Continuing Authorities Program (CAP)

Section 206 Project

Engineering Appendix

for

Crabtree Swamp (206)

Aquatic Ecosystem Restoration Study

Integrated Feasibility Report

And Environmental Assessment

Horry County, South Carolina

06 July 2020

Prepared By:

Engineering Division

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Table of Acronyms

1D	One-dimensional
2D	Two-dimensional
ACBM	Articulated Concrete Block Mat
AEP	Annual Exceedance Probability
CAP	Continuing Authorities Program
cfs	cubic feet per second
CN	Curve Number
CY	Cubic yards
DI	Design and Implementation
DTM	Digital Terrain Model
EC	Existing Conditions
ECB	Erosion Control Blanket
EM	Engineer Manual
EP	Engineer Pamphlet
ER	Engineer Regulation
ESA	Environmental Site Assessment
ETL	Engineer Technical Letter
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
Ft	Feet
GPR	Ground penetrating radar
HEC	Hydrologic Engineering Center
HMS	Hydrologic Modeling System
HSG	Hydrologic Soils Group
HUC	Hydrologic Unit Code
Hwy	Highway
IDNR	Iowa Department of Natural Resources
LiDAR	Light Detection and Ranging
LF	Linear feet
LOB	Left Overbank

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MHHW	Mean Higher High Water
MRLC	Multi-Resolution Land Characteristics Consortium
NAD	North American Datum of 1983
NAVD88	North American Vertical Datum of 1988
NGVD29	National Geodetic Vertical Datum of 1929
NHD	National Hydrography Dataset
NLCD	National Land Cover Database 2016
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NSE	Nash-Sutcliffe
POR	Period of record
PP	Preferred Plan
RAS	River Analysis System
RMS	Root Mean Squared
ROB	Right Overbank
ROW	Right-of-Way
SC	South Carolina
SCDOT	South Carolina Department of Transportation
SCS	Soil Conservation Service
SLC	Sea Level Change
SLR	Sea Level Rise
USACE	U. S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U. S. Geological Survey
VA	Vulnerability Assessment
VE	Value Engineering

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Executive Summary

This appendix documents all engineering analyses and design tasks that were performed for the Crabtree Swamp Aquatic Ecosystem Restoration Project (hereafter Crabtree Swamp) Final Integrated Feasibility Report (Main Report). This Continuing Authorities Program (CAP) Project is authorized by Section 206 of the 1996 Water Resources Development Act, as amended. This engineering appendix includes alternatives evaluated, engineering analysis summaries, and the preliminary design. It is important to differentiate between the objectives of the project and the Engineering Appendix. The objective of the project is aquatic ecosystem restoration. The objective of the engineering analysis, specifically the hydraulic analysis, is to verify that the Preferred Plan will not have adverse impacts to current flood stages and erosional forces (velocities). The Cost Appendix is provided as a separate appendix. This document meets all requirements in Appendix C of ER 1110-2-1150.

1.0 Project Background

Crabtree Swamp was originally a low-gradient coastal plain tributary to the Waccamaw River that was modified by a clearing and snagging and channelization project in the 1960s to improve drainage for agricultural lands. The original project constructed by the U.S. Army Corps of Engineers (USACE) was authorized in 1964 under Section 208 of the Flood Control Act of 1954. The project was designed as flood control and for agricultural drainage. The project was completed in 1966 and had a 20 year project life (USACE, 2016).

This is an aquatic restoration and protection project. The objectives of the project include stabilization of stream bank to minimize bank failures, reestablishment of aquatic life habitat and passages, and increasing connection of the Crabtree Swamp channel to adjacent floodplains and wetlands.

1.1 Location

The study area is located in the City of Conway, Horry County, South Carolina (SC) (Figure 2-1). Crabtree Swamp originates northwest of the City of Conway, near Rose Moss Road, flows through Conway and terminates in Kingston Lake at Long Avenue, which is pointed out in the figure. Kingston Lake flows into the Waccamaw River, also pointed out in the figure. The study area begins at Rose Moss Rd and terminates near the channel's intersection of Long Avenue. The study area is approximately 7.2 miles in length (USACE, 2016).

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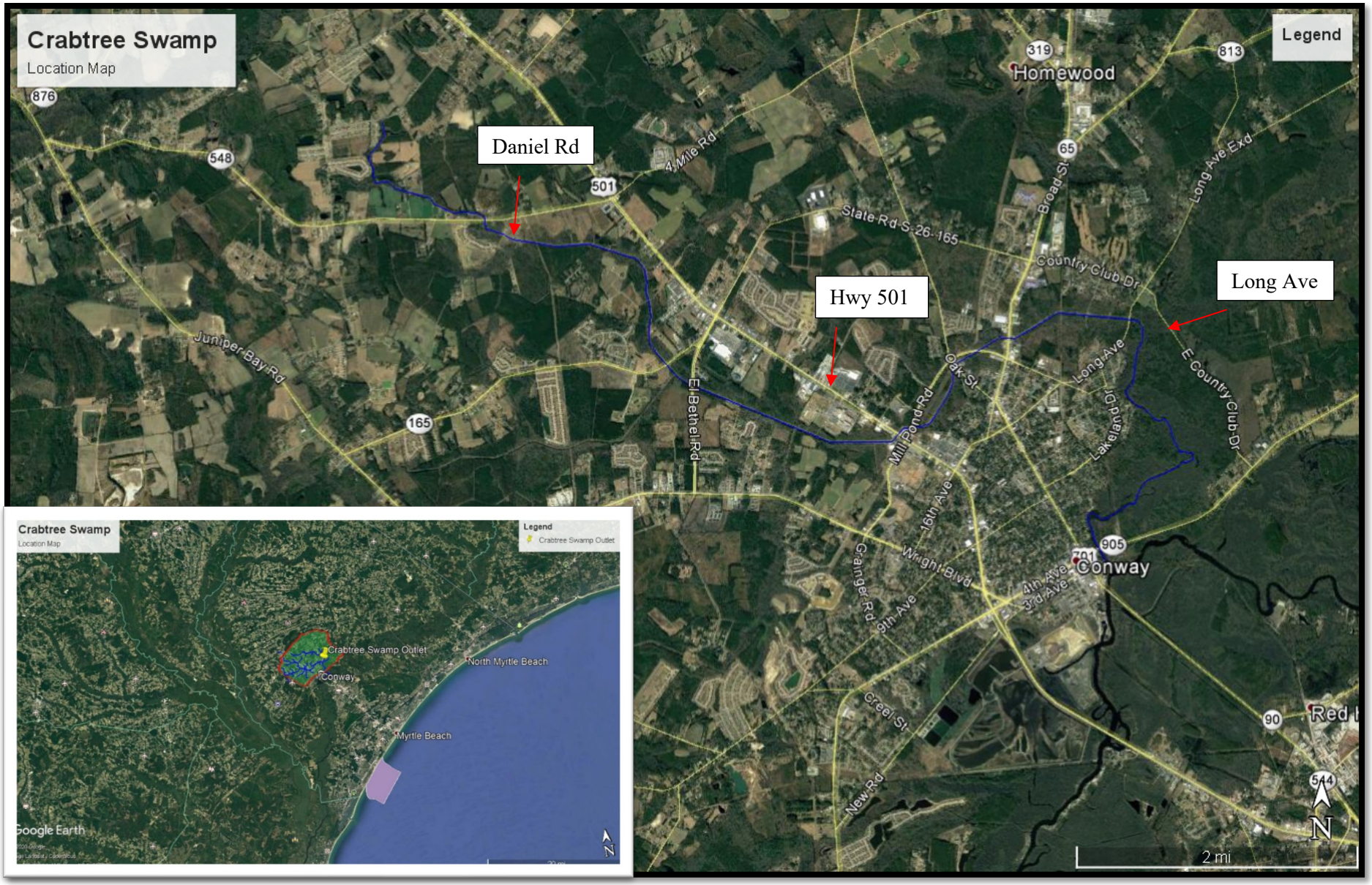


Figure 1-1 – Project Location.

1.2 Existing Conditions

The Crabtree Swamp Basin has an area of approximately 18 square miles, with variable land use ranging from moderately urbanized and residential at the basin's downstream outlet to agriculture and upland forest at the basin head. The topography at the head of the basin is mostly flat with maximum elevation of approximately 60 ft-NAVD88 (North American Vertical Datum of 1988), and a minimum elevation of 23 ft-NAVD88 at the basin's outlet, which is at the confluence with Kingston Lake. Prior to channelization to support development, Crabtree Swamp was a wetland. Several small tributaries flow into Crabtree Swamp throughout the project area.

As more intense urban land uses have replaced agricultural uses, with subsequent increased stormwater runoff, reaches of Crabtree Swamp started to exhibit associated stressors, such as bank failure, erosive channel velocities, incising and scouring, loss of aquatic life habitat, episodic flooding, invasive vegetation, and blockages that prevented aquatic life passage. Historic channel improvements resulted in dredge material placement on the bank cutting off portions of the floodplains and wetlands from the channel during flood events. As described in detail in the Main Report, the following events have led to degradation of the ecosystem:

- Historical modifications and changes in watershed land uses have resulted in the Crabtree Swamp becoming an incised, trapezoidal channel with little remaining structural diversity, and prone to bank failures;
- Lack of habitat and physical barriers are inhibiting aquatic life passages; and
- The historical placement of depositional material has disconnected the lower reach of Crabtree Swamp from adjacent wetlands.

1.2.1 Past Section 208 Project

In 1964, USACE authorized a project in Crabtree Swamp under Section 208 of the 1954 Flood Control Act, which involves snagging and clearing for flood damage reduction. Construction was completed in 1966. The Section 208 project included snagging and clearing a 50-ft width of Kingston Lake Swamp and Smith Lake Swamp downstream of SC Highway 106, for a total length of approximately one mile. Additionally, approximately 4.5 miles of the channel within the current CAP 206 project area was widened from SC Highway 106 (Long Avenue) to the confluence of Crabtree and Fourmile Swamps. The improved bottom width varied between 10-50 feet (USACE 1982[a]).

The project was designed as a flood control and major drainage project that would provide protection from the 3-year storm for the agricultural interests in Horry County, but had insufficient capacity to provide relief to residential areas (USACE 1982[a]). The Section 208 project had a project life of 20 years, but it is understood that USACE Civil Works projects (including CAP projects) remain authorized until deauthorized by Congress. As such, the Crabtree Swamp Section 208 project remains authorized, resulting in some constraints on the current Section 206 project. In accordance with EP 1105-2-58 and ER 1165-2-119, the current CAP 206 project may be used to improve the existing Section 208 project with the following constraints:

1) it shall not impair or substantially change the purposes or functions of the existing Section 208 project;
2) it must be targeted to meet the additional Section 206 needs rather than adjustment of the Section 208 project's functions; and
3) it shall not nullify or change an existing condition of the non-federal sponsor's responsibilities for the Section 208 project.

1.2.2 Existing Aquatic Ecosystem Restoration Projects

The Sponsor has already constructed two rock grade control structures in the project area to address ecosystem concerns. These are shown in Figure 1-2. Horry County installed Structure #1, and Horry County and the U.S. Fish and Wildlife Service (USFWS) installed Structure #2. The profile design of these structures, as provided by the Natural Resources Conservation Service (NRCS) is shown in Figure 1-3, and finished Structure #2 is shown in Figure 1-4.



Figure 1-2 – Existing Grade Control Structure Locations.

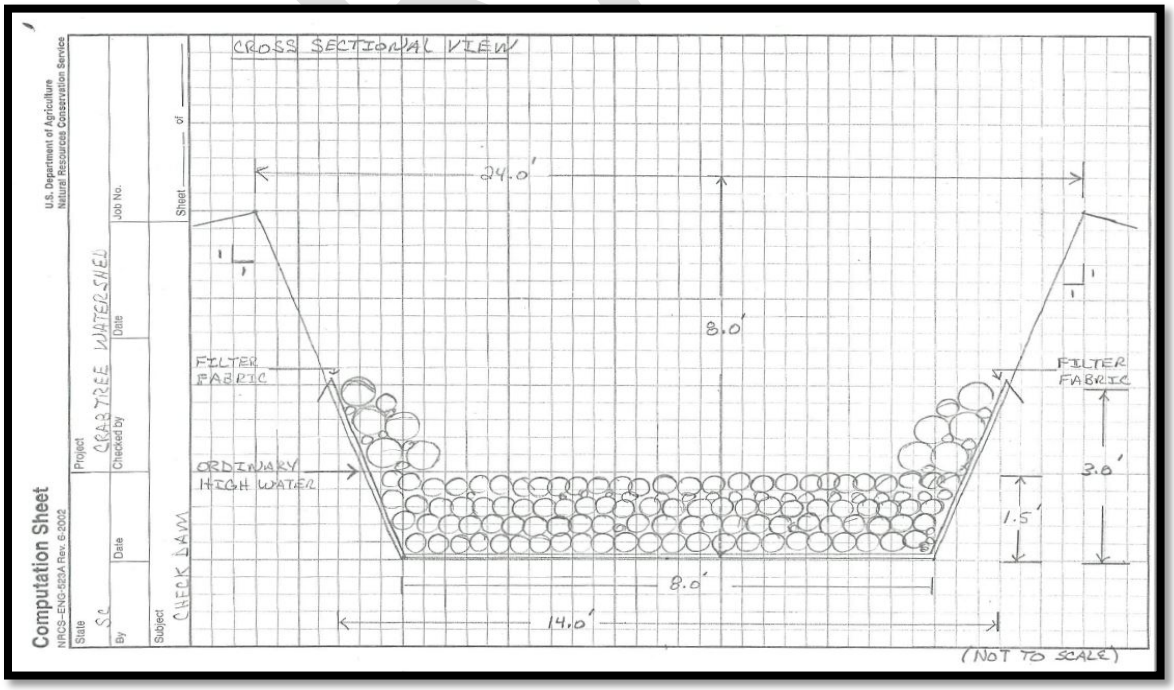


Figure 1-3 – NRCS Grade Control Structure Design.



Figure 1-4 – Existing Grade Control Structure.

Horry County also constructed a floodplain bench to address these concerns. The floodplain bench is the bench along the northwest bank of the channel in Figure 1-5.

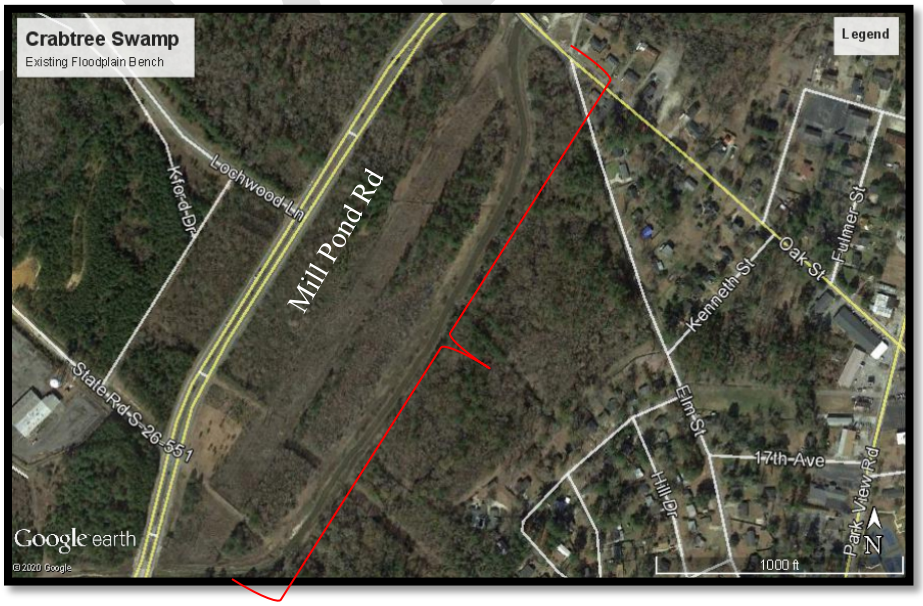


Figure 1-5 – Existing Floodplain Bench.

Lastly, two existing "drop structures" are present in the channel approximately 750 linear feet (LF) downstream of El Bethel Road. The structures do not appear to be man-made, and are assumed to be the product of beavers or other natural means. However, they do create riffle pools, which provide desired habitat for the target species,

meeting a project objective. The location of the structures is shown in Figure 1-6, and the actual structures are shown in Figure 1-7.

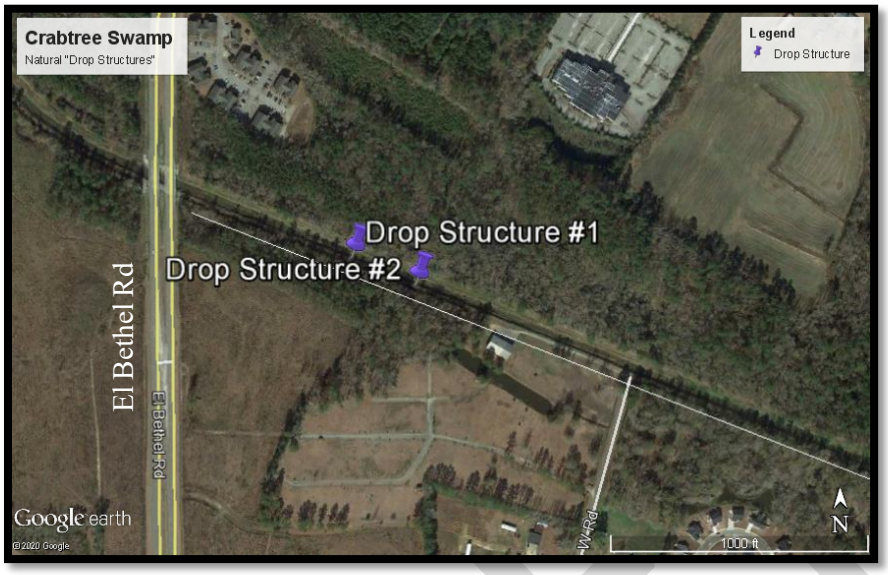


Figure 1-6 – Location of Natural "Drop Structures".



Figure 1-7 – Natural "Drop Structures".

In addition, the Natural Resources Conservation Service (NRCS) has completed three bank stabilization projects in 2019 within the project area. These proposed projects are shown in Figure 1-8 through Figure 1-10.

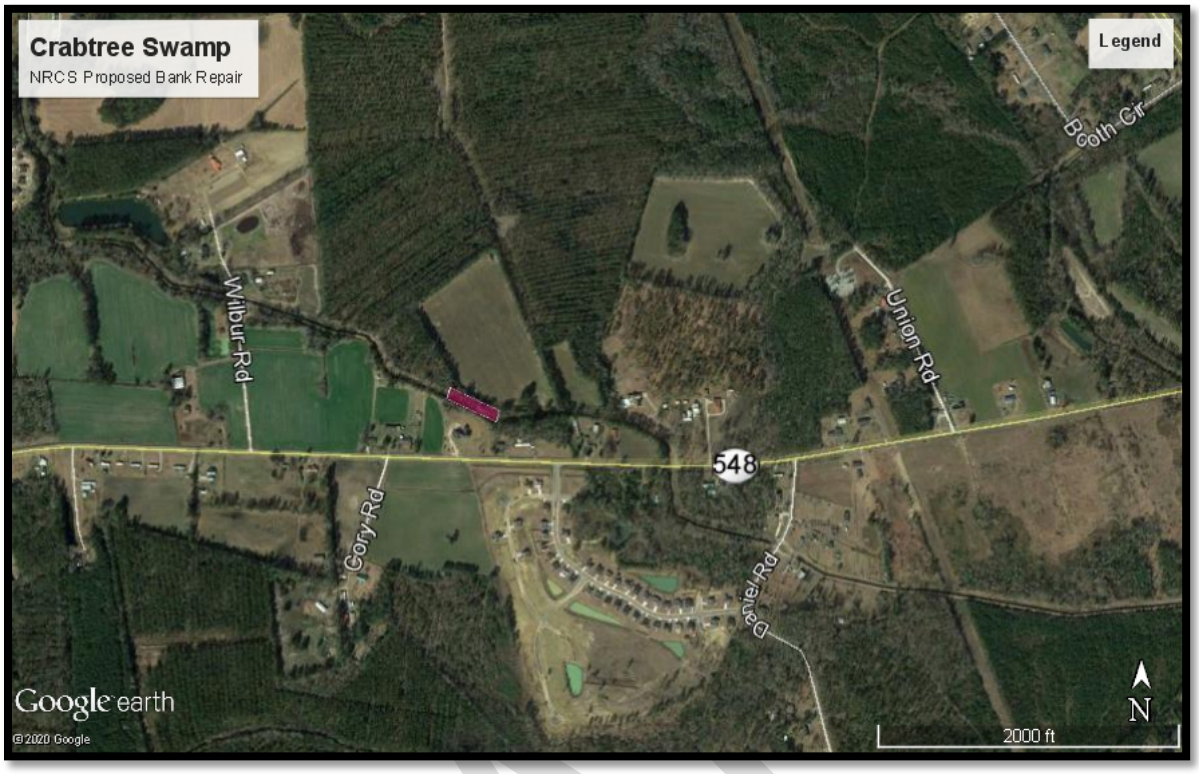


Figure 1-8 – NRCS Foundation Repair.



Figure 1-9 – NRCS Bank Repair.



Figure 1-10 – NRCS Toe Repair.

1.3 Expected Future Without-Project Conditions

As urban land development continues to replace agricultural uses, subsequent stormwater runoff will also continue to increase. Crabtree Swamp will see increased runoff flows and higher erosive channel velocities, which will result in continued bank failures, incising, and scouring. This will result in continued loss of aquatic life habitat, and blockages that prevent aquatic life passage. The natural "drop structures" shown in Figure 1-6 are not expected to remain in place long-term.

1.4 Expected Future With-Project Conditions

This project cannot stop urban land development. However, by providing aquatic life passages and creating more natural wetland habitat and aquatic life habitat areas, the wetland and aquatic life habitats can continue to flourish despite increased runoff. During the period after construction while the newly planted vegetation is maturing, the younger trees and smaller plants will result in a lower roughness, especially during high flows. This will result in faster channel velocities in the areas of the new plantings that is indicated by the modeling. However, it is important to note that the areas with new plantings will either be atop embankment armoring at the root wads and drop structure, or within wider channels (in the floodplain bench) with slower velocities than existing conditions.

2.0 Preferred Plan

Development of management measures and alternatives is described in detail in the Main Report. The Preferred Plan includes a combination of the following management measures.

- Floodplain Benches
- Berm Cutting

- Log Drop Structure

The Preferred Plan is described by reach in the next sections.

2.1 Reach 1 – Daniel Road to El Bethel Road

Reach 1 runs from Daniel Road at the upstream end of the project area to the bridge at El Bethel Road. The management measures proposed for Reach 1 included four floodplain benches (alternating banks) and a log drop structure. The component locations are shown in Figure 2-1, with the existing grade control structure locations included. The bench location and length determination is discussed in Section 5.5.1.

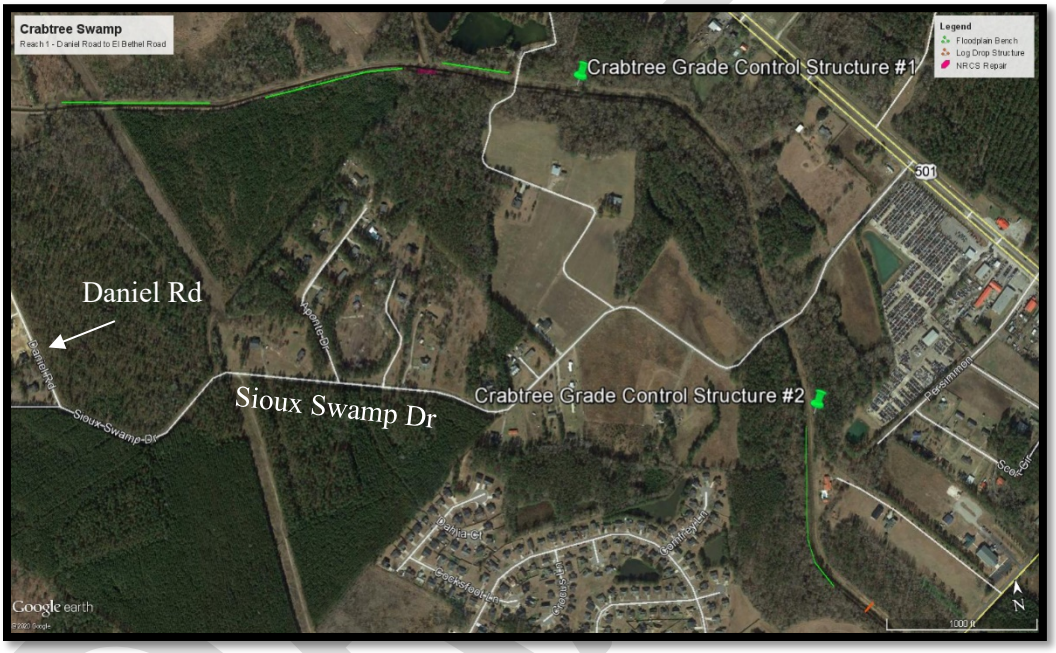


Figure 2-1 – Reach 1 Components.

The floodplain bench design is the same as that already constructed. It consists of a 12-ft wide flat riparian bench at the 50% Annual Exceedance Probability (AEP), or 2-year, 24-hour flood elevation, a 30-ft wide bench at 1.0% slope (moving up the bank perpendicular to the channel), and a 1V:1H slope to tie into natural grade. Any areas within the floodplain bench footprint that are at a lower elevation than the bench design will not be filled in. The floodplain benches will be planted with native wetland vegetation. The lengths and bench elevations are as follows (moving from upstream to downstream):

- Reach 1 bench #1: 987 LF of floodplain bench at elevation 25.75-ft NAVD88 on the left bank (looking downstream).
- Reach 1 bench #2: 900 LF of floodplain bench at elevation 23.30-ft NAVD88 on the right bank (looking downstream).
- Reach 1 bench #3: 455 LF of floodplain bench at elevation 22.75-ft NAVD88 on the left bank (looking downstream).
- Reach 1 bench #4: 1119 LF of floodplain bench at elevations ranging from 17.15 down to 15.79-ft NAVD88 on the right bank (looking downstream).

A profile sketch of the design is shown in Figure 2-2.

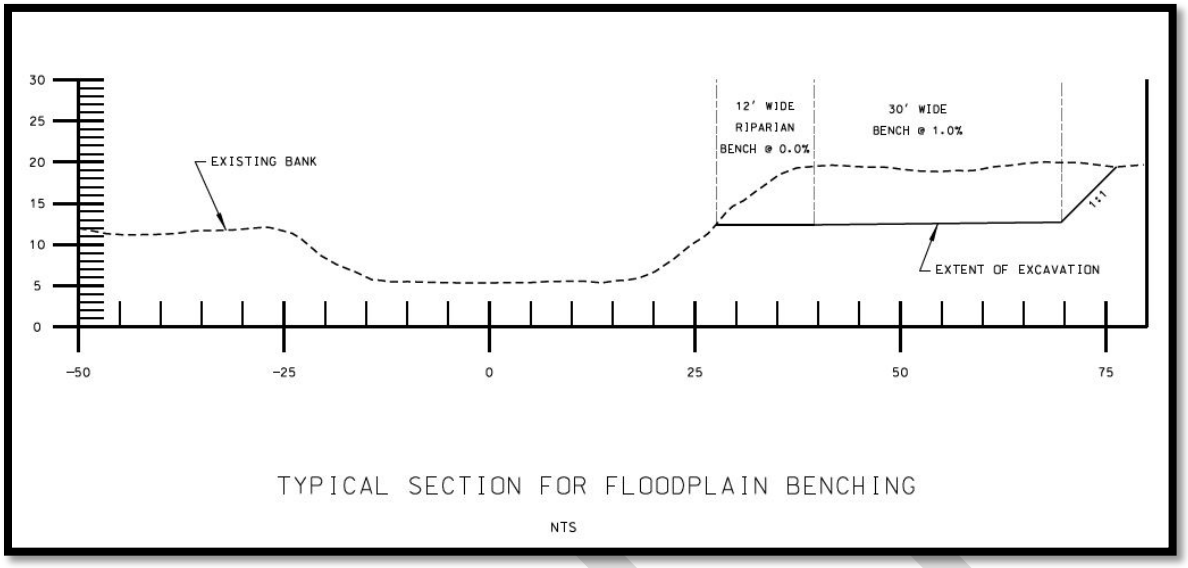


Figure 2-2 – Floodplain Bench Design.

Drop structures are low-head structures constructed across the entire width of a channel, and are designed to stabilize channel grades, improve fish passage, create habitat, and reduce erosion and incising (Saldi-Caromile et al, 2004). The log drop structure is designed to have a 24-inch log across the channel, placed at an elevation that is largely submerged, with a 10-ft penetration into the bank on each side. Approximately 2 cubic yards (CY) of riprap will be placed on each bank to anchor the log. The largest D50 will be determined during the Design and Implementation Phase (DI) to withstand the 4% AEP storm velocities. The riprap will be covered with soil and plantings. The sketch in Figure 2-3 shows the concept, as described by Saldi-Caromile et al (2004).

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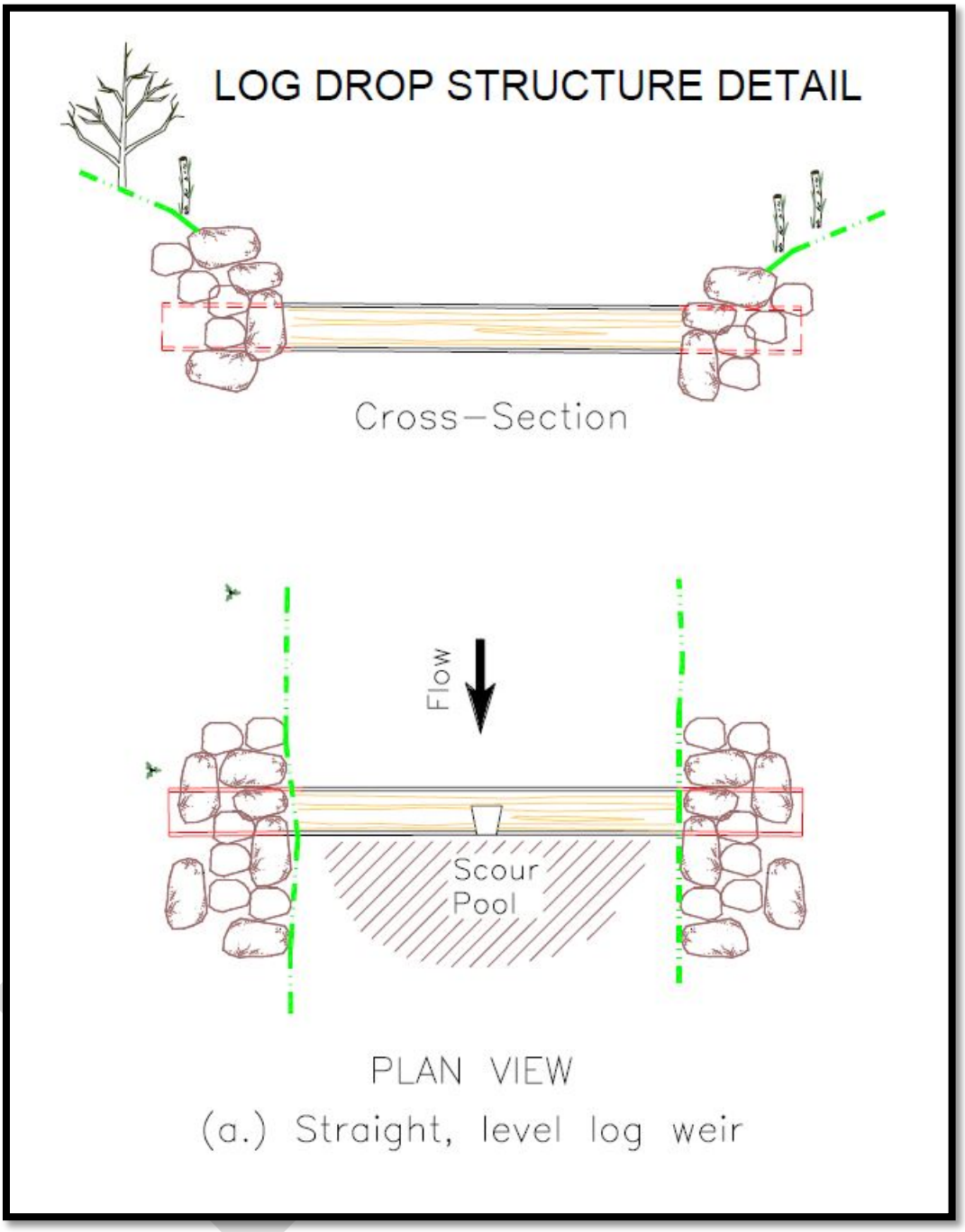


Figure 2-3 – Log Grade Control Structure Design.

2.2 Reach 2 – El Bethel Road through Highway 501 to Mill Pond Road

Reach 2 runs from the bridge at El Bethel Road through the culvert at Highway 501 to the bridge at Mill Pond Road. The management measures proposed for Reach 2 includes three floodplain benches (all on the south/right bank), as shown in Figure 2-4. The preferred plan also includes replacing the two existing, naturally-occurring drop structures just downstream of El Bethel Road with log drop structures, assuming they are no longer in place when design begins. Two management measures that were also initially carried forward for analysis included a grade control structure downstream of the Hwy 501 culvert and two root wads just upstream of the Hwy 502 culvert.

However, these were eliminated from the preferred plan based on the benefits analysis results. The analysis of these features are discussed in Section 6.2 of this appendix.



Figure 2-4 – Reach 2 Components.

All floodplain benches in this reach are located on the south bank, due to the presence of utility pipes on the north bank. The floodplain benches will be planted with native wetland vegetation. The bench dimensions are as follows:

- Reach 2 Bench #1: 486 LF of floodplain bench at elevation 12.80-ft NAVD88 on the right bank (looking downstream).
- Reach 2 Bench #2: 888 LF of floodplain bench at elevation 12.40-ft NAVD88 on the right bank.
- Reach 2 Bench #3: 1878 LF of floodplain bench at elevation 5.0-ft NAVD88 on the right bank.

2.3 Reach 3 – Highway 701 Bridge to Long Avenue

Reach 3 runs between the bridge at Highway 701 to the bridge at Long Avenue, at the downstream end of the project area. The management measures proposed for Reach 3 included six berm cuts in existing berms along the banks on both sides of the channel. The locations of these berm cuts, shown in Figure 2-8, were chosen as they are adjacent to low areas in the wetland. The design includes each cut to be made down to elevation 6.0-ft NAVD88, with side slopes of 3H:1V on each side up to grade, and armoring with articulated concrete block mat (ACBM) to prevent erosion. The cut measurements are as follows, moving from upstream to downstream:

- 1 - right bank looking downstream, approximately 280 LF

- 2 - left bank looking downstream, approximately 200 LF
- 3 - right bank looking downstream, approximately 300 LF
- 4 - left bank looking downstream, approximately 150 LF
- 5 - left bank looking downstream, approximately 350 LF
- 6 - right bank looking downstream, approximately 370 LF.

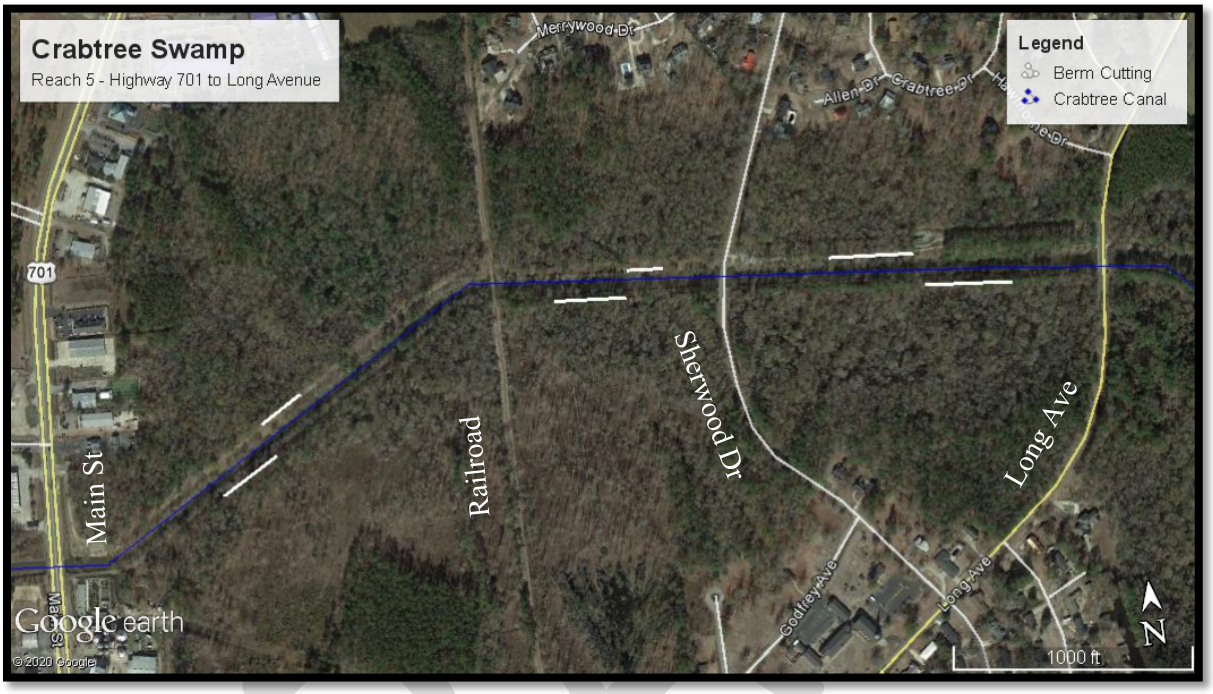


Figure 2-5 – Reach 3 Components.

3.0 Civil Design

3.1 Channel Sections

The site quantities (cut, etc.) were determined by estimating quantities using InRoads V8i (SELECT SERIES 2), VERSION 08.11.07.615, within MicroStation V8i (SELECT SERIES 3), VERSION 08.11.09.714. Cut volumes were calculated for construction of the floodplain bench cross section shown in Figure 2-2, and berm widening down to elevation 6 ft-NAVD88. For example, the dashed line in Figure 2-2 shows the existing ground elevation, and the solid line shows the floodplain bench cut. InRoads was used to calculate the volume of sediment between the dashed and solid lines for the length of the benches. An estimated 41,954 CY of material will be excavated. Construction debris materials from the site, consisting of mainly soil and vegetation (assuming no contamination), will be properly disposed of. Horry County has stated that they will use at least 50% of the soil for road projects, to be stored on their property.

3.2 Real Estate

This project will require the acquisition of real estate in order to obtain access for construction equipment. Real estate acquisition will also be required for staging/lay down areas and spoil areas. The possible access, storage, and staging areas are shown in Figure 3-1 through Figure 3-3. The circled staging areas in Figure 3-1 and Figure 3-2

are on private lands, and a construction easement will be necessary. This project is located within the city of Conway, use of the existing public city streets for transportation of construction equipment and material will be feasible.

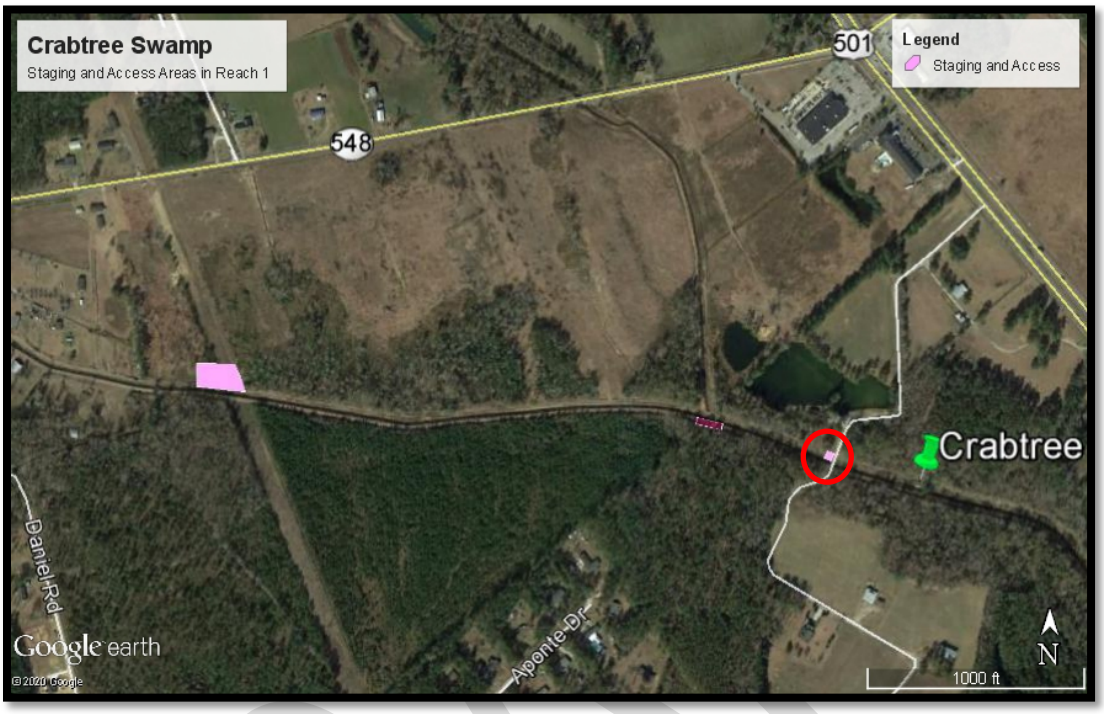


Figure 3-1 - Access Roads, Staging and Storage Areas in Reach 1.



Figure 3-2 - Access Roads, Staging and Storage Areas in Reach 2.

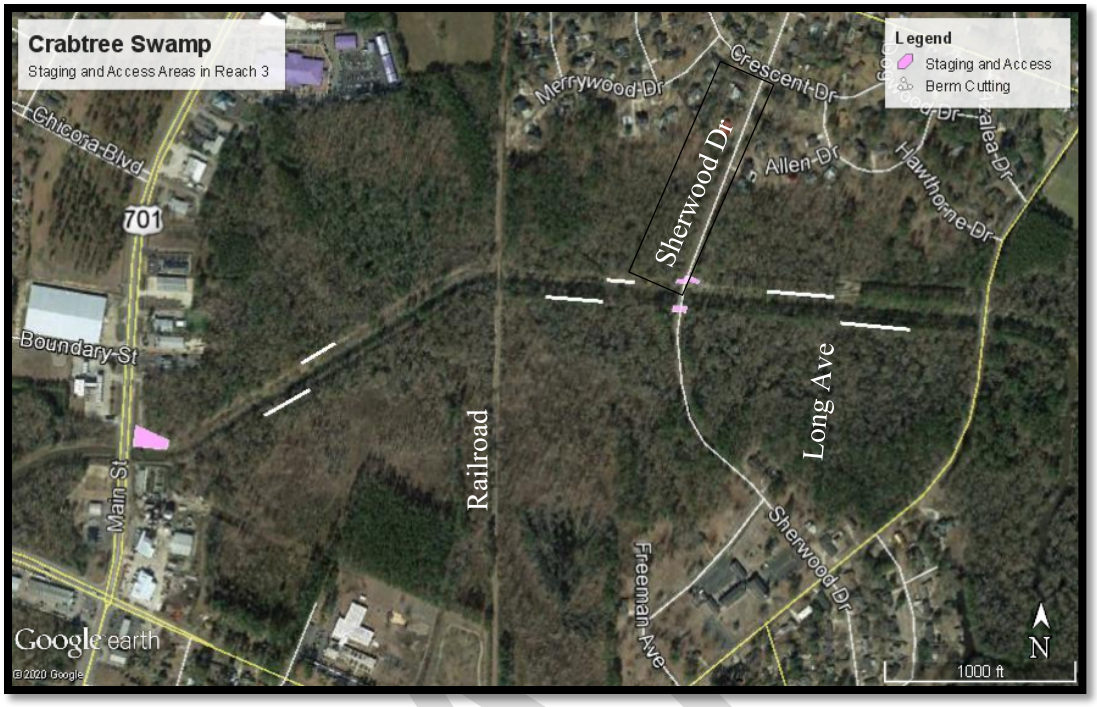


Figure 3-3 - Access Roads, Staging and Storage Areas in Reach 3.

3.3 Relocations

Utilities located in the vicinity of the project were identified during on-site inspections and by inspection utility shapefiles supplied by the Sponsor. For the Preferred Plan, the two existing single-barreled stormwater culvert outfalls in Reach 2 just upstream of the root wads are identified for removal, as a floodplain bench is designed for this area. If the removal and/or relocation of any additional utilities is determined during design, the same size and type of material would be utilized in the relocation of a utility to accommodate the proposed construction.

4.0 Hydrology Data & Model Development

4.1 Introduction

The purpose of the hydrologic study was to develop a hydrologic model of the basin to determine runoff hydrographs using the Hydrologic Engineering Center - Hydrologic Modeling System (HEC-HMS) version 4.2.1, March 2017, for use in the 1-D portion of the hydraulic model. Runoff hydrographs were created using HEC-HMS for two specific storms for flow calibration and verification, and a range of storm frequencies using the most recent rainfall statistics from the National Oceanic and Atmospheric Administration's (NOAA's) Atlas 14, Volume 2, Version 3, accessed 2019. HEC-GeoHMS in ArcMAP (version 10.1) was used to develop the watershed characteristics to import into HEC-HMS. This section presents the available hydrologic data and results of hydrologic studies conducted to define characteristics for the Crabtree Swamp basin.

4.2 Data Applied

4.2.1 Topography

New Light Detection and Ranging (LiDAR) elevation data collected by Horry County in 2017 was used in the hydrologic model. Since LiDAR does not collect data below the water or beneath bridges, channel cross section data from the NRCS was used to characterize the stream for the hydraulic model. Bridge design data, provided by the South Carolina Department of Transportation (SCDOT), was used to characterize the bridges in the hydraulic model. All topographic and elevation data sources used are presented in Table 4-1. The LiDAR data provided was in the North American Vertical Datum of 1988 (NAVD88), and North American Datum of 1983 (NAD 83), 2011 State Plane of South Carolina horizontal datum, so all other data was converted to these.

Table 4-1 – Topographic and Survey Data Referenced.

Survey Data	Source	Date
LiDAR data (NAVD88)	Horry County	2017
Hydrographic Survey data from NRCS	NRCS	2010
Bridge Design Data	SCDOT	various

4.2.1 Hydrography

Delineations of watershed boundaries and the centerlines of the tributaries were obtained from the U.S. Geological Survey's (USGS's) National Hydrography Dataset (NHD) at https://datagateway.nrcs.usda.gov/GDGOrder.aspx and are shown as the gray lines in Figure 4-1. were also obtained from the NHD, and compared to the basins created by GeoHMS, which are shown in Figure 4-1. The yellow marker indicates the downstream end of both the project area and Crabtree Swamp. The tributaries, reprepresented by blue lines, as well as the watershed, appear to include all basins that discharge into the Waccamaw River, located downstream of the Crabtree Swamp.

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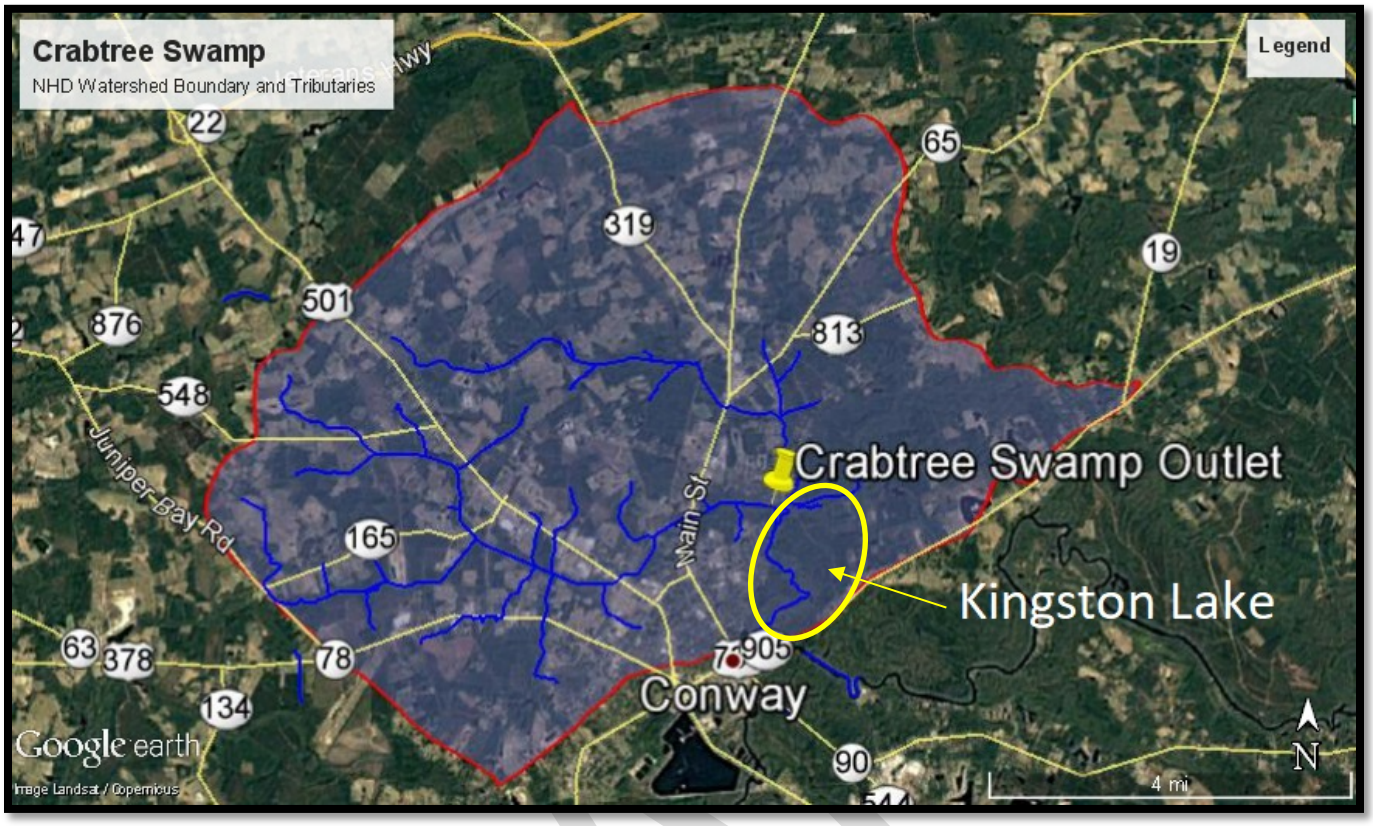


Figure 4-1 – NHD Watershed Boundary and Tributaries.

The individual basins created by HEC-HMS for each tributary, represented by white lines, are overlain the NHD data in Figure 4-2, showing that the individual basins match the NHD watershed. The area in the northwest outside the basins but within the watershed may be part of the contributing to the Waccammaw River, but it does not contain direct tributaries to Crabtree Swamp,

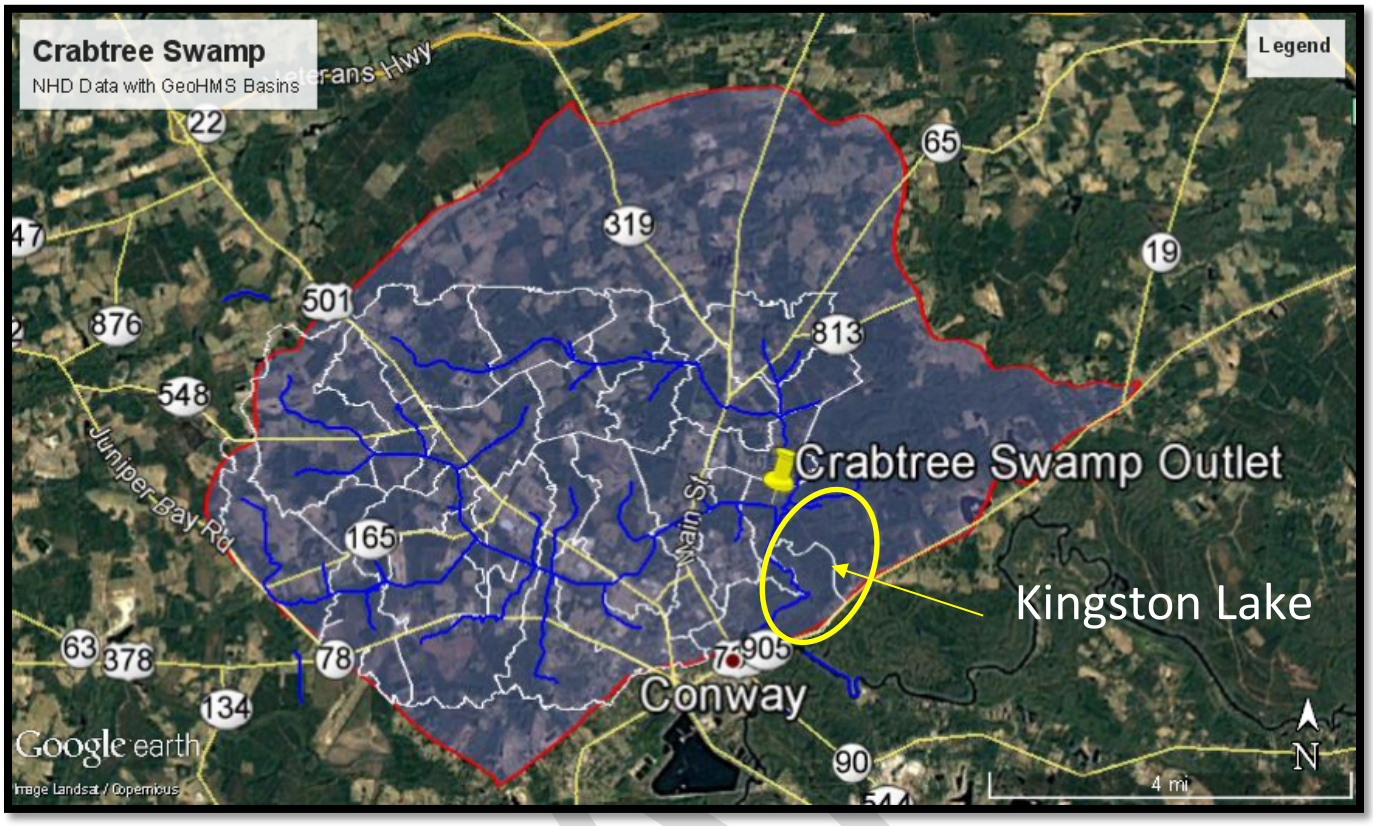


Figure 4-2 – NHD Data with HMS Basins

4.2.2 Soils

Soil maps for the HEC-HMS model were obtained through the Soil Survey Geographic Database (SSURGO 2.2) provided by the U.S. Department of Agriculture (USDA) and the NRCS at https://websoilsurvey.nrcs.usda.gov/, accessed September 2019. The majority of the project basin contained soil from the hydrologic soil group (HSG) of "Group A/D", which is sand and loamy sand, so the few areas within the project basin where soil data is not available were assumed to have the same soil type.

