# **Fletcher Stream and Wetland Mitigation Site**

### **Annual Monitoring Report**

Monitoring Year 3 of 7

# FINAL

Fletcher Stream and Wetland Mitigation Site NCDMS Contract No. 006997 NCDMS Project No. 100004 DWR# 16-1076 USACE Action ID: SAW-2016-02205 Henderson County, North Carolina Data Collected: April 2022– January 2023 Date Submitted: February 2023



Submitted to: NCDEQ-Division of Mitigation Services 1652 Mail Service Center Raleigh N C 27699-1652



Harry Tsomides Project Manager NCDEQ-DMS Asheville Regional Office 2090 U.S. 70 Highway

Subject: Draft MY3 Monitoring Report Fletcher Stream and Wetland Site, Henderson County French Broad River CU 06010105 DMS Project ID No. 100004 / DEQ Contract #006997

Mr. Tsomides

On February 3, 2023 EWS received comments on the Fletcher Stream and Wetland Site Draft MY3 Monitoring Report. Included with the monitoring report comments are comments regarding the MY3 boundary inspection report conducted by DMS Staff. The following are DMS comments and responses by EWS (in **RED**).

#### **Report Comments**

- Other than the 14 LF erosion noted on Fletcher Reach 2B, the stream visual assessment tables indicate 100% performance across the site for all visual monitoring metrics. Can EWS confirm this is the case for 2022/MY3? If not then please update these tables accordingly. **One failed structure on Fletcher Reach 2A was discussed and mapped in addition to the 14 lf mentioned above.** No other locations were called out in MY3.
- DMS appreciates that some measures were taken in 2022 to try and address the violations however some of the problem areas have not disappeared and some new ones have occurred. Monitoring providers are responsible for annually checking and reporting on the easement integrity across the project site for encroachments, missing markers, adequate signage, fence breaks, etc. Please confirm that the site was fully checked and what the results are. Project easement violations need to be discussed in the text, noting what is occurring and where, and what remedial actions have been or will be taken. The site was walked in its entirety on April 6 & 7 and September 14-15. Fence breaks, downed trees, and other potential problems were addressed throughout MY3 as observed. Text has been added to further address previous and current concerns.
- For the vegetation visual assessment table, easement encroachment level was noted as 0.00 however this does not seem to capture the multiple sections of easement scalloping/ edge mowing that are currently occurring. A number of areas called out during the easement inspection along Fletcher Reach 1A and B were re-planted during MY3 and signage added or modified. These areas have not fully healed from the initial encroachment. Fenceline mowing along the LDB of Fletcher 2A occurred after our September assessment and was conducted by day laborers not familiar with the restrictions of the easement. A 3' easement boundary setback from fences was incorporated in the alignment to allow for maintenance of fences. Some



constrictions in this setback were identified and co-occur with areas of encroachment. The property owner and lessee have been consulted regarding easement restrictions. Tables and text will be updated with the most current conditions.

- Supplemental Planting has been mapped on the CCPVs and the plant list is included in Appendix F; please also note that all the species planted are from the IRT-approved mitigation plan. The provided species list was drawn from the Approved mitigation plan. Clarifying text has been added to the report body.
- Thank you for providing the culvert photos from on top of the culverts; however to fully view the stream conditions at the culvert intakes/outlets DMS would like to see photos looking into the culverts from either side (upstream and downstream) of the culverts to show if there are any ongoing concerns such as debris jamming, siltation, perching, etc. If this is not possible for this year's report please begin tracking this in 2023. Clarification on the exact need, purpose, and expectation for requested photos is appreciated. Additional photos displaying these features will be provided starting in MY4.
- It is noted that the area of bank scour (Station 142+25) on Fletcher Creek Reach 2B has remained stable from MY1 through MY3 and will continue to be monitored in future site visits for further signs of structural instability. Does EWS feel like live staking this section would be beneficial and reduce failure risks moving forward? EWS initially treated the scour with livestakes and the addition was beneficial in stabilizing the area. Survival and growth of livestakes along Reach 2B has been high overall. EWS does not believe a reach wide supplemental planting is needed. Livestakes will be be utilized in areas identified as current or potential problems.
- EWS indicates that geomorphology data were collected November 2022 to January 2023. Data collection for each year should be limited to the calendar year for which it is reporting, unless there are previously approved extenuating circumstances. EWS makes a full faith effort to collect, process, and report data within an acceptable timeframe. Unforeseen and irreconcilable circumstances were present during MY3 such that pre-approval could not be planned for or requested.
- Similarly, vegetation data should be collected prior to leaf drop. The growing season for the project is listed at 4/9 through 10/26; it is indicated that vegetation data were collected in November 2022. EWS makes a full faith effort to collect, process, and report data within an acceptable timeframe. EWS began monitoring in October although vegetation data collection did extend ultimately into November.
- The supplemental planting list (Appendix F) is comprised of species that were all in the approved mitigation plan; however quantities are not listed. Can EWS provide a planting area and quantities of each species? This would be helpful to know a) the area across the site that got planted relative to the total planted area, and b) an idea of the proportional amounts of each species (e.g., that it wasn't 90% one species and 10% all the rest). The supplemental planting was conducted following identification of existing stem location. The planting re-established an approximate



6' center of woody stems in encroachment and low stem density areas. A bulk order was placed for use in numerous projects. As such, EWS is unable to provide a specific number of stems planted at the Fletcher Project but can provide an approximate species distribution of approved species based upon that bulk order.

- Silky willow and black willow live stakes were two of the six supplementally planted species; typically, bare roots or containerized trees are used in supplemental plantings. Were the willow live stakes used mainly along the channel, and if so, does this indicate there were channel stability issues? Livestakes were utilized to address poor initial livestake establishment, lack of shading, and herbaceous vegetation crowding along the stream. This effort was not in response to a channel or bank stability issue.
- Thank you for your continued attention to the scattered invasives across the site; DMS appreciates EWS staying ahead of this issue in the earlier monitoring years. Yearly treatments will be continued through the life of the project.
- Continuous stage data –can EWS provide a timetable for replacing the Raccoon Branch pressure transducer in 2023, since it has had problems the past two monitoring years? The Raccoon gauge and logger were replaced January 17<sup>th</sup> 2023.
- Coates Reach 1B (lower) was noted last year as having in stream vegetation; can EWS provide an update on the conditions in this section with regard to vegetation in the channel? Areas of herbaceous vegetation encroachment are still present. Supplemental planting of livestakes in early 2022 was conducted to provide more near stream cover and competition for herbaceous species.

### Conservation Easement Inspection Comments

#### **Observations:**

- Numerous mowed areas were observed along field/lawn boundaries and are shown in the attached kmz file. **Reviewed**
- Several areas with damaged fencing were seen but no livestock encroachment was noted at these locations. Noted
- A utility pole guy wire appears to be within the CE along Weston Creek. Noted
- A residential outdoor patio area with furniture is also located within the CE near Jackson Road along Weston Creek. **EWS is aware and is taking steps toward remediation.**
- A platted spring box is located at the upper end of Racoon Branch. Noted
- Numerous t-posts were loose/leaning. Noted
- The exclusion fencing is damaged at multiple locations including broken wire, fallen tree, broken Hbracing, disconnected gate, leaning post and missing sections of safety fence in row crop areas.
- A small area of soil disturbance suggested possible minor grading along the north side of Fletcher Creek. This is a low area along the easement boundary where debris accumulates along the



easement boundary during heavy rainfall. Debris is removed from this area on a regular basis by EWS or the lessee.

#### Action Items (please include written responses to each)

- Due to the numerous mowing encroachments and possible minor grading along the easement boundary, the easement marking should be upgraded and the landowner/operator should be notified about compliance. The fence line mowing noted at Fletcher 2A was conducted by day laborers not properly informed on the restrictions of the easement. There is an average of a 3' setback from fencing to the easement boundary to allow for maintenance. EWS has consulted both the property owner and lessee regarding fencing repairs/maintenance and restrictions.
- Repair damaged and improperly fastened signs and loose/leaning posts. Loose and leaning posts will be repaired or upgraded with a u-posts and rivet configuration when identified.
- Repair damaged livestock exclusion and safety fencing. EWS has consulted both the property owner and lessee regarding exclusionary fencing repairs. It is EWS' understanding that the removal of safety fencing will be required prior to project closeout.
- The platted soil road along Fletcher Creek appears to be abandoned and of little potential use. A deed modification or quit claim should be considered. This road is currently in use by the lessee for maintenance of the nursery operation, predominantly during the summer months.
- The residential outdoor patio encroachment still needs resolution. Noted. A request to remove the remaining gravel has been made. A previous request to remove the furniture and fire ring was initially followed and remained in compliance through the September 2022 site walk. A check of this location conducted on February 10, 2023 showed that the furniture had been moved out of the easement. Once the remaining gravel is removed, the area is to be remediated with topsoil and seeded. Due to the existing canopy coverage planting of woody stems has not been planned. Natural recruitment is anticipated to occur.

#### **Digital Support File Comments**

- The groundwater gauge data includes six additional gauges not referenced in the report; TW 1-6. Please clarify if this data was to be submitted with the Fletcher groundwater gauge data. Removed template title from the electronic files.
- The geodatabase file submitted does not contain any data. Please submit the required spatial data. This may be a download time out error that could be resolved by sending the spatial data zip file individually. **The finals will be delivered via jump drive.**

Sincerely,

David Tuch Managing Partner

Prepared for:



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Prepared by:



balance through proper planning

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### 1.0 PROJECT SUMMARY

#### 1.1. Project Setting and Background

The Fletcher Stream and Wetland Mitigation Site (Fletcher Site) is located in the French Broad River Basin (CU 06010105). The Fletcher Site also lies within the lower portion of the Cane Creek (HUC 060101050703) watershed which is identified as a Targeted Local Watershed (TLW) according to the 2009 French Broad River Basin Restoration Priorities (RBRP) Plan. Project work at the Fletcher Site was completed in March 2019, and included construction, planting, monitoring feature installation, and fence installation. Through the project work, a total of 9,528 linear feet were restored, 896 linear feet were enhanced through Enhancement II activities, 1,249 linear feet were preserved, and 8.91 acres of wetland were re-established. The Fletcher Site is anticipated to generate a total of 10,011.300 SMU's and 8.910 WMU's. Refer to Appendix A, Table 1 for the project components and mitigation credit information and Figure 2 for the Project Asset Map.

Historic land use at the Fletcher Site has consisted primarily of agriculture and livestock grazing. Additional land use practices, including the excavation of drainage ditches, maintenance and removal of riparian vegetation, and the relocating, dredging, and straightening of on-site streams have contributed to unstable channel characteristics, degraded water quality, and degradation of prior wetlands. Previous stream conditions at the site consisted of incised channels with unstable banks and a limited riparian buffer width. Fletcher Creek and Coates Branch flow though active pastures with livestock access to the streams. The floodplain adjacent to Weston Creek contains approximately 8.91 acres of mapped hydric soils that have been farmed for produce. Previous ditching and farming activities eliminated jurisdictional wetlands. The completed project restored ecological function to the existing streams, wetlands, and riparian corridor by returning streams to a proper relationship with the floodplain, excluding cattle from the riparian buffer, eliminating drainage ditches and spoil piles, removing invasive species, and revegetating the riparian buffer with native plant species appropriate for the valley and the watershed conditions. Grading activities improved the groundwater hydrology of the onsite wetlands, increased hydrologic access of the floodplain for overbank flows, and provided attenuation of flood flows.

This project is protected by a 34.81-acre conservation easement and is located approximately 1.1 miles southeast of Fletcher, NC in Henderson County at 35.422278° N, -82.486183° W. The Fletcher Site is bounded by agricultural land and is bisected by Jackson Road.

### **1.2. Project Goals and Objectives**

The project goals address stressors identified in the TLW and priority subwatershed, as outlined in the Final Mitigation Plan, and include:

- Provide a network of streams with natural, stable forms that support proper stream functions;
- Improve groundwater hydrology to support recovery of native riparian vegetation;
- Reduce sediment inputs from eroding stream banks to reduce fine sediment loads and percentage of fines in the bed-material load;
- Restore proper sediment transport to support channel stability and bedform diversity;
- Improve substrate quality to facilitate hyporheic flow and support aquatic communities;
- Improve quantity, quality, and diversity of habitats to support healthy aquatic communities;
- Reduce pollutant inputs to the project streams (fecal coliform, nitrogen, phosphorus) to restore a balance to proper nutrient cycles;
- Improve riparian vegetation community to provide temperature regulation of the stream, provide a future source of organic inputs, and aid in long-term channel bank stability;

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- Restore areas of former riparian wetlands so that the hydrology and soils will support wetland vegetative communities and wildlife;
- Improve landscape connectivity that allows space for biotic and abiotic process and provides a source and sink for natural populations; and,
- Prevent the site from future impacts of development and agricultural issues.

The following objectives are proposed for accomplishing the above listed goals as outlined in the Final Mitigation Plan:

- Construct stream channels that will maintain proper dimension, pattern, and profile and meet jurisdictional status;
- Construct streams with proper bankfull to floodplain relationship;
- Construct streams that provide naturally stable dimensions and stabilize constructed banks with appropriate bioengineering;
- Construct streams that maintain an appropriate sediment transport balance with the sediment that is supplied by the watershed so that the overall stream profile neither aggrades nor degrades over time;
- Create and improve stream bedform diversity by constructing pools of varied depths and riffles of varied slopes;
- Construct stable riffles that provide an improved diversity of bed material clast and a reduction in fines relative to existing conditions;
- Construct in-stream habitat features from native material to provide diversity of habitat;
- Prevent cattle from access to the streams and riparian areas by installing exclusion fencing;
- Install BMPs in concentrated runoff areas that drain agricultural fields;
- Provide a buffer from agricultural activates and row crops;
- Plant native climax tree species and understory species in the riparian zone;
- Reconstruct stream channels that are properly connected to the riparian wetlands;
- Re-grade topography to eliminate ditches and drainage features;
- Plant native wetland tree and shrub species; and,
- Establish a conservation easement that provides a minimum buffer from future activities in the adjacent watershed.

### **1.3. Project Performance Standards**

The stream restoration performance standards for the project will follow accepted and approved criteria based on the Final Mitigation Plan for the Fletcher Mitigation Site (2018). Performance criteria will be evaluated throughout the monitoring period as defined in Table 4 of the Fletcher Adaptive Management Summary Packet. The table below provides a list of the performance standards associated with each project objective along with a description of the monitoring approach.

Fletcher Mitigation Site Project Performance Standards										
Objective	Performance Standard	Monitoring Approach								
Construct stream channels that will maintain proper dimension, pattern, and profile	Riffle section W/D ratios should remain within the range of the appropriate stream type. BHR should not exceed 1.2. BHR should not change more than 10% in any given monitoring interval. Changes that do occur should indicate a trend toward stability.	Survey of select cross sections and visual assessment.								
Construct streams with proper bankfull to floodplain relationship	Four bankfull events or greater will be documented during the monitoring period	Crest gauges, continuous stage recorders, and debris lines.								
Construct streams that provide naturally stable dimensions and stabilize constructed banks with appropriate bioengineering	Channel banks should generally remain stable. Where bank migration does occur it should not exceed 20% of the bankfull width.	Visual assessment and bank pin monitoring as necessary.								
Construct streams that maintain an appropriate sediment transport balance with the sediment that is supplied by the watershed so that the overall stream profile neither aggrades nor degrades over time.	Profile adjustments should not indicate significant aggradation or degradation. BHR requirements as stated above.	Resurvey of longitudinal profile if visual assessment indicates potential instability.								
Create and improve stream bedform diversity by constructing pools of varied depths and riffles of varied slopes	Profile should maintain a diversity of depths expressed in riffle/pool forms.	Visual assessment								
Construct stable riffles that provide an improved diversity of bed material clast and a reduction in fines relative to existing conditions	Substrate material should progress towards or maintain coarser material in riffles and runs with finer material present in pools and glides.	Pebble count measurements will not be be taken as part of routine monitoring unless deemed necessary per Sept 29, 2021 Technical Working Group Memo.								
Construct in-stream habitat features from native material to provide a diversity of habitats	In-stream habitat structures should remain intact and functional.	Visual assessment								
Prevent cattle from access to the streams and riparian areas by installing exclusion fencing.	Exclusion fencing should remain intact and effective at preventing livestock access.	Visual assessment								
Install BMP's in concentrated runoff areas that drain agricultural fields	Capacity for sediment storage should be available for at least one year following construction completion.	Visual assessment								
Provide a buffer from agricultural activities and row crops	Record conservation easement prior to implementation.	None								
Plant native climax tree species and understory species in the riparian zone	Minimum of 320 stems/ac present at MY-3. Minimum of 260 stems/ac present at MY-5. Minimum of 210 stems/ac present at MY-7.	Vegetation plots								
Reconstruct stream channels that are properly connected to the riparian wetlands	Groundwater elevation within 12 inches of the ground surface for 10% of the growing season.	Groundwater monitoring gauges								
Re-grade topography to eliminate ditches and drainage features	Groundwater elevation within 12 inches of the ground surface for 10% of the growing season.	Groundwater monitoring gauges								
Plant native wetland tree and shrub species.	Minimum of 320 stems/ac present at MY-3. Minimum of 260 stems/ac present at MY-5. Minimum of 210 stems/ac present at MY-7.	Vegetation plots								
Establish a conservation easement that provides a minimum buffer from future activities in the adjacent watershed.	Record conservation easement prior to implementation.	None								

### **1.4. Mitigation Components**

The Fletcher Site generated 10,011.300 SMUs and 8.910 WMUs. Refer to Table 1 for project components and mitigation credit information for the Fletcher Site and Table 2 for the project component and the CCPV for a visual description of the project assets. These credits are based on the Approved Fletcher Site Mitigation Plan.

#### **1.5. Project Performance**

Monitoring Year 3 (MY 3) data was collected from April 2022 to January 2023. Monitoring activities included visual assessments of all reaches and the surrounding easement, collection of images at 33 permanent photo stations, inventory of 26 permanent vegetation monitoring plots, and surveying of 28 cross-sections.

Summary information/data related to the occurrence of items such as beaver or encroachment and statistics related to performance of various project and monitoring elements can be found in the tables and figures in the report appendices. Narrative background and supporting information formerly found in these reports can be found in the Baseline Monitoring Report (formerly Mitigation Plan) and in the Mitigation Plan (formerly Restoration Plan) documents available on the NCDMS website (https://deq.nc.gov/about/divisions/mitigation-services/dms-project-documents). All raw data supporting the tables and figures in the appendices is available from DMS upon request.

#### 1.5.1. Vegetation

Visual assessment of vegetation outside of the monitoring plots (Appendix B – Table 6) indicates that the herbaceous vegetation is well established throughout the project. The site will continue to be monitored for problems in future monitoring years.

Monitoring of the permanent vegetation plots (n = 26) was completed in November 2022. Summary tables and photographs associated with MY3 vegetation monitoring are located in Appendix B and Tables 7a and 7b, Appendix C. MY3 monitoring data indicates that plot #26 is failing to meet the MY3 criteria of 320 planted stems per acre. The remainder of plots are well above success criteria. Planted stem densities among plots ranged from 202 to 850 planted stems per acre. A total of 26 species of stems were documented within the plots. Results from the vegetation plots surveyed during MY3 (2022) and a summary of preceding years can be found in Table 7b, Appendix C.

Numerous small areas of mowing encroachment were identified during a January 2023 boundary inspection. In most cases these encroachments have resulted in scalloping of the easement along bends, between corner posts, or inline markers and generally cover areas between 10 and < 20 sqft. One new area of encroachment was noted at the upstream extent of Fletcher Reach 1. This circular area was created during fence line upgrade work in late MY3. The corner marker occurs along the fence line and was obscured by vegetation leading to the encroachment. An additional post and sign will be installed at this location to better denote the presence of the corner. One area along the right descending easement boundary of Fletcher Reach 1A and 1B, previously identified in MY2 was still present but drastically reduced from the previous year. An area of easement encroachment co-occurs with an identified area of invasive vegetation along left descending fence line of Fletcher Reach 2A. This area was mowed during routine fence line maintenance. At the northern end of the fence line of Fletcher Reach 2A this offset decreases to ~18" and coincides with the triangular area of encroachment. The final area of encroachment occurred at the downstream boundary of Fletcher Reach 2B where some scalloping of the easement occurred.

A supplemental planting of both woody stems and livestakes was conducted on February 28 and March 3, 2022. Species were drawn from the list within the approved mitigation plan. Additional livestakes were installed along Coates Branch Reach 1B, 1C, and 1D in areas where herbaceous vegetation has become dominant. Supplemental live stake install was intended to provide additional shading and aid in competition with the dense herbaceous layers. Bare root stems were installed along the right descending easement boundary of Fletcher Reach 1B (MY2 Encroachment) and 2A (MY2 Bare

Area); and between Coates Branch Reach 1D and Fletcher 1C. These areas of replanting coincide with two of the three areas of encroachment documented in MY2 and areas of low stem density. Supplemental plantings were intended to bring stem density to approximately 600 stems/acre. Additionally, areas noted as bare in MY2 were also supplementally planted during this effort. A table listing species and material type is located in Appendix F.

Invasive species occur in low abundance throughout the site. Largely along fences and around the bases of existing mature trees. The majority of dense infestations were documented and treated in MY1 and MY2. Treatments continued through MY3. Fourteen areas were identified during MY3 and will continue to be treated in future monitoring years. The primary species documented at the Fletcher Site include Chinese Privet (Ligustrum sinense) and Multiflora Rose (Rosa multiflora), although there are areas containing Oriental bittersweet (Celastrus orbiculatus), kudzu (Pueraria montana var. lobata), and fescue (Festuca spp.). The largest areas of invasive vegetation occur along Raccoon Branch Reach 1B/1C (Rosa multiflora), Coates Branch Reach 1A (Rose, Privet, and Bittersweet) and the lower portion of Coates Reach 1B (Fescue). The most complicated area of treatment occurs in the northwestern extent of the easement boundary of Weston Creek Reach 1B, along Hoopers Creek. Mature stands of canopy entangled kudzu are located immediately adjacent to and upstream of the easement in this location. Joint efforts are ongoing to control kudzu and to a lesser extent bittersweet and grape in both the easement and adjacent private land. The level of infestation has required a mechanical treatment to ground level in the extreme northeastern corner of the easement. This area will be replanted with size appropriate species as the invasive population is brought to a "spot treatment" level of control. Details on invasive species density and area can be found in Table 6 and the CCPV, Appendix B. Treatment logs are located in Appendix F.

#### 1.5.2. Stream Geomorphology

Visual assessment of the stream channel was performed to document signs of beaver damage, structural instability, such as eroding banks, or excessive sedimentation. The area of bank scour (Station 142+25) on Fletcher Creek Reach 2B in MY1 has remained stable through MY3 (Table 5, Figure 2 CCPV). This area and the remainder of the project will continue to be monitored in future site visits for further signs of structural instability.

One beaver dam was documented within the site during MY3. This beaver dam was located at Stations 424+50. USDA APHIS has managed the beaver within the site. The beaver dam was breached in early October and a follow-up visit in December of 2022 confirmed no further activity during MY3. The site will continue to be monitored for signs of beaver activity.

Geomorphic data for MY3 was collected between October 2022 and January 2023. Summary tables and cross-section data plots related to stream morphology are located in Appendix D. Cross-sectional dimensions remained relatively stable between baseline conditions and MY3 monitoring efforts. The most substantial changes have occurred at cross-sections 9 and 10. Cross-section 9 had shown some fluctuation in bankfull depth over the course of monitoring but had returned to roughly baseline condition in MY3. At cross-section 10 a portion of the toe structure has failed leading to an extension of the upstream pool (Appendix A, Table 5, Appendix D, cross-section graphics and Table 11a). The trend continued into MY3 remaining similar to MY2 conditions. Overall, riffle dimensions for each reach also remained relatively similar between baseline conditions and MY3 monitoring (Appendix D, Table 11b).

#### 1.5.3.Hydrology

Since project completion in late 2019, bankfull flows have been recorded on Fletcher Reach 1 a total of three times (zero events in MY3), Fletcher Reach 2 a total of 7 times (1 event in MY3), Coates Branch a total of 17 times (3 events in MY3), and Weston Creek Reach 1A a total of 6 times (2 events in MY3). Rainfall data includes precipitation events exceeding 2 inches per day occurring on 2/3/2022, 3/23/2022, 5/23/2022, and 11/11/2022. The pressure transducer on Raccoon Branch failed during MY2, resulting in uncorrectable data beginning on April 27<sup>th</sup>, 2021. Prior to that date, the transducer recorded 170 days of continuous surface flow. Data was successfully downloaded from the pressure transducer on Raccoon Branch twice during 2022 (4/6/2022 and 11/16/2022). However, upon working the data up to a useable state, it became evident that the pressure transducer on Raccoon Branch was malfunctioning for the entirety of MY3. The transducer will be replaced in January 2023. See Table 10, Appendix E for details regarding bankfull events by stream.

Groundwater wells (n=11) installed on Weston Creek Reach were largely falling short of the expected performance standard of 12% of the growing season. Increased groundwater elevations and duration of saturation was noted in 3 of 11 wells. Four of the 11 wells maintained a similar hydroperiod to what was observed during MY2. A reduction of hydroperiod was observed in 4 of 11 wells all of which occurred along the left descending bank of Weston Creek. MW1 exceeded the performance standard during MY3 (25%). Additionally, MW3, MW9, and MW10 fell just short of the 12% standard despite regionwide drought status during significant portions of MY3 (Groundwater Summary Table and Figures, Appendix E, Drought.gov). Observations from MY3 continue to suggest a trend towards increased saturation around Weston Reach 1A. Data from future monitoring years will provide additional information regarding hydrologic uplift and wetland establishment. Groundwater wells will continue to be monitored throughout the life of the project.

#### 2.0 METHODS

The visual assessment of the project was performed on April 6-7 2022 and again on September 14-15 2022. Permanent photo station photos were taken during the fall monitoring efforts. Additional photos of vegetation or stream problem areas were taken as needed throughout MY3.

Geomorphic measurements were taken during low flow conditions using a Nikon<sup>®</sup> NPR 332 Total Station. Three-dimensional coordinates associated with cross-section and profile data were collected in the field and geo-referenced (NAD83 State Plane feet FIPS 3200). Morphological data were collected at 28 cross-sections. Survey data was imported into CAD, ArcGIS<sup>®</sup>, and Microsoft Excel<sup>®</sup> for data processing and analysis. Channel substrate monitoring is no longer required but if needed will be characterized using a Wolman Pebble Count as outlined in Harrelson et al. (1994) and processed using Microsoft Excel. Vegetation success is being monitored at 26 permanent monitoring plots. Vegetation monitoring follows the CVS-EEP Level 2 Protocol for Recording Vegetation, version 4.2 (Lee et al. 2008) and includes analysis of species composition and density of planted species. Data is processed using the NCDMS Shiny App Vegetation Tool (https://ncdms.shinyapps.io/Veg\_Table\_Tool/). In the field, the four corners of each plot were permanently marked with metal t-posts and photos of each plot are taken from the origin each monitoring year.

Precipitation data was reported from the NCCRONOS station in at the Asheville Regional Airport. Bankfull events were documented with crest gauges and continuous stage recorders, each crossreferenced with the bankfull elevation at its location. Crest gauges will be monitored semi-annually. The height of the corklines was recorded and cross-referenced with known bankfull elevations at each crest gauge. Groundwater for hydrologic success of restored wetlands was monitored using HOBO U20 Water Level Loggers. An additional logger was installed on site, above ground, for use as a barometric reference. Data loggers collected depth to groundwater daily and all data were processed using HOBOware and analyzed using Microsoft Excel.

#### 3.0 <u>REFERENCE</u>

- Equinox Environmental. 2019. As-Built Baseline Report Fletcher Mitigation Site. Prepared for North Carolina Department of Environmental Quality, Division of Mitigation Services. DMS Project No. 100004.
- Kee Mapping and Survey. 2019. As-Built Survey of Fletcher Creek Restoration Project. Prepared for EW Solutions.
- Lee, Michael T., R.K. Peet, S.D. Roberts, and T.R. Wentworth. 2008. CVS-EEP Protocol for Recording Vegetation, Version 4.2 (http://cvs.bio.unc.edu/methods.htm)
- National Integrated Drought information System (Drought.gov). <u>https://www.drought.gov/states/north-carolina#historical-conditions</u> Accessed 1/5/2023
- Stantec Consulting, Inc. 2018. Final Mitigation Plan Fletcher Mitigation Site. Prepared for North Carolina Department of Environmental Quality, Division of Mitigation Services. DMS Project No. 100004.
- USACE (U.S. Army Corps of Engineers). 2003. Stream Mitigation Guidelines. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, North Carolina Wildlife Resources Commission, North Carolina Department of Environment and Natural Resources-Division of Water Quality. Wilmington District
- USACE (U.S. Army Corps of Engineers). 2016. Wilmington District Stream and Wetland Compensatory Mitigation Update. North Carolina Interagency Review Team. October 24, 2016.

# Appendix A Project Background Data and Maps



Table 1. Project Mitigation Assets and Components											
	•	1			Fletcher Mitigati	on Site					
Project Segment	Mitigation As-Built Plan Centerline Mitigation Category Leve		Restoration Level	Mitigation Ratio (X:1)	Mitigation Plan Credits*	Comments					
Fletcher Creek 1a	461	457	Cool	EII	2.5	184.400					
Fletcher Creek 1b	377	377	Cool	R	1.0	377.000					
Fletcher Creek 1c	1,540	1,507	Cool	R	1.0	1,540.000	Less 51' for crossing				
Fletcher Creek 2a	1,296	1,290	Cool	R	1.0	1,296.000	Less 33' for utility crossing; Less than 30' buffer for 86 LF				
Fletcher Creek 2b	1,470	1,558	Cool	R	1.0	1,470.000	Less 33' for outlet protection and 51' and 73' for 2 crossings				
Raccoon Branch 1a	489	489	Cool	Р	10.0	48.900	.001 ac temporary impact to Wetland A				
Raccoon Branch 1b	461	461	Cool	Р	10.0	46.100	.006 ac temporary impact to Wetland B				
Raccoon Branch 1c	153	143	Cool	EII	2.5	61.200	Less 53' for crossing; Stream length not included in wetlands				
Raccoon Branch 1d	448	439	Cool	R	1.0	448.000					
Pine Branch 1	299	301	Cool	Р	10.0	29.900					
Coates Branch Reach 1a	282	283	Cool	EII	2.5	112.800					
Coates Branch Reach 1b	606	598	Cool	R	1.0	606.000	.016 ac temporary impact to Wetland D				
Coates Branch Reach 1c	708	702	Cool	R	1.0	708.000	Less 44' for crossing				
Coates Branch Reach 1d	325	321	Cool	R	1.0	325.000					
Weston Creek 1a	1,954	1,916	Cold	R	1.0	1,954.000	Less 29' for ROW and outlet protection				
Weston Creek 1b	804	798	Cold	R	1.0	804.000					
Wetland A	0.03	n/a	RNR	Е	n/a	n/a	0.001 ac temporary impact to Wetland A				
Wetland B	0.11	n/a	RNR	Е	n/a	n/a	0.006 ac temporary impact to Wetland A				
Wetland D	0.05	n/a	RNR	E	n/a	n/a	0.016 ac temporary impact to Wetland A				
Wetland E	8.9	8.910	RNR	REE	1.0	8.910					

\* Mitigation plan credits account for breaks in conservation easements and are based on design stream stationing and taken from the approved mitigation plan. Mitigation plan credits are the same as the approved mitigation plan.

^ Based on centerline calculations from the as-built survey, accounts for breaks in conservation easement and utility right-of-ways.

#### **Project Credits**

		Stream		Wetland	Non-Rip	Coastal		
Restoration Level	Warm	Cool	Cold	Non-Riv	Wetland	Marsh		
Restoration	-	6770.000	2758.000	-	-	-		
Re-establishment				8.910	-	-		
Rehabilitation				-	-	-		
Enhancement				-	-	-		
Enhancement I	-	-	-					
Enhancement II	-	358.400	-					
Creation								
Preservation	-	124.900	-	-	-			
Total Credits <sup>%</sup>	-	7253.300	2758.000	8.910	-	-		

<sup>%</sup> Project credits reflect the sum of credits outlined in the approved mitigation plan.