4.2.3 Land Cover

Land cover data for the model was acquired from the Multi-Resolution Land Characteristics Consortium (MRLC, 2001) via their National Land Cover Database 2016 (NLCD, 2016) at https://www.mrlc.gov/. The georeferenced land cover data was combined with average roughness coefficient Manning's n values for each land use, and created a map layer of georeferenced Manning's n values.

4.2.4 Percent Impervious

Percent impervious data for the model was acquired from the Multi-Resolution Land Characteristics Consortium (MRLC2001) via their National Land Cover Database 2016 (NLCD2016) at https://www.mrlc.gov/.

4.2.5 Gaged Stage and Streamflow Data

One gage is located at the downstream end of the project area in the channel at Long Avenue; USGS Gage #02110701, Crabtree Swamp at Conway, SC. This gage had almost continuous recorded stage, streamflow, and rainfall data from February 2000 to present. The rainfall and streamflow data was used to calibrate and verify the hydrology model. The data for this was obtained from:

https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=02110701

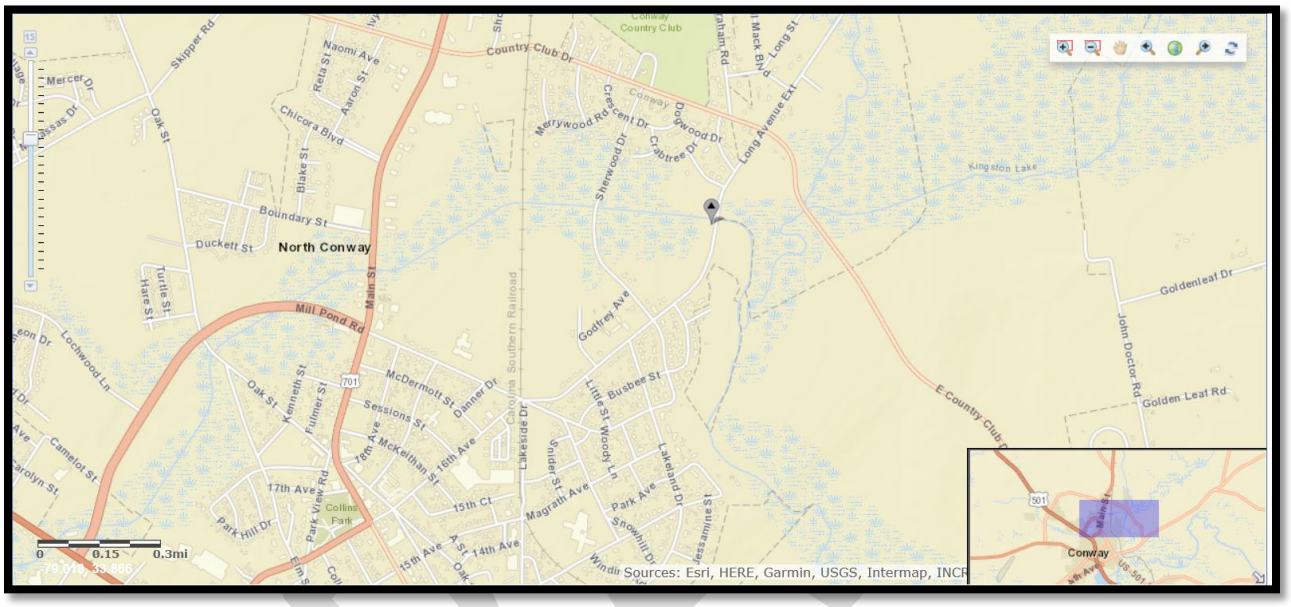


Figure 4-3 – Location of USGS Gage #02110701.

4.2.6 Rainfall

As stated in Section 4.2.5, historic rainfall data for model calibration was obtained at United States Geological Survey, National Water Information System: http://maps.waterdata.usgs.gov/. Rainfall records from Hurricane Dorian at the 15-minute interval were used to calibrate the hydrology model, and rainfall records from Hurricane Florence were used for model verification.

All synthetic rainfall estimates were developed using NOAA's Atlas 14 point rainfall maps, at https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=sc.

4.2.7 Loss Method

For this study, Soil Conservation Service (SCS) curve numbers (CN) were used for loss calculation. The curve numbers were developed in GeoHMS.

First, the land cover provided by the National Land Cover Data (NLCD 2016), and soils map from the SSURGO 2.2 dataset were processed to be compatible, spatially, relative to the project area, within GeoHMS. Any unknown areas as identified by the soils map were assumed as "Group A/D" type soil, as that was a large portion of the known soil types. Next, the percent impervious areas, as provided by the Multi-Resolution Land Characteristics Consortium

(MRLC 2016), was extracted for each subbasin, also using GeoHMS tools. The curve numbers were then calculated in GeoHMS by relating soil types and land use data for each subbasin. Finally, the total runoff losses were then developed from the composite CN (land use and soil types) and the percent imperviousness.

4.2.8 Transform Method

The transform method, the actual surface runoff calculation, chosen for this study was the SCS Unit Hydrograph Transform using the "standard" shape (i.e., a unit hydrograph shape factor or "484"). The lag time, defined as approximately 60% of the time of concentration, was calculated within the GeoHMS tool using stream lengths, stream slopes, and each subbasin's hydraulically longest flow path.

4.2.9 Routing Method

The method used to route the water was Muskingum-Cunge with slopes and lengths of reaches calculated by the GeoHMS tool and the LiDAR. A Manning's roughness coefficient of 0.10 was chosen initially to represent heavy vegetation (but was calibrated to 0.15), along with a trapezoidal channel with 50 ft bottom width and 5H:1V side slopes. The roughness coefficient Manning's n value was used as a calibration variable.

4.2.10 Calibration and Verification

The HMS model was calibrated and verified for flows at USGS Gage #02110701 (USGS #0701), located at the downstream end of the project area. The HMS model was calibrated to Hurricane Dorian, which occurred September 4-6, 2019, and produced peak flows of 1,520 cubic feet per second (cfs) at the USGS #0701. Sensitivity of lag, CN, Manning's coefficient, initial abstraction, and the transform method were adjusted to achieve calibration. The results presented in this report are final despite possible timing and recession discrepancies. These discrepancies are likely due to spatially varying rainfall and therefore spatially varying initial abstraction, a lumped model approach, and SCS methodology limitations. For example, the basin received some rainfall in the days preceding Hurricane Dorian, as recorded at USGS #0701 at the downstream end of the project area. However, this gage may have recorded isolated rain events that were not evenly spread throughout the entire basin, or at the same time. Additional effort to calibrate the model to the USGS #0701 gage were limited due to the uncertainty of the spatial variability of observed rainfall upstream in the basin.

Comparison of observed discharge and simulation data allows a direct evaluation of model performance. This comparison begins with hydrograph comparison, and is completed using the statistical measures Nash-Sutcliffe (NSE) and volume residual to quantitatively compare the hydrologic simulation results to determine if the model was adequately calibrated and validated. The NSE is a normalized statistic that determines the relative magnitude of the residual variance compared to the observed data variance and indicates how well the plot of the observed data versus the simulated data matches a 1:1 line (Wang et al., 2009). The ranges for NSE can vary between $-\infty$ to 1, where:

- NSE=1 corresponds to a perfect match between discharge data and observed data;
- NSE=0 shows that the model predictions are as accurate as the mean of the observed data; and
- NSE<0 occurs when the observed mean is a better predictor than the model, which indicates unacceptable performance.

The statistical thresholds for calibration and validation was to achieve above a NSE value greater than 0.5.

The volume residual function is implicitly a measure of the comparison of the runoff volume of the two hydrographs (the computed runoff and the observed gage runoff) and is calculated by the computed volume minus the observed volume. A positive value represents a higher overall computed volume compared to the observed gage, whereas a negative value represents a computed volume less than observed. The goal of calibration was to minimize the volume residual as much as possible. In hydrologic modeling, both positive and negative differences are equally as undesirable and therefore the magnitude of difference is the focus.

The calibration error statistics are shown in Table 4-2; all flows are in cubic feet per second (cfs). The modeled outflow hydrograph, plotted with observed flows, is shown in Figure 4-4. The black line is the observed flow, the solid blue line represents the flow at the model outlet, the dashed blue line represents the outlet flow contributed by the channel, and the dotted blue line represents the outlet flow contributed by the subbasin. The peak flows match in timing at all three peaks, but the magnitude of the first peak is under predicted, indicating the initial loss parameter is under predicting, despite a conservative initial abstraction value of 0.2.

Table 4-2 – HMS Calibration Statistics.

Statistic Name	Description	Statistic Result
Peak Discharge	Peak observed discharge	1520.0 cfs
Mean Absolute Error	Mean difference between observed and calculated flows	93.8 cfs
RMS Error	Mean of the squared difference between observed and calculated flows	135.2 cfs
Nash-Sutcliffe	How well the plot of the observed data versus the simulated data matches 1:1	0.941
Volume Residual	Comparison of runoff volume	0.02 inches

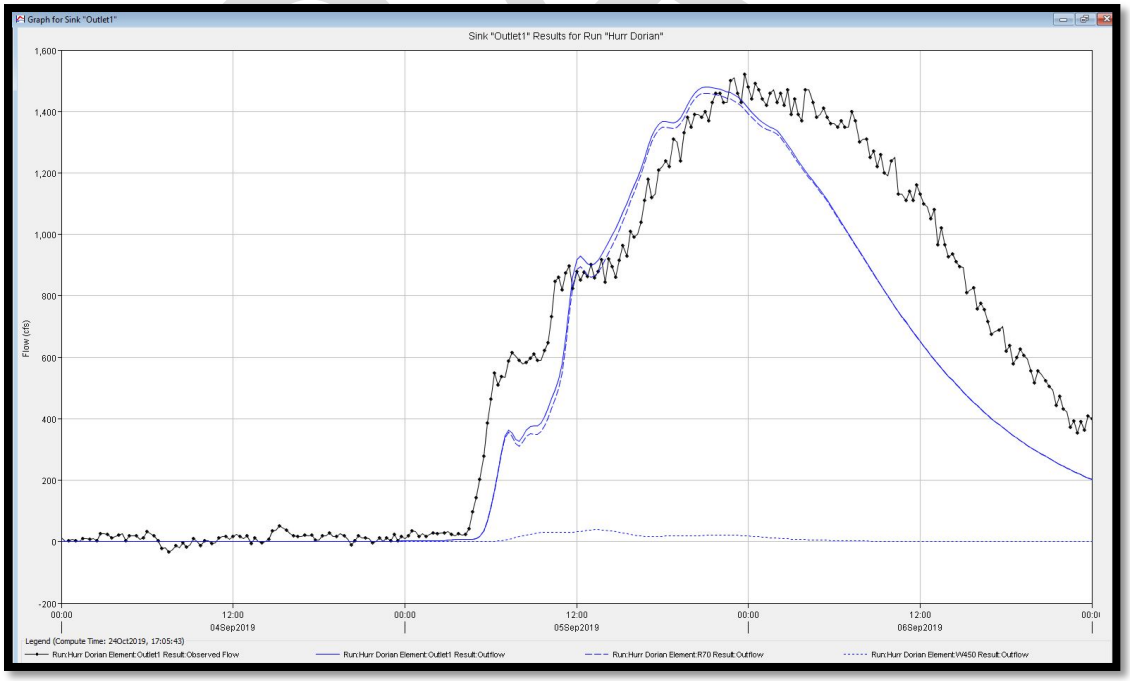


Figure 4-4 – Calibration Hydrograph (Legend Explanation in Preceding Paragraph).

Following calibration, the model was verified using Hurricane Florence, which occurred September 14-16, 2018. To obtain verification for Hurricane Florence, the initial abstraction values were changed in the basin models

due to differing antecedent basin conditions. The basin had received some rain in the days leading up to Hurricane Dorian, so the conservative initial abstraction default value of 0.2 was appropriate. However, Hurricane Florence hit the basin under dry antecedent conditions, so higher initial abstraction values between one and five were used to represent soil storage during the beginning hours of the storm. The verification statistics are shown in Table 4-3, and the verification hydrograph is shown in Figure 4-5. The black line is the observed flow, the solid blue line represents the flow at the model outlet, the dashed blue line represents the outlet flow contributed by the channel, and the dotted blue line represents the outlet flow contributed by the subbasin. Despite increasing the initial abstraction to indicate more soil storage at the beginning of the storm the model over predicted the initial peak flow, but the peaks line up nicely, indicating roughness values and lag are correct. It is important to note that the stages at the gage (the downstream end of the model) were extremely high during Hurricane Florence, limiting the flow at this point. Due to HMS limitations that do not include tailwater conditions in the calculation, this explains why the model over predicts the flowrate during high tailwater conditions. To remain conservative, the Hurricane Dorian basin model with the initial abstraction values of 0.2 was used as the calibrated model to run the synthetic storms. It is also important to note that the flows in the RAS model had better verification results for the same storm.

Table 4-3 – HMS Verification Statistics.

Statistic Name	Description	Statistic Result
Peak Discharge	Peak observed discharge	1040.0 cfs
Mean Absolute Error	Mean difference between observed and calculated flows	161.2 cfs
RMS Error	Mean of the squared difference between observed and calculated flows	226.8 cfs
Nash-Sutcliffe	How well the plot of the observed data versus the simulated data matches 1:1	0.712
Volume Residual	Comparison of runoff volume	0.02 inches

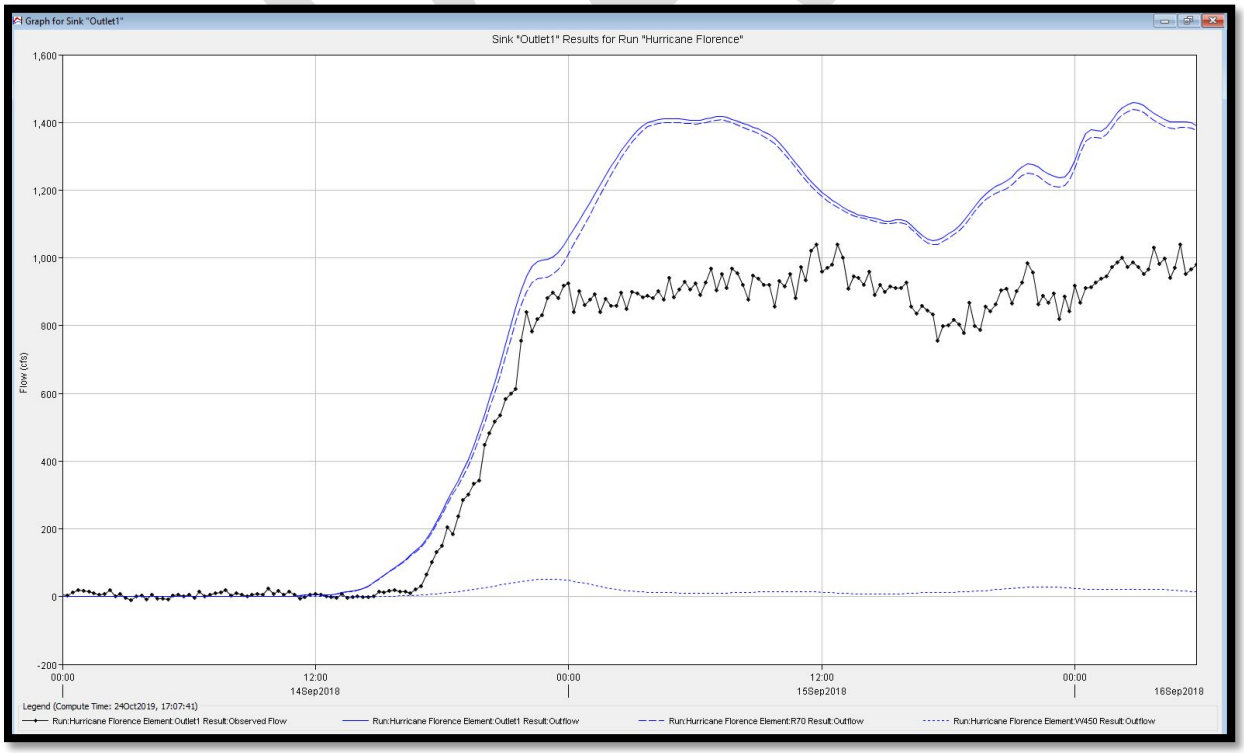


Figure 4-5 – Verification Hydrograph (Legend Explanation in Preceding Paragraph).

4.2.11 Synthetic Storm Events

All synthetic storm events and associated rainfall depths are shown in Table 4-4. All were developed using NOAA's Atlas 14 frequency maps, except for the 3-yr or 33% Annual Exceedance Probability (AEP) storm. Since NOAA does not provide a rainfall depth for the 33% AEP storm, it was interpolated using the data in Table 4-4. According to the curve, shown in Figure 4-6, the rainfall depth for the 33% AEP storm is 4.8 inches.

Table 4-4 – Synthetic Rainfall Totals.

Statistical Recurrence	Annual Exceedance Probability (AEP)	Storm Duration, hours	Simulation Length, hours	Total Rain, inches
1-Year Storm	100%	24	72	3.44
2-Year Storm	50%	24	72	4.18
3-Year Storm	33%	24	72	4.8
5-Year Storm	20%	24	72	5.4
10-Year Storm	10%	24	72	6.41
25-Year Storm	4%	24	72	7.86
50-Year Storm	2%	24	72	9.08
100-Year Storm	1%	24	72	10.4

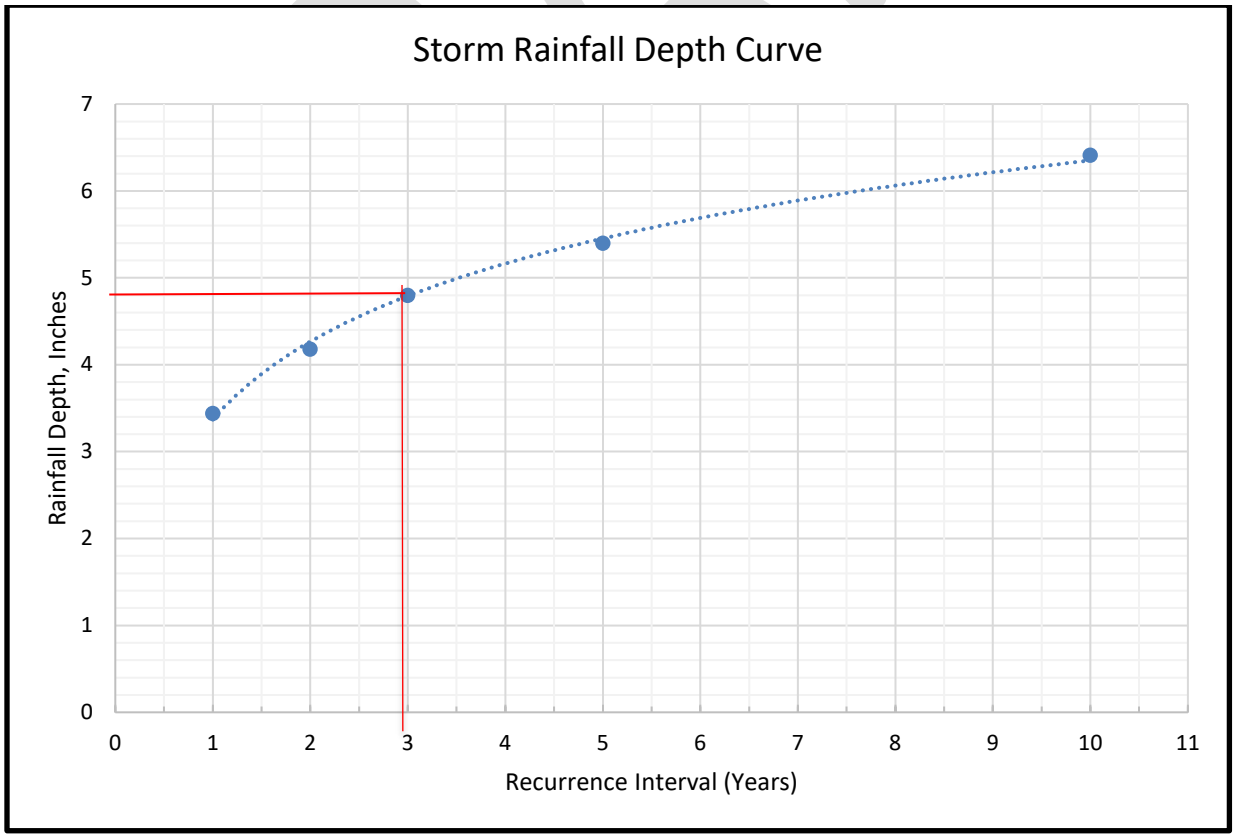


Figure 4-6 – Storm Rainfall Depth Curve

Hourly rainfall hydrographs were calculated from the rainfall totals using the Fourth Quartile, 90% duration temporal distribution hydrograph template provided by the same source. Hydrologic loading conditions have historically been referred to by their statistical frequency, and will therefore be referred to as such in this appendix.

5.0 Hydraulic Model Development

5.1 General Methodology

The purpose of the hydraulic study is to evaluate impacts of the alternatives to flood stages by applying the latest topographic data, hydrology records, land uses, and hydraulic modeling techniques. The Hydrologic Engineering Center's River Analysis System (HEC-RAS), version 5.0.5, June 2018, hydraulic model was used to route synthetic flood hydrographs through the project area.

5.2 Development of the HEC-RAS Pre-Project Model

The team determined that no management measures could be implemented in the channel between Rose Moss Road and Daniel Road. Therefore, the HEC-RAS model includes 5.63 miles of channelbed from Daniel Road to Kingston Lake. A digital terrain model (DTM) was created in RAS Mapper within HEC-RAS, using the LiDAR data, onto which the features were generated by digitizing the channel, cross sections, and 2D flow areas (wetlands). A majority of the project area is made up of wetlands that contain small tributaries flowing into the Crabtree Swamp channel, but which capture floodwaters when the channel overtops its banks. Based on this bi-directional flow that occurs during a large storm event, 2D flow areas were used to represent the wetlands. All this geo-referenced data created the geometry file in HEC-RAS, and the channel geometry was added from data collected in the field, as LiDAR does not reflect ground elevations below the water line. Both the NRCS hydrographic survey data channel centerline data from the Federal Emergency Management Agency (FEMA) Flood Insurance Study were outdated, and no longer represented the actual channel inverts or geometry. These Existing Conditions (EC) model features were used for calibration. Two invert difference examples are displayed in the following five figures. Figure 5-1 shows the channel centerline invert as shown in the FEMA Flood Insurance Study (FIS) (FEMA 2015); note that two of the channel locations are labeled points A and B as indicated by the blue arrows. Figure 5-2 shows the corresponding location at point A in the model, and Figure 5-3 shows the associated model cross section created from LiDAR data at point A. Figure 5-4 and Figure 5-5 show the same data for point B. The gray line beneath the water is the original LiDAR terrain, and represents the channel embankment with the water surface at the lowest point. The straight trapezoidal lines represent the channel template cut into the cross sections based upon water depth data collected in the field, and can be ignored in this analysis. The important thing to note is that the lowest LiDAR embankment elevation (above the water) is lower than the FEMA centerline, indicating scour has occurred in the channel after development of the FEMA model. A comparison of the approximate elevations are presented in Table 5-1. All approximated elevations are in feet-NAVD88.

Table 5-1 – FEMA vs LiDAR Channel Elevations

Cross Section Point	FEMA Channel Elevation	LiDAR Channel Elevation
A	4.0 ft-NAVD88	3.0 ft-NAVD88
B	4.2 ft-NAVD88	3.2 ft-NAVD88

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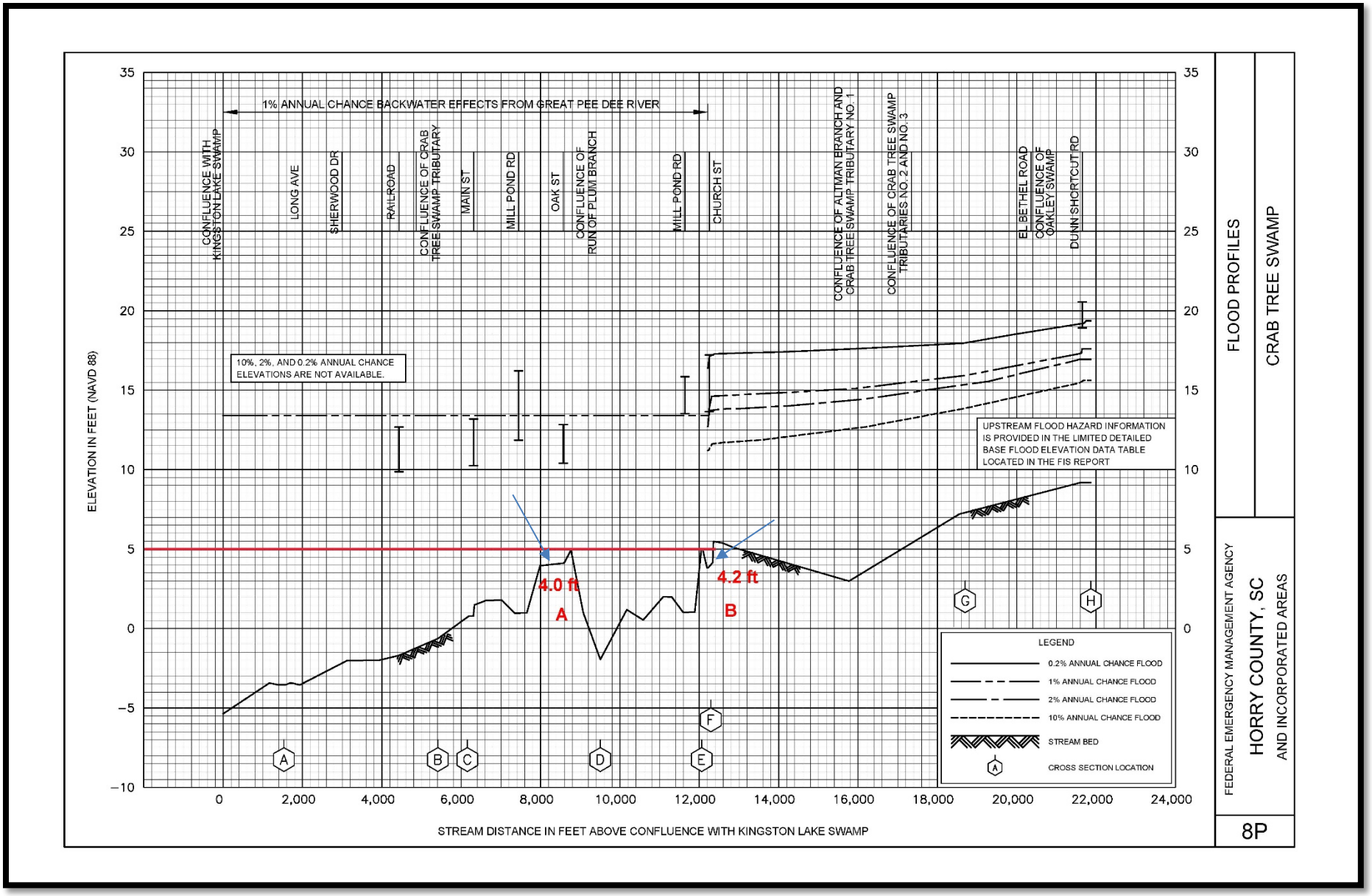


Figure 5-1 – FEMA Channel Centerline Invert

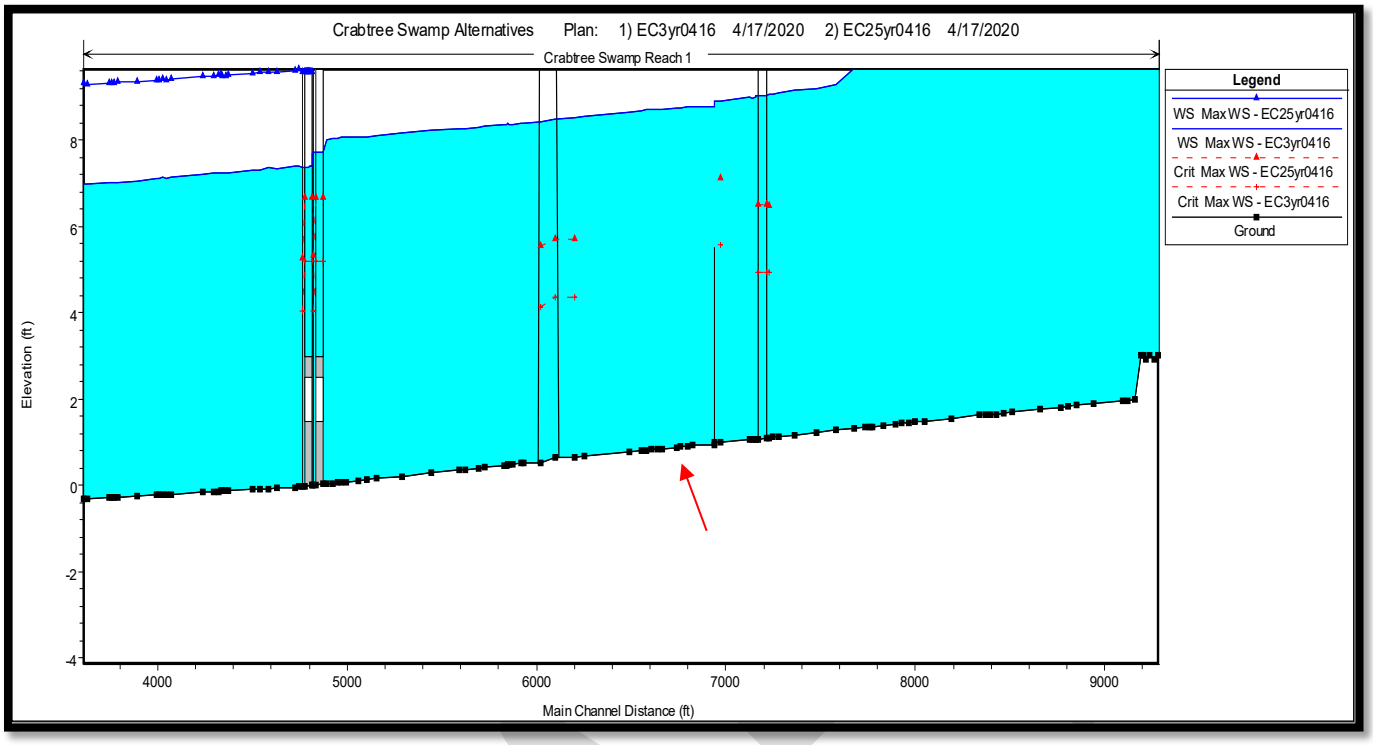


Figure 5-2 – Location A in Channel

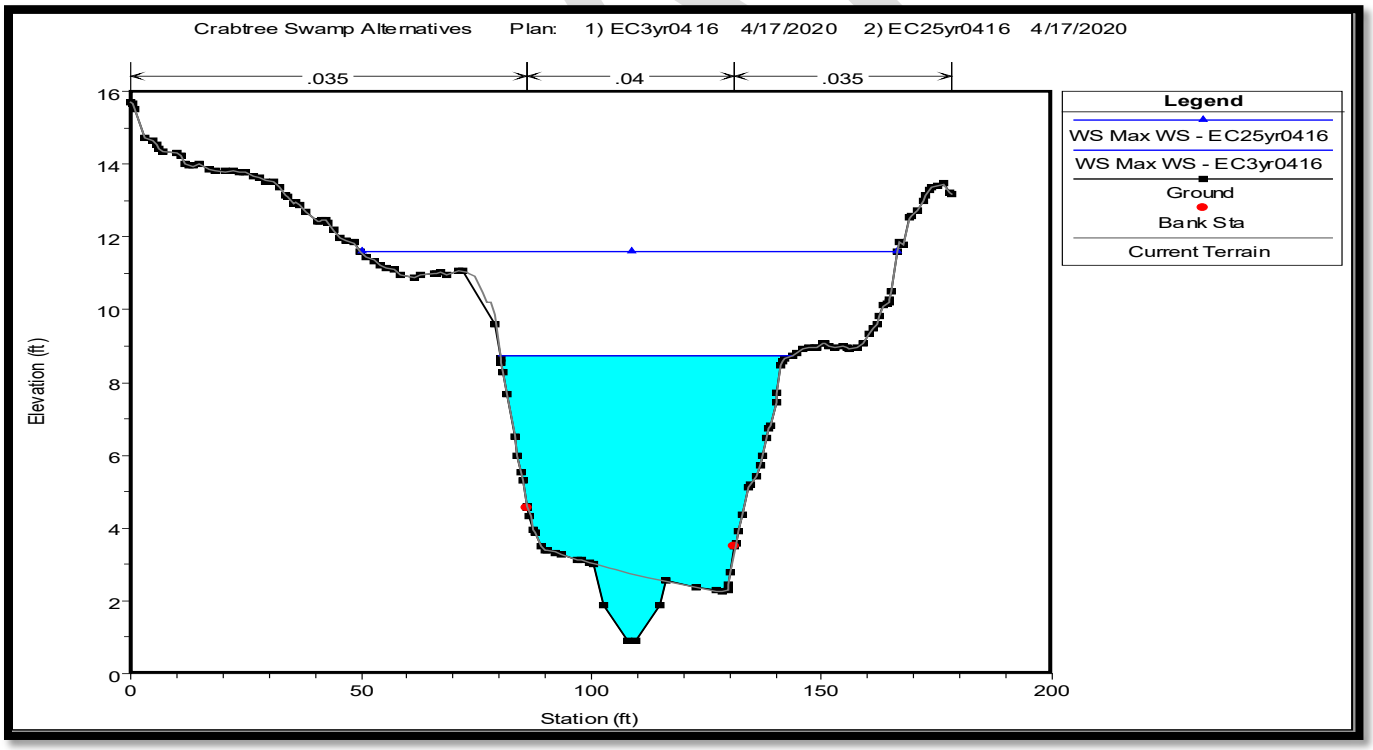


Figure 5-3 – Location A LiDAR

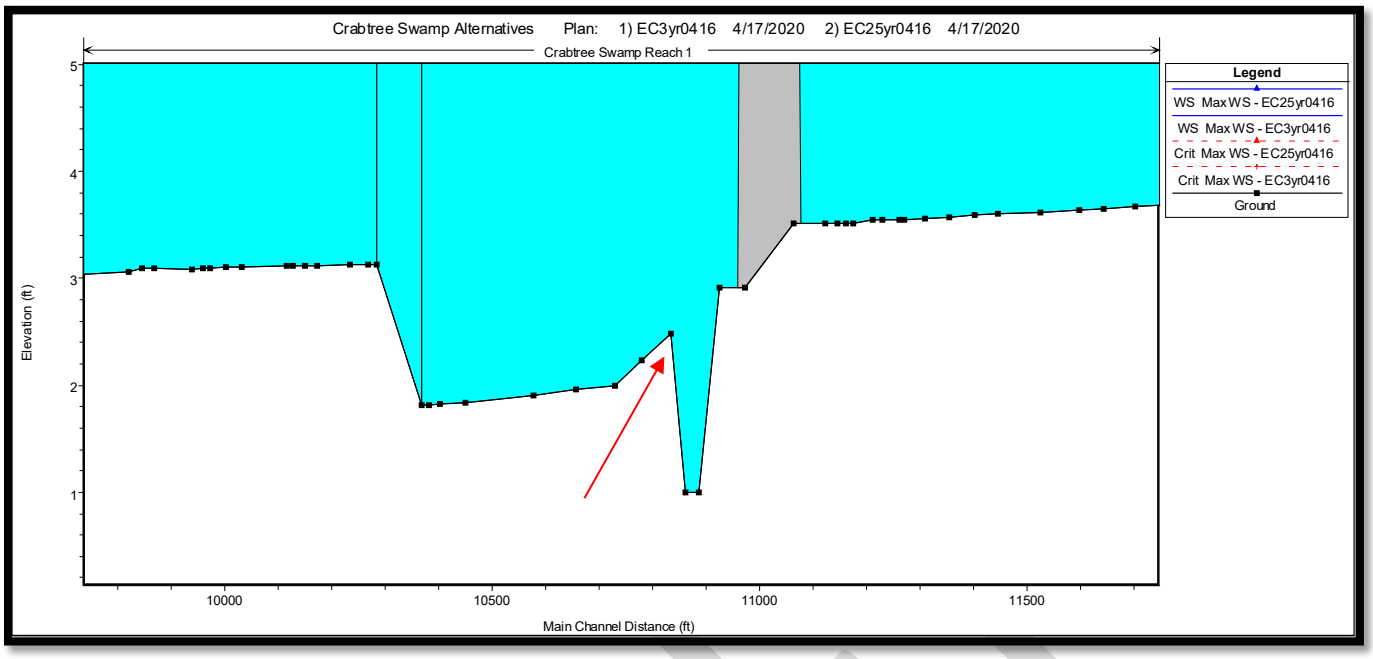


Figure 5-4 – Location B in Channel

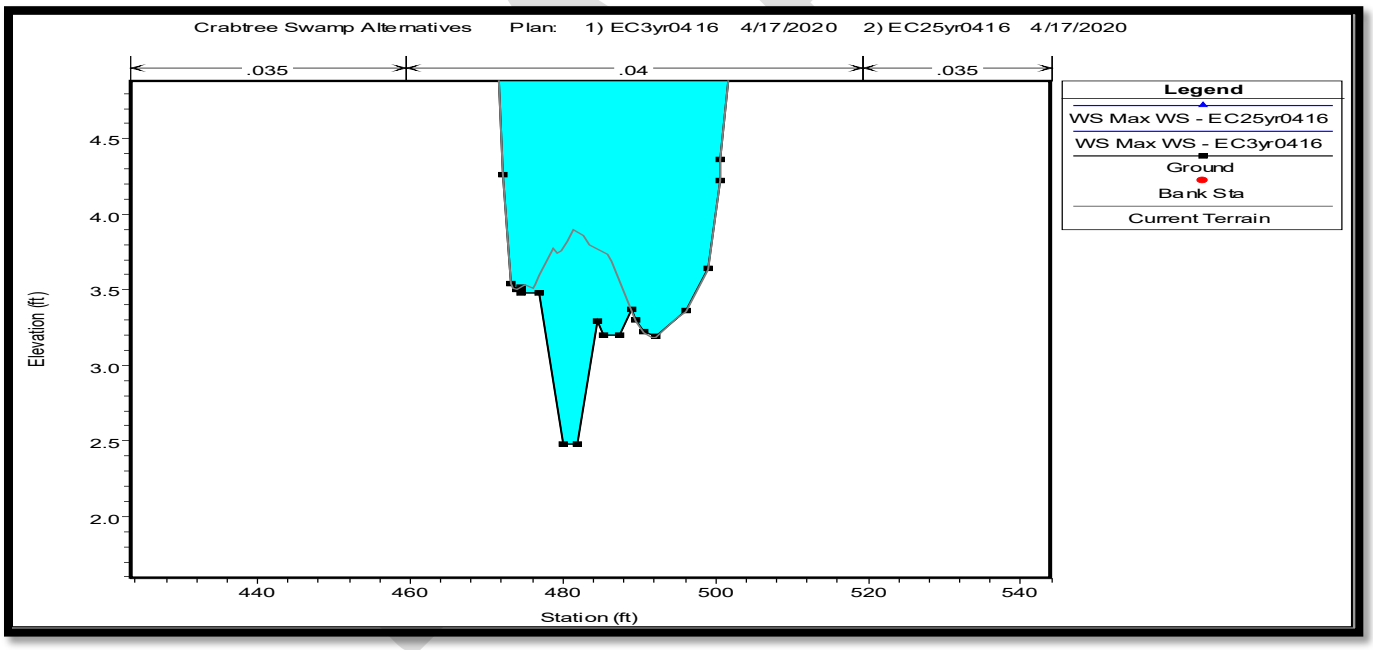


Figure 5-5 – Location B LiDAR

5.2.1 Tributaries

Tributaries in the project area flow through wetlands, so they were represented within the two-dimensional (2D) flow areas within the model. The flow hydrographs from HMS were added as flow change locations within the one-dimensional (1D) channel at each tributary confluence, with two exceptions. Due to the fact that the wetlands flanking each side of the channel between Highway 701 and Long Avenue are adjacent to flood-prone

neighborhoods, and the flooding and stages in this wetland are driven more by rainfall then channel overflow, the inflows from these areas are represented by rainfall added to the 2D area, then flowing into the 1D channel.

5.2.2 Roughness coefficient Manning's "n" Values

The roughness coefficient Manning's n values for the 2D flow areas were obtained by importing the georeferenced Manning's n values layer created from the land use data, as discussed in Section 4.2.3.

In the 1D channel, all cross-sections were fairly narrow, and contained three roughness coefficient Manning's n values: left overbank (LOB), channel, and right overbank (ROB). Roughness coefficient Manning's n values for the main channel were estimated according to channel and embankment conditions observed during field visits, as per the values presented in Open-Channel Hydraulics (Chow, 1959).

Table 5-2 - Roughness coefficient Manning's n Value Ranges Applied.

Channel Description	Location	n Value Range	n Value Applied
Clean, winding, some pools and shoals	Channel	0.035 - 0.045	0.040
Clean, straight, full, no rifts or deep pools, but with stones and weeds	Overbanks	0.030 – 0.040	0.035

5.2.3 Bridges and Culverts

The model included 13 bridges and two large in-line culverts. These were digitized first in RAS Mapper to ensure proper location in the geometry, and piers and abutments were added to each bridge, based upon SCDOT-furnished data or field observation.

5.2.4 Lateral Structures

Lateral structures were used to connect the 1D channel with the 2D flow areas. The 1D cross sections were digitized bank to bank from and to high spots. The 2D flow areas were then digitized along the cross section ends. Lateral structures were digitized along the 2D area edges that connect to the 1D channel cross sections. The tailwater conditions for each lateral structure is the adjacent area.

5.2.5 Inline Structures

Inline structures with culverts were used to represent culverts within the Crabtree channel. Inline structures were used to represent existing weir-like structures in the channel, such as the existing rock grade control structures and the two natural drop structures shown in Figure 5-6.

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Figure 5-6 – Existing Obstructions of Unknown Origin.

5.2.6 Two-Dimensional (2D) Flow Areas

Two-Dimensional (2D) flow areas were used to represent wetlands and low-lying overbank areas. The geometry file is shown in Figure 5-7. Red lines were added to show the extent of each reach.

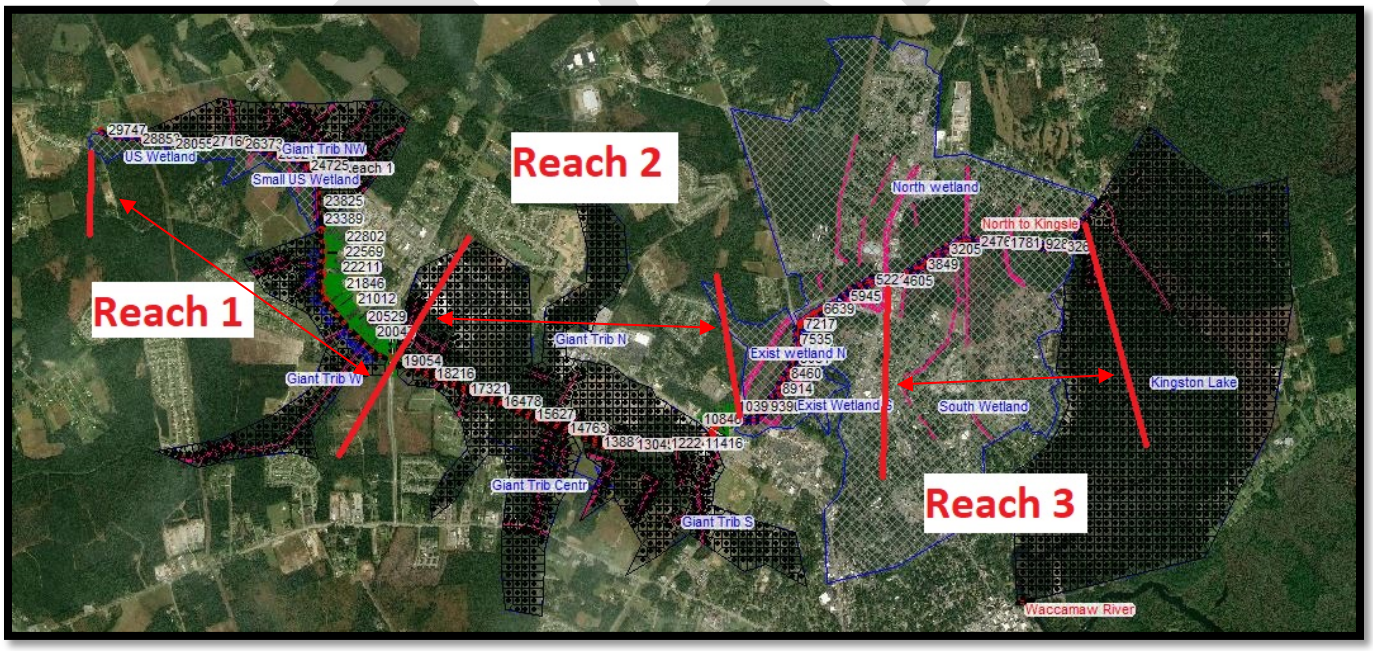


Figure 5-7 – HEC-RAS Geometry.

5.2.7 Boundary Conditions

The downstream boundary condition for the 1D channel just downstream of Long Avenue is Kingston Lake, and the downstream boundary condition for Kingston Lake is the Waccamaw River. A USGS stage gage is located at both locations. The observed stages at Waccamaw River (essentially tide) were used as a downstream boundary condition, and the observed stages Long Avenue were used to calibrate the 1D model. Since the observed stages at Long Avenue are the only observed stages available within the project area for calibration, they could not be used as the boundary condition stages.

The upstream boundary condition applied included flow hydrographs at the upstream end of the channel, representing the runoff hydrograph from upstream basins. Runoff from the basins along the project channel, except for the reach downstream of Highway 501, were represented by lateral inflow hydrographs. The locations of these inflows were determined based on tributary and culvert locations. All flow hydrographs were obtained from the hydrology modeling presented in Section 3 of this report.

Along the reach downstream of Highway 501, inflows were represented by adding rainfall to the 2D flow areas, and allowing for natural outflow into the channel. This was done as stages within this wetland were driven more by rainfall than channel overflow. This also helped with model calibration. This was not done for all the other 2D flow areas due to the level of detail required to represent all culverts within each wetland. This would result in a much larger scope for this modeling exercise that is not supported by the CAP schedule and budget.

5.3 Model Calibration and Verification

Stage and flow data from USGS Gage #02110701, located at the Long Avenue Bridge, was used for the RAS model calibration. This gage contains almost continuous flow data from February 2000, and continuous stage data from January 2014 to present. The recorded (observed) stage and flow data were used for calibration and verification of the HEC-RAS model. Like the HMS model, the RAS model was calibrated to Hurricane Dorian, and verified using data from Hurricane Florence.

However, some data deficiencies did exist that resulted in calibration challenges. The stage data is derived from the recorded “Gage Height” in feet, which is defined as “the height of the water surface above the gage datum (zero point)” (USGS 2019). Thus, gage heights are not stage elevations, and must be corrected. The observed stages generally ranged between 12.0-ft NAVD and 13.5-ft NAVD, which is higher than the ground elevation, which ranges between 8.0 and 10.0-ft NAVD at the top of the berms on each bank. The site discription also includes “Datum of gage: 10 feet above NGVD29” (National Geodetic Vertical Datum of 1929), as presented in Figure 5-8. During a site visit on 04 December 2019, the stage was observed to be approximately 6.25 feet below the road deck on the Long Avenue bridge. The bridge deck is at approximately elevation 9.5-ft NAVD, resulting in a stage elevaion of 3.25-ft NAVD. The stages recorded at the USGS gage during the time of the site visit ranged between 11.31 and 11.39-ft NAVD. Therefore, the actual conversion is gage height - 8.1 feet.

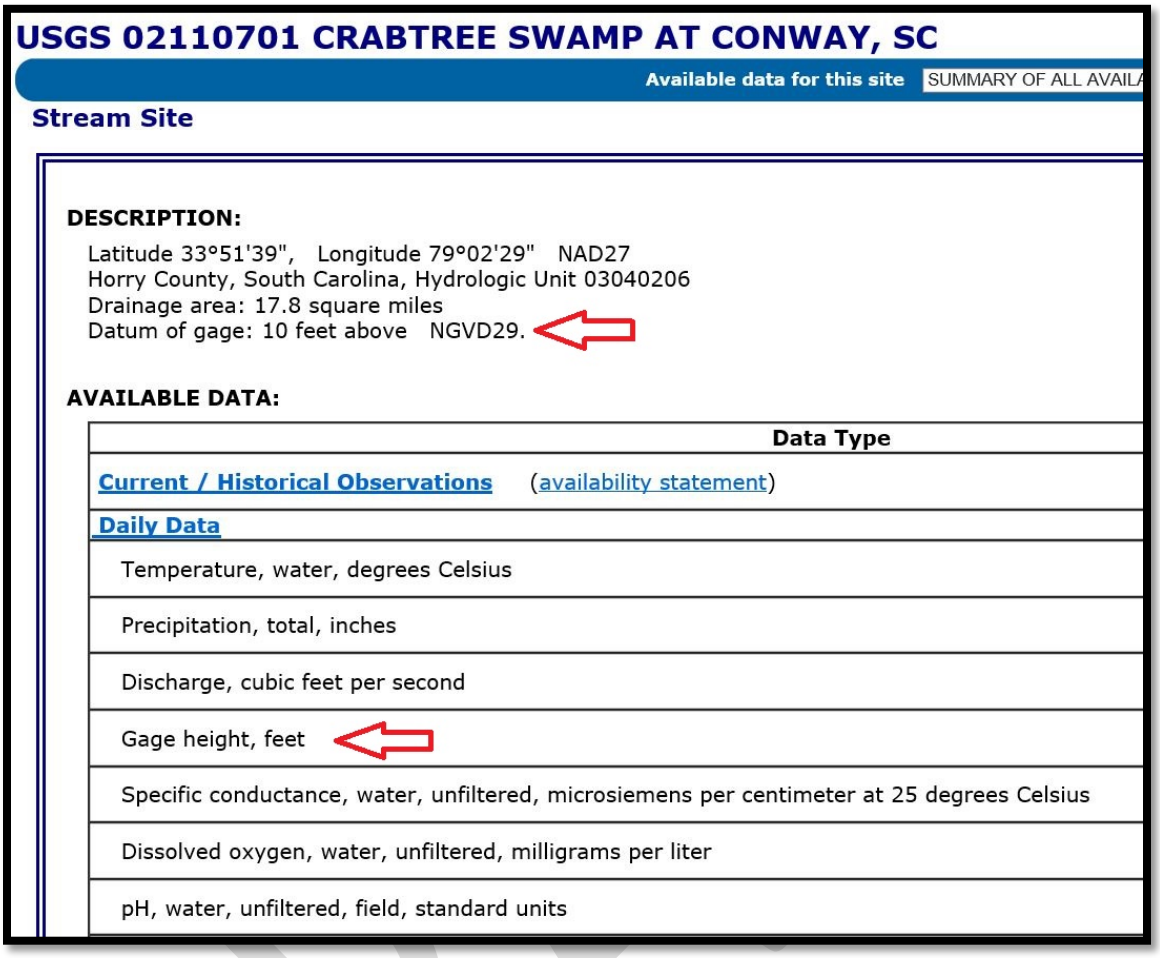


Figure 5-8 – USGS Gage Information.

Given the known bank elevations from the LiDAR, it was obvious that the raw gage height data was not corrected for stage elevations, and the datum of gage value could not be used to calculate the corrected stage elevations. Thus, field measurements had to be used to calculate the stage elevations from the gage height data. During a site visit, the distance between the bridge deck and the water was measured. Given the known bridge deck elevation from LiDAR, and the recorded gage height at the same date and time, the correction of subtracting 8.1 feet resulted in relatively accurate stage. Given the LiDAR deck elevation was in NAVD88, applying the correction this way resulted in the stages in the same vertical datum.

Once representative stage elevation data was calculated, the following was adjusted in the model to achieve calibration:

- 2D flow area representation (adding breaklines, adjusting mesh, adding rainfall to downstream wetland),
- 2D storage connections,
- Initial conditions within the 2D flow areas,
- Downstream boundary conditions,
- Lateral weir coefficient,
- Calculation options and tolerances (mixed flow regime, initial ramp up time), and
- Roughness coefficient Manning's n value in channel and in Kingston Lake.

- Due to actual storm surge experienced during Hurricane Dorian that could not be used as a downstream boundary condition, the modeled stages at Long Avenue would not get high enough to match the corrected stage values.

The downstream boundary condition posed a calibration challenge as well. Since stage was one of the criteria used to determine calibration, this could not be used as a boundary condition for the 1D. Thus, the downstream boundary condition of "Normal Depth" was used for the 1D channel, with a slope of 0.0001, to represent the relatively flat terrain. The channel discharges into Kingston Lake, represented by a 2D flow area. The downstream boundary condition of Kingston Lake is the Waccamaw River, with a boundary condition of a stage hydrograph. A USGS stage gage was also located at the confluence of Kingston Lake and the Waccamaw river, but the same gage height problem existed for this data as well; but with no bridge data to be used for correction. Thus, in light of the proximity to the coast, high tide elevations were applied as the boundary condition. As such, the flow curve shape and flow values compared to observed, as was the stage curve shape (timing of peaks, slopes of stage increase and decrease). Once the model results converged on the flow and stage targets, the model was verified using Hurricane Florence. The flow and stage results more closely matched observed values.

5.4 Results

Calibration and verification results are presented in the next four figures.

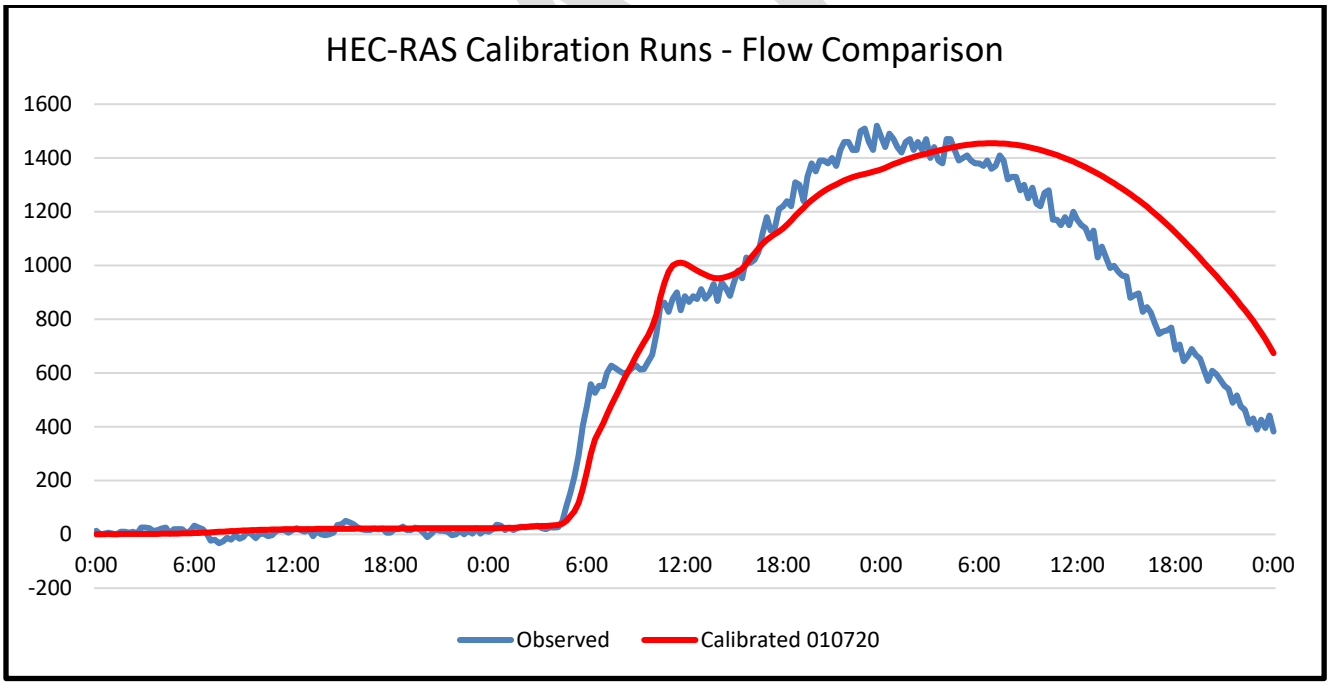


Figure 5-9 – Calibrated Flow.

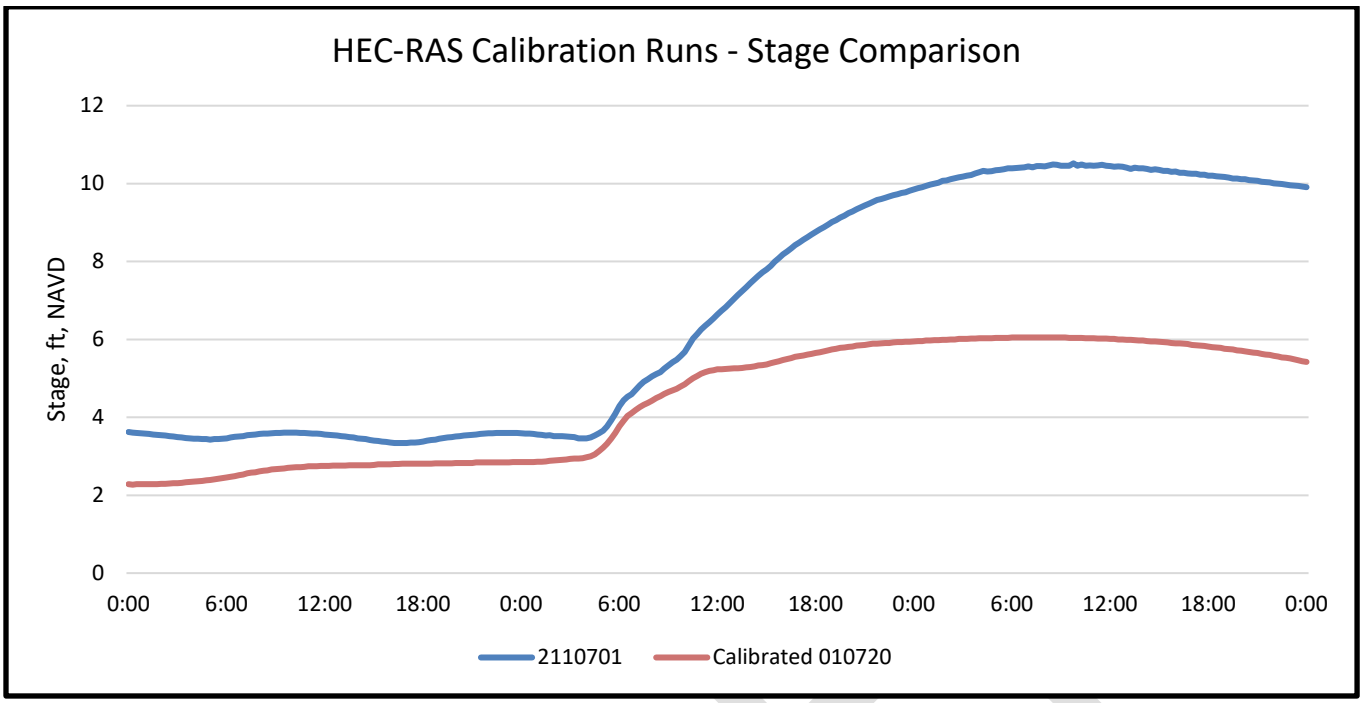


Figure 5-10 – Calibrated Stages.

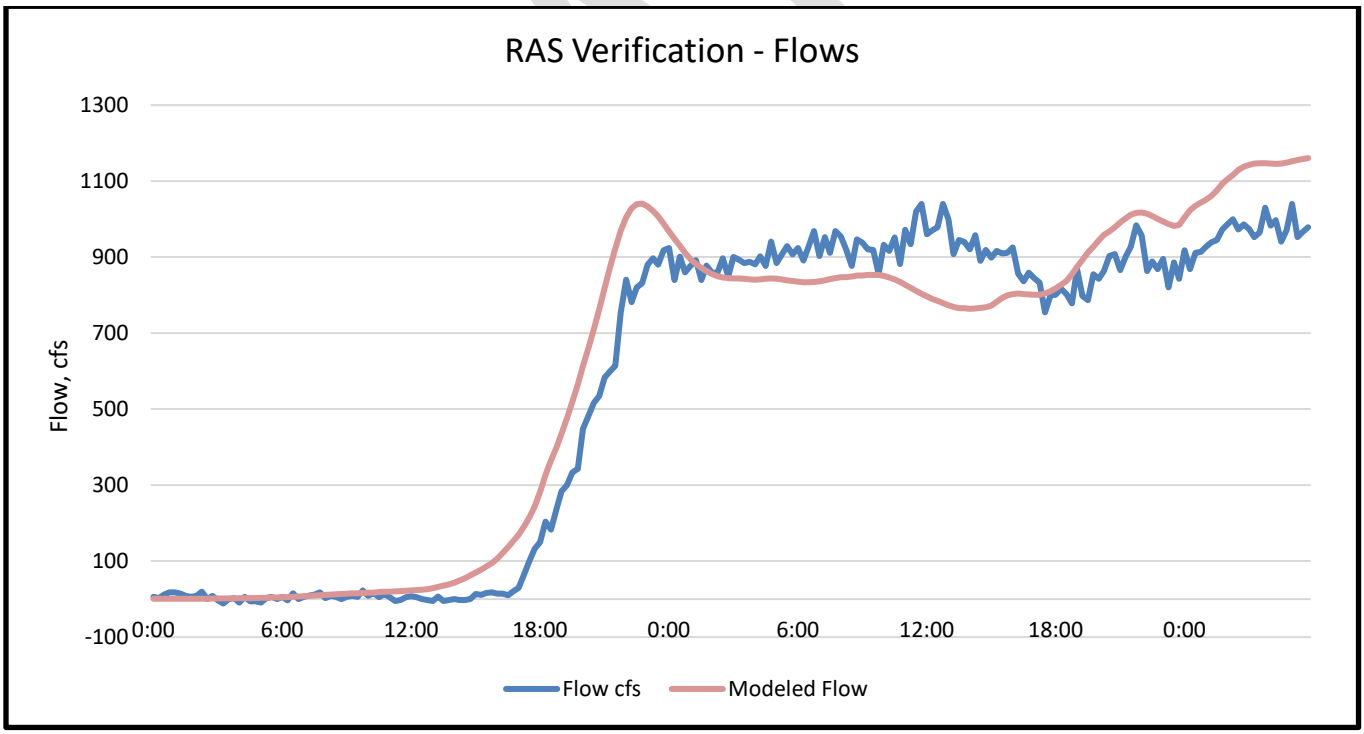


Figure 5-11 – Verification Flows.

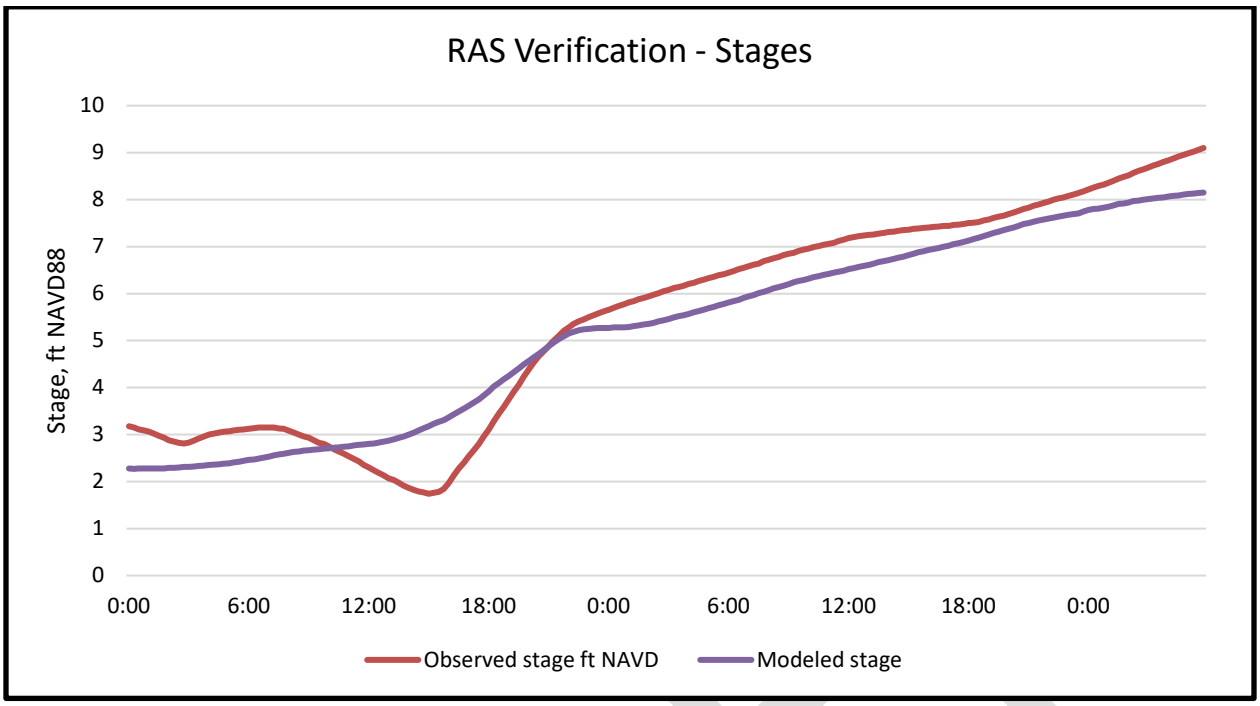


Figure 5-12 – Verification Stages.

5.5 With-Project Model Development

Each management measure was modeled individually to ascertain impacts to flood protection of each. The management measures as developed by the team, as well as their locations, are discussed in detail in the main report and in Section 2.0 of this appendix.

- Floodplain Benches
- Berm Cutting
- Log Drop Structure
- Newbury Rock Riffle Grade Control Structure
- Bank Stabilization
- Root Wads

The design of the components and their representation in the model (RAS) can best be conveyed with graphics. For ease of comparison of each components' design with their impact on flood stages, the model results for each reach are presented in this section with the description.

5.5.1 Reach 1 – Daniel Road to El Bethel Road

Reach 1 runs from Daniel Road at the upstream end of the project area to the bridge at El Bethel Road. The management measures proposed for Reach 1 included four floodplain benches (alternating banks) and a log drop structure. The component locations are shown in Figure 5-13, with the existing grade control structure locations for reference. The floodplain bench layouts are a result of maximizing the potential length possible while avoiding existing structures and utilities. Benches were placed along the bank in all locations possible to maximimze benefits. The log drop structure location is denoted by the orange line near the bottom right corner of the figure.

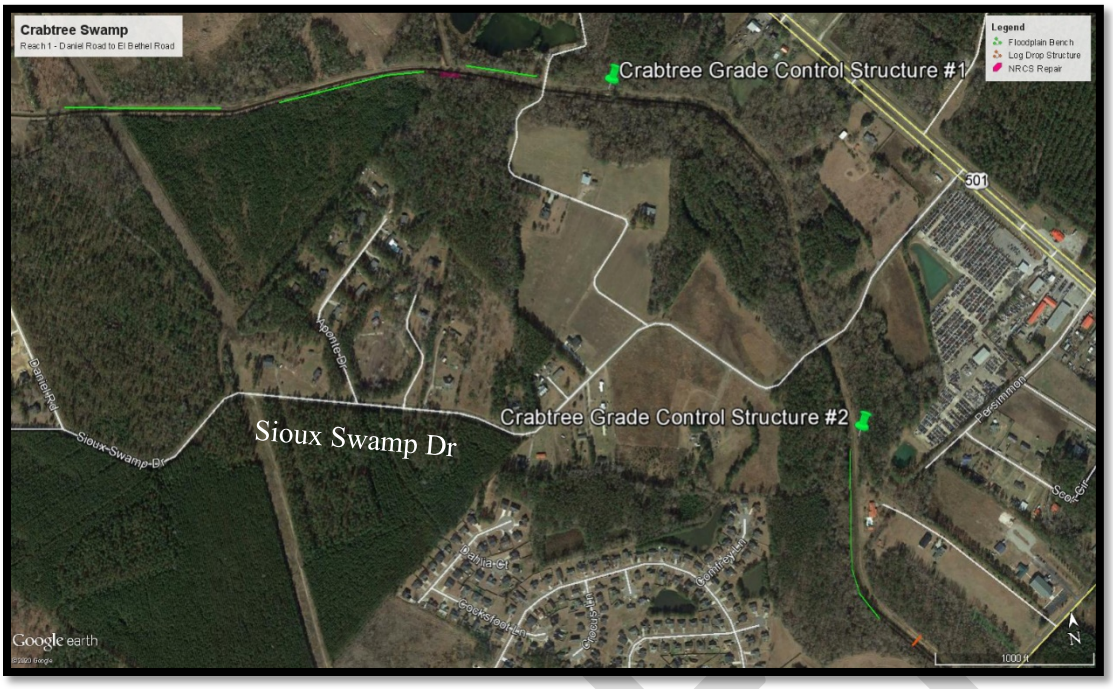


Figure 5-13 – Reach 1 Component Locations.

Figure 5-14 and Figure 5-15 show the left overbank and right overbank floodplain bench design and representation in RAS, respectively. The log grade control structure design and representation in RAS are shown in Figure 5-16.

The bench design elevation is based upon the peak 50% AEP storm elevations derived from the HEC-RAS model calibration. The peak 50% AEP storm event water stage is included in the figures to illustrate the bench elevation design. Since the floodplain bench design includes thick wetland vegetation, the Roughness coefficient Manning's n value on the benches was increased to 0.1. The volume of material to be removed was calculated using InRoads, as discussed in Section 3.0. The station and elevation data for Reach 1 floodplain benches are provided in Tables 5-3 a-d.

Table 5-3 a-d – Reach 1 Floodplain Bench Stations and Elevations

Station	WS Elev ft
28902	26.81
28853	26.63
28773	26.52
28759	26.47
28735	26.38
28666	26.33
28648	26.28
28622	26.29
28596	26.2
28478	25.99
28344	25.81
28275	25.7
28248	25.69
28235	25.66
28206	25.63
28119	25.41
28055	25.34
27986	25.27
27939	25.19

Station	WS Elev ft
27275	24.16
27166	23.96
27076	23.83
27028	23.69
26983	23.6
26883	23.48
26796	23.37
26722	23.29
26660	23.22
26565	23.14

Station	WS Elev ft
26373	23.01
26281	22.96
26195	22.86
26175	22.83
26142	22.81
26086	22.76
26025	22.69
25971	22.65

Station	WS Elev ft
22429	17.39
22387	17.33
22369	17.3
22355	17.29
22338	17.27
22265	17.14
22252	17.15
22237	17.11
22224	17.04
22211	17.07
22173	17.01
21994	16.6
21968	16.61
21953	16.6
21939	16.61
21905	16.49
21846	16.42
21825	16.43
21800	16.38
21783	16.38
21750	16.35
21694	16.28
21649	16.25
21619	16.24
21542	16.14
21436	15.97

DRAFT

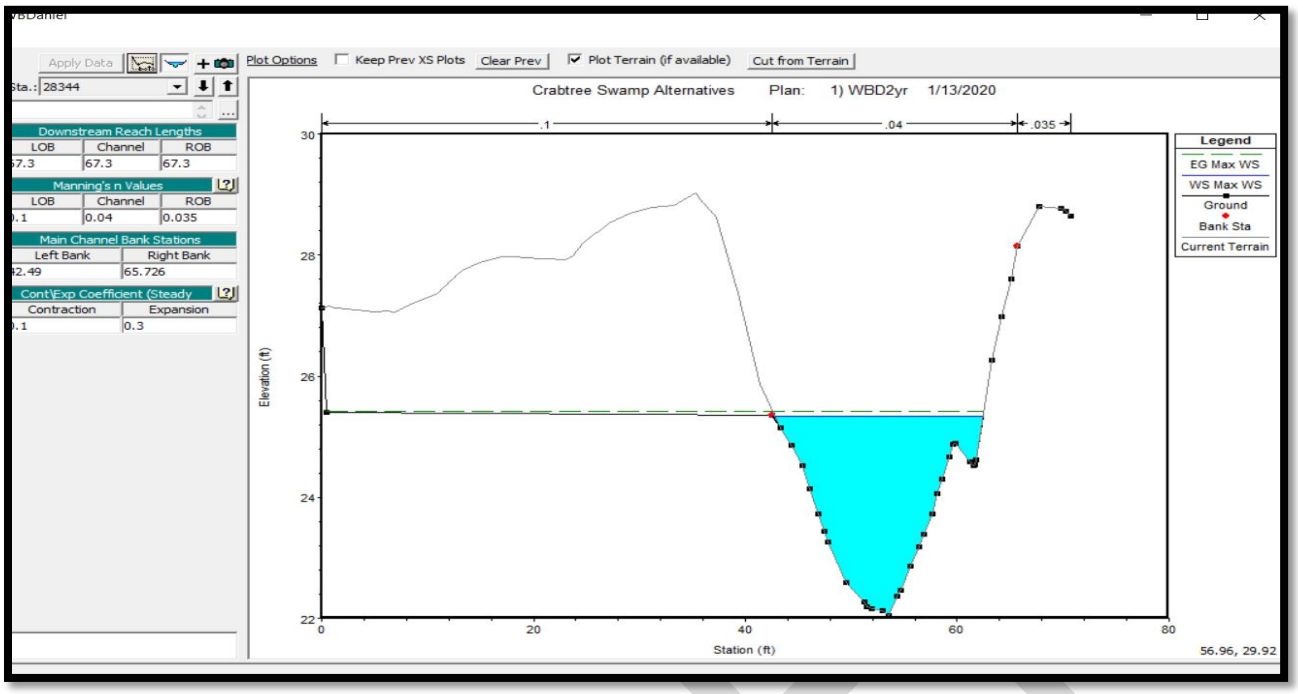


Figure 5-14 – Left Overbank Floodplain Bench in RAS.

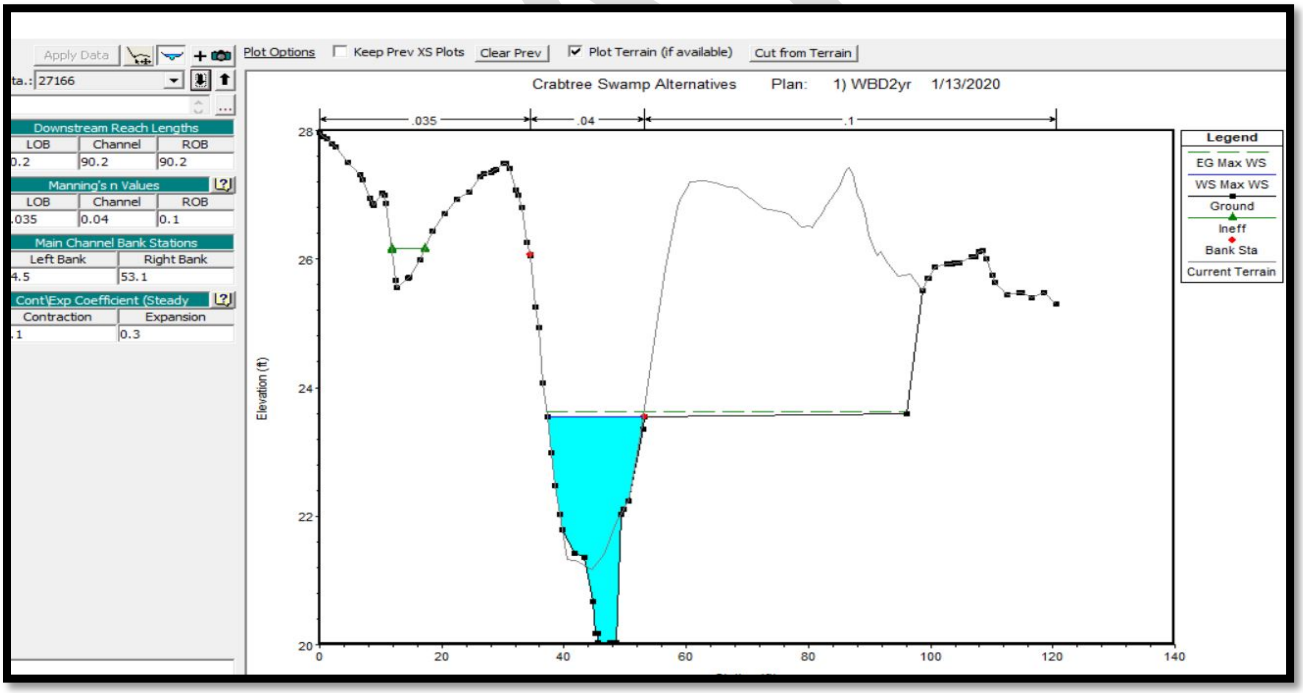


Figure 5-15 – Right Overbank Floodplain Bench in RAS.

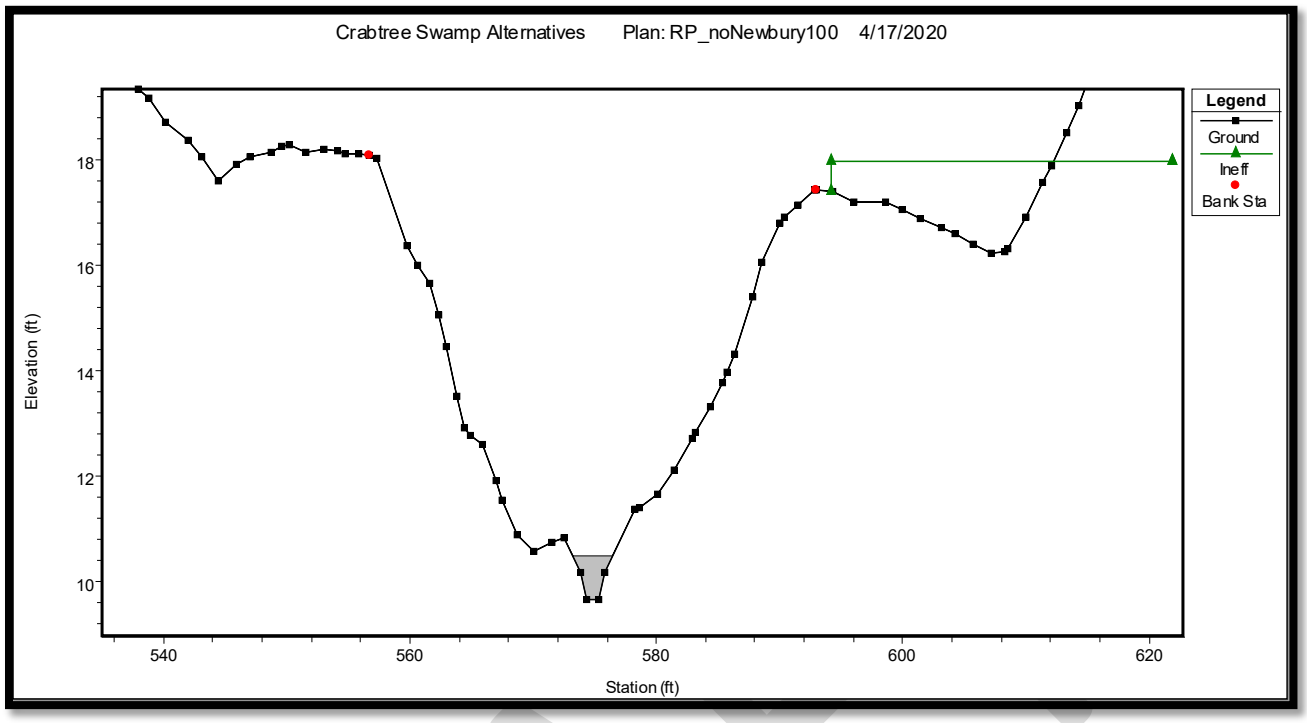


Figure 5-16 – Log Grade Control Structure in RAS.

5.5.2 Reach 2 – El Bethel Road through Highway 501 to Mill Pond Road

Reach 2 runs from the bridge at El Bethel Road through the culvert at Highway 501 to the bridge at Mill Pond Road. The management measures proposed for Reach 2 include three floodplain benches (all on the south bank), replacement of the existing natural drop structures with log drop structures, and construction of two root wads just upstream of Highway 501 (on opposite banks) with associated bank stabilization, and a Newbury rock riffle grade control structure and bank stabilization between Highway 501 and Mill Pond Road. The component locations upstream of Highway 501 are shown in Figure 5-17. A detail of the root wad and associated bank stabilization placement is shown in Figure 5-18 (the pink polygon indicates where the NRCS will be performing toe repair). Figure 5-19 shows the location of the features between Hwy 501 and Mill Pond Road. The root wads and the Newbury rock riffle structure were included in the model for analysis, but were ultimately removed from the preferred plan, as discussed in Section 6.2.4.

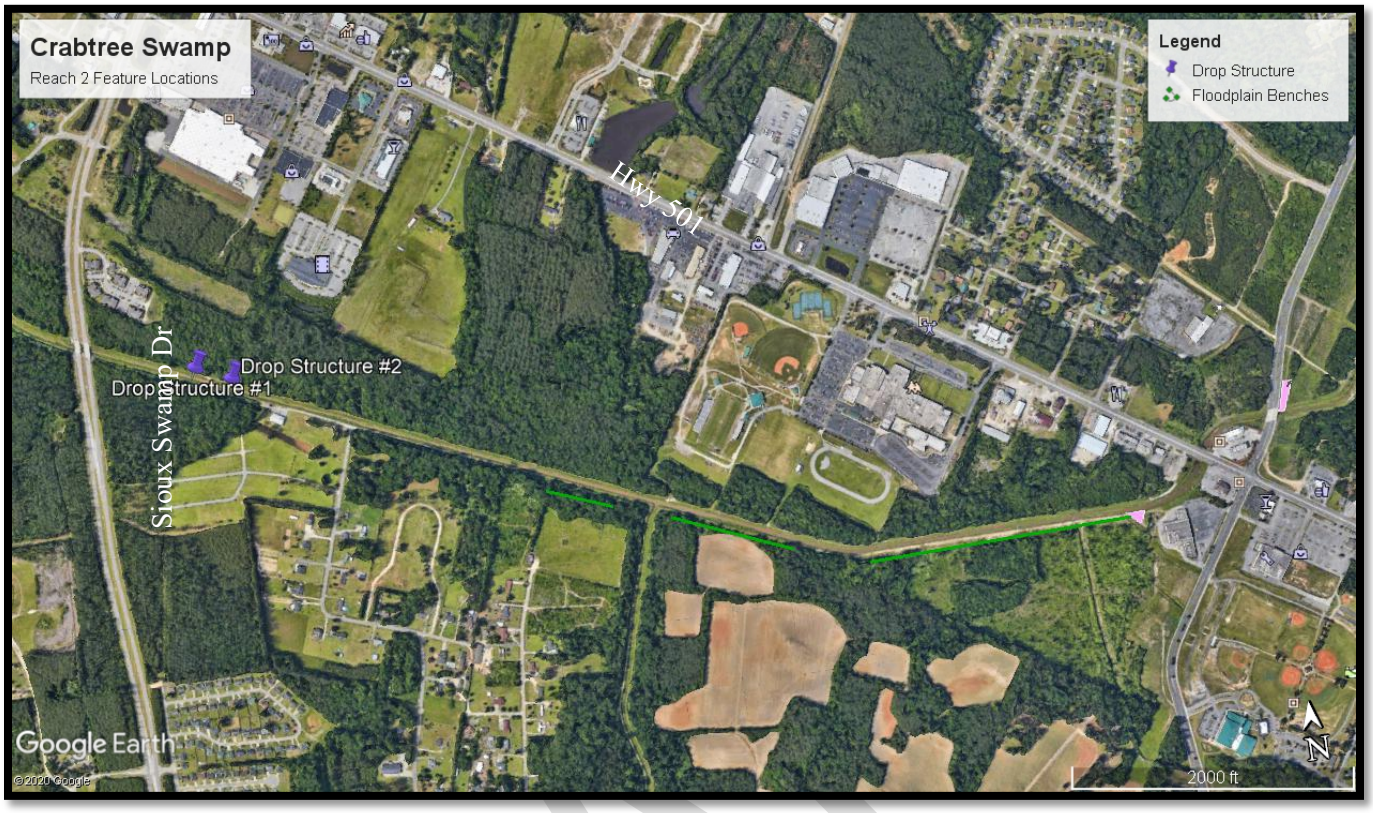


Figure 5-17 – Reach 2 Components.

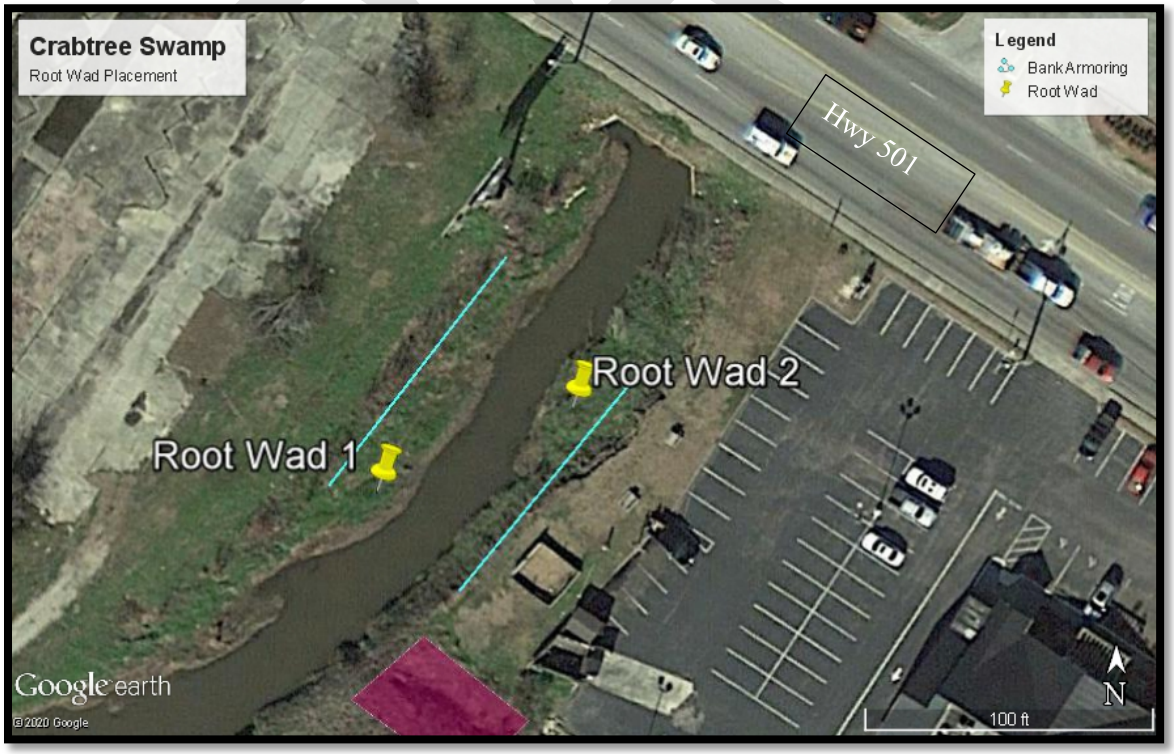


Figure 5-18 – Root Wad Placement.



Figure 5-19 – Reach 2 Components Downstream of Hwy 501.

Floodplain Benching in Reach 2 in RAS

Three floodplain benches are proposed for Reach 2, as shown in Figure 5-17. Although the same cross-sectional design was applied as in Reach 1, a 12-ft wide flat riparian bench followed by a 30-ft wide bench at 1.0% slope with a 1V:1H slope to tie into natural grade, the placement and elevation differ from those in Reach 1. Instead of alternating sides of the channel like in Reach 1, the benches in Reach 2 are all on the right bank due to the presence of underground utility pipes on the left bank. The two shorter benches have a berm elevation at the 50% AEP storm peak stage elevation, and any areas within the floodplain bench footprint that are at a lower elevation than the bench design will not be filled in, and these floodplain benches will be planted with native wetland vegetation. One of these bench designs is shown in Figure 5-20. However, the existing bank elevation along the longer bench is much lower than the 50% AEP storm peak stage, as shown in Figure 5-21. Since it is located just upstream of the root wads that will increase flood stages, the design elevation of the longer bench is 5.0-ft NAVD88, as shown in Figure 5-22. Also to offset any stage impacts, this bench should have sparser wetland vegetation, to minimize headloss. The station and elevation data for the Reach 2 floodplain benches are provided in Tables 5-4 a-c.

Table 5-4a-c – Reach 2 Floodplain Bench Stations and Elevations

Station	WS Elev ft
15772	13.07
15710	13.03
15627	13
15585	12.98
15550	12.96
15495	12.95
15415	12.9
15309	12.86
15232	12.83

Station	WS Elev ft
14866	12.72
14822	12.73
14781	12.71
14763	12.7
14743	12.71
14714	12.7
14689	12.69
14651	12.68
14620	12.67
14593	12.67
14579	12.69
14564	12.67
14515	12.62

Station	WS Elev ft	Station	WS Elev ft
13538	5.72	12467	5.42
13465	5.69	12395	5.41
13424	5.68	12334	5.38
13325	5.65	12224	5.35
13227	5.62	12141	5.33
13120	5.6	12119	5.32
13077	5.59	12087	5.31
13045	5.58	12013	5.29
12902	5.54	11983	5.28
12782	5.47	11948	5.27
12697	5.48	11909	5.26
12648	5.48	11846	5.24
12624	5.46	11777	5.22
12575	5.45	11719	5.21
12517	5.43	11683	5.2
12501	5.43	11660	5.19
12487	5.43		

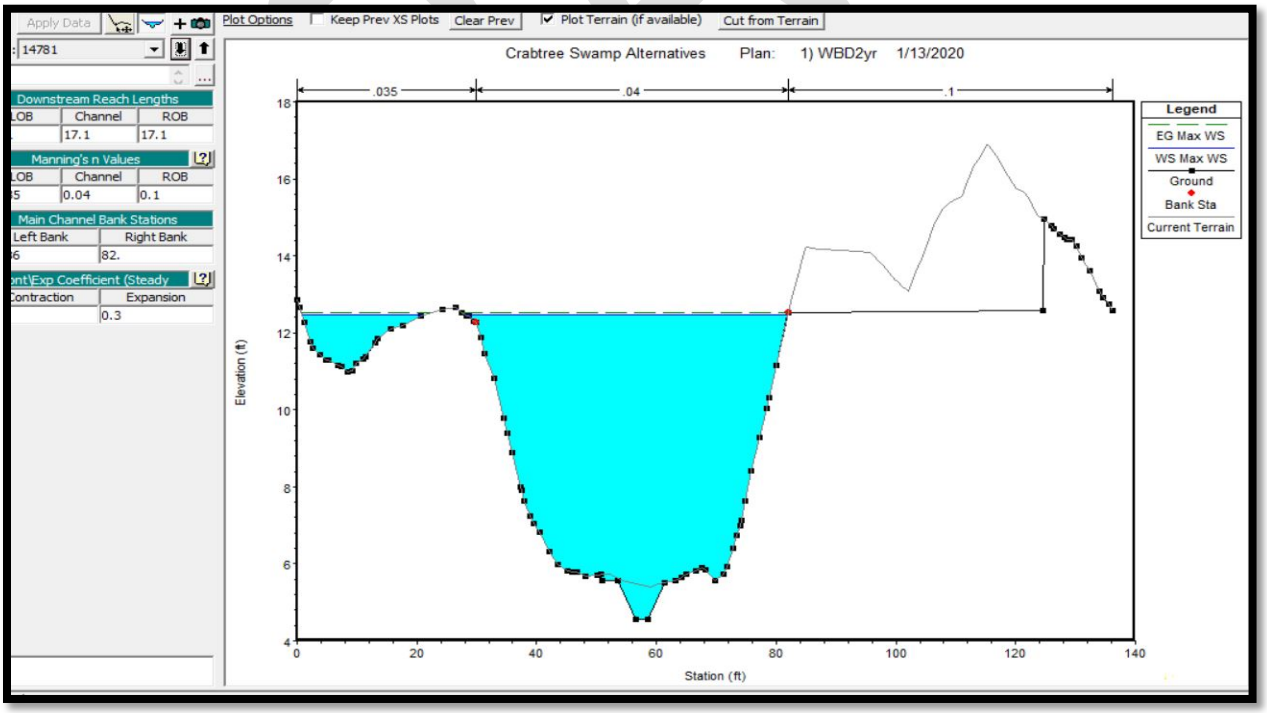


Figure 5-20 – Floodplain Bench Design.

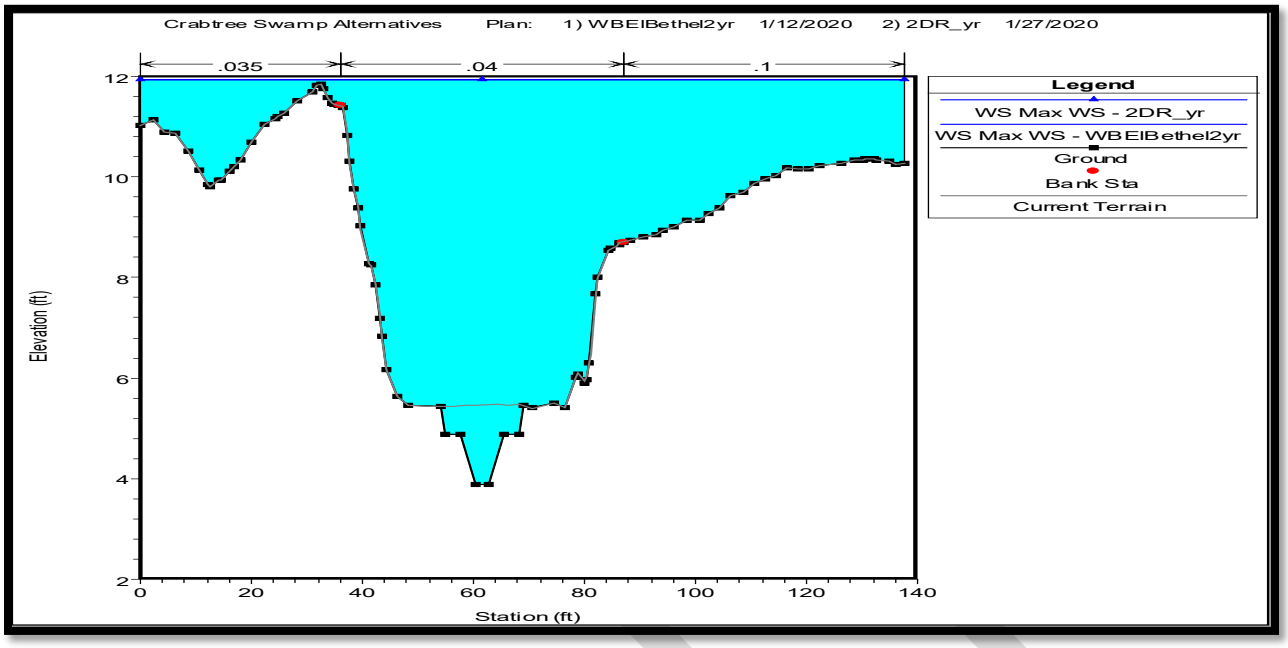


Figure 5-21 – Proposed Floodplain Bench Area Already Low.

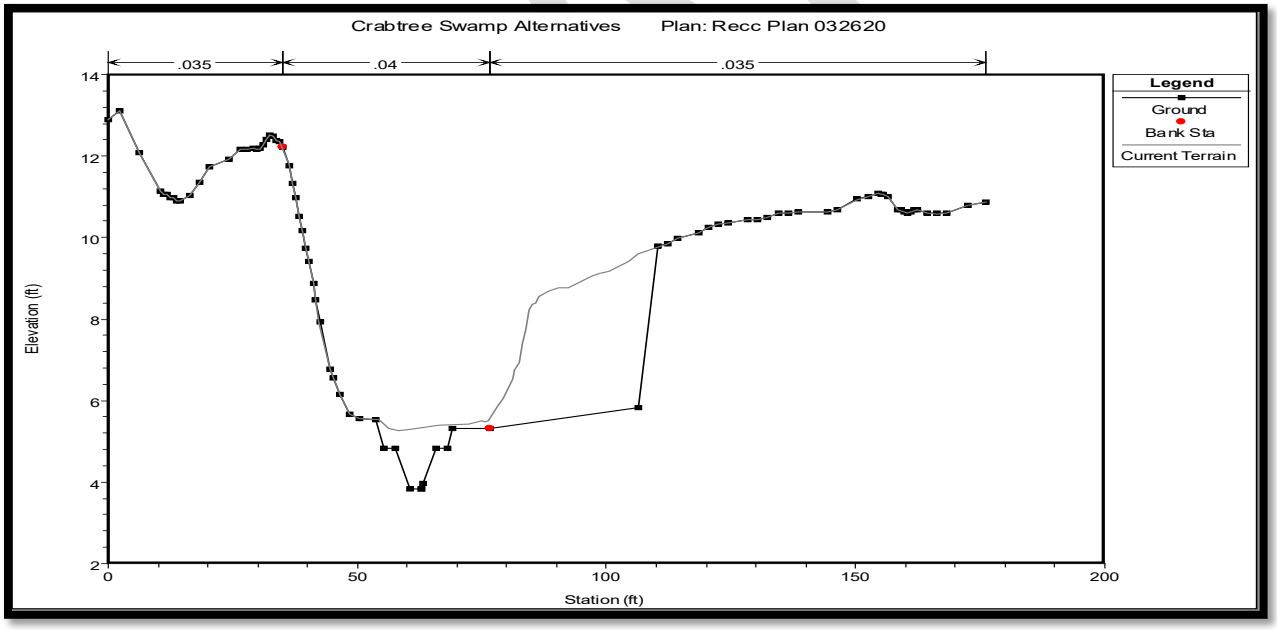


Figure 5-22 – Lower Floodplain Bench.

Root Wad Representation in RAS

A root wad consists of the tree root mass or root ball and a portion of the trunk (to be driven into the bank) (Doll et al). Root wads serve four main functions; to armor a channel bank by deflecting erosive flows away from the bank, to structurally support the channel bank, to provide habitat for aquatic animals, and to supply food for aquatic

insects (Doll et al). An example of a root wad is shown in Figure 5-23 (Doll et al). The location of the root wads were chosen to provide a refuge for the fish after passing through the fish passage.



Figure 5-23 – Root Wad.

Two root wads were designed to be installed just upstream of the Highway 501 culvert. The two root wads woud each have been 10 LF along the length of the channel, and would have been installed on opposite banks. Root wad #2 is 50 LF downstream of root wad #1. The trees would have had a trunk diameter ranging between 10 to 24 inches, a trunk length between 10 to 15 feet, and would have been placed at the toe of the bank, facing upstream, with one-third of the root wad below the base-flow elevation of 6.5-ft NAVD88, as recommended by Doll et al. In order to place one-third of the root wad below the water surface and the non-submerged portion next to the bank as shown in the figures, sedimentation within the channel from prior storms would need to be removed at the area of root wad installation. The bank above the root wads was modeled to be graded to a slope of no steeper than 2.5H: 1V, covered with an Erosion Control Blanket (ECB) made from a biodegradable fiber such as coconut fiber, and soil and plantings placed on top. A cross section of a root wad design is shown in Figure 5-24 (IDNR, 2017). However, this graphic shows the root wad trunks to be topped with fabric encapsulated soil lifts instead of soil, which would require a large amount of excavation. The root wads for this design would have been installed using the drive point method, which would not disturb the bank above the root wad. The soil would remain in place, and would have been covered with an ECB, four inches of soil, and plantings.

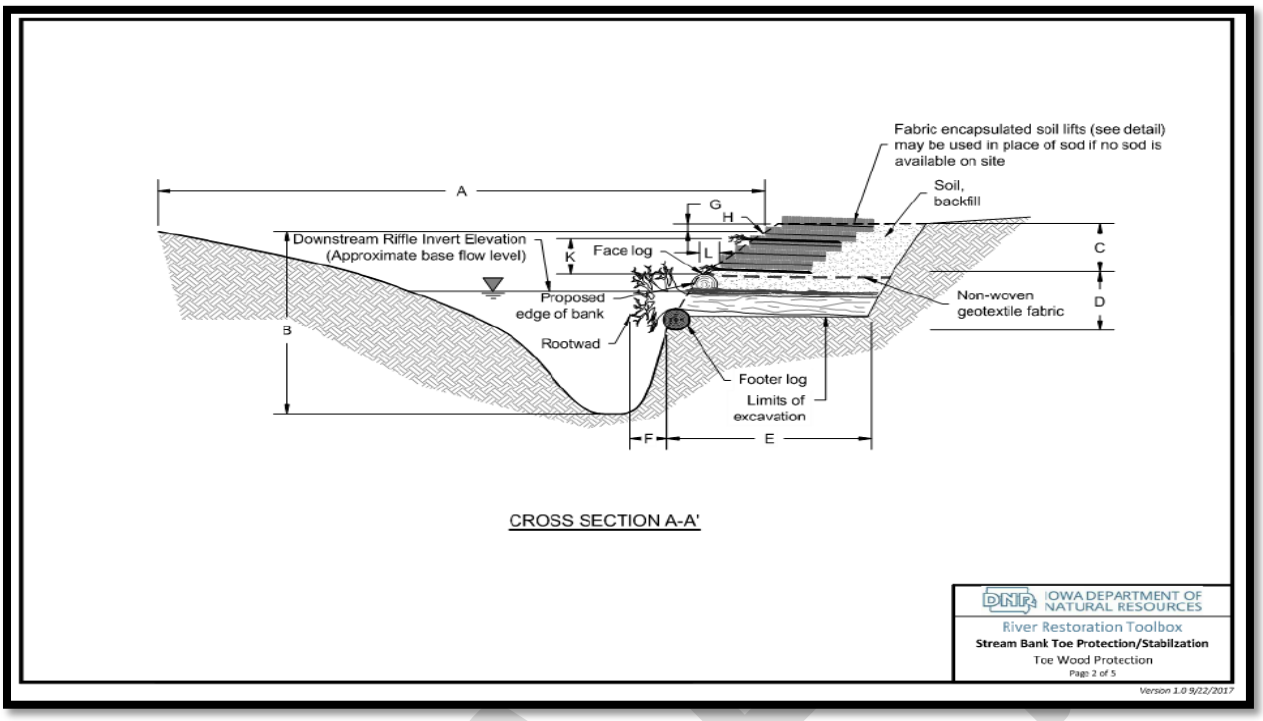


Figure 5-24 – Root Wad Design.

Each root wad is 10 LF along the length of the channel, and they will be installed on opposite banks. Figure 5-25 and Figure 5-26 show the representation of the root wads in RAS on the left and right banks, respectively.