#### Total Stream Credit 10,011.300

Total Wetland Credit 8.910

#### Wetland Mitigation Category

CM	Coastal Marsh
R	Riparian
NR	Non-Riparian

#### **Restoration Level**

Е

RH

R

- HQP High Quality Preservation
- P Preservation
  - Wetland Enhancement Veg and Hydro
- EII Stream Enhancement II
- EI Stream Enhancement I
- C Wetland Creation
  - Wetland Rehabilitation Veg and Hydro
- REE Wetland Re-establishment Veg and Hydro
  - Restoration

Table 2. Project Activity and Reporting HistoryFletcher Mitigation Site									
	Data Collection	<b>Completion or</b>							
Activity or Report	Complete	Delivery							
Mitigation Plan	Feb - 2018	Feb - 2018							
Mitigation Plan Addendum	-	-							
Final Design - Construction Plans	-	Mar - 2018							
Construction	-	Mar - 2019							
Temporary S&E Mix Applied	-	Mar - 2019							
Permanent Seed Mix Applied	-	Mar - 2019							
Bare Root and Live Stake Plantings	-	Mar- 2019							
Baseline Monitoring Document (Year 0 Monitoring - Baseline)	Mar - 2019	Apr - 2019							
Stream Assessment	Mar - 2019	Apr 2010							
Vegetation Assessment	Mar - 2019	Api - 2019							
Adaptive Management-Weston Cr	-	Dec-2019							
Adaptive Management-Weston Cr replant	-	Jan-2020							
Pre-Year 1 Vegetation Monitoring-North Side	Dec 2019	-							
Pre-Year 1 Geomorphology Monitoring-North Side	Dec 2019	-							
Pre-Year 1 Vegetation Monitoring-South Side	Dec 2019	-							
Pre-Year 1 Geomorphology Monitoring-South Side	Dec 2019	-							
Weston Cr flood damage repair	-	Feb-2020							
Weston Cr flood damage replant	-	Feb-2020							
MY1 Invasive Vegetation Treatments	Jun 2020	-							
MY1 Invasive Vegetation Treatments	Jul 2020								
MY1 Invasive Vegetation Treatments	Aug 2020	-							
MY1 Weston Reach Beaver Removal	-	July 2020							
MY1 Monitoring Geomorphology	Oct 2020	-							
MY1 Monitoring Vegetation	Oct 2020	-							
MY1 Monitoring Report	-	Dec-2020							
MY2 Initial Site Assessment		April-2021							
MY2 Weston Reach Beaver Removal	-	July-2021							
MY2 Monitoring Vegetation	Oct-2021	-							
MY2 Monitoring Geomorphology	Oct-2021	-							
MY2 Monitoring Report		Dec-2021							
MY3 Supplemental planting	March-2022								
MY3 Initial Site Assessment	April-2022								
MY3 Invasive Vegetation Treatments	June 2022								
M3 Weston Reach Beaver Management	-	Nov 2022							
MY3 Monitoring Vegetation	Nov 2022	-							
MY3 Monitoring Geomorphology	Nov 2022-Jan 2023	-							
MY3 Monitoring Report		Jan-2023							

Table 3. Project Contacts								
Fletcher Mitigation Site								
	EW Solutions							
Drime Contractor	37 Haywood Street, Suite 100							
Prime Contractor	Asheville, NC 28801							
	David Tuch (828) 253-6856							
	Stantec Consulting, Inc							
Destance	56 College Street, Suite 201							
Designer	Asheville, North Carolina 28801							
	Grant Ginn (828) 449-1930							
	Penland Contracting, Inc							
<b>Construction Contractor</b>	300 NP&L Loop							
(North Side)	Franklin, NC 28734							
	Lewis Penland (828) 421-1753							
	Baker Construction							
<b>Construction Contractor</b>	1000 Bat Cave Road							
(South Side)	Old Fort, NC 28762							
	Charles Baker (828) 668-5060							
	Penland Contracting, Inc							
Seeding Contractor	300 NP&L Loop							
(North Side)	Franklin, NC 28734							
	Lewis Penland (828) 421-1753							
	Baker Construction							
Seeding Contractor	1000 Bat Cave Road							
(South Side)	Old Fort NC 28762							
(	Charles Baker (828) 668-5060							
	Fauinox							
	37 Haywood St							
Planting Contractor	Asheville North Carolina 28801							
	Owen Carcon (222) 252 6256							
	Kee Manning							
	88 Central Ave							
As-built Surveys	Asheville NC 28801							
	Brad Kee (828) 575-9021							
	SESSCO LLC							
	200 Cane Creek Rd							
Seeding Mix Source	Eletabor NC 28732							
	(220) 654 2001							
	(828) 034-8991 Mallaw Marsh Forms							
	Mellow Marsh Farms							
Live Stakes	1312 woody Store Road							
	Siler City, NC 2/344							
	(919) /42-1200							
	Equinox							
Monitoring Performers	37 Haywood St.							
(MY3)- 2022	Asheville, North Carolina 28801							
	Danvey Walsh (828) 253-6856							

Table 4. Project Baseline Information and Attributes Project Information																
Project Name	Fletcher Stream and Wetland Mitigation Site															
County	Henderson															
Project Area (acres)	34.8															
Project Coordinates (latitude and longitude)	35.422278° N, -82.486183° W															
		Project Watershed Summary Information														
Physiographic Province	1							Blue	Ridge							
River Basin								French B	road Rive	r						
USGS Hydrologic Unit 8-digit 6010105	USC	USCS Hydrologic Unit 14-digit 0600 1000 1000														
DWR Sub-basin	1	04-03-02														
Project Drainage Area (so miles)						0	52 Eletch	er Creek /	0.37 Wes	ton Branch						
Project Drainage Area Percentage of Impervious Area		U.32 Hetcher Creek / U.37 Weston Branch														
CGLA Land Use Classification								Agric	ultural							
COIA Land Ox Classification				Deach		. Informer	tion	Agric	unutai							
	<b>1</b>	r	-	Reach	summar	y Informa	ition	r	r	1	r	r	r		r	-
Parameters	Fletcher Creek 1A	Fletcher Creek 1B	Fletcher Creek 1C	Fletcher Creek 2A	Fletcher Creek 2B	Raccoon Branch 1A	Raccoon Branch 1B	Raccoon Branch 1C	Raccoon Branch 1D	Pine Branch	Coates Branch 1A	Coates Branch 1B	Coates Branch 1C	Coates Branch 1D	Weston Creek 1A	Weston Creek 1B
Length of Reach (linear feet) ^	457	380	1,541	1,299	1,510	489	461	143	440	301	283	601	708	325	1,982	825
Valley Confinement (Rosgen)	П	П	П	П	VIII	П	П	П	П	П	П	П	П	П	VIII	VIII
Drainage area (miles <sup>2</sup> )	0.30	0.30	0.37	0.49	0.52	0.01	0.03	0.04	0.04	0.01	0.02	0.03	0.04	0.07	0.30	0.37
Perennial, Intermittent, Ephemeral	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial	Intermittent	Perennial	Perennial	Perennial	Perennial	Perennial	Perennial
NCDWR Water Quality Classification	С	С	С	С	С	С	С	С	С	С	С	С	С	С	C: Tr	C: Tr
Stream Classification (existing)	G	G	B, F, G	B, G	B, E, G	В	В	B, G	B, G	В	B, G	B, G	B, F, G	В	E, G	E, G
Stream Classification (proposed)	B4	B4	B4	B4	B5	B4	B4	B4	B4	B4	B4	B4	B4	B4	C5	C5
FEMA classification	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			1	Vetland	Summa	ry Inforn	ation									
Parameters		Wetland A			Wetland B			Wetland D				Wet	Wetland E			
Size of Wetland (acres)		0.03			0.11			0.05				8.91				
Wetland Type (non-riparian, riparian riverine or riparian non- riverine)		Riparian			Riparian			Riparian				Riparian				
Mapped Soil Series		-			-							На				
Drainage class	-			-			-				poorly					
Soil Hydric Status		Hydric			Hydric			Hydric				Hydric				
Source of Hydrology		Sprin	g			Spr	ing		Spring				Groundwater			
Hydrologic Impairment	Agric	ulture/ Live	stock Gra	zing	Agri	culture/ Liv	estock Gr	azing	Ag	riculture/ Liv	estock Gra	zing		Agri	culture	
Native vegetation community	Mo	ountain Allu	vial Fore	st	М	ountain Al	luvial For	est	Mountain Alluvial Forest				M	ountain A	lluvial Fo	rest
Percent composition of exotic invasive vegetation		15% 15%						15	%			1	%			
				Reouls	tory Co	nside rati	ons									
Regulation		Applicable ?	Resolved?			Supporting Documentation										
Waters of the United States - Section 404		Yes	Yes				Jurisdictional Determination									
Waters of the United States – Section 401		Yes	Yes				Jurisdictional Determination									
Endangered Species Act		Yes				Yes			ERTR							
Historic Preservation Act					Ν	J/A			ERTR							
Coastal Zone Management Act (CZMA)/ Coastal Area Management	Act (CAMA)	No			Ν	J/A						N/A				
FEMA Floodplain Compliance		Yes			,	Yes			Yes							
Essential Fisheries Habitat		No	N/A				N/A									

A Based on actual thalweg calculations from the as-built survey, accounts for breaks in conservation easement and utility right-of-ways.

# Appendix B Visual Assessment Data



Prepared for



Current Condition Plan View Fletcher Mitigation Site Monitoring Year 3 Henderson County, NC NCDMS Contract No.: 006997 NCDMS Project No.: 100004 February 2023 Overview

 Easement
 — As-Built Top of Bank

 Map Pages
 — As-Built Thalweg

Notes: 1) Baselin

1) Baseline Data Provided by Kee Mapping





Encroachment Continuous Stage Recorder – - As-Built Top of Bank Fletcher Mitigation Site **Vegetation Plot** Monitoring Year 3 Streams Crest Gauge Henderson County, NC Enhancement II Meeting NCDMS Contract No.: 006997 Photo Point NCDMS Project No.: 100004 **Conservation Easement** No Credit Cross-Section February 2023 Mitigation Services Sheet 1 of 12 Restoration









Mitigation Services<br/>ENVIRONMENTAL QUALITYCuthent Condition Fian View<br/>Fletcher Mitigation Site<br/>Monitoring Year 3<br/>Henderson County, NC<br/>NCDMS Contract No.: 006997<br/>NCDMS Project No.: 100004<br/>February 2023<br/>Sheet 4 of 12














Mitigation Services

Current Condition Plan View Fletcher Mitigation Site Monitoring Year 3 Henderson County, NC NCDMS Contract No.: 006997 NCDMS Project No.: 100004 February 2023 Sheet 9 of 12

ve Vegetation	Streams			As-Built Top of Bank
Invasive Vegetation		Enhancement II	Vegetatior	n Plot
		No Credit		Not Meeting
		Preservation		Wetlands Enhancement
	$\bigstar$	Photo Point		Conservation Easement

# Raccoon Branch Reach 1A



**Pine Branch** 









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		Table 5. Visual Stream Mo Fletcher Mitigation Site - Fletche Assessed Length 457 feet (Apr	orphology Sta er Creek Rea il 6-7 and Se	ability Asses och 1A - Enh ptember 14-	ssment nancement I -15, 2022)	I				
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	N/A	N/A	N/A
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	N/A	N/A	N/A
				Totals	0	0	100%	N/A	N/A	N/A
3. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	N/A	N/A			N/A			
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	N/A	N/A			N/A			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio ≥ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A			

- Information Unavailable N/A - Item does not apply.

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Fletc Assessed Length 380 feet (Apr	Morphology her Creek F il 6-7 and Se	/ Stability A Reach 1B - R ptember 14	ssessment Restoration -15, 2022)					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	1	1			100%			
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	1	1			100%			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	1	1			100%			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	1	1			100%			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	1	1			100%			

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Fletc Assessed Length 1,514 feet (Ap	Morphology her Creek R ril 6-7 and S	Stability A each 1C - R eptember 14	ssessment lestoration I-15, 2022)					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	6	6			100%		,	,
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	6	6			100%			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	6	6			100%			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	6	6			100%			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio ≥ 1.6. Rootwads/logs providing some cover at base-flow.	6	6			100%			

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Fletc	Morphology her Creek F	/ Stability A Reach 2A - R	ssessment Restoration					
Major Channel Category	Channel Sub-Category	Assessed Length 1,299 feet (Ap	ril 6-7 and S Number Stable, Performing as Intended	eptember 14 Total Number in As-built	4-15, 2022) Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	13	14			93%			
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	14	14			100%			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	14	14			100%			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	14	14			100%			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio ≥ 1.6. Rootwads/logs providing some cover at base-flow.	14	14			100%			
- Information Unavailable	2	1	1	1			1			

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Fletc Assessed Length 1,511 feet (An	Morphology her Creek R ril 6-7 and S	/ Stability A leach 2B - R entember 14	ssessment lestoration					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			1	14	99%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	1	14	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	27	27			100%			
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	27	27			100%			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	27	27			100%			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	27	27			100%			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio ≥ 1.6. Rootwads/logs providing some cover at base-flow.	27	27			100%			

- Information Unavailable N/A - Item does not apply.

Major Channel Category Sub-Category	Assessed Length 153 feet (Apri Metric	l 6-7 and Se Number Stable, Performing	ptember 14- Total	15, 2022)			Number	Eastana	
		as Intended	Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	with Stabilizing Woody Vegetation	with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank 1. Scoured / Eroding Bank lacl scour and	acking vegetative cover resulting simply from poor growth and/or and erosion.			0	0	100%	0	0	100%
2. Undercut Banks un Does <u>NC</u> providing	undercut/overhanging to the extent that mass wasting appears likely. <u>IOT</u> include undercuts that are modest, appear sustainable and are ing habitat.			0	0	100%	0	0	100%
3. Mass Wasting Bank slut	lumping, calving, or collapse.			0	0	100%	0	0	100%
			Totals	0	0	100%	0	0	100%
2. Engineered Structures 1. Overall Integrity Structure	ares physically intact with no dislodged boulders or logs.	N/A	N/A			N/A			
2. Grade Control Grade co	control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A			
2a. Piping Structure	ires lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A			
3. Bank Protection Bank ero 15%.	rosion within the structures extent of influence does NOT exceed	N/A	N/A			N/A			
4. Habitat Pool form Depth Ra	orming structures maintaining ~ Max Pool Depth : Mean Bankfull Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A			

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Raccc Assessed Length 440 feet (Apr	Morphology oon Branch I il 6-7 and Se	<sup>7</sup> Stability A Reach 1D - I ptember 14-	ssessment Restoration 15, 2022)					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	N/A	N/A			N/A			•
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	N/A	N/A			N/A			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A			

	Table 5 cont'd. Visual Stream Morphology Stability Assessment         Fletcher Mitigation Site - Coates Branch Reach 1A - Enhancement II										
Major Channel Category	Channel Sub-Category	Assessed Length 284 feet (Apr Metric	il 6-7 and Se Number Stable, Performing as Intended	<u>ptember 14-</u> Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation	
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%	
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%	
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%	
				Totals	0	0	100%	0	0	100%	
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	N/A	N/A			N/A				
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A				
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A				
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	N/A	N/A			N/A				
	4. Habitat	Pool forming structures maintaining $\sim$ Max Pool Depth : Mean Bankfull Depth Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A				

- Information Unavailable

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Coat Assessed Length 601 feet (Apr	Morphology es Branch R il 6-7 and Se	<sup>7</sup> Stability A each 1B - R ptember 14-	estoration 15, 2022)					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	N/A	N/A			N/A			
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	N/A	N/A			N/A			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A			

		Table 5 cont'd. Visual Stream	Morphology	Stability A	ssessment					
		Fletcher Mitigation Site - Coat Assessed Length 708 feet (Apr	es Branch R il 6-7 and Se	each 1C - R ptember 14	estoration •15, 2022)					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	N/A	N/A			N/A			
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	N/A	N/A			N/A			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio ≥ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A			
- Information Unavailable										

		Table 5 cont'd. Visual Stream Fletcher Mitigation Site - Coat Assessed Length 325 feet (Apr	Morphology es Branch R il 6-7 and Se	Stability A each 1D - R ptember 14-	ssessment estoration 15, 2022)					
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.			0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
				Totals	0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	N/A	N/A			N/A			•
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	N/A	N/A			N/A			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	N/A	N/A			N/A			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	N/A	N/A			N/A			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	N/A	N/A			N/A			

Table 5 cont'd. Visual Stream Morphology Stability Assessment											
Fletcher Mitigation Site - Weston Creek Reach 1A - Restoration											
Major Channel Category	Channel Sub-Category	Assessed Length 1,562 feet (A)	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation	
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.	r ely. e		0	0	100%	0	0	100%	
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%	
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%	
					0	0	100%	0	0	100%	
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	30	30			100%				
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	30	30			100%				
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	30	30			100%				
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	30	30			100%				
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio ≥ 1.6. Rootwads/logs providing some cover at base-flow.	30	30			100%				
- Information Unavailable	•										

Table 5 cont'd. Visual Stream Morphology Stability Assessment         Fletcher Mitigation Site - Weston Creek Reach 1B - Restoration         Assessed Length 825 feet (April 6-7 and September 14-15, 2022)										
Major Channel Category	Channel Sub-Category	Metric	Number Stable, Performing as Intended	Total Number in As-built	Number of Unstable Segments	Amount of Unstable Footage	% Stable, Performing as Intended	Number with Stabilizing Woody Vegetation	Footage with Stabilizing Woody Vegetation	Adjusted % for Stabilizing Woody Vegetation
1. Bank	1. Scoured / Eroding	Bank lacking vegetative cover resulting simply from poor growth and/or scour and erosion.	y.		0	0	100%	0	0	100%
	2. Undercut	Banks undercut/overhanging to the extent that mass wasting appears likely. Does <u>NOT</u> include undercuts that are modest, appear sustainable and are providing habitat.			0	0	100%	0	0	100%
	3. Mass Wasting	Bank slumping, calving, or collapse.			0	0	100%	0	0	100%
Totals					0	0	100%	0	0	100%
2. Engineered Structures	1. Overall Integrity	Structures physically intact with no dislodged boulders or logs.	10	10			100%			•
	2. Grade Control	Grade control structures exhibiting maintenance of grade across the sill.	10	10			100%			
	2a. Piping	Structures lacking any substantial flow underneath sills or arms.	10	10			100%			
	3. Bank Protection	Bank erosion within the structures extent of influence does <u>NOT</u> exceed 15%.	10	10			100%			
	4. Habitat	Pool forming structures maintaining ~ Max Pool Depth : Mean Bankfull Depth Ratio $\geq$ 1.6. Rootwads/logs providing some cover at base-flow.	10	10			100%			

Table 6. Vegetation Condition Assessment         Fletcher Creek Restoration Site         Assessed April 6-7 and September 14-15, 2022										
Planted Acreage : 32.3										
Vegetation Category	Definitions	CCPV Depiction	Number of Polygons	Combined Acreage	% of Planted Acreage					
1. Bare Areas	Very limited cover of both woody and herbaceous material.	Brown Stipple	0	0.00	0%					
2. Low Stem Density Areas	n Density Areas Woody stem densities clearly below target levels based on MY3, 4, or S stem count criteria.		0	0.00	0%					
	Totals	0	0.00	0%						
3. Areas of Poor Growth Rates or Vigor	Areas with woody stems of a size class that are obviously small given the monitoring year.	N/A	0	0.00	0%					
		Cumulative Totals	0	0.00	0%					
Easement Acreage	34.8									
Vegetation Category	Definitions	CCPV Depiction	Number of Polygons/Points	Combined Acreage	% of Easement Acreage					
4. Invasive Areas of Concern	Areas or points (if too small to render as polygons at map scale).	Cross Hatch (Yellow - Present)	14	0.64	2%					
5. Easement Encroachment Areas	Areas or points (if too small to render as polygons at map scale).	Red	6	0.02	0.1%					
N/A - Item does not apply.		•								

## Permanent Photo Stations



Fletcher Creek 1A – Permanent Photo Station 1 Looking Upstream



Fletcher Creek 1A – Permanent Photo Station 1 Looking Downstream



Fletcher 1B, Cross section 1 Crest Gauge.



Fletcher Creek 1B – Permanent Photo Station 2 Looking Upstream



Fletcher Creek 1B – Permanent Photo Station 2 Looking Downstream



Fletcher Creek 1B – Permanent Photo Station 3 Looking Upstream



Fletcher Creek 1C – Permanent Photo Station 3 Looking Downstream



Fletcher Creek 1C – Permanent Photo Station 4 Looking Upstream



Fletcher Creek 1C – Permanent Photo Station 4 Looking Downstream



Fletcher Creek 1C – Permanent Photo Station 5 Looking Upstream from Crossing



Fletcher Creek 1C – Permanent Photo Station 5 Looking Downstream from Crossing



Fletcher Creek 1C – Permanent Photo Station 6 Looking Upstream



Fletcher Creek 1C – Permanent Photo Station 6 Looking Downstream



Fletcher Creek 1C – Permanent Photo Station 7 Looking Upstream



Fletcher Creek 2A - Permanent Photo Station 7 Looking Downstream



Coates Branch 1D – Permanent Photo Station 7 Looking Upstream



Fletcher Creek 2A – Permanent Photo Station 8 Looking Upstream



Fletcher Creek 2A – Permanent Photo Station 8 Looking Downstream



Fletcher Creek 2A – Permanent Photo Station 9 Looking Upstream



Fletcher Creek 2A – Permanent Photo Station 9 Looking Downstream



Fletcher Creek 2A – Permanent Photo Station 10 Looking Upstream



Fletcher Creek 2A – Permanent Photo Station 10 Looking Downstream



Fletcher Creek 2A – Permanent Photo Station 11 Looking Upstream



Fletcher Creek 2B – Permanent Photo Station 12 Looking Downstream



Fletcher Creek 2B – Permanent Photo Station 13 Looking Upstream from Crossing



Fletcher Creek 2B – Permanent Photo Station 13 Looking Downstream from Crossing



Fletcher Reach 2B. Cross-section 11 Crest Gauge.



Fletcher Creek 2B – Permanent Photo Station 14 Looking Upstream



Fletcher Creek 2B – Permanent Photo Station 14 Looking Downstream



Fletcher Creek 2B – Permanent Photo Station 15 Looking Upstream



Fletcher Creek 2B – Permanent Photo Station 15 Looking Downstream



Fletcher Creek 2B – Permanent Photo Station 16 Looking Upstream



Weston Creek 1A – Permanent Photo Station 17 Looking Downstream



Weston Reach 1A, Cross-section 15 Crest Gauge.



Weston Creek 1A – Permanent Photo Station 18 Looking Upstream



Weston Creek 1A – Permanent Photo Station 18 Looking Downstream



Weston Creek 1A – Permanent Photo Station 19 Looking Upstream



Weston Creek 1A – Permanent Photo Station 19 Looking Downstream



Weston Creek 1B – Permanent Photo Station 20 Looking Upstream



Weston Creek 1B – Permanent Photo Station 20 Looking Downstream



Weston Creek 1D – Permanent Photo Station 21 Looking Upstream



Raccoon Branch 1A – Permanent Photo Station 22 Looking Downstream



Pine Branch – Permanent Photo Station 23 Looking Downstream



Raccoon Branch 1A – Permanent Photo Station 24 Looking Upstream



Raccoon Branch 1B – Permanent Photo Station 24 Looking Downstream



Pine Branch – Permanent Photo Station 24 Looking Upstream


Raccoon Branch 1B – Permanent Photo Station 25 Looking Upstream



Raccoon Branch 1C – Permanent Photo Station 25 Looking Downstream



Raccoon Branch 1C – Permanent Photo Station 26 Looking Upstream



Raccoon Branch 1D – Permanent Photo Station 26 Looking Downstream



Raccoon Branch 1D – Permanent Photo Station 27 Looking Upstream



Raccoon Branch 1D – Permanent Photo Station 27 Looking Downstream



Coates Branch 1A – Permanent Photo Station 28 Looking Downstream



Coates Branch 1B – Permanent Photo Station 29 Looking Downstream



Coates Branch 1B – Permanent Photo Station 30 Looking Upstream



Coates Branch 1B – Permanent Photo Station 30 Looking Downstream



Coates Branch 1B – Permanent Photo Station 31 Looking Upstream from Crossing



Coates Branch 1C – Permanent Photo Station 31 Looking Downstream from Crossing



Cross-section 26 Crest Gauge.



Coates Branch 1C – Permanent Photo Station 32 Looking Upstream



Coates Branch 1C – Permanent Photo Station 32 Looking Downstream



Coates Branch 1D – Permanent Photo Station 33 Looking Upstream



Coates Branch 1D – Permanent Photo Station 33 Looking Downstream

## Vegetation Plot Photos



Vegetation Monitoring Plot 1



Vegetation Monitoring Plot 2



Vegetation Monitoring Plot 3



**Vegetation Monitoring Plot 4** 



**Vegetation Monitoring Plot 5** 



**Vegetation Monitoring Plot 6** 



**Vegetation Monitoring Plot 7** 



**Vegetation Monitoring Plot 8** 



**Vegetation Monitoring Plot 9** 



Vegetation Monitoring Plot 10



Vegetation Monitoring Plot 11



**Vegetation Monitoring Plot 12** 



Vegetation Monitoring Plot 13



**Vegetation Monitoring Plot 14** 



Vegetation Monitoring Plot 15



**Vegetation Monitoring Plot 16** 



Vegetation Monitoring Plot 17



Vegetation Monitoring Plot 18



Vegetation Monitoring Plot 19



**Vegetation Monitoring Plot 20** 



Vegetation Monitoring Plot 21



Vegetation Monitoring Plot 22



Vegetation Monitoring Plot 23



**Vegetation Monitoring Plot 24** 



Vegetation Monitoring Plot 25



**Vegetation Monitoring Plot 26** 

## **Problem Areas**



Beaver Dam Weston Reach 1B, Station 424+50



Breached Beaver Dam Weston Reach 1B, Station 424+50

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## Appendix C Vegetation Plot Data

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Planted Acreage		32.3																												
Date of Initial Pla	nt	2019-03-29																												
		2020-01-31 2021-02-26 202	22-																											
Date(s) of Supple	mental Plant(s)	03-31																												
Date(s) Mowing		2022-11-17																												
Date of Current S	urvey	2022-11-17																												
Plot size (ACRES)		0.0247													T-11-7- C-			2) El												
															Table 7a, Cu	rrent Plot Da	ta IVIY3 (202	2) Fletcher N	litigation Site	2.										
	Colorado Naciona	Common Name	Tree/Sh	Indicator	Veg F	Plot 1 F	Veg F	lot 2 F	Veg P	lot 3 F	Veg P	lot 4 F	Veg F	lot 5 F	Veg F	Not 6 F	Veg F	Plot 7 F	Veg P	lot 8 F	Veg P	lot 9 F	Veg Plo	ot 10 F	Veg Pl	lot 11 F	Veg P	ot 12 F	Veg Pla	lot 13 F
	Scientinc Name	Common Name	rub	Status	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total
	Acer negundo	boxelder	Tree	FAC	1	1	3	3	1	2	3	3		3	3	4	4	7	3	3			6	7	1	1	3	3	2	2
	Alnus serrulata	hazel alder	Tree	OBL					1	2																				
	Aronia arbutifolia	red chokeberry	Shrub	FACW																										
1 1	Aronia melanocarpa	black chokeberry	Shrub	FAC																										
	Asimina triloba	pawpaw	Tree	FAC																										
1 1	Betula nigra	river birch	Tree	FACW	1	1	4	4	3	3	2	2							1	1	2	2	1	1	3	4	5	5	5	5
Species	Carpinus caroliniana	American hornbeam	Tree	FAC					1	1			1	1					1	1	4	4					1	1		
Included in	Cephalanthus occidentalis	common buttonbush	Shrub	OBL	2	2			1	1	6	6	2	2	4	4	1	1												
Approved	Cornus amomum	silky dogwood	Shrub	FACW	2	2	1	1	4	4	3	3	5	5	5	5	2	2	1	1					2	2				
Mitigation Plan	Fraxinus pennsylvanica	green ash	Tree	FACW	3	3	3	3	3	3			1	1					6	6	2	2	3	3	1	1			2	2
1 1	Hamamelis virginiana	American witchhazel	Tree	FACU	1	1																								
	Lindera benzoin	northern spicebush	Tree	FAC																			1	1						
1 1	Liriodendron tulipifera	tuliptree	Tree	FACU			3	3									1	1	1	1	3	3			1	1			1	1
	Platanus occidentalis	American sycamore	Tree	FACW			4	4		2			1	1					3	3	5	5	6	6	4	4			3	3
	Salix nigra	black willow	Tree	OBL						1																				
	Salix sericea	silky willow	Shrub	OBL																								3	1	1
Sum	Performance Standard				10	10	18	18	14	19	14	14	10	13	12	13	8	11	16	16	16	16	17	18	12	13	9	12	14	14
	Acer rubrum	red maple	Tree	FAC			1		1						1						1									
1	llex opaca	American holly	Tree	FACU																										
	Juglans nigra	black walnut	Tree	FACU																						1				
1	Liquidambar styraciflua	sweetaum	Tree	FAC							1	1	2	2																
Post Mitigation	Oxydendrum arboreum	sourwood	Shrub	UPL																										
Plan Species	Pinus virainiana	Virainia pine	Tree																											
	Prunus serotina	black cherry	Tree	FACU																										
1	Quercus falcata	southern red oak	Tree	FACU																										
	Quercus sp.																													
1 1	Robinia pseudoacacia	black locust	Tree	FACU																										
Sum	Proposed Standard				10	10	18	18	14	19	14	14	10	13	12	13	8	11	16	16	16	16	17	18	12	13	9	12	14	14
		•																								•				
Invasives	Rosa multiflora	multiflora rose	Shrub	FACU														1												
	Current Year Ste	m Count				10		18		19		14		13		13		11		16		16		18		13		12		14
	Stems/Ac	re				405		729		769		567		526		526		405		648		648		729		526		486		567
Mitigation Plan	Species Co	unt				6		6		9		4		6		3		4		7		5		5		6		4		6
Performance -	Dominant Species Co	mposition (%)				30		22		21		40		33		38		58		38		31		39		29		42		36
Standard	Average Plot He	ight (ft.)				5		10		5		3		3		4		4		3		7		6		8		3		113
1 1	% Invasiv	6				0		0		0		0		0		0		8		0		0		0		0		0		0
																_												_		_
	Current Year Ste	m Count				10		18		19		14		13		13		11		16		16		18		13		12		14
Post Mitigation	Stems/Ac	re			1	405		729		769	1	567		526		526		405	1	648		648		729		526	1	486		567
Plan	Species Co	unt				6		6		9		4		6		3		4		7		5		5		6		4		6
Performance	Dominant Species Co	mposition (%)			1	30		22		21		40		33		38		58		38		31		39		29		42		36
Standard	Average Plot He	ight (ft.)		1	1	5		10		5		3		3		4		4		3		7	1	6		8		3		113
	% Invasiv	6				0		0		0		0		0		0		8		0		0		0		0		0		0

1). Bolded species are proposed for the current monitoring year, Italicized species are not approved, and a regular font indicates that the species has been approved. 2). The "Species included in Approved Migation Plan" sections contains only how species that we been approved in the origination plan addendum (regular font), and species that are not approved (talicized). 3). The "Migation Plan" sections contained with the species in a regular font indicates that the species that are not approved (talicized). 3). The "Migation Plan" sections contained with the species that we been approved in prior monitoring year (bolded), species that have been approved in prior monitoring years through a mitigation plan addendum for the current monitoring year (bolded), species that have been approved in prior monitoring years through a mitigation plan addendum for the current monitoring year (bolded), species that have been approved in prior monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan approved, post mitigation plan approved, and proposed stress.

Date of the performant o	F Veg Plot 26 F Total Planted Total
2020-13-22020           Date() do 2020-13-2020           Date() do 2020-13-70           Date() do 2020-	F Veg Plot 26 F Total Planted Total
Date of gate primer dar Particity       0.91 / 0.202 - 11/9         Date of gate primer dar Particity       0.92 - 11/9         Date of gate primer dar Particity       0.023 - 11/9         Date of corrent Survey       0.023 - 11/9         Date of corrent Survey       0.023 - 11/9         Date of corrent Survey       0.024 - 11/9         Date of corrent Survey       Date of corrent Survey         Date of corrent Survey       Date of corrent Survey       Date of corrent Survey       <	F Veg Plot 26 F Total Planted Total
Date of Lores for solution of the objection	F Veg Plot 26 F Total Planted Total
Marcine Super Part 1     Marcine Super Part 1       0.017     0.027 Marcine Super Su	F Veg Plot 26 F Total Planted Total
Name	F Veg Plot 26 F Total Planted Total
Process         Process         Process         Process         Veg Plot 14 F         Veg Plot 15 F         Veg Plot 25 F         Veg Plot 22 F         Veg Plot 25 F         V	F Veg Plot 26 F Total Planted Total
Scientific Name         Common Name         Tub         Status         Planted         Total	Total Planted Total
Ace negundo boxelder Tee FAC 2 2 1 1 1 1 1 2 2 2 5 5 1 1 1 1 1 2 2 2 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Alnus serrulata hazel alder Tree OBL	
Aronia arbutilola red chokeberry Shub FACW	
Aronia melanozarpa black chokeberry Shub FAC	
Asimisa triloba pawpaw Tre FAC	2 5 5
Betulanigra river birch Tree FACW 4 4 6 6 6 1 1 1 1 1 2 2 1 3 3 4 4 1 1 1	
Species Carpinus caroliniana American hombeam Tree FAC 2 2 4 4 4 1 1 1 3 4 4 4 1 1 1 3 1 2 12 12	
Included in Cephalanthus occidentalis common buttombush Shub OBL 1 1 1 2 2 2 1 1 1 1 1 1 1 1 1 1	1
Approved         Corrussamonum         silkydogwood         Shub         FACW         2         2         1         1         1         1         2         1         1         4	4
Mitigation Plan Fraxinus pernoylvanica green ash Tree FACW 1 1 1 4 4 2 2 4 4 1 1 1 1 1 2 2 2 2 2 2	
Hamamelis virginiana American witchhazel Tree FACU	
Lindera benzoin northern spicebush Tree FAC 1 1 1 2 2 2 1 1 3 3 1	1 1 1
Liriodendron tulipfera tuliptree Tree FACU 2 2 2 2 3 3 1 1 1	
Platanus occidentalis         American sycamore         Tree         FACW         6         6         2         2         3         1         3         4         4         1         1         7         7	
Salix rigra         black willow         Tree         OBL         2         1         1	
Salix sericea         silky willow         Shub         OBL         2         4         1         1         2         5         1         1	1 1
Sum         Performance Standard         15         15         19         19         10         12         12         12         17         18         21         9         9         16         16         16         16         16         16         10         10         8	8 7 7
Accruturum         red maple         Tree         FAC         Image: Contract of the second secon	
llexopaco Americanhaly Tre FAC	1
Jugaris ngra block wontuit i ree HALU	
Liquidadará strachura sveršava i rez HA.	
Post Miglation Ukydefarlan arboreum souwood shrub UPL	3
ria specia fransvigilization wiging pine interesting and an anti-anti-anti-anti-anti-anti-anti-anti-	3
	4
Num         Discretional         Discretional         Tele         Price         Image: Control and the price         Image: Cont	8 7 7
Invadest Braamultiflera multiflera Trage Strab FAT1	
Current Year Steen Count 15 19 12 12 17 27 9 9 16 16 16 16 10	8 7
Stem/lere         607         769         486         485         688         850         364         648         526         405	324 202
Mitigation Plan Species Count 5 6 7 6 6 9 4 9 7 4 5 7	4 3
Performance Dominant Species Composition (%) 38 32 33 31 28 24 27 25 44 67 23	21 71
Standard Average Plot Height (ft.) 96 4 3 6 5 6 8 3 6 6 6 3	2 4
% Invisives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0
Current Year Stem Count         15         19         12         12         17         21         9         16         16         16         10	8 7
Post Mitigation Stem://Arre 667 769 486 486 688 850 364 648 648 526 405 7	324 202
Plan Species Count 5 6 7 6 6 9 4 9 7 4 5	4 3
Performance Dominant Species Composition (%) 38 32 33 31 28 24 27 25 44 67 23	21 71
Standard         Average Pilot Height (ft.)         96         4         3         6         5         6         8         3         6         6         3	2 4
% Investives         0 <t< td=""><td></td></t<>	

1). Bolded species are proposed for the current monitoring year, Italicized species are not approved, and a regular font indicates that the species has been approved. 2). The "Species included in Approved Migation Plan" sections contains only how species that we been approved in the origination plan addendum (regular font), and species that are not approved (talicized). 3). The "Migation Plan" sections contained with the species in a regular font indicates that the species that are not approved (talicized). 3). The "Migation Plan" sections contained with the species that we been approved in prior monitoring year (bolded), species that have been approved in prior monitoring years through a mitigation plan addendum for the current monitoring year (bolded), species that have been approved in prior monitoring years through a mitigation plan addendum for the current monitoring year (bolded), species that have been approved in prior monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan addendum for the current monitoring years through a mitigation plan approved, post mitigation plan approved, and proposed stress.