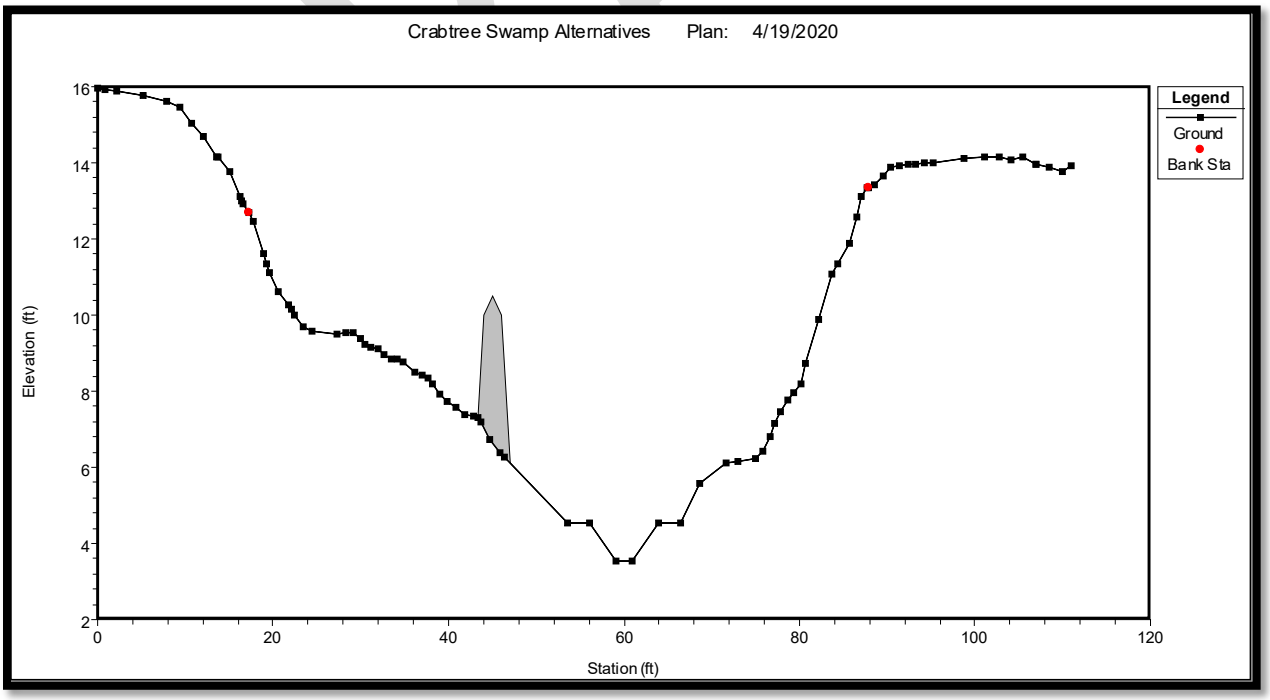


Figure 5-25 – Left Bank Root Wad in RAS

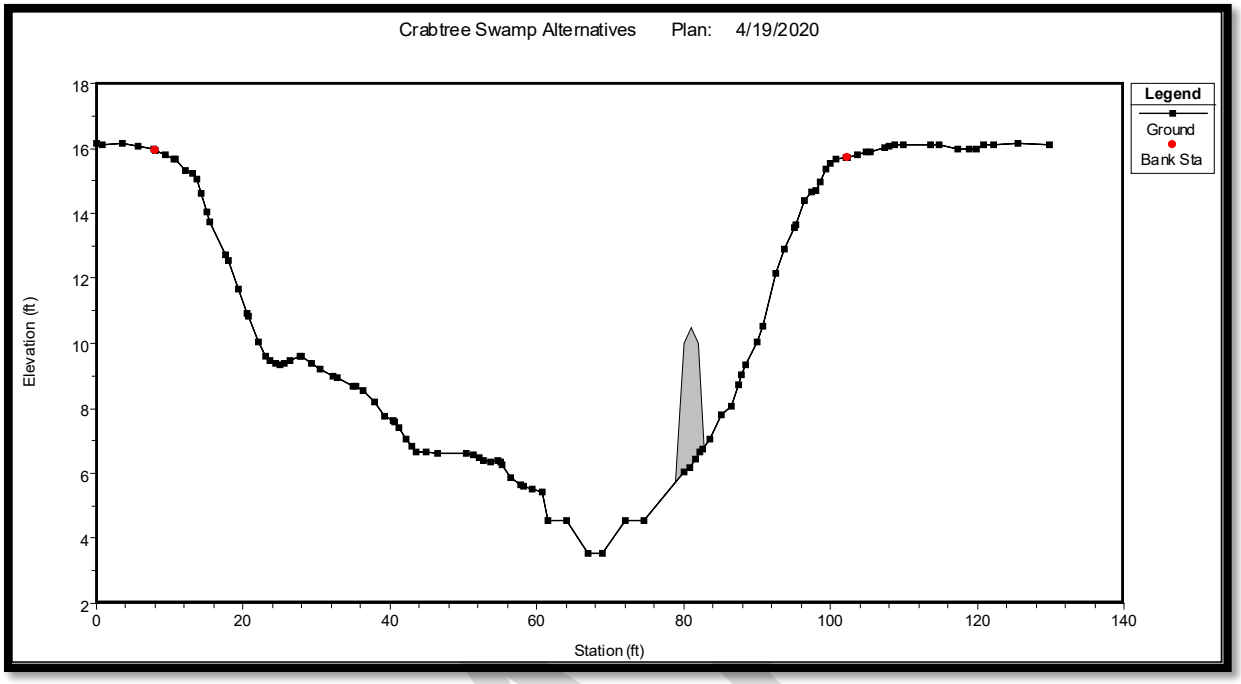


Figure 5-26 – Right Bank Root Wad in RAS.

5.5.3 Newbury Rock Riffle Grade Control Structure

One of the management measures that was carried forward for further analysis was a grade control structure to be placed downstream of the Hwy 501 culvert, to raise the stage (and fish) for passage through the culvert. To illustrate the magnitude of stage increase required to achieve fish passage under non storm event flow conditions, Figure 5-25 shows the Hwy 501 culvert under base flow conditions. Bank stabilization at the structure was also considered, to address the bank scour conditions shown in Figure 5-26.



Figure 5-27 – Scour Hole and Stage Drop at Hwy 501.



Figure 5-28 – Scour Downstream of Hwy 501.

The grade control structure design selected was the Newbury rock riffle structure, on recommendation by the team expert on aquatic ecosystem restoration and fish passage. Newbury rock riffle grade control structures (hereafter Newbury structures) are low-head weirs with long aprons made from riprap or small boulders that are built by placing rock fill within an existing channel. The slope is designed to create a hydraulic profile reflecting those of natural riffles. These structures are primarily used to enhance the aquatic ecosystem by adding pool and riffle habitat and providing a more natural channel diversity. They can also provide limited grade control (NASEM, 2005). The Newbury structure in Crabtree Swamp will raise the base flow stage to elevation 6.5-ft NAVD88, to enable fish passage through the Highway 501 culvert invert of 6.0-ft NAVD88 (7.0-ft NGVD29) (SCDOT, 1947). The depth through the culvert will provide fish passage through the culvert, to the upstream reaches of the project area. A plan and two profile views are shown in Figure 5-29 and Figure 5-30, which was designed in accordance with criteria obtained from (NASEM, 2005) and https://thegreenreach.weebly.com/west-union-stream-restoration.html.

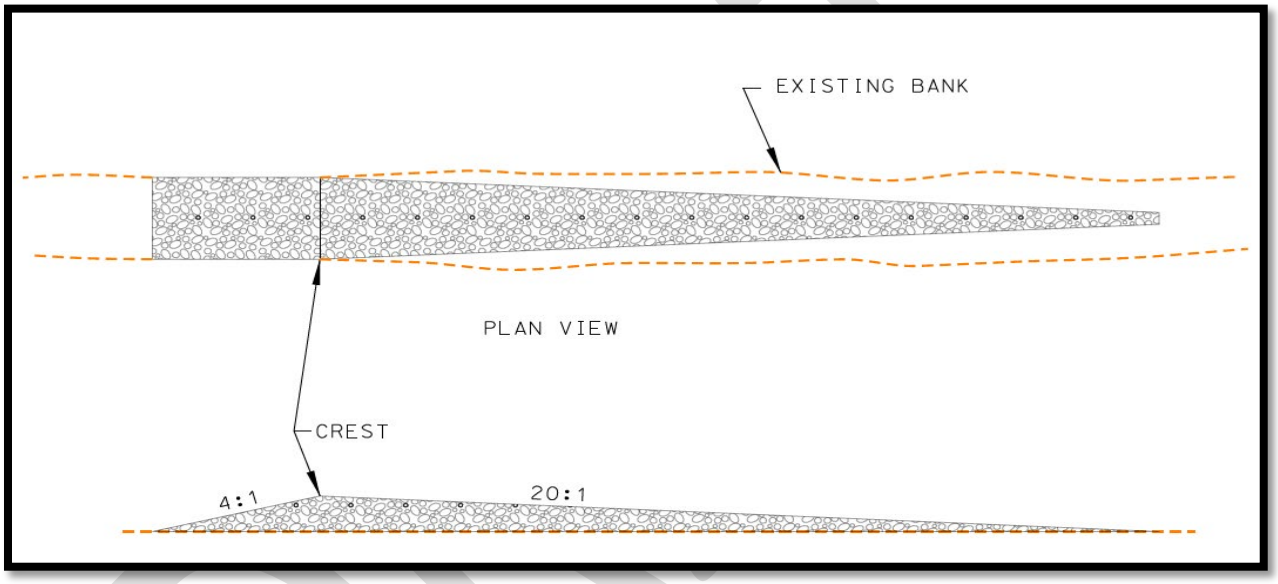


Figure 5-29 – Newbury Rock Riffle Design – Longitudinal.

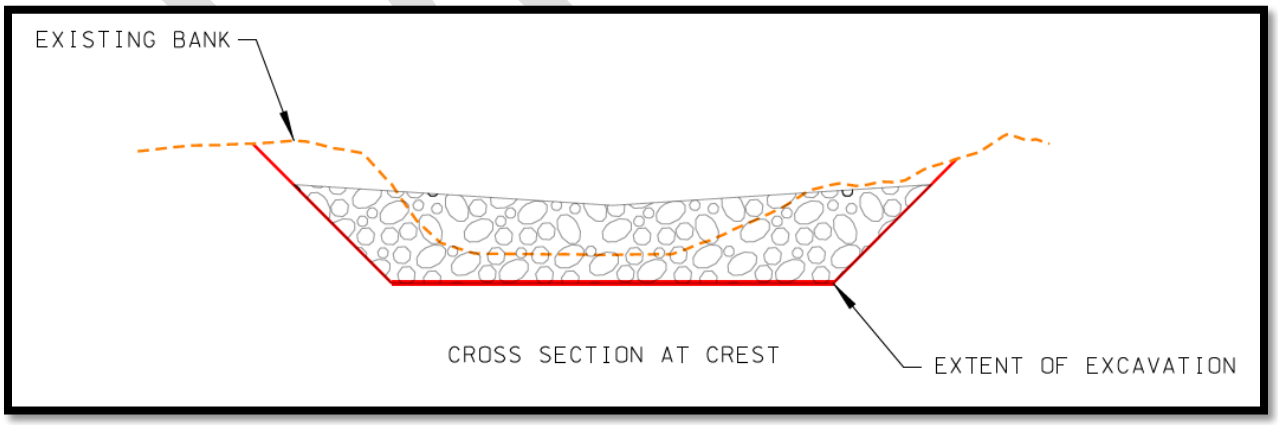


Figure 5-30 – Newbury Rock Riffle Cross Section.

The crest and ramp will have a wide V-notch shape to reduce bank scour and maintain depth in the center to help with fish passage. The rock should be keyed into both the channel bed and the bank, and should be lined beneath with a geotextile fabric to prevent loss of fine material. The Newbury structure will be approximately three feet high at its crest, 72 feet in length to achieve the design slopes, and constructed of well graded stone of various sizes ranging from boulders to fine material. The design includes application of a sealant to be applied during construction, to ensure the structure is water-tight. The bank stabilization at the scoured area will include grading the bank to a slope of 2H: 1V, install riprap to the top of bank, and cover with soil and plantings.

Several attempts were made to represent this ramp-like structure by altering channel cross sections. However, this resulted in an unstable model that would not run. Since the main purpose of modeling the Newbury structure is to ascertain the impacts to storm stages, it was represented as a weir with a crest elevation of 6.5-ft NAVD88, and the bottom of the V-notch at 6.0-ft NAVD88, as shown in Figure 5-31.

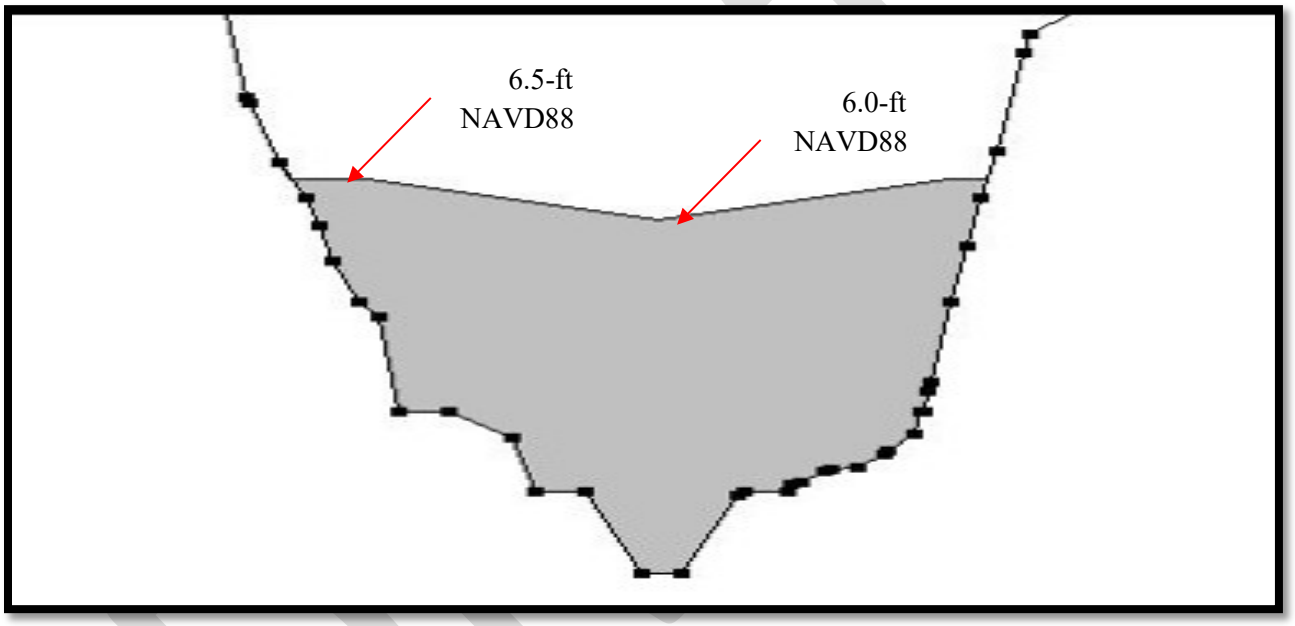


Figure 5-31 – Representation of Newbury Structure in RAS.

5.5.4 Reach 3 – Highway 701 Bridge to Long Avenue

Reach 3 runs between the bridge at Highway 701 to the bridge at Long Avenue, at the downstream end of the project area. The management measures proposed for Reach 3 includes six berm cuts in existing berms along the banks on both sides of the channel. The locations of these berm cuts, with nomenclature added, are shown in Figure 5-32, and this nomenclature is referenced in the results discussion. The purpose of these berm cuts is to reconnect the channel to the adjacent wetlands without adversely impacting flood stages in the surrounding communities. The cuts are made on alternating banks at lower areas in the adjacent wetlands. The elevation 6.0-ft NAVD88 was chosen as that was the highest low area elevation in the adjacent wetlands. Figure 5-33 and Figure 5-34 and show examples of the right and left banks in RAS, respectively.



Figure 5-32 – Reach 3 Components.

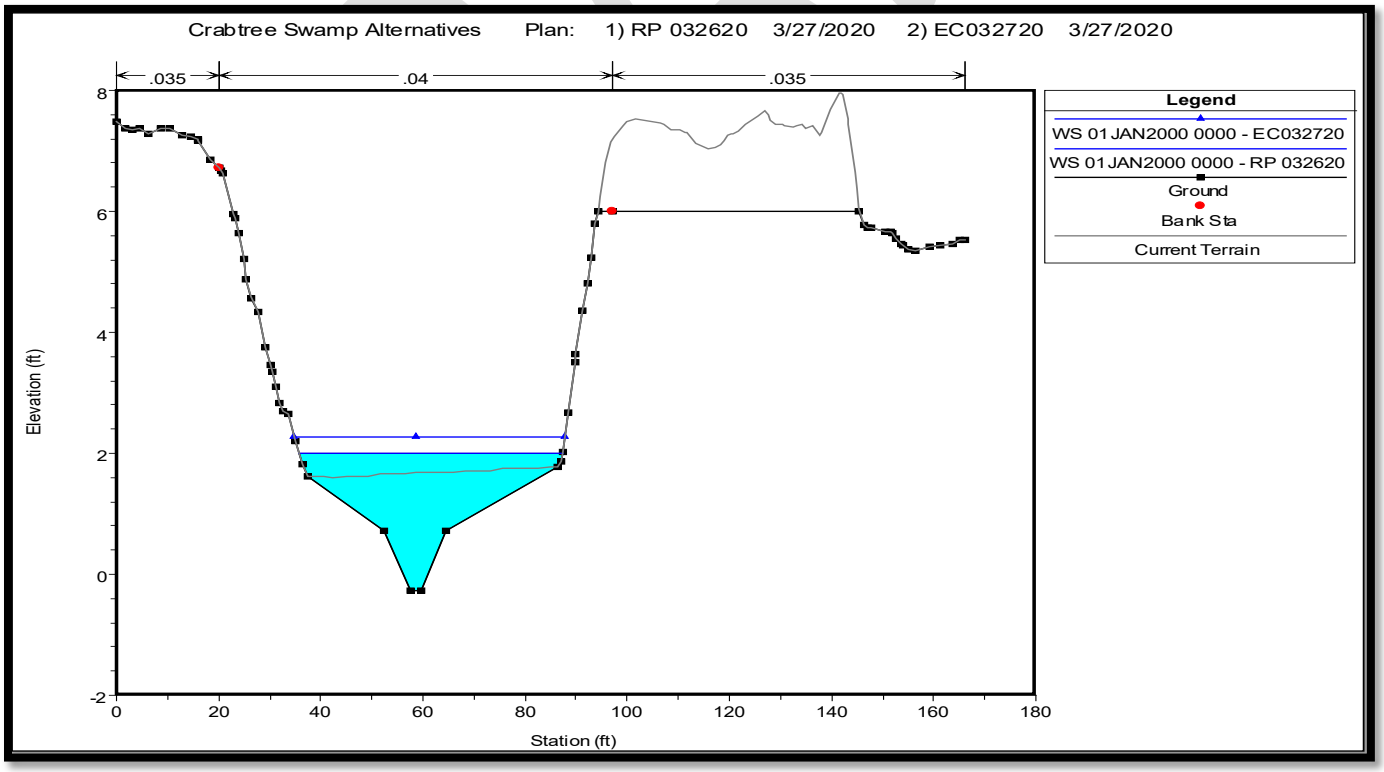


Figure 5-33 – Berm Cutting Right Bank.

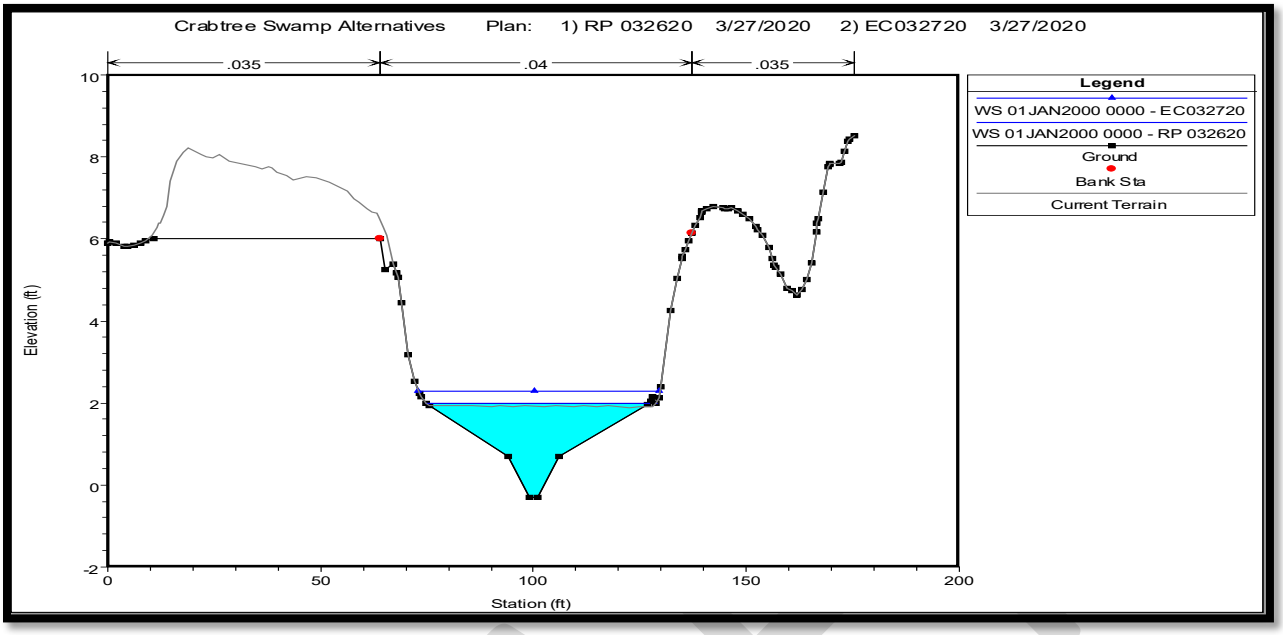


Figure 5-34 – Berm Cutting Left Bank.

6.0 Preferred Plan Model Results

As noted in the Executive Summary of this appendix, the objective of the hydraulic analysis was to ensure that the Preferred Plan does not adversely impact existing flood stages or erosional forces (velocities). Bottom line up front: The hydraulic analysis results indicated that the combined features of the Preferred Plan will not have adverse impacts on existing flood stages or velocities. To optimize the length of this appendix, only storm results are presented and discussed; the 33% AEP, the 4% AEP, and the 1% AEP storm scenarios. These were chosen to show that the project maintains the intent of the Section 208 project, and to illustrate impacts of the project to flood protection for the design AEP (4%) and 1% AEP storms. Velocities for the 4% AEP storm are presented at each feature to show the velocities the design will be able to withstand. Since the small stage diffierences are barely detectable on the graphs, the stages are provided in tabular form as an attachment to this appendix.

Impacts of design features within a channel can have impacts on the stage profile upstream, depending on channel conditions. For this reason, the impacts of each preferred plan component on flood stages are presented starting downstream in Reach 3, and moving upstream.

In all graphics in this section, the following apply:

1. the solid blue line represents Existing Conditions (EC),
2. the red line with triangles represents the Preferred Plan (PP) conditions, and
3. unless otherwise noted, all numbers are elevations in feet-NAVD88.

6.1 Reach 3 Results

The purpose of these berm cuts is to reconnect the channel to the adjacent wetlands. The communities adjacent to the wetlands (both to the north and south) are prone to flooding. Thus, the Preferred Plan cannot adversely impact flood stages in either the channel or the wetlands. The next few figures compare the resulting Existing Conditions (EC) and Preferred Plan (PP) 1% AEP flood stages in both the channel and the wetland. Figure 6-1 shows the peak stage hydraulic profile in the channel; the solid blue line represents the EC stages, and the red line with the small triangles represents the PP stages. Figure 6-4 shows a stage hydrograph for one cross section between Hwy 701 and berm cut 5. These figures show that the design reduces the peak channel stage by 0.27 feet and 0.12 feet for the 1% AEP and 33% AEP storms, respectively (as measured at the Hwy 701 culvert).

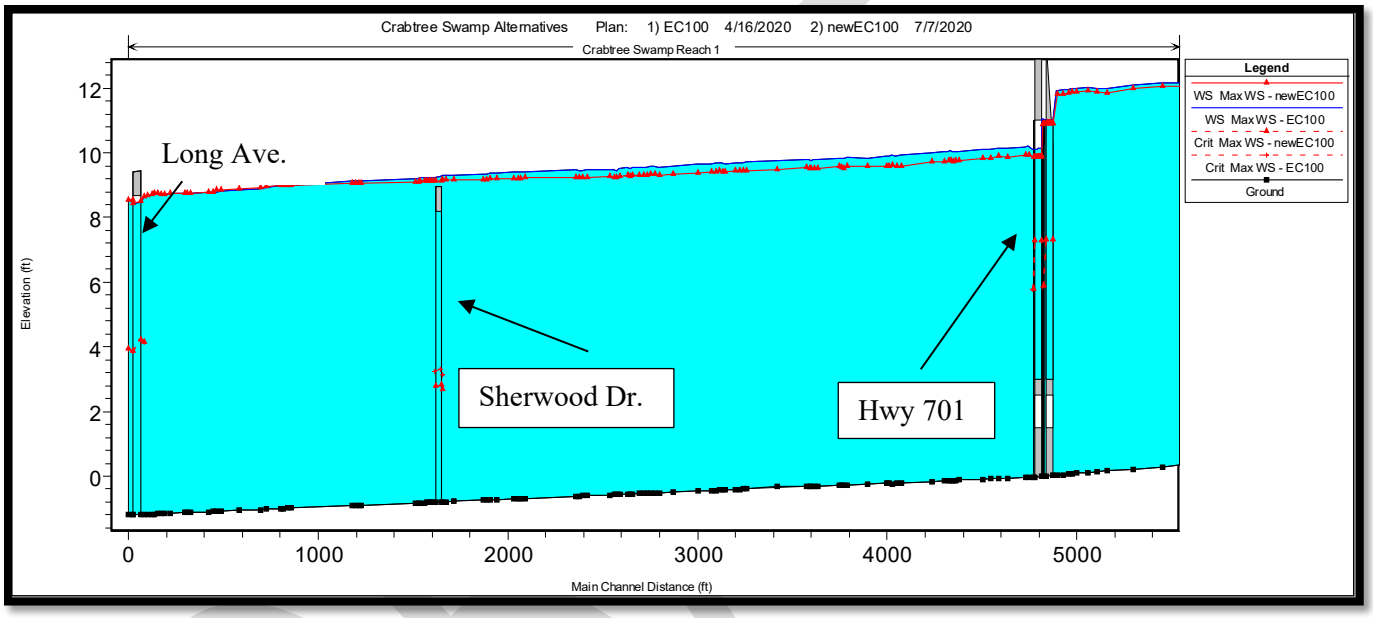


Figure 6-1 – Reach 3, 1% AEP Storm Peak Channel Stage Profile.

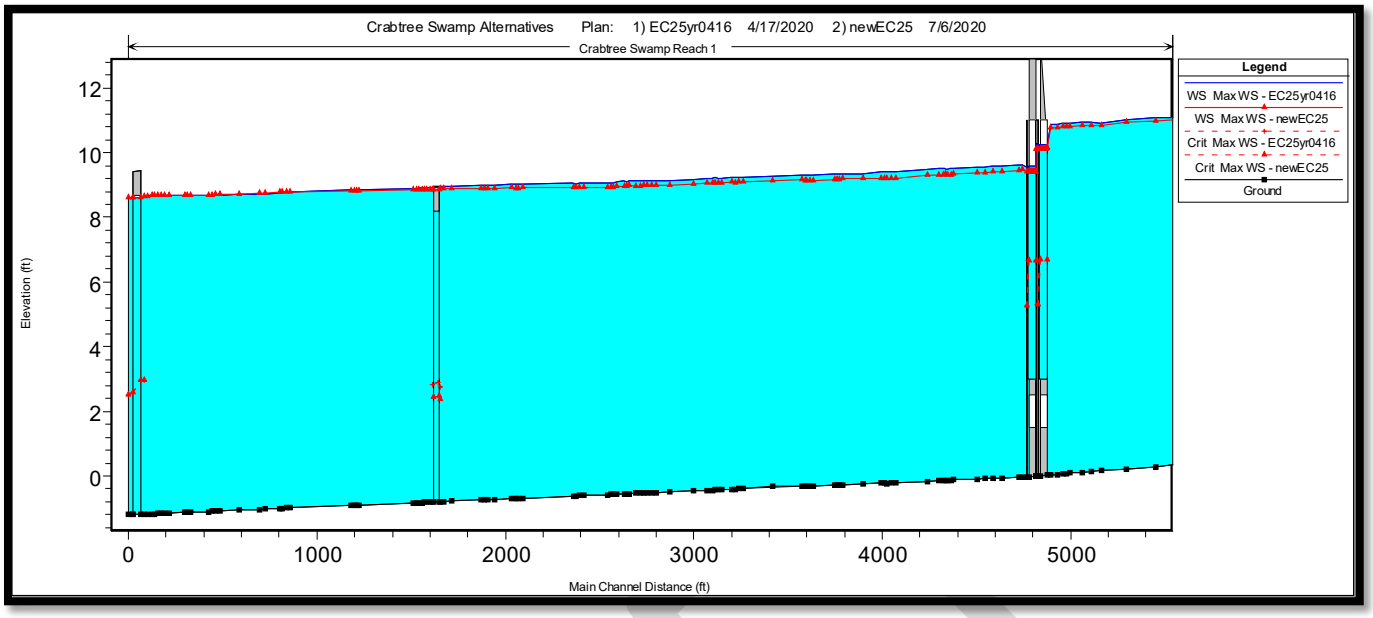


Figure 6-2 - Reach 3, 4% AEP Storm Peak Channel Stage Profile.

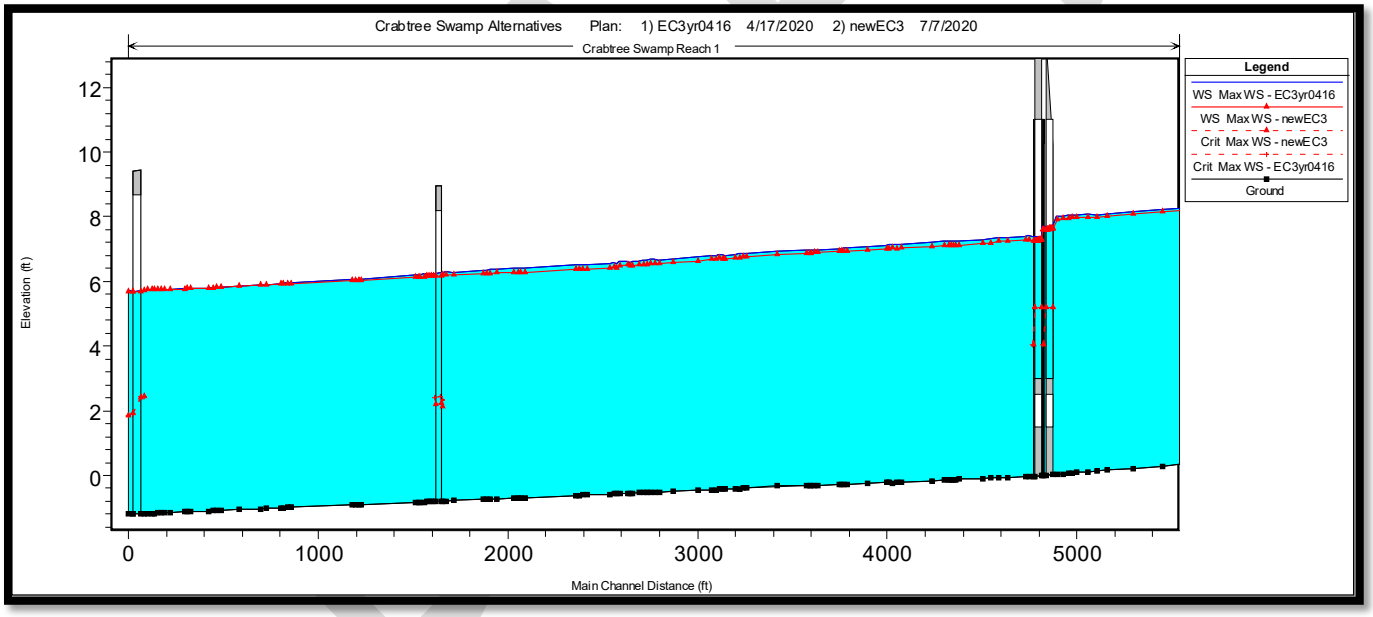


Figure 6-3 - Reach 3, 33% AEP Storm Peak Channel Stage Profile.

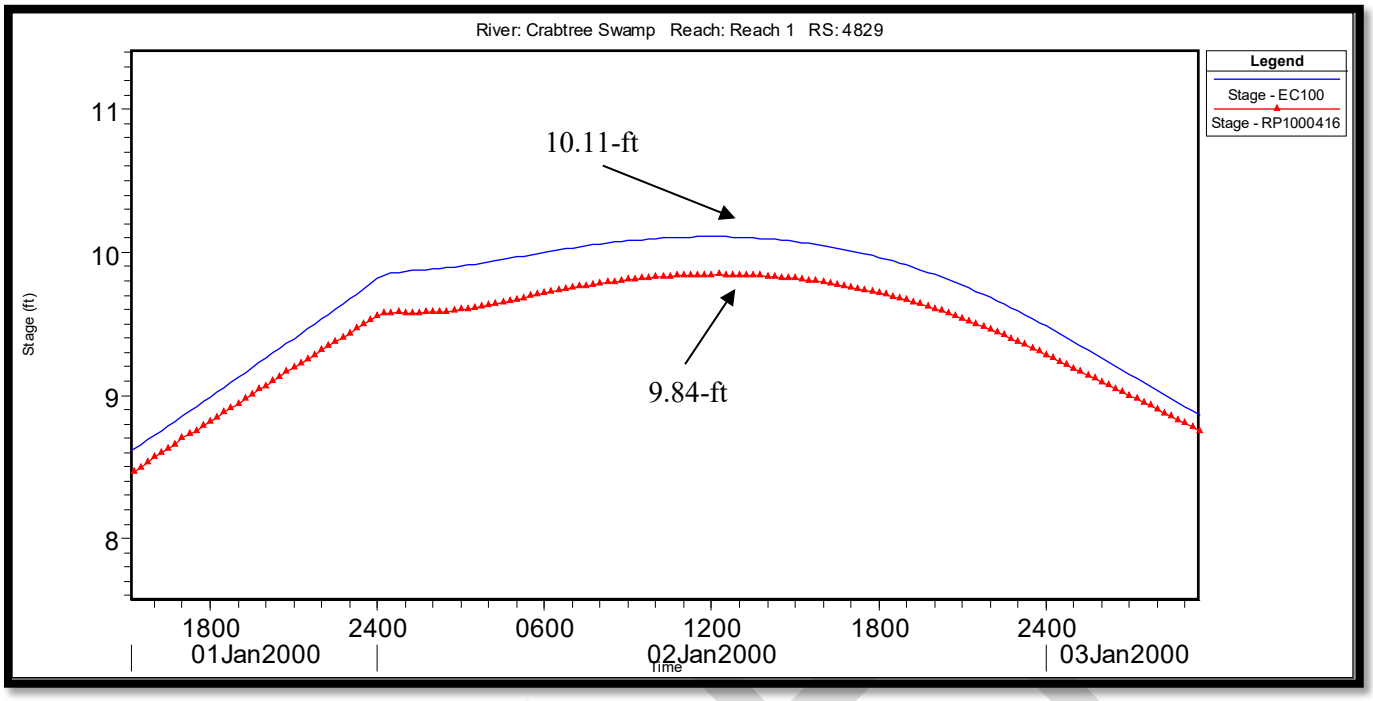


Figure 6-4 – Reach 3, 1% AEP Storm Channel Stage Hydrograph.

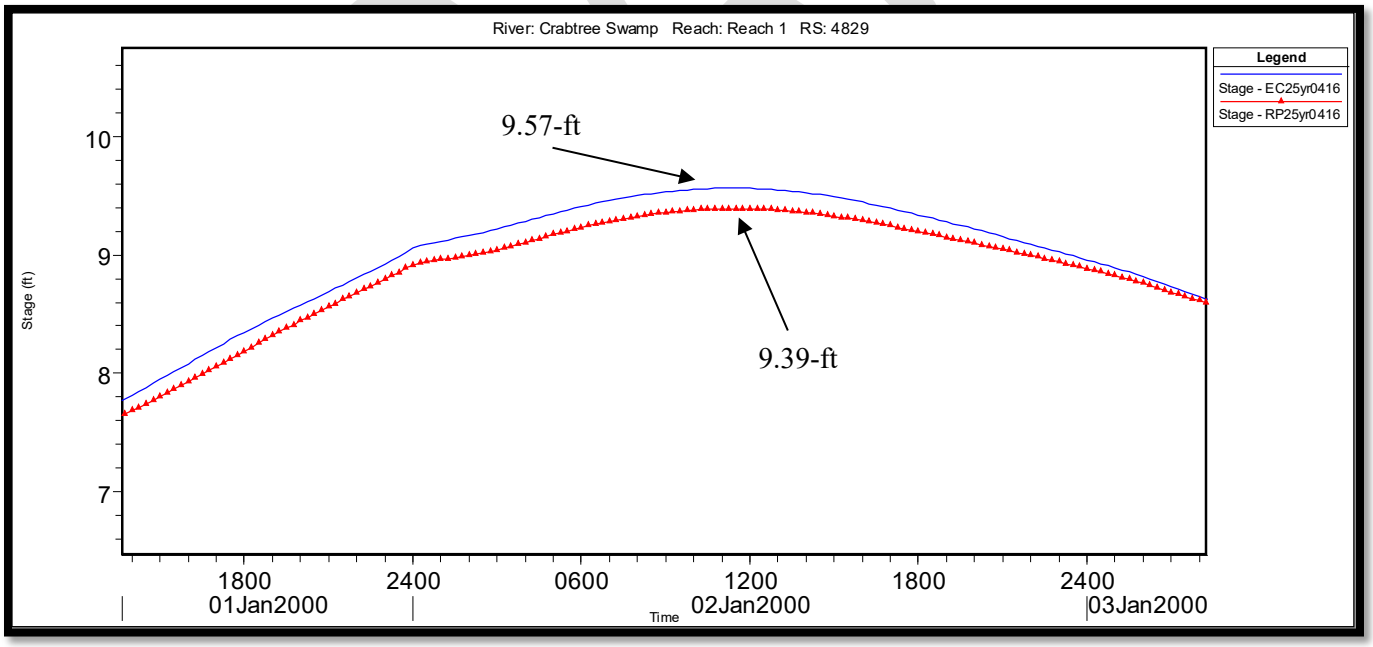


Figure 6-5 - Reach 3, 4% AEP Storm Channel Stage Hydrograph.

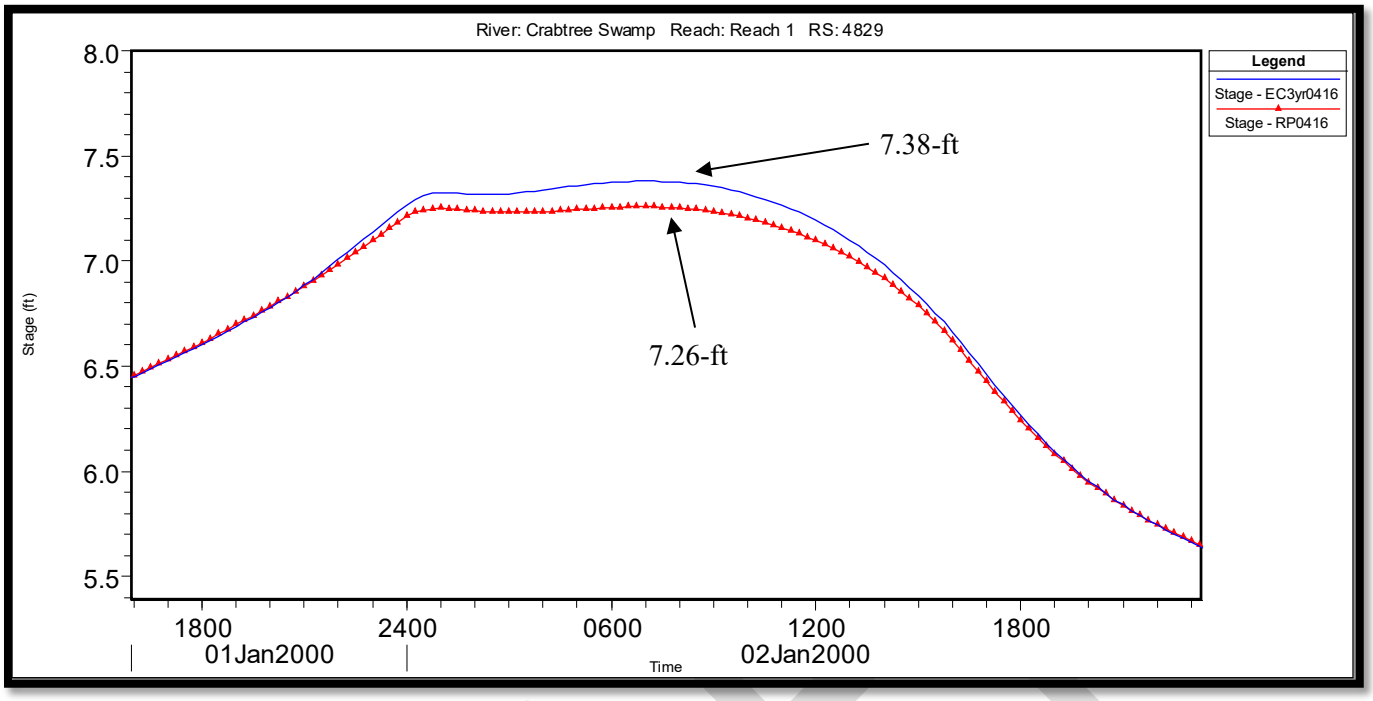


Figure 6-6 – Reach 3, 33% AEP Channel Stage Hydrograph.

The next eight figures compare the EC and PP stage hydrographs at various places within the wetland areas adjacent to Reach 3. The locations of each hydrograph relative to the berm cuts are indicated in the figure descriptions. These hydrographs show an overall reduction in peak stages with the project constructed for both the North and South wetlands between 0.08-ft and 0.9-ft for all wetland areas for the 33%, 4%, and 1% AEP storms, with one exception. The peak stage during the 33% AEP storm in the south wetland, downstream, shows an increase of 0.03-ft, which is below the model uncertainty (LiDAR accuracy), then drains faster. In all scenarios, the peak flows drain at the same rate or faster. The hydrographs for the 33%, 4%, and 1% AEPs storms are presented.

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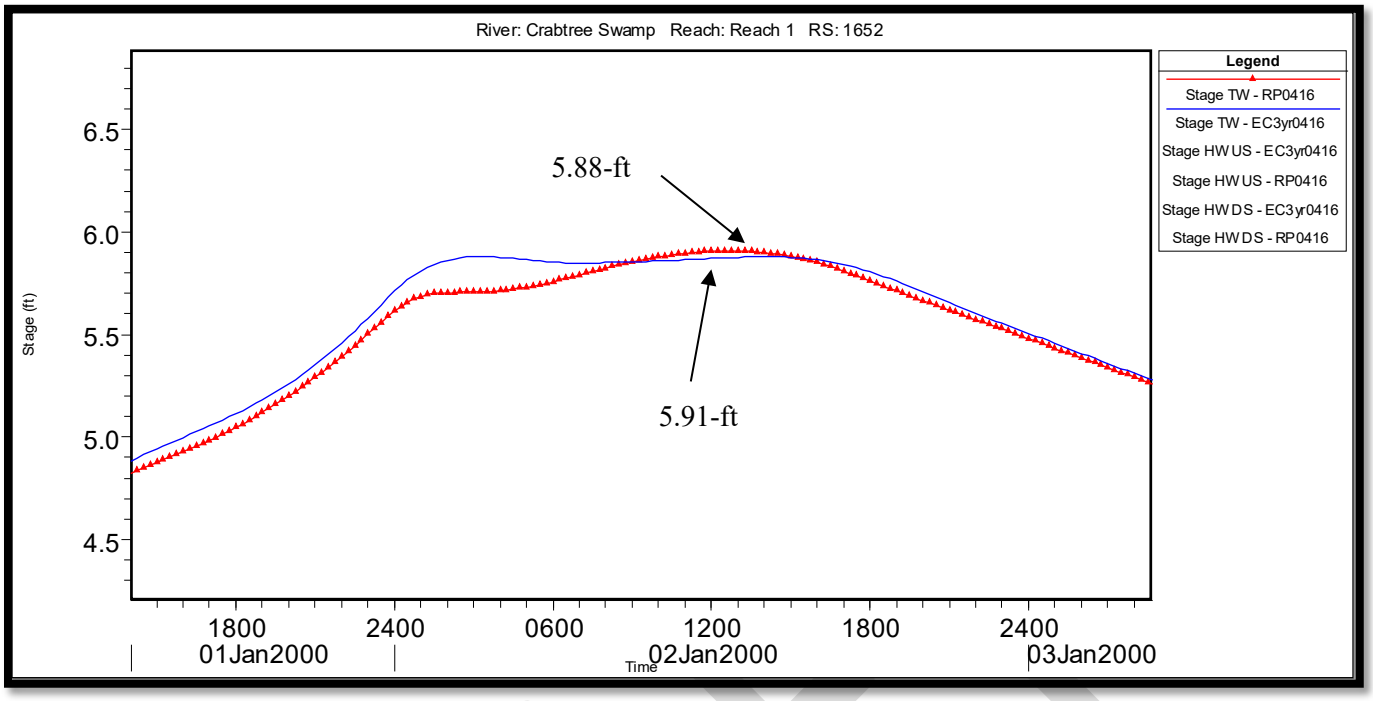


Figure 6-7 – Peak Stages in South Wetland Adjacent to Berm Cut 6, 33% AEP Storm.

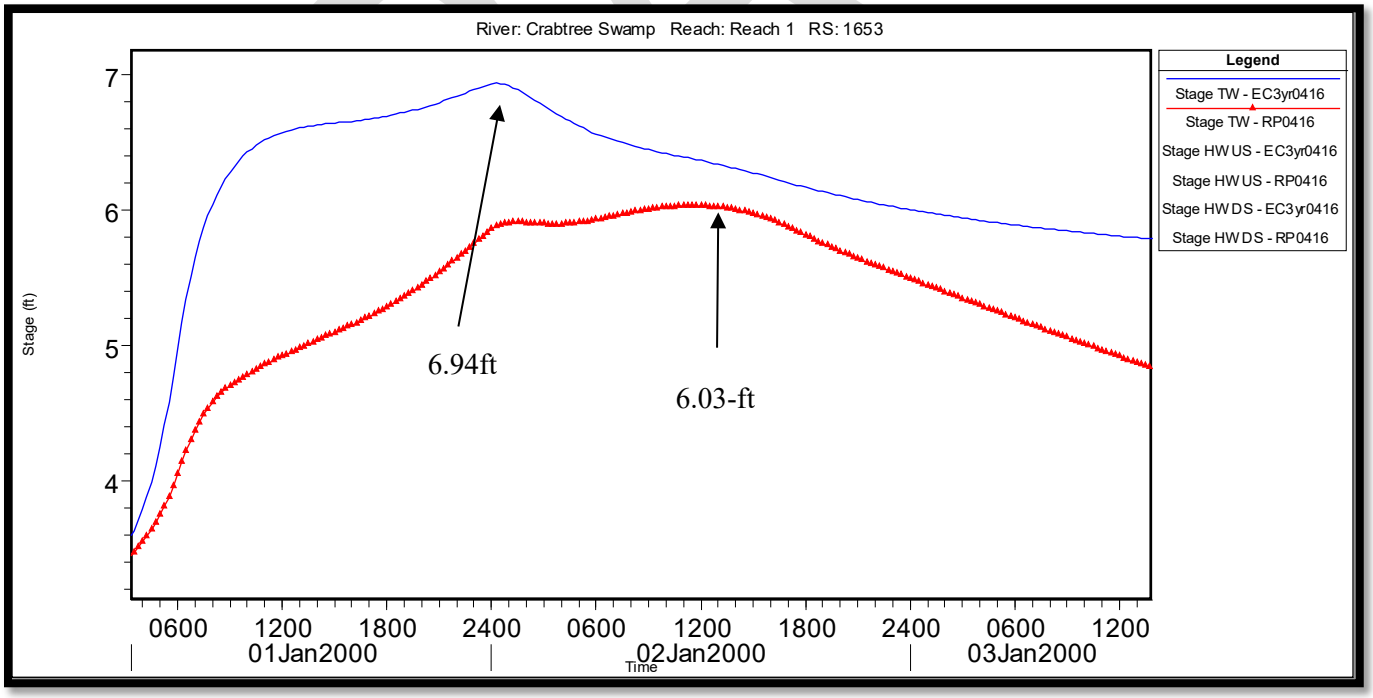


Figure 6-8 – Peak Stages in North Wetland Adjacent to Berm Cut 5, 33% AEP Storm.

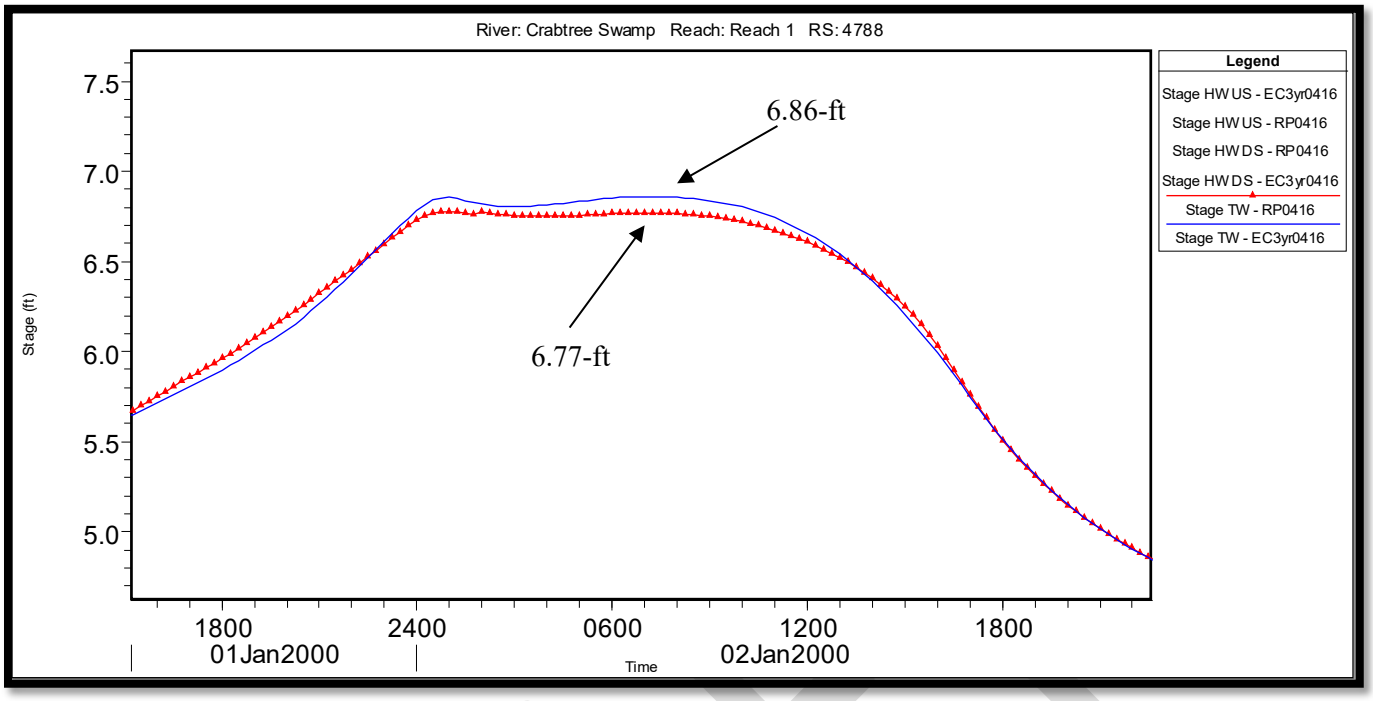


Figure 6-9 - Peak Stages in South Wetland Adjacent to Berm Cut 2, 33% AEP Storm.

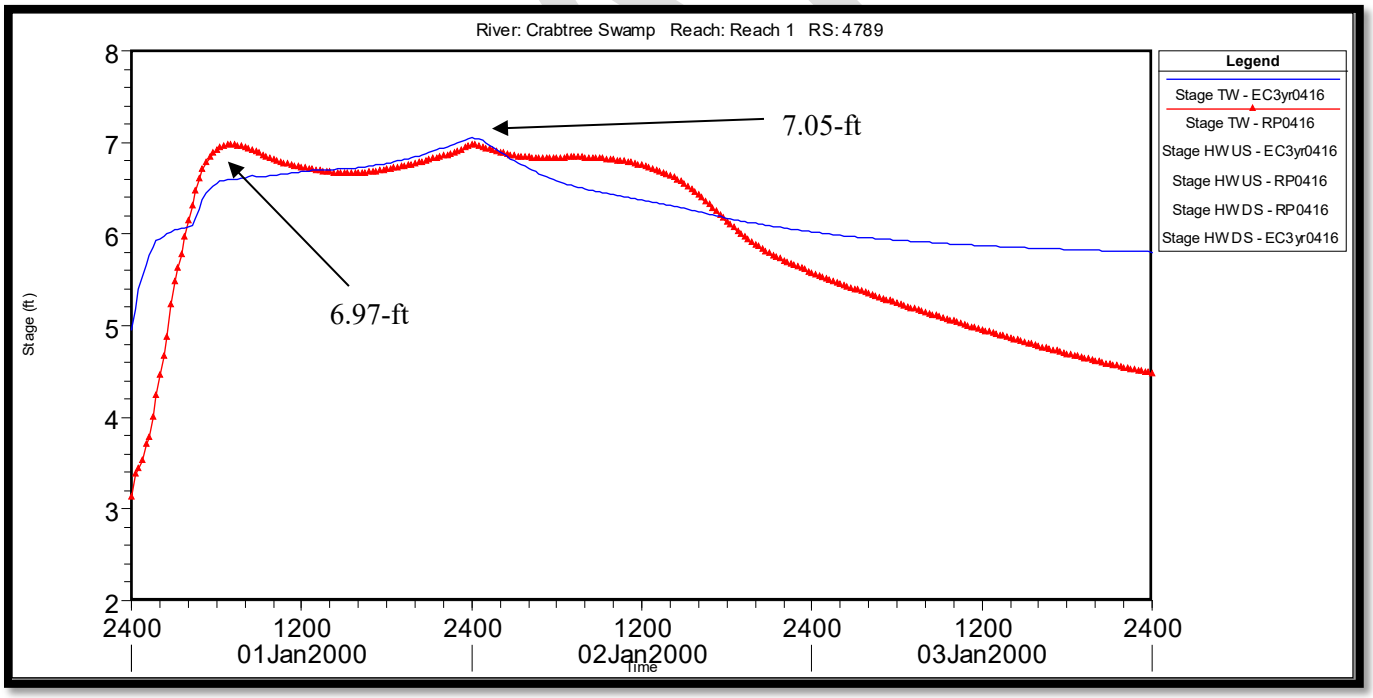


Figure 6-10 - Peak Stages in North Wetland Adjacent to Berm Cut 1, 33% AEP Storm.