		Table 7	o, Vegetation	Performance	Standards Sur	nmary Table, I	VIY3 (2022) FI	etcher Mitigat	ion Site.			
		Veg P	lot 1 F			Veg P	lot 2 F			Veg P	Plot 3 F	
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3	405	5	6	0	729	10	6	0	769	5	9	0
Monitoring Year 2	526	4	6	0	688	/	5	0	526	4	6	0
Monitoring Year 0	526	1	6	0	769	2	5	0	729	2	6	0
		Veg P	lot 4 F			Veg P	lot 5 F	-		Veg P	Plot 6 F	-
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3	567	3	4	0	526	3	6	0	526	4	3	0
Monitoring Year 2	567	2	4	0	405	3	5	0	486	2	3	0
Monitoring Year 0	520	1	4	0	304	2	2	0	324	22	2	0
Wontoning rear o	048	Veg P	lot 7 F	0	202	Veg P	lot 8 F	U	524	Veg P	Plot 9 F	U
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7			-									
Monitoring Year 5												
Monitoring Year 3	405	4	4	8	648	3	7	0	648	7	5	0
Monitoring Year 2	324	3	4	0	648	2	7	0	648	5	5	0
Monitoring Year 1	243	2	3	0	688	2	7	0	648	3	5	0
Monitoring Year U	324		4 ot 10 5	0	850		/ ot 11 E	0	972		6	0
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3	729	6	5	0	526	8	6	0	486	3	4	0
Monitoring Year 2	688	5	5	0	445	8	5	0	405	2	4	0
Monitoring Year 1	688	3	5	0	567	5	6	0	405	2	4	0
Monitoring Year 0	769	2	5	0	688	2	6	0	445	2	4	0
	Stome / Ac	Veg Pl	ot 13 F	1/ Investues	Stame / A a	Veg Pl	ot 14 F	9/ Investues	Stome / Ac	Veg Pl	lot 15 F	0/ 1
Monitoring Year 7	Stellis/Ac.	AV. Ht. (II)	# Species	76 Invasives	Stellis/Ac.	AV. Ht. (II)	# Species	76 IIIVasives	Stems/Ac.	AV. HL. (IL)	# Species	% invasives
Monitoring Year 5												
Monitoring Year 3												
	567	113	6	0	607	96	5	0	769	4	6	0
Monitoring Year 2	567 526	113 6	6 6	0	607 607	96 8	5 5	0	769 729	4	6 6	0
Monitoring Year 2 Monitoring Year 1	567 526 567	113 6 4	6 6 6	0 0 0	607 607 648	96 8 4	5 5 5	0 0 0	769 729 769	4 3 3	6 6 6	0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0	567 526 567 567	113 6 4 1	6 6 6 6	0 0 0 0	607 607 648 688	96 8 4 2	5 5 5 5	0 0 0 0	769 729 769 891	4 3 3 1	6 6 6 6	0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0	567 526 567 567	113 6 4 1 Veg Pl	6 6 6 ot 16 F		607 607 648 688	96 8 4 2 Veg Pl	5 5 5 ot 17 F	0 0 0 0	769 729 769 891	4 3 3 1 Veg Pl	6 6 6 00t 18 F	0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0	567 526 567 567 567 Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 16 F # Species	0 0 0 0 % Invasives	607 607 648 688 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species	0 0 0 0 % Invasives	769 729 769 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species	0 0 0 0 % Invasives
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 5	567 526 567 567 567 Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 16 F # Species	0 0 0 0 % Invasives	607 607 648 688 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species	0 0 0 0 % Invasives	769 729 769 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species	0 0 0 0 % Invasives
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 5 Monitoring Year 3	567 526 567 567 Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft)	6 6 0 0 t 16 F # Species	0 0 0 0 % Invasives	607 607 648 688 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species	0 0 0 0 % Invasives	769 729 769 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species	0 0 0 0 % Invasives
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3	567 526 567 567 567 Stems/Ac. 486 486	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2	6 6 0 16 F # Species 7 7	0 0 0 % Invasives	607 607 648 688 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4	5 5 5 ot 17 F # Species 6 6	0 0 0 % Invasives 0 0	769 729 769 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4	6 6 6 18 F # Species 6 5	0 0 0 % Invasives
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1	567 526 567 567 Stems/Ac. 486 486 567	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1	6 6 0 16 F # Species 7 7 7 9	0 0 0 % Invasives 0 0 0	607 607 648 688 Stems/Ac. 486 526 526	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3	5 5 5 ot 17 F # Species 6 6 6	0 0 0 % Invasives 0 0 0	769 729 769 891 Stems/Ac. 688 486 526	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2	6 6 6 00 18 F # Species 6 5 5	0 0 0 0 % Invasives 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 0	567 526 567 567 567 <b>Stems/Ac.</b> 486 486 567 972	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1	6 6 6 ot 16 F # Species 7 7 7 9 9	0 0 0 % Invasives 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 486 526 526 526 607	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1	5 5 5 ot 17 F # Species 6 6 6 6 7	0 0 0 % Invasives 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2	6 6 0 18 F # Species 6 5 5 6	0 0 0 % Invasives 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 0	567 526 567 567 <b>Stems/Ac.</b> 486 486 567 972	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl	6 6 6 ot 16 F # Species 7 7 9 9 9 0t 19 F	0 0 0 0 % Invasives 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 486 526 526 526 607	96 8 4 2 Veg Pl 6 4 3 1 Veg Pl	5 5 5 ot 17 F # Species 6 6 6 6 7 0t 20 F	0 0 0 % Invasives 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl	6 6 6 0t 18 F # Species 6 5 5 6 0t 21 F	0 0 0 % Invasives 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 5 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0	567 526 567 567 567 Stems/Ac. 486 486 567 972 567 972 5tems/Ac.	113 6 4 1 Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 16 F # Species 7 7 7 9 9 9 0t 19 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 486 526 526 607 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 7 7 ot 20 F # Species	0 0 0 % Invasives 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft)	6 6 6 0t 18 F # Species 6 5 5 6 0t 21 F # Species	0 0 0 % Invasives 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 7 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7	567 526 567 567 567 567 567 486 486 567 972 5tems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl 4v. Ht. (ft)	6 6 6 0t 16 F # Species 7 7 9 9 9 0t 19 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 486 526 526 607 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 7 7 ot 20 F # Species	0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft)	6 6 6 18 F # Species 6 5 5 6 ot 21 F # Species	0 0 0 % Invasives 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 5 Monitoring Year 2	567 526 567 567 567 567 548 486 486 567 972 5357 972 5358 557	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft)	6 6 6 0t 16 F # Species 7 7 9 9 9 0t 19 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0	607 607 648 688 Stems/Ac. 486 526 526 607 Stems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl 4 4 4 3 1 Veg Pl 4 4 4 4 5 5 5 6 5 6 5 6 5 7 7 7 7 7 7 7 7 7 7 7	5 5 5 ot 17 F # Species 6 6 6 6 7 7 ot 20 F # Species	0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac.	4 3 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species 6 5 5 6 ot 21 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           850           729	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 1 4v. Ht. (ft) 6 6	6 6 6 0t 16 F # Species 7 7 7 9 9 9 0t 19 F # Species 9 9	0 0 0 0 % Invasives 0 0 0 0 % Invasives 0 0	607 607 648 688 5tems/Ac. 486 526 526 526 607 5tems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 8 5	5 5 5 ot 17 F # Species 6 6 6 6 7 7 ot 20 F # Species 4 5	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2	6 6 6 ot 18 F # Species 6 5 5 6 ot 21 F # Species 9 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 7 Monitoring Year 5 Monitoring Year 5 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           Stems/Ac.           729           769	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 1 4 Veg Pl Av. Ht. (ft) 6 6 4 3	6 6 6 0t 16 F # Species 7 7 7 9 9 0t 19 F # Species 9 9 9	0 0 0 0 % Invasives 0 0 0 0 % Invasives % Invasives	607 607 648 688 5tems/Ac. 486 526 526 526 607 526 526 607 5tems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 5 5	0 0 0 0 % Invasives 0 0 0 0 % Invasives % Invasives 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2 2	6 6 6 18 F # Species 6 5 5 6 00 21 F # Species 9 9 9	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 5 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 0	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           Stems/Ac.           729           769           810	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1	6 6 6 0t 16 F # Species 7 7 7 9 9 9 0t 19 F # Species 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 486 526 526 526 607 526 607 5tems/Ac. 364 445 567 729	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 4 5 5 6	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 1	6 6 6 18 F # Species 6 5 6 10 21 F # Species 9 9 9 9	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 5 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 2 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           Stems/Ac.           729           769           810	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl	6 6 6 0t 16 F # Species 7 7 7 9 9 0t 19 F # Species 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 526 526 526 607 526 526 607 5tems/Ac. 364 445 567 729	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl	5 5 5 ot 17 F # Species 6 6 6 6 6 7 ot 20 F # Species 4 5 5 6 6 0 0 t 23 F	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl	6 6 6 ot 18 F # Species 6 5 5 6 ot 21 F # Species 9 9 9 9 9 10 ot 24 F	0 0 0 0 % Invasives 0 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0	567           526           567           567           Stems/Ac.           486           486           567           972           5tems/Ac.           5tems/Ac.           972           769           810           Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 7 7 7 9 9 0 19 F # Species 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 486 526 526 526 526 607 526 526 526 526 526 526 526 526 526 526	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 6 7 ot 20 F # Species 4 5 6 6 ot 23 F # Species	0 0 0 % Invasives 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species 6 5 5 6 ot 21 F # Species 9 9 9 9 10 ot 24 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 5 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           500           972           729           769           810           Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 7 7 7 9 9 9 0t 19 F # Species 9 9 9 9 9 9 9 9 9 9 0t 22 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 648 58 58 526 526 526 526 607 526 526 607 526 526 526 526 526 526 526 526 526 526	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 5 6 6 ot 23 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species 6 5 5 5 6 0 0 21 F # Species 9 9 9 9 10 0 0 24 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 2 Monitoring Year 2 Monitoring Year 3	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           972           759           810           Stems/Ac.           Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 0 t16 F # Species 7 7 7 9 9 9 9 0 t19 F # Species 9 9 9 9 0 t22 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 526 526 526 607 526 526 607 526 526 526 526 526 526 526 526 526 526	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 6 7 ot 20 F # Species 4 5 5 6 ot 23 F # Species	0 0 0 % Invasives 0 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac.	4 3 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species 6 6 5 5 5 6 6 ot 21 F # Species 9 9 9 9 9 9 9 0 0 0 0 t 24 F # Species	0 0 0 0 % Invasives 0 0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 2 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3	567           526           567           567           Stems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 6 4 4 3 1 Veg Pl Av. Ht. (ft)	6 6 6 0 116 F # Species 7 7 7 9 9 9 9 0 119 F # Species 9 9 9 9 9 9 9 9 9 0 122 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 526 526 526 607 526 526 364 445 567 729 5tems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 6 6	5 5 5 ot 17 F # Species 6 6 6 6 6 7 ot 20 F # Species 4 5 5 6 6 0 7 ot 20 F # Species 4 5 5 6 6 6 7 7 0 7 0 7 7 0 7 7 7 7 7 7 7 7 7	0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 ot 18 F # Species 6 5 5 6 ot 21 F # Species 9 9 9 9 9 9 10 ot 24 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           557           972           769           810           Stems/Ac.           648           688           688	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 4 4 4 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 4 3 2	6 6 6 0 116 F # Species 7 7 9 9 9 9 0 119 F # Species 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 648 688 5tems/Ac. 486 526 526 607 526 607 5tems/Ac. 364 445 567 729 5tems/Ac.	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 9 6 5 3 3 1 Veg Pl	5 5 5 5 5 5 5 5 5 6 6 6 7 7 7 7 7 7 7 7	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 405	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 0 t 18 F # Species 6 5 5 6 0 t 21 F # Species 9 9 9 9 9 9 9 9 9 0 10 0 t 24 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 2 Monitoring Year 2 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           52           567           972           52           557           972           52           550           729           769           810           5           5           648           688           688           688           729	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 1 4 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1 2 5 6 6 6 4 3 2 7 2	6 6 6 7 7 7 9 9 9 0 19 F # Species 9 9 9 9 9 9 0 12 F # Species 9 9 9 9 0 7 7 7 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 58 526 526 526 607 526 607 526 526 526 526 729 58 567 729 58 567 729 55 526 526 526 526 526 526 526 526 526	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 6 5 3 3 1 Veg Pl Av. Ht. (ft) 9 6 6 7 7 7	5 5 5 5 17 F # Species 6 6 6 7 0 t 20 F # Species 4 5 5 6 0 t 23 F # Species 4 4 4 4 4 4 4	0 0 0 0 % Invasives 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 9 405 364	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 0 18 F # Species 6 5 5 6 0 12 I F # Species 9 9 9 9 9 9 9 9 9 9 9 0 10 0 0 24 F # Species 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 2 Monitoring Year 2 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 0 Monitoring Year 2 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           52           52           52           55           972           52           52           52           52           52           550           729           769           810           5           5           648           688           688           729	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 1 4 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 6 4 3 2 5 6 4 3 1 2 8 9 8 9 8 9 8 9 8 9 8 9 8 9 9 9 9 9 9	6 6 6 7 7 7 9 9 9 0 0 19 F # Species 9 9 9 9 9 0 19 F # Species 9 9 9 9 0 12 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 55 526 526 526 607 526 607 55 526 607 55 526 526 526 526 526 526 526 526 526	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 9 6 5 3 3 1 Veg Pl Av. Ht. (ft) 9 6 7 8 8 5 5 3 1 2 2 8 9 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 5 5 6 ot 23 F # Species 4 4 4 4 4 4 4 4 4 4 4 4 4 4 0 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 9 405 364 405 567	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft) 3 3 2 2 1 Veg Pl Av. Ht. (ft) 3 3 2 2 1 1 Veg Pl Av. Ht. (ft) 3 3 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	6 6 6 0 18 F # Species 6 5 5 6 0 0 21 F # Species 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 0 0 0 22 F # Species 5 5 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 2 Monitoring Year 3 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1	567           526           567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           52           52           52           567           972           52           567           972           57           972           769           810           729           769           810           648           688           688           688           729           729           769           810           500           729           769           648           688           688           729           729           729           729           729           5tems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 1 4 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 3 2 2 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6 6 6 7 7 7 9 9 0 19 F # Species 9 9 9 9 9 9 9 0 19 F # Species 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 55 526 526 526 607 526 607 55 55 55 729 55 55 729 55 55 729 55 55 729 55 55 729 55 55 729 55 55 729 55 55 729 55 55 729 55 55 55 729 55 55 55 55 55 55 55 55 55 55 55 55 55	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 3 1 Veg Pl Av. Ht. (ft) 6 5 5 3 3 1 Veg Pl Av. Ht. (ft) 9 8	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 5 5 6 ot 23 F # Species 4 4 5 5 6 0 ot 23 F # Species 4 4 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 9891 Stems/Ac. 405 364	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 3 2 2 1 1 Veg Pl Av. Ht. (ft) 3 3 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	6 6 6 3 5 4 5 5 6 0 0 21 F 4 5 9 9 9 9 9 9 9 9 9 9 0 0 0 24 F 4 5 5 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 3 Monitoring Year 3	567           526           5567           567           Stems/Ac.           486           486           5567           972           Stems/Ac.           5567           972           5567           972           5567           972           709           769           810           5tems/Ac.           648           688           688           729           769           810           5tems/Ac.           5tems/Ac.           5tems/Ac.           5tems/Ac.	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 2 1 4 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 3 2 Veg Pl Av. Ht. (ft) 9 6 4 4 3 2 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	6 6 6 7 7 7 9 9 0 0 19 F # Species 9 9 9 9 9 9 9 9 9 9 9 0 22 F # Species 7 7 7 7 7 7 0 25 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 648 688 3 5 526 526 526 607 526 607 526 607 526 526 526 526 526 7 729 5 5 567 729 5 5 567 729 5 5 5 67 729 5 5 5 67 5 729 5 5 5 6 7 5 5 6 7 5 5 6 8 8 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 6 5 3 2 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 7 0 t 20 F # Species 6 0 t 23 F # Species 4 4 4 4 4 4 0 t 26 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 5tems/Ac. 688 486 526 810 526 810 5526 810 5526 810 5526 810 5526 810 5526 810 5526 8391 5tems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 10 18 F # Species 6 5 6 10 21 F # Species 9 9 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0 0 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Monitoring Year 2 Monitoring Year 1 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 0 Monitoring Year 7 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 2 Monitoring Year 2 Monitoring Year 2 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1 Monitoring Year 2 Monitoring Year 2 Monitoring Year 3	567           526           5567           567           Stems/Ac.           486           486           567           972           Stems/Ac.           2           557           972           51           567           972           52           567           972           769           810           729           769           810           648           688           688           688           729           5tems/Ac.           55           55           729           75           55           648           688           729           55           55           567           55           55           55           55           55           55           55           55           55           55      <	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 3 2 Veg Pl Av. Ht. (ft)	6 6 6 7 7 7 9 9 9 0 19 F # Species 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0           0	607 607 648 648 58 58 526 526 526 607 526 607 526 607 526 526 729 58 567 729 55 567 729 55 567 729 55 567 729 55 567 729 55 567 729 55 526 405 526 526 526 526 526 526 526 526 526 52	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 6 6 5 3 2 Veg Pl Av. Ht. (ft)	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 5 6 6 ot 23 F # Species 4 4 4 4 4 4 4 4 4 0 t 26 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 91 Stems/Ac. 91 567 364	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft)	6 6 6 3 5 5 5 6 5 5 6 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 0 10 0 0 24 F # Species 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 1 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 4 Monitoring Year 5 Monitoring Year 5 Monitoring Year 5 Monitoring Year 3 Monitoring Year 2 Monitoring Year 2 Monitoring Year 2 Monitoring Year 3 Monitoring Year 1 Monitoring Year 2 Monitoring Year 3 Monitoring Year 3	567           526           567           567           Stems/Ac.           486           486           486           567           972           972           5tems/Ac.           850           729           769           810           5tems/Ac.           648           688           688           688           688           585           729	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 4 3 2 Veg Pl Av. Ht. (ft) 2	6 6 6 7 7 7 9 9 9 0 19 F # Species 9 9 9 9 9 9 0 12 F # Species 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 607 648 688 5tems/Ac. 526 526 526 607 526 607 526 526 607 526 526 729 5tems/Ac. 526 405 526 405 405 405 526 526 526 526 526 526 526 526 526 52	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 6 6 5 3 2 Veg Pl Av. Ht. (ft) 4 4	5 5 5 5 17 F # Species 6 6 6 6 7 7 0t 20 F # Species 4 4 5 5 6 6 0t 23 F # Species 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 91 Stems/Ac. 405 364	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft) 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1	6 6 6 6 18 F # Species 6 5 5 6 0 7 7 9 9 9 9 9 9 9 9 9 9 9 9 0 0 0 7 7 8 7 8 9 9 9 9 9 9 9 9 9 10 0 0 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3	567           526           567           567           567           486           486           567           972           Stems/Ac.           972           972           526           567           972           550           972           550           972           550           972           550           972           648           648           688           688           688           688           688           688           688           638           729           5tems/Ac.           324           324	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 4 3 2 Veg Pl Av. Ht. (ft) 2 1 Av. Ht. (ft)	6 6 6 7 7 7 9 9 9 0 19 F # Species 9 9 9 9 9 9 0 12 F # Species 7 7 7 7 7 7 0 12 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 648 688 5tems/Ac. 526 526 607 526 607 526 607 364 445 567 729 5tems/Ac. 557 526 405 526 405 526 405 526 405 526 405	96 8 4 2 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 9 6 6 5 3 3 1 Veg Pl Av. Ht. (ft) 9 8 5 3 3 1 Veg Pl Av. Ht. (ft) 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	5 5 5 5 117 F # Species 6 6 6 7 7 ot 20 F # Species 4 4 5 5 6 6 ot 23 F # Species 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 Stems/Ac. 91 5tems/Ac.	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft) 3 2 1 Veg Pl Av. Ht. (ft)	6 6 6 0 18 F # Species 6 5 5 6 6 0 12 F # Species 9 9 9 9 9 9 10 0 0 24 F # Species 5 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Monitoring Year 2 Monitoring Year 1 Monitoring Year 1 Monitoring Year 0 Monitoring Year 0 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 3 Monitoring Year 1 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 3 Monitoring Year 1 Monitoring Year 3 Monitoring Year 3 Monitoring Year 1 Monitoring Year 2 Monitoring Year 3 Monitoring Year 1 Monitoring Year 3 Monitoring Year 1 Monitoring Year 1 Monitoring Year 3 Monitoring Year 1	567           526           567           567           567           567           567           567           567           486           486           567           972           972           5tems/Ac.           850           729           769           810           Stems/Ac.           648           688           688           688           688           688           324           324           243	113 6 4 1 Veg Pl Av. Ht. (ft) 3 2 1 1 1 Veg Pl Av. Ht. (ft) 6 6 4 3 1 Veg Pl Av. Ht. (ft) 6 6 4 4 3 2 Veg Pl Av. Ht. (ft) 2 1 2 4	6 6 6 7 7 7 9 9 9 9 0 19 F # Species 9 9 9 9 9 9 9 0 12 F # Species 7 7 7 7 7 7 7 7 0 12 F # Species	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	607 648 688 5tems/Ac. 526 526 607 526 607 526 364 445 567 729 567 729 5567 405 405 405 405 405 405 405 405 526 202 283 243 23 202	96 8 4 2 Veg Pl Av. Ht. (ft) 6 4 3 1 Veg Pl Av. Ht. (ft) 8 5 3 1 Veg Pl Av. Ht. (ft) 6 5 3 2 Veg Pl Av. Ht. (ft) 9 4 4 4 4 3 2	5 5 5 ot 17 F # Species 6 6 6 6 7 ot 20 F # Species 4 4 5 5 6 6 ot 23 F # Species 4 4 4 5 5 6 6 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	769 729 769 891 Stems/Ac. 688 486 526 810 Stems/Ac. 648 688 729 891 5tems/Ac. 364 405 567	4 3 1 Veg Pl Av. Ht. (ft) 5 4 2 2 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft) 3 2 2 1 Veg Pl Av. Ht. (ft)	6 6 6 0 t 18 F # Species 6 5 5 6 0 t 21 F # Species 9 9 9 9 9 9 9 10 0 t 24 F # Species 5 5 5 5 5 5 5 5 5 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\*Each monitoring year represents a different plot for the random vegetation plot "groups". Random plots are denoted with an R, and fixed plots with an F.

Table 9. Vegetat Fletc	ion Plot Criteria Attainr her Creek Restoration P	nent MY3 (2022) roject
Vegetation Plot ID	Vegetation Survival Threshold Met?	Tract Mean
1	Yes	
2	Yes	
3	Yes	
4	Yes	
5	Yes	
6	Yes	
7	Yes	
8	Yes	
9	Yes	
10	Yes	
11	Yes	
12	Yes	
13	Yes	06.2%
14	Yes	90.270
15	Yes	
16	Yes	
17	Yes	
18	Yes	
19	Yes	
20	Yes	
21	Yes	
22	Yes	
23	Yes	
24	Yes	
25	Yes	
26	No	

## Appendix D Stream Measurement and Geomorphology Data

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Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	10.9	11.9	12.2	10.8	9.5	-	-	-
Floodprone Width (ft)	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Bankfull Mean Depth (ft)	1.7	1.5	1.5	1.7	1.9	-	-	-
Bankfull Max Depth (ft)	2.7	2.5	5.7	2.8	2.6	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	18.3	18.3	18.3	18.3	18.3	-	-	-
Width/Depth Ratio	6.5	7.8	8.1	6.4	4.9	-	-	-
Entrenchment Ratio	5.5	5.0	4.9	5.5	6.3	-	-	-
Bank Height Ratio	1.0	1.1	0.9	0.9	0.8	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	10.9	7.5	12.2	6.9	7.4	-	-	-
Floodprone Width (ft)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Bankfull Mean Depth (ft)	0.9	1.4	0.8	1.5	1.4	-	-	-
Bankfull Max Depth (ft)	1.8	2.0	2.0	2.6	2.1	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	10.3	10.3	10.3	10.3	10.3	-	-	-
Width/Depth Ratio	11.5	5.5	14.5	4.7	5.3	-	-	-
Entrenchment Ratio	3.7	5.3	3.3	5.8	5.4	-	-	-
Bank Height Ratio	1.0	0.8	0.8	0.9	0.9	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	7.6	6.1	6.5	5.4	4.0	-	-	-
Floodprone Width (ft)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Bankfull Mean Depth (ft)	0.3	0.3	0.3	0.4	0.5	-	-	-
Bankfull Max Depth (ft)	0.5	0.5	0.4	0.6	0.6	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	2.1	2.1	2.1	2.1	2.1	-	-	-
Width/Depth Ratio	27.6	18.2	19.8	14.0	7.9	-	-	-
Entrenchment Ratio	1.3	1.6	1.5	1.8	2.5	-	-	-
Bank Height Ratio	1.0	1.4	1.3	1.0	0.9	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B


						-		
CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	16.6	14.0	18.7	8.5	11.2	-	-	-
Floodprone Width (ft)	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Bankfull Mean Depth (ft)	1.2	1.5	1.1	2.4	1.8	-	-	-
Bankfull Max Depth (ft)	3.0	3.5	3.4	3.8	3.6	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	20.3	20.3	20.3	20.3	20.3	-	-	-
Width/Depth Ratio	13.7	9.6	17.2	3.5	6.2	-	-	-
Entrenchment Ratio	3.6	4.3	3.2	7.1	5.3	-	-	-
Bank Height Ratio	1.0	0.8	0.8	0.8	0.9	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



MY0	Pre-MY1	— MY1 –	MY2 -	MY3	BKF
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CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	12.0	12.9	13.0	12.8	11.0	-	-	-
Floodprone Width (ft)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Bankfull Mean Depth (ft)	0.6	0.6	0.6	0.6	0.7	-	-	-
Bankfull Max Depth (ft)	1.0	1.0	1.0	1.2	1.2	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	7.5	7.5	7.5	7.5	7.5	-	-	-
Width/Depth Ratio	19.2	22.4	22.4	21.8	16.2	-	-	-
Entrenchment Ratio	4.2	3.9	3.9	3.9	4.5	-	-	-
Bank Height Ratio	1.0	1.4	1.4	1.1	1.0	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



	—— MY0	Pre-MYI	—— MYI	—— MY2	MY3	BKF
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CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	13.1	10.6	11.7	8.5	8.0	-	-	-
Floodprone Width (ft)	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Bankfull Mean Depth (ft)	0.8	1.0	0.9	1.2	1.3	-	-	-
Bankfull Max Depth (ft)	1.6	1.7	1.8	1.9	1.9	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	10.4	10.4	10.4	10.4	10.4	-	-	-
Width/Depth Ratio	16.5	10.7	13.2	6.9	6.2	-	-	-
Entrenchment Ratio	2.7	3.3	3.0	4.1	4.4	-	-	-
Bank Height Ratio	1.0	1.0	0.9	0.9	1.0	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	15.3	15.0	15.7	12.5	16.3	-	-	-
Floodprone Width (ft)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Bankfull Mean Depth (ft)	1.3	1.4	1.3	1.6	1.3	-	-	-
Bankfull Max Depth (ft)	2.6	2.8	2.8	2.8	2.6	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	20.5	20.5	20.5	20.5	20.5	-	-	-
Width/Depth Ratio	11.4	11.0	12.0	7.7	13.0	-	-	-
Entrenchment Ratio	3.3	3.3	3.2	4.0	3.1	-	-	-
Bank Height Ratio	1.0	0.8	0.9	0.9	0.9	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B







Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	12.6	11.0	11.8	8.2	6.7	-	-	-
Floodprone Width (ft)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Bankfull Mean Depth (ft)	0.7	0.8	0.8	1.1	1.4	-	-	-
Bankfull Max Depth (ft)	1.2	1.6	1.7	2.5	2.3	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	9.2	9.2	9.2	9.2	9.2	-	-	-
Width/Depth Ratio	17.4	13.2	15.0	7.3	4.9	-	-	-
Entrenchment Ratio	4.0	4.6	4.3	6.1	7.4	-	-	-
Bank Height Ratio	1.0	1.1	1.2	1.0	1.2	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	10.2	9.6	11.2	12.6	11.0	-	-	-
Floodprone Width (ft)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Bankfull Mean Depth (ft)	0.7	0.7	0.6	0.6	0.6	-	-	-
Bankfull Max Depth (ft)	1.3	1.1	1.2	1.4	1.3	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	7.1	7.1	7.1	7.1	7.1	-	-	-
Width/Depth Ratio	14.6	13.0	17.7	22.4	16.9	-	-	-
Entrenchment Ratio	3.9	4.2	3.6	3.2	3.7	-	-	-
Bank Height Ratio	1.0	1.1	1.0	1.1	1.1	-	-	-





 Left Descending Bank
 Right Descending Bank

 \* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	9.7	10.0	9.7	9.4	7.8	-	-	-
Floodprone Width (ft)	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Bankfull Mean Depth (ft)	1.2	1.2	1.2	1.2	1.5	-	-	-
Bankfull Max Depth (ft)	2.3	2.2	2.2	2.4	2.4	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	11.7	11.7	11.7	11.7	11.7	-	-	-
Width/Depth Ratio	8.1	8.5	8.1	7.6	5.2	-	-	-
Entrenchment Ratio	7.2	7.0	7.2	7.5	9.0	-	-	-
Bank Height Ratio	1.0	1.0	1.0	1.2	1.0	-	-	-





 Left Descending Bank
 Upstream

 \* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B







 Left Descending Bank
 Right Descending Bank

 \* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



6.8

1.1

12.3

7.2

1.1

12.2

7.3

1.0



Width/Depth Ratio

Entrenchment Ratio

Bank Height Ratio



13.8

6.8

1.1

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Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B

12.6

7.1

1.0





Left Descending Bank

Right Descending Bank

\* Data not collected due to adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	9.7	-	9.3	9.4	10.1	-	-	-
Floodprone Width (ft)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Bankfull Mean Depth (ft)	1.1	-	1.1	1.1	1.0	-	-	-
Bankfull Max Depth (ft)	2.0	-	1.8	1.8	1.6	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	10.4	-	10.4	10.4	10.4	-	-	-
Width/Depth Ratio	9.1	-	8.3	8.5	9.9	-	-	-
Entrenchment Ratio	5.1	-	5.4	5.3	4.9	-	-	-
Bank Height Ratio	1.0	-	0.9	0.8	0.9	-	-	-



Left Descending Bank

Fight Descending Bank

\* Data not collected due to adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	9.8	-	8.2	8.3	6.6	-	-	-
Floodprone Width (ft)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Bankfull Mean Depth (ft)	1.0	-	1.1	1.1	1.4	-	-	-
Bankfull Max Depth (ft)	1.7	-	1.9	1.8	2.1	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	9.4	-	9.4	9.4	9.4	-	-	-
Width/Depth Ratio	10.1	-	7.2	7.4	4.6	-	-	-
Entrenchment Ratio	5.1	-	6.1	6.0	7.6	-	-	-
Bank Height Ratio	1.0	-	0.9	0.9	0.8	-	-	-





Right Descending Bank

Left Descending Bank
\* Data not collected due to adaptive management on Weston Reach 1A and 1B



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0.9

1.0

1.0

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Left Descending Bank \* Data not collected due to adaptive management on Weston Reach 1A and 1B

Right Descending Bank



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	9.7	-	9.4	9.8	7.7	-	-	-
Floodprone Width (ft)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Bankfull Mean Depth (ft)	0.5	-	0.5	0.5	0.6	-	-	-
Bankfull Max Depth (ft)	0.7	-	0.8	0.8	1.0	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	4.7	-	4.7	4.7	4.7	-	-	-
Width/Depth Ratio	20.4	-	19.0	20.4	12.8	-	-	-
Entrenchment Ratio	4.1	-	4.2	4.1	5.2	-	-	-
Bank Height Ratio	1.0	-	1.3	1.1	0.9	-	-	-





Right Descending Bank

\* Data not collected due to adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	8.3	-	13.4	10.8	7.7	-	-	-
Floodprone Width (ft)	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Bankfull Mean Depth (ft)	1.5	-	0.9	1.2	1.6	-	-	-
Bankfull Max Depth (ft)	2.5	-	2.5	2.5	2.6	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	12.7	-	12.7	12.7	12.7	-	-	-
Width/Depth Ratio	5.4	-	14.2	9.2	4.7	-	-	-
Entrenchment Ratio	7.2	-	4.5	5.5	7.8	-	-	-
Bank Height Ratio	1.0	-	1.0	1.0	0.9	-	-	-





Right Descending Bank

\* Data not collected due to adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	5.6	6.1	6.1	3.6	3.5	-	-	-
Floodprone Width (ft)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Bankfull Mean Depth (ft)	0.5	0.4	0.4	0.7	0.8	-	-	-
Bankfull Max Depth (ft)	1.2	1.2	1.1	1.0	1.2	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	2.7	2.7	2.7	2.7	2.7	-	-	-
Width/Depth Ratio	11.6	13.7	13.8	4.9	4.5	-	-	-
Entrenchment Ratio	3.6	3.3	3.3	5.6	5.7	-	-	-
Bank Height Ratio	1.0	0.7	0.6	0.7	0.8	-	-	-



Left Descending Bank



Right Descending Bank

\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



18.1

2.6

0.6

3.4

14.2

2.9

0.8

3.4

9.5

3.5

0.7

3.4

6.2

4.4

0.7

-

-

-

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Bankfull Cross-Sectional Area (ft<sup>2</sup>)

Width/Depth Ratio

Entrenchment Ratio

Bank Height Ratio



Facing Upstream Right Descending Bank \* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B

3.4

13.8

2.9

1.0







Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



1.0

0.9

0.9

0.9



Bank Height Ratio



-

-

-

Left Descending BankLooking Downstream\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B







Looking UpstreamRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



2.2

14.0

0.6

2.2

15.4

3.4

0.8

0.5

2.2

15.5

3.4

0.9

0.8

2.2

8.1

4.7

0.9

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Bankfull Max Depth (ft)

Width/Depth Ratio

Bankfull Cross-Sectional Area (ft<sup>2</sup>)

0.8

2.2

13.5



Facing UpstreamRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B



CHANNEL DIMENSIONS SUMMARY	MY0	*Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6
Bankful Width (ft)	5.9	6.9	6.4	5.6	6.7	-	-	-
Floodprone Width (ft)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Bankfull Mean Depth (ft)	0.6	0.5	0.6	0.7	0.6	-	-	-
Bankfull Max Depth (ft)	1.2	1.3	1.1	1.2	1.2	-	-	-
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	3.7	3.7	3.7	3.7	3.7	-	-	-
Width/Depth Ratio	9.2	13.2	11.1	8.4	12.2	-	-	-
Entrenchment Ratio	4.3	3.6	3.9	4.5	3.7	-	-	-
Bank Height Ratio	1.0	1.0	0.8	1.0	1.0	-	-	-





Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B





Entrenchment Ratio

Bank Height Ratio

4.1

1.0

3.4

1.0

3.3

0.9

5.3

0.9

6.2

0.9



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Left Descending BankRight Descending Bank\* Data collected as part of 2019 monitoring year during adaptive management on Weston Reach 1A and 1B

			Fle	tcher	Ta Miti	able 1 gatio	.0. Ba n Site	aselin - Fle	e Str tche	e am l r Cre	Data S ek Re	umm each 1	ary 1B (3)	80 fe	et *)									
Parameter	Regi	ional (	Curve		Pre-I	Existin	g Con	dition			Refe	ence	Reach	Data	,	1	Design	1		As-l	Built /	Basel	ine	
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	6.1	-	-	8.0	-	-	14.7	-	-	19.5	-	-	-	8.7	-	-	7.1	-	-	-	1
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0	-	-	-	1
Bankfull Mean Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	0.3	-	-	-	1
Bankfull Max Depth (ft)				0.7	-	-	0.8	-	-	1.2	-	-	1.4	-	-	-	0.9	-	-	0.6	-	-	-	1
Bankfull Cross Sectional Area (ft2)		-		4.4	-	-	6.2	-	-	18.0	-	-	27.2	-	-	-	5.5	-	-	2.3	-	-	-	1
Width/Depth Ratio				8.5	-	-	10.5	-	-	12.0	-	-	14	-	-	-	13.6	-	-	21.4	-	-	-	1
Entrenchment Ratio				1.1	-	-	2.1	-	-	1.4	-	-	1.5	-	-	-	2.4	-	-	2.8	-	-	-	1
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	1
d50 (mm)				6.0	-	1	11.0	-	-	60.0	-	1	125	1	1	-	-	-	-	12.0	1	-	-	1
Profile																								
Riffle Length (ft)				-	-	1	1	-	-	-	-	1	1	1	1	-	-	-	4.8	8.5	8.0	13.1	2.5	13
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	0.018	0.014	0.044	0.013	13
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	9.6	9.7	14.4	2.8	12
Pool Max Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	1.2	2.0	1.9	2.9	0.5	12
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	23.4	-	39.0	14.6	27.9	29.4	40.5	8.0	11
Pattern																								
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	10.3	13.7	17.2	17.7	18.2	17.8	19.0	0.7	3
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	14.0	-	21.0	17.0	22.7	25.0	26.0	4.9	3
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	2.6	2.9	3.0	0.6	3
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.7	18.2	17.8	19.1	0.8	3
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	2.0	2.1	2.0	2.2	0.1	3
										•														
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft2							-					-					-							
Max Part Size (mm) Mobilized at Bankfull							-					-					-				-			
Stream Power (Transport Capacity) W/m2							-					-					-				-			
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	30					2.3	35				0.30							
Rosgen Classification						(	3					В	4				B4				В	4		
Bankfull Velocity (fps)		-				2.3	- 3.6					-					-							
Bankfull Discharge (cfs)		-				22	2.0					-					15.0							
Valley Length (ft)							-					-					-				33	57		
* Channel Thalweg Length (ft)							-					-					-				38	30		
^ Channel Centerline (ft)							-					-									37	7		
Sinuosity							-										1.11				1.	12		
Water Surface Slope (ft/ft)						0.008	- 0.018					0.011 -	0.018				0.016				0.0	15		
Bankfull Slope (ft/ft)							-										-				0.0	16		
Bankfull Floodplain Area (acres)							-					-												
% of Reach with Eroding Banks							-					-												
Channel Stability or Habitat Metric						Uns	table			1														
Biological or Other							-					-												

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Fle	tcher	Ta Miti	able 1 gatio	.0. Ba n Site	aselin - Fle	e Str tche	e am l r Cre	Data S ek Re	umm each 1	ary 1B (3)	80 fe	et *)									
Parameter	Regi	ional (	Curve		Pre-I	Existin	g Con	dition			Refe	ence	Reach	Data	,	1	Design	1		As-l	Built /	Basel	ine	
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	6.1	-	-	8.0	-	-	14.7	-	-	19.5	-	-	-	8.7	-	-	7.1	-	-	-	1
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0	-	-	-	1
Bankfull Mean Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	0.3	-	-	-	1
Bankfull Max Depth (ft)				0.7	-	-	0.8	-	-	1.2	-	-	1.4	-	-	-	0.9	-	-	0.6	-	-	-	1
Bankfull Cross Sectional Area (ft2)		-		4.4	-	-	6.2	-	-	18.0	-	-	27.2	-	-	-	5.5	-	-	2.3	-	-	-	1
Width/Depth Ratio				8.5	-	-	10.5	-	-	12.0	-	-	14	-	-	-	13.6	-	-	21.4	-	-	-	1
Entrenchment Ratio				1.1	-	-	2.1	-	-	1.4	-	-	1.5	-	-	-	2.4	-	-	2.8	-	-	-	1
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	1
d50 (mm)				6.0	-	1	11.0	-	-	60.0	-	1	125	1	1	-	-	-	-	12.0	1	-	-	1
Profile																								
Riffle Length (ft)				-	-	1	1	-	-	-	-	1	1	1	1	-	-	-	4.8	8.5	8.0	13.1	2.5	13
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	0.018	0.014	0.044	0.013	13
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	9.6	9.7	14.4	2.8	12
Pool Max Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	1.2	2.0	1.9	2.9	0.5	12
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	23.4	-	39.0	14.6	27.9	29.4	40.5	8.0	11
Pattern																								
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	10.3	13.7	17.2	17.7	18.2	17.8	19.0	0.7	3
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	14.0	-	21.0	17.0	22.7	25.0	26.0	4.9	3
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	2.6	2.9	3.0	0.6	3
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.7	18.2	17.8	19.1	0.8	3
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	2.0	2.1	2.0	2.2	0.1	3
										•														
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft2							-					-					-							
Max Part Size (mm) Mobilized at Bankfull							-					-					-				-			
Stream Power (Transport Capacity) W/m2							-					-					-				-			
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	30					2.3	35				0.30							
Rosgen Classification						(	3					В	4				B4				В	4		
Bankfull Velocity (fps)		-				2.3	- 3.6					-					-							
Bankfull Discharge (cfs)		-				22	2.0					-					15.0							
Valley Length (ft)							-					-					-				33	57		
* Channel Thalweg Length (ft)							-					-					-				38	30		
^ Channel Centerline (ft)							-					-									37	7		
Sinuosity							-										1.11				1.	12		
Water Surface Slope (ft/ft)						0.008	- 0.018					0.011 -	0.018				0.016				0.0	15		
Bankfull Slope (ft/ft)							-										-				0.0	16		
Bankfull Floodplain Area (acres)							-					-												
% of Reach with Eroding Banks							-					-												
Channel Stability or Habitat Metric						Uns	table			1														
Biological or Other							-					-												

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Fleto	T her l	fable Mitig	10 C ation	ont'd Site	. Bas - Flet	e line che r	Strea Cree	um Da k Rea	ta Su ich 10	mma C (1,5	ry 541 fe	et *)	1								
Parameter	Regi	onal (	Curve		Pre-H	xistin	g Con	dition			Refer	ence	Reach	Data	,	1	Desigr	ı		As-	Built /	Basel	ine	
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	6.3	-	-	9.3	-	-	14.7	-	-	19.5	-	-	-	9.4	-	7.6	9.8	9.8	12.0	3.1	2
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0	30.0	30.0	50.0	28.3	2
Bankfull Mean Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	0.3	0.5	0.5	0.6	0.2	2
Bankfull Max Depth (ft)				0.6	-	-	0.9	-	-	1.2	-	-	1.4	-	-	-	0.9	-	0.5	0.8	0.8	1.0	0.4	2
Bankfull Cross Sectional Area (ft2)		-		4.9	-	-	7.5	-	-	18.0	-	-	27.2	-	-	-	6.4	-	2.1	4.8	4.8	7.5	3.8	2
Width/Depth Ratio				8.2	-	-	16.6	-	-	12.0	-	-	14	-	-	-	13.8	-	19.2	23.4	23.4	27.6	6.0	2
Entrenchment Ratio				1.3	-	-	1.7	-	-	1.4	-	-	1.5	-	-	-	2.4	-	1.3	2.7	2.7	4.2	2.0	2
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-		-	1.0	1.0	1.0	1.0	0.0	2
d50 (mm)				5.0	-	-	14.0	-	-	60.0	-	-	125	-	-	-	-	-	18.0	18.5	19.0	19.0	0.71	2
Profile																								
Riffle Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4	10.9	11.1	21.1	4.9	44
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000	0.009	0.007	0.029	0.008	44
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.3	13.1	12.8	29.0	4.6	44
Pool Max Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	1.5	2.8	2.8	4.0	0.6	44
Pool Spacing (ft)				-	-	-	-	-	-	-	1	1	1	-	-	31.0	-	51.7	13.5	35.0	34.4	96.1	13.5	43
Pattern																								
Channel Belt Width (ft)				-	-	-	-	-	-	-	1	1	1	-	-	11.2	15.0	18.7	18.7	20.2	19.7	22.3	1.9	3
Radius of Curvature (ft)				-	-	-	-	-	-	-	1	1	1	-	-	15.0	-	22.0	17.2	21.0	20.6	25.3	4.1	3
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	2.2	2.2	2.7	0.5	3
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.7	20.2	19.7	22.3	1.9	3
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.9	-	2.0	2.1	2.1	2.4	0.2	3
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft2							-					-					-					-		
Max Part Size (mm) Mobilized at Bankfull							-					-					-					-		
Stream Power (Transport Capacity) W/m2							-					-					-					-		
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	37					2.3	35				0.37							
Rosgen Classification						В, І	F, G					В	4				B4				В	4		
Bankfull Velocity (fps)		-					-					-					-							
Bankfull Discharge (cfs)		-				25	5.0					-					18.0							
Valley Length (ft)							-					-					-				1,4	36		
* Channel Thalweg Length (ft)							-					-					-				1,5	541		
^ Channel Centerline (ft)							-					-					-				1,5	540		
Sinuosity						1.	24					-					1.10				1.	10		
Water Surface Slope (ft/ft)						0.009	- 0.015					0.011 -	0.018				0.012				0.0	012		
Bankfull Slope (ft/ft)							-					-					-				0.0	012		
Bankfull Floodplain Area (acres)							-			1		-						_			_			
% of Reach with Eroding Banks							-			l		-												
Channel Stability or Habitat Metric						Uns	table			l		-												
Biological or Other							-			I		-												

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Fletc	T her N	able Litiga	10 Co tion S	ont'd. Site -	Base Flete	eline cher (	Strea Creel	m Da x Rea	ita Su ich 24	ımmaı A (1,:	ry 299 f	eet *	)								
Parameter	Regi	onal (	urve		Pre-H	xistin	g Con	dition			Refe	rence	Reach	Data		1	Desigr	1		As-	Built /	Base	ine	
																			-					
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	4.9	-	-	7.9	-	-	14.7	-	-	19.5	-	-	-	10.4	-	12.6	12.9	12.9	13.1	0.3	2
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-		-	35.0	42.5	42.5	50.0	10.6	2
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	0.7	0.8	0.8	0.8	0.0	2
Bankfull Max Depth (ft)				0.8	-	-	1.1	-	-	1.2	-	-	1.4	-	-	-	1.0	-	1.2	1.4	1.4	1.6	0.3	2
Bankfull Cross Sectional Area (ft2)		-		4.8	-	-	7.9	-	-	18.0	-	-	27.2	-	-	-	7.6	-	9.2	9.8	9.8	10.4	0.9	2
Width/Depth Ratio				5.0	-	-	9.1	-	-	12.0	-	-	14	-	-	-	14.2	-	16.5	17.0	17.0	17.4	0.6	2
Entrenchment Ratio				1.4	-	-	1.9	-	-	1.4	-	-	1.5	-	-	-	2.4	-	2.7	3.3	3.3	4.0	0.9	2
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	1.0	1.0	1.0	0.0	2
d50 (mm)				9.0	-	-	14.0	-	-	60.0	-	-	125.0	-	-	-	-	-	18.0	19.0	20.0	20.0	1.4	2
Profile		-				-		-			-		-	-	-									
Riffle Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	16.0	14.6	32.2	6.7	35
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.010	0.008	0.028	0.007	35
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.58	10.8	10.2	25.3	4.2	34
Pool Max Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	1.2	2.5	2.6	3.7	0.7	34
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	34.2	-	57.2	9.4	36.8	37.5	52.2	9.4	33
Pattern										·														
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	12.6	16.8	21.0	23.8	24.5	24.1	25.5	0.9	3
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	17.0	-	25.0	16.8	22.1	19.8	29.6	6.7	3
Rc: Bankfull Width (ft/ft)				-	-	I	-	I	I	-	-	1	-	I	-	-	-	-	1.6	2.1	1.9	2.8	0.6	3
Meander Wavelength (ft)				-	-	I	-	I	1	-	-	1	-	I	-	-	-	-	23.8	24.5	24.1	25.5	0.9	3
M eander Width Ratio				-	-	I	-	I	1	-	-	1	-	I	-	-	3.5	-	2.3	2.4	2.3	2.5	0.1	3
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft2													-				-							
Max Part Size (mm) Mobilized at Bankfull													-				-							
Stream Power (Transport Capacity) W/m2													-				-							
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	49					2.	35				0.49							
Rosgen Classification						В,	G					E	34				B4				В	4		
Bankfull Velocity (fps)		-				2.0	3.4						-				-							
Bankfull Discharge (cfs)		-				32	.0						-				22.0							
Valley Length (ft)													-				-				1,1	58		
* Channel Thalweg Length (ft)													-				-				1,2	.99		
^ Channel Centerline (ft)													-				-				1,2	96		
Sinuosity						1.	35						-				1.17				1.	15		
Water Surface Slope (ft/ft)						0.005	0.014					0.011	- 0.018				0.012				0.0	11		
Bankfull Slope (ft/ft)													-				-				0.0	12		
Bankfull Floodplain Area (acres)													-											
% of Reach with Eroding Banks										1			-											
Channel Stability or Habitat Metric						Sev	ere						-											
Biological or Other													-											

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Fletc	T her N	able Litiga	10 Co tion S	ont'd. Site -	Base Flete	eline cher (	Strea Creel	m Da x Rea	ita Su ich 21	ımmaı B (1,	ry 510 f	eet *	)								
Parameter	Regi	onal C	urve		Pre-H	xistin	g Con	dition			Refe	rence	Reach	Data		1	Desigr	1		As-	Built /	Base	line	
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	1	4.4	-	i.	10.7	1	1	14.7	-	1	19.5	1	1	-	10.6	-	9.8	10.0	10.0	10.2	0.3	2
Floodprone Width (ft)				1	-	i	-	I	1	-	-	1	-	i	1	-	-	-	40.0	55.0	55.0	70.0	21.2	2
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	0.7	0.7	0.7	0.8	0.1	2
Bankfull Max Depth (ft)				0.7	-	I	1.0	I	1	1.2	-	1	1.4	I	1	-	1.0	-	1.2	1.3	1.3	1.3	0.1	2
Bankfull Cross Sectional Area (ft2)		-		3.3	-	I	7.2	I	1	18.0	-	1	27.2	I	1	-	7.9	-	7.1	7.4	7.4	7.6	0.3	2
Width/Depth Ratio				5.2	-	I	15.7	I	1	12.0	-	-	14	I	1	-	14.3	-	12.6	13.6	13.6	14.6	1.4	2
Entrenchment Ratio				1.4	-	I	5.9	I	1	1.4	-	-	1.5	I	1	-	2.3	-	3.9	5.5	5.5	7.2	2.3	2
Bank Height Ratio				1	-	i.	-	I	1	-	-	-	-	i.	1	-	-	-	1.0	1.0	1.0	1.0	0.0	2
d50 (mm)				1	5.0	1	-	1	1	60.0	-	1	125.0	-	1	1	-	-	5.5	11.8	18.0	18.0	8.8	2
Profile				_																				
Riffle Length (ft)				1	-	i	-	1	I	-	-	1	-	i	I	-	-	-	5.3	16.0	14.6	32.2	6.7	35
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.010	0.008	0.028	0.007	35
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.58	10.8	10.2	25.3	4.2	34
Pool Max Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	1.2	2.5	2.6	3.7	0.7	34
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	35.0	-	58.3	9.4	36.8	37.5	52.2	9.4	33
Pattern																								
Channel Belt Width (ft)				-	-	-	-	-	1	-	-	-	-	-	1	12.9	17.2	21.5	18.0	19.9	19.2	22.6	2.4	3
Radius of Curvature (ft)				-	-	-	-	-	1	-	-	-	-	-	1	17.0	-	26.0	23.5	25.3	24.8	27.5	2.0	3
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	2.4	2.3	2.6	0.2	3
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.9	19.9	19.2	22.6	2.4	3
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	1.7	1.9	1.8	2.1	0.2	3
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft <sup>2</sup>													-											
Max Part Size (mm) Mobilized at Bankfull													-											
Stream Power (Transport Capacity) W/m2													-											
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	52					2.	35				0.52							
Rosgen Classification						B, I	E, G					E	34				B5				В	5		
Bankfull Velocity (fps)		-				1.8	2.7						-				-							
Bankfull Discharge (cfs)		-				33	.0						-				23.0							
Valley Length (ft)													-				-				1,4	67		
* Channel Thalweg Length (ft)													-				-				1,5	10		
^ Channel Centerline (ft)													-				-				1,4	70		
Sinuosity						1.	)3			l –			-				1.10				1.	10		
Water Surface Slope (ft/ft)						0.004	- 0.01					0.011	- 0.018				0.007				0.0	011		
Bankfull Slope (ft/ft)													-				-				0.0	12		
Bankfull Floodplain Area (acres)													-											
% of Reach with Eroding Banks													-											
Channel Stability or Habitat Metric						Uns	able						-											
Biological or Other										l			-											

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Flet	T cher l	able Mitig	10 Co ation	ont'd. Site	Base - Wes	eline ston (	Strea Creel	m Da x Rea	ita Su ich 17	mma \ (1.9	ry 82 fe	et *)									
Parameter	Regi	onal C	urve		Pre-I	xistin	g Con	dition			Refe	rence	Reach	Data	<u> </u>	1	Desigr	1		As-	Built /	Basel	ine	_
							-										-							
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	4.5	-	-	6.3	-	-	6.3	-	-	10.7	-	-	-	8.6	-	9.1	9.8	9.8	10.4	0.9	2
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0	50.0	50.0	50.0	0.0	2
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	0.6	-	0.6	0.6	0.6	0.6	0.0	2
Bankfull Max Depth (ft)				0.6	-	-	0.7	-	-	1.0	-	-	1.2	-	-	-	0.9	-	0.9	1.0	1.0	1.1	0.1	2
Bankfull Cross Sectional Area (ft2)		-		2.7	-	-	4.6	-	-	7.7	-	-	10.0	-	1	1	5.5	-	5.4	5.8	5.8	6.2	0.6	2
Width/Depth Ratio				7.4	-	-	10.0	1	1	6.0	-	1	11.0	-	1	1	13.6	-	15.5	16.4	16.4	17.4	1.3	2
Entrenchment Ratio				1.6	-	-	2.6	1	1	2.3	-	1	4.8	-	1	1	4.6	-	4.8	5.1	5.1	5.5	0.5	2
Bank Height Ratio				-	-	-	-	1	1	-	1	1	-	-	1	1	-	-	1.0	1.0	1.0	1.0	0.0	2
d50 (mm)				1.0	-	1	4.0	1	1	13.0	1	i	17.0	-	1	-	-	-	1.5	2.6	3.6	3.6	1.5	2
Profile																								
Riffle Length (ft)				-	-	i	-	i	1	-	1	1	-	-	1	i.	-	-	4.3	13.3	11.9	38.6	7.8	55
Riffle Slope (ft/ft)				-	-	i	-	1	I	-	1	1	-	-	I	-	-	-	0.000	0.004	0.002	0.017	0.004	55
Pool Length (ft)				-	-	i	-	1	I	-	1	1	-	-	I	-	-	-	5.7	13.1	12.8	26.1	4.3	54
Pool Max Depth (ft)				-	-	i	-	1	I	-	1	1	-	-	I	-	1.4	-	1.1	1.7	1.7	2.6	0.4	54
Pool Spacing (ft)				-	-	i	-	I	I	-	1	1	-	-	I	43.0	-	60.2	8.9	35.7	34.4	72.9	12.0	53
Pattern																								
Channel Belt Width (ft)				-	-	i.	-	1	1	-	1	1	-	-	1	13.7	27.4	34.3	24.8	27.0	27.2	29.0	2.1	3
Radius of Curvature (ft)				-	-	I.	-	1	1	-	1	1	-	-	1	10.0	-	17.0	11.0	14.3	14.6	17.4	3.2	3
Rc: Bankfull Width (ft/ft)				-	-	I.	-	1	1	-	1	1	-	-	1	-	-	-	1.3	1.7	1.7	2.0	0.4	3
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.5	26.9	27.2	29.0	2.3	3
Meander Width Ratio				-	-	I	-	I	1	-	1	1	-	-	1	-	2.9	-	2.9	3.1	3.2	3.4	0.2	3
Substrate, Bed and Transport Parameters										-						-			-					
Reach Shear Stress (Competency) lb/ft <sup>2</sup>													-				-							
Max Part Size (mm) Mobilized at Bankfull													-				-							
Stream Power (Transport Capacity) W/m2													-				-							
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	30					0.	25				0.30							
Rosgen Classification						E,	G					E	4				C5				C	5		
Bankfull Velocity (fps)		-				1.8	2.2						-				-							
Bankfull Discharge (cfs)		-				21	.0						-				15.0							
Valley Length (ft)													-				-				1,6	16		
* Channel Thalweg Length (ft)													-				-				1,9	82		
^ Channel Centerline													-				-				1,9	54		
Sinuosity						1.	01					1.	60				1.24				1.	24		
Water Surface Slope (ft/ft)						0.006	0.009					0.0	08				0.005				0.0	05		
Bankfull Slope (ft/ft)							-						-				-				0.0	05		
Bankfull Floodplain Area (acres)													-											
% of Reach with Eroding Banks													-											
Channel Stability or Habitat Metric						Uns	able						-											
Biological or Other										1			-											

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

Parameter       Par-Juncional diameter di diameter di diameter di diameter diameter di di diameter diamet
Problem is the field between the set of t
Dimension & Substrate API U. U. U. V.
Bankfull Widh (n)       ·   <
Floodprone Width (p)     I <th< td=""></th<>
Bankfull Mana Depth (t)     ·    <
Bankfull Max Depth (r)       O       O       I
Bankfull Cross Sectional Area (r):       -       3.8       -       7.8       -       7.7       -       -       10       -       6.3       -       4.7       -       -       1         Bankfull Cross Sectional Area (r):       5.3       -       7.8       -       7.7       -       -       10       -       -       6.3       -       4.7       -       4.7       -       4.7       -       4.7       -       4.7       -       4.7       1       -       1       1       1       1       2
With Depth Ratio       5.3       -       I.19       -       I.19       -       -       I       -       -       I       I       -       I </td
Entrenchment Ratio       I.3       ·
Bank Height Ratio       I <thi< th="">       I       <thi< th=""></thi<></thi<>
d50 (m)     l.0     r.0     r
Profile       Image: Normal Stream Profile       Image: Norma
Riffle Lengh (ft)       I
Riffle Slope (fr/ft)       Image: state of the state of
Pool Lengh (fr)       Pool Pool Max Depth (fr)
Pool Max Depth (it)       Image: Amage (it) <thimage: (it)<="" amage="" th="">       Image: Amage (it)       I</thimage:>
Pool Spacing (ft)       Image: Pool Spacing (f
Pattern       -       14.9       29.9       37.3       27.3       28.4       28.1       29.9       1.3       3         Radius of Curvature (ft)       Image: Bankfull Width (ft/ft)       Image: Bankfull Width (ft
Channel Belt Width (ft)       -       -       -       -       -       -       -       -       -       -       14.9       29.9       37.3       28.4       28.1       29.9       1.3       3         Radius of Curvature (ft)       -       -       -       -       -       -       -       -       -       -       -       14.9       29.9       37.3       28.4       28.1       29.9       1.3       3         Rei Bankfull Width (ft/ft)       -       -       -       -       -       -       -       -       -       -       -       -       11.0       -       19.0       15.8       19.5       18.2       24.5       4.5       3         Meander Wavelength (ft)       -       -       -       -       -       -       -       -       -       -       1.0       -       1.0       1.0       2.1       1.9       2.6       0.5       3         Meander Wavelength (ft)       -       -       -       -       -       -       -       3.3       -       2.9.9       3.0       3.0       3.2       0.1       3         Meander Wavelength (fthand Reader Stress (Competency) Ib/ft <sup>2</sup>
Radius of Curvature (ft)       Image: Curvatu
Rc: Bankfull Width (ft/ft)       Image: Constraint of the formation
Meander Wavelength (ft)       Image: Constraint of the straint of the s
Meander Width Ratio     ·
Substrate, Bed and Transport Parameters         -
Substrate, Bed and Transport Parameters         -           Reach Shear Stress (Competency) Ib/t <sup>2</sup> -         -
Reach Shear Stress (Competency) lb/ft <sup>2</sup> -         -         -         -           Max Part Size (mm) Mobilized at Bankfull         -
Max Part Size (mn) Mobilized at Bankfull         -
Stream Power (Transport Capacity) W/m <sup>2</sup> -         -         -         -           Additional Reach Parameters         -
Additional Reach Parameters
Drainage Area (mi <sup>2</sup> )         0.37         0.25         0.37           Rosgen Classification         G, E         E4         C5         C5
Rosgen Classification G, E E4 C5 C5
Bankfull Velocity (fps) - 1.8 - 2.3
Bankfull Discharge (fs) - 25.0 - 18.0
Valey Length (ft) 708
* Channel Thalwey Length (ft)
^ Channel Centerline (ft)     804
Simulation (17) 1.01 1.60 1.20 1.17
Water Surface Shone (fr/ft)         0.005 - 0.007         0.0080         0.009         0.0024
Bankfull Shoe (fuff)         -         -         0.0026
Bankful Eloddain Ara (arss)
Shirten Foogham Food (actor)
Channel Stability or Habitat Marine Unstable -
Biological of Other

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Fle	] tchei	Fable r Miti	10 C igatio	ont'd n Site	l. Bas e - Ra	eline	Strea n Bra	m Da nch R	ta Su teach	mmar 1C (1	y 153 fe	eet)									
Parameter	Regi	onal (	urve		Pre-F	xistin	g Con	dition			Refer	ence	Reach	Data		1	Desigi	1		As-	Built	Base	ine	
							-																	
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	N	Min	Mean	Med	Max	SD	N	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	1.8	-	-	3.4	-	-	14.7	-	-	19.5	-	-	-	6.0	-						
Floodprone Width (ft)				-	_	-	-	-	-	-	-	-	-	-	-	-	-	-						
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-						
Bankfull M ax Depth (ft)				0.1	-	-	0.2	-	-	1.2	-	-	1.4	-	-	-	0.5	-						
Bankfull Cross Sectional Area (ft <sup>2</sup> )		-		0.4	-	-	0.6	-	-	18	-	-	27.2	-	-	-	2.0	-						
Width/Depth Ratio				8.0	-	-	25.7	-	-	12	-	-	14.0	-	-	-	17.8	-						
Entrenchment Ratio				1.7	-	-	2.1	-	-	1.4	-	-	1.5	-	-	-	2.3	-						
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
d50 (mm)				1.0	-	-	2.0	-	-	60.0	-	-	125.0	-	-	-	-	-						
Profile																								
Riffle Length (ft)				-	1	1	-	1	-	-	-	-	-	1	-	-	-	-						
Riffle Slope (ft/ft)				-	-	1	-	1	-	-	-	-	-	1	-	-	-	-						
Pool Length (ft)				-	-	1	-	1	-	-	-	-	-	1	-	-	-	-						
Pool M ax Depth (ft)				-	-	1	-	1	-	-	-	-	-	1	-	-	0.8	-						
Pool Spacing (ft)				-	-	1	-	1	-	-	-	-	-	1	-	3.3	-	5.5						
Pattern																								
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	6.4	8.5	10.7						
Radius of Curvature (ft)				-	-	1	-	1	-	-	-	-	-	1	-	9.0	-	13.0						
Rc: Bankfull Width (ft/ft)				-	-	1	-	1	-	-	-	-	-	1	-	-	-	-						
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Meander Width Ratio				-	-	1	-	1	-	-	-	-	-	1	-	-	1.9	-						
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft2							-					-					-							
Max Part Size (mm) Mobilized at Bankfull							-										-							
Stream Power (Transport Capacity) W/m2							-					-					-							
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	04					2.3	35				0.04							
Rosgen Classification						В,	G					В	4				B4							
Bankfull Velocity (fps)		-				2.4	- 3.4					-					-							
Bankfull Discharge (cfs)		-				4	.0					-					3.0							
Valley Length (ft)							-										-							
Channel Thalweg Length (ft)							-					-					-							
Sinuosity						1.	09										1.09							
Water Surface Slope (ft/ft)						0.048	- 0.092					0.011	0.018				0.040							
Bankfull Slope (ft/ft)							-					-					-							
Bankfull Floodplain Area (acres)							-																	
% of Reach with Eroding Banks							-																	
Channel Stability or Habitat Metric						Uns	table																	
Biological or Other							-					-												

- Information unavailable.

			Flet	] tcher	fable Mitig	10 C gation	'ont'd 1 Site	l. Bas - Ra	e line ccoor	Strea Bran	m Da ch Re	ta Su ach 1	mmar LD (4	у 40 fe	et *)									
Parameter	Regi	ional C	Curve		Pre-I	xistin	g Con	dition			Refer	ence l	Reach	Data	/	1	Desigr	1		As-	Built	Base	ine	
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	N	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	1.8	-	-	3.4	-	-	14.7	-	-	19.5	-	-	-	6.1	-	-	6.9	-	-	-	1
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	20	-	-	-	1
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	-	0.5	-	-	-	1
Bankfull Max Depth (ft)				0.1	-	-	0.2	-	-	1.2	-	-	1.4	-	-	-	0.5	-	-	1.34	-	-	i.	1
Bankfull Cross Sectional Area (ft2)		-		0.4	-	-	0.6	-	-	18	-	-	27.2	-	-	-	2.1	-	-	3.42	-	-	-	1
Width/Depth Ratio				8.0	-	-	25.7	-	-	12	-	-	14.0	-	-	-	17.8	-	-	13.8	-	-	-	1
Entrenchment Ratio				1.7	-	-	2.1	-	-	1.4	-	-	1.5	-	-	-	2.3	-	-	2.91	-	-	-	1
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	1
d50 (mm)				1.0	-	-	2.0	-	-	60.0	-	-	125.0	-	-	-	-	-	-	0.062	-	-	-	1
Profile																								
Riffle Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	4.5	4.2	7.9	1.7	38.0
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.003	0.033	0.030	0.085	0.021	38.0
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7	5.4	5.0	12.7	2.6	37.0
Pool M ax Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	0.6	1.0	1.1	1.4	0.2	37.0
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	20.1	-	33.6	4.1	12.1	11.2	28.8	5.5	35.0
Pattern		•														•								
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	6.5	8.7	10.9	6.7	7.5	7.0	8.7	1.1	3
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	9.0	-	13.0	7.9	10.1	8.5	13.9	3.3	3
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	1.6	1.3	2.2	0.6	3
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	7.5	7.0	8.7	1.1	3
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	1.1	1.2	1.1	1.4	0.1	3
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft2							-					-					-					-		
Max Part Size (mm) Mobilized at Bankfull							-					-					-					-		
Stream Power (Transport Capacity) W/m2							-					-					-					-		
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	04					2.3	35				0.04							
Rosgen Classification						В,	G					В	4				B4				E	84		
Bankfull Velocity (fps)		-				2.4	- 3.4					-					-							
Bankfull Discharge (cfs)		-				4	.0					-					3.0							
Valley Length (ft)							-					-					-				4	13		
* Channel Thalweg Length (ft)							-					-					-				4	40		
^ Channel Centerline (ft)							-					-					-				4	48		
Sinuosity						1.	09					-					1.05				1.	08		
Water Surface Slope (ft/ft)						0.048	- 0.092					0.011 -	0.018				0.048				0.0	)40		
Bankfull Slope (ft/ft)												-					-				0.0	)41		
Bankfull Floodplain Area (acres)												-												
% of Reach with Eroding Banks												-												
Channel Stability or Habitat Metric						Uns	table					-												
Biological or Other							-					-												

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			FI	] etche	Fable er Mit	10 C tigati	'ont'd on Si	l. Bas te - C	e line oates	Strea Bran	m Da ch Re	ta Su each i	mmar 1A (2)	y 82 fe	et)									
Parameter	Regional Curve Pre-Existing Condition									Refer	ence l	Reach	Data	/	:	Desigi	1	As-Built / Baseline						
	1				•															-	1			
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	N	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν
Bankfull Width (ft)	-	-	-	0.9	-	-	1.3	-	-	14.7	-	-	19.5	-	-	-	5.0	-						
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-						
Bankfull Max Depth (ft)				0.2	-	-	0.3	-	-	1.2	-	-	1.4	-	-	-	0.4	-						
Bankfull Cross Sectional Area (ft2)		-		0.2	-	-	0.3	-	-	18.0	-	-	27.2	-	-	-	1.4	-						
Width/Depth Ratio				5.1	-	-	5.6	-	-	12.0	-	-	14.0	-	-	-	18.0	-						
Entrenchment Ratio				2.0	-	-	2.8	-	-	1.4	-	-	1.5	-	-	-	2.4	-						
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
d50 (mm)				1.0	-	-	2.0	-	-	60.0	-	-	125.0	-	-	-	-	-						
Profile																								
Riffle Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Pool Max Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-						
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	5.5						
Pattern																								
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	5.4	7.2	9.0						
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	7.0	-	11.0						
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-						
				,					,	,		,						,	,					
Substrate, Bed and Transport Parameters																								
Reach Shear Stress (Competency) lb/ft <sup>2</sup>							-			-							-							
Max Part Size (mm) Mobilized at Bankfull							-			-						-								
Stream Power (Transport Capacity) W/m <sup>2</sup>							-			-							-							
Additional Reach Parameters																								
Drainage Area (mi <sup>2</sup> )						0.	02			2.4							0.02							
Rosgen Classification						В,	G			B4							B4							
Bankfull Velocity (fps)		-				1.7	- 2.0			-							-							
Bankfull Discharge (cfs)		-				3	.0			-							1.0							
Valley Length (ft)							-			-							-							
Channel Thalweg Length (ft)							-					-					-							
Sinuosity						1.	08					-					1.14							
Water Surface Slope (ft/ft)						0.03 -	0.034					0.011 -	0.018				0.031							
Bankfull Slope (ft/ft)							-			l		-					-							
Bankfull Floodplain Area (acres)							-					-								_				
% of Reach with Eroding Banks							-			1		-												
Channel Stability or Habitat Metric						Uns	table																	
Biological or Other							-			1		-												
- Information unavailable.																								