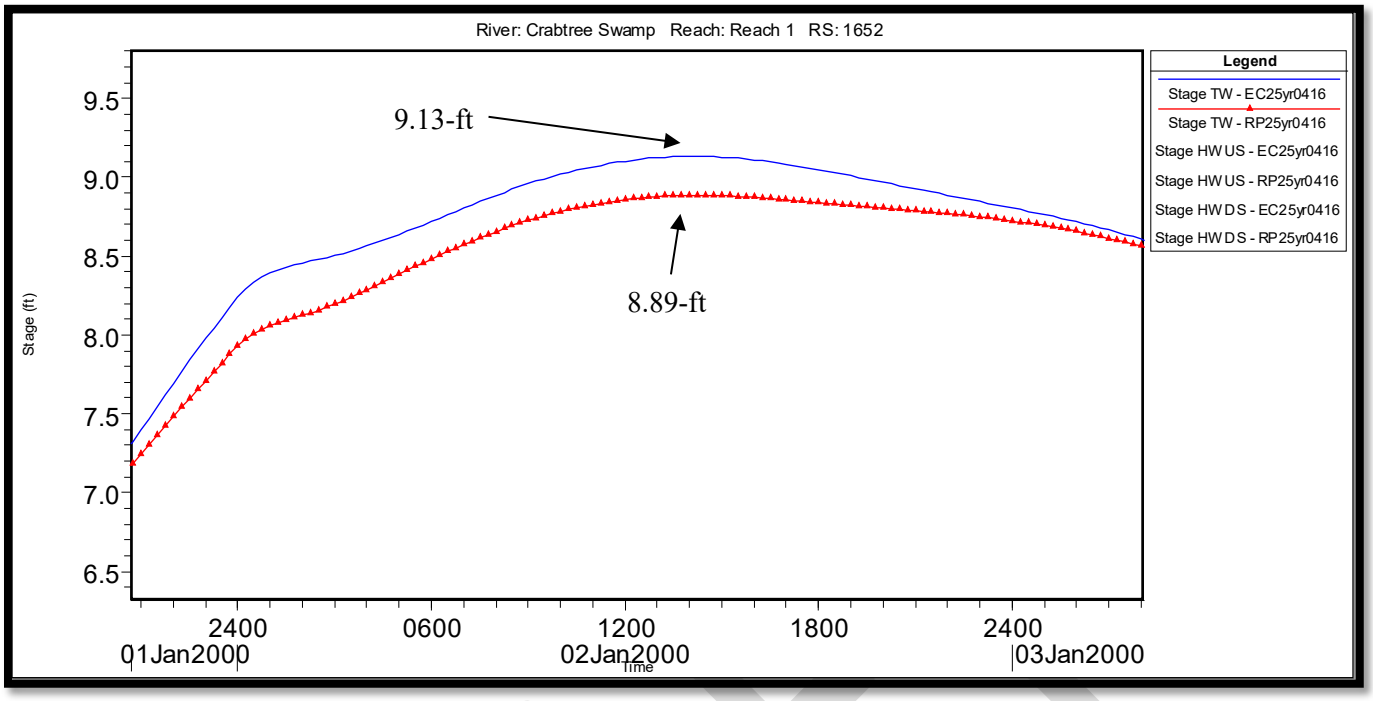


Figure 6-11 - Peak Stages in South Wetland Adjacent to Berm Cut 6, 4% AEP Storm.

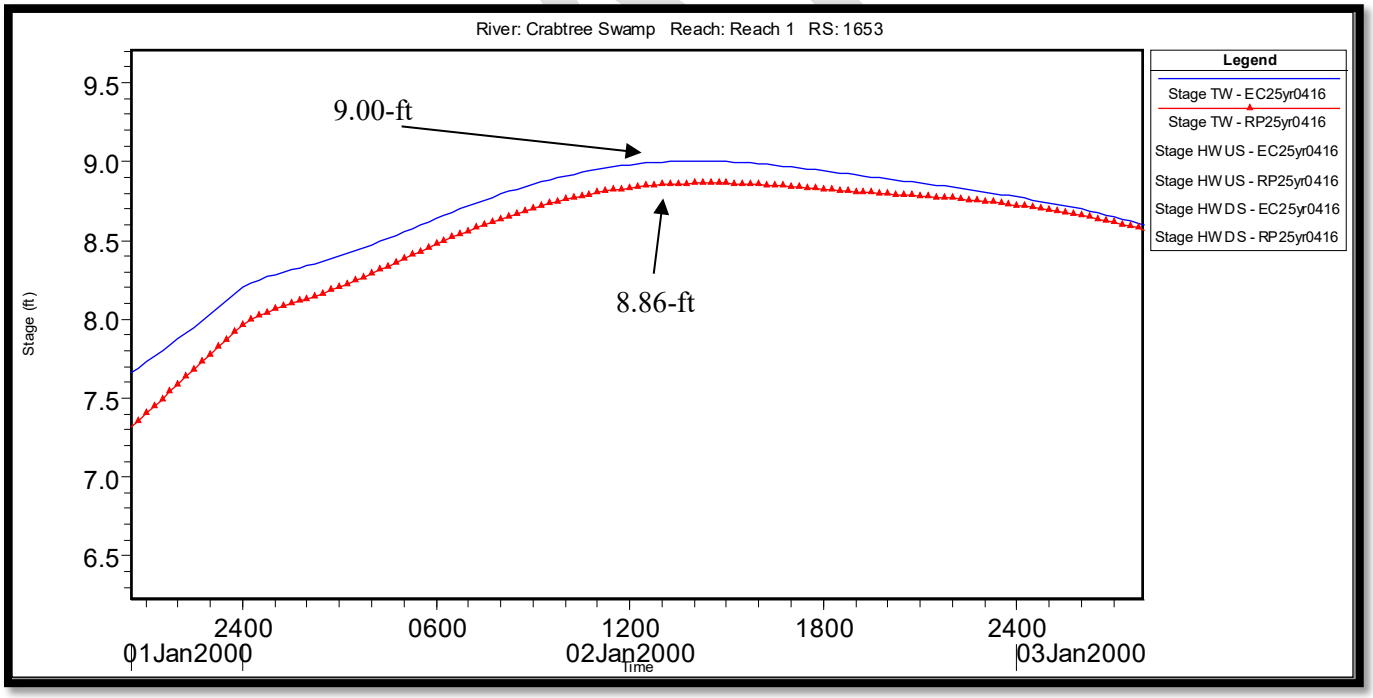


Figure 6-12 - Peak Stages in North Wetland Adjacent to Berm Cut 5, 4% AEP Storm.

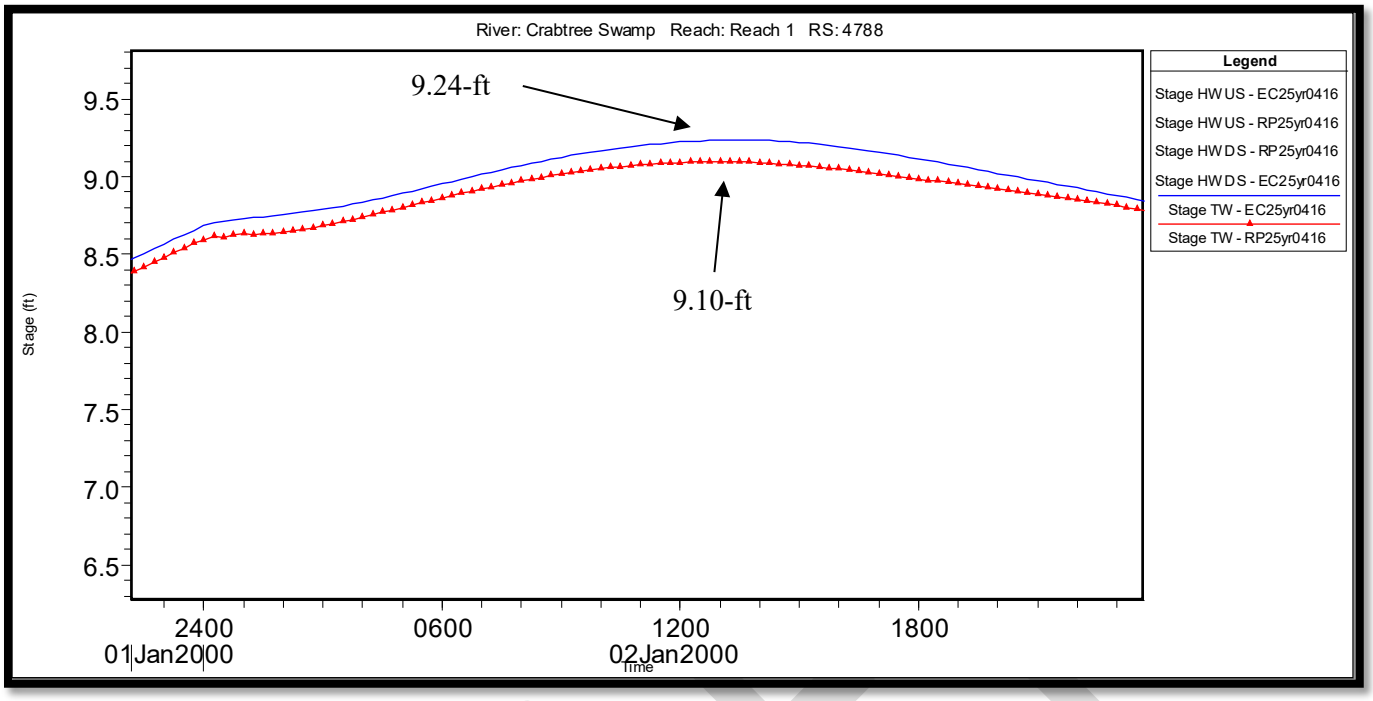


Figure 6-13 - Peak Stages in South Wetland Adjacent to Berm Cut 2, 4% AEP Storm.

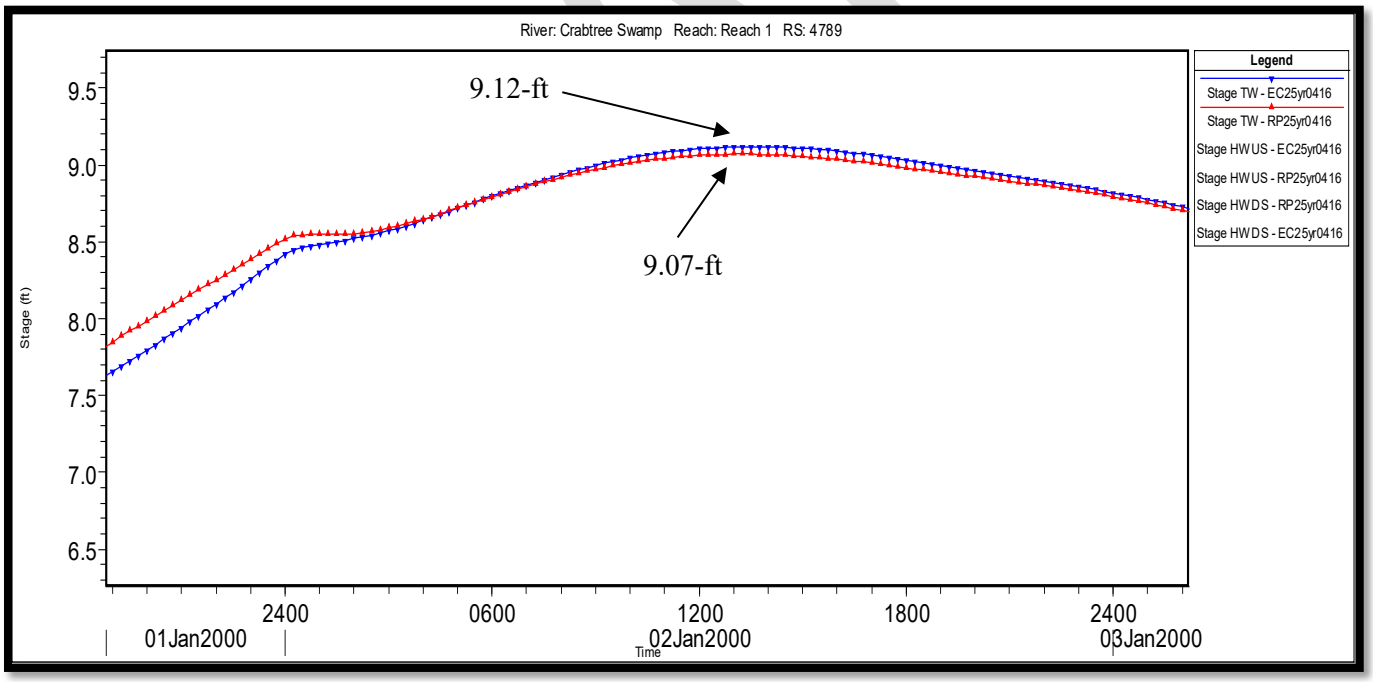


Figure 6-14 - Peak Stages in North Wetland Adjacent to Berm Cut 1, 4% AEP Storm.

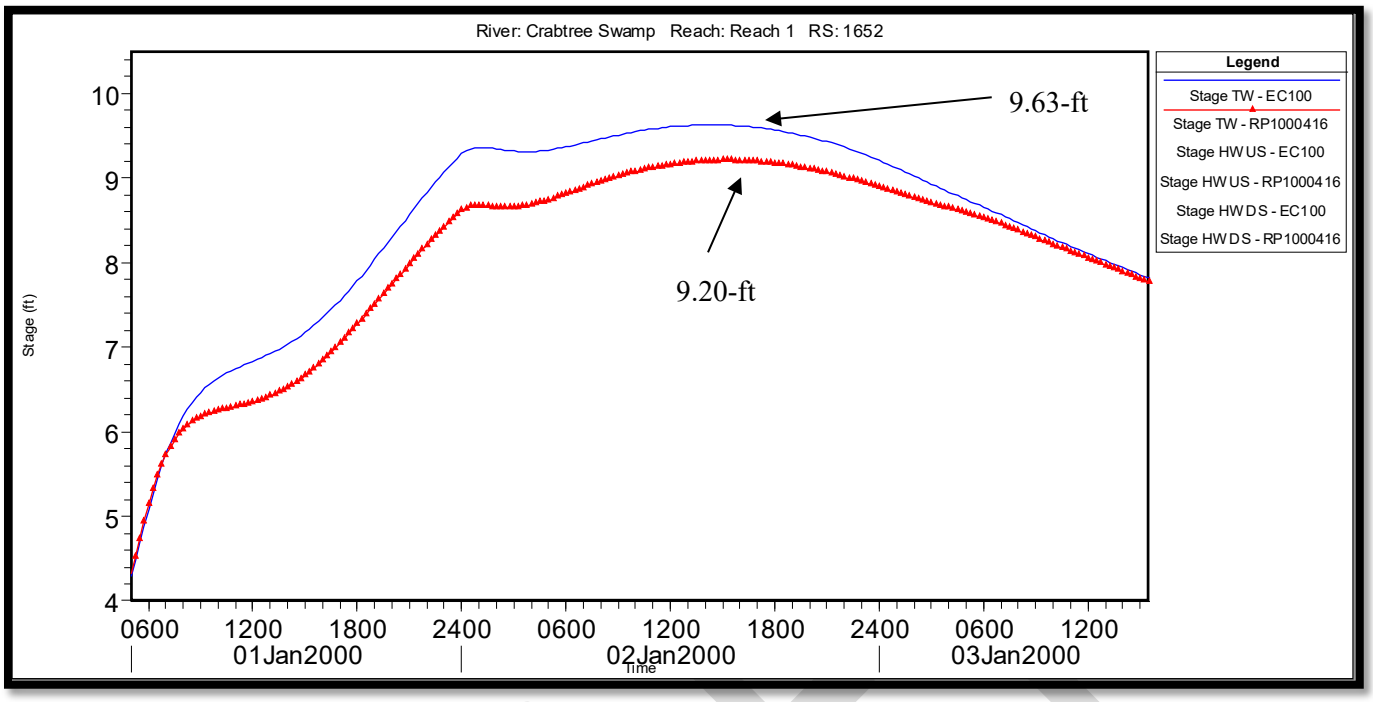


Figure 6-15 - Peak Stages in South Wetland Adjacent to Berm Cut 6, 1% AEP Storm.

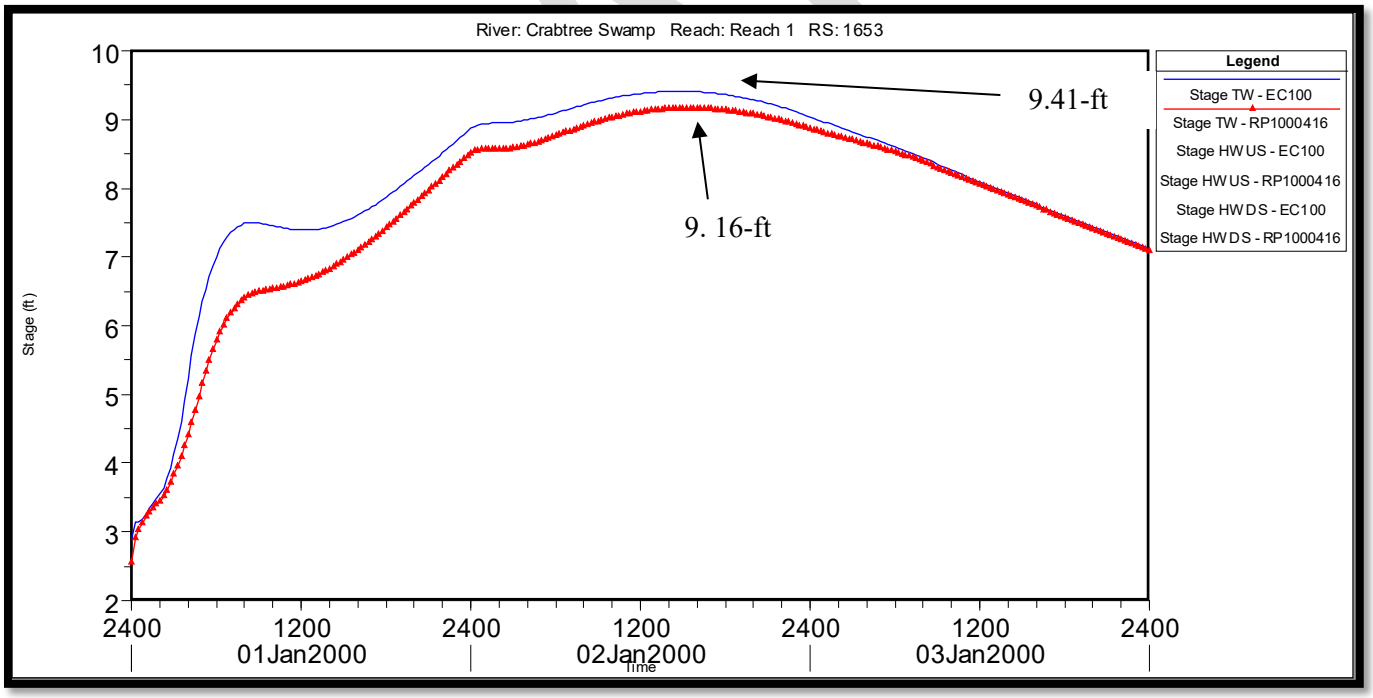


Figure 6-16 - Peak Stages in North Wetland Adjacent to Berm Cut 5, 1% AEP Storm.

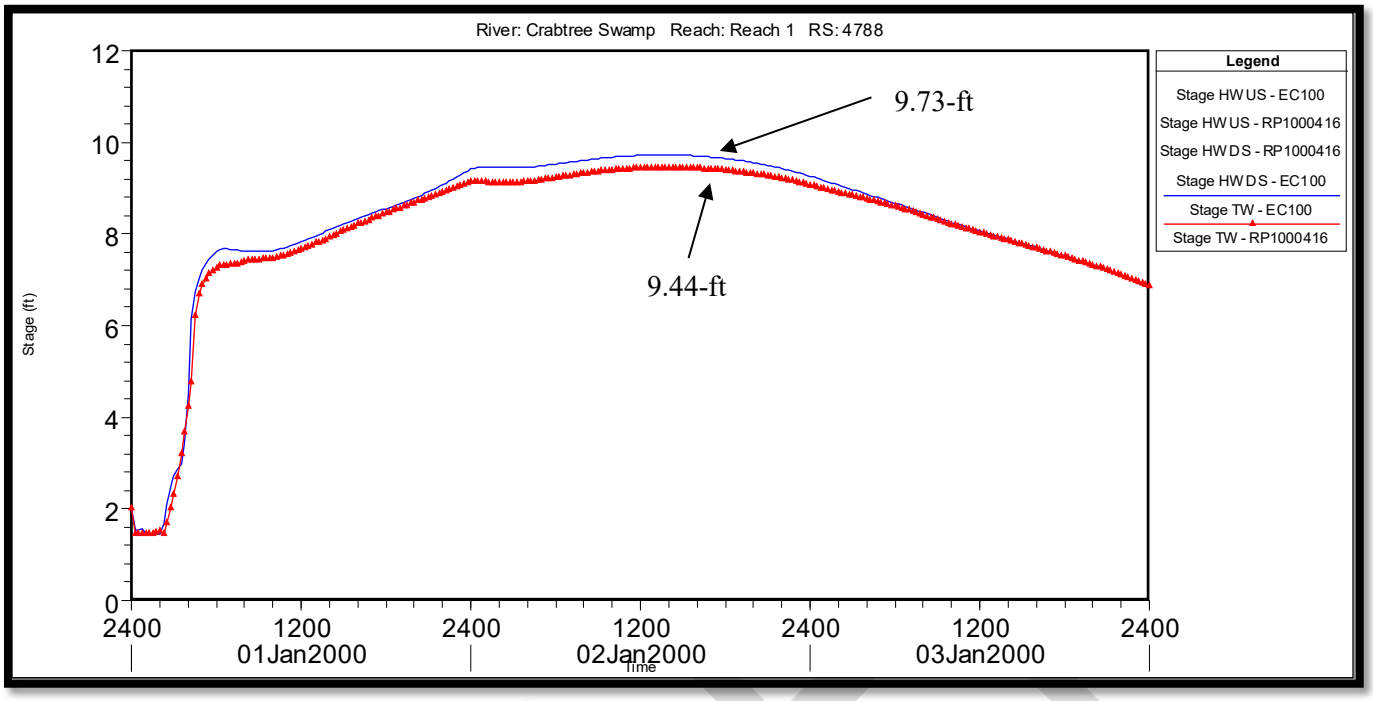


Figure 6-17 - Peak Stages in South Wetland Adjacent to Berm Cut 2, 1% AEP Storm.

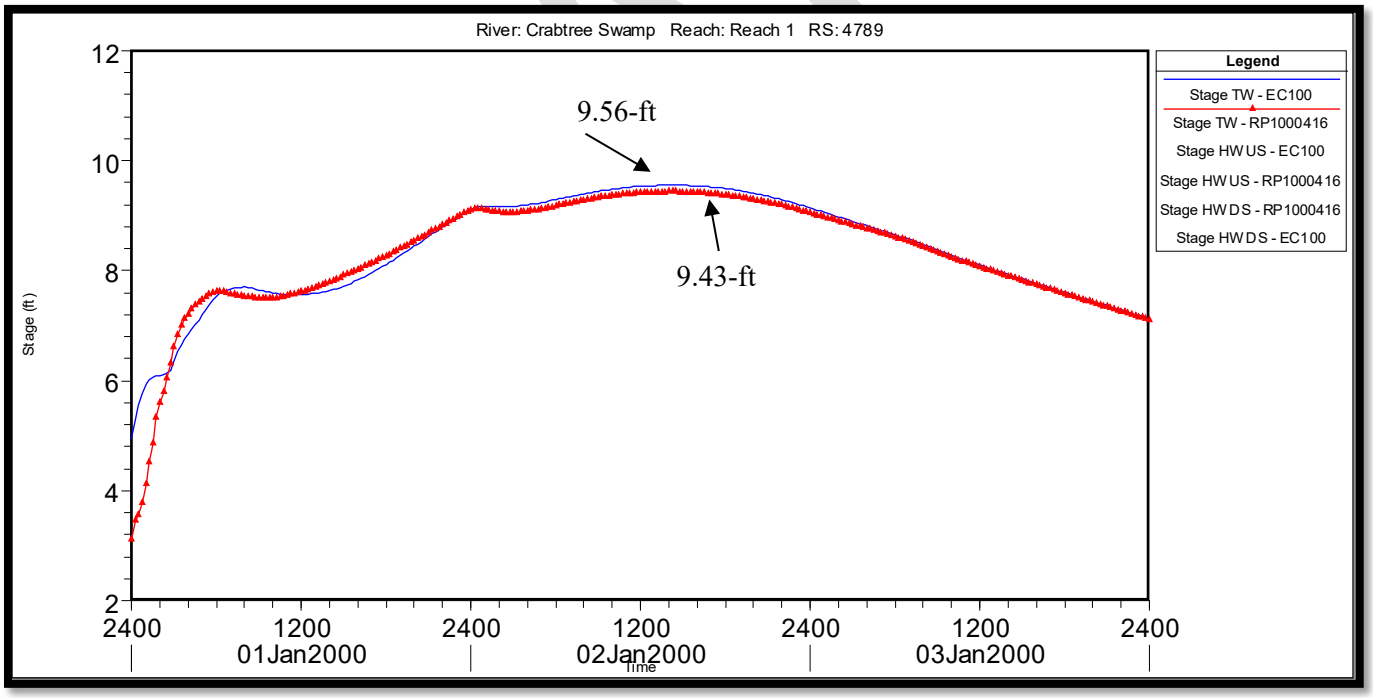


Figure 6-18 - Peak Stages in North Wetland Adjacent to Berm Cut 1, 1% AEP Storm.

Figure 6-19 through Figure 6-21 show the side-by-side comparison of the EC and PP flood depth maps for the 1%, 4%, and 33% AEPs. These flood maps show no increase in flood extents or depths for any of the storms.

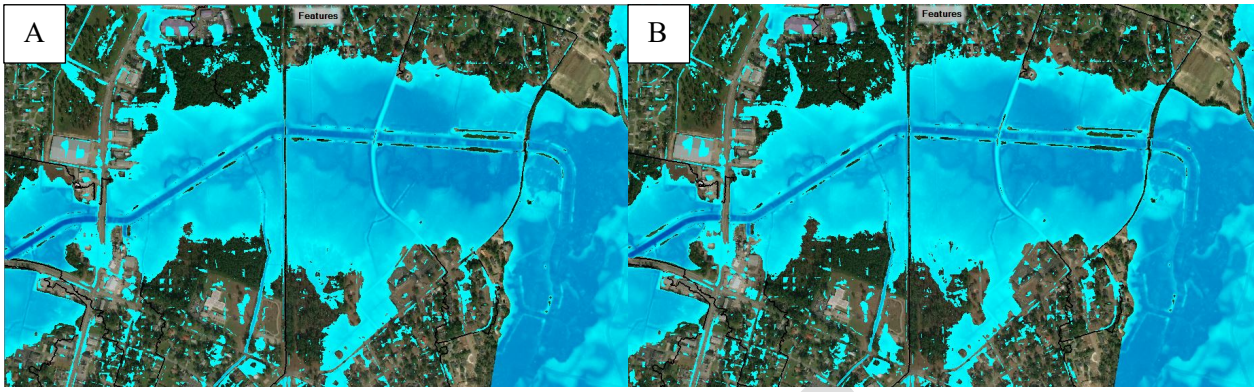


Figure 6-19 – Reach 3, 1% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

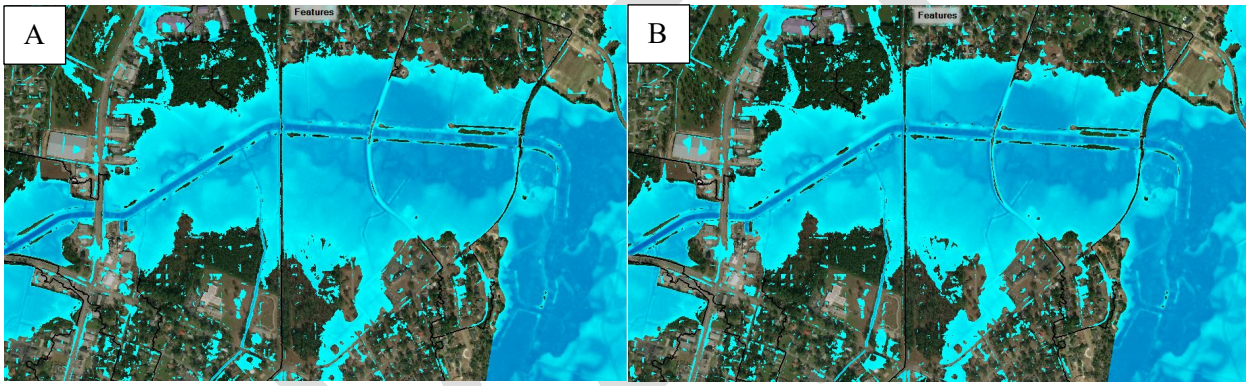


Figure 6-20 - Reach 3, 4% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

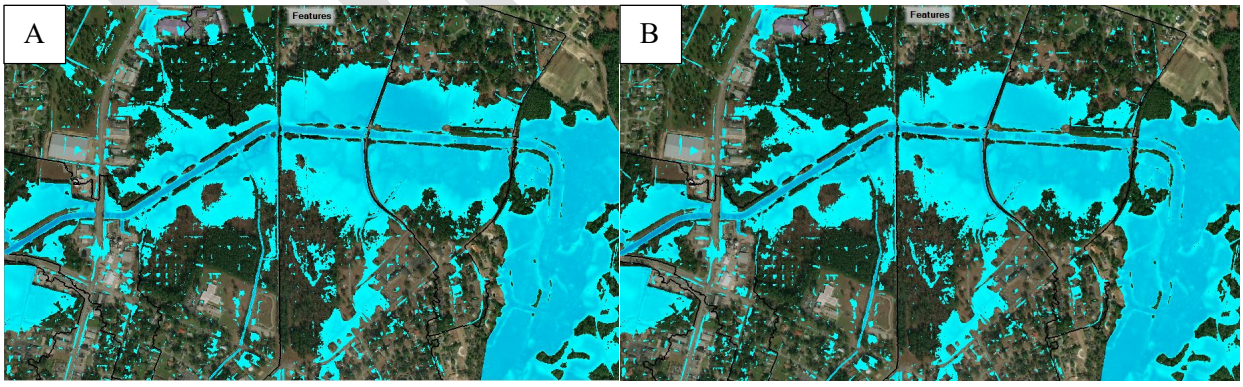


Figure 6-21 - Reach 3, 33% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

The 4% AEP storm channel velocities for the EC model scenario are compared to those of the PP model scenario at each berm cut in Table 6-1. The results show that the design is expected to result in a reduction in velocities at the berm cuts. All velocities are in feet per second (fps).

Table 6-1 – 4% AEP Storm Channel Velocities at Berm Cuts.

Berm Cut Number	Existing Conditions Velocity	Preferred Plan Velocity
1	1.70 fps	1.37 fps
2	2.23 fps	1.79 fps
3	1.45 fps	1.01 fps
4	1.41 fps	1.09 fps
5	1.64 fps	1.08 fps
6	1.55 fps	1.48 fps

6.2 Reach 2 Results

Moving upstream along the project, Reach 2 includes three floodplain benches, and two log drop structures to replace the existing natural drop structures. To optimize the length of this appendix, only the results for the 33%, 4%, and 1% AEP storms are presented and discussed.

6.2.1 33% AEP, 24-Hour Storm

The results of the 33% AEP storm simulation indicate that upstream of the root wads, the PP stage is 0.01 feet higher than the EC stage, for approximately 600 LF of channel, as shown in Figure 6-22. The black arrow shows where the impacts end. It is important to note the overall reduction in the peak stage downstream of Hwy 501 as a result of the berm cuts downstream.

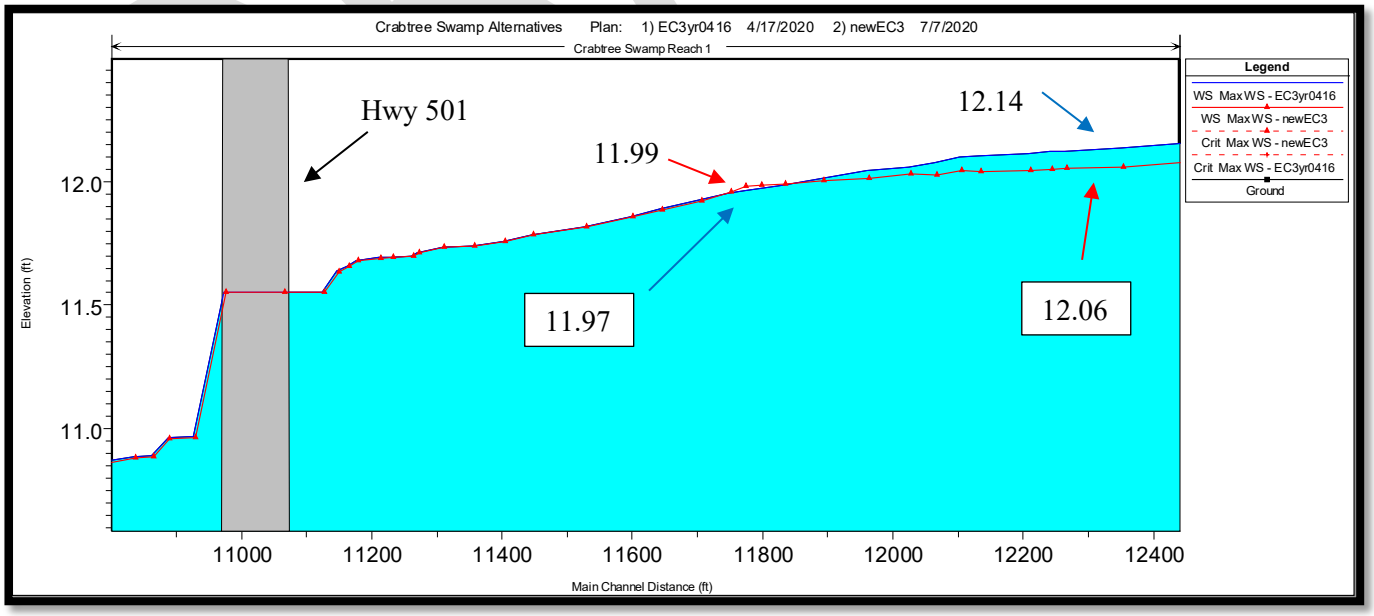


Figure 6-22 – Reach 2, 33% AEP Storm Stage Difference Between Hwy 501 and Floodplain Benches.

Figure 6-23 shows a side-by-side comparison of the EC and PP flood maps.

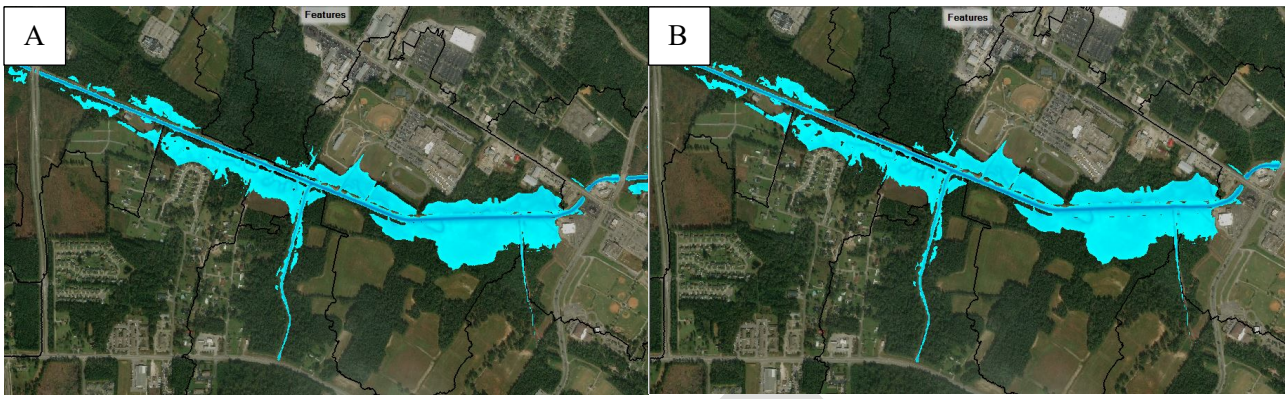


Figure 6-23 - Reach 2, 33% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

6.2.2 4% AEP, 24-Hour Storm

The results of the 4% AEP storm simulation indicate that upstream of the root wads, the PP stage is 0.03 feet higher than the EC stage, for approximately 800 LF of channel, as shown in Figure 6-24. The black arrow shows where the impacts end.

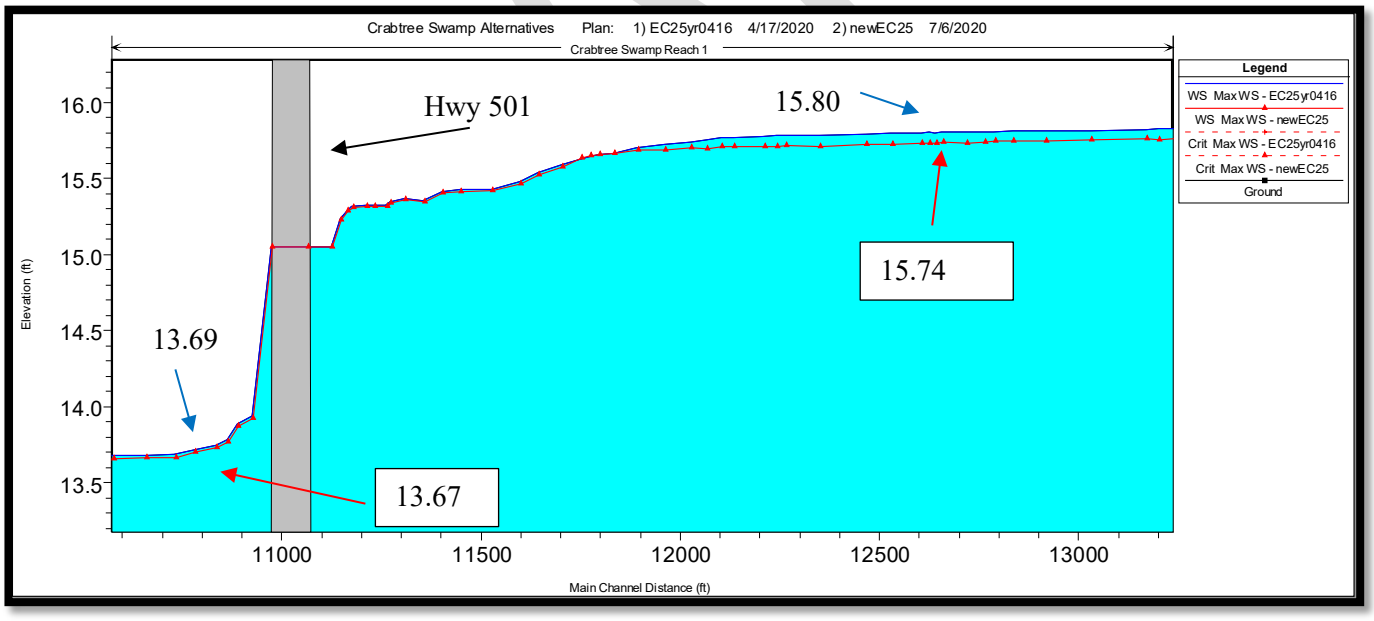


Figure 6-24 – Reach 2, 4% AEP Storm Stage Differences Between Hwy 501 and Floodplain Benches.

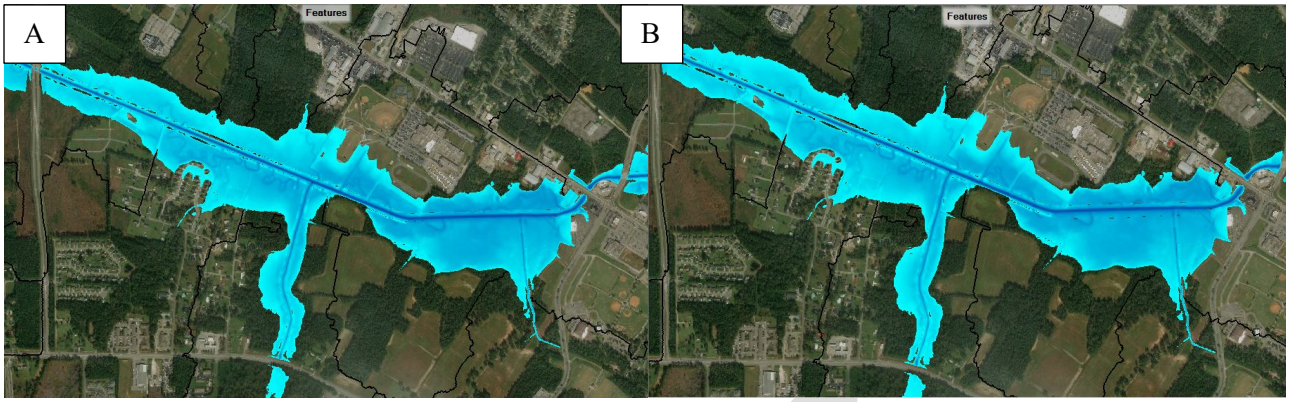


Figure 6-25 - Reach 2, 4% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

6.2.3 1% AEP, 24-Hour Storm

Figure 6-26 shows that the root wads result in a peak stage increase of 0.04-ft during the 1% AEP storm. It is important to note the peak stages are decreased downstream of Hwy 501, as a result of the downstream berm cuts.

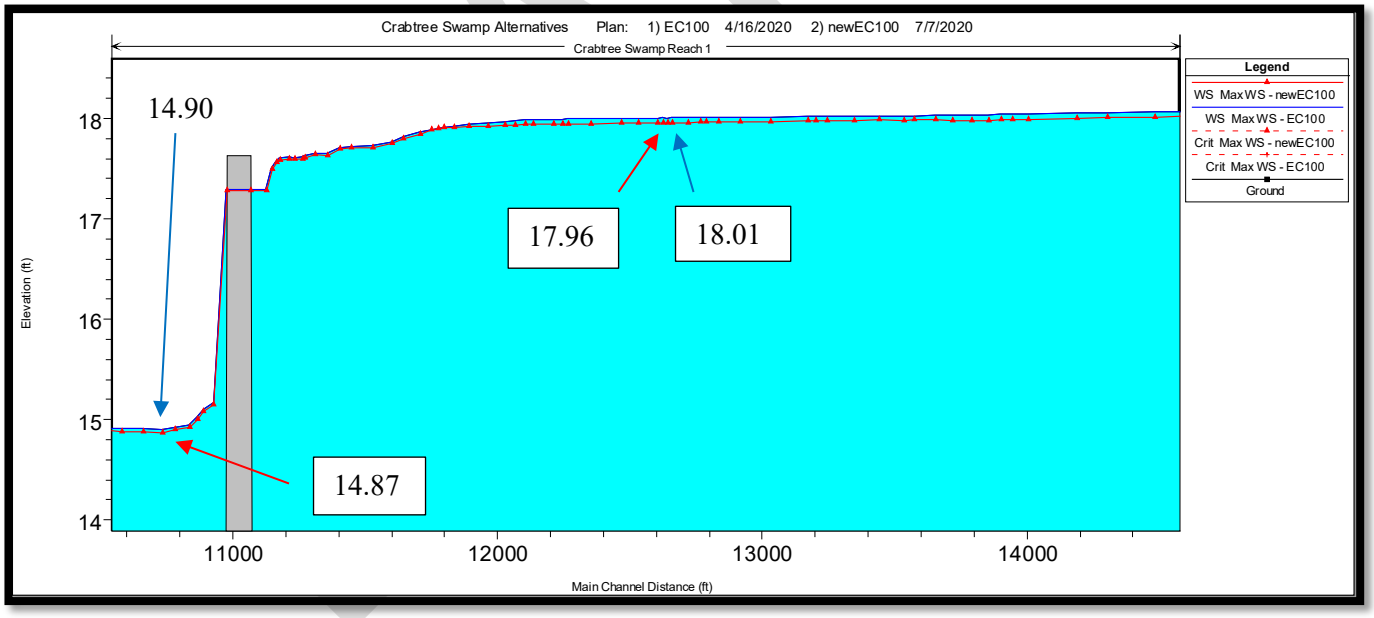


Figure 6-26 – Reach 2, 1% AEP Storm Stage Differences Between Hwy 501 and Floodplain Benches.

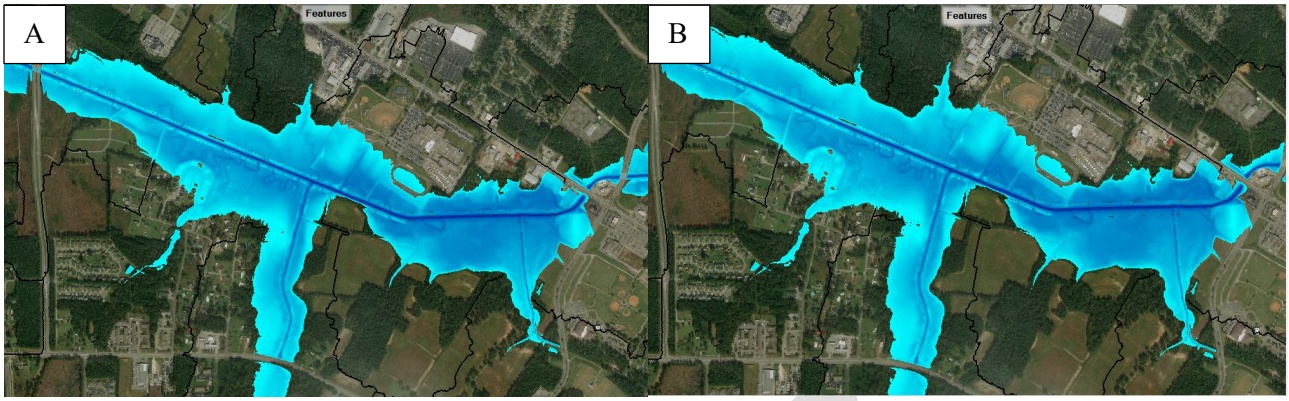


Figure 6-27 - Reach 2, 1% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

Figure 6-28 shows a comparison of the channel velocities during the 4% AEP storm along the entire project length. Every cross section where channel velocity is shown to increase with the PP was analyzed, and all were verified to have no channel alterations at these points. However, many were located just upstream of the floodplain benches. It should be noted that these embankments are heavily vegetated, and no erosion is evident just upstream of the existing floodplain benches, indicating that the existing vegetation provides erosion protection. Therefore, the results indicate that impacts to velocities with the Preferred Plan (red line) are negligible, and reduce it in many areas.

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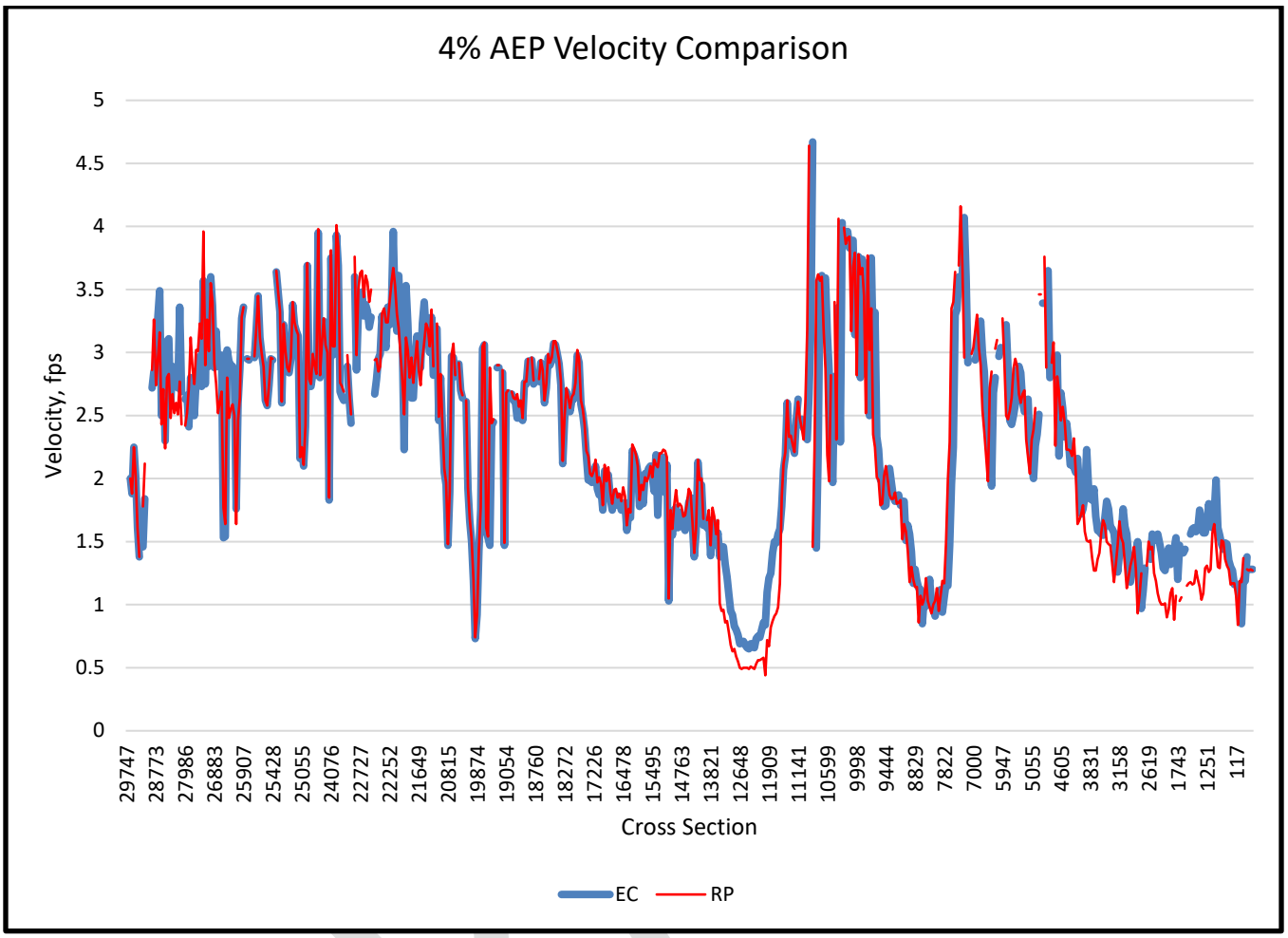


Figure 6-28 – 4% AEP Storm Channel Velocity Comparison

6.2.4 Newbury Riffle Structure Analysis

One of the management measures that was carried forward for further analysis was a grade control structure to be placed downstream of the Hwy 501 culvert, to raise the stage (and fish) for passage through the culvert. The grade control structure design selected was the Newbury rock riffle structure, a low-head weir with a long apron made from riprap or small boulders that are built by placing rock fill within an existing channel. The slope is designed to create a hydraulic profile reflecting those of natural riffles. A plan and two profile views are shown in Figure 6-29 and Figure 6-30, which was designed in accordance with criteria obtained from (NASEM, 2005) and https://thegreenreach.weebly.com/west-union-stream-restoration.html.

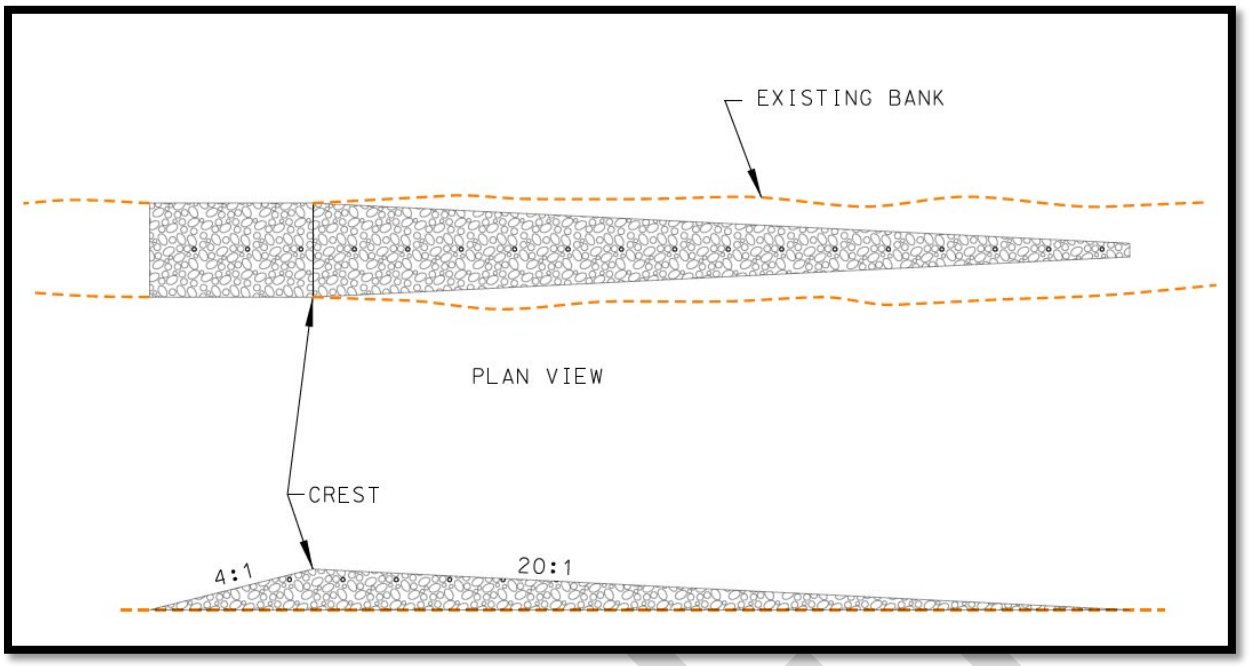


Figure 6-29 – Newbury Rock Riffle Design – Longitudinal.

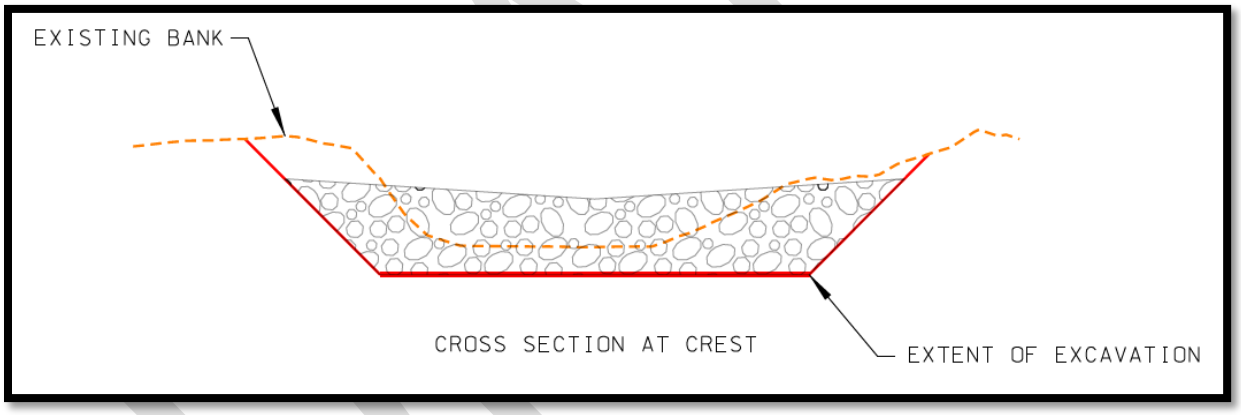


Figure 6-30 – Newbury Rock Riffle Cross Section.

The fish would only be able to swim up the ramp to the Hwy 501 culvert when the depth within the V-notch all the way up the ramp is also six inches deep, the minimum required for fish passage. This is illustrated in Figure 6-31, with the blue line representing the water.

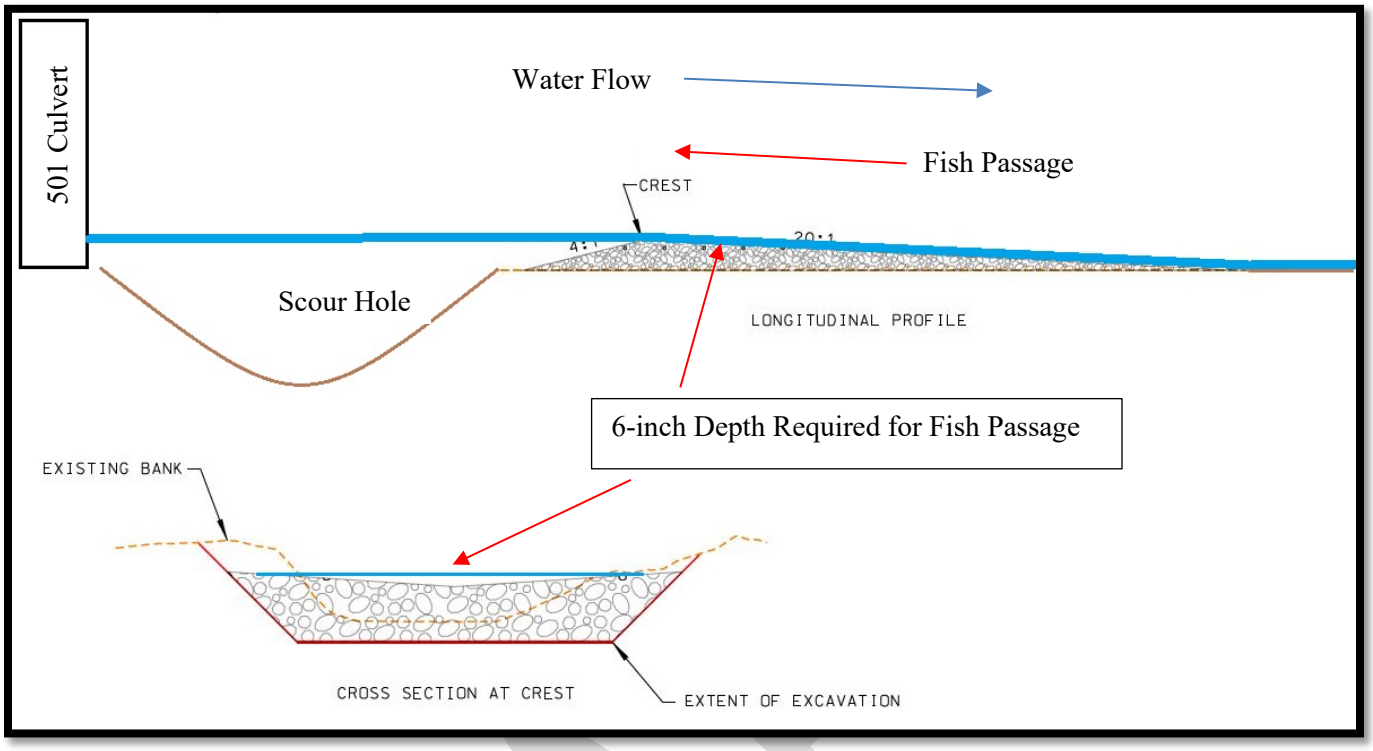


Figure 6-31 – Newbury Depth Requirement.

Thus, an analysis was performed to compare the frequency of conditions that allow fish passage under existing conditions, and with the Newbury structure constructed. The results are presented in Table 6-3. According to the model, the flows required to achieve both the tailwater conditions and flows for fish passage currently ("Existing") are between 58 and 64 cfs, which occur with rainfall events of between 1.45 and 1.82 inches. According to rainfall records, this has occurred between four and eight times in the period of record (POR) from 2006 through 2019. In comparison, the "With Project" row shows that only a flow of approximately 9.71 cfs is necessary for fish passage. This is due to the fact that the tailwater conditions will already be created by the Newbury structure, and only a minimum flow is needed to create the six-inch depth (within the 178-degree V-notch) all the way down the Newbury ramp. This flow is produced by 0.39-0.58-inch rain event, which has occurred an average of 25-36 times per year over the rainfall POR. The starred rows labeled "With Project*" are lower flow frequencies, in the event the V-notch is optimized with a smaller angle.

Table 6-2 – Fish Passage Frequency at Hwy 501.

	Flow req'd	**Rainfall**	**Frequency,**
Conditions	**cfs**	**req'd, in**	**#/yr**
Existing	58-64	1.45-1.82	4-8
With Project	9.71	0.39-0.58	25-36
Other Frequency Options May be Possible*			
With Project*	8.04-8.39	0.32-0.51	28-42
With Project*	6.18-6.64	0.24-0.44	32-48
With Project*	5.31-5.53	0.2-0.365	38-52
With Project*	4.64-4.59	0.16-0.29	44-57

*** Flow Frequencies for lower flows with smaller V-notch**

Based on the estimated low frequency of fish passage, as compared to the target fish passage of 100% of the time, the team decided to eliminate this feature, and its associated bank stabilization, from the preferred plan.

6.3 Reach 1 Results

Figure 6-32 through Figure 6-37 show that the log drop structure causes no stage increases during the 33%, 4%, or 1% AEP storms, respectively. The green lines along the x axis indicate locations of the floodplain benches, which coincide with lower peak stages for the preferred plan. Instead, the PP peak storm stages decrease moving upstream for both storms, in the area of the floodplain benches. Followed by the hydraulic profile of each storm is a side-by-side comparison of the EC and PP floodplain maps for the same storm.

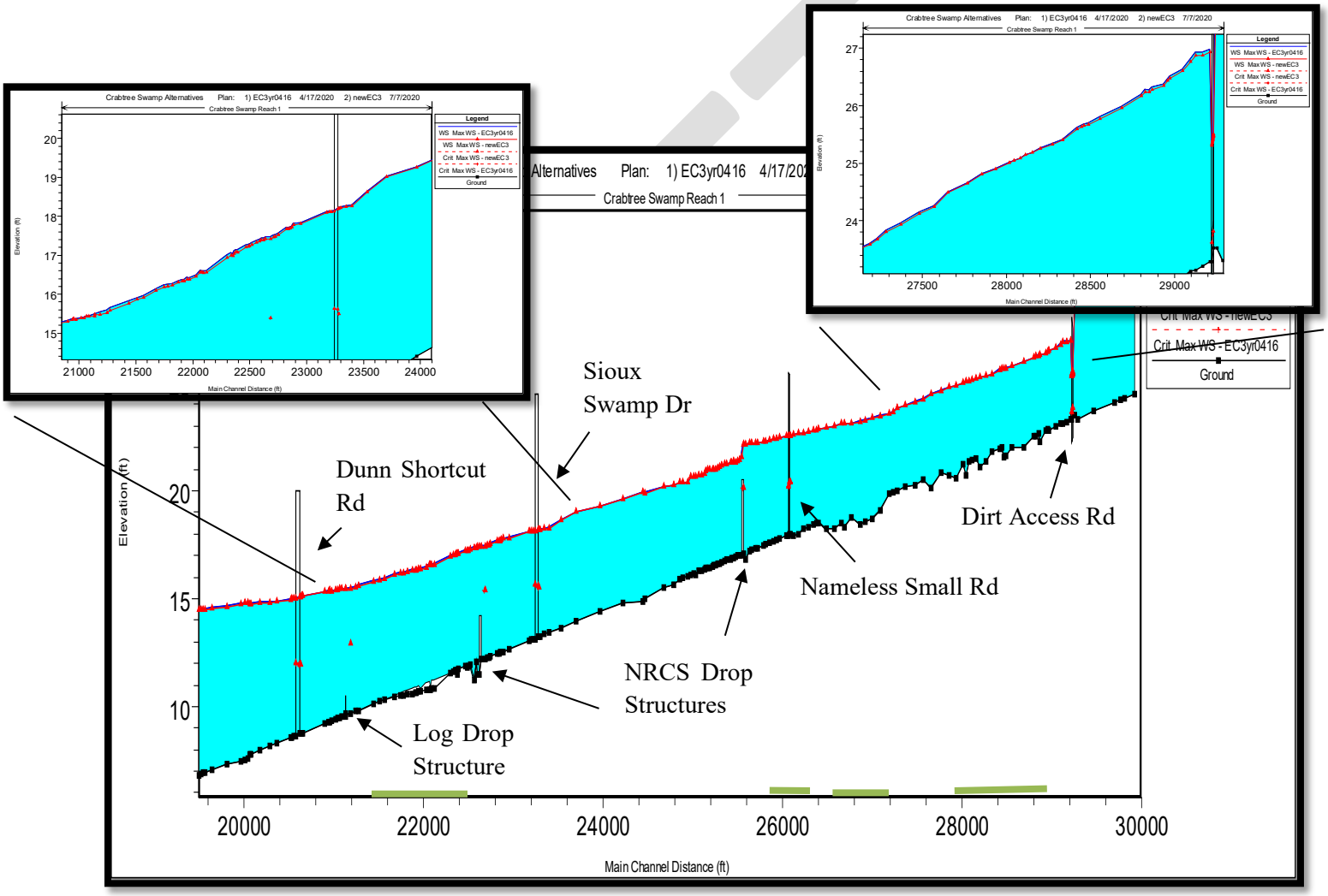


Figure 6-32 – Reach 1, 33% AEP Storm Stage Differences.

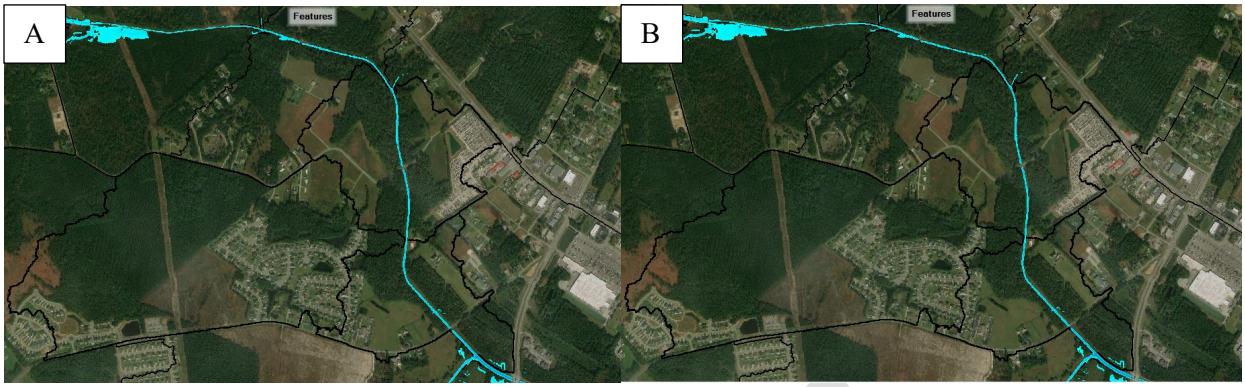


Figure 6-33 - Reach 1, 33% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

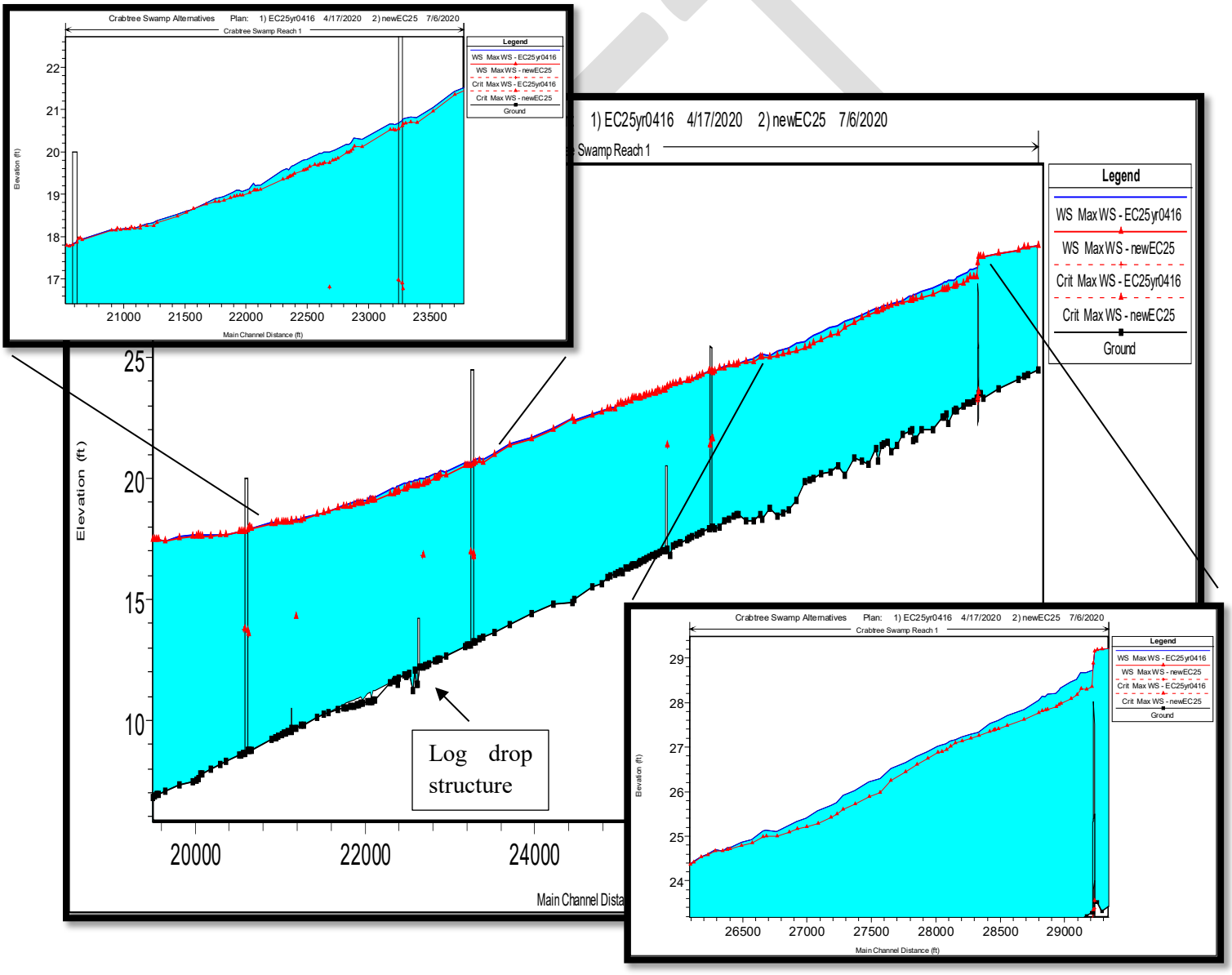


Figure 6-34 – Reach 1, 4% AEP Storm Stage Differences.

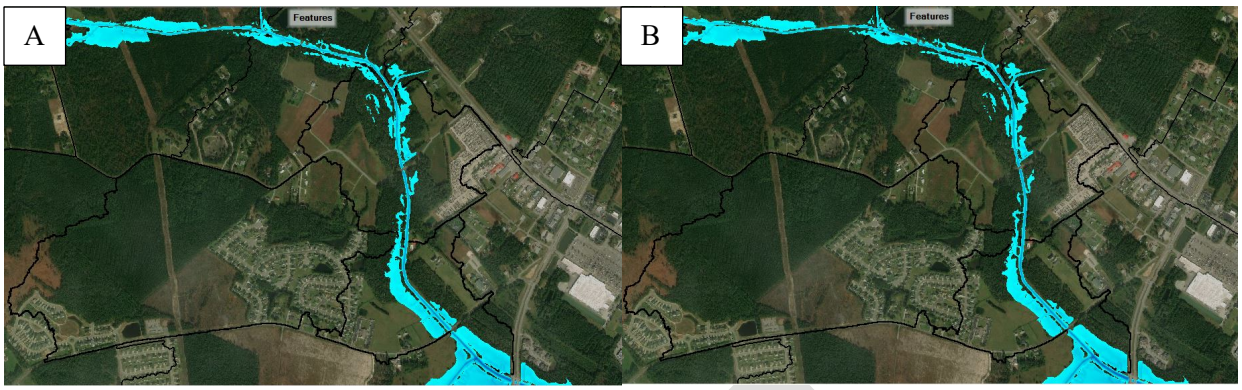


Figure 6-35 - Reach 1, 4% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

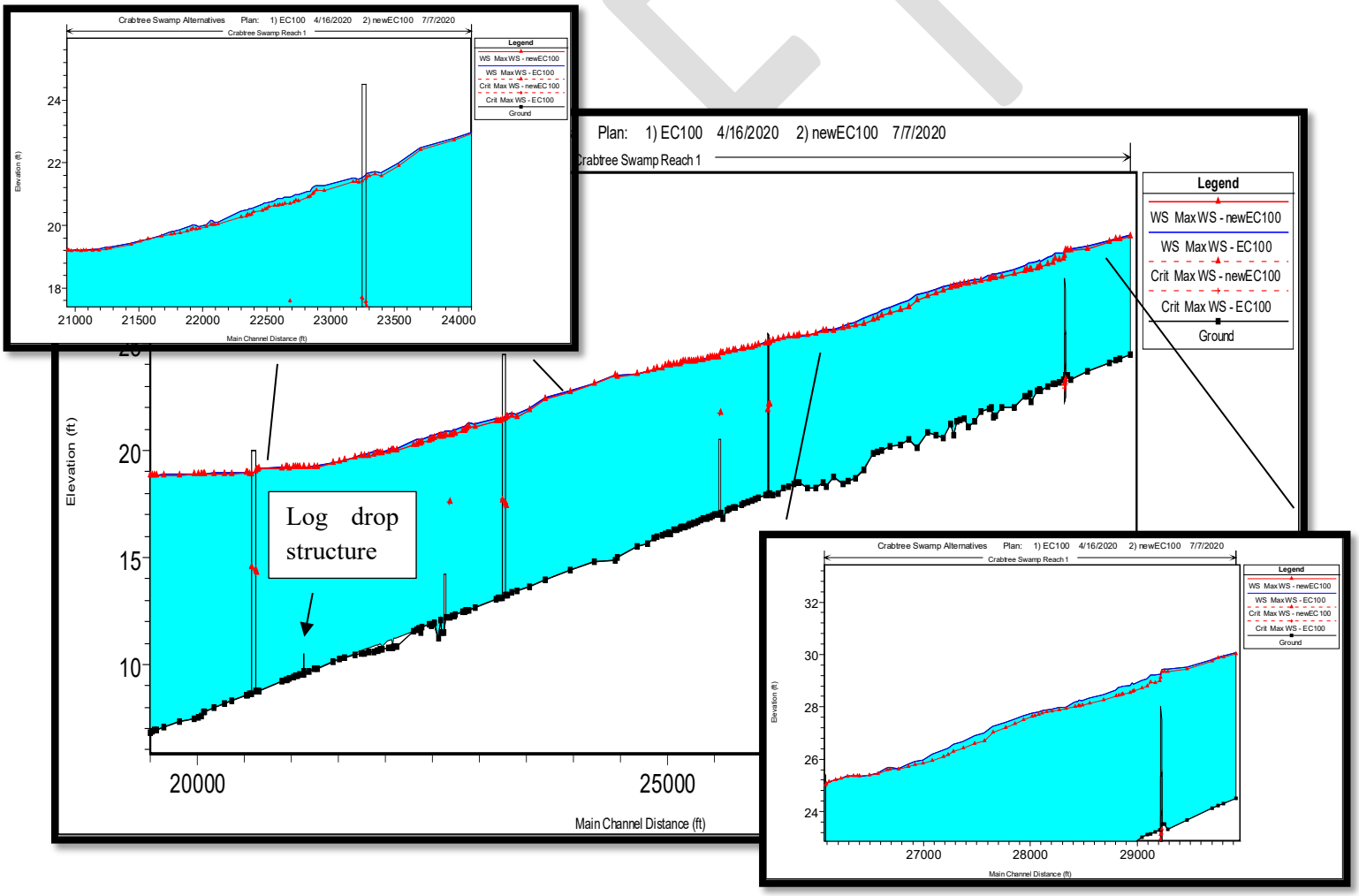


Figure 6-36 – Reach 1, 1% AEP Storm Stage Differences.

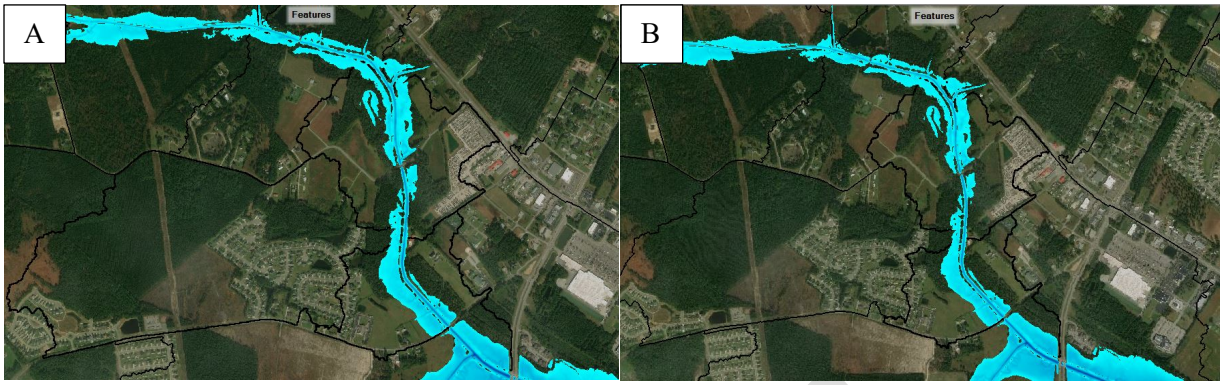


Figure 6-37 - Reach 1, 1% AEP Depth Maps: A) Existing Conditions; B) Preferred Plan.

Table 6-3 shows the modeled 4% AEP storm channel velocities at the log drop structure, which is located at Cross Section 21012. The velocity is slightly increased near the log-drop structure with the design conditions, as expected due to reduced cross sectional area followed by a drop. The structure design includes buried riprap, and the channel in the area is vegetated, so the embankment is protected in this area.

Table 6-3 – 4% AEP Storm Channel Velocities at Log Drop Structure.

Channel Cross Section	EC Velocity	PP Velocity
20962	3.19 fps	3.23 fps
21062	2.82 fps	2.89 fps

7.0 Conclusion and Recommendations

7.1 Model Result Conclusions

Reach 1 – All components can be constructed with no adverse impacts to flood stages.

Reach 2 – All components can be constructed with no adverse impacts to flood stages.

Reach 3 – All components can be constructed with no adverse impacts to flood stages. However, the berm cut lengths and elevations can be analyzed further for optimized storage and drainage.

7.2 Recommendations for Analyses During Design and Implementation

The Continuing Authorities Program is designed for projects that are smaller in footprint, scope, and cost. Technical analyses during the Feasibility Study are to have a proportionately smaller scope, including the hydraulic analyses. In keeping with the intent of CAP and the smaller analysis scope and budget, the hydraulic analysis performed for this study included data from an older hydrographic survey, no recent information was available on the SCDOT bridges and culverts, no base flow data was available within the upper reaches of the project area, and the analysis did not include a Monte Carlo uncertainty analysis. In addition, it was evident during site visits that voids exist beneath the culvert at Hwy 701, and it is believed that voids exist beneath the culvert at Hwy 501 as well. Lastly, it was noted that the hydrographic data available was newer than the data used for the FEMA Flood Insurance Study, and invert differences indicated that the channel has changed. It is recommended that during the DI Phase, the following be performed:

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- Hydrographic survey data be collected, including details on bridges and culverts;
- Coordinate with USGS during hydrographic survey to survey an accurate reference elevation for their stage gage;
- Flow data be collected at the Hwy 501 bridge and the culvert at Daniel Road, at a minimum;
- Coordinate with SCDOT on possible design for future Hwy 501 culvert replacement, to be replaced with either an open-bottom bridge or a floodplain culvert design;
- Update hydrologic and hydraulic modeling with recent hydrographic survey data, as well as channel bridge and culvert data, and culvert outfall data (especially in Reach 3);
- Update hydrologic and hydraulic modeling with an additional calibration run using low flow conditions;
- Full assessment of structure foundations, especially the voids beneath the Highways 501 and 701 structures;
- Optimize the berm cut lengths and elevations;
- Contact FEMA regarding updating their model; and
- a Monte Carlo uncertainty analysis should be performed.

8.0 Climate Change Assessment

8.1 Sea Level Change Due to Climate Change

The climate assessment for sea level change (SLC) follows USACE guidance of Engineer Regulation (ER) 1100-2-8162, Incorporating Sea Level Change in Civil Works Programs and Engineer Pamphlet (EP) 1100-2-1, Procedures to Evaluate Sea Level Change: Impacts, Responses, and Adaptation. ER 1100-2-8162 and EP 1100-2-1 provide guidance for incorporating the direct and indirect physical effects of projected future sea level change across the project life cycle in managing, planning, engineering, designing, constructing, operating, and maintaining USACE projects and systems of projects.

The Crabtree Swamp Aquatic Ecosystem Restoration project, located in lowland areas approximately 15 miles inland from Myrtle Beach on the coast of South Carolina, is potentially vulnerable to sea level rise. It is important to restate the purpose of the project to add perspective to climate change impacts. This is an aquatic restoration and protection project. The objectives of the project include stabilization of stream bank to minimize bank failures, reestablishment of aquatic life habitat and passages, and increasing connection of the Crabtree Swamp channel to adjacent floodplains and wetlands. Overall, the purpose of the Crabtree Swamp Aquatic Ecosystem Restoration Project is to increase and improve wetland habitat.

To assess the vulnerability of the project features to future SLC, the web-based USACE Sea-Level Change Curve Calculator, Version 2019.21 (USACE 2019) was used to calculate SLC projection curves based on the National Oceanic and Atmospheric Administration (NOAA) tide gauge 8661070. The gauge is located on Springmaid Pier at Myrtle Beach, South Carolina, about 15 miles southeast of the mouth of the Crabtree Swamp channel outlet. The following figures show pertinent data on NOAA gauge 8661070.

- Figure 8-1 shows the datum values for the Springmaid Pier tide gauge.
- Figure 8-2 shows the three USACE SLC scenarios were calculated from above mentioned online calculator.
- Figure 8-3 shows USACE's projected SLC elevations.

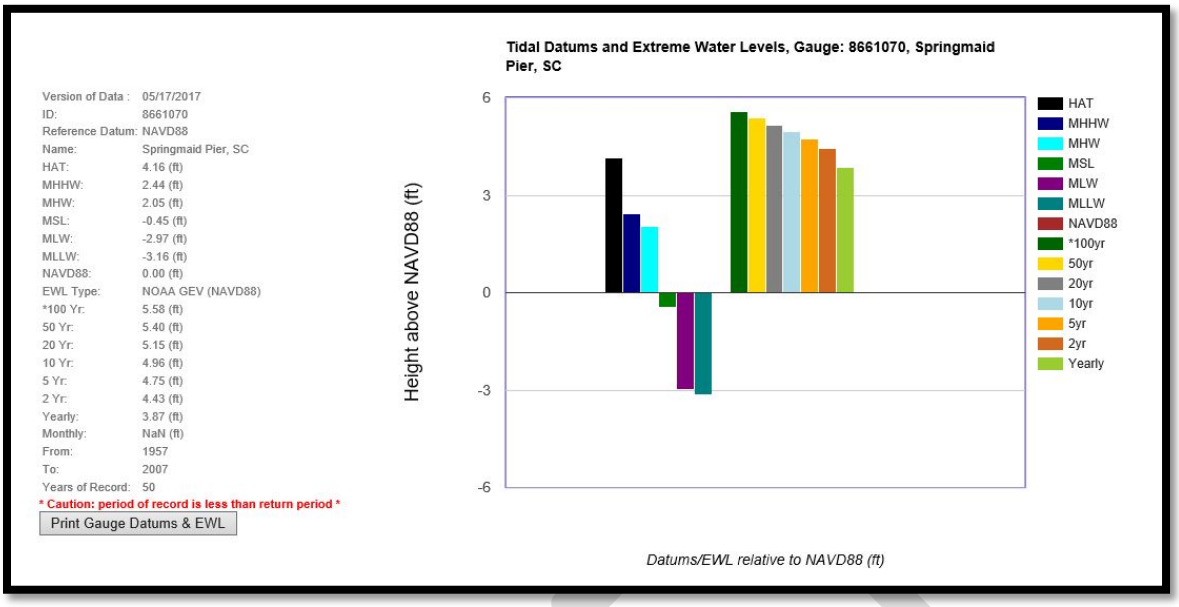


Figure 8-1 – Tidal Datums for NOAA Gauge 8661070.

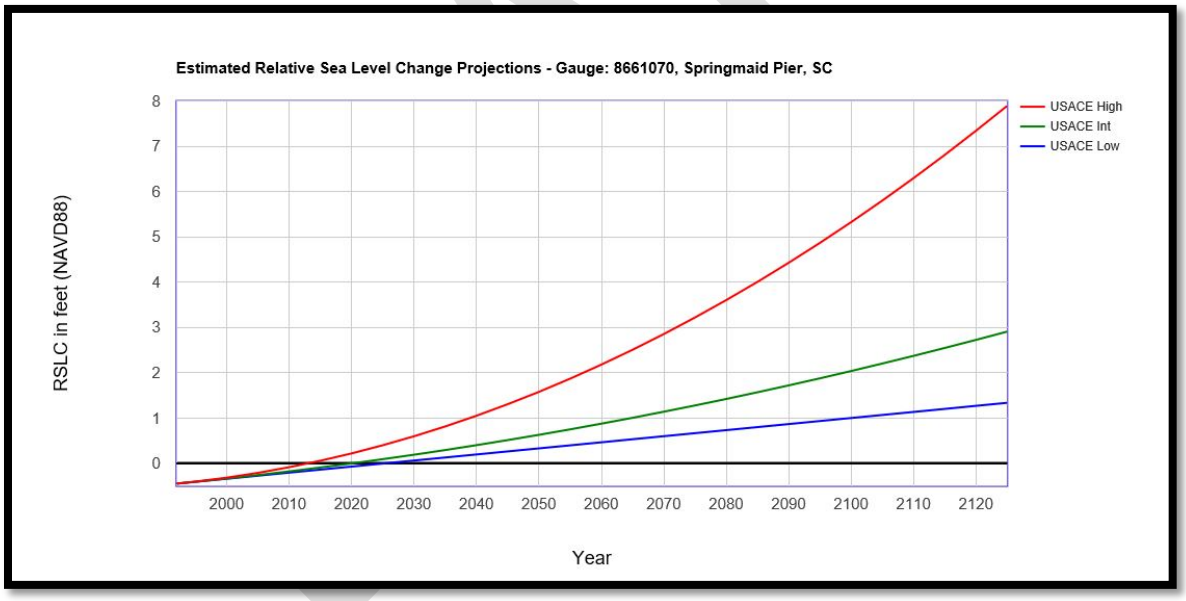


Figure 8-2 – Estimated SLC Projections.

The SLC curves shown in Figure 8-2 include:

- Low projection, which is based on historic sea level rise and represents the minimum expected sea level change.
- Intermediate projection.
- High projection, representing the maximum sea level change.

Rio Anton Ruiz Ecosystem Restoration
8661070, Springmaid Pier, SC
NOAA's 2006 Published Rate: 0.01342 feet/yr
All values are expressed in feet relative to NAVD88

Year	USACE Low	USACE Int	USACE High
1992	-0.45	-0.45	-0.45
1995	-0.41	-0.41	-0.41
2000	-0.34	-0.34	-0.32
2005	-0.28	-0.26	-0.21
2010	-0.21	-0.18	-0.09
2015	-0.14	-0.09	0.06
2020	-0.07	-0.01	0.22
2025	-0.01	0.09	0.40
2030	0.06	0.19	0.60
2035	0.13	0.29	0.81
2040	0.19	0.40	1.05
2045	0.26	0.51	1.30
2050	0.33	0.63	1.58
2055	0.40	0.75	1.87
2060	0.46	0.87	2.18
2065	0.53	1.00	2.51
2070	0.60	1.14	2.85
2075	0.66	1.28	3.22
2080	0.73	1.42	3.60
2085	0.80	1.57	4.00
2090	0.87	1.72	4.43
2095	0.93	1.88	4.87
2100	1.00	2.04	5.32
2105	1.07	2.20	5.80
2110	1.13	2.37	6.30
2115	1.20	2.55	6.81
2120	1.27	2.72	7.34
2125	1.34	2.91	7.89

Figure 8-3 – Published SLC Stages.

The project is assumed to be constructed in 2025, and is therefore evaluated based on 50-year (2075) and 100-year (2125) project life cycles. Based on evaluation of the SLC curves in Figure 8-3, sea level rise will reach 0.66, 1.28 and 3.22 feet NAVD88 for the low, intermediate, and high curves, respectively in 2075. Sea level rise will reach 1.34, 2.91 and 7.89 feet NAVD88 for the low, intermediate, and high curves, respectively in 2125.

In lieu of identifying a critical elevation at which SLC impacts the project performance, the future SLC elevations were mapped on a regional terrain dataset using NOAA's Sea Level Rise Viewer to determine if the inundation due to SLC would encroach on the project area at the 50-yr and 100-yr marks. USACE Intermediate curve was used for this exercise, and Figure 8-4 shows the current 2020 Mean Higher High Water (MHHW) levels as a reference.

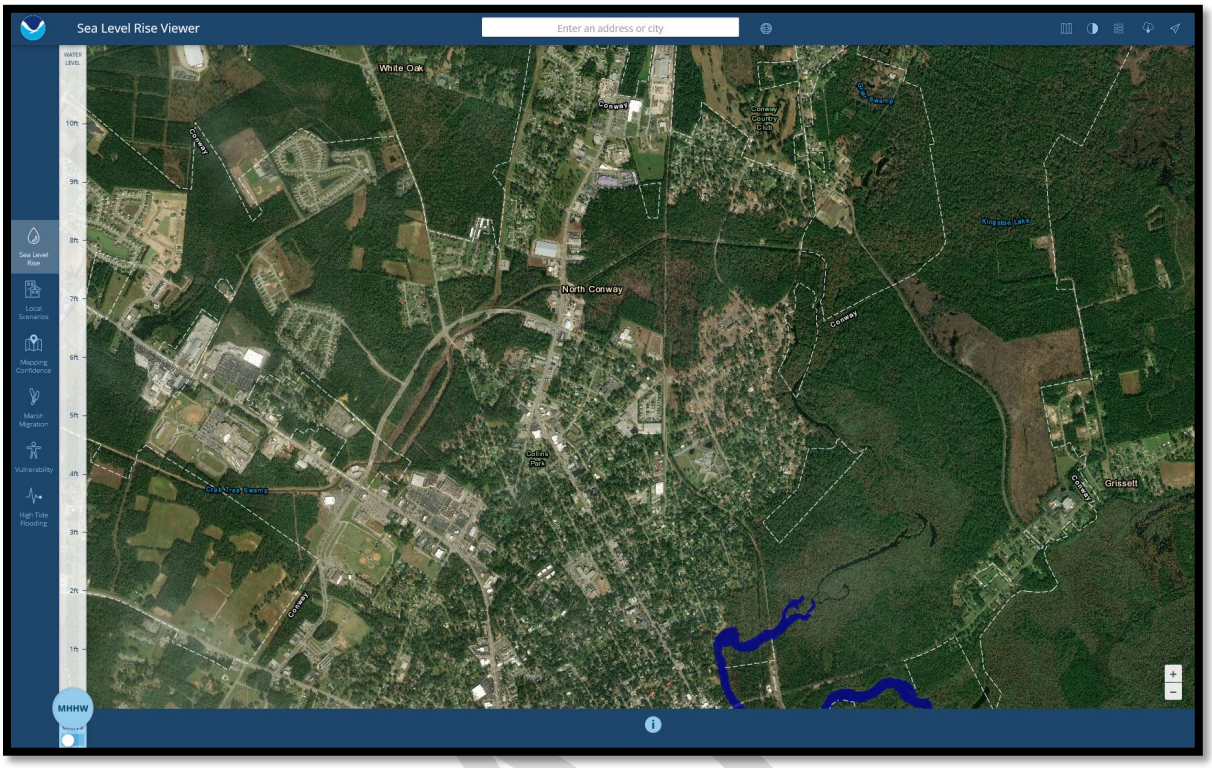


Figure 8-4 – Current MHHW Levels.

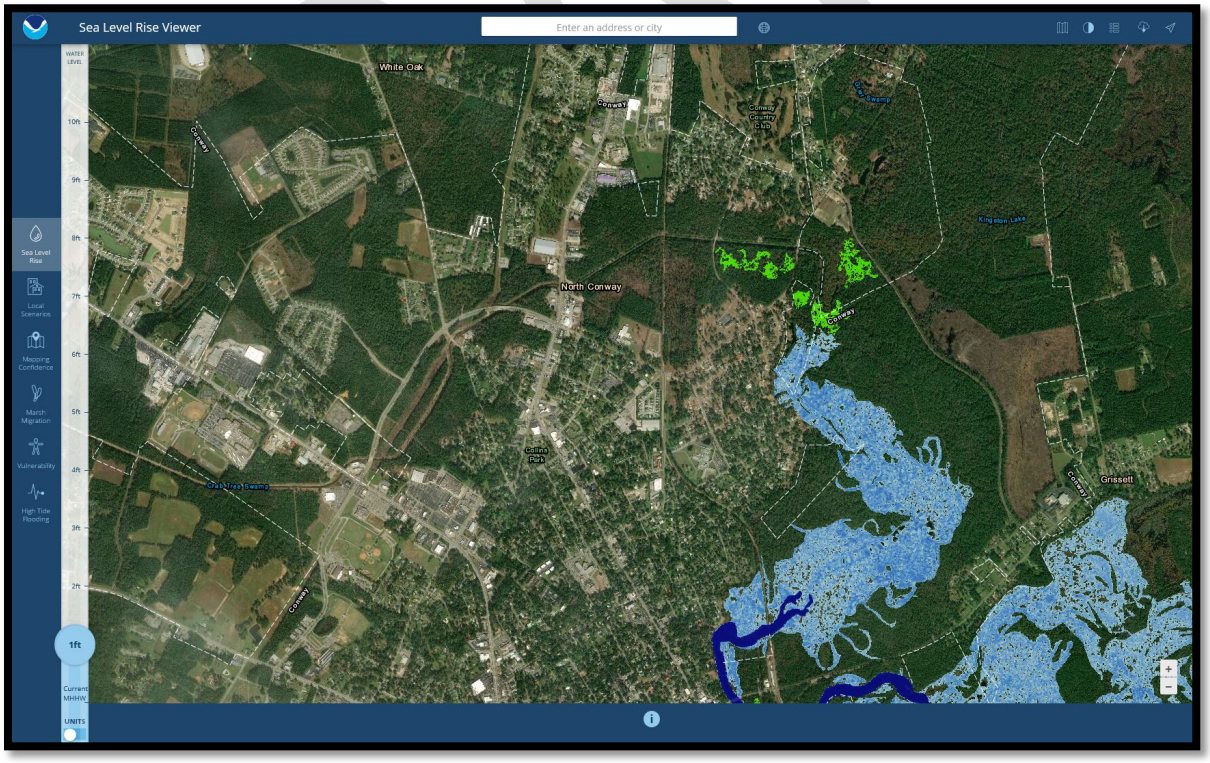


Figure 8-5 – 2075 Intermediate Curve - MHHW Levels.



Figure 8-6 – 2125 Intermediate Curve - MHHW Levels.

The progressively higher water levels in 2075 and 2125 show impacts to the project area, despite being 15 miles from shore. Green areas indicate low-lying areas, and the blue areas show water depths, with deeper blues indicating deeper depths. Figure 8-5 shows green low-lying areas in the wetlands at the downstream end of the project area. Figure 8-6 shows inundation in the downstream project area wetlands, including some developed areas (this figure is zoomed in to the maximum extent).

Since the objective of the project it to increase wetland habitat by creating more natural pools and extending wetland habitat, the sea level rise will aid in this. No design changes would be necessary. However, the increased salinity may change the ecosystem to a more brackish habitat.

8.2 Inland Hydrology Due to Climate Change

The climate assessment for inland hydrology follows USACE guidance of Engineering and Construction Bulletin (ECB) 2018-14, Guidance for Incorporating Climate Change Impacts to Inland Hydrology in Civil Works Studies, Designs, and Projects. ECB 2018-14 provides guidance for incorporating climate change information in the hydrologic analyses in accordance with USACE climate preparedness and resilience policy and ER 1105-2-101, Risk Assessment for Flood Risk Management Studies.

The vulnerability and risk to this project associated with inland hydrology climate change was assessed qualitatively as outlined in ECB 2018-14. The vulnerability assessment includes a literature review and an application of climate tools to evaluate observed and projected climate trends. As required by Engineering Construction Bulletin ECB 2018-14, a hydrologic literature review was conducted to summarize peer reviewed literature on current climate and observed climate trends and projected climate trends in the project area. A synthesis of USACE peer reviewed climate literature (USACE, 2015) is available for the South Atlantic-Gulf Region 03, and is the primary source of information in this literature review. In addition to a literature review, the vulnerability

assessment includes the application of climate tools used to provide information on observed and projected climate trends relevant to the project area.

8.2.1 Observed Climate Change Trends

The literature review shows that observed temperature trends show an apparent general warming trend in most areas of Region 03, with a few exceptions in the northern areas of the region. The graphics provided in the report (USACE, 2015) show either a cooling trend or no change, depending on the season. Figure 8-7 shows linear seasonal change trends in air temperature (left column) and precipitation (right column) between the 1950-2000 POR.

Precipitation trends are unclear in Region 03, as there is not a clear consensus among the multiple studies cited by the report. However, a small upward trend in precipitation in has been identified by multiple authors, as well as a trend of increased variability in precipitation. The right column in Figure 8-7 shows the rainfall change trend in the project area increases in fall and winter, and decreases in spring and summer.

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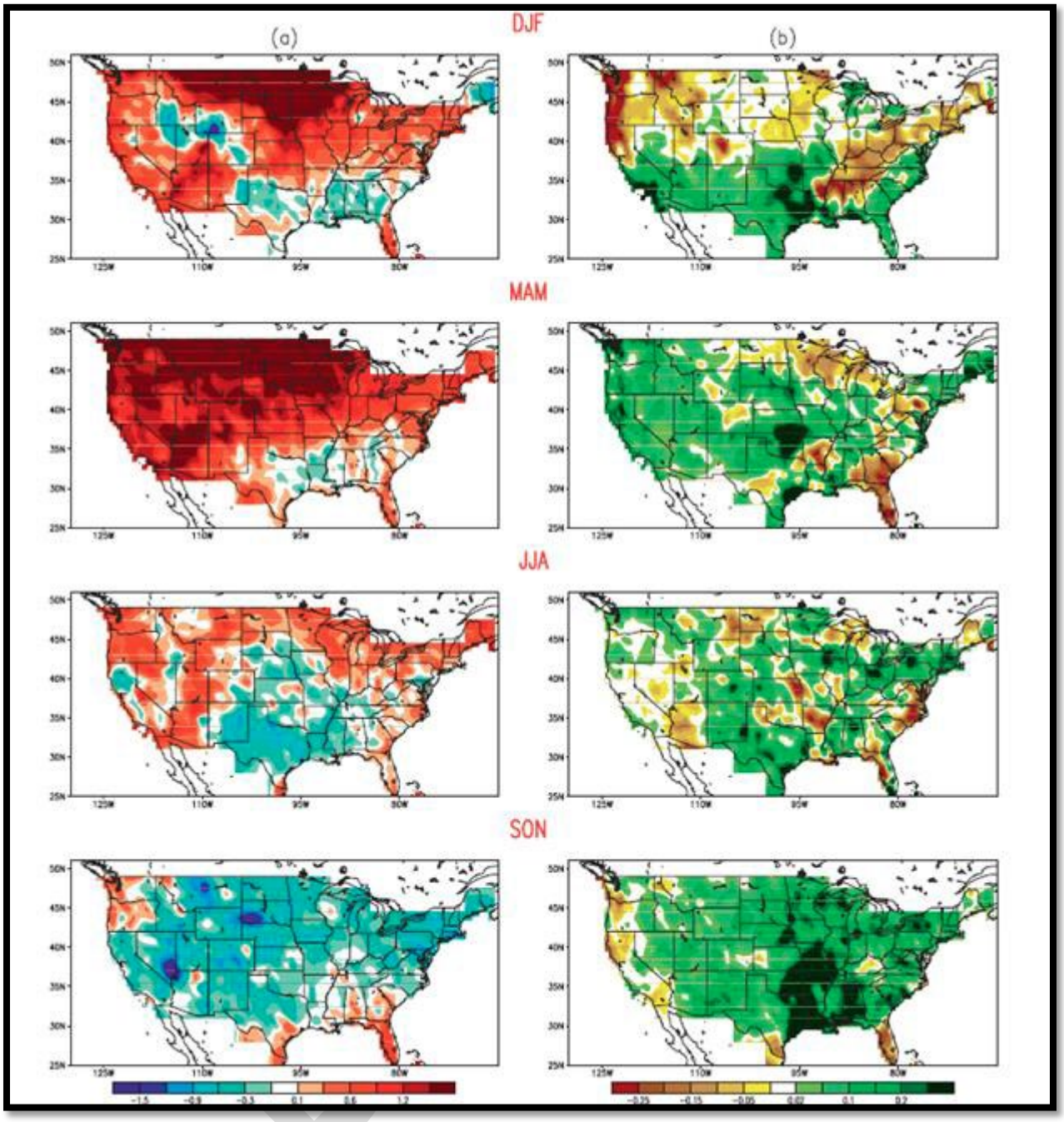


Figure 8-7 – Temperature and Precipitation Trends (USACE, 2015).

The left column in Figure 8-7 shows the temperature change trend in the project area decreases in winter months, but remains unchanged the rest of the year. This is supported by the data presented in Figure 8-8, which shows the temperature change trends by POR. The overall POR shows a slight temperature decrease trend in the project area.

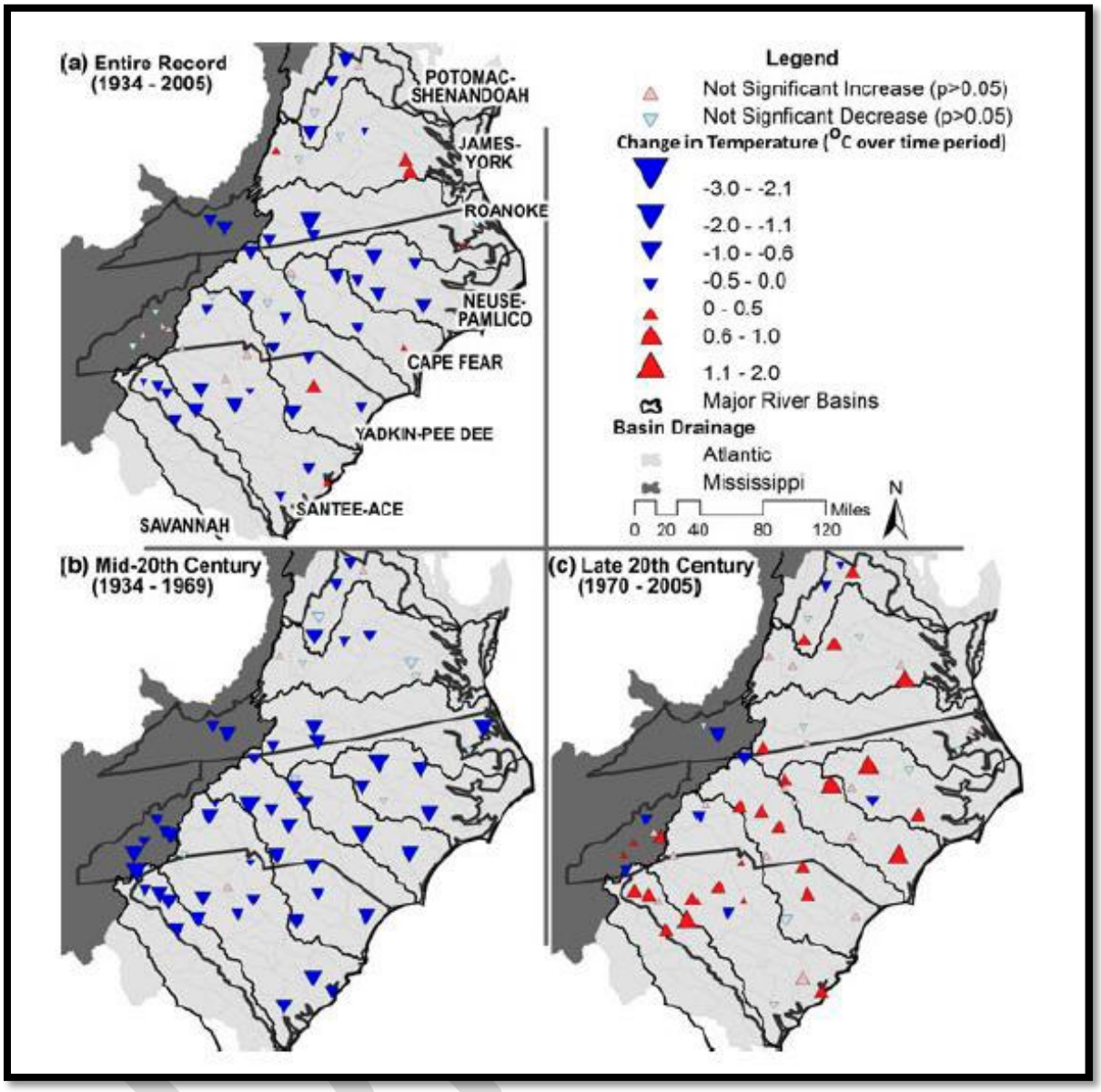


Figure 8-8 – Period of Record Temperature Changes (USACE, 2015).