	Table 10 Cont'd. Baseline Stream Data Summary         Fletcher Mitigation Site - Coates Branch Reach 1B (601 feet *)         Date 10 Control of the Coates Branch Reach 1B (601 feet *)																									
Parameter	Regional Curve Pre-Existing Condition							Reference Reach Data							Desigi	ı	As-Built / Baseline									
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν		
Bankfull Width (ft)	-	-	-	0.9	-	-	1.3	-	-	14.7	-	-	19.5	-	-	-	5.7	-	-	5.2	-	-	-	1		
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.0	-	-	-	1		
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	-	0.3	-	-	-	1		
Bankfull Max Depth (ft)				0.2	-	-	0.3	-	-	1.2	-	-	1.4	-	-	-	0.5	-	-	0.7	-	-	-	1		
Bankfull Cross Sectional Area (ft2)		-		0.2	-	-	0.3	-	-	18	-	-	27.2	-	-	-	1.8	-	-	1.6	-	-	-	1		
Width/Depth Ratio				5.1	-	-	5.6	-	-	12	-	-	14.0	-	-	-	17.9	-	-	16.5	-	-	-	1		
Entrenchment Ratio				2.0	-	-	2.8	-	-	1.4	-	-	1.5	-	-	-	2.4	-	-	2.9	-	-	-	1		
Bank Height Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	1		
d50 (mm)				1.0	-	-	2.0	-	-	60.0	-	-	125.0	-	-	-	-	-	-	15.0	-	-	-	1		
Profile																										
Riffle Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.0	6.5	6.3	14.0	2.1	52		
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000	0.020	0.016	0.072	0.016	52		
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	3.4	3.2	6.3	1.2	51		
Pool M ax Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	0.24	1.2	1.1	2.5	0.4	51		
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	18.8	-	31.4	5.8	11.7	12	18.7	2.5	50		
Pattern																										
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	6.1	8.1	10.2	9.7	10.6	10.5	11.5	0.9	3		
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	12.0	9.0	11.0	12.0	12.1	1.8	3		
Rc: Bankfull Width (ft/ft)				-	-	1	1	-	-	-	-	1	1	i	I	-	-	1	1.5	1.9	2.1	2.1	0.3	3		
Meander Wavelength (ft)				-	-	1	1	-	-	-	-	1	1	i	I	-	-	1	9.7	10.6	10.5	11.5	0.9	3		
Meander Width Ratio				-	-	1	1	-	-	-	-	1	1	i	I	-	2.5	1	1.7	1.9	1.8	2.0	0.1	3		
Substrate, Bed and Transport Parameters																										
Reach Shear Stress (Competency) lb/ft2							-										-					-				
Max Part Size (mm) Mobilized at Bankfull							-			-					-			-								
Stream Power (Transport Capacity) W/m2							-			-							-		-							
Additional Reach Parameters																										
Drainage Area (mi2)						0.	03			2.4							0.03									
Rosgen Classification					B, G						B4						B4			B4						
Bankfull Velocity (fps)		-				1.7	- 2.0			-							-									
Bankfull Discharge (cfs)		-				3	.0			-						2.0										
Valley Length (ft)							-					-					-		597							
* Channel Thalweg Length (ft)							-					-				-			601							
^ Channel Centerline (ft)							-					-					-		606							
Sinuosity						1.	08					-					1.04		1.05							
Water Surface Slope (ft/ft)						0.03 -	0.034					0.011 -	0.018			0.033			0.033							
Bankfull Slope (ft/ft)							-			-							-		0.033							
Bankfull Floodplain Area (acres)							-					-														
% of Reach with Eroding Banks							-					-														
Channel Stability or Habitat Metric						Sev	/ere					-														
Biological or Other							-			-																

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

			Fle	] tchei	Fable r Miti	10 C gatio	'ont'd n Site	. Bas - Co	eline ates	Stre a Branc	m Da h Re	ta Su ach 1	mmar C (70	y 8 fee	t *)											
Parameter	Regional Curve Pre-Existing Condition									1	Desigi	ı	As-Built / Baseline													
				·																						
Dimension & Substrate - Riffle	LL	UL	Eq.	Min	Mean	Med	Max	SD	Ν	Min	Mean	Med	Max	SD	Ν	Min	Mean	Max	Min	Mean	Med	Max	SD	Ν		
Bankfull Width (ft)	-	-	-	1.9	-	-	3.4	-	-	14.7	-	-	19.5	-	-	-	6.0	-	-	5.4	-	-	-	1		
Floodprone Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	20.0	-	-	-	1		
Bankfull Mean Depth (ft)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	-	-	0.4	-	-	-	1		
Bankfull Max Depth (ft)				0.2	-	1	0.3	1	1	1.2	-	1	1.4	-	-	-	0.5	1	-	0.8	-	-	-	1		
Bankfull Cross Sectional Area (ft2)		-		0.3	-	1	0.8	1	1	18	-	1	27.2	-	-	-	2.0	1	-	2.2	-	-	-	1		
Width/Depth Ratio				10.4	-	1	14.5	1	1	12	-	1	14.0	-	-	-	17.8	1	-	13.5	-	-	-	1		
Entrenchment Ratio				1.2	-	1	1.9	1	1	1.4	-	1	1.5	-	-	-	2.3	1	-	3.7	-	-	-	1		
Bank Height Ratio				-	-	1	1	1	-	-	-	1	-	-	-	-	-	1	-	1.0	-	-	-	1		
d50 (mm)				9.0	-	-	12.0	1	-	60.0	-	1	125.0	-	-	-	-	1	-	0.4	-	-	-	1		
Profile																										
Riffle Length (ft)				-	-	1	1	1	1	-	-	1	-	-	-	-	-	1	3.8	7.4	7.7	10.1	1.6	48		
Riffle Slope (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000	0.010	0.010	0.033	0.007	48		
Pool Length (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	4.6	4.2	7.3	1.4	48		
Pool M ax Depth (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	0.6	1.0	1.0	1.4	0.2	49		
Pool Spacing (ft)				-	-	-	-	-	-	-	-	-	-	-	-	19.8	-	33.0	6.4	14.3	14.6	19.6	2.6	48		
Pattern																										
Channel Belt Width (ft)				-	-	-	-	-	-	-	-	-	-	-	-	6.5	8.6	10.8	10.9	11.7	11.6	12.5	0.8	3		
Radius of Curvature (ft)				-	-	-	-	-	-	-	-	-	-	-	-	9.0	-	13.0	7.0	8.8	7.2	12.1	2.9	3		
Rc: Bankfull Width (ft/ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	1.5	1.2	2.1	0.5	3		
Meander Wavelength (ft)				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.9	12.1	11.6	13.7	1.5	3		
Meander Width Ratio				-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	-	1.8	2.0	1.9	2.1	0.1	3		
Substrate, Bed and Transport Parameters																										
Reach Shear Stress (Competency) lb/ft2							-					-					-					-				
Max Part Size (mm) Mobilized at Bankfull							-			-							-			-						
Stream Power (Transport Capacity) W/m2							-										-		-							
Additional Reach Parameters																										
Drainage Area (mi <sup>2</sup> )						0.	04			2.4							0.04									
Rosgen Classification						<b>B</b> , I	F, G			B4							B4			B4						
Bankfull Velocity (fps)		-				0.9	- 1.8			-							-									
Bankfull Discharge (cfs)		-				4	.0			-							3.0									
Valley Length (ft)							-			-							-			667						
* Channel Thalweg Length (ft)							-					-					-		708							
^ Channel Centerline (ft)							-					-					-		708							
Sinuosity						1.	03					-					1.07		1.06							
Water Surface Slope (ft/ft)						0.009	- 0.021					0.011 -	0.018				0.015				0.0	013				
Bankfull Slope (ft/ft)							-			-							-		0.013							
Bankfull Floodplain Area (acres)							-					-														
% of Reach with Eroding Banks							-					-														
Channel Stability or Habitat Metric						Uns	table					-														
Biological or Other							-			-																

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.
|  |      |         | Fle   | ]<br>tchei | Fable<br>r Miti | 10 C<br>gatio | 'ont'd<br>n Site | l. Bas<br>e - Co | eline<br>oates | Stre a<br>Branc | m Da<br>h Re | ta Su<br>ach 1 | mmar<br>D (32 | y<br>5 fee | t *) |      |        |      |       |       |       |       |       |    |
|--|------|---------|-------|------------|-----------------|---------------|------------------|------------------|----------------|-----------------|--------------|----------------|---------------|------------|------|------|--------|------|-------|-------|-------|-------|-------|----|
| Parameter                                | Regi | ional ( | Curve |            | Pre-I           | xistin        | g Con            | dition           | ares           |                 | Refer        | ence l         | Reach         | Data       | • )  | 1    | Desigi | 1    |       | As-   | Built | Base  | ine   |    |
|  |      |         |       |            |                 |               |                  |                  |                |                 |              |                |               |            |      |      |        |      |       |       |       |       |       |    |
| Dimension & Substrate - Riffle           | LL   | UL      | Eq.   | Min        | Mean            | Med           | Max              | SD               | Ν              | Min             | Mean         | Med            | Max           | SD         | Ν    | Min  | Mean   | Max  | Min   | Mean  | Med   | Max   | SD    | Ν  |
| Bankfull Width (ft)                      | -    | -       | -     | 3.6        | -               | -             | 5.0              | -                | -              | 14.7            | -            | -              | 19.5          | -          | -    | -    | 6.9    | -    | -     | 6.1   | -     | -     | -     | 1  |
| Floodprone Width (ft)                    |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | -     | 25.0  | -     | -     | -     | 1  |
| Bankfull Mean Depth (ft)                 | -    | -       | -     | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | 0.4    | -    | -     | 0.5   | -     | -     | -     | 1  |
| Bankfull Max Depth (ft)                  |      |         |       | 0.2        | -               | 1             | 0.3              | -                | -              | 1.2             | -            | -              | 1.4           | -          | -    | -    | 0.6    | -    | -     | 1.0   | 1     | -     | -     | 1  |
| Bankfull Cross Sectional Area (ft2)      |      | -       |       | 1.0        | -               | 1             | 1.4              | -                | -              | 18              | -            | -              | 27.2          | -          | -    | -    | 2.7    | -    | -     | 3.3   | 1     | -     | -     | 1  |
| Width/Depth Ratio                        |      |         |       | 13.0       | -               | 1             | 18.0             | -                | -              | 12              | -            | -              | 14.0          | -          | -    | -    | 17.7   | -    | -     | 11.4  | 1     | -     | -     | 1  |
| Entrenchment Ratio                       |      |         |       | 1.7        | -               | 1             | 1.8              | -                | -              | 1.4             | -            | -              | 1.5           | -          | -    | -    | 2.2    | -    | -     | 4.1   | 1     | -     | -     | 1  |
| Bank Height Ratio                        |      |         |       | -          | -               | 1             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | -     | 1.0   | 1     | -     | -     | 1  |
| d50 (mm)                                 |      |         |       | 8.0        | -               | -             | 14.0             | -                | -              | 60.0            | -            | -              | 125.0         | -          | -    | -    | -      | -    | -     | 4.0   | 1     | -     | -     | 1  |
| Profile                                  |      |         |       |            |                 |               |                  |                  |                |                 |              |                |               |            |      |      |        |      |       |       |       |       |       |    |
| Riffle Length (ft)                       |      |         |       | -          | -               | 1             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | 4.1   | 7.2   | 7.3   | 11.9  | 1.8   | 22 |
| Riffle Slope (ft/ft)                     |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | 0.000 | 0.008 | 0.006 | 0.021 | 0.006 | 22 |
| Pool Length (ft)                         |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | 1.8   | 4.6   | 4.4   | 8.1   | 1.8   | 22 |
| Pool M ax Depth (ft)                     |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | 0.9    | -    | 0.6   | 1.1   | 1.1   | 2.2   | 0.3   | 22 |
| Pool Spacing (ft)                        |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | 22.8 | -      | 38.0 | 8.0   | 13.9  | 14.0  | 19.1  | 3.2   | 21 |
| Pattern                                  |      |         |       |            |                 |               |                  |                  |                |                 |              |                |               |            |      |      |        |      |       |       |       |       |       |    |
| Channel Belt Width (ft)                  |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | 7.4  | 9.9    | 12.3 | 11.5  | 12.7  | 12.8  | 13.8  | 1.2   | 3  |
| Radius of Curvature (ft)                 |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | 10.0 | -      | 15.0 | 4.7   | 7.0   | 7.2   | 9.2   | 2.3   | 3  |
| Rc: Bankfull Width (ft/ft)               |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | 0.7   | 1.0   | 1.0   | 1.3   | 0.3   | 3  |
| Meander Wavelength (ft)                  |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | -      | -    | 11.5  | 12.5  | 12.1  | 13.8  | 1.2   | 3  |
| Meander Width Ratio                      |      |         |       | -          | -               | -             | -                | -                | -              | -               | -            | -              | -             | -          | -    | -    | 2.6    | -    | 1.7   | 1.8   | 1.9   | 2.0   | 0.1   | 3  |
|  |      |         |       |            |                 |               |                  |                  |                |                 |              |                |               |            |      |      |        |      |       |       |       |       |       |    |
| Substrate, Bed and Transport Parameters  |      |         |       |            |                 |               |                  |                  |                |                 |              |                |               |            |      |      |        |      |       |       |       |       |       |    |
| Reach Shear Stress (Competency) lb/ft2   |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       |       | -     |       |    |
| Max Part Size (mm) Mobilized at Bankfull |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       |       | -     |       |    |
| Stream Power (Transport Capacity) W/m2   |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       |       | -     |       |    |
| Additional Reach Parameters              |      |         |       |            |                 |               |                  |                  |                |                 |              |                |               |            |      |      |        |      |       |       |       |       |       |    |
| Drainage Area (mi <sup>2</sup> )         |      |         |       |            |                 | 0.            | 07               |                  |                |                 |              | 2.             | 4             |            |      |      | 0.07   |      |       |       |       |       |       |    |
| Rosgen Classification                    |      |         |       |            |                 | I             | В                |                  |                |                 |              | В              | 4             |            |      |      | B4     |      |       |       | E     | 4     |       |    |
| Bankfull Velocity (fps)                  |      | -       |       |            |                 | 0.9           | - 1.3            |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       |       |       |       |    |
| Bankfull Discharge (cfs)                 |      | -       |       |            |                 | 7             | .0               |                  |                |                 |              | -              |               |            |      |      | 5.0    |      |       |       |       |       |       |    |
| Valley Length (ft)                       |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       | 3     | 11    |       |    |
| * Channel Thalweg Length (ft)            |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       | 3     | 25    |       |    |
| ^ Channel Centerline (ft)                |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       | 3     | 25    |       |    |
| Sinuosity                                |      |         |       |            |                 | 1.            | 05               |                  |                |                 |              | -              |               |            |      |      | 1.12   |      |       |       | 1.    | 05    |       |    |
| Water Surface Slope (ft/ft)              |      |         |       |            |                 | 0.004         | - 0.009          |                  |                |                 |              | 0.011 -        | 0.018         |            |      |      | 0.015  |      |       |       | 0.0   | 013   |       |    |
| Bankfull Slope (ft/ft)                   |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      | -      |      |       |       | 0.0   | 014   |       |    |
| Bankfull Floodplain Area (acres)         |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      |        |      |       |       |       |       |       |    |
| % of Reach with Eroding Banks            |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      |        |      |       |       |       |       |       |    |
| Channel Stability or Habitat Metric      |      |         |       |            |                 | Uns           | table            |                  |                |                 |              | -              |               |            |      |      |        |      |       |       |       |       |       |    |
| Biological or Other                      |      |         |       |            |                 |               | -                |                  |                |                 |              | -              |               |            |      |      |        |      |       |       |       |       |       |    |

\* Channel Thalweg Length (ft): Based on actual thalweg calculations from the as-built survey, accounts for breaks in conservation easement and utility right-of-ways.

^ Channel Centerline (ft): Based on stream centerline stationing from design stream stationing; accounts for breaks in conservation easement and utility right-of-ways.

- Information unavailable.

Non-Applicable.

									Table	11a. Mo	onitoring	Data - Di	mensior	al Morph Fletch	ology S er Mitig	Summ zation	ary (Dii Site	mensio	onal Para	meters – C	Cross Sect	ions)													
			C Fk	ross Sectio	on 1 (Riffle) ek Reach 11	В						C Fle	ross Secti tcher Cre	on 2 (Pool) ek Reach 1	B						C Fle	ross Secti tcher Cre	on 3 (Pool) ek Reach 10	c						C Fle	ross Section tcher Cree	n 4 (Riffle) k Reach 10	2		
Dimension	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5 1	MY6 M	1Y7	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6 MY7
Record Elevation (datum) Used	2124.8	2124.7	2124.6	2124.7	2124.7				2	123.0	2123.1	2123.1	2123.5	2123.4					2118.8	2118.9	2118.9	2118.8	2119.1					2118.5	2118.4	2118.5	2118.5	2118.6			
Low Bank Height Elevation (datum) Used	start         start <th< th=""><th></th><th></th><th></th></th<>																																		
Bankfull Width (ft)	mark         mark <th< th=""><th></th><th></th><th></th></th<>																																		
Floodprone Width (ft)	min (ba)         21247         21247         21247         21247         21247         21247         21247         21247         21247         21247         21247         21247         21247         21247         21247         21237         2137         2137         21387         21385         21185 <t< th=""><th></th><th></th><th></th></t<>																																		
Bankfull Mean Depth (ft)	m) bes         212.4 <t< th=""><th></th><th></th><th></th></t<>																																		
Bankfull Max Depth (ft)	mm carbon         stard																																		
Bankfull Cross Sectional Area (ft <sup>2</sup> )	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$														2.1																				
Bankfull Width/Depth Ratio	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $														7.9																				
Bankfull Entrenchment Ratio	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$														2.5																				
*Bankfull Bank Height Ratio	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $														0.9																				
Low Top of Bank Depth (ft)	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $														0.6																				
	28         33         33         4.4         4.0         55         5.0         4.9         55         6.3         37         5.3         33         5.8         5.4          1.3         1.6         1.5         1.8           1.0         1.1         1.4         0.9         1.2         1.0         1.1         0.8         0.8         0.9         0.9         0.0         1.0         1.4         1.3         1.6         1.5         1.8           0.6         0.7         0.7         0.6         0.8         0         2.7         2.9         2.0         2.4         2.1         0         1.8         1.6         1.7         2.4         1.9         0         0.5         0.6         0.6         0.6           Flether Creek Reach 2         Cross Section 6 (RIIIs)         Flether Creek Reach 2           Flether Creek Reach 12         Flether Creek Reach 12         Flether Creek Reach 2           Base         Pre-MYI         MYI         MY2         MY3         MY4         MY1         MY2         MY3         MY4         MY1 <th colspa<="" th=""><th>n 8 (Pool)</th><th></th><th></th><th>· · ·</th></th>														<th>n 8 (Pool)</th> <th></th> <th></th> <th>· · ·</th>	n 8 (Pool)			· · ·																
	10         1.1         1.2         1.0         1.1         1.0         9         0.8         0.8         0.9         0.9         0.9         1.0         1.4         1.3         1.0           0.6         0.7         0.7         0.6         0.8         0.8         0.9         0.9         0.9         1.0         1.4         1.3         1.0           0.6         0.7         0.7         0.7         0.7         0.7         1.0         1.0         0.8         0.8         0.9         0.9         0.5         0.6														k Reach 2/																				
Dimension	24         164         159         8.8         10.6         6.5         7.8         9.4         6.4         4.9         11.6         5.5         14.5         4.7         5.3         9         16.6         18.2         18.2         18.3         18.3         1.3         1.4         4.0         7.7         5.3         3.3         3.4         4.0         7.7         18.2         13.3         15.8         5.4         4.7         5.3         5.8         5.4         5.7         5.7         10.7         10.7         10.3         3.3         5.8         5.4         5.7         10.7         10.3         10.3         1.8         2.1         10.7														MV2	MV4	MVE	MV6 MV7																	
Passed Flamtion (datum) Lload	23     24     23     25     53     33     155     155     47     53     33     58     54     2     21    <														2101.0																				
Low Bank Height Flamtion (datum) Used	2.4       1.4       1.5       2.3       2.3       1.8.3       18.3 <th< td=""><td>2100.6</td><td></td><td></td><td></td></th<>														2100.6																				
Bow Bank Height Elevation (datum) Osed	2.1       1.2       2.3       2.5       2.5       2.5       2.6       1.6.5														16.2																				
Eloodnone Width (ft)	25       2.5       2.5       2.5       2.5       2.5       2.5       18.														50.0																				
Pankfull Moon Donth (ft)	214       164       159       8.8       106       6.5       7.8       9.4       6.4       4.9       11.6       5.5       14.5       4.7       5.3       0       27.6       18.2														1.2			++-																	
Bankfull Max Depth (ft)	21       164       159       8.8       10.6       Image: constraint of the state in t														2.6																				
Dankell Cross Contract Array (6 <sup>2</sup> )	28         3.3         3.4         4.4         4.0         5.5         5.0         4.9         5.5         6.3         1         7.5         3.3         5.8         5.4         1         1.5         1.8         2.8         2.6           1.0         1.1         1.0         9         1.0         1.1         1.0         9.8         1.0         0.8         9.9         9.9         1.0         1.1         1.0         0.0														20.5			++-																	
Bankfull Cross Sectional Area (it ) Bankfull Width/Donth Batio	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $														12.0			++-																	
Bankfull Fotrenchment Patio	3.6	9.0	2.2	7.1	5.3					4.2	3.0	3.0	3.0	4.5					27	3.3	3.0	4.1	4.4					3.3	3.3	3.2	4.0	3.1			
*Ponkfull Ponk Hoight Potio	1.0	4.5	3.2	0.9	0.0				_	1.0	1.4	1.4	1.1	1.0					1.0	1.0	0.0	0.0	1.0				_	1.0	0.8	0.0	4.0	0.0			++-
Low Top of Popk Dopth (8)	2.0	2.0	0.8	2.0	2.2				-	1.0	1.4	1.4	1.1	1.0	-				1.0	1.0	1.7	1.9	1.0				_	2.6	0.8	2.4	0.9	0.9			
Low Top of Bank Dephi (ii)	5.0	3.0	2.0	2.7 Januar Canati	0 (Baal)					1.2	1.4	1.4 Ca	L.4	- 10 (D:01-					1.0	1.8	C-	1.0	- 11 (D:01-					2.0	2.2	C	2.4	12 (B1)			<u> </u>
			Fle	etcher Cre	k Reach 2	4						Fle	tcher Cre	ek Reach 2.	4 <u> </u>						Fle	tcher Cre	ek Reach 2	B						Fle	tcher Cree	k Reach 21	3		
Dimension	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6 M	IY7	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6 MY7
Record Elevation (datum) Used	2093.5	2093.6	2093.3	2093.5	2093.7				2	093.1	2092.9	2093.0	2092.9	2092.6					2079.0	2079.1	2079.3	2079.4	2079.4					2078.6	2078.7	2078.7	2078.6	2078.7			
Low Bank Height Elevation (datum) Used	2093.5	2093.6	2092.6	2093.3	2093.6				2	093.1	2093.1	2093.3	2093.0	2093.0					2079.0	2079.3	2079.3	2079.5	2079.5					2078.6	2078.8	2078.7	2079.1	2078.8			
Bankfull Width (ft)	15.6	16.1	13.6	11.2	10.6					12.6	11.0	11.8	8.2	6.7					10.2	9.6	11.2	12.6	11.0					9.7	10.0	9.7	9.4	7.8			
Floodprone Width (ft)	60.0	60.0	60.0	60.0	60.0					50.0	50.0	50.0	50.0	50.0					40.0	40.0	40.0	40.0	40.0					70.0	70.0	70.0	70.0	70.0			
Bankfull Mean Depth (ft)	1.1	1.0	1.2	1.5	1.6					0.7	0.8	0.8	1.1	1.4					0.7	0.7	0.6	0.6	0.6					1.2	1.2	1.2	1.2	1.5			
Bankfull Max Depth (ft)	2.8	2.3	2.8	3.0	2.7					1.2	1.6	1.7	2.5	2.3					1.3	1.1	1.2	1.4	1.3					2.3	2.2	2.2	2.4	2.4			
Bankfull Cross Sectional Area (ft <sup>2</sup> )	16.9	16.9	16.9	16.9	16.9					9.2	9.2	9.2	9.2	9.2					7.1	7.1	7.1	7.1	7.1					11.7	11.7	11.7	11.7	11.7			
Bankfull Width/Depth Ratio	14.4	15.4	10.9	7.4	6.6					17.4	13.2	15.0	7.3	4.9					14.6	13.0	17.7	22.4	16.9					8.1	8.5	8.1	7.6	5.2			
Bankfull Entrenchment Ratio	3.9	3.7	4.4	5.4	5.7					4.0	4.6	4.3	6.1	7.4					3.9	4.2	3.6	3.2	3.7					7.2	7.0	7.2	7.5	9.0			
*Bankfull Bank Height Ratio	1.0	1.0	0.7	0.9	0.9					1.0	1.1	1.2	1.0	1.2					1.0	1.2	1.0	1.1	1.1					1.0	1.0	1.0	1.2	1.0			
Low Top of Bank Depth (ft)	2.8	2.3	2.1	2.7	2.5					1.5	1.7	2.0	2.6	2.6					1.3	1.4	1.2	1.5	1.4					2.3	2.2	2.2	2.9	2.6			
			с	ross Sectio	n 13 (Pool)	•						Cr	oss Sectio	n 14 (Riffle	)																				
			Fle	etcher Cree	k Reach 2	B						Fle	tcher Cre	ek Reach 2	B		L MOVE		4																
Dimension	Base	Pre-MY1	MY1	MY2	MY3	MY4	MY5 I	MY6 M	117	Base	Pre-MY1	MY1	MY2 2076 :	MY3	MY4	MY5	MY6	MY7	-																
Record Elevation (datum) Used	2075.5	2075.5	2075.4	20/5.5	2075.4	+	-		2	075.1	2015.2	2075.3	20/5.4	2075.4	-				-																
Low Bank Height Elevation (datum) Used	20/5.5	20/5.6	2075.8	20/5.6	20/5.7	<u> </u>			2	075.1	20/5.2	2075.4	20/5.3	2075.6	<del> </del>	-	-		4																
Bankfull Width (ft)	10.1	13.1	9.9	9.7	8.9	+ +			_	9.8	10.3	9.7	9.6	10.2	-				-																
Floodprone Width (ft)	/0.0	/0.0	/0.0	/0.0	/0.0				_	/0.0	/0.0	/0.0	/0.0	/0.0	-				-																

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+ Data not collected due to adaptive management on Weston Reach 1A and 1B