Similarly, studies have shown an overall mild downward trend in streamflow in Region 03. However, the maps show changes in both directions in the project area, as shown in Figure 8-9 (USACE, 2015).

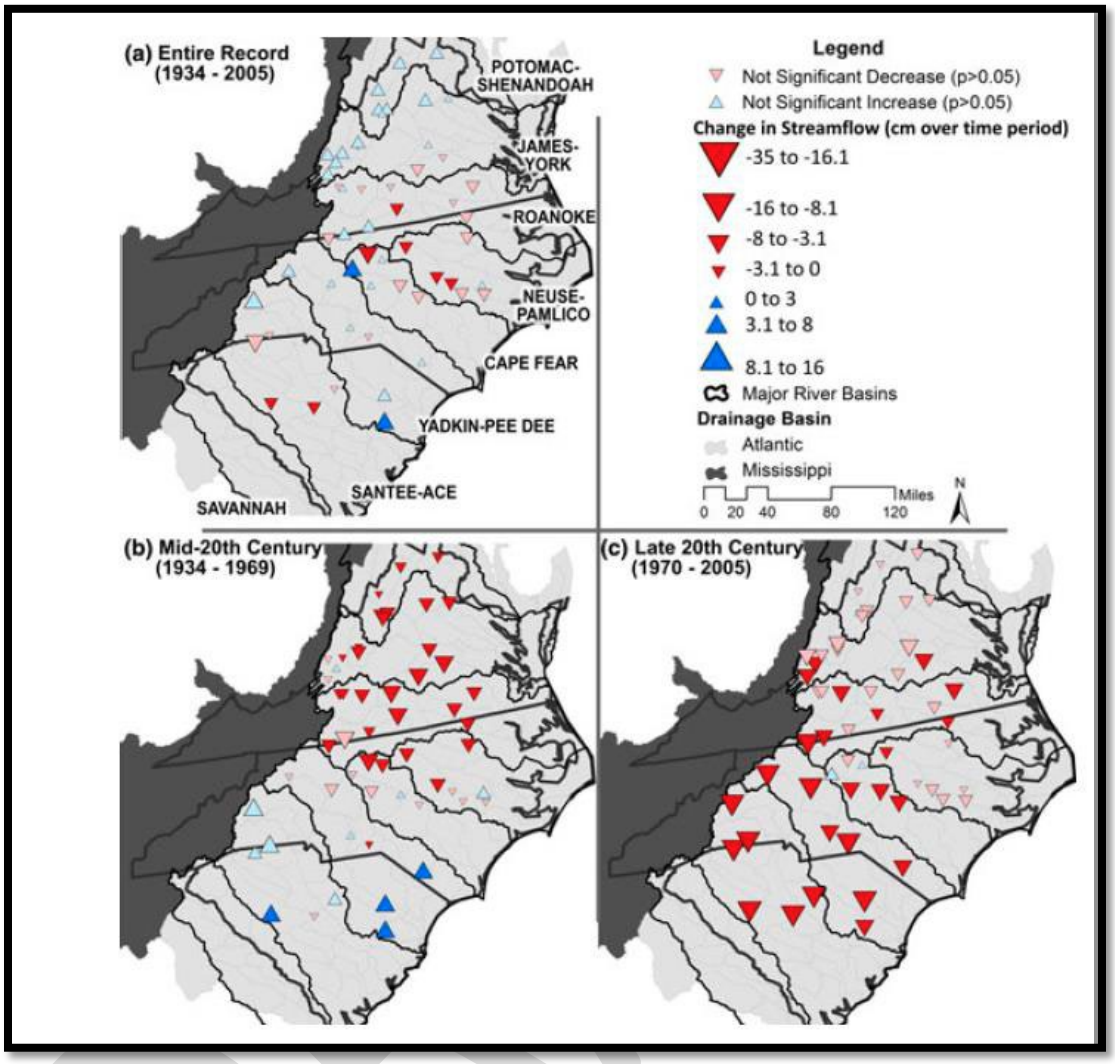


Figure 8-9 – Streamflow Change Trends (USACE, 2015).

An evaluation of observed and projected climate trends was also performed with the Climate Hydrology Assessment Tool (CHAT). The annual instantaneous peak streamflow reported by the CHAT for Crabtree Swamp is shown in Figure 8-10. The p-value is 0.843957, which is associated with a 84.39% risk of error.

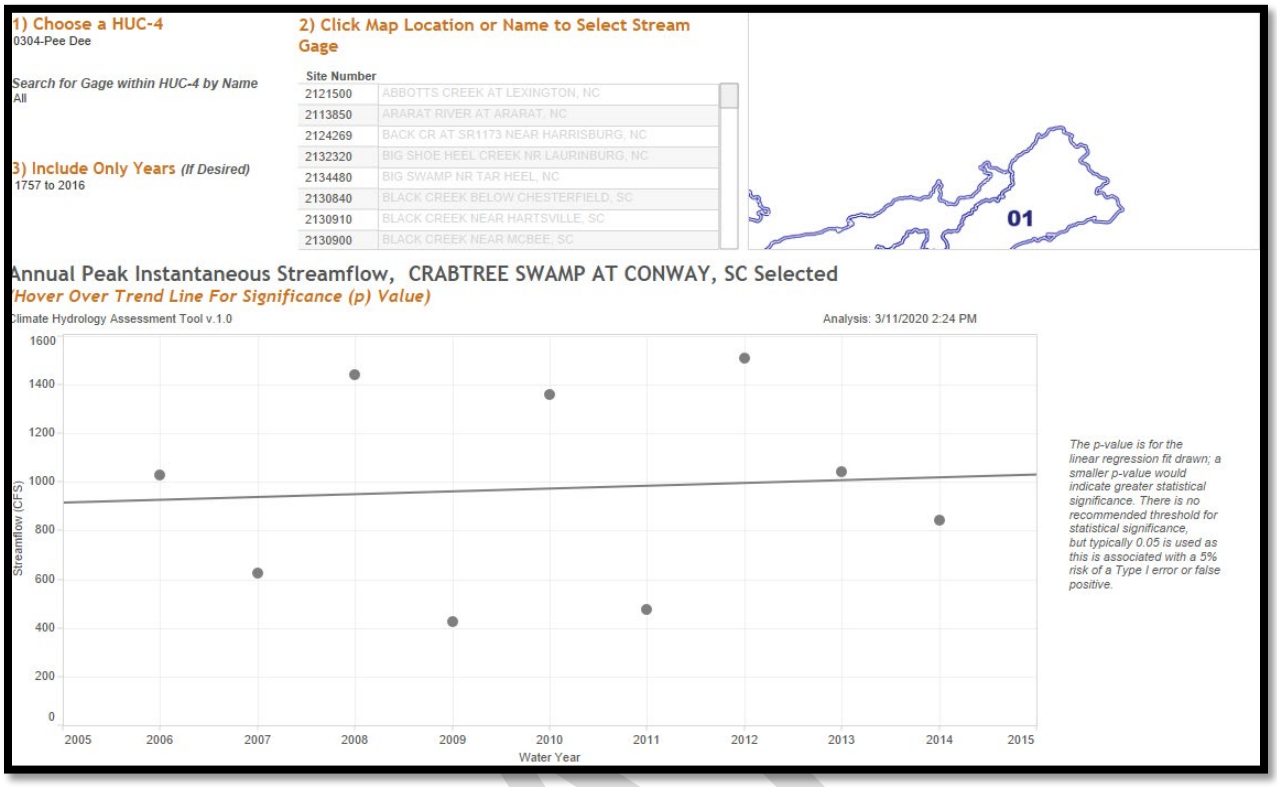


Figure 8-10 – Annual Streamflow Trend of Crabtree Swamp.

8.2.2 Projected Climate Trends

Overall, an increase in temperature is predicted for Region 03 over the next century. This includes a projected increase in the frequency, intensity (3-5°C) and duration (3-4 additional days) of extreme heat waves on an annual basis (USACE 2015). Likewise, an increase in intensity and frequency of extreme precipitation events is projected over the next century is predicted. No consensus exists on the projected change in annual precipitation, but there is consensus towards overall drier summers. Among the streamflow studies, no consensus was found in future projections. However, the CHAT tool shows a predicted upward trend in mean annual maximum monthly streamflow, as shown in Figure 8-11. The p-value for this line is <0.0001, which is associated with a <0.01% risk of an error.

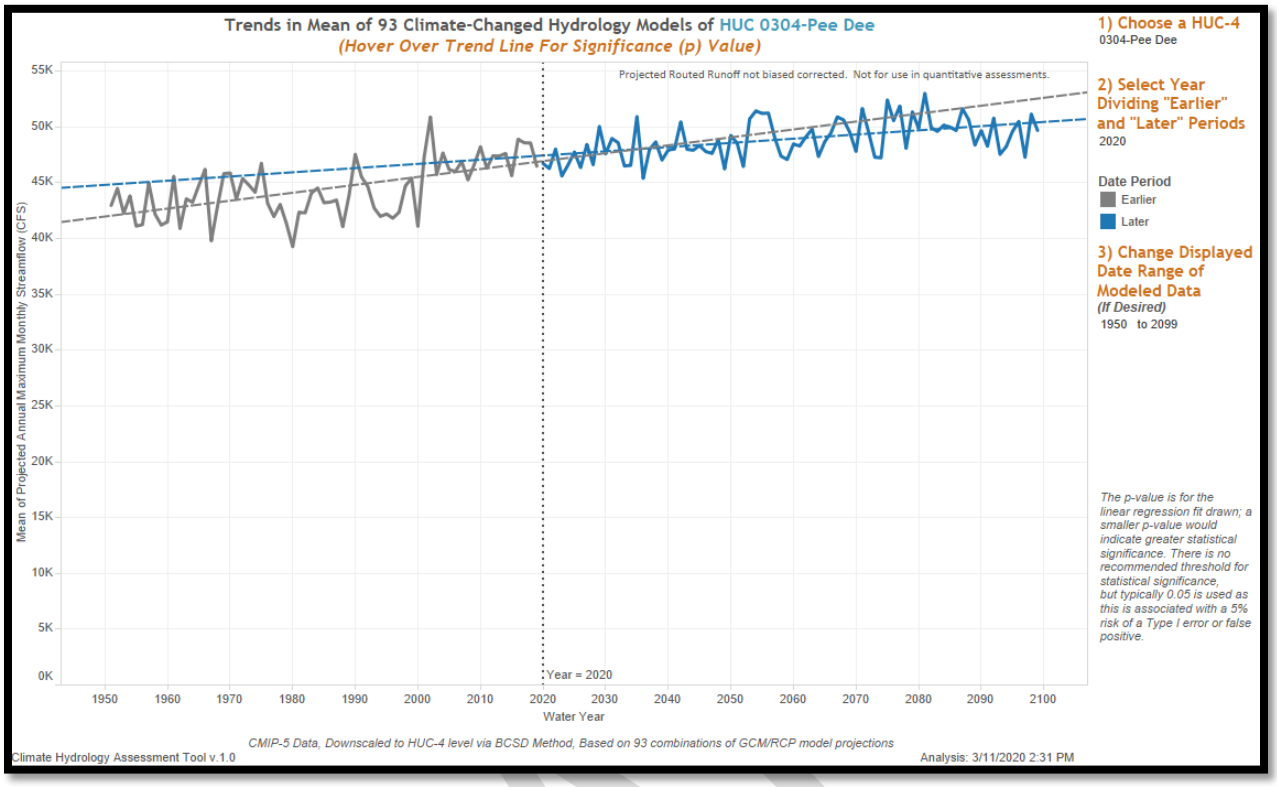


Figure 8-11 – Projected Annual Streamflow Changes in Crabtree Swamp.

The Nonstationary Detection Tool (NSD) was used to assess the stationarity of annual peak stream flow in the Waccamaw River (no Nonstationarity analysis was performed on the Crabtree Swamp). No nonstationarities were detected, as no events met the criteria for consensus, robustness, and magnitude and were not considered statistically significant.

8.2.3 Risk Assessment

Based on the inland hydrology vulnerability assessment, no adverse impacts are expected due to future SLC or climate change. Sea level rise will result in higher stages and increased wetland extents, while increased streamflow would also result in higher stages and wetlands expansion, which is the one of the objectives of this project. Neither SLC nor climate change will damage or hinder the functionality of any of the design components. Therefore, a strategy for adaptive management of the project is not necessary at this time. The only changes these events would incur is the ecosystem shift to a more brackish wetland instead of freshwater. However, both SLC and climate change will impact flood stages and extents. Flood risk management would likely need to be addressed in a future flood control project outside of the scope of this study.

Table 8-1 – Qualitative Analysis for Intermediate Sea Level Change Rate.

Feature or Measure	Trigger	Hazard	Harm	Qualitative Likelihood
Log Drop Structures	Increased precipitation due to more intense storms	Future flood volumes may be larger than present	Flood stages may be out of bank.	Likely
Newbury Rock Riffle Structure	Increased precipitation due to more intense storms	Future flood volumes may be larger than present	Flood stages may be out of bank.	Likely
River, channel	Increased precipitation due to more intense storms	Future flood volumes may be larger than present	Flood stages may be out of bank.	Likely
Floodplain Benches	Increased precipitation due to more intense storms	Future flood volumes may be larger than present	Wetlands will be wet more often	Likely
Environmental, habitat areas, and ecosystem projects	Increased precipitation due to more intense storms , increased SLC	The wetland areas in the downstream end of the project area will have higher stages	the wetland ecosystems may become more brackish due to increased salinity	Likely

9.0 Geotechnical Analysis

Even though the Preferred Plan requires excavation into the embankment and construction of two small low-head structures constructed of natural materials, it was determined that this design does not need a geotechnical analysis during the Feasibility phase, as the results would not change the Preferred Plan. A full geotechnical analysis will be performed during the DI phase, including sampling and analysis of soil throughout the project area, slope stability analyses, and embankment armoring protection design.

10.0 Structural Requirements

Even though the Preferred Plan requires excavation into the embankment and construction of two small structures, it was determined that this design has no structural components requiring analysis. If it is determined during the Design and Implementation (DI) phase that a structural analysis is necessary, it will be completed at that time.

11.0 Electrical and Mechanical Requirements

There are no electrical or mechanical elements in this project design.

12.0 Hazardous, Toxic, and Radioactive Waste (HTRW)

Details of the environmental analysis performed for this Feasibility Study is presented in the Main Report. Phase I and Phase II Environmental Site Assessments (ESAs) will be completed during the Design and Implementation (D&I) phase.

13.0 Construction Procedures and Water Control Plan

The construction of riverine projects are normally sequenced from downstream to upstream, in order to minimize any impacts upstream. Runoff and erosion control measures will be put in place during construction to minimize erosion of the excavated slopes, any stockpiled excavation, and all adjacent land (staging area) that may have been stripped of vegetation. Temporary diversion of water from a specific working area (to keep it dry) to a selected location will be performed in accordance with the approved Erosion Control Plan and within construction limits. The Erosion Control Plan will be developed by the construction contractor and reviewed by USACE prior to beginning construction.

14.0 Design and Implementation (DI) Analyses

The following data and detailed analyses will occur during the DI Phase:

- Collect flow data in the channel at the Hwy 501 culvert, and the culvert at Daniel Road, at a minimum.
- Collect design level survey/LiDAR data;
- Collect updated hydrographic survey, including bridges and culverts within channel, as well as pipe outfalls;
- Perform updated Hydrologic and Hydraulic modeling;
- Full assessment of the adjacent structure foundations, especially the voids beneath the Highways 501 and 701 structures;
- Soil sampling and analysis, as well as slope stability analyses of the banks;
- Phase I Environmental Site Assessments (ESAs) (and Phase II, if necessary);
- Value Engineering Study;
- Construction sequence;
- Real Estate Acquisition; and
- Final Design of Preferred Plan, preparation of Plans and Specifications.

15.0 Risk and Uncertainty

Due to the fact that the NFS has already constructed several successful features similar to those in this selected plan, within the project area, the risks to design and construction costs are relatively low. The existence of similar functioning features provide a level of certainty regarding slope stability, armoring, and overall project functioning. Due to the amount of analyses to be performed during the Design and Implementation phase (updated hydraulic modeling, slope stability, and HTRW), the following risks exist that may result in a design change and/or increased construction costs:

- Real estate easements may not be available, which may result in some design changes or structure relocations;
- New land use within the basin may result in higher storm flows, or structures within the floodplain;
- Detailed hyrdrdaulic and soil analyses may result in additional bank armoring needed or gentler side slopes, increasing construction costs;
- Changes in land use along with detailed hydraulic modeling may result in a selected plan and/or design change;
- Additional sediment within the channel due to continued bank failure or sedimentation my result in more sediment to remove from the channel or a change in the floodplain bench elevation; and
- HTRW may be discovered.

The detailed cost risk register is provided in the Cost Appendix.

16.0 Schedule for Design and Construction

The schedule for design and construction is provided in the separate Cost Appendix.

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17.1 Simulation Tools

- Hydrologic Modeling System (HEC-HMS) Version 4.2.1
- ESRI ArcMap Version 10.4.1
- HEC-GeoHMS Version 10.1
- HEC-RAS Version 5.0.5 Beta

DRAFT

ATTACHMENT

HEC RAS TABULAR RESULTS

DRAFT

Profile Output Table - Standard Table 1
HEC-RAS Location: User Defined Profile: Max WS

Rivers = 1
Hydraulic = 1
River Sta = 615
Plans = 6
Profiles = 1

River	Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude #
					(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29520	Max	EC100	225.46	24.12	29.8		29.92	0.001534	2.82	80.59	30.96	0.29

Crabtree Swamp	Reach 1	29520	Max	EC3yr0416	62.76	24.12	28.97		28.99	0.000272	1.07	58.78	23.2	0.12
Crabtree Swamp	Reach 1	29520	Max	EC25yr0416	159.4	24.12	29.46		29.54	0.001106	2.25	70.75	26.39	0.24
Crabtree Swamp	Reach 1	29520	Max	newEC25	159.4	24.12	29.46		29.54	0.001106	2.25	70.75	26.39	0.24
Crabtree Swamp	Reach 1	29520	Max	newEC100	225.89	24.12	29.75		29.88	0.00162	2.87	79.06	30.82	0.3
Crabtree Swamp	Reach 1	29520	Max	newEC3	63.21	24.12	28.96		28.97	0.00028	1.08	58.49	23.15	0.12
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29287	Max	EC100	210.36	23.68	29.52		29.62	0.001091	2.53	90.84	65.91	0.24
Crabtree Swamp	Reach 1	29287	Max	EC3yr0416	61.28	23.68	28.92		28.94	0.000156	0.91	67.44	23.67	0.09
Crabtree Swamp	Reach 1	29287	Max	EC25yr0416	151.92	23.68	29.27		29.33	0.000727	2.02	76.37	42.48	0.2
Crabtree Swamp	Reach 1	29287	Max	newEC25	151.92	23.68	29.27		29.33	0.000727	2.02	76.38	42.48	0.2
Crabtree Swamp	Reach 1	29287	Max	newEC100	212.62	23.68	29.45		29.56	0.001202	2.63	86.44	53.69	0.25
Crabtree Swamp	Reach 1	29287	Max	newEC3	61.8	23.68	28.91		28.92	0.000161	0.92	67.15	23.45	0.09
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29101	Max	EC100	188.93	23.31	29.44		29.48	0.000527	1.67	136.69	90.6	0.17
Crabtree Swamp	Reach 1	29101	Max	EC3yr0416	57.87	23.31	28.91		28.91	0.000106	0.75	77.57	59.9	0.07
Crabtree Swamp	Reach 1	29101	Max	EC25yr0416	137.12	23.31	29.19		29.23	0.000508	1.61	85.4	81.69	0.16
Crabtree Swamp	Reach 1	29101	Max	newEC25	137.11	23.31	29.19		29.23	0.000508	1.61	85.4	81.69	0.16
Crabtree Swamp	Reach 1	29101	Max	newEC100	193.54	23.31	29.34		29.39	0.000638	1.82	128	87.5	0.18
Crabtree Swamp	Reach 1	29101	Max	newEC3	58.62	23.31	28.89		28.9	0.00011	0.76	77.21	59.23	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29065	Max	EC100	188.93	23.52	29.43		29.47	0.000443	1.66	144.43	91.3	0.16
Crabtree Swamp	Reach 1	29065	Max	EC3yr0416	57.87	23.52	28.9		28.91	0.000137	0.82	70.54	78.06	0.09
Crabtree Swamp	Reach 1	29065	Max	EC25yr0416	137.12	23.52	29.18		29.21	0.000341	1.38	123.09	81.11	0.14
Crabtree Swamp	Reach 1	29065	Max	newEC25	137.01	23.52	29.18		29.21	0.000341	1.38	123.1	81.11	0.14
Crabtree Swamp	Reach 1	29065	Max	newEC100	193.54	23.52	29.33		29.37	0.00054	1.79	135.51	85.63	0.17
Crabtree Swamp	Reach 1	29065	Max	newEC3	58.61	23.52	28.89		28.9	0.000143	0.84	70.17	75.91	0.09
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29042	Culvert											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29021	Max	EC100	188.93	23.29	29.25		29.28	0.000336	1.49	153.28	88.36	0.14
Crabtree Swamp	Reach 1	29021	Max	EC3yr0416	57.8	23.29	26.98		27.01	0.000578	1.36	42.57	21.01	0.17
Crabtree Swamp	Reach 1	29021	Max	EC25yr0416	137.12	23.29	28.71		28.74	0.0004	1.46	107.91	80.09	0.15
Crabtree Swamp	Reach 1	29021	Max	newEC25	137.12	23.29	28.35		28.4	0.000697	1.78	77.05	59.98	0.19
Crabtree Swamp	Reach 1	29021	Max	newEC100	193.54	23.29	29		29.04	0.00051	1.75	131.74	85.86	0.17
Crabtree Swamp	Reach 1	29021	Max	newEC3	58.51	23.29	26.93		26.96	0.000635	1.41	41.51	20.78	0.18

Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28977	Max	EC100	188.93	23.21	29.2		29.26	0.00068	1.91	112.33	73.27	0.19
Crabtree Swamp	Reach 1	28977	Max	EC3yr0416	57.77	23.21	26.93		26.97	0.001053	1.68	34.45	19.22	0.22
Crabtree Swamp	Reach 1	28977	Max	EC25yr0416	137.12	23.21	28.66		28.72	0.000747	1.84	74.61	48.85	0.2
Crabtree Swamp	Reach 1	28977	Max	newEC25	137.12	23.21	28.29		28.36	0.001047	2.12	64.74	27.55	0.23
Crabtree Swamp	Reach 1	28977	Max	newEC100	193.54	23.21	28.92		29.01	0.001145	2.36	82.35	63.34	0.25
Crabtree Swamp	Reach 1	28977	Max	newEC3	58.47	23.21	26.87		26.92	0.001174	1.75	33.37	18.92	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28975	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28935	Max	EC100	187.9	23.14	29.21		29.23	0.000199	1.27	167.33	67.4	0.11
Crabtree Swamp	Reach 1	28935	Max	EC3yr0416	57.77	23.14	26.93		26.95	0.000194	0.9	64.51	25.74	0.1
Crabtree Swamp	Reach 1	28935	Max	EC25yr0416	137.2	23.14	28.68		28.7	0.000185	1.14	132.91	61.87	0.1
Crabtree Swamp	Reach 1	28935	Max	newEC25	137.2	23.14	28.3		28.33	0.000286	1.35	101.9	50.49	0.13
Crabtree Swamp	Reach 1	28935	Max	newEC100	193.91	23.14	28.94		28.97	0.000279	1.45	149.85	64.03	0.13
Crabtree Swamp	Reach 1	28935	Max	newEC3	58.47	23.14	26.88		26.89	0.000213	0.93	63.07	25.61	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28930	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28902	Max	EC100	316.58	23.13	29.07		29.18	0.001178	2.85	129.29	58.79	0.26
Crabtree Swamp	Reach 1	28902	Max	EC3yr0416	93.43	23.13	26.81		26.89	0.001483	2.3	40.64	18.16	0.27
Crabtree Swamp	Reach 1	28902	Max	EC25yr0416	228.46	23.13	28.52		28.63	0.001238	2.72	97.15	57.75	0.26
Crabtree Swamp	Reach 1	28902	Max	newEC25	228.49	23.12	28.17		28.28	0.001317	2.86	122.71	55.87	0.27
Crabtree Swamp	Reach 1	28902	Max	newEC100	323.9	23.12	28.8		28.93	0.001434	3.23	158.4	58.28	0.29
Crabtree Swamp	Reach 1	28902	Max	newEC3	94.59	23.12	26.76		26.85	0.001515	2.34	46.08	46.42	0.27
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28853	Max	EC100	313.02	23.01	29.01		29.12	0.001421	2.94	122.81	56.99	0.28
Crabtree Swamp	Reach 1	28853	Max	EC3yr0416	93.29	23.01	26.63		26.78	0.003387	3.12	29.91	17.65	0.39
Crabtree Swamp	Reach 1	28853	Max	EC25yr0416	227.63	23.01	28.47		28.58	0.001566	2.85	92.78	53.24	0.28
Crabtree Swamp	Reach 1	28853	Max	newEC25	228.41	23.01	28.08		28.21	0.002012	3.26	112.72	53.28	0.33
Crabtree Swamp	Reach 1	28853	Max	newEC100	322.02	23.01	28.71		28.85	0.002027	3.57	146.34	55.06	0.33
Crabtree Swamp	Reach 1	28853	Max	newEC3	94.58	23.01	26.6		26.75	0.003252	3.12	36.13	43.81	0.39
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28773	Max	EC100	308	22.8	28.86		29.01	0.001675	3.24	103.17	55.24	0.31
Crabtree Swamp	Reach 1	28773	Max	EC3yr0416	93.21	22.8	26.52		26.6	0.001363	2.25	41.5	17.79	0.26

Crabtree Swamp	Reach 1	28773	Max	EC25yr0416	226.36	22.8	28.33		28.46	0.001417	2.87	78.73	35.39	0.28
Crabtree Swamp	Reach 1	28773	Max	newEC25	228.86	22.8	27.98		28.07	0.001203	2.74	128.54	57.77	0.26
Crabtree Swamp	Reach 1	28773	Max	newEC100	319.48	22.8	28.6		28.72	0.001271	3.03	165.09	59.2	0.27
Crabtree Swamp	Reach 1	28773	Max	newEC3	94.57	22.8	26.47		26.56	0.001398	2.3	45.93	42.7	0.26
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28759	Max	EC100	306.89	22.86	28.91		28.99	0.001015	2.48	135.44	53.48	0.23
Crabtree Swamp	Reach 1	28759	Max	EC3yr0416	93.17	22.86	26.47		26.57	0.001925	2.57	36.33	24.01	0.3
Crabtree Swamp	Reach 1	28759	Max	EC25yr0416	225.67	22.86	28.27		28.44	0.00198	3.28	69.02	45	0.32
Crabtree Swamp	Reach 1	28759	Max	newEC25	228.42	22.86	27.96		28.06	0.001464	2.95	126.57	56.67	0.28
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23

Crabtree Swamp	Reach 1	28622	Max	EC25yr0416	221.34	22.55	28.15		28.23	0.00077	2.3	96.42	25.45	0.21
Crabtree Swamp	Reach 1	28622	Max	newEC25	226.63	22.55	27.82		27.88	0.000698	2.24	149.31	59.66	0.2
Crabtree Swamp	Reach 1	28622	Max	newEC100	311.7	22.55	28.44		28.52	0.000758	2.51	187.82	65.99	0.21
Crabtree Swamp	Reach 1	28622	Max	newEC3	94.56	22.55	26.24		26.29	0.000731	1.78	58.11	46.75	0.19
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28596	Max	EC100	295.22	22.56	28.64		28.81	0.001792	3.39	92.95	40.68	0.31
Crabtree Swamp	Reach 1	28596	Max	EC3yr0416	92.8	22.56	26.2		26.3	0.001907	2.55	36.42	16.03	0.3
Crabtree Swamp	Reach 1	28596	Max	EC25yr0416	221.7	22.56	28.06		28.21	0.001741	3.09	71.71	26.74	0.3
Crabtree Swamp	Reach 1	28596	Max	newEC25	227.55	22.56	27.77		27.87	0.00134	2.8	129.91	57.76	0.27
Crabtree Swamp	Reach 1	28596	Max	newEC100	311.77	22.56	28.4		28.51	0.001318	3.03	167.8	67.52	0.27
Crabtree Swamp	Reach 1	28596	Max	newEC3	94.56	22.56	26.16		26.27	0.001935	2.61	41.07	42.03	0.3
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28478	Max	EC100	302.68	22.01	28.45		28.61	0.00157	3.23	104.02	53.26	0.3
Crabtree Swamp	Reach 1	28478	Max	EC3yr0416	94.12	22.01	25.99		26.09	0.001826	2.51	37.45	16.88	0.3
Crabtree Swamp	Reach 1	28478	Max	EC25yr0416	231.73	22.01	27.85		28	0.001702	3.11	74.56	30.7	0.3
Crabtree Swamp	Reach 1	28478	Max	newEC25	239.34	22.01	27.62		27.72	0.001263	2.83	135.84	58.75	0.27
Crabtree Swamp	Reach 1	28478	Max	newEC100	321.01	22.01	28.25		28.36	0.001187	3.01	175.57	66.49	0.26
Crabtree Swamp	Reach 1	28478	Max	newEC3	94.55	22.01	25.96		26.05	0.00181	2.54	42.13	43.12	0.3
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28344	Max	EC100	297.72	22.04	28.32		28.43	0.001047	2.71	117.01	46.97	0.24
Crabtree Swamp	Reach 1	28344	Max	EC3yr0416	94.22	22.04	25.81		25.88	0.001377	2.12	44.5	21.4	0.26
Crabtree Swamp	Reach 1	28344	Max	EC25yr0416	232.68	22.04	27.7		27.81	0.001114	2.59	89.74	32.17	0.25
Crabtree Swamp	Reach 1	28344	Max	newEC25	242.52	22.04	27.48		27.56	0.000939	2.48	145.79	57.78	0.23
Crabtree Swamp	Reach 1	28344	Max	newEC100	318.48	22.04	28.13		28.21	0.000889	2.63	183.38	58.59	0.23
Crabtree Swamp	Reach 1	28344	Max	newEC3	94.54	22.04	25.77		25.84	0.001348	2.14	49.43	47.53	0.26
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28275	Max	EC100	291.77	21.65	28.23		28.36	0.001274	2.97	104.37	37.68	0.27
Crabtree Swamp	Reach 1	28275	Max	EC3yr0416	94.22	21.65	25.7		25.78	0.001471	2.29	41.15	18.17	0.27
Crabtree Swamp	Reach 1	28275	Max	EC25yr0416	230.81	21.65	27.6		27.73	0.00136	2.89	79.88	30.09	0.27
Crabtree Swamp	Reach 1	28275	Max	newEC25	242.07	21.65	27.41		27.5	0.001057	2.67	140.48	55.28	0.24
Crabtree Swamp	Reach 1	28275	Max	newEC100	313.88	21.65	28.06		28.16	0.000993	2.78	177.02	56.48	0.24
Crabtree Swamp	Reach 1	28275	Max	newEC3	94.54	21.65	25.67		25.75	0.001439	2.3	46.69	45.66	0.27
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28248	Max	EC100	289.54	21.54	28.25		28.33	0.000787	2.42	131.26	44.7	0.21
Crabtree Swamp	Reach 1	28248	Max	EC3yr0416	94.22	21.54	25.69		25.75	0.000955	2.02	46.54	17.48	0.22

Crabtree Swamp	Reach 1	28248	Max	EC25yr0416	230.14	21.54	27.58		27.7	0.001148	2.74	84.14	40.38	0.25
Crabtree Swamp	Reach 1	28248	Max	newEC25	241.81	21.54	27.39		27.47	0.000885	2.52	146.57	55.34	0.22
Crabtree Swamp	Reach 1	28248	Max	newEC100	312.17	21.54	28.04		28.13	0.000838	2.64	183.36	57.42	0.22
Crabtree Swamp	Reach 1	28248	Max	newEC3	94.54	21.54	25.65		25.72	0.000936	2.03	53.38	47.98	0.22
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28235	Max	EC100	288.04	21.99	28.2		28.32	0.001183	2.86	105.82	37.3	0.26
Crabtree Swamp	Reach 1	28235	Max	EC3yr0416	94.22	21.99	25.66		25.74	0.001298	2.21	42.7	17.87	0.25
Crabtree Swamp	Reach 1	28235	Max	EC25yr0416	229.5	21.99	27.56		27.68	0.001297	2.81	81.73	30.34	0.26
Crabtree Swamp	Reach 1	28235	Max	newEC25	241.46	21.99	27.37		27.46	0.001002	2.6	142.32	55.01	0.24
Crabtree Swamp	Reach 1	28235	Max	newEC100	310.95	21.99	28.03		28.12	0.000928	2.7	178.82	56.07	0.23
Crabtree Swamp	Reach 1	28235	Max	newEC3	94.54	21.99	25.63		25.7	0.001265	2.21	49.01	46.95	0.25
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28206	Max	EC100	286.37	21.94	28.18		28.29	0.001053	2.7	113.86	42.53	0.24
Crabtree Swamp	Reach 1	28206	Max	EC3yr0416	94.22	21.94	25.63		25.7	0.001284	2.16	43.7	18.98	0.25
Crabtree Swamp	Reach 1	28206	Max	EC25yr0416	229.37	21.94	27.53		27.65	0.001185	2.72	84.36	33.5	0.25
Crabtree Swamp	Reach 1	28206	Max	newEC25	241.85	21.94	27.35		27.43	0.000927	2.51	146.39	55.87	0.23
Crabtree Swamp	Reach 1	28206	Max	newEC100	309.72	21.94	28.01		28.09	0.00084	2.59	183.53	56.65	0.22
Crabtree Swamp	Reach 1	28206	Max	newEC3	94.54	21.94	25.6		25.67	0.001255	2.16	50.64	49.56	0.25
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28119	Max	EC100	275.29	21.8	27.99		28.13	0.001726	3.16	94.35	40.67	0.3
Crabtree Swamp	Reach 1	28119	Max	EC3yr0416	94.22	21.8	25.41		25.53	0.002626	2.84	33.23	15.26	0.34
Crabtree Swamp	Reach 1	28119	Max	EC25yr0416	225.17	21.8	27.33		27.51	0.002194	3.36	67.13	29.93	0.33
Crabtree Swamp	Reach 1	28119	Max	newEC25	238.93	21.8	27.25		27.34	0.001313	2.77	138.23	55.12	0.26
Crabtree Swamp	Reach 1	28119	Max	newEC100	299.68	21.8	27.93		28.01	0.001081	2.74	175.95	56.64	0.24
Crabtree Swamp	Reach 1	28119	Max	newEC3	94.53	21.8	25.4		25.52	0.002498	2.8	39.82	44.78	0.33
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28055	Max	EC100	269.85	21.38	27.97		28.07	0.000987	2.64	109.17	44.84	0.23
Crabtree Swamp	Reach 1	28055	Max	EC3yr0416	94.22	21.38	25.34		25.41	0.001206	2.15	43.8	18.16	0.24
Crabtree Swamp	Reach 1	28055	Max	EC25yr0416	223.51	21.38	27.29		27.4	0.001112	2.69	83.19	27.51	0.24
Crabtree Swamp	Reach 1	28055	Max	newEC25	237.73	21.38	27.19		27.27	0.000809	2.43	150.41	54.87	0.21
Crabtree Swamp	Reach 1	28055	Max	newEC100	293.77	21.38	27.88		27.95	0.000716	2.4	188.84	56.89	0.21
Crabtree Swamp	Reach 1	28055	Max	newEC3	94.53	21.38	25.32		25.4	0.00115	2.14	50.17	46.51	0.24
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	28050	Lat											
Crabtree Swamp	Reach 1													

Crabtree Swamp	Reach 1	27986	Max	EC100	264.96	21.14	27.92		28.01	0.000875	2.51	112.63	41.18	0.22
Crabtree Swamp	Reach 1	27986	Max	EC3yr0416	94.22	21.14	25.27		25.33	0.000995	2.08	45.3	16.41	0.22
Crabtree Swamp	Reach 1	27986	Max	EC25yr0416	221.79	21.14	27.22		27.33	0.001103	2.63	84.57	33.52	0.24
Crabtree Swamp	Reach 1	27986	Max	newEC25	236.27	21.14	27.14		27.21	0.0008	2.42	146.7	50.75	0.21
Crabtree Swamp	Reach 1	27986	Max	newEC100	287.88	21.14	27.83		27.91	0.000648	2.42	182.37	51.79	0.2
Crabtree Swamp	Reach 1	27986	Max	newEC3	94.53	21.14	25.26		25.32	0.000921	2.06	54.9	46.7	0.21
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27939	Max	EC100	265.95	21.49	27.88		27.97	0.000926	2.49	115.09	48.51	0.23
Crabtree Swamp	Reach 1	27939	Max	EC3yr0416	94.22	21.49	25.19		25.27	0.001583	2.37	39.8	17.75	0.28
Crabtree Swamp	Reach 1	27939	Max	EC25yr0416	221.78	21.49	27.16		27.27	0.001227	2.66	86.44	35.12	0.26
Crabtree Swamp	Reach 1	27939	Max	newEC25	234.67	21.49	27.09		27.17	0.000909	2.52	138.68	48.64	0.23
Crabtree Swamp	Reach 1	27939	Max	newEC100	284.12	21.49	27.8		27.87	0.000752	2.45	173.59	50.27	0.21
Crabtree Swamp	Reach 1	27939	Max	newEC3	94.53	21.49	25.19		25.27	0.001445	2.32	48.59	46.18	0.27
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27904	Max	EC100	269.04	21.42	27.86		27.94	0.000656	2.24	135.43	57.02	0.2
Crabtree Swamp	Reach 1	27904	Max	EC3yr0416	94.22	21.42	25.15		25.22	0.001149	2.09	45.1	19.24	0.24
Crabtree Swamp	Reach 1	27904	Max	EC25yr0416	222.91	21.42	27.13		27.22	0.000936	2.41	98.54	40.81	0.23
Crabtree Swamp	Reach 1	27904	Max	newEC25	233.6	21.42	27.01		27.13	0.001215	2.72	85.97	38.7	0.26
Crabtree Swamp	Reach 1	27904	Max	newEC100	283.1	21.42	27.75		27.84	0.000821	2.46	129.16	56.61	0.22
Crabtree Swamp	Reach 1	27904	Max	newEC3	94.53	21.42	25.15		25.21	0.001163	2.1	45.02	19.23	0.24
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27878	Max	EC100	272.07	21.37	27.81		27.91	0.001064	2.62	116.82	58.41	0.24
Crabtree Swamp	Reach 1	27878	Max	EC3yr0416	94.22	21.37	25.09		25.18	0.001576	2.37	39.69	17.19	0.28
Crabtree Swamp	Reach 1	27878	Max	EC25yr0416	224.46	21.37	27.07		27.19	0.001309	2.8	84.72	36.63	0.26
Crabtree Swamp	Reach 1	27878	Max	newEC25	233.77	21.37	26.94		27.09	0.001651	3.12	75	34.62	0.29
Crabtree Swamp	Reach 1	27878	Max	newEC100	285.59	21.37	27.69		27.81	0.001262	2.85	110.28	49.01	0.26
Crabtree Swamp	Reach 1	27878	Max	newEC3	94.53	21.37	25.08		25.17	0.001596	2.39	39.6	17.18	0.28
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27846	Max	EC100	276.39	20.74	27.78		27.87	0.000876	2.43	124.69	55.64	0.22
Crabtree Swamp	Reach 1	27846	Max	EC3yr0416	94.22	20.74	25.05		25.13	0.001234	2.19	43.04	17.4	0.25
Crabtree Swamp	Reach 1	27846	Max	EC25yr0416	226.59	20.74	27.04		27.15	0.001175	2.67	85.01	38.15	0.25
Crabtree Swamp	Reach 1	27846	Max	newEC25	235.14	20.74	26.9		27.03	0.001423	2.88	81.65	36.94	0.28
Crabtree Swamp	Reach 1	27846	Max	newEC100	289.5	20.74	27.66		27.76	0.001093	2.65	118.22	48.63	0.25
Crabtree Swamp	Reach 1	27846	Max	newEC3	94.53	20.74	25.05		25.12	0.001247	2.2	42.94	17.36	0.25
Crabtree Swamp	Reach 1													

Crabtree Swamp	Reach 1	27821	Max	EC100	279.12	21.26	27.76		27.84	0.000805	2.35	128.76	53.06	0.22
Crabtree Swamp	Reach 1	27821	Max	EC3yr0416	94.22	21.26	25.02		25.09	0.001327	2.15	43.73	19.99	0.26
Crabtree Swamp	Reach 1	27821	Max	EC25yr0416	227.27	21.26	27.02		27.11	0.001064	2.5	94.49	40.22	0.24
Crabtree Swamp	Reach 1	27821	Max	newEC25	235.49	21.26	26.88		26.99	0.001267	2.75	85.65	36.08	0.26
Crabtree Swamp	Reach 1	27821	Max	newEC100	291.84	21.26	27.63		27.72	0.001011	2.57	122.16	50.03	0.24
Crabtree Swamp	Reach 1	27821	Max	newEC3	94.53	21.26	25.01		25.08	0.001347	2.17	43.61	19.98	0.26
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27735	Max	EC100	286.59	20.59	27.64		27.76	0.001105	2.74	112.47	47.88	0.25
Crabtree Swamp	Reach 1	27735	Max	EC3yr0416	94.22	20.59	24.91		24.98	0.001307	2.23	42.29	17.32	0.25
Crabtree Swamp	Reach 1	27735	Max	EC25yr0416	228.85	20.59	26.9		27.02	0.001262	2.79	81.89	30.88	0.26
Crabtree Swamp	Reach 1	27735	Max	newEC25	236.24	20.59	26.74		26.88	0.001519	3.02	78.29	27.57	0.28
Crabtree Swamp	Reach 1	27735	Max	newEC100	298.12	20.59	27.49		27.63	0.001362	3	105.54	43.29	0.27
Crabtree Swamp	Reach 1	27735	Max	newEC3	94.53	20.59	24.9		24.98	0.001328	2.24	42.15	17.3	0.25
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27647	Max	EC100	298.18	20.7	27.52		27.65	0.001242	2.93	105.33	40.6	0.26
Crabtree Swamp	Reach 1	27647	Max	EC3yr0416	94.22	20.7	24.82		24.89	0.001093	2.11	44.55	17.25	0.23
Crabtree Swamp	Reach 1	27647	Max	EC25yr0416	232.76	20.7	26.79		26.91	0.001207	2.8	83.19	23.74	0.25
Crabtree Swamp	Reach 1	27647	Max	newEC25	238.86	20.7	26.62		26.76	0.001439	3.01	79.34	21.56	0.28
Crabtree Swamp	Reach 1	27647	Max	newEC100	308.18	20.7	27.35		27.5	0.001488	3.19	98.67	33.87	0.28
Crabtree Swamp	Reach 1	27647	Max	newEC3	94.53	20.7	24.81		24.88	0.001111	2.13	44.39	17.22	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27560	Max	EC100	309.58	20.84	27.4		27.53	0.001347	3.03	109.98	48.5	0.27
Crabtree Swamp	Reach 1	27560	Max	EC3yr0416	94.22	20.84	24.66		24.75	0.001959	2.5	37.66	18.07	0.31
Crabtree Swamp	Reach 1	27560	Max	EC25yr0416	237.15	20.84	26.66		26.79	0.001502	2.97	81.04	31.5	0.28
Crabtree Swamp	Reach 1	27560	Max	newEC25	242.09	20.84	26.45		26.61	0.001878	3.23	74.87	26.08	0.32
Crabtree Swamp	Reach 1	27560	Max	newEC100	318.21	20.84	27.19		27.36	0.001713	3.34	100.67	43.17	0.31
Crabtree Swamp	Reach 1	27560	Max	newEC3	94.52	20.84	24.64		24.74	0.002006	2.53	37.42	18.02	0.31
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27445	Max	EC100	328.62	20.16	27.26		27.38	0.00109	2.86	126.75	47.26	0.25
Crabtree Swamp	Reach 1	27445	Max	EC3yr0416	94.22	20.16	24.5		24.57	0.001136	2.13	44.29	17.78	0.24
Crabtree Swamp	Reach 1	27445	Max	EC25yr0416	243.42	20.16	26.52		26.63	0.001142	2.73	95.39	38.31	0.25
Crabtree Swamp	Reach 1	27445	Max	newEC25	245.92	20.16	26.26		26.41	0.001548	3.11	79.19	35.11	0.29
Crabtree Swamp	Reach 1	27445	Max	newEC100	334.72	20.16	27.02		27.16	0.001405	3.16	115.77	43.57	0.28
Crabtree Swamp	Reach 1	27445	Max	newEC3	94.52	20.16	24.49		24.56	0.001166	2.15	43.99	17.74	0.24
Crabtree Swamp	Reach 1													

Crabtree Swamp	Reach 1	27363	Max	EC100	344.65	20.5	27.01		27.24	0.002355	3.9	94.37	45.27	0.36
Crabtree Swamp	Reach 1	27363	Max	EC3yr0416	94.22	20.5	24.27		24.4	0.003168	2.97	31.69	16.69	0.38
Crabtree Swamp	Reach 1	27363	Max	EC25yr0416	250.35	20.5	26.29		26.49	0.002303	3.57	70.16	22.55	0.35
Crabtree Swamp	Reach 1	27363	Max	newEC25	251.19	20.5	25.97		26.21	0.003066	3.96	63.49	20.46	0.4
Crabtree Swamp	Reach 1	27363	Max	newEC100	348.9	20.5	26.69		26.99	0.003212	4.4	81.25	34.67	0.41
Crabtree Swamp	Reach 1	27363	Max	newEC3	94.52	20.5	24.24		24.38	0.003323	3.03	31.25	16.63	0.39
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27275	Max	EC100	351.96	20.26	26.9		27.06	0.001366	3.23	112.38	41.84	0.27
Crabtree Swamp	Reach 1	27275	Max	EC3yr0416	94.22	20.26	24.16		24.22	0.000949	1.97	47.83	18.49	0.22
Crabtree Swamp	Reach 1	27275	Max	EC25yr0416	251.26	20.26	26.21		26.33	0.00114	2.75	91.46	23.94	0.25
Crabtree Swamp	Reach 1	27275	Max	newEC25	251.38	20.26	25.89		26.01	0.001134	2.9	108.28	36.72	0.25
Crabtree Swamp	Reach 1	27275	Max	newEC100	354.76	20.26	26.59		26.75	0.001328	3.39	136.11	45.59	0.28
Crabtree Swamp	Reach 1	27275	Max	newEC3	94.52	20.26	24.12		24.19	0.000942	1.99	50.7	28.4	0.22
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27166	Max	EC100	352.8	20.17	26.67		26.88	0.001983	3.71	100	40.41	0.33
Crabtree Swamp	Reach 1	27166	Max	EC3yr0416	93.66	20.17	23.96		24.06	0.001938	2.49	37.64	17.93	0.3
Crabtree Swamp	Reach 1	27166	Max	EC25yr0416	251.25	20.17	26.02		26.18	0.001686	3.21	78.37	26.02	0.3
Crabtree Swamp	Reach 1	27166	Max	newEC25	251.36	20.17	25.72		25.87	0.001613	3.26	103.05	43.21	0.3
Crabtree Swamp	Reach 1	27166	Max	newEC100	355.39	20.17	26.41		26.59	0.001756	3.72	136.31	53.09	0.31
Crabtree Swamp	Reach 1	27166	Max	newEC3	94.52	20.17	23.94		24.03	0.00193	2.51	40.76	28.5	0.3
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27076	Max	EC100	353.7	20.02	26.56		26.72	0.001533	3.25	120.28	62.76	0.29
Crabtree Swamp	Reach 1	27076	Max	EC3yr0416	93.66	20.02	23.83		23.91	0.001413	2.24	41.81	18.42	0.26
Crabtree Swamp	Reach 1	27076	Max	EC25yr0416	251.06	20.02	25.91		26.04	0.001353	2.89	87.79	35.44	0.27
Crabtree Swamp	Reach 1	27076	Max	newEC25	251.25	20.02	25.61		25.73	0.001332	3.01	114.78	49.44	0.27
Crabtree Swamp	Reach 1	27076	Max	newEC100	356.45	20.02	26.28		26.44	0.001467	3.41	152.49	63.04	0.29
Crabtree Swamp	Reach 1	27076	Max	newEC3	94.52	20.02	23.81		23.89	0.001361	2.27	44.63	28.49	0.26
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	27028	Max	EC100	352.63	19.93	26.43		26.64	0.002356	3.81	106.83	62.31	0.35
Crabtree Swamp	Reach 1	27028	Max	EC3yr0416	93.66	19.93	23.69		23.82	0.002489	2.84	32.99	14.89	0.34
Crabtree Swamp	Reach 1	27028	Max	EC25yr0416	251.03	19.93	25.76		25.96	0.002334	3.6	70.97	37.71	0.35
Crabtree Swamp	Reach 1	27028	Max	newEC25	251.19	19.93	25.49		25.67	0.002064	3.55	101.31	48.18	0.33
Crabtree Swamp	Reach 1	27028	Max	newEC100	355.96	19.93	26.17		26.37	0.002179	3.89	141.85	68.52	0.35
Crabtree Swamp	Reach 1	27028	Max	newEC3	94.52	19.93	23.67		23.8	0.00244	2.86	36.17	26.03	0.33
Crabtree Swamp	Reach 1													

Crabtree Swamp	Reach 1	26983	Max	EC100	352.31	19.86	26.34		26.54	0.001972	3.65	109.31	65.51	0.33
Crabtree Swamp	Reach 1	26983	Max	EC3yr0416	93.66	19.86	23.6		23.71	0.00212	2.68	34.97	15.74	0.32
Crabtree Swamp	Reach 1	26983	Max	EC25yr0416	251.01	19.86	25.69		25.86	0.001963	3.37	74.62	33.33	0.32
Crabtree Swamp	Reach 1	26983	Max	newEC25	251.15	19.86	25.42		25.57	0.001756	3.4	104.82	51.46	0.31
Crabtree Swamp	Reach 1	26983	Max	newEC100	355.79	19.86	26.09		26.27	0.001867	3.75	145.97	68.84	0.33
Crabtree Swamp	Reach 1	26983	Max	newEC3	94.52	19.86	23.58		23.7	0.00206	2.7	38.44	27.78	0.31
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26883	Max	EC100	351.62	19.12	26.19		26.36	0.00145	3.34	114.5	52.99	0.28
Crabtree Swamp	Reach 1	26883	Max	EC3yr0416	93.66	19.12	23.48		23.55	0.001065	2.08	45.06	17.8	0.23
Crabtree Swamp	Reach 1	26883	Max	EC25yr0416	250.96	19.12	25.57		25.69	0.001219	2.88	88.09	30.76	0.26
Crabtree Swamp	Reach 1	26883	Max	newEC25	251.02	19.12	25.29		25.41	0.001146	2.91	113.73	43.89	0.26
Crabtree Swamp	Reach 1	26883	Max	newEC100	355.28	19.12	25.93		26.1	0.001369	3.42	144.88	57.39	0.28
Crabtree Swamp	Reach 1	26883	Max	newEC3	94.51	19.12	23.46		23.53	0.001061	2.1	47.81	28.06	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26796	Max	EC100	351.22	18.68	25.97		26.19	0.002069	3.77	99.94	54.44	0.33
Crabtree Swamp	Reach 1	26796	Max	EC3yr0416	93.66	18.68	23.37		23.45	0.001209	2.22	42.17	15.35	0.24
Crabtree Swamp	Reach 1	26796	Max	EC25yr0416	250.77	18.68	25.41		25.57	0.001629	3.17	79.26	23.85	0.29
Crabtree Swamp	Reach 1	26796	Max	newEC25	250.64	18.68	25.22		25.31	0.001067	2.75	140.2	48.89	0.24
Crabtree Swamp	Reach 1	26796	Max	newEC100	354.8	18.68	25.85		25.97	0.001267	3.19	174.18	58.75	0.26
Crabtree Swamp	Reach 1	26796	Max	newEC3	94.51	18.68	23.36		23.44	0.001137	2.19	51.76	46.64	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26722	Max	EC100	351.28	18.57	25.92		26.06	0.001399	3.19	130.86	76.24	0.28
Crabtree Swamp	Reach 1	26722	Max	EC3yr0416	93.66	18.57	23.29		23.36	0.001164	2.18	43.01	16.18	0.24
Crabtree Swamp	Reach 1	26722	Max	EC25yr0416	250.66	18.57	25.33		25.46	0.001416	2.89	93.99	49.74	0.27
Crabtree Swamp	Reach 1	26722	Max	newEC25	250.61	18.57	25.16		25.24	0.000931	2.52	158.41	72.25	0.23
Crabtree Swamp	Reach 1	26722	Max	newEC100	354.34	18.57	25.79		25.88	0.000939	2.77	213.42	85.13	0.23
Crabtree Swamp	Reach 1	26722	Max	newEC3	94.51	18.57	23.28		23.35	0.001122	2.17	51.17	54.53	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26660	Max	EC100	349.29	18.45	25.81		25.96	0.001543	3.25	128.54	80.05	0.29
Crabtree Swamp	Reach 1	26660	Max	EC3yr0416	93.66	18.45	23.22		23.29	0.001068	2.12	44.16	16	0.23
Crabtree Swamp	Reach 1	26660	Max	EC25yr0416	250.19	18.45	25.24		25.37	0.001442	2.93	92.29	47.4	0.27
Crabtree Swamp	Reach 1	26660	Max	newEC25	250.33	18.45	25.1		25.18	0.000962	2.61	146.3	63.84	0.23
Crabtree Swamp	Reach 1	26660	Max	newEC100	352.14	18.45	25.72		25.82	0.001052	2.88	194.89	78.83	0.24
Crabtree Swamp	Reach 1	26660	Max	newEC3	94.51	18.45	23.22		23.29	0.001035	2.11	51.3	49.13	0.22
Crabtree Swamp	Reach 1													