								Т	Fable 1	1a Cont'	d. Monitor	ring Data	- Dimen	sional M Fletch	orpholo er Mitig	gy Sum gation S	nmary ( Site	Dime	nsional l	Parameters	- Cross	Sections	)													
			Cr	oss Section Weston C	15 (Riffle reek 1A	)						C	oss Sectio Weston O	n 16 (Pool Treek 1A							(	ross Secti Weston	on 17 (Poe Creek 1A	d)						Cro	ss Section Weston Cr	18 (Riffle reek 1A	)			
Dimension	Base	+Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	+Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	+Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7	Base	+Pre-MY1	MY1	MY2	MY3	MY4	MY5	MY6	MY7
Record Elevation (datum) Used	2082.5	-	2082.6	2082.6	2082.7					2082.3		2082.5	2082.8	2082.8					2076.2	-	2076.4	2076.4	2076.	5				2076.3		2076.3	2076.5	2076.5				
Low Bank Height Elevation (datum) Used	space         space <tp< td=""><td></td><td></td><td></td></tp<>																																			
Bankfull Width (ft	Impartmentant         omessar																																			
Floodprone Width (ft)	apple plane duam Use 2 082.5       v <th< td=""><td></td><td></td><td></td></th<>																																			
Bankfull Mean Depth (ft)	belact         State         State <t< td=""><td></td><td></td><td></td></t<>																																			
Bankfull Max Depth (ft	bit         c         202.5         202.6         202.6         202.6         207.6																																			
Bankfull Cross Sectional Area (ft2	Image: Normal and the final fin																																			
Bankfull Width/Depth Ratio	Back al Wale (0)         9.1         -         10.8         9.0         5.2         -         9.7         -         9.3         9.4         0.1         -         9.8         -         8.3         6.6         -         10.5																																			
Bankfull Entrenchment Ratio	Mashopeh (b)         0.6         .         0.6         1.0         1         .         1.1         .         1.1         1.0         0         0         .         1.1         1.1         1.1         1.1         1.0         0         0         1.1																																			
*Banktull Bank Height Ratio	brace       brace <td>-</td> <td>-</td> <td></td> <td></td>														-	-																				
Low Top of Bank Depth (II	Image														_																					
	mix         1.2         -         21.0         1.2         -         21.0         -         21.0         -         21.0         -         21.0         -         21.0         -         21.0         -         21.0         -         21.0         -         21.0																																			
Dimension	best       s.4														MY5	MY6	MY7																			
Record Elevation (datum) Used	answer wer wer wer wer wer wer wer wer wer																																			
Low Bank Height Elevation (datum) Used																																				
Bankfull Width (ft	miniful Muchegin (i)       1.1       1.2       1.4       1.2       1.4																																			
Floodprone Width (ft	start       start <th< td=""><td></td><td></td><td></td></th<>																																			
Bankfull Mean Depth (ft	Weiss       15        15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       5.1       15       15       15.1       15       15       15.1       15       15.1       15.1       15.1       15.1       15.1       15.1       15.0																																			
Bankfull Max Depth (ft	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$																																			
Bankfull Cross Sectional Area (ft2	Impresentation         Imprese																																			
Bankfull Width/Depth Ratio	Image: Normalize state in the state in																																			
Bankfull Entrenchment Ratio	Image: Part Part Part Part Part Part Part Part																																			
*Bankfull Bank Height Ratio	1.0		1.3	1.1	0.9					1.0		1.0	1.0	0.9					1.0	0.7	0.6	0.7	0.8					1.0	0.6	0.8	0.7	0.7				
Low Top of Bank Depth (ff)	0.7		1.0	0.9	0.9			1 1		2.5	-	2.4	2.4	25					1.0	0.9	0.7	0.7	1.0					13	0.5	0.7	0.7	0.8				
and the state of t			1.0	0.7	0.7		_							4					1.2	0.8		0.7	1.0						010			010				
and the state of t			Cr	oss Section	23 (Riffle	9						C	oss Sectio	n 24 (Pool					1.2	0.8	(	ross Secti	on 25 (Poo	d)						Cr	ss Section	26 (Riffle	)			
Dim med on	Pass	Pro MV1	Cr	oss Section Coates Bra	23 (Riffle anch 1B	:) MV4	MVE	MVG	MV7	Pasa	Puo MV1	C	coss Sectio	n 24 (Pool anch 1B	MV4	MVE	MV4	MV7	I.2	Dro MV1	(   MV1	ross Secti Coates B	on 25 (Poo ranch 1C	d)	MV5	MV4	MV7	Page	Buo MV1	Cre	oss Section Coates Bra	26 (Riffle		MVE	MV4	MV7
Dimension	Base	Pre-MY1	Cr MY1	Coates Bra	23 (Riffle anch 1B MY3	) MY4	MY5	5 MY6	MY7	Base	Pre-MY1	C: MY1 2121.2	Coates B	n 24 (Pool anch 1B MY3	MY4	MY5	MY6	MY7	Base	0.8	MY1	ross Secti Coates B MY2	on 25 (Poo ranch 1C MY3	d) MY4	MY5	MY6	MY7	Base	Pre-MY1	Cre MY1 2108.0	oss Section Coates Bra MY2	26 (Riffle inch 1C MY3	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Back Height Elevation (datum) Use	Base 2121.0	Pre-MY1 2121.1 2121.2	Cr MY1 2121.1 2121.2	0.5 ross Section Coates Bra MY2 2121.1 2121.0	23 (Riffle anch 1B MY3 2121.4 2121.1	) MY4	MY5	5 MY6	MY7	Base 2121.1	Pre-MY1 2121.1 2121.0	Ci MY1 2121.2 2121.0	Coates B MY2 2121.2 2121.0	n 24 (Pool anch 1B MY3 2121.2	MY4	MY5	MY6	MY7	Base 2108.0	0.8 Pre-MY1 2108.1	MY1 2108.1 2107.9	Coates B MY2 2108.2	on 25 (Poe ranch 1C MY3 2108.2	d) MY4 2	MY5	MY6	MY7	Base 2107.9	Pre-MY1 2107.9 2107.9	MY1 2108.0 2107.9	OSS Section Coates Bra MY2 2108.2 2108.1	26 (Riffle anch 1C MY3 2108.1 2108.1	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Usec Low Bank Height Elevation (datum) Usec	Base 2121.0 2121.0 5.2	Pre-MY1 2121.1 2121.2 4.9	Cr MY1 2121.1 2121.2 3.4	0.5 ross Section Coates Br 2121.1 2121.0 3.5	23 (Riffle anch 1B MY3 2121.4 2121.1 2.3	) MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4	Pre-MY1 2121.1 2121.0 8.6	Ci MY1 2121.2 2121.0 7.9	Coates Bi 2121.2 2121.0 5.7	n 24 (Pool anch 1B MY3 2121.2 2121.0 7.5	MY4	MY5	MY6	MY7	Base 2108.0 5.3	Pre-MY1 2108.1 2108.1 5.6	MY1 2108.1 2107.9 6.2	Coates B 2108.2 2108.2 4.8	2108.2 2108.2 4.4	d) MY4 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4	Pre-MY1 2107.9 2107.9 5.5	MY1 2108.0 2107.9 5.8	0ss Section Coates Bra <u>MY2</u> 2108.2 2108.1 5.8	26 (Riffle anch 1C MY3 2108.1 2108.1 4.2	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Bank Heigh Elevation (datum) Use Bankfall Widh (ft Floodorous Widh (ft	Base 2121.0 2121.0 5.2 15.0	Pre-MY1 2121.1 2121.2 4.9 15.0	MY1 2121.1 2121.2 3.4 15.0	0.5 coss Section Coates Bra 2121.1 2121.0 3.5 15.0	23 (Riffle anch 1B 2121.4 2121.4 2121.1 2.3 15.0	) MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0	Pre-MY1 2121.1 2121.0 8.6 40.0	Ci MY1 2121.2 2121.0 7.9 40.0	ross Sectio Coates Bi MY2 2121.2 2121.0 5.7 40.0	n 24 (Pool anch 1B 2121.2 2121.0 7.5 40.0	MY4	MY5	MY6	MY7	1.2 Base 2108.0 5.3 20.0	Pre-MY1 2108.1 2108.1 5.6 20.0	MY1 2108.1 2107.9 6.2 20.0	Coates B MY2 2108.2 4.8 20.0	2108.3 2108.3 2108.3 2108.3 20.0	d) MY4 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0	Pre-MY1 2107.9 2107.9 5.5 20.0	MY1 2108.0 2107.9 5.8 20.0	00000000000000000000000000000000000000	26 (Riffle anch 1C MY3 2108.1 2108.1 4.2 20.0	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Usec Low Bask Heigh Elevation (datum) Usec Baskidl Width (ft Pioodgrone Width (ft Baskidl Mean Depth (ft	Base 2121.0 2121.0 5.2 15.0 0.3	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3	1.0 Cr 2121.1 2121.2 3.4 15.0 0.5	0.5 ross Section Coates Bra 2121.1 2121.0 3.5 15.0 0.5 0	0.9 23 (Riffle anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7	MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6	Ci MY1 2121.2 2121.0 7.9 40.0 0.6	ross Sectio Coates B 2121.2 2121.0 5.7 40.0 0.9	212 n 24 (Pool anch 1B 2121.2 2121.0 7.5 40.0 0.7	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 5.3 20.0 0.5	Pre-MY1 2108.1 2108.1 5.6 20.0 0.5	MY1 2108.1 2107.9 6.2 20.0 0.4	Coates B 2108.2 2108.2 2108.2 4.8 20.0 0.6	2108.2 2108.2 2108.2 2108.2 2108.2 2108.2 0.6	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4	Cre MY1 2108.0 2107.9 5.8 20.0 0.4	00000000000000000000000000000000000000	26 (Riffle mch 1C MY3 2108.1 2108.1 4.2 20.0 0.5	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Usec Low Bank Height Elevation (datum) Usec Bankful Mean Depth (ft Bankful Max Depth (ft Bankful Max Depth (ft	Base 2121.0 5.2 15.0 0.3 0.7	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3 0.5	1.0 Cr 2121.1 2121.2 3.4 15.0 0.5 1.0	0.5 voss Section Coates Br 2121.1 2121.0 3.5 15.0 0.5 0.8	0.9 23 (Riffle anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8	) MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3	Ci MY1 2121.2 2121.0 7.9 40.0 0.6 1.4	Toss Section Coates Br 2121.2 2121.0 5.7 40.0 0.9 1.4	212 n 24 (Pool anch 1B 2121.2 2121.0 7.5 40.0 0.7 1.5	MY4	MY5	MY6	MY7	1.2 Base 2108.0 5.3 20.0 0.5 0.9	Pre-MY1 2108.1 2108.1 5.6 20.0 0.5 0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9	Coates B MY2 2108.2 2108.2 4.8 20.0 0.6 0.8	1.5 on 25 (Poe ranch 1C MY3 2108.3 2108.3 2108.3 0.6 0.9	d) MY4 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6	MY2           2108.2           2108.1           5.8           20.0           0.4	26 (Riffle anch 1C MY3 2108.1 2108.1 4.2 20.0 0.5 0.8	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Usec Low Bank Height Elevation (datum) Usec Bankfull Widh (f) Floodgrone Widh (f) Bankfull Mean Depth (f) Bankfull Mean Depth (f) Bankfull Mean Depth (f)	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3 0.5 1.6	1.0 Cr 2121.1 2121.2 3.4 15.0 0.5 1.0 1.6	0.5           voss Section           Coates Br           2121.1           2121.0           3.5           15.0           0.5           0.8           1.6	0.9 23 (Riffle anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6	)) MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1	Ci MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1	ross Sectic Coates Bi MY2 2121.2 2121.0 5.7 40.0 0.9 1.4 5.1	2.5 n 24 (Pool anch 1B MY3 2121.2 2121.0 7.5 40.0 0.7 1.5 5.1	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 0.9 2.7	0.3 Pre-MY1 2108.1 2108.1 5.6 20.0 0.5 0.9 2.7	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7	MY2           Coates B           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7	1.5 on 25 (Poe ranch 1C 2108.: 2108.: 2108.: 2108.: 0.6 0.9 2.7	d) MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2	MY2           2108.2           2108.1           5.8           20.0           0.4           0.5           2.2	26 (Riffle anch 1C MY3 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Bask Height Elevation (datum) Use Baskful Wohn (ft Floodgrow Widh (ft) Baskful Mas Depth (ft Baskfull Mas Depth (ft) Baskfull Cross Sectional Area (ft <sup>2</sup> ) Baskfull WithDepth Rask	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3 0.5 1.6 15.1	1.0 Cr 2121.1 2121.2 3.4 15.0 0.5 1.0 1.6 7.5	8.9           wass Section           Coates Bra           2121.1           2121.0           3.5           15.0           0.5           0.8           1.6           7.6	0.9 23 (Riffle anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4	MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5	Ci MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3	MY2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4	2.5 n 24 (Pool anch 1B 2121.2 2121.0 7.5 40.0 0.7 1.5 5.1 10.9	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 0.9 2.7 10.5	Pre-MV1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5	MY2           Coates B           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8	13 25 (Poe ranch 1C 2108.: 2108.: 2108.: 4.4 20.0 0.6 0.9 2.7 7.0	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4	MY2           2108.2           2108.1           5.8           20.0           0.4           0.5           2.2           15.5	26 (Riffle anch 1C MY3 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Bank Height Elevation (datum) Use Low Bank Height Elevation (datum) Use Bankfull Mean Depth (R Bankfull Mean Depth (R Bankfull Mean Depth (R) Bankfull Weith Depth Rait Bankfull Weith Depth Rait Bankfull Weith Depth Rait Bankfull Mean Depth Bankfull Mean Depth Bankfull Mean Depth Bankfull Mean Depth Ban	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3 0.5 1.6 15.1 3.1	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           1.6           7.5           4.4	8.9           wass Section           Coates Br           2121.1           2121.0           3.5           15.0           0.5           0.8           1.6           7.6           4.3	23 (Riffle anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4	MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5 4.6	Ci MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3 5.0	MY2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0	212 212 212 212 212 212 212 212	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 0.9 2.7 10.5 3.8	Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2	0.7           cross Secti           Coates B           MY2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1	1.0 25 (Poor ranch 1C MY3 2108.: 2108.: 2108.: 2108.: 2108.: 0.6 0.9 2.7 7.0 4.5	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6	MY1           2108.0           2107.9           5.8           20.0           0.4           0.6           2.2           15.4           3.4	MY2           2108.2           2108.1           5.8           20.0           0.4           0.5           2.2           15.5           3.4	26 (Riffle mch 1C 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Bask Height Elevation (datum) Use Baskful Wohft (f Floodgrone Wihft (f) Baskful Max Depth (f) Baskfull Max Depth (f) Baskfull Assoc Depth (f) Baskfull Eurenchment Raik *Baskfull Eurenchment Raik	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9 1.0	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3 0.5 1.6 15.1 3.1 1.1	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           7.5           4.4           1.1	MY2           2121.1           2121.0           3.5           15.0           0.5           0.8           1.6           7.6           4.3           0.9	a.y           23 (Riffle           anch 1B           MY3           2121.4           2121.1           2.3           15.0           0.7           0.8           1.6           3.4           6.4           0.6	MY4	MY5	5 MY6	MY7	Base 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 1.4.5 4.6 0.9	Cr MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3 5.0 0.9	MY2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9	MY3           2121.2           2121.2           2121.0           7.5           40.0           0.7           1.5           5.1           10.9           5.3           0.9	MY4	MY5	MY6	MY7	Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0	0.8           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6           1.0	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8	Coates B           MY2           2108.2           2108.2           2108.2           20.0           0.6           0.8           2.7           8.8           4.1           1.0	1.0           on 25 (Poeranch 1C           MY3           2108           2108           2108           0.00           0.6           0.9           2.7           7.0           4.5           1.1	MY4 2 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0	Pre-MV1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0	MY1           2108.0           2107.9           5.8           20.0           0.4           0.6           2.2           15.4           3.4           0.8	oss Section Coates Bri 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9	Mr           26 (Riffle meh IC           MY3           2108.1           2108.1           20.0           0.5           0.8           2.2           8.1           4.7           0.9	) MY4	MY5	MY6	MY7
Dimension           Record Elevation (datum) Usec           Low Bank Height Elevation (datum) Usec           Bankful Mean Deeph (ft           Bankful Gross Sectional Area (ft <sup>2</sup> )           Bankful Gross Sectional Area (ft <sup>2</sup> )           Bankful Gross Group (ft)           Bankful Gross Group (ft)           Bankful Gross Or (ft)           Bankful Gross Deeph (ft)	Base           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           3.1           1.1           0.6	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1	with the second secon	23 (Riffle mch 1B 2121.4 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5	MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           7.4           40.0           0.7           1.5           5.1           10.7           5.4           1.0           1.5	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5 4.6 0.9 1.2	MY1           2121.2           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2	MY2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9           1.3	MY3         2121.2           2121.2         2121.2           2121.2         2121.2           2121.2         5.5           40.0         0.7           1.5         5.1           5.3         0.9           1.3         1.3	MY4	MY5	MY6	MY7	Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9	0.3           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	Annu         Annu           Coates B         MY2           2108.2         2108.2           2108.2         2108.2           4.8         20.0           0.6         0.8           2.7         8.8           4.1         1.0           0.8         0.8	1.0           On 25 (Poeranch 1C)           MY3           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2108           2109           0.6           0.9           2.7           7.0           4.5           1.1           0.9	l) MY4 2 2 	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	MY1           2108.0           2107.9           5.8           20.0           0.4           0.6           2.2           15.4           3.4           0.8           0.5	oss Section Coates Bra 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	Million           26 (Riffler           mch IC           MY3           2108.1           2108.1           4.2           20.0           0.5           0.8           2.2           8.1           4.7           0.9           0.8	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Lise Low Bank Height Elevation (datum) Lise Low Bank Height Elevation (datum) Lise Banklah Wohl (f) Phodogenew Wohl (f) Banklah Mas Dayle (f) Banklah Mas Dayle (f) Banklah Mas Dayle (f) Banklah Mas Dayle (f) Banklah Nyidit) Near (f) Banklah Shidit) Low Top of Bank Deph (f) Low Top of Bank Deph (f)	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9 1.0 0.7	Pre-MY1 2121.1 4.9 15.0 0.3 0.5 1.6 15.1 3.1 1.1 0.6	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1	MY2           2121.1           2121.1           2121.0           3.5           15.0           0.5           0.8           1.6           7.6           4.3           0.9           0.7           costes Br:           Costes Br:	23 (Riffle anch 1B 2121.4 2121.4 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 0.5 127 (Pool) anch 1B	MY4 MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5 4.6 0.9 1.2	MY1 2121.2 2121.0 7.9 40.0 0.6 5.1 12.3 5.0 0.9 1.2 Cr	ross Sectio Coates B <u>MY2</u> 2121.2 2121.0 5.7 40.0 0.9 1.3 0ss Sectio Coates B	MY3           2121.2           2121.	MY4	MY5	MY6	MY7	Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9	0.8 Pre-MY1 2108.1 5.6 20.0 0.5 0.9 2.7 11.3 3.6 1.0 0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	0.7           ross Secti           Coates B           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	Answer         Answer           000         25 (Poor           000         25 (Poor           000         2108           2108         2108           2108         2108           0.09         0.9           0.7         7.0           4.5         1.1           0.9         0.9	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 3.4 0.8 0.5	oss Section Coates Br: 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	226 (Riffle nch IC <u>MY3</u> 2108.1 2108.1 4.2 20.0 0.5 0.5 2.2 8.1 4.7 0.9 0.8	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Bask Height Elevation (datum) Use Low Bask Height Elevation (datum) Use Baskful Weah (ft Baskful Mas Depth (ft Baskful Asso Depth (ft Baskful Cross Sectional Area (ft Baskful Entreschment Rata Paskful Entreschment Rata Tashful Entreschment Rata Datukful Low Top of Bask Depth (ft Low Top of Bask Depth (ft)	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9 1.0 0.7	Pre-MY1 2121.1 2121.2 4.9 15.0 0.3 0.5 1.6 15.1 3.1 1.1 0.6 Den MY1	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           1.6           7.5           4.1           1.1           1.1	with the second secon	2 23 (Riffle anch 1B MY3 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 a 27 (Pool) anch 1D	MY4 MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5 4.6 0.9 1.2 Pre-MY1	MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3 0.9 1.2 Cr	ross Sectio Coates B MY2 2121.2 2121.0 5.7 40.0 0.9 1.4 5.1 6.4 7.0 0.9 1.3 oss Sectio Coates B	MY3           2121.2           2121.2           2121.2           2121.0           7.5           5.1           10.9           5.3           0.9           1.3           28 (Riffle anch ID)           MY3	MY4	MY5	MY6	MY7	Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9	0.3           Pre-MY1           2108.1           5.6           20.0           0.5           20.0           0.5           20.0           0.5           10.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	0.7           ross Secti           Coates B           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	Answer         Answer           000         25 (Poor           000         25 (Poor           000         2108.3           2108.3         2108.3           2108.3         2108.3           0.0         0.6           0.9         2.7           2.7         7.0           4.5         1.1           0.9         0.9	MY4 2 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 0.8 0.5	oss Section Coates Br; 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	226 (Riffle mch 1C MY3 2108.1 2108.1 2108.1 2.08.1 2.0.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Lies Low Bank Height Elevation (datum) Lies Low Bank Height Elevation (datum) Lies Banklah Wath (ft Photogenew Wahh (ft Photogenew	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9 1.0 0.7 8 Base 2105.7	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           3.1           1.1           0.6	MY1           2121.1           2121.2           33.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           210           2105 7	MY2           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           215.0           0.5           0.8           1.6           7.6           4.3           0.7           ross Section           Coates Br:           MY2           2105.7	233 (Riffle, anch 1B MY3 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 127 (Pool) anch ID MY3 2105 (Pool) 2105 (Pool)	MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5 8 ase 2105 6	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5 4.6 0.9 1.2 Pre-MY1 2105.6	MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3 5.0 0.9 1.2 1.2 Cr MY1 2105 7	oss Section           0.9           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2105.7           2005.7	MY3           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2105 & S.1           2005 & R	MY4	MY5	MY6	MY7	Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9	0.3           Pre-MY1           2108.1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	0.77           rooss Secti           Coates B           MY2           2108.2           2108.2           2108.2           2108.2           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	1.0           no 25 (Poe           ranch 1C           MY3           2108.:           2109.:           21	MY4 2 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	MY1           2107.9           5.8           20.0           0.4           0.5           15.4           3.4           0.5	oss Section Coates Br: 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	26 (Riffle mch 1C MY3 2108.1 2108.1 4.2 200.0 5 0.8 2.2 8.1 4.7 0.9 0.8	) MY4	MY5	MY6	MY7
Dimension           Record Elevation (datum) Use           Low Bank Height Elevation (datum) Use           Bankful Wohl (fr           Bankful Max Depth (fr           Bankful Bank Heigh Rark           "bankful Bank Heigh Rark           Dimension           Record Elevation (datum) List           Low Bash Height Elevation (datum) List	Base           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7           Base           2105.7	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           3.1           1.1           0.6           Pre-MY1           2105.7           2105.7	MY1           2121.1           2121.2           12121.2           12121.2           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           1.1           1.1           2105.5	MY2           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           215.0           0.5           0.8           1.6           7.6           4.3           0.9           0.7           ross Section           Coates Br:           MY2           2105.8	2.33 (Riffle, anch 1B MY3 2121.4 2121.4 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 a 27 (Pool) anch 1D MY3 2105.9 2105.9	MY4 MY4 MY4	MY5	5 MY6	MY7	Base           2121.1           7.4           40.0           0.7           1.5           5.1           10.7           5.4           1.5           Base           2105.6           2105.6	Pre-MY1 2121.1 2121.0 8.6 40.0 0.6 1.3 5.1 14.5 4.6 0.9 1.2 Pre-MY1 2105.6	MY1           2121.2           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           Cr           MY1           2105.5	MY2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9           1.3           oxs Sectio           Coates Br           MY2           2105.6           2105.7           2105.6	Autom           anch 1B           MY3           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           205.7           205.7	MY4	MY5	MY6	MY7 	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 2.7 10.5 3.8 1.0 0.9	0.3           Pre-MY1           2108.1           2108.1           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	Or         Or           Tooss Secti         Coates B           MY2         2108.2           2108.2         2108.2           0.6         0.6           0.7         2.8           4.1         1.0           0.8         0.8	1.0           on 25 (Poe           ranch 1C           MY3           2108.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           2109.:           21	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 0.6 1.0 0.6	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 0.8 0.5	oss Section Coates Br: 2108.2 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	Mittee           26 (Rifflee           mch 1C           MY3           2108.1           2108.1           20.0           0.5           0.8           2.2           8.1           4.7           0.9           0.8	) MY4	MY5	MY6	MY7
Dimension Record Elevation (datum) Used Low Bank Height Elevation (datum) Used Low Bank Height Elevation (datum) Used Reads and Wealth (the Second Se	Base           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7           1.6           16.5           2.9           1.0           0.7           1.6           1.5.2           1.0           0.7	Pre-MY1           2121.1           2121.2           4.9           15.0           0.5           1.6           0.5           1.6           0.6           2105.7           2105.7           205.7	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           1.1           2105.7           2105.5	with the second secon	233 (Riffler anch 1B MY3 2121.4 2121.1 2.121.1 2.121.1 2.121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 3.4 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	MY4 MY4 MY4 MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           7.4           40.0           0.7           5.5           1.5           5.1           10.7           5.4           1.0           1.5           Base           2105.6           2105.6	Pre-MY1           2121.1           2121.0           8.6           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           2105.6           2105.6           7.4	MY1           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           Cr           MY1           2105.7           2105.7           7.5	MY2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           5.7           40.0           0.9           1.4           5.4           7.0           0.9           1.3           oss Sectio           Ocates BI           MY2           2105.7           2105.6           4.7	Image: Non-Section 12 (Pool and 18)           MY3           2121.0           2121.0           2121.0           2121.0           7.5           40.0           0.7           1.5           5.1           10.9           5.3           0.9           1.3           2105.8           2105.7           40.0	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 0.9 2.7 10.5 3.8 1.0 0.9	0.3           Pre-MY1           2108.1           2108.1           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	MY2           108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           2108.2           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	1.0           mn 25 (Pooe           granch 1C           MY3           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           2108.           210.0           0.6           0.9           2.7           7.0           4.5           1.1           0.9           0.9	MY4 2 2	MY5	MY6	MY7	Base           2107.9           2107.9           5.4           20.0           0.4           0.8           2.2           13.5           3.7           1.0           0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cre 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 3.4 0.8 0.5	oss Section Coates Br: 2108.2 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	26 (Riffle mch 1C MY3 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8	)	MY5	MY6	MY7
Dimension           Record Elevation (datum) Use           Low Bask Height Elevation (datum) Use           Banklul Mean Depth (ft           Banklul Anx Oepth (ft           Banklul Mean Depth (ft           Banklul Mean Depth (ft           Banklul Mean Depth (ft           User Top of Bank Depth (ft           Low Top of Bank Depth (ft           Dimension           Low Bank Height Elevation (datum) Use           Low Bank Height Elevation (datum) Use           Fanklul Weth (ft	Base           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7           2.05.7           2105.7           5.9           25.0	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           1.1           0.6           Pre-MY1           2105.7           6.9           25.0	MY1           2121.1           2121.3           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           2105.7           2105.5           6.4           25.0	w.2           oss Section           Coates Br;           2121.1           2121.1           2121.1           3.5           15.0           0.5           0.8           1.6           7.6           4.3           0.9           0.7           0.7           2005.7           2105.8           5.6           25.0	233 (Riffler anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.5 1.6 0.5 1.7 (Pool) anch 1D MY3 2105.9 2105.9 2106.0 6.7 25.0	MY4 MY4 MY4 MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           7.4           40.0           0.7           5.1           10.7           5.4           1.0           1.5           2105.6           2105.6           2105.6           2105.6	Pre-MY1           2121.1           2121.0           8.6           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           Pre-MY1           2105.6           2105.6           7.4	MY1           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           Cr           MY1           2105.7           7.5           25.0	oss Section           0.000           0.000           0.100           0.100           0.100           0.110           0.110           0.110           0.110           0.110           0.110           0.110           0.110           0.110           0.110           0.110           0.111           0	MY3           2121.2           2121.0           2121.0           2121.0           2121.0           7.5           40.0           0.7           1.5           5.1           10.9           5.3           0.9           1.3           28 (Riffle anch ID           MY3           2105.8           2105.7           4.0           25.0	MY4	MY5	MY6	MY7	Base           2108.0           2108.0           5.3           20.0           0.5           2.7           10.5           3.8           1.0           0.9	0.3           Pre-MY1           2108.1           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1           2108.1           2107.9           6.2           20.0           0.4           0.9           2.7           14.5           3.2           0.8	MY2           Coates B           MY2           2108.2           2108.2           2108.2           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	1.0           na 25 (Pooe           ranch 1C           MY3           2108.:           2108.:           2108.:           2108.:           4.4           20.0           0.6           0.9           2.7           7.0           4.5           1.1           0.9	H) MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 200.0 4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	MY1           2108.0           2107.9           5.8           200.0           0.4           0.6           2.1           1.5.4           3.4           0.5	oss Section Coates Br: 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	26 (Riffle anch 1C MY3 2108.1 2108.1 2108.1 2108.1 2.00.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8	)	MY5	MY6	MY7
Dimension           Record Elevation (datum) Like           Low Bank Height Elevation (datum) Like           Low Bank Height Elevation (datum) Like           Bankfull Mean Depht (datum)           Bankfull Mean Depht (datum)           Bankfull Case Scient Area (datum)           Low Top of Bank Depht (datum)           Dimension           Record Elevation (datum) Like           Low Bank Height Revision (datum)           Dimension           Record Elevation (datum) Like           Resolution (datum) Like           Resolution (datum)           Bankfull Mean Depht (datum)           Bankfull Mean Depht (datum)	Base           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           2.9           1.0           0.7           2105.7           2105.7           2105.7           0.6	Pre-MY1           2121.1           2121.2           15.0           0.3           0.5           15.0           15.1           15.1           15.1           1.1           2105.7           2105.7           6.9           25.0           0.5	MY1           2121.1           2121.2           3.4           15.0           0.6           1.0           1.6           1.75           7.5           4.4           1.1           1.1           2105.5           6.4           25.0           0.6	MY2           2121.1           2121.1           2121.1           2121.0           3.5           15.0           0.5           0.8           1.6           4.3           0.9           0.7           coates Br:           MY2           2105.7           2105.8           5.6           25.0           0.7	233 (Rime anch 1B 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 0.6 0.5 1.6 0.5 1.7 (Pool) anch 1D MY3 2105.9 2105.0 6.7 25.0 0.6	) MY4 	MY5	5 MY6	MY7	Base           2121.1           2121.1           7.4           40.0           0.7           1.5           5.1           10.7           5.4           1.0           1.5           2105.6           2105.6           6.1           25.0	Pre-MY1           2121.1           2121.0           8.6           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           Pre-MY1           2105.6           7.4           25.0           0.4	MY1           2121.2           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           Cr           MY1           2105.5           7.5           25.0           0.4	MY2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9           1.3           cost Sectio           Coates B           MY2           2105.7           2105.6           4.7           25.0           0.7	MY3           2121.0           2121.0           2121.0           2121.0           7.5           40.0           0.7           1.5           5.1           10.9           1.3           2.8 (Riffer anch 1D           MY3           2105.8           2105.7           4.0           25.0           0.8	MY4	MY5	MY6	MY7	1.2 Base 2108.0 5.3 20.0 0.5 0.9 2.7 10.5 3.8 1.0 0.9	D.a           Pre-MY1           2108.1           25.6           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2107.9 6.2 20.0 0.4 2.7 14.5 3.2 0.8 0.8	Or         Or           Tooss Secti         Coates B           MY2         2108.2           2108.2         2108.2           20.0         0.6           0.8         2.7           8.8         4.1           1.0         0.8	1.0           na 25 (Poice           ranch 1C           MY3           2108.2           2108.3           2108.3           4.44           20.0           0.6           0.9           0.7           7.0           4.5           1.11           0.9	M) MY4 2 2 	MY5	MY6	MY7	Base 2107.9 2107.9 2007.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 3.4 0.8 0.5	oss Section Coates Br: 2108.2 2108.1 2108.1 200. 0.4 0.5 2.2 1.5 3.4 0.9 0.5	26 (Riffle mch 1C 12108.1 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8 0.8 2.2 0.8 2.2 0.8 2.2 0.8 2.2 0.8 2.2 0.8 2.2 0.8 2.2 0.8 2.2 0.8 2.0 0.8 0.0 0.9 0.8 0.0 0.8 0.0 0.8 0.0 0.8 0.0 0.8 0.0 0.8 0.8	) MY4	MY5	MY6	MY7
Dimension           Record Elevation (datum) Usec           Low Bank Height Elevation (datum) Usec           Bankful Mean Depth (ft           Bankful Bankful Bank Heigh Ratu           *Bankful Bank Height Ratu           Low Top of Bank Depth (ft           Dimension           Record Elevation (datum) Usec           Low Bank Height Elevation (datum) Usec           Bankful Mean Depth (ft           Bankful Man Depth (ft           Bankful Mean Depth (ft	Base           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7           2.9           1.0           0.7           5.9           25.0           0.6           1.2	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           3.1           1.1           2105.7           6.9           25.0           0.5	MY1           2121.1           2121.1           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           2105.7           2105.5           6.4           25.0           0.6           1.1	with the second section of the second section section section of the second section seccond section section section section section section	23 (Riffler anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 3 (Pool) anch 1D MY3 2105.9 2106.0 6.7 25.0 0.6 1.2	) MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           2121.1           7.4           40.0           0.7           1.5           5.1           10.7           5.4           1.0           1.5           2105.6           6.1           25.0           0.5	Pre-MY1           2121.1           2121.1           2121.1           2121.0           8.6           40.0           0.6           4.6           0.9           1.2           Pre-MY1           2105.6           2105.7           7.4           25.0           0.4           0.9	Cr MY1 2121.2 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3 5.0 0.9 1.2 Cr MY1 2105.5 7.5 25.0 0.4 0.9 0.9	oss Section           Question           2121.2           2121.2           2121.2           2121.0           5.7           40.0           5.7           40.0           9.9           1.4           5.1           6.4           7.0           0.9           1.3           005 Section           005 Section           2105.6           4.7           2105.6           4.7           25.0           0.7           1.0	MY3           2121.0           2121.0           2121.0           2121.0           7.5           40.0           0.7           1.5           5.1           10.9           5.3           0.9           1.3           28 (Riffle anch 1D           MY3           2105.8           2105.7           4.0           25.0           0.8           1.1	MY4	MY5	MY6	MY7	1.2 Base 2108.0 5.3 20.0 0.5 2.7 10.5 3.8 1.0 0.9	0.3           Pre-MY1           2108.1           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8 0.8	ross Secti Coates B 2108.2 2108.2 2108.2 2108.2 2108.2 208.2	n 25 (Poo ranch 1C MY3 2108.: 2108.: 2108.: 2108.: 2108.: 2108.: 2108.: 1208.: 2108.: 100.0 0.6 0.9 2.7 7.0 7.0 4.5 1.1 0.9	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 220.0 0.4 0.4 0.4 0.4 0.4 0.2 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.4 0.4 0.4 0.4 0.4 0.2 2.0 2.0 0 20.0 0 0.4 0.5	oss Section Coates Br; 2108.2 2108.2 200.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	26 (Riffle mch 1C MY3 2108.1 2108.1 2108.1 2108.1 2.0.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8	)	MY5	MY6	MY7
Dimension Record Elevation (datum) Use Low Bank Height Elevation (datum) Use Low Bank Height Elevation (datum) Use Low Bank Height Elevation (datum) Use Bankfull Man Depht (I Bankfull Man Depht (I Bankfull Man Depht (I Bankfull Man Depht (I Dimension Record Elevation (datum) Use Low Bank Height Ratic Low Top of Bank Deph (I Bankfull Cash Sector) (datum) Use Low Bank Height Clevation (datum) Use Low Bankfull Man Depht (I Ba	Base           2121.0           2121.0           2121.0           2121.0           5.2           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7           Base           2105.7           25.0           0.6           1.2           3.7	Pre-MY1           2121.1           2121.2           4.9           15.0           0.5           1.6           15.1           3.1           1.1           0.6           Pre-MY1           2105.7           6.9           25.0           0.5           1.3           3.7	MY1           2121.1           2121.1           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1 <td>0.7           0000           Coates Br:           MY2           2121.1           2121.1           2121.1           0.3.5           15.0           0.5           0.5           0.5           0.76           4.3           0.9           0.7           Coates Br:           MY2           2105.7           2105.8           5.6           25.0           0.7           1.2           3.7</td> <td>23 (Rime anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.5 0.7 (Pool) anch 1D MY3 2105.9 2106.0 6.7 25.0 0.6 1.2 25.0 0.6 1.3 3.7</td> <td>) MY4</td> <td>MY5</td> <td>5 MY6</td> <td>MY7</td> <td>Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5 2105.6 2105.6 2105.6 6.1 25.0 0.5 1.0 3.3</td> <td>Pre-MY1           2121.1           2121.0           84.0           0.6           4.0           1.3           5.1           14.5           4.6           0.9           1.2           Pre-MY1           2105.6           7.4           25.0           0.4           0.9           3.3</td> <td>MY1           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           212.3           5.0           0.9           1.2           Cr           MY1           2105.5           7.5           25.0           0.4           0.9           3.3</td> <td>oss Section           MY2           2121.2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9           1.3           oss Section           Coates Bit           MY2           2105.7           2105.6           4.7           25.0           0.7           1.0           3.3</td> <td>MY3           2121.2           2121.2           2121.2           2121.2           2121.0           7.5           40.0           0.7           1.5           5.1           0.9           1.3           28 (Riffle anch 1D           MY3           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           3.3  <td>MY4</td><td>MY5</td><td>MY6</td><td>MY7 </td><td>Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9</td><td>D.a           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           2.0           0.9           2.7           11.3           3.6           1.0           0.9</td><td>MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8</td><td>MY2           Coates B           MY2           2108.2           2108.2           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8</td><td>1.0         1.0           na 25 (Poo         0           ranch 1C         108.3           2108.3         2108.3           4.4         20.0           0.6         0.9           2.7         7.0           4.5         1.1           0.9         0.9</td><td>MY4 2 2</td><td>MY5</td><td>MY6</td><td>MY7</td><td>Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8</td><td>Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 0.6 2.2 14.0 3.6 1.0 0.6</td><td>Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 115.4 3.4 0.8 0.5</td><td>oss Section Coates Bra 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 2.2 15.5 3.4 0.9 0.5</td><td>26 (Riffle mch 1C 2108.1 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8</td><td></td><td>MY5</td><td>MY6</td><td>MY7</td></td>	0.7           0000           Coates Br:           MY2           2121.1           2121.1           2121.1           0.3.5           15.0           0.5           0.5           0.5           0.76           4.3           0.9           0.7           Coates Br:           MY2           2105.7           2105.8           5.6           25.0           0.7           1.2           3.7	23 (Rime anch 1B MY3 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.5 0.7 (Pool) anch 1D MY3 2105.9 2106.0 6.7 25.0 0.6 1.2 25.0 0.6 1.3 3.7	) MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5 2105.6 2105.6 2105.6 6.1 25.0 0.5 1.0 3.3	Pre-MY1           2121.1           2121.0           84.0           0.6           4.0           1.3           5.1           14.5           4.6           0.9           1.2           Pre-MY1           2105.6           7.4           25.0           0.4           0.9           3.3	MY1           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           212.3           5.0           0.9           1.2           Cr           MY1           2105.5           7.5           25.0           0.4           0.9           3.3	oss Section           MY2           2121.2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9           1.3           oss Section           Coates Bit           MY2           2105.7           2105.6           4.7           25.0           0.7           1.0           3.3	MY3           2121.2           2121.2           2121.2           2121.2           2121.0           7.5           40.0           0.7           1.5           5.1           0.9           1.3           28 (Riffle anch 1D           MY3           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           3.3 <td>MY4</td> <td>MY5</td> <td>MY6</td> <td>MY7 </td> <td>Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9</td> <td>D.a           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           2.0           0.9           2.7           11.3           3.6           1.0           0.9</td> <td>MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8</td> <td>MY2           Coates B           MY2           2108.2           2108.2           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8</td> <td>1.0         1.0           na 25 (Poo         0           ranch 1C         108.3           2108.3         2108.3           4.4         20.0           0.6         0.9           2.7         7.0           4.5         1.1           0.9         0.9</td> <td>MY4 2 2</td> <td>MY5</td> <td>MY6</td> <td>MY7</td> <td>Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8</td> <td>Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 0.6 2.2 14.0 3.6 1.0 0.6</td> <td>Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 115.4 3.4 0.8 0.5</td> <td>oss Section Coates Bra 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 2.2 15.5 3.4 0.9 0.5</td> <td>26 (Riffle mch 1C 2108.1 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8</td> <td></td> <td>MY5</td> <td>MY6</td> <td>MY7</td>	MY4	MY5	MY6	MY7 	Base           2108.0           2108.0           5.3           20.0           0.5           0.9           2.7           10.5           3.8           1.0           0.9	D.a           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           2.0           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	MY2           Coates B           MY2           2108.2           2108.2           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	1.0         1.0           na 25 (Poo         0           ranch 1C         108.3           2108.3         2108.3           4.4         20.0           0.6         0.9           2.7         7.0           4.5         1.1           0.9         0.9	MY4 2 2	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 0.6 2.2 14.0 3.6 1.0 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 115.4 3.4 0.8 0.5	oss Section Coates Bra 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 2.2 15.5 3.4 0.9 0.5	26 (Riffle mch 1C 2108.1 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8		MY5	MY6	MY7
Dimension     Record Elevation (datum) Usec     Low Bank Height Elevation (datum) Usec     Low Bank Height Elevation (datum) Usec     Bankful Wath (ff     Bankful Max Depth (ff     Bankful Max Depth (ff     Bankful Cross Sectional Area (ff     Bankful Gross Sectional Area (ff     Bankful Elevation (datum) Usec     Low Bank Height Rest     Low Top of Bank Depth (ff     Bankful Bankful Bank Height Ration     Bankful Bankful Bankful Bankful     Dimension     Record Elevation (datum) Usec     Low Bank Height Elevation (datum) Usec     Low Bank Height Ration     Bankful Max Depth (ff     Bankful Gross Sectional Area (ff     Bankful Max Depth (ff     Bankful Gross Sectional Area (ff)     Bankful Gross Sectional Area (ff)     Bankful Gross Sectional Area (ff)	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9 1.0 0.7 8 Base 2105.7 2105.7 2105.7 5.9 25.0 0.6 1.2 3.7 9.2	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           15.1           3.1           1.1           0.6           15.1           3.1           1.1           0.6           2105.7           2105.7           0.5           25.0           0.5           1.3           3.7           13.2	MY1           2105.7           6.4           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           2105.7           6.4           25.0           0.6           1.1           1.1           1.1.1	MY2           2121.1           2121.1           2121.1           15.0           0.5           0.8           1.6           7.6           4.3           0.9           0.7           Coates Br;           MY2           2105.7           2105.8           5.6           25.0           0.7           1.2           3.7           1.2           3.7	23 (Riffler mch 1B MY3 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.8 1.6 0.5 3.4 6.4 0.5 3.4 6.4 0.5 2105.9 2105.9 2105.0 6.7 25.0 0.6 1.2 2105.9 21	)	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5 2105.6 2105.6 2105.6 6.1 250.6 1.0 0.5 1.0 3.3 11.4	Pre-MY1           2121.1           2121.0           86           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           2105.6           2105.6           2105.7           7.4           25.0           0.4           0.9           3.3           16.5	MY1           2121.2           2121.0           7.9           40.0           0.6           1.4           5.0           1.2           Cr           MY1           2105.5           7.5           25.0           0.4           0.9           3.3           17.2	oss Section           Over State           Operation           Operation	n 24 (Pool anch 1B MY3 2121.2 2121.0 7.5 40.0 0.7 1.5 5.1 10.9 5.3 0.9 1.3 28 (Riffle anch 1D MY3 2105.8 2105.8 205.7 4.0 25.0 0.8 4.0 25.0 0.8 4.0 2.1 21.0 0.5 1 1.3 20.0 5.1 1.3 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	MY4	MY5	MY6	MY7 	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 0.9 2.7 10.5 3.8 1.0 0.9	0.8           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	MY2           Coates B           2108.2           2108.2           2108.2           2108.2           4.8           20.0           0.6           0.8           2.7           8.8           4.1           1.0           0.8	1.0           na 25 (Poo           ranch 1C           MY3           2108.:           2108.:           2108.:           2108.:           0.6           0.9           2.7           7.0           7.0           4.5           1.1           0.9	MY4 2 2 2 2 2 2 2 1 1 2 1 1 1 1 1 1 1 1 1	MY5	MY6	MY7	Base 2107.9 2107.9 220.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 3.4 0.8 0.5	oss Section Coates Bra 2108.2 2108.1 5.8 20.0 0.4 0.5 3.4 0.9 0.5	26 (Riffle mch 1C MY3 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8		MY5	MY6	MY7
Dimension Dimension Record Elevation (datum) Use Low Bank Height Elevation (datum) Use Low Bank Height Elevation (datum) Use Elevation (datum) Use Floadprane Wohl (i) Bankfull Man Depht (i) Bankfull Man Depht (i) Bankfull Man Depht (i) Bankfull Man Depht (i) Dimension Record Elevation (datum) Use Low Bank Height Ratic Low Top of Bank Deph (i) Dimension Record Elevation (datum) Use Low Bankfull Man Depht (i) Bankfull Wath D	Base 2121.0 2121.0 5.2 15.0 0.3 0.7 1.6 16.5 2.9 1.0 0.7 8 Base 2105.7 2105.7 2105.7 2105.7 5.9 25.0 0.6 1.2 3.7 9.2 5.9	Pre-MY1           2121.1           2121.2           2121.2           315.0           0.3           15.6           15.1           3.1           1.1           205.7           2105.7           2105.7           2105.7           6.9           25.0           0.5           1.3           3.7           13.6	MY1           2121.1           2121.2           3.4           15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           2105.5           6.4           25.0           0.6           1.1           3.7           11.1           3.7           11.1           3.9	mail         mail           Ooss Section         3.5           J121.1         2121.1           J121.1         15.0           0.5         0.5           0.6         1.6           7.6         4.3           0.9         0.7           2105.7         2105.8           5.6         25.0           0.7         1.2           3.7         8.4           4.5         4.5	23 (Riffler mch 1B MY3 2121:4 2121:4 2121:1 2.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 2105.9 2106.0 6.7 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 0.6 7. 25.0 1.6 7. 25.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	) MY4	MY5	5 MY6	MY7	Base 2121.1 2121.1 7.4 40.0 0.7 1.5 5.1 10.7 5.4 1.0 1.5 2105.6 2105.6 6.1 2105.6 6.1 2105.6 5.1 0.5 1.0 0.5 1.0 3.3 11.4 4.1	Pre-MY1           2121,1           2121,0           84,00           0.6           1.3           5.1           14.5           4.6           0.9           1.2           Pre-MY1           2105.6           2105.6           2105.6           0.4           0.9           3.3           16.5           3.4	MY1           2121.2           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           Cr           MY1           2105.7           25.0           0.4           0.9           3.3           17.2           3.3	oss Sectio           Coates B           MY2           2121.2           2121.2           2121.0           5.7           40.0           0.9           1.4           5.1           6.4           7.0           0.9           1.3           oss Sectio           Coates B           MY2           2105.7           2105.6           4.7           0.0           0.7           2105.6           4.7           0.5.3	A2 (Pool           anch 1B           MY3           2121.2           2121.2           2121.0           7.5           40.0           0.7           1.5           5.1           10.9           5.3           0.9           1.3           28 (Riffle           anch 1D           MY3           2105.8           2105.7           4.0           0.8           1.1           3.3           4.9           6.2	MY4	MY5	MY6	MY7 	1.2 Base 2108.0 2108.0 0.5 0.9 2.7 10.5 3.8 1.0 0.9	0.8           Pre-MY1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           1.0           0.9	MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	Alternation         Alternation           Coates B         MY2           Coates B         2108.2           2108.2         2108.2           2108.2         2108.2           200.6         0.6           0.8         2.7           8.8         4.1           1.0         0.8	1.0           nn 25 (Poor           ranch 1C           MY3           2108.:           2108.:           2108.:           2108.:           2108.:           2108.:           2108.:           2108.:           1.11           0.9           2.77           7.0           4.5           1.11           0.9           0.9	MY4 2 2 	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 3.4 0.8 0.5	oss Section Coates Bra 2108.2 2108.1 2208.1 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	26 (Riffle mch 1C MY3 2108.1 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8	)	MY5	MY6	MY7
Dimension     Record Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Baskall Wath (ft     Baskall Mean Deph (ft     Baskall Mean Deph (ft     Baskall Mean Deph (ft     Baskall Cross Sectional Area (ft     Baskall Cross Sectional Area (ft     Baskall Bask Height Rest     Cov Top of Bask Deph (ft     Dimension     Record Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Low Bask Height Revation (datum) Lise     Low Baskall Mean Depth (ft     Baskall Weith Depth Rata;     Baskall Bask Height Rata;     Baskall Baskall Bask Height Rata;     Baskall Baskall Bask Height Rata;     Baskall Baskall Baskall Bask Height Rata;     Baskall Baskalll Baska	Base           2121.0           2121.0           15.0           15.0           15.0           15.0           15.0           15.0           15.0           15.0           15.0           15.0           15.0           15.0           16           16.5           2.9           1.0           0.7           2105.7           25.0           0.6           1.2           25.0           0.6           1.2           3.7           9.2           4.3           1.0	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           1.1           0.6           Pre-MY1           2105.7           2105.7           6.9           25.0           0.5           1.3           3.7           13.2           3.6           1.0	MY1           2121.1           2121.1           2121.1           12121.1           15.0           0.5           1.0           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           2105.7           6.4           25.0           0.6           1.1.1           3.7           11.1           3.7           11.1           0.8	MY2           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           0.3           0.5           0.7           0.7           Coates Brr           2105.7           2105.7           2105.7           2105.8           5.6           25.0           0.7           1.2           3.7           8.4           4.5           1.0	23 (Rime anch 1B MY3 2121.4 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.7 0.7 0.7 0.7 1.6 3.4 6.4 0.6 0.5 0.5 2105.9 2105.9 2106.0 6.7 25.0 0.6 0.6 1.2 2106.0 6.7 25.0 0.6 0.6 1.2 21.0 21.0 1.4 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	) MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           7.4           40.0           0.7           1.5           5.1           10.7           5.4           1.0           1.5           2105.6           2105.6           2105.6           6.1           25.0           0.5           1.0           3.3           11.4           4.1           1.0	Pre-MY1           2121.1           2121.0           8.6           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           2105.6           2105.6           2105.7           7.4           25.0           0.4           0.9           3.3           16.5           3.4           1.0	MY1           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           2105.7           2105.7           2105.5           7.5           25.0           0.4           0.9           3.3           17.2           3.3           0.9	Section           MY2           2121.2           2105.7           2105	MY3           2121.2           2121.2           2121.2           2121.2           2121.0           7.5           3.1           0.7           1.5           5.1           10.9           5.3           0.9           1.3           A& (Rifflemanch ID)           MY3           2105.7           4.0           25.0           0.8           1.1.1           3.3           4.9           6.2           0.9	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 0.5 0.9 2.7 10.5 3.8 1.0 0.9	0.8           Pre-MY1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6           0.9           0.9           2.7           1.0           0.9	( MY1 2108.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8	ost         ost           ross Secti         Coates B           MY2         2108.2           2108.2         2108.2           4.8         2.00           0.6         0.8           2.7         8.8           4.1         1.0           0.8         0.8	n 25 (Potos 1 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	MY4 MY4 2 	MY5	MY6	MY7	Base           2107.9           2107.9           5.4           20.0           0.4           0.8           2.2           13.5           3.7           1.0           0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.6 2.2 15.4 3.4 0.8 0.5	oss Section Coates Bra 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 3.4 0.5 0.5 3.4 0.5 0.5	26 (Riffle mch 1C MY3 2108.1 2108.1 2108.1 20.0 0.5 0.8 2.2 8.1 4.7 0.9 0.8		MY5	MY6	MY7
Dimension  Record Elevation (datum) Use Low Bank Height Elevation (datum) Use Low Bank Height Elevation (datum) Use Low Bank Height Elevation (datum) Use Bankfull Wass Depth (II Bankfull Mass Depth (II Bankfull Mass Depth Elevation Bankfull Mass Depth (II Bankfull Mass Depth (II Bankfull East Height Ratic Low Top of Bank Depth (II Bankfull Casa)  Dimension  Record Elevation (datum) Use Low Bankfull Mass Depth (II Bankfull Mass Depth (II Bankfull Mass Depth (II Bankfull Casa)  Dimension  Record Elevation (datum) Use Low Bank Height Clevation (datum) Use Low Bankfull Mass Depth (II Bankfull Mass Depth (II) Bankfull Mass Dep	Base           2121.0           2121.0           2121.0           15.0           0.3           0.7           1.6           16.5           2.9           1.0           0.7           2105.7           2105.7           2.0           0.6           1.2           3.7           4.3           1.0           1.2	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           1.6           15.1           3.1           1.1           2005.7           2105.7           2105.7           2105.7           3.3           3.7           1.3           3.7           1.3           3.7           1.3           3.6           1.0	MY1           2121.1           2121.2           3.15.0           0.5           1.0           1.6           7.5           4.4           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           3.9           0.8           1.0	msp           oss Section           MY2           2121.1           2121.1           2121.1           15.0           0.5           0.8           1.6           7.6           4.3           0.9           0.7           0.7           2105.7           2105.8           5.6           25.0           0.7           1.2           3.7           8.4           4.5           1.0	23 (Riffle anch 1B MY3 2121.4 2121.4 2121.4 2121.3 15.0 0.7 0.8 1.6 3.4 6.4 0.6 0.5 27 (Pool) anch 1D MY3 2105.9 2106.0 6.7 25.0 0.6 1.2 3.7 1.2 3.7 1.0 0.6 1.3	) MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           7.4           40.0           0.7           1.5           5.1           10.7           5.4           1.0           1.5           2105.6           2105.6           2105.6           6.1           25.0           0.5           1.0           3.3           11.4           4.1           1.0           1.0	Pre-MY1           2121.1           2121.1           2121.0           8.6           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           Pre-MY1           2105.6           2105.6           2105.6           2105.6           3.0.4           0.9           3.3           16.5           3.4           1.0	Cr MY1 2121.2 2121.0 7.9 40.0 0.6 1.4 5.1 12.3 5.0 0.9 1.7 2105.7 7.5 Cr MY1 2105.7 7.5 25.0 0.4 0.9 1.7 2105.7 7.9 0.9 1.7 2105.7 7.9 0.9 1.7 2105.7 7.9 0.9 1.7 2105.7 7.9 0.9 0.9 1.7 2105.7 7.9 0.9 0.9 1.7 2105.7 7.9 0.9 0.9 1.7 2105.7 7.9 0.9 0.9 1.7 2105.7 7.9 0.9 0.9 1.7 2105.7 7.5 0.9 0.9 1.7 2105.7 7.5 0.9 0.9 1.7 2105.7 7.5 0.9 0.9 1.7 2105.7 7.5 0.9 0.9 1.7 2105.7 7.5 0.9 0.9 1.7 2105.7 7.5 0.9 0.9 0.9 1.7 2105.7 7.5 0.0 0.9 0.9 0.9 1.7 2105.7 7.5 0.0 0.9 0.9 0.9 0.9 0.9 0.9 0.9	oss Secti           Coates B:           MY2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.2           2121.3           6.4           7.0           0.9           1.4           7.0           0.9           1.3           0.05           2105.6           4.7           25.0           0.7           1.0           3.3           6.9           5.3           0.9           0.9	MY3           2121.2           2121.2           2121.2           2121.3           7.5           40.0           0.7           5.3           0.9           1.3           210.8           2121.0           7.5           40.0           0.7           3.3           28 (Riffle           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.8           2105.9           4.0           0.8           1.1           3.3           4.9           0.9           0.9	MY4	MY5	MY6	MY7	1.2 Base 2108.0 2108.0 5.3 20.0 0.5 0.9 2.7 10.5 3.8 1.0 0.9	0.8           Pre-MY1           2108.1           2108.1           2108.1           5.6           20.0           0.5           0.9           2.7           11.3           3.6           1.0           0.9	( MY1 2108.1 2107.9 6.2 20.0 0.4 0.4 0.4 0.4 0.4 0.4 0.4	0.0         0.0           Coates B         MY2           2108.2         2108.2           200         0.6           0.8         2.7           8.8         4.1           1.0         0.8	n 25 (Portanti 2007) 10 10 10 10 10 10 10 10 10 10 10 10 10 1	MY4 2 2 	MY5	MY6	MY7	Base 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 1.0 0.8	Pre-MY1 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cro MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 2 2.2 2.2 15.4 3.4 0.8 0.5	oss Section Coates Br; 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 2.5 3.4 0.9 0.5 0.5	26 (Riffle nch 1C MY3 2108.1 2108.1 4.2 20.0 0.5 0.8 2.2 2.2 2.2 2.2 4.7 0.9 0.8	)	MY5		MY7
Dimension     Record Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Low Bask Height Elevation (datum) Lise     Baskall Mean Deph (f)     Baskall Mean Deph (f)     Baskall Mean Deph (f)     Baskall Cross Sectional Area (f)     Baskall Cross Sectional Area (f)     Baskall Bask Height Rate     "Baskall Bask Height Rate     Dimension     Record Elevation (datum) Lise     Low Bask Height Revation (datum) Lise     Low Bask Height Revation (datum) Lise     Low Bask Height Revation (datum) Lise     Low Baskfull Mean Depth (f)     Baskfull Mean Depth (f)     Baskfull Baskfull Mean Depth (f)     Baskfull Baskfull Bask Height Rate     Taskfull Baskfull Bask Height Rate     Taskfull Baskfull Bask Height Rate     Record Elevation (datum) Lise     Low Baskfull Cross Sectional Area (f)     Baskfull Baskfull Bask Height Rate     Taskfull Baskfull Bask	Base 2121.0 2121.0 2121.0 2121.0 2121.0 2.2 15.0 0.7 1.6 16.5 2.9 1.0 0.7 2105.	Pre-MY1           2121.1           2121.2           4.9           15.0           0.3           0.5           1.6           15.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.1           1.2105.7           2.50           2.50           2.50           2.50           1.3           3.3           1.3           3.4           1.0           1.0           1.0           1.0           1.0           1.0           1.0           1.0           1.0           1.0           1.0           1.2	MY1           2121.1           2121.2           3.1           1.0           1.6           7.5           1.1           1.1           2105.5           6.4           25.0           0.6           1.1           2105.5           6.4           25.0           0.6           1.1.1           3.7           11.1           3.9           0.8           1.0	MY2           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.1           2121.5           0.5           0.8           1.6           7.6           4.3           0.9           0.7           2105.7           2105.8           5.6           25.0           0.7           1.2           3.7           8.4           4.5           1.0           1.2           in the Stand	23 (kiffle mch 1B 2121.4 2121.4 2121.4 2121.4 2121.1 2.3 15.0 0.7 0.8 0.8 0.6 0.5 2105.0 2105.0 2105.0 2105.0 2105.0 6.7 2205.9 2105.0 6.7 2205.9 2105.0 5.7 210.4 0 7 210.6 0 7 210.5 0 7 210.5 0 7 210.5 0 7 210.5 0 7 210.5 0 7 210.5 1 210.5 2100 210.5 2100 2100	MY4	MY5	5 MY6	MY7	Base           2121.1           2121.1           2121.1           2121.1           2121.1           7.4           40.0           0.7           5.1           1.5           5.1           1.0           1.5           5.4           1.0           1.5           Base           2105.6           6.1           25.0           0.5           1.0           3.3           11.4           4.1           1.0           1.0	Pre-MY1           2121.1           2121.0           8.6           40.0           0.6           1.3           5.1           14.5           4.6           0.9           1.2           2105.6           2105.6           2105.6           2105.6           3.3           16.5           3.3           1.0           0.9           0.9           3.3           1.0           0.9	MY1           2121.2           2121.2           2121.0           7.9           40.0           0.6           1.4           5.1           12.3           5.0           0.9           1.2           Cr           MY1           2105.5           7.5           25.0           0.4           0.9           3.3           17.2           3.3           0.9           0.8           by the techning	No.         Section           0005 Section         2121-2           2121-2         2121-0           2121-2         121-0           1212-2         121-0           14         5.1           6.4         7.0           0.9         1.3           005 Section         2105-7           2105-7         1.0           3.3         6.9           0.7         1.0           3.3         0.9           0.9         0.9           0.9         0.9	24 (Pold march 1B MY3 2121.2 2121.2 (2	MY4	MY5	MY6	MY7 MY7 MY7 CDMS,	1.2 Base 2108.0 5.3 20.0 0.5 2.7 10.5 3.8 1.0 0.9 0.9 2.7 10.5 3.8 1.0 0.9	0.8           Pre-MY1           2108.1           2108.1           2108.1           20.0           0.9           2.7           11.3           3.6           0.9           0.9           0.9           0.9           0.9           0.9           0.9           0.9	( MY1 2108.1.1 2107.9 6.2 20.0 0.4 0.9 2.7 14.5 3.2 0.8 0.8 0.8	0.0         0.0           Coates B         MY2           2108.8:4         2108.8:4           200.0         0.6           0.8         2.7           8.8         4.1           1.0         0.8	n 25 (Por ranch 1C 2000) 2108.00 2000, 2000 2000, 2000 2000, 2000 2000, 2000 2000, 2000 2000, 2000 2000, 2000 2000, 20000, 20000, 2000, 2000, 2000, 2000, 2000, 20	MY4 2 2 	MY5	MY6	MY7	Base 2107.9 2107.9 2107.9 5.4 20.0 0.4 0.8 2.2 13.5 3.7 0.0 8 0.8	Pre-MY1 2107.9 2107.9 5.5 20.0 0.4 0.6 2.2 14.0 3.6 1.0 0.6	Cre MY1 2108.0 2107.9 5.8 20.0 0.4 0.6 2.2 15.4 0.4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	oss Section Coates Br; 2108.2 2108.1 5.8 20.0 0.4 0.5 2.2 15.5 3.4 0.9 0.5	2000 MY3 2108.1 2108.1 2109.1 2109.1 200.0 0.5 2.2 8.1 0.8 2.2 8.1 0.9 0.8		MY5		

+ Data not collected due to adaptive management on Weston Reach 1A and 1B

																		Tab	le 11b	. Mo	nitori	ng Da	nta - Si	stream	n Rea	ch Da	ta Su	mma	ry																					
	-						-		_									Fletc	her M	litigat	tion Si	ite - F	letche	er Cro	eek R	each	1B (3	80 fee	<u>t *)</u>										-										_	
Parameter			Ba	seline					Pr	e-MY -	1					MY - 1						M	Y - 2						MY	- 3					M	Y - 4					M	Y -5					M	Y - 6		
Dimension & Substrate - Riffle	Min	Mean	Med	Max	SD	n	Min	n Mea	an Me	ed Ma	x SE	n	M	in Mea	an M	fed M	ax	SD	n	Min	Mean	Med	Max	SE	) n	i N	fin N	lean	Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mear	Med	Ma	ax S	D n
Bankfull Wahh (h)       7.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       6.1       ·       ·       1       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       · </td <td></td>																																																		
Findefrome Wath (f)       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       20.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       ·       0.0       ·       ·       1       0.0       ·       ·       1       0.0       ·       ·       1       0.0       ·       ·       1       0.0       ·       ·       1       0.0       ·       ·       1 </td <td></td> <td></td>																																																		
Bankfull Max Depth (ft)       0.3       -       -       1       -       0.4       -       -       1       -       0.4       -       -       1       -       0.4       -       -       1       -       0.4       -       -       1       -       0.4       -       -       1       -       0.5       -       -       1       -       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.7       -       1       1       2.3       -       1       1       2.3       -       1       1       2.3       -       1																																																		
Bankfull Max Depth (h)         0.3         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         0.5         -         1         0.5         -         1         0.5         -         1         0.6         -         1         0.6         -         1         0.7         1         0.7         1         0.7         1         0.7         1         0.7         1         0.7         1         0.7																																																		
BankTun Mean upperint U       U.S.       C       I       V       U.S.       V       I       V       U.S.       V       I       V       U.S.       V       I       V       U.S.       V       V       U.S.       V       U.S. <td></td> <td></td>																																																		
Width/Depth Ratio	Baskful Max Depth (n)       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.7       -       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       -       1       -       0.7       1       -       0.7       1       0.7       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1       0.7       1																																																	
Bankfull Mx Depth (n)       0.6       .       .       1       .       0.6       .       .       1       .       0.6       .       .       1       .       0.6       .       .       1       .       0.6       .       .       1       .       0.6       .       .       1       .       0.6       .       .       1       .       0.6       .       .       1       .       0.7       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       .       1       .       0.7       .       1       .       0.7       .       1       .       0.7       .       1       .       0.7       .       1       .       0.7       .       1       .       0.7       .       1       .       0.7																																																		
Bank Height Ratio	Makful Cross-scient Action (1)       -       2.1       -       1       -       2.2       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       2.3       -       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       <																																																	
Profile	Banking Max Depth (m)       ·														_																																			
Bankfull Max Opph (f)       0.6       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       1       -       0.6       -       1       1       0.6       -       1       1       0.6       0       1       1       0.6       0       1       1       0.6       0       1       1       0.6       1       1       1       0.6       1       1       1       0.6       1       1																																																		
Riffle Slope (ft/ft)	0.002	0.018	0.014	0.044	0.013	13																																												
Pool Length (ft	5.1	9.6	9.7	14.4	2.8	12																																												
Pool Max Depth (ft)	1.2	2.0	1.9	2.9	0.5	12																																												
Pool Spacing (ft)	14.6	27.9	29.4	40.5	8.0	11																																												
Pattern	•		•																														•	•	•							•	•	•					_	
Channel Belt Width (ft)	17.7	18.2	17.8	19.0	0.7	3		1																									1				1	1			1						1			
Radius of Curvature (ft)	17.0	22.7	25.0	26.0	4.9	3																																												
Rc: Bankfull Width (ft/ft)	2.0	2.6	2.9	3.0	0.6	3																																												
Meander Wavelength (ft	17.7	18.2	17.8	19.1	0.8	3																																												
Meander Width Ratio	2.0	2.1	2.0	2.2	0.1	3																																												
Additional Reach Parameters																																																	_	
Rosgen Classification				B4																													1																	
*Channel Thalweg Length (ft)			-	380																																													-	
Sinuosity (ft)			1	.12																																														-
Water Surface Slope (Channel) (ft/ft)			0	.015																																														
Bankfull Slope (ft/ft)			0	.016																																														
Ri% / Ru% / P% / G% / S%	30%	26%	32%	12%	0%												T											T										1												
* Channel Thalweg Length (ft): Based on ac	tual thalv	reg calcul	ations fro	om the as-	built surv	ey, accor	unts for l	breaks in	on conserv	ation ease	ement and	utility righ	at-of-wa	ys.																																				

\* Channel Thalweg Length (ft): Based on actual thalweg ca - Information Unavailable N/A - Information does not apply. Ri = Rifle / Ru = Run / P = Pool / G = Glide / S = Step

																		Т	able 1	1b Co	ont'd.	. Mor	nitori	ng Da	ata - S	Stream	n Rea	ch Da	ata Su	mmai	ry																					
																		]	Fletch	ner M	itigat	ion Si	ite - I	Fletch	ner Cr	reek F	Reach	1C (1	1,541 1	feet *)	)																					
Parameter			Ba	seline						Pre-M	AY - 1						MY-	L					N	MY - 2						M	Y - 3						MY	- 4					M	Y - 5					M	Y - 6		
Dimension & Substrate - Riffle	Min	Mean	Med	Max	SD	) r	n	Min	Mean	Med	Max	SD	n	Mi	n Me	an M	fed M	lax	SD	n	Min	Mean	n Me	d M	lax S	SD	n	Min	Mean	Med	Max	SD	n	M	in M	ean	Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	n Med	Ma	x SD	) n
Bankfull Width (ft)	7.6	9.8	9.8	12.0	3.1	2	2	6.1	9.5	9.5	12.9	4.8	2	6.4	9.	7 9	.7 1	3.0	4.6	2	5.4	9.1	9.1	1 12	2.8 5	5.2	2	4.0	7.5	7.5	11.0	4.9	2																			
Floodprone Width (ft)	10.0	30.0	30.0	50.0	28.3	3 2	2	10.0	30.0	30.0	50.0	28.3	2	10.	0 30	.0 3	0.0 5	0.0	28.3	2	10.0	30.0	30.	.0 50	0.0 2	8.3	2	10.0	30.0	30.0	50.0	28.3	2																			
Phologroup Work (1)         10         30         50         28.3         2         10.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         20.0         30.0																																																				
Procopying       Processing       Processing <td></td> <td></td>																																																				
Bankfull Max Depth (m)         0.5         0.5         0.6         0.2         2         0.4         0.2         0.5         0.6         0.2         2         0.4         0.5         0.5         0.6         0.6         0.7         0.7         0.0         0.2         2         0.4         0.5         0.6         0.6         0.7         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.0         0.7         0.0         0.0         0.7         0.0         0.0         0.7         0.0																																																				
Baakful Mean porth         3.         9.5         9.6         9.2         2         9.5         0.5         0.6         0.7																																																				
Biantul Mean Depth       0       9       0.2																																																				
Instrumentation for the strength of the strengt of the strength of the strength of the strength of the																																																				
Bask Hull Mean beged (ff)       US       0.5       0.6       0.2       2       0.3       0.5       0.6       0.2       2       0.4       0.2       2       0.4       0.2       0.5       0.6       0.2       2       0.4       0.2       0.5       0.6       0.6       0.6       0.6       0.6       0.7       0.1       0.2       0.2       0.2       0.2       0.2       0.2       0.2       0.4       0.2       0.4       0.3       0.5       0.6 <td></td> <td></td>																																																				
BankTuri Neen Legen (rd)         0.5         0.5         0.5         0.6         0.6         0.7         0.1         0.5         0.5         0.6         0.6         0.7         0.1         0.6         0.6         0.7         0.1         0.5         0.5         0.6         0.6         0.7         0.1         0.6         0.6         0.7         0.1         0.6         0.6         0.7         0.1         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.7         0.0         0.0         0.7         0.0 <td></td> <td></td>																																																				
Bakkful Max Depkinition         0.5         0.8         0.4         1.2         2.1         0.5         0.7																																																				
Bankfull Max bepth (h)         0.5         0.8         0.8         10         0.4         2         0.4         0.4         0.4         0.4         0.7         0.7         10         0.4         2         0.6         0.9         0.1         2         0.6         0.9         0.1         0.0         0.9         0.1																																																				
Pool Max Depth (ft)	1.5	2.8	2.8	4.0	0.6	4	4																																				1									
Pool Spacing (ft)	13.5	35.0	34.4	96.1	13.5	5 43	3																																													
Pattern																									-				•														_	-								
Channel Belt Width (ft)	18.7	20.2	19.7	22.3	1.9	3	3		1			1							1	1		1				1	1				1												1		1				1			
Radius of Curvature (ft)	17.2	21.0	20.6	25.3	4.1	3	3																																													
Rc: Bankfull Width (ft/ft)	1.8	2.2	2.2	2.7	0.5	3	3																																													
Meander Wavelength (ft)	18.7	20.2	19.7	22.3	1.9	3	3																																													
Meander Width Ratio	2.0	2.1	2.1	2.4	0.2	3	3																																													
Additional Reach Parameters															_	_		_						_		_									-								-									_
Rosgen Classification				B4																																							_	_								
*Channel Thalweg Length (ft)			1	541																																							_									
Sinnosity (ft)				.10																																							_									
Water Surface Slone (Channel) (ft/ft)			0	.012																																							_	_								_
Bankfull Slone (ft/ft)			0	012																																								_								_
Ri% / Ru% / P% / G% / S%	32%	19%	38%	11%	0%			1	1		1	1	1		1			1				1	1	1		1			1	1	1	1	1		1	- T	T	1				1			1	T		1	1	1		
* Channel Thabaye Length (ft): Based on act	ual thalwa	or calcula	tions fr	m the as-	built sur	nev ac	counts	for brea	ks in cor	nservatio	n easem	ent and u	tility rich	t-of-way		-	_	-					-		_	_		-			-	-	-	-			-				-				-		-	-	-	-	_	
- Information Unavailable		-p				,,																																														
N/A - Information does not apply																																																				
$R_i = R_i ffe / R_i = R_{in} / P = Pool / G = Glid$	r/S = St	en																																																		
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																			Tab Fl	ole 11 letche	b Co r Mi	nt'd. tigati	Mon on Si	itorin te - Fl	g Dat etche	ta - S er Cr	Strear reek I	n Rea Reach	ch Da	ata S 1.299	umma feet '	ary *)																								
Parameter			B	aseline						Pre	-MY	1					M	IY - 1				-		M	Y - 2						2	м́ү-3						N	1Y -4							MY-	- 5						MY-	. 6		
Dimension & Substrate - Riffle	Min	Mean	Mee	I Ma	x S	D	n	Min	Mean	n Me	d M	ax S	SD	n	Min	Mean	Med	Ma:	s SI	D	n	Min	Mean	Med	Ma	ax S	SD	n	Min	Mean	n Me	d M	ax S	D	n	Min	Mear	Med	l Ma	ax S	SD	n	Min	Me	an M	fed	Max	SD	n	Min	n Me	an N	fed	Max	SD	n
Bankfull Width (ft	Backfull Wach Up (1)         14.3         15.5         17.2         2         10.6         10.1         10.2 <td></td>																																																							
Floodprone Width (ft)	Bankini Wach (1)         1.4. <th1.4.< th=""> <th1.4.< th="">         1.4.</th1.4.<></th1.4.<>																																																							
Bankfull Mean Depth (ft)	Endedprises Within 1350         475         475         670         177         2         350         475         475         670         177         2         350         475         475         670         177         2         350         475         475         670         177         2         350         475         475         670         177         2         350         475         475         670         177         2         350         425         425         500         106         2         2         100         10         0         0         0         1         12         2         2         13         13         13         13         13         13         13         13         13         14         01         2         0 <th< td=""><td>_</td><td></td></th<>														_																																									
Bankfull Max Depth (ft)	Endedpose Wideh (u)         50         47.5 <td>_</td> <td></td>														_																																									
Bankfull Cross-Sectional Area (ft2)	Accord Ward         Arrow														-																																									
Width/Depth Ratio	Automatic and action for the start of the start														_																																									
Entrenchment Ratio	Bushful Mean Depth (1)         68         09         1         1         2         2         1 <td>_</td> <td></td>														_																																									
Bank Height Ratio	Build Max Deph (h)       1.6       2.2       2.2       2.8       0.8       2       1.7       2.0       2.0       2.3       0.4       2       1.8       2.3       2.3       2.8       0.7       2.1														_																																									
Profile	Bankful Man Uppent)         0         9         9         10         12         2         10																																																							
Riffle Length (ft	Backful Mean Depth (in b)         0         9         9         1         1         0         0         2         0         1         1         1         1         1         1         1         0         2         0         1         1         0         0         2         0         1         1         0         0         2         0         1 </td <td></td> <td></td>																																																							
Riffle Slope (ft/ft)	0.001	0.010	0.00	8 0.02	28 0.0	007	35																																																	
Pool Length (ft)	5.6	10.8	10.3	25.	3 4	.2	34																																																	
Pool Max Depth (ft	1.2	2.5	2.6	3.7	7 0	.7	34																																																	
Pool Spacing (ft	9.4	36.8	37.5	52.	2 9	.4	33																																																	
Pattern																		_		_														_											_								_	_		
Channel Belt Width (ft	23.8	24.5	24.1	25.	.5 0	.9	3																																										1							
Radius of Curvature (ft	16.8	22.1	19.8	29.	.6 6	.7	3																																																	
Rc: Bankfull Width (ft/ft	1.6	2.1	1.9	2.8	8 0	.6	3																																																	
Meander Wavelength (ft	23.8	24.5	24.1	25.	5 0	.9	3																																																	
Meander Width Ratio	2.3	2.4	2.3	2.5	5 0	.1	3																																																	
Additional Reach Parameters																																																								
Rosgen Classification				B4																																																				
*Channel Thalweg Length (ft)				,299																																																	_	_	_	
Sinuosity (ft)				1.15																																																	_	_	_	
Water Surface Slope (Channel) (ft/ft)			(	0.011																																																				
Bankfull Slope (ft/ft)			(	0.012																																																		_	_	
Ri% / Ru% / P% / G% / S%	44%	15%	29%	129	% 0'	%																																																	_	
* Channel Thalweg Length (ft): Based on ac	ual thalw	eg calcu	ations fi	om the a	is-built s	urvey, a	account	ts for br	eaks in a	conserva	ation eas	ement a	nd utility	y right-c	f-ways.					_	_		-				_							_		-					_					_										

Information Unavailable
 N/A - Information does not apply.

R1 = Riffle / R	u = Run / P	= Pool / G $=$	Ghde / S = Step	

																		Tal	ole 11b	Con	t'd. !	Moni	torinș	g Data	ı - Str	eam l	Reach	Data	a Sun	nmary	y																					
	-																	F	etchei	Miti	igatio	n Sit	e - Fl	etcher	r Cree	ek Re	ach 2	B (1,	510 fe	et *)				-																		
Parameter	Image: Notation of the stress of th																MY	- 3					N	IY - 4						MY	- 5					M	Y - 6															
Dimension & Substrate - Riffle	Min         Mea         Med         Max         SD         n         Min         Mea         Max         SD         n         Min         Mea         Mea         Max         SD         n         Min         Mea         Mea         Max         SD         n         Min         Max         SD         n         Min         Mea         Max         SD         n         Min         Min         Mea         Max         SD         n         Min         Min<														n	N	fin N	Mean	Med	Max	SD	n	Min	Mea	n Me	i Ma	x S	D I	n !	Min M	lean	Med	Max	SD	n	Min	Mean	Med	Max	SD	n											
Bankfull Width (ft)	9.8	Um         Jeam         J														2.11	2	1	).2	10.6	10.6	11.0	0.5	2																												
Floodprone Width (ft)	40.0	18         100         100         102         103         0.5         2         9.7         103         10.5         2         9.7         104         11.2         11.2         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         11.1         12.6         10.7         10.7         10.8         10.4         12.2         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         11.1         10.1         12.7														1 2	4	0.0	55.0	55.0	70.0	21.2	2																													
Bankfull Mean Depth (ft)	400         550         550         760         212         2         400         250         550         760         212         2         400         550														5 2	(	.6	0.7	0.7	0.7	0.1	2																														
Bankfull Max Depth (ft)	4000         55.01         75.00         12.1         2         4000         55.01         55.00         76.00         21.21         2         40.00         55.01         75.00         70.01         21.21         2         40.00         55.01         75.00         70.01         21.01         2         21.01         2         21.01         2         21.01         2         21.01 </td <td>1</td> <td>.3</td> <td>1.3</td> <td>1.3</td> <td>1.4</td> <td>0.0</td> <td>2</td> <td></td>														1	.3	1.3	1.3	1.4	0.0	2																															
Bankfull Cross-Sectional Area (ft <sup>2</sup> )	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $														7	.1	7.4	7.4	7.6	0.3	2																															
Width/Depth Ratio	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$														1	3.8	15.3	15.3	16.9	2.2	2																															
Entrenchment Ratio	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$														.7	5.2	5.2	6.8	2.3	2																																
Bank Height Ratio	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$														.1	1.1	1.1	1.1	0.0	2																																
Profile	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $																																																			
Riffle Length (ft)	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$																																						(													
Riffle Slope (ft/ft)	0.001	0.010	0.00	8 0.02	8 0.0	007	35																																			<u> </u>										
Pool Length (ft)	5.6	10.8	10.2	2 25.3	3 4	.2	34																																													
Pool Max Depth (ft)	1.2	2.5	2.6	3.7	0	.7	34																																													
Pool Spacing (ft)	9.4	36.8	37.5	5 52.2	2 9	.4	33																																													(
Pattern																																																				
Channel Belt Width (ft)	18.0	19.9	19.3	2 22.6	5 2	.4	3																																			<u> </u>										
Radius of Curvature (ft)	23.5	25.3	24.8	3 27.5	5 2	.0	3																																													
Rc: Bankfull Width (ft/ft)	2.2	2.4	2.3	2.6	0	.2	3																																													(
Meander Wavelength (ft)	17.9	19.9	19.3	2 22.6	5 2	.4	3																																													
Meander Width Ratio	1.7	1.9	1.8	2.1	0	.2	3																																			<u> </u>										
Additional Reach Parameters		÷	· ·		÷				·							·	· · ·		-					·	· ·	· ·						-	·		· ·						-							· · ·	·	· ·	· · ·	
Rosgen Classification				B5																																																
*Channel Thalweg Length (ft)				1,510																																																
Sinuosity (ft)				1.10																																																
Water Surface Slope (Channel) (ft/ft)			(	0.011																																																
Bankfull Slope (ft/ft)			(	0.012														 																								(										
Ri% / Ru% / P% / G% / S%	44%	15%	29%	5 12%	6 0	%																																														
* Channel Thalweg Length (ft): Based on act	ual thalw	veg calcu	lations fi	om the a	s-built s	survey,	accoun	ts for b	reaks in	conserv	ation ea	isement	and util	ity right-	of-ways.																																					
- Information Unavailable																																																				
N/A - Information does not apply.																																																				
Ri = Riffle / Ru = Run / P = Pool / G = Glid	e / S = S	Step																																																		

																		Table Fle	e 11b tcher	Con Mit	t'd. ! igatic	Monit on Sit	oring e - W	g Data eston	a - Str Cree	ream k Re	Reac ach 1	h Da A (1,	ta Su 982 f	mma eet *)	ry )																	
Parameter	Barkful Man Drght(h) (6)         06         0.0         2															М	Y - 4			MY-	5				M	Y - 6																						
Parameter         Parameter <t< th=""><th>x S</th><th>D</th><th>n</th></t<>															x S	D	n																															
Dimensions         Substrate - RITE         Num         Main																_																																
Description         State         Mode																_																																
Description         Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>																_	_																															
Bandfull Walh(t)       9.1       9.8       9.8       10.4       10.2       2       -       -       10.1       10.6       10.6       10.7																																																
Baskful Wach(i)       9.1       9.8       9.8       10.4       0.9       2       5.7																																																
Baskuti Mushiti (V)       9.1       9.8       9.0<																																																
Productions with (1) Sul 3 vol 1 Sul 3 vol																																																
Description         Qui         Qui <th< td=""><td></td><td></td><td></td><td></td><td></td></th<>																																																
Image: Name of the start in the st														1																																		
Biologene With (1) 500         50         50         50																	_																															
Bankfull Mean Depth (ii)         0.6 <td></td> <td></td> <td></td> <td>_</td>																	_																															
Pool Length (ft	5.7	13.1	12.	3 26.	1 4	.3	54																																									
Pool Max Depth (ft	) 1.1	1.7	1.7	2.6	5 0	.4	54																																7						/			
Pool Spacing (ft	8.9	35.7	34.	4 72.	9 12	2.0	53																																- 17									
Pattern																																													1			
Channel Belt Width (ft	24.8	27.0	27.	2 29.	0 2	.1	3																																1						/			
Radius of Curvature (ft	) 11.0	14.3	14.	5 17.	4 3	.2	3																																7						/			
Rc: Bankfull Width (ft/ft	) 1.3	1.7	1.7	2.0	) 0	.4	3																																- 17									
Meander Wavelength (ft	24.5	26.9	27.	2 29.	0 2	.3	3																																									_
Meander Width Ratio	2.9	3.1	3.2	3.4	1 0	.2	3																																									
Additional Reach Parameters																																							1				_	1	1	1	1	
Rosgen Classification	1			C5																																		-	1						1	1		
*Channel Thalweg Length (ft	)			1,982																																												
Sinuosity (ft	)			1.24																																			1						1	1		
Water Surface Slope (Channel) (ft/ft	)			0.005																																		-	1		-		1	1	1	1	1	
Bankfull Slope (ft/ft	)			0.005																																		-	1						1	1		
Ri% / Ru% / P% / G% / S%	38%	15%	369	6 119	6 0	%																														1												_
* Channel Thalweg Length (ft): Based on ac	tual thalw	eg calcu	lations f	rom the a	is-built s	survey,	accour	nts for b	oreaks in co	onservati	ion easer	nent and	utility ri	ight-of-w	vays.		-																										-					
- Information Unavailable																																																
+ Data not collected due to adaptive manage	ement on	Weston	Reach I	A and 11	3																																											
N/A - Information does not apply.																																																
Ri = Riffle / Ru = Run / P = Pool / G = Gli	le / S = S	tep																																														

																	Table	11b C	Cont'd	l. Mor	itorin	g Data	a - Sti	ream I	Reach	Data	Sum	mary																					
	1		n	P			1						_				гіе	tcher	winug	gation	sne -	westo	n Cre	ек ке	ach 1	D (82	5 leet	· ·)	1			1			7 4			1						r					_
Parameter			Ba	iseiine					+Pre-	VI Y - 1					M	1 - 1					M	x - 2						MY-						M	2 - 4		-			M	1-5					M	1-0		
Dimension & Substrate - Riffle	Min	1 Mea	1 Mee	I Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mear	1 Med	Max	i SE	D n	M	in M	lean !	Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mear	Med	Max	SD	n	Min	Mean	Med	Max	SD	n
Image: Base of the second o															-																																		
Bindral Man Depth (h)       40       a       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       a       b       b       a       b       a       b       a       b       a       b       a       b <td></td> <td></td> <td></td>																																																	
Bankfull May Depth (ft	Pixodgrone Watch (1)       400       -       -       1       -       -       -       400       -       -       1       - </td <td></td> <td></td> <td></td>																																																
Bankfull Cross-Sectional Area (ft <sup>2</sup>	Baskful Neurophynin       0.5       -       -       1       -       -       -       0.5       -       -       1       -       0.5       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       -       0.6       -       -       1       0.6       -       -       1       0.6       -       -       1       0.6       -       1       0.6       -       -       1       0.6       0       -       1       0															$ \rightarrow$	-																																
Width/Depth Ratio	Baskult Assam Legn (tr)       0.5       0.7 <th0< td=""><td></td><td></td><td>-</td></th0<>																-																																
Entrenchment Ratio	Description       Vol																																																
Bank Height Ratio	Additional Area (d <sup>2</sup> )       1 <td></td> <td></td> <td></td>																																																
Profile	Backhill Max Dyn(1)       0       1 <th1< th="">       1       <th1< th=""></th1<></th1<>																																																
Riffle Length (ft	Baskell Max Deph (n)       0       0       1       0       1       0       1       0       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1       1       0       1																																																
Riffle Slope (ft/ft	Baskini Ma Ude (m)       0.7 </td <td></td> <td></td> <td></td>																																																
Pool Length (ft	absolute mass operator is series of the integration of the																																																
Pool Max Depth (ft	) 1.4	2.0	2.0	2.7	0.3	21																																											
Pool Spacing (ft	) 19.1	7 35.2	34.8	68.4	12.1	20																																											
Pattern																																-				-							-		-				
Channel Belt Width (ft	) 27.	3 28.4	28.1	29.9	1.3	3																																											
Radius of Curvature (ft	) 15.8	3 19.5	18.2	24.5	4.5	3																																											
Rc: Bankfull Width (ft/ft	) 1.7	2.1	1.9	2.6	0.5	3																																											
Meander Wavelength (ft	) 27.	3 28.4	28.1	29.9	1.3	3																																											
Meander Width Ratie	0 2.9	3.0	3.0	3.2	0.1	3																																											
Additional Reach Parameters	-																																					_											
Rosgen Classification	n			C5																					_																								
*Channel Thalweg Length (ft	:)			825																					_																								
Sinuosity (ft	:)			1.17																					_																								
Water Surface Slope (Channel) (ft/ft	:)		0	.0024																					_																								
Bankfull Slope (ft/ft	:)		0	.0026		_										1				_	_			_	_											-	-	-		1					-				
Ri% / Ru% / P% / G% / S%	6 359	5 9%	42%	14%	0%																																												
* Channel Thalweg Length (ft): Based on ac	tual tha	lweg calci	lations fr	om the as	-built sur-	vey, acco	unts for br	eaks in con	iservatio	n easeme	nt and uti	lity right-o	of-ways.																																				
<ul> <li>Information Unavailable</li> </ul>																																																	
+ Data not collected due to adaptive manag	ement o	n Weston	Reach 1.	A and 1B																																													
N/A - Information does not apply.																																																	
Ri = Riffle / Ru = Run / P = Pool / G = Gla	de / S =	Step																																															

																	Table	11b C	'ont'd	l. Moi	nitoriı	ng Dat	a - Str	eam R	leach I	Data S	umma	ry																			
													-				Flete	cher M	Iitiga	tion S	ite - F	laccoo	n Bra	nch Re	each 11	D (440	feet *	)			-														_		
Parameter			Ba	seline					Pre-	MY - 1	1				M	- 1					N	IY - 2					M	Y - 3					M	Y - 4					MY	(-5					MY	- 6	
Dimension & Substrate - Riffle	Min	Mean	Med	Max	SD	n	Min	Mean	n Med	Max	x SD	n	Min	Mean	Med	Max	SD	n	Min	Mea	n Mee	i Maz	x SD	n	Min	Mean	n Med	Max	s SD	n	Min	Mean	n Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	Med	Max	SD n
Bankfull Width (ft)	) -	6.9	-	-	-	1	-	7.8	-	-	-	1	-	6.9	-	-	-	1	-	5.7	-	-	-	1	-	4.6	-	-	-	1																	
Floodprone Width (ft)	) -	20.0	-	-	-	1	-	20.0	-	-	-	1	-	20.0	-	-	-	1	-	20.0	- 1	-	-	1	-	20.0	I	-	-	1																	ı — — —
Bankfull Mean Depth (ft)	Back/Ill Man Depth (i)         0.5         -         -         1         -         0.4         -         -         1         -         0.4         -         -         1         -         0.6         -         -         1         -         0.6         -         -         1         -         0.6         -         -         1         -         0.6         -         -         1         -         0.6         -         -         1         -         0.6         -         -         1         -         0.6         -         -         1         -         1.6         1         -         0.6         -         -         1         -         1.0         0.7         -         1         -         1         -         1         -         1         -         1         -         1         -         1         -         1         0.7         1         -         1         -         1         0.7         1         0.7         1         0.7         1         1         0.7         1         1         0.7         1         1         0.7         1         1         1         0.7         1         1 <th1<< td=""><td></td><td></td><td></td><td></td><td></td><td>ı — — —</td></th1<<>																			ı — — —																											
Bankfull Max Depth (ft)	Baskfull Max Depth (t):       1.3       -       -       1       -       0.9       -       -       0.9       -       -       1       -       1.0       -       -       1       -       1.0       -       -       1       -       1.0       -       -       -       1       -       -       -       1       -       1.0       -       -       1       -       1.0       -       1       -       1.0       -       1       -       1.0       -       1       -       1.1       -       1.0       -       1       -       1.1       -       1.0																																														
Bankfull Cross-Sectional Area (ft2	Butch II (noss) Sectional Answirth II - 54       -       -       1       -       1       -       -       -       -       1       -       -       -       -       -       1       -       -       -       -       1       -       -<																																														
Width/Depth Ratio	ull Conservational Area (17)       3.4       -       -       -       1       -       3.4       -       -       -       1       -       3.4       -       -       -       1       -       3.4       -       -       -       1       -       3.4       -       -       -       1       -       3.4       -       -       -       1       -       3.4       -       -       -       1       -       3.4       -       -       1       -       3.4       -       -       1       -       3.4       -       -       1       -       3.4       -       -       1       -       3.4       -       -       1       -       3.4       -       -       1       -       3.4       -       -       1       1       -       1 <td></td> <td></td> <td></td> <td></td> <td></td>																																														
Entrenchment Ratio	With Dph Raio         1         s         <																																														
Bank Height Ratio	Rifflexinght Ratio         1.0         0.5         0.5         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.6         1.1         0.7																					í																									
Profile	With Dept Ratio         -         1         1         1         1         1         1         1         1         1         1         1 <th1< th="">         1         <th1< th="">         &lt;</th1<></th1<>																																														
Riffle Length (ft)	Widh/Deph Ratio       -       1.8       -       -       1       -       142       -       -       1       -       95       -       -       1       -       62       -       -       1       -       0																																														
Riffle Slope (ft/ft)	Wath Deph Ratio         1 <th1< th="">         1         1</th1<>																																														
Pool Length (ft)	) 1.7	5.4	5.0	12.7	2.6	37																																									
Pool Max Depth (ft)	0.6	1.0	1.1	1.4	0.2	37																																									
Pool Spacing (ft)	) 4.1	12.1	11.2	28.8	5.5	35																																									
Pattern																																							_								
Channel Belt Width (ft)	6.7	7.5	7.0	8.7	1.1	3							1							1										1	1		1														
Radius of Curvature (ft	7.9	10.1	8.5	13.9	3.3	3																																									
Rc: Bankfull Width (ft/ft)	) 1.2	1.6	1.3	2.2	0.6	3																																									
Meander Wavelength (ft)	6.7	7.5	7.0	8.7	1.1	3																																									
Meander Width Ratio	1.1	1.2	1.1	1.4	0.1	3																																									í – 1
Additional Reach Parameters								•																				•										-							-		
Rosgen Classification	h			B4																																		_	_							_	-
*Channel Thalweg Length (ft)	)		6	140																																		_	_							_	
Sinuosity (ft)	)		1	.08																																		_	-							_	
Water Surface Slope (Channel) (ft/ft)	)		0	.040																																		_								_	
Bankfull Slone (ft/ft)			0	.041															<u> </u>																			_	_						_	_	
Ri% / Ru% / P% / G% / S%	39%	0%	46%	8%	6%				1	1		1		1				I		1										1		1	1	1	1	1		T									
* Channel Thalweg Length (ft): Based on ac	tual thalw	eg calcula	tions fro	m the as-	built sur	vev. acco	unts for l	reaks in o	conservat	on easer	nent and u	tility right	of-ways.																									-									
- Information Unavailable		5																																													
N/A - Information does not apply																																															
Pi - Piffa / Pu - Pun / P - Pool / G - Gli	le / S – S	lan																																													
RI-Rune / Ru - Run / F - FOOT/ G - OIE	10 / 0 - 0	~1																																													

																Table 1	1b Co	ont'd.	Moni	toring	g Data	- Stre	eam Re	each I	Data Su	immary																		
																Fleto	her M	litigat	tion Si	ite - C	oates I	Branc	h Rea	ch 1B	(606 f	eet *)																		
margine         margine <t< th=""><th></th></t<>																																												
Dimension & Substrate - Riffle	genesion Asubtracte-ARTe         Min         Mea         Mea         Mea         Med         Mea         Mea <th>SD n</th>														SD n																													
Bankfull Width (ft)	-	5.2		-	-	1		- 4.9	9 -	-	-	1	-	3.4	-	-	1		3.5		-	-	1		2.3			· 1.	00															
Floodpring       Walk       Mark																																												
Answer (a)       Bark (b)       Constraints)       Low       Low <thlow< th="">       Low       <thlow< th="">       Low       <thlow< th=""> <thlow< td=""><td></td><td></td></thlow<></thlow<></thlow<></thlow<>																																												
Bankfull Maan Daph (n)       0.3       x       x       1       x       0.3       x																																												
Bakiful Man Depth (b)       0																																												
Width/Depth Ratio	Image: Normalize Stress of the stre															_																												
Entrenchment Ratio	Bankfull Max Depth (fi)       0.7															_																												
Bank Height Ratio	Baskul Max Ageneration And China an																																											
Profile	Bankful Max Depth (f)       0																																											
Riffle Length (ft)	Bankfull Max Depth (n)       0 <td></td> <td></td>																																											
Riffle Slope (ft/ft)	Description on the construction of																																											
Pool Length (ft)	1.2	3.4	3.2	6.3	1.2	51																																						
Pool Max Depth (ft)	0.2	1.2	1.1	2.5	0.4	51																																						
Pool Spacing (ft)	5.8	11.7	12.0	18.7	2.5	50																																						
Pattern										-																			_													 _		
Channel Belt Width (ft)	9.7	10.6	10.5	11.5	0.9	3																				1														1	1			
Radius of Curvature (ft)	9.0	11.0	12.0	12.1	1.8	3																																						
Rc: Bankfull Width (ft/ft)	1.5	1.9	2.1	2.1	0.3	3																																						
Meander Wavelength (ft)	9.7	10.6	10.5	11.5	0.9	3																																						
Meander Width Ratio	17	19	1.8	2.0	0.1	3																																						
Additional Reach Parameters		1	1		1				-		-!			!	!		- '										-		-			- ! -				-						 -		
Roseen Classification	<b></b>			B4			1						1			 	1							1											1						1	 		
*Channel Thalwey Length (ft)				601												 	-																									 		
Sinnosity (ft)				1.05												 																										 		_
Water Surface Slone (Channel) (ft/ft)			0	033																																								
Bankfull Slone (ft/ft)			0	033																																								
Ri% / Ru% / P% / G% / S%	56%	0%	28%	10%	6%			1	1	1	1	1	-	1	1					1		1	1		1	T T	1	1		<u> </u>	<u> </u>	1	- <u>r</u>	1		1	1	1	1	1		1	<u> </u>	
* Channel Thalayer Length (ft): Based on act	nal thaly	eg calcul	ations fro	om the as-	built sur	Nev acco	ounts fo	r breaks in	n conserva	tion case	ment and a	tility right	-of-ways																_													_		_
- Information Unavailable		-p				,,																																						
N/A - Information doar not apply																																												
Di = Di00 / Du = Dun / D = Dunl / C = Chil																																												
$\kappa_1 = \kappa_{BDE} / \kappa_0 = \kappa_{DD} / P = Pool / G = Gld$	e / S = S	tep																																										

																	Table	11b C	Cont'd	I. Mor	nitorir	ng Dat	a - Str	eam F	leach I	Data S	umma	ry																			
							-		_				-				Flet	tcher l	Mitig	ation	Site - (	Coates	s Bran	ch Re	ach 1C	C (708 1	(eet *)				-1						1		_	_				_			
Parameter			Ba	seline		_		_	Pre	MY -	1	_		_	M	(-1				_	M	IY - 2	_	_	_	_	M	IY - 3	_	_	_	_	M	Y - 4			_		<u>MY</u>	<u>(-5</u>		-			M	<u>í-6</u>	
Dimension & Substrate - Riffle	Min	Mean	Med	Max	SD	n	Mir	Mea	n Med	Ma	x SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	n Mee	i Max	x SD	n	Min	Mean	n Med	I Ma:	x SD	n	Min	Mear	n Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	Med	Max	SD n
Bankfull Width (ft	) -	5.4	-	-	-	1	-	5.5	-	-	-	1	-	5.8	-	-	-	1	-	5.8	-	-	-	1	-	4.2	-	-	-	1.00	)									$\perp$					<u> </u>		
Floodprone Width (ft	) -	20.0	-	-	-	1	-	20.0	) -	-	-	1	-	20.0	-	-	-	1	-	20.0	- (	-	-	1	-	20.0	-	-	-	1.00	)														<u> </u>		
Bankfull Mean Depth (ft	) -	0.4	-	-	-	1	-	0.4	-	-	-	1	-	0.4	-	-	-	1	-	0.4	-	-	-	1	-	0.5	-	-	-	1.00	)														<u> </u>		
Bankfull Max Depth (ft	) -	0.8	-	-	-	1	-	0.6	-	-	-	1	-	0.6	-	-	-	1	-	0.5	-	-	-	1	-	0.8	-	-	-	1.00	)												-		<u> </u>		
Bankfull Cross-Sectional Area (ft2	- (	2.2	-	-	-	1	-	2.2	-	-	-	1	-	2.2	-	-	-	1	-	2.2	-	-	-	1	-	2.2	-	-	-	1.00	)														L		
Width/Depth Ratio	- 0	13.5	-	-	-	1	-	14.0	) -	-	-	1	-	15.4	-	-	-	1	-	15.5	-	-	-	1	-	8.1	-	-	-	1.00	)														L		
Entrenchment Ratio	- (	3.7	-	-	-	1	-	3.6	-	-	-	1	-	3.4	-	-	-	1	-	3.4	-	-	-	1	-	4.7	-	-	-	1.00	)														I		
Bank Height Ratio	- (	1.0	-	-	-	1	-	0.9	-	-	-	1	-	0.8	-	-	-	1	-	0.9	-	-	-	1	-	0.9	-	-	-	1.00	)														I		
Profile				-																															-			-					(				
Riffle Length (ft	3.8	7.4	7.7	10.1	1.6	48																																									
Riffle Slope (ft/ft	0.000	0.010	0.010	0.033	0.003	7 48																																									
Pool Length (ft	) 1.2	4.6	4.2	7.3	1.4	48																																					4		('		
Pool Max Depth (ft	0.6	1.0	1.0	1.4	0.2	49																																					1				
Pool Spacing (ft	) 6.4	14.3	14.6	19.6	2.6	48																																									
Pattern																																															
Channel Belt Width (ft	) 10.9	11.7	11.6	12.5	0.8	3																																									
Radius of Curvature (ft	) 7.0	8.8	7.2	12.1	2.9	3																																									
Rc: Bankfull Width (ft/ft	) 1.2	1.5	1.2	2.1	0.5	3																																									
Meander Wavelength (ft	) 10.9	12.1	11.6	13.7	1.5	3																																									
Meander Width Ratio	1.8	2.0	1.9	2.1	0.1	3																																									
Additional Reach Parameters																																															
Rosgen Classification	1			B4															1																			-	-		-						
*Channel Thalweg Length (ft	)		1	708																																		-	-		-						
Sinuosity (ft	)		1	.06																																											
Water Surface Slope (Channel) (ft/ft	)		0	.013																																											
Bankfull Slope (ft/ft	)		0	.013																																		_	_	_	_				_		
Ri% / Ru% / P% / G% / S%	52%	0%	32%	11%	5%																																					1					
* Channel Thalweg Length (ft): Based on ac	tual thalwa	eg calcula	tions fro	m the as-	built sur	vey, acco	unts for	preaks in	conservat	ion eases	ment and a	stility right	of-ways.									_	-		_	-			_		-			-													
- Information Unavailable																																															
N/A - Information does not apply.																																															
Ri = Riffle / Ru = Run / P = Pool / G = Glic	le / S = S	lep																																													

	Table 11b Cont'd. Monitoring Data - Stream Reach Data Summary																																														
	Fletcher Mitigation Site - Coates Branch Reach ID (325 feet *)           monter         NV_1         NV_2           NV_2         NV_3         NV_4         NV_5         NV_6																																														
Parameter			Ba	aseline					Pre-MY - 1         MY - 1           Moon         Mod         Mox         SD         n         Min					M	Y - 2					MY-	3					MY-	- 4					MY-	- 5					MY-	6								
Dimension & Substrate - Riffle	Min	Mean	Med	I Max	SD	n	Mi	in Mean	n Med	Max	SD SD	n	Min	Mean	Med	Max	SD	n	Min	Mean	Med	Max	SD	n	Mir	Mean	n Med M	fax S	SD	n	Min 1	Mean	Med	Max	SD	n	Min M	iean I	Med	Max	SD	n	Min	Mean M	fed 1	Max	SD n
Bankfull Width (ft)	-	6.1	-	-	-	1	-	7.4	-	-	-	1	-	7.5	-	-	-	1	-	4.7	-	-	-	1	-	4.0	-	-	- 1	.00																	
Floodprone Width (ft)	-	25.0	-	-	-	1	-	25.0	-	-	-	1	-	25.0	-	-	-	1	-	25.0	-	-	-	1	-	25.0	-	-	- 1	.00																	
Bankfull Mean Depth (ft)	-	0.5	-	-	-	1	-	0.4	-	-	-	1	-	0.4	-	-	-	1	-	0.7	-	-	-	1	-	0.8	-	-	- 1	.00																	
Bankfull Max Depth (ft)	- (	1.0		-	-	1	-	0.9		-	-	1	-	0.9	-	-	-	1	-	1.0	-	-	-	1	-	1.1	-	-	- 1	.00																	
Bankfull Cross-Sectional Area (ft2	-	3.3		-	-	1	-	3.3	-	-	-	1	-	3.3	-	-	-	1	-	3.3	-	-	-	1	-	3.3	-	-	- 1	.00																	
Width/Depth Ratio	-	11.4		-	-	1	-	16.5	-	-	-	1	-	17.2	-	-	-	1	-	6.9	-	-	-	1	-	4.9	-	-	- 1	.00																	
Entrenchment Ratio	-	4.1			-	1	-	3.4		-	-	1		3.3	-	-	-	1	-	5.3	-	-	-	1	-	6.2	-		- 1	.00																	
Bank Height Ratio	-	1.0	-	-	-	1	-	1.0	-	-	-	1	-	0.9	-	-	-	1	-	0.9	-	-	-	1		0.9	-	-	- 1	.00									_								
Profile																																															
Riffle Length (ft)	4.1	7.2	7.3	11.9	1.8	22																																									
Riffle Slope (ft/ft)	0.000	0.008	0.00	6 0.021	0.00	6 22																																									
Pool Length (ft)	1.8	4.6	4.4	8.1	1.8	22																																	1								
Pool Max Depth (ft)	0.6	1.1	1.1	2.2	0.3	22																																									
Pool Spacing (ft)	8.0	13.9	14.0	19.1	3.2	21																																									
Pattern																																															
Channel Belt Width (ft)	11.5	12.7	12.8	13.8	1.2	3																																	1								
Radius of Curvature (ft	4.7	7.0	7.2	9.2	2.3	3																																									
Rc: Bankfull Width (ft/ft)	0.7	1.0	1.0	1.3	0.3	3																																									
Meander Wavelength (ft)	11.5	12.5	12.1	13.8	1.2	3																																									
Meander Width Ratio	1.7	1.8	1.9	2.0	0.1	3																																									
Additional Reach Parameters																																															
Rosgen Classification				B4																																		-									
*Channel Thalweg Length (ft)	)			325																																		-									
Sinuosity (ft				1.05																																											
Water Surface Slope (Channel) (ft/ft			0	0.013																																											
Bankfull Slope (ft/ft)			0	0.014																																											
Ri% / Ru% / P% / G% / S%	52%	0%	33%	10%	5%																																										
* Channel Thalweg Length (ft): Based on ac	tual thalv	eg calcul	ations fr	om the as	-built sur	vey, acco	ounts for	r breaks in a	conservati	ion easen	nent and u	tility right-	of-ways.																																		
- Information Unavailable																																															
N/A - Information does not apply.																																															
Ri = Riffle / Ru = Run / P = Pool / G = Glid	le / S = 5	Step																																													

## Appendix E Hydrologic Data

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Monitoring Gauge					Max	x. Consecu	Per WE Growing S tive Hydro	formance S TS Station: Season: 4/9 period (%)	Standard: 1 Asheville 9 to 10/26 and numb	12 % 2 13S (201 days er of cons	) ecutive day	s (n)									
	Pre MY-	1 (2020)	MY-1	(2020)	MY-2	(2021)	MY-3	(2022)	MY-4	(2023)	MY-5	(2024)	MY-6	(2025)	MY-7	(2026)					
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n					
MW-1	-	-	4	9	4	9	25	50	-	-	-	-	-	-	-	-					
MW-2	-	-	4	9	3	7	2	5	-	-	-	-	-	-	-	-					
MW-3	-	-	5	11	7	14	11	23	-	-	-	-	-	-	-	-					
MW-4	-	-	6	13	5	10	5	10	-	-	-	-	-	-	-	-					
MW-5	-	-	6	13	11	23	8	17	-	-	-	-	-	-	-	-					
MW-6	-	-	4	9	11	22	8	17	-	-	-	-	-	-	-	-					
MW-7	-	-	2	4	4	9	8	17	-	-	-	-	-	-	-	-					
MW-8	-	-	6	13	10	21	10	21	-	-	-	-	-	-	-	-					
MW-9	-	-	12	24	15	31	11	22	-	-	-	-	-	-	-	-					
MW-10	-	-	11	23	11	22	11	22	-	-	-	-	-	-	-	-					
MW-11	3 6 3 7 3								-	-	-	-	-	-	-	-					
* Performace sta	ndard for gr	oundwater g	auges was c	alculated at	Exceeds rec	uirements b	y 10%				Fails to meet requirements, by less than 10%										
12 percent (24 day duration (2.4 day	ays). Percen /s)	t deviation is	s based upor	n this	Exceeds req	uirements, l	out by less th	1an 10%		Fails to meet requirements by more than 10%											



































	Table 10. Veri Fletcher Cu	fication of Bankfull Eve reek Mitigation Project	nts	
Reach	Date of Data Collection	*Date of Occurrence	Method	Photo # (if available)
	8/6/2020	8/6/2020	Stage Recorder	n/a
Fletcher Reach 1	8/15/2020	8/15/2020	Stage Recorder	n/a
	10/18/2021	unknown	Crest Gauge	n/a
	10/18/2021	unknown	Crest Gauge	n/a
	10/19/2021	3/25/2021	Stage Recorder	n/a
	10/19/2021	3/31/2021	Stage Recorder	n/a
Fletcher Reach 2	10/19/2021	8/17/2021	Stage Recorder	n/a
	10/19/2021	3/31/2021	Stage Recorder	n/a
	10/19/2021	8/17/2021	Stage Recorder	n/a
	11/14/2022	unknown	Crest Gauge	n/a
			Crost Guuge	II a
	4/19/2019	4/19/2019	Stage Recorder	n/a
	2/6/2020	2/6/2020	Stage Recorder	n/a
	4/29/2020	4/29/2020	Stage Recorder	n/a
	8/6/2020	8/6/2020	Stage Recorder	n/a
	8/15/2020	8/15/2020	Stage Recorder	n/a
	10/18/2021	unknown	Crest Gauge	3
	10/19/2021	11/12/2020	Stage Recorder	n/a
	10/19/2021	12/14/2020	Stage Recorder	n/a
<b>Coates Branch</b>	10/19/2021	1/1/2021	Stage Recorder	n/a
	10/19/2021	2/18/2021	Stage Recorder	n/a
	10/19/2021	3/25/2021	Stage Recorder	n/a
	10/19/2021	3/31/2021	Stage Recorder	n/a
	10/19/2021	8/17/2021	Stage Recorder	n/a
	10/19/2021	10/7/2021	Stage Recorder	n/a
	11/13/2022	2/4/2022	Stage Recorder	n/a
	11/13/2022	5/26/2022	Stage Recorder	n/a
	11/13/2022	7/28/2022	Stage Recorder	n/a
		<u> </u>		
	No data o	collected during 2019 due t	to Adaptive Managemen	t
	10/15/2021	2/6/2020	Stage Recorder	n/a
	10/15/2021	10/15/2021	Crest Gauge	4
Weston Creek Reach 1A	10/19/2021	3/25/2021	Stage Recorder	n/a
	10/19/2021	8/17/2021	Stage Recorder	n/a
	11/14/2022	4/23/2022	Stage Recorder	n/a
	11/14/2022	10/27/2022	Stage Recorder	n/a

\*The dates listed for 2022 were based on precipitation and stage recorder data collected between October 2021 and November 2022

Appendix F Other Data This Page Intentionally Left Blank

Date	Start / End Time	Certified Applicator #	Site & Target Species	Herbicide	Concentration (%)	Volume Herbicide Concentration Used (oz)	Volume Mixture Used (gal)	Weather (Temp/Wind)	Site Notes
6/21/2022	13:00-15:00	C. Lawson 26-38261	Coates, MFR, festuca	Glypho	4	22	6	80+/light var	Festuca treatment along fenceline, native vegetation boundary, and around planted and natural stems.
6/21/2022	11:00-13:00	C. Lawson 26-38261. O. Carson	Fletcher (N), Kudzu	Clopyrilid	1	7	7	70/light var	Spot treatment Kudzu along easement boundary.
7/12/2022	10:00-16:00	C. Lawson 26-38261	Fletcher (S), MFR, Privet	Tryclopyr	3	69	23	85/light var	multifloral rose, privet, tree-of-heaven, bittersweet.
9/15/2022	10:00-12:00	C. Lawson 26-38261	Fletcher (N), Kudzu	Clopyrilid	3	15	5	80/light- Moderate var	Kudzu within and along periphery of Weston Reach 1B.
9/27/2022	10:00-13:00	O. Carson 26-29539	Fletcher (N&S)	Glypho	4	45	15	85/light var	multifloral rose, privet, tree-of-heaven, bittersweet.

Fletcher Stream and Wetland MY3 Supplemental Planting Summary											
Scientific Name	Common Name	Material	<b>Relative Percentage</b>								
Acer negundo	Box elder	bareroot	35								
Alnus serrulata	Tag alder	bareroot	15								
Cornus amomum	Silky dogwood	bareroot	15								
Liriodendron tulipifera	Tulip poplar	bareroot	35								
			50								
Salix nigra	Black willow	live stake	50								
Salix sericea	Silky willow	live stake	50								

\* Supplemental planting was conducted on February 28 and March 3, 2022. Additional livestakes were installed along Coates Branch Reach 1B, 1C, and 1D. Bare root stems were installed along the right descending easement boundary of Fletcher Reach 1B and 2A; and between Coates Branch Reach 1D and Fletcher 1C.

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