Crabtree Swamp	Reach 1	26565	Max	EC100	335.07	18.76	25.65		25.81	0.001536	3.36	112.68	56.75	0.28
Crabtree Swamp	Reach 1	26565	Max	EC3yr0416	93.66	18.76	23.14		23.2	0.000911	2.01	46.56	16.35	0.21
Crabtree Swamp	Reach 1	26565	Max	EC25yr0416	249.6	18.76	25.1		25.24	0.001303	2.98	87.85	35.99	0.26
Crabtree Swamp	Reach 1	26565	Max	newEC25	249.92	18.76	25		25.09	0.000939	2.69	135.66	48	0.23
Crabtree Swamp	Reach 1	26565	Max	newEC100	334.29	18.76	25.6		25.72	0.001057	2.99	167.59	56.3	0.24
Crabtree Swamp	Reach 1	26565	Max	newEC3	94.51	18.76	23.13		23.2	0.000899	2.02	51.53	44.36	0.21
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29520	Max	EC100	225.46	24.12	29.8		29.92	0.001534	2.82	80.59	30.96	0.29

Crabtree Swamp	Reach 1	26195	Max	EC100	400.17	18.53	25.35		25.43	0.000704	2.42	190.61	76.87	0.2
Crabtree Swamp	Reach 1	26195	Max	EC3yr0416	111.9	18.53	22.86		22.92	0.000876	2.01	55.55	27.04	0.21
Crabtree Swamp	Reach 1	26195	Max	EC25yr0416	281.99	18.53	24.74		24.87	0.001228	2.9	98.24	65.17	0.26
Crabtree Swamp	Reach 1	26195	Max	newEC25	283.77	18.53	24.72		24.81	0.000901	2.55	160.75	93.96	0.23
Crabtree Swamp	Reach 1	26195	Max	newEC100	402.58	18.53	25.37		25.42	0.000538	2.18	270.34	93.97	0.18
Crabtree Swamp	Reach 1	26195	Max	newEC3	125.44	18.53	22.86		22.94	0.001081	2.26	57.81	44.42	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26175	Max	EC100	402.12	18.49	25.35		25.41	0.000532	2.1	218.95	82.46	0.18
Crabtree Swamp	Reach 1	26175	Max	EC3yr0416	111.55	18.49	22.83		22.9	0.001101	2.17	51.64	43.43	0.23
Crabtree Swamp	Reach 1	26175	Max	EC25yr0416	279.9	18.49	24.74		24.87	0.001237	2.89	100.97	74	0.26
Crabtree Swamp	Reach 1	26175	Max	newEC25	282.85	18.49	24.7		24.79	0.000985	2.59	158.02	98.12	0.24
Crabtree Swamp	Reach 1	26175	Max	newEC100	402.55	18.49	25.36		25.41	0.000439	1.93	291.6	98.78	0.16
Crabtree Swamp	Reach 1	26175	Max	newEC3	111.7	18.49	22.82		22.89	0.001092	2.17	53.31	58.79	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26142	Max	EC100	403.99	18.43	25.36		25.39	0.000282	1.62	266.34	84.75	0.13
Crabtree Swamp	Reach 1	26142	Max	EC3yr0416	110.09	18.43	22.81		22.87	0.000895	1.97	55.95	49.11	0.21
Crabtree Swamp	Reach 1	26142	Max	EC25yr0416	286.2	18.43	24.67		24.8	0.001048	2.82	103.23	74.47	0.25
Crabtree Swamp	Reach 1	26142	Max	newEC25	288.89	18.43	24.67		24.75	0.000807	2.5	165.36	95.94	0.22
Crabtree Swamp	Reach 1	26142	Max	newEC100	402.76	18.43	25.36		25.39	0.000245	1.53	335.81	96.63	0.12
Crabtree Swamp	Reach 1	26142	Max	newEC3	109.97	18.43	22.8		22.86	0.000881	1.97	57.64	64.63	0.21
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26086	Max	EC100	398.02	18.33	25.35		25.39	0.000299	1.66	276.46	93.06	0.13
Crabtree Swamp	Reach 1	26086	Max	EC3yr0416	109.28	18.33	22.76		22.81	0.00084	1.9	57.53	52.15	0.21
Crabtree Swamp	Reach 1	26086	Max	EC25yr0416	295.75	18.33	24.7		24.74	0.000392	1.76	179.82	80.51	0.15
Crabtree Swamp	Reach 1	26086	Max	newEC25	295.77	18.33	24.67		24.7	0.000308	1.64	252.67	93.04	0.14
Crabtree Swamp	Reach 1	26086	Max	newEC100	397.81	18.33	25.34		25.38	0.000306	1.8	316.85	97.84	0.14
Crabtree Swamp	Reach 1	26086	Max	newEC3	109.55	18.33	22.75		22.81	0.000826	1.89	62.82	68.49	0.21
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	26025	Max	EC100	454.66	18.23	25.27		25.35	0.000604	2.4	223.54	80.8	0.19
Crabtree Swamp	Reach 1	26025	Max	EC3yr0416	129.99	18.23	22.69		22.75	0.00083	1.94	67.17	24.78	0.21
Crabtree Swamp	Reach 1	26025	Max	EC25yr0416	338.71	18.23	24.59		24.69	0.000868	2.6	141.8	78.14	0.23
Crabtree Swamp	Reach 1	26025	Max	newEC25	338.36	18.23	24.58		24.66	0.000697	2.46	194.5	78.12	0.21
Crabtree Swamp	Reach 1	26025	Max	newEC100	454.57	18.23	25.26		25.35	0.000668	2.64	248.42	80.76	0.21
Crabtree Swamp	Reach 1	26025	Max	newEC3	129.74	18.23	22.68		22.74	0.000811	1.93	68.58	39.22	0.21
Crabtree Swamp	Reach 1													

Crabtree Swamp	Reach 1	25971	Max	EC100	454.62	18.01	25.21		25.31	0.000784	2.72	197.26	78.98	0.22
Crabtree Swamp	Reach 1	25971	Max	EC3yr0416	129.98	18.01	22.65		22.71	0.000687	1.88	69.22	23.45	0.19
Crabtree Swamp	Reach 1	25971	Max	EC25yr0416	338.65	18.01	24.53		24.66	0.000992	2.87	118.61	70.06	0.24
Crabtree Swamp	Reach 1	25971	Max	newEC25	338.35	18.01	24.53		24.63	0.000804	2.64	169.72	70.1	0.22
Crabtree Swamp	Reach 1	25971	Max	newEC100	454.53	18.01	25.21		25.31	0.000813	2.82	227.52	78.92	0.23
Crabtree Swamp	Reach 1	25971	Max	newEC3	129.74	18.01	22.65		22.7	0.000676	1.88	70.28	35.65	0.19
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25911	Max	EC100	454.52	17.94	25.14		25.27	0.001135	3.09	179.12	90.47	0.26
Crabtree Swamp	Reach 1	25911	Max	EC3yr0416	129.98	17.94	22.58		22.65	0.001141	2.24	58.15	22.2	0.24
Crabtree Swamp	Reach 1	25911	Max	EC25yr0416	338.57	17.94	24.43		24.59	0.001536	3.27	103.54	80.06	0.3
Crabtree Swamp	Reach 1	25911	Max	newEC25	338.33	17.94	24.42		24.59	0.001541	3.28	103.37	79.98	0.3
Crabtree Swamp	Reach 1	25911	Max	newEC100	454.46	17.94	25.13		25.26	0.001144	3.1	178.53	90.47	0.26
Crabtree Swamp	Reach 1	25911	Max	newEC3	129.73	17.94	22.57		22.65	0.00114	2.23	58.1	22.2	0.24
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25907	Max	EC100	454.49	18	25.06	22.15	25.24	0.001525	3.5	148.54	76.78	0.3
Crabtree Swamp	Reach 1	25907	Max	EC3yr0416	129.98	18	22.55	20.38	22.63	0.001067	2.24	58	20.58	0.24
Crabtree Swamp	Reach 1	25907	Max	EC25yr0416	338.57	18	24.37	21.62	24.55	0.001642	3.36	100.92	48.21	0.3
Crabtree Swamp	Reach 1	25907	Max	newEC25	338.31	18	24.37	21.62	24.54	0.001646	3.36	100.77	47.87	0.3
Crabtree Swamp	Reach 1	25907	Max	newEC100	454.35	18	25.05	22.15	25.23	0.001534	3.51	148.02	76.7	0.3
Crabtree Swamp	Reach 1	25907	Max	newEC3	129.73	18	22.55	20.38	22.62	0.001066	2.24	57.95	20.57	0.24
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25906	Bridge											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25901	Max	EC100	454.44	17.93	25.04		25.16	0.000793	3.05	182.8	68.78	0.23
Crabtree Swamp	Reach 1	25901	Max	EC3yr0416	129.98	17.93	22.53		22.59	0.000757	1.99	66.45	26.67	0.2
Crabtree Swamp	Reach 1	25901	Max	EC25yr0416	338.6	17.93	24.4		24.53	0.000874	2.95	123.89	61.89	0.24
Crabtree Swamp	Reach 1	25901	Max	newEC25	338.32	17.93	24.39		24.52	0.000877	2.95	123.68	61.87	0.24
Crabtree Swamp	Reach 1	25901	Max	newEC100	454.35	17.93	25.04		25.16	0.000796	3.06	182.41	68.62	0.23
Crabtree Swamp	Reach 1	25901	Max	newEC3	129.73	17.93	22.53		22.59	0.000757	1.99	66.38	26.65	0.2
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25831	Max	EC100	454.3	17.79	24.95		25.09	0.001129	3.04	164.29	61.32	0.26
Crabtree Swamp	Reach 1	25831	Max	EC3yr0416	129.97	17.79	22.46		22.52	0.001016	2.09	62.29	24.28	0.23
Crabtree Swamp	Reach 1	25831	Max	EC25yr0416	338.55	17.79	24.31		24.44	0.001322	2.94	115.19	58.77	0.28
Crabtree Swamp	Reach 1	25831	Max	newEC25	338.29	17.79	24.3		24.44	0.001328	2.95	114.97	58.75	0.28
Crabtree Swamp	Reach 1	25831	Max	newEC100	454.17	17.79	24.95		25.08	0.001135	3.05	163.91	61.14	0.26

Crabtree Swamp	Reach 1	25831	Max	newEC3	129.73	17.79	22.45		22.52	0.001014	2.08	62.24	24.27	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25830	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25800	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25798	Max	EC100	453.92	17.74	24.9		25.05	0.00125	3.23	156.18	68.04	0.27
Crabtree Swamp	Reach 1	25798	Max	EC3yr0416	129.97	17.74	22.44		22.49	0.000778	1.94	67.06	23.37	0.2
Crabtree Swamp	Reach 1	25798	Max	EC25yr0416	338.51	17.74	24.26		24.4	0.001183	2.96	115.2	47.95	0.26
Crabtree Swamp	Reach 1	25798	Max	newEC25	338.28	17.74	24.25		24.39	0.001186	2.97	114.97	47.71	0.26
Crabtree Swamp	Reach 1	25798	Max	newEC100	453.82	17.74	24.89		25.04	0.001257	3.23	155.73	66.64	0.27
Crabtree Swamp	Reach 1	25798	Max	newEC3	129.73	17.74	22.43		22.49	0.000777	1.94	67.01	23.36	0.2
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25767	Max	EC100	452.8	17.68	24.82		25.01	0.001499	3.56	138.96	63.27	0.29
Crabtree Swamp	Reach 1	25767	Max	EC3yr0416	129.97	17.68	22.4		22.47	0.001004	2.12	61.36	22.51	0.23
Crabtree Swamp	Reach 1	25767	Max	EC25yr0416	338.53	17.68	24.2		24.36	0.0014	3.19	108.95	38.63	0.28
Crabtree Swamp	Reach 1	25767	Max	newEC25	338.28	17.68	24.19		24.35	0.001406	3.19	108.7	38.51	0.28
Crabtree Swamp	Reach 1	25767	Max	newEC100	452.76	17.68	24.82		25.01	0.001507	3.57	138.53	62.1	0.3
Crabtree Swamp	Reach 1	25767	Max	newEC3	129.73	17.68	22.39		22.46	0.001003	2.12	61.31	22.51	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25714	Max	EC100	447.57	17.59	24.82		24.94	0.001059	2.96	170.37	59.45	0.25
Crabtree Swamp	Reach 1	25714	Max	EC3yr0416	129.97	17.59	22.32		22.41	0.00125	2.3	56.56	21.74	0.25
Crabtree Swamp	Reach 1	25714	Max	EC25yr0416	340.1	17.59	24.09		24.27	0.001773	3.45	98.71	58.15	0.31
Crabtree Swamp	Reach 1	25714	Max	newEC25	339.76	17.59	24.08		24.26	0.001779	3.45	98.53	58.14	0.31
Crabtree Swamp	Reach 1	25714	Max	newEC100	447.58	17.59	24.81		24.93	0.001067	2.97	169.94	59.43	0.25
Crabtree Swamp	Reach 1	25714	Max	newEC3	129.73	17.59	22.32		22.4	0.001248	2.3	56.52	21.73	0.25
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25675	Max	EC100	446.69	17.53	24.75		24.9	0.001164	3.2	159.22	63.31	0.26
Crabtree Swamp	Reach 1	25675	Max	EC3yr0416	129.97	17.53	22.29		22.36	0.001035	2.21	58.94	20.33	0.23
Crabtree Swamp	Reach 1	25675	Max	EC25yr0416	340.08	17.53	24.03		24.17	0.001361	3.12	120.26	47.42	0.27
Crabtree Swamp	Reach 1	25675	Max	newEC25	339.75	17.53	24.02		24.17	0.001371	3.12	119.83	47.33	0.28
Crabtree Swamp	Reach 1	25675	Max	newEC100	446.67	17.53	24.75		24.89	0.001173	3.21	158.73	63.06	0.26
Crabtree Swamp	Reach 1	25675	Max	newEC3	129.73	17.53	22.28		22.36	0.001033	2.2	58.9	20.33	0.23
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25653	Max	EC100	445.73	17.49	24.73		24.87	0.001146	3.08	161.27	67.66	0.26

Crabtree Swamp	Reach 1	25653	Max	EC3yr0416	129.97	17.49	22.29		22.34	0.000701	1.9	68.23	22.24	0.19
Crabtree Swamp	Reach 1	25653	Max	EC25yr0416	340.16	17.49	24.04		24.17	0.001241	2.99	119.95	52.38	0.26
Crabtree Swamp	Reach 1	25653	Max	newEC25	339.83	17.49	24.03		24.17	0.001246	2.99	119.53	52.13	0.27
Crabtree Swamp	Reach 1	25653	Max	newEC100	445.74	17.49	24.73		24.86	0.001154	3.08	160.73	67.51	0.26
Crabtree Swamp	Reach 1	25653	Max	newEC3	129.73	17.49	22.28		22.34	0.0007	1.9	68.18	22.23	0.19
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25580	Max	EC100	445.16	17.36	24.69		24.8	0.000918	2.79	182.25	77.25	0.24
Crabtree Swamp	Reach 1	25580	Max	EC3yr0416	129.97	17.36	22.24		22.29	0.0007	1.87	69.51	28.47	0.19
Crabtree Swamp	Reach 1	25580	Max	EC25yr0416	340.08	17.36	23.98		24.11	0.001159	2.89	117.93	51.77	0.26
Crabtree Swamp	Reach 1	25580	Max	newEC25	339.78	17.36	23.97		24.1	0.001164	2.89	117.63	51.22	0.26
Crabtree Swamp	Reach 1	25580	Max	newEC100	445.17	17.36	24.68		24.79	0.000926	2.79	181.61	77	0.24
Crabtree Swamp	Reach 1	25580	Max	newEC3	129.73	17.36	22.24		22.29	0.000698	1.87	69.47	28.45	0.19
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25564	Max	EC100	440.95	17.34	24.67		24.78	0.000838	2.74	181.63	84.45	0.23
Crabtree Swamp	Reach 1	25564	Max	EC3yr0416	130.01	17.34	22.24		22.28	0.000549	1.68	77.61	26.73	0.17
Crabtree Swamp	Reach 1	25564	Max	EC25yr0416	337.67	17.34	23.96		24.07	0.000893	2.62	131.94	49.42	0.23
Crabtree Swamp	Reach 1	25564	Max	newEC25	337.38	17.34	23.96		24.06	0.000897	2.62	131.53	49.17	0.23
Crabtree Swamp	Reach 1	25564	Max	newEC100	440.99	17.34	24.66		24.77	0.000846	2.74	180.9	84.36	0.23
Crabtree Swamp	Reach 1	25564	Max	newEC3	129.77	17.34	22.24		22.28	0.000548	1.67	77.56	26.72	0.17
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25524	Max	EC100	438.51	17.27	24.65		24.75	0.00084	2.63	186.61	79.2	0.22
Crabtree Swamp	Reach 1	25524	Max	EC3yr0416	130.01	17.27	22.22		22.26	0.000563	1.64	79.1	27.36	0.17
Crabtree Swamp	Reach 1	25524	Max	EC25yr0416	336.88	17.27	23.94		24.04	0.0009	2.58	130.95	52.85	0.23
Crabtree Swamp	Reach 1	25524	Max	newEC25	336.59	17.27	23.93		24.04	0.000904	2.58	130.65	52.41	0.23
Crabtree Swamp	Reach 1	25524	Max	newEC100	438.57	17.27	24.64		24.74	0.000847	2.64	185.92	78.95	0.22
Crabtree Swamp	Reach 1	25524	Max	newEC3	129.77	17.27	22.21		22.26	0.000562	1.64	79.04	27.35	0.17
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25492	Max	EC100	435.78	17.21	24.64		24.72	0.000785	2.51	200.51	87.36	0.22
Crabtree Swamp	Reach 1	25492	Max	EC3yr0416	130	17.21	22.19		22.24	0.000656	1.77	73.59	26.48	0.19
Crabtree Swamp	Reach 1	25492	Max	EC25yr0416	336.41	17.21	23.9		24.01	0.001089	2.74	122.91	69.54	0.25
Crabtree Swamp	Reach 1	25492	Max	newEC25	336.28	17.21	23.89		24.01	0.001095	2.74	122.59	69.19	0.25
Crabtree Swamp	Reach 1	25492	Max	newEC100	435.88	17.21	24.63		24.71	0.000794	2.52	199.72	87.26	0.22
Crabtree Swamp	Reach 1	25492	Max	newEC3	129.76	17.21	22.19		22.24	0.000655	1.76	73.54	26.48	0.19
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25455	Max	EC100	434.47	16.79	24.58		24.7	0.000995	2.93	169.43	76.44	0.24

Crabtree Swamp	Reach 1	25455	Max	EC3yr0416	130	16.79	22.17		22.22	0.00058	1.78	73.17	22.68	0.17
Crabtree Swamp	Reach 1	25455	Max	EC25yr0416	336.56	16.79	23.84		23.97	0.001115	2.95	114.08	43.96	0.25
Crabtree Swamp	Reach 1	25455	Max	newEC25	336.43	16.79	23.83		23.96	0.001121	2.96	113.82	43.84	0.25
Crabtree Swamp	Reach 1	25455	Max	newEC100	434.59	16.79	24.57		24.69	0.001004	2.94	168.69	76.21	0.24
Crabtree Swamp	Reach 1	25455	Max	newEC3	129.76	16.79	22.17		22.21	0.000579	1.77	73.13	22.67	0.17
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25428	Max	EC100	434.41	17.1	24.53	21.77	24.66	0.001287	2.93	158.24	69.11	0.27
Crabtree Swamp	Reach 1	25428	Max	EC3yr0416	130	17.1	22.12	20.12	22.19	0.001161	2.11	61.75	25.98	0.24
Crabtree Swamp	Reach 1	25428	Max	EC25yr0416	336.56	17.1	23.8	21.4	23.93	0.001574	2.94	115.45	44.9	0.29
Crabtree Swamp	Reach 1	25428	Max	newEC25	336.41	17.1	23.79	21.4	23.92	0.001586	2.95	115	44.66	0.3
Crabtree Swamp	Reach 1	25428	Max	newEC100	434.49	17.1	24.53	21.77	24.66	0.0013	2.94	157.56	68.78	0.27
Crabtree Swamp	Reach 1	25428	Max	newEC3	129.76	17.1	22.12	20.12	22.19	0.001158	2.1	61.7	25.97	0.24
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25425	Inl											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25391	Max	EC100	434.21	17.04	24.39		24.61	0.00191	3.81	122.66	55.46	0.32
Crabtree Swamp	Reach 1	25391	Max	EC3yr0416	129.98	17.04	21.41		21.54	0.002423	2.93	44.38	19.15	0.34
Crabtree Swamp	Reach 1	25391	Max	EC25yr0416	336.5	17.04	23.65		23.86	0.00198	3.64	92.92	30.3	0.32
Crabtree Swamp	Reach 1	25391	Max	newEC25	336.36	17.04	23.64		23.85	0.001994	3.65	92.6	29.7	0.33
Crabtree Swamp	Reach 1	25391	Max	newEC100	434.37	17.04	24.38		24.6	0.00193	3.82	121.99	55.03	0.32
Crabtree Swamp	Reach 1	25391	Max	newEC3	129.75	17.04	21.41		21.54	0.002426	2.93	44.31	19.14	0.34
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25369	Max	EC100	434.19	17	24.38		24.57	0.001647	3.59	130.27	55.93	0.31
Crabtree Swamp	Reach 1	25369	Max	EC3yr0416	129.97	17	21.37		21.49	0.002019	2.79	46.54	19.06	0.32
Crabtree Swamp	Reach 1	25369	Max	EC25yr0416	336.5	17	23.63		23.82	0.001767	3.48	96.82	33.83	0.31
Crabtree Swamp	Reach 1	25369	Max	newEC25	336.35	17	23.62		23.81	0.001779	3.48	96.54	33.58	0.31
Crabtree Swamp	Reach 1	25369	Max	newEC100	434.35	17	24.37		24.56	0.001663	3.6	129.71	55.62	0.31
Crabtree Swamp	Reach 1	25369	Max	newEC3	129.75	17	21.37		21.49	0.00202	2.79	46.47	19.05	0.32
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25341	Max	EC100	434.15	16.96	24.34		24.52	0.001524	3.5	132.27	59.74	0.3
Crabtree Swamp	Reach 1	25341	Max	EC3yr0416	129.97	16.96	21.32		21.44	0.00207	2.71	47.92	21.32	0.32
Crabtree Swamp	Reach 1	25341	Max	EC25yr0416	336.48	16.96	23.59		23.77	0.001597	3.32	101.33	27.21	0.3
Crabtree Swamp	Reach 1	25341	Max	newEC25	336.33	16.96	23.58		23.75	0.001608	3.33	101.03	26.9	0.3
Crabtree Swamp	Reach 1	25341	Max	newEC100	434.3	16.96	24.33		24.52	0.001539	3.51	131.63	59.15	0.3
Crabtree Swamp	Reach 1	25341	Max	newEC3	129.74	16.96	21.32		21.43	0.002073	2.71	47.84	21.31	0.32

Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25317	Max	EC100	434.19	16.91	24.37		24.48	0.000828	2.75	169.23	66.13	0.23
Crabtree Swamp	Reach 1	25317	Max	EC3yr0416	129.97	16.91	21.34		21.4	0.000711	1.91	68.1	23.06	0.2
Crabtree Swamp	Reach 1	25317	Max	EC25yr0416	336.48	16.91	23.63		23.73	0.000846	2.6	129.72	36.05	0.22
Crabtree Swamp	Reach 1	25317	Max	newEC25	336.35	16.91	23.61		23.72	0.000851	2.61	129.32	35.72	0.22
Crabtree Swamp	Reach 1	25317	Max	newEC100	434.32	16.91	24.36		24.48	0.000835	2.76	168.54	65.87	0.23
Crabtree Swamp	Reach 1	25317	Max	newEC3	129.74	16.91	21.34		21.4	0.000711	1.91	68.01	23.05	0.2
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25294	Max	EC100	434.08	16.87	24.28		24.46	0.001561	3.42	132.29	48.03	0.3
Crabtree Swamp	Reach 1	25294	Max	EC3yr0416	129.97	16.87	21.28		21.37	0.001565	2.5	51.98	20.55	0.28
Crabtree Swamp	Reach 1	25294	Max	EC25yr0416	336.44	16.87	23.55		23.71	0.001453	3.22	104.49	25.85	0.28
Crabtree Swamp	Reach 1	25294	Max	newEC25	336.29	16.87	23.53		23.7	0.001464	3.23	104.19	25.82	0.28
Crabtree Swamp	Reach 1	25294	Max	newEC100	434.2	16.87	24.27		24.45	0.001574	3.43	131.76	47.77	0.3
Crabtree Swamp	Reach 1	25294	Max	newEC3	129.74	16.87	21.27		21.37	0.001566	2.5	51.9	20.54	0.28
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25281	Max	EC100	434.08	16.85	24.29		24.44	0.001274	3.18	143.11	50.65	0.27
Crabtree Swamp	Reach 1	25281	Max	EC3yr0416	129.97	16.85	21.28		21.36	0.001135	2.27	57.31	20.54	0.24
Crabtree Swamp	Reach 1	25281	Max	EC25yr0416	336.45	16.85	23.55		23.69	0.001214	3	112.63	32.84	0.26
Crabtree Swamp	Reach 1	25281	Max	newEC25	336.29	16.85	23.54		23.68	0.001223	3.01	112.25	32.6	0.26
Crabtree Swamp	Reach 1	25281	Max	newEC100	434.19	16.85	24.28		24.43	0.001285	3.2	142.55	50.56	0.27
Crabtree Swamp	Reach 1	25281	Max	newEC3	129.74	16.85	21.27		21.35	0.001136	2.27	57.23	20.53	0.24
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25247	Max	EC100	434.07	16.8	24.27		24.4	0.001081	2.97	156.31	55.29	0.25
Crabtree Swamp	Reach 1	25247	Max	EC3yr0416	129.96	16.8	21.24		21.32	0.001209	2.25	57.71	22.68	0.25
Crabtree Swamp	Reach 1	25247	Max	EC25yr0416	336.43	16.8	23.52		23.65	0.001132	2.87	117.11	40.61	0.25
Crabtree Swamp	Reach 1	25247	Max	newEC25	336.29	16.8	23.51		23.64	0.00114	2.88	116.76	40.41	0.26
Crabtree Swamp	Reach 1	25247	Max	newEC100	434.16	16.8	24.26		24.39	0.001092	2.98	155.67	55.17	0.25
Crabtree Swamp	Reach 1	25247	Max	newEC3	129.74	16.8	21.24		21.31	0.00121	2.25	57.63	22.67	0.25
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	25214	Max	EC100	434.02	16.74	24.24		24.37	0.000995	2.98	157.45	61.61	0.24
Crabtree Swamp	Reach 1	25214	Max	EC3yr0416	129.96	16.74	21.21		21.28	0.000992	2.11	61.51	22.67	0.23
Crabtree Swamp	Reach 1	25214	Max	EC25yr0416	336.42	16.74	23.49		23.62	0.001036	2.84	118.51	38.35	0.24
Crabtree Swamp	Reach 1	25214	Max	newEC25	336.26	16.74	23.48		23.6	0.001043	2.85	118.17	38.14	0.24
Crabtree Swamp	Reach 1	25214	Max	newEC100	434.11	16.74	24.22		24.36	0.001005	2.99	156.74	61.42	0.24
Crabtree Swamp	Reach 1	25214	Max	newEC3	129.74	16.74	21.21		21.28	0.000992	2.11	61.42	22.66	0.23

Crabtree Swamp	Reach 1													
Crabtree	Reach 1	25183	Max	EC100	434.65	16.69	24.23		24.34	0.000989	2.8	180.42	83.72	0.24
Crabtree	Reach 1	25183	Max	EC3yr0416	129.96	16.69	21.15		21.25	0.001457	2.44	53.32	21.07	0.27
Crabtree	Reach 1	25183	Max	EC25yr0416	336.53	16.69	23.45		23.59	0.00133	2.95	119.83	61.32	0.27
Crabtree	Reach 1	25183	Max	newEC25	336.38	16.69	23.44		23.57	0.001342	2.96	119.2	60.61	0.28
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29520	Max	EC100	225.46	24.12	29.8		29.92	0.001534	2.82	80.59	30.96	0.29
Crabtree Swamp	Reach 1	29520	Max	EC3yr0416	62.76	24.12	28.97		28.99	0.000272	1.07	58.78	23.2	0.12

	Reach 1													
Crabtree	Reach 1	25084	Max	EC100	429.64	16.52	24.18		24.23	0.000472	1.96	242.29	88.26	0.17
Crabtree	Reach 1	25084	Max	EC3yr0416	129.94	16.52	21		21.07	0.001105	2.23	58.2	31.43	0.24
Crabtree	Reach 1	25084	Max	EC25yr0416	337.21	16.52	23.35		23.42	0.000624	2.16	176.85	69.77	0.19
Crabtree	Reach 1	25084	Max	newEC25	336.96	16.52	23.34		23.4	0.000634	2.17	175.7	69.4	0.19
Crabtree	Reach 1	25084	Max	newEC100	429.86	16.52	24.17		24.22	0.000478	1.97	241.13	88	0.17
Crabtree	Reach 1	25084	Max	newEC3	129.69	16.52	20.99		21.07	0.001106	2.23	58.12	31.39	0.24
	Reach 1													
Crabtree	Reach 1	25055	Max	EC100	426.49	16.46	24.16		24.22	0.000447	2.17	224.61	78.15	0.17
Crabtree	Reach 1	25055	Max	EC3yr0416	129.94	16.46	21		21.05	0.000613	1.79	72.47	24.28	0.18
Crabtree	Reach 1	25055	Max	EC25yr0416	337.21	16.46	23.33		23.4	0.00056	2.24	166.91	60.17	0.18
Crabtree	Reach 1	25055	Max	newEC25	336.88	16.46	23.31		23.39	0.000566	2.25	165.95	59.78	0.19
Crabtree	Reach 1	25055	Max	newEC100	426.82	16.46	24.14		24.21	0.000452	2.18	223.57	77.17	0.17
Crabtree	Reach 1	25055	Max	newEC3	129.7	16.46	20.99		21.04	0.000613	1.79	72.37	24.27	0.18
	Reach 1													
Crabtree	Reach 1	25030	Max	EC100	426.42	16.43	24.16		24.21	0.000416	2.01	243.51	86.92	0.16
Crabtree	Reach 1	25030	Max	EC3yr0416	129.93	16.43	20.97		21.03	0.000885	2.03	64.07	27.01	0.21
Crabtree	Reach 1	25030	Max	EC25yr0416	337.2	16.43	23.33		23.39	0.00055	2.1	179.53	69.31	0.18
Crabtree	Reach 1	25030	Max	newEC25	336.88	16.43	23.32		23.38	0.000558	2.11	178.42	69.03	0.18
Crabtree	Reach 1	25030	Max	newEC100	426.75	16.43	24.14		24.2	0.000422	2.02	242.35	86.68	0.16
Crabtree	Reach 1	25030	Max	newEC3	129.68	16.43	20.96		21.03	0.000885	2.03	63.98	26.93	0.21
	Reach 1													
Crabtree	Reach 1	25009	Max	EC100	426.4	16.4	24.13		24.2	0.000558	2.31	211.98	76.88	0.18
Crabtree	Reach 1	25009	Max	EC3yr0416	129.92	16.4	20.93		21.01	0.001144	2.24	57.97	20.64	0.24
Crabtree	Reach 1	25009	Max	EC25yr0416	337.21	16.4	23.3		23.39	0.000757	2.41	155.81	59.19	0.21
Crabtree	Reach 1	25009	Max	newEC25	336.88	16.4	23.29		23.37	0.000768	2.42	154.81	58.66	0.21
Crabtree	Reach 1	25009	Max	newEC100	426.71	16.4	24.12		24.19	0.000566	2.32	210.93	76.58	0.18
Crabtree	Reach 1	25009	Max	newEC3	129.66	16.4	20.93		21	0.001144	2.24	57.88	20.64	0.24
	Reach 1													
Crabtree	Reach 1	24994	Max	EC100	501.08	16.37	24.06		24.17	0.000935	2.84	195.95	70.81	0.24
Crabtree	Reach 1	24994	Max	EC3yr0416	150.91	16.37	20.8		20.95	0.002714	3.16	47.83	20.48	0.36
Crabtree	Reach 1	24994	Max	EC25yr0416	389.73	16.37	23.19		23.4	0.001967	3.69	106	52.4	0.33
Crabtree	Reach 1	24994	Max	newEC25	389.44	16.37	23.17		23.39	0.001996	3.71	105.43	52.35	0.34
Crabtree	Reach 1	24994	Max	newEC100	501.45	16.37	24.04		24.15	0.000949	2.86	194.91	70.61	0.24
Crabtree	Reach 1	24994	Max	newEC3	150.59	16.37	20.79		20.95	0.002716	3.15	47.75	20.46	0.36

	Reach 1													
Crabtree	Reach 1	24962	Max	EC100	500.51	16.31	24.06		24.14	0.000702	2.56	235.98	96.51	0.21
Crabtree	Reach 1	24962	Max	EC3yr0416	150.9	16.31	20.75		20.87	0.002052	2.86	52.81	21.35	0.32
Crabtree	Reach 1	24962	Max	EC25yr0416	389.76	16.31	23.19		23.29	0.001031	2.77	160.13	70.84	0.24
Crabtree	Reach 1	24962	Max	newEC25	389.47	16.31	23.17		23.27	0.001052	2.79	158.72	70.32	0.25
Crabtree	Reach 1	24962	Max	newEC100	500.97	16.31	24.04		24.13	0.000715	2.57	234.55	96.4	0.21
Crabtree	Reach 1	24962	Max	newEC3	150.58	16.31	20.74		20.87	0.002054	2.86	52.72	21.33	0.32
	Reach 1													
Crabtree	Reach 1	24935	Max	EC100	499.18	16.27	24.04		24.12	0.000641	2.49	236.13	90.21	0.2
Crabtree	Reach 1	24935	Max	EC3yr0416	150.89	16.27	20.72		20.82	0.001677	2.62	57.52	23.02	0.29
Crabtree	Reach 1	24935	Max	EC25yr0416	389.81	16.27	23.16		23.26	0.000984	2.73	162.64	71.73	0.24
Crabtree	Reach 1	24935	Max	newEC25	389.5	16.27	23.14		23.24	0.001004	2.75	161.14	71.35	0.24
Crabtree	Reach 1	24935	Max	newEC100	499.73	16.27	24.02		24.11	0.000652	2.5	234.76	89.87	0.2
Crabtree	Reach 1	24935	Max	newEC3	150.58	16.27	20.71		20.82	0.001679	2.62	57.42	23.01	0.29
	Reach 1													
Crabtree	Reach 1	24897	Max	EC100	499.38	16.12	24		24.1	0.000667	2.65	225.25	87.23	0.2
Crabtree	Reach 1	24897	Max	EC3yr0416	150.89	16.12	20.68		20.77	0.001139	2.34	64.56	22.91	0.25
Crabtree	Reach 1	24897	Max	EC25yr0416	389.8	16.12	23.11		23.23	0.00095	2.83	155.77	67.26	0.24
Crabtree	Reach 1	24897	Max	newEC25	389.49	16.12	23.09		23.22	0.00107	2.99	137.24	66.88	0.25
Crabtree	Reach 1	24897	Max	newEC100	499.94	16.12	23.99		24.08	0.000679	2.67	223.87	87.2	0.21
Crabtree	Reach 1	24897	Max	newEC3	150.58	16.12	20.68		20.76	0.00114	2.34	64.46	22.9	0.25
	Reach 1													
Crabtree	Reach 1	24877	Max	EC100	515.57	16.17	24.03		24.08	0.000354	1.92	296.48	85.82	0.15
Crabtree	Reach 1	24877	Max	EC3yr0416	150.88	16.17	20.65		20.74	0.001325	2.4	62.93	42.13	0.26
Crabtree	Reach 1	24877	Max	EC25yr0416	390.78	16.17	23.13		23.26	0.000985	2.89	144.26	76.21	0.24
Crabtree	Reach 1	24877	Max	newEC25	390.32	16.17	23.11		23.24	0.001001	2.9	143.12	75.94	0.24
Crabtree	Reach 1	24877	Max	newEC100	516.05	16.17	24.01		24.06	0.00036	1.94	295.16	85.8	0.15
Crabtree	Reach 1	24877	Max	newEC3	150.57	16.17	20.65		20.74	0.001327	2.4	62.83	42.1	0.26
	Reach 1													
Crabtree	Reach 1	24845	Max	EC100	517.87	16.09	23.96		24.07	0.000733	2.8	215.3	77.25	0.22
Crabtree	Reach 1	24845	Max	EC3yr0416	150.88	16.09	20.63		20.71	0.000908	2.18	69.15	22.73	0.22
Crabtree	Reach 1	24845	Max	EC25yr0416	390.69	16.09	23.07		23.19	0.000896	2.82	151.95	64.38	0.23
Crabtree	Reach 1	24845	Max	newEC25	390.25	16.09	23.05		23.17	0.000911	2.83	150.5	64.08	0.23
Crabtree	Reach 1	24845	Max	newEC100	518.33	16.09	23.94		24.05	0.000746	2.82	214.04	77.16	0.22
Crabtree	Reach 1	24845	Max	newEC3	150.57	16.09	20.63		20.7	0.000908	2.18	69.05	22.72	0.22

	Reach 1													
Crabtree	Reach 1	24808	Max	EC100	518.21	16.05	23.85		24.03	0.001973	3.6	166.71	85.67	0.33
Crabtree	Reach 1	24808	Max	EC3yr0416	150.79	16.05	20.42		20.64	0.003956	3.77	40.03	16.92	0.43
Crabtree	Reach 1	24808	Max	EC25yr0416	390.69	16.05	22.91		23.14	0.002523	3.95	105.66	45.7	0.37
Crabtree	Reach 1	24808	Max	newEC25	390.24	16.05	22.89		23.12	0.002576	3.98	104.56	45.23	0.37
Crabtree	Reach 1	24808	Max	newEC100	518.94	16.05	23.83		24.02	0.002012	3.63	165.1	85.04	0.34
Crabtree	Reach 1	24808	Max	newEC3	150.56	16.05	20.41		20.64	0.003966	3.77	39.95	16.91	0.43
	Reach 1													
Crabtree	Reach 1	24759	Max	EC100	518.23	15.97	23.83		23.95	0.000887	2.86	198.61	75.01	0.23
Crabtree	Reach 1	24759	Max	EC3yr0416	150.79	15.97	20.42		20.5	0.000971	2.17	69.58	24.51	0.23
Crabtree	Reach 1	24759	Max	EC25yr0416	390.68	15.97	22.92		23.04	0.000971	2.8	139.34	42.66	0.24
Crabtree	Reach 1	24759	Max	newEC25	390.22	15.97	22.89		23.01	0.000985	2.82	138.5	41.82	0.24
Crabtree	Reach 1	24759	Max	newEC100	518.94	15.97	23.81		23.93	0.000904	2.88	197.18	74.73	0.24
Crabtree	Reach 1	24759	Max	newEC3	150.55	15.97	20.42		20.49	0.000972	2.17	69.46	24.5	0.23
	Reach 1													
Crabtree	Reach 1	24725	Max	EC100	515.64	15.91	23.8		23.92	0.000979	2.97	201.9	89.03	0.24
Crabtree	Reach 1	24725	Max	EC3yr0416	150.78	15.91	20.37		20.46	0.001189	2.39	63.05	21.8	0.25
Crabtree	Reach 1	24725	Max	EC25yr0416	390.52	15.91	22.86		23.01	0.001153	3.04	135.75	55.75	0.26
Crabtree	Reach 1	24725	Max	newEC25	390.08	15.91	22.84		22.98	0.001174	3.07	134.25	54.88	0.26
Crabtree	Reach 1	24725	Max	newEC100	516.39	15.91	23.78		23.91	0.001001	3	200.12	88.85	0.24
Crabtree	Reach 1	24725	Max	newEC3	150.54	15.91	20.37		20.46	0.001191	2.39	62.95	21.79	0.25
	Reach 1													
Crabtree	Reach 1	24657	Max	EC100	505.19	15.64	23.74		23.86	0.000973	2.96	192.54	71.55	0.24
Crabtree	Reach 1	24657	Max	EC3yr0416	150.77	15.64	20.29		20.38	0.00116	2.45	61.58	19.33	0.24
Crabtree	Reach 1	24657	Max	EC25yr0416	388.96	15.64	22.77		22.94	0.001329	3.25	119.63	47.35	0.27
Crabtree	Reach 1	24657	Max	newEC25	388.67	15.64	22.74		22.91	0.00135	3.27	118.8	46.95	0.27
Crabtree	Reach 1	24657	Max	newEC100	506.17	15.64	23.72		23.84	0.000995	2.99	191.03	70.72	0.24
Crabtree	Reach 1	24657	Max	newEC3	150.54	15.64	20.28		20.38	0.001162	2.45	61.49	19.31	0.24
	Reach 1													
Crabtree	Reach 1	24548	Max	EC100	502.62	15.5	23.59		23.75	0.001074	3.18	162.44	48.43	0.25
Crabtree	Reach 1	24548	Max	EC3yr0416	150.76	15.5	20.18		20.26	0.001076	2.31	65.27	22.32	0.24
Crabtree	Reach 1	24548	Max	EC25yr0416	388.77	15.5	22.65		22.79	0.001117	3.04	127.77	28.81	0.25
Crabtree	Reach 1	24548	Max	newEC25	388.47	15.5	22.62		22.76	0.001136	3.06	126.87	28.72	0.26
Crabtree	Reach 1	24548	Max	newEC100	503.57	15.5	23.57		23.73	0.001093	3.21	161.31	47.78	0.26
Crabtree	Reach 1	24548	Max	newEC3	150.52	15.5	20.17		20.25	0.001078	2.31	65.15	22.3	0.24

	Reach 1													
Crabtree	Reach 1	24323	Max	EC100	498.86	15	23.5		23.57	0.000532	2.26	251.66	82.43	0.18
Crabtree	Reach 1	24323	Max	EC3yr0416	150.66	15	19.91		20	0.001354	2.46	61.33	25.15	0.26
Crabtree	Reach 1	24323	Max	EC25yr0416	387.4	15	22.41		22.55	0.001177	2.97	130.83	69.02	0.26
Crabtree	Reach 1	24323	Max	newEC25	387.16	15	22.37		22.51	0.001209	3	129.53	68.58	0.26
Crabtree	Reach 1	24323	Max	newEC100	499.95	15	23.48		23.55	0.000547	2.28	249.5	82.06	0.18
Crabtree	Reach 1	24323	Max	newEC3	150.38	15	19.9		19.99	0.001357	2.46	61.21	25.11	0.26
	Reach 1													
Crabtree	Reach 1	24298	Max	EC100	476.55	14.89	23.53		23.56	0.000165	1.54	342.16	80.7	0.11
Crabtree	Reach 1	24298	Max	EC3yr0416	150.67	14.89	19.95		19.97	0.000265	1.33	113.22	41.65	0.13
Crabtree	Reach 1	24298	Max	EC25yr0416	377.32	14.89	22.48		22.53	0.000277	1.83	210.65	66.25	0.14
Crabtree	Reach 1	24298	Max	newEC25	377.53	14.89	22.44		22.5	0.000284	1.85	209.09	66.2	0.14
Crabtree	Reach 1	24298	Max	newEC100	477.8	14.89	23.5		23.54	0.000168	1.55	340.1	80.48	0.11
Crabtree	Reach 1	24298	Max	newEC3	150.39	14.89	19.94		19.97	0.000265	1.33	113.03	41.6	0.13
	Reach 1													
Crabtree	Reach 1	24076	Max	EC100	592.59	14.82	23.13		23.32	0.001363	3.62	176	58.83	0.29
Crabtree	Reach 1	24076	Max	EC3yr0416	188.22	14.82	19.6		19.74	0.001752	2.97	63.37	21.19	0.3
Crabtree	Reach 1	24076	Max	EC25yr0416	466.52	14.82	22.07		22.29	0.001763	3.75	124.72	32.95	0.32
Crabtree	Reach 1	24076	Max	newEC25	467.41	14.82	22.02		22.24	0.001824	3.81	123.1	32.02	0.32
Crabtree	Reach 1	24076	Max	newEC100	594.46	14.82	23.09		23.29	0.001411	3.66	174.04	58.44	0.29
Crabtree	Reach 1	24076	Max	newEC3	188.04	14.82	19.59		19.73	0.001761	2.97	63.22	21.17	0.3
	Reach 1													
Crabtree	Reach 1	23825	Max	EC100	602.52	14.4	22.78		22.88	0.000678	2.68	254.67	77.64	0.21
Crabtree	Reach 1	23825	Max	EC3yr0416	188.03	14.4	19.27		19.37	0.001205	2.53	74.29	24.94	0.25
Crabtree	Reach 1	23825	Max	EC25yr0416	472.02	14.4	21.71		21.84	0.001076	2.98	176.47	65.62	0.25
Crabtree	Reach 1	23825	Max	newEC25	472.53	14.4	21.65		21.79	0.001139	3.05	172.39	65.05	0.26
Crabtree	Reach 1	23825	Max	newEC100	606.26	14.4	22.73		22.83	0.000715	2.73	251.1	77.64	0.21
Crabtree	Reach 1	23825	Max	newEC3	188	14.4	19.26		19.36	0.001214	2.54	74.08	24.79	0.25
	Reach 1													
Crabtree	Reach 1	23561	Max	EC100	656.45	13.95	22.48		22.64	0.000899	3.27	214.79	60.61	0.24
Crabtree	Reach 1	23561	Max	EC3yr0416	187.94	13.95	19.03		19.1	0.000789	2.18	86.16	24.68	0.21
Crabtree	Reach 1	23561	Max	EC25yr0416	476.22	13.95	21.43		21.57	0.000994	3	160.45	45.82	0.24
Crabtree	Reach 1	23561	Max	newEC25	476.29	13.95	21.35		21.5	0.001053	3.05	157.01	42.79	0.25
Crabtree	Reach 1	23561	Max	newEC100	658.99	13.95	22.42		22.58	0.000944	3.32	211.27	60.35	0.25
Crabtree	Reach 1	23561	Max	newEC3	187.73	13.95	19.02		19.09	0.000793	2.19	85.89	24.63	0.21

	Reach 1													
Crabtree	Reach 1	23389	Max	EC100	694.84	13.66	21.98		22.31	0.002381	4.56	152.73	36.45	0.38
Crabtree	Reach 1	23389	Max	EC3yr0416	187.25	13.66	18.63		18.8	0.002829	3.3	56.76	23.74	0.38
Crabtree	Reach 1	23389	Max	EC25yr0416	480.75	13.66	21.05		21.29	0.002072	3.93	122.31	30.25	0.34
Crabtree	Reach 1	23389	Max	newEC25	478.15	13.66	20.95		21.2	0.002196	4.01	119.33	29.97	0.35
Crabtree	Reach 1	23389	Max	newEC100	696.97	13.66	21.91		22.24	0.002524	4.66	150	35.69	0.39
Crabtree	Reach 1	23389	Max	newEC3	187.35	13.66	18.61		18.79	0.002888	3.32	56.38	23.69	0.38
	Reach 1													
Crabtree	Reach 1	23254	Max	EC100	673.53	13.43	21.68		21.97	0.002176	4.32	157.69	45.26	0.36
Crabtree	Reach 1	23254	Max	EC3yr0416	180.74	13.43	18.29		18.44	0.00236	3.13	57.79	22.88	0.35
Crabtree	Reach 1	23254	Max	EC25yr0416	464.68	13.43	20.8		21.01	0.001828	3.69	126.05	31.67	0.33
Crabtree	Reach 1	23254	Max	newEC25	469.65	13.43	20.68		20.91	0.002034	3.84	122.26	31.31	0.34
Crabtree	Reach 1	23254	Max	newEC100	673.38	13.43	21.58		21.89	0.002336	4.43	153.41	41.66	0.37
Crabtree	Reach 1	23254	Max	newEC3	180.34	13.43	18.26		18.42	0.002423	3.16	57.16	22.79	0.35
	Reach 1													
Crabtree	Reach 1	23204	Max	EC100	709.06	13.35	21.73		21.88	0.000852	3.14	239.81	70.07	0.24
Crabtree	Reach 1	23204	Max	EC3yr0416	190.35	13.35	18.28		18.35	0.000929	2.13	89.32	32.22	0.23
Crabtree	Reach 1	23204	Max	EC25yr0416	491.82	13.35	20.83		20.94	0.000801	2.69	183.58	43.84	0.23
Crabtree	Reach 1	23204	Max	newEC25	491.88	13.35	20.7		20.82	0.00088	2.76	178.29	43.08	0.23
Crabtree	Reach 1	23204	Max	newEC100	709.32	13.35	21.63		21.79	0.000915	3.21	233.03	69.65	0.25
Crabtree	Reach 1	23204	Max	newEC3	190.1	13.35	18.25		18.32	0.000955	2.15	88.43	32.14	0.23
	Reach 1													
Crabtree	Reach 1	23157	Max	EC100	709.05	13.27	21.68		21.83	0.001027	3.19	222.37	43.47	0.25
Crabtree	Reach 1	23157	Max	EC3yr0416	190.35	13.27	18.24		18.31	0.00093	2.07	92.08	32.4	0.22
Crabtree	Reach 1	23157	Max	EC25yr0416	491.83	13.27	20.79		20.9	0.000823	2.65	185.31	40.33	0.22
Crabtree	Reach 1	23157	Max	newEC25	491.88	13.27	20.67		20.78	0.000889	2.73	180.32	39.94	0.23
Crabtree	Reach 1	23157	Max	newEC100	709.32	13.27	21.58		21.74	0.001085	3.25	218.1	43.13	0.25
Crabtree	Reach 1	23157	Max	newEC3	190.1	13.27	18.21		18.28	0.000957	2.09	91.15	32.33	0.22
	Reach 1													
Crabtree	Reach 1	23138	Max	EC100	709.06	13.24	21.66	17.42	21.82	0.000891	3.19	222.12	40.19	0.24
Crabtree	Reach 1	23138	Max	EC3yr0416	190.35	13.24	18.24	15.5	18.29	0.0006	1.9	100.12	30.41	0.18
Crabtree	Reach 1	23138	Max	EC25yr0416	491.82	13.24	20.78	16.76	20.89	0.000694	2.62	187.69	38.27	0.21
Crabtree	Reach 1	23138	Max	newEC25	491.88	13.24	20.66	16.76	20.77	0.000747	2.69	182.92	37.98	0.22
Crabtree	Reach 1	23138	Max	newEC100	709.32	13.24	21.56	17.42	21.72	0.000939	3.25	218.16	39.99	0.25
Crabtree	Reach 1	23138	Max	newEC3	190.1	13.24	18.21	15.5	18.26	0.000613	1.92	99.24	30.31	0.19

	Reach 1													
Crabtree	Reach 1	23100	Bridge											
	Reach 1													
Crabtree	Reach 1	23072	Max	EC100	708.91	13.13	21.48		21.67	0.001182	3.51	203.54	52.64	0.27
Crabtree	Reach 1	23072	Max	EC3yr0416	190.35	13.13	18.13		18.2	0.000777	2.12	89.77	27.56	0.21
Crabtree	Reach 1	23072	Max	EC25yr0416	491.69	13.13	20.64		20.77	0.000919	2.89	169.96	36.68	0.24
Crabtree	Reach 1	23072	Max	newEC25	491.88	13.13	20.51		20.65	0.001	2.98	164.97	36.28	0.25
Crabtree	Reach 1	23072	Max	newEC100	709.31	13.13	21.37		21.57	0.001257	3.59	197.95	45.75	0.28
Crabtree	Reach 1	23072	Max	newEC3	190.09	13.13	18.1		18.18	0.000796	2.14	88.93	27.47	0.21
	Reach 1													
Crabtree	Reach 1	23056	Max	EC100	708.91	13.1	21.5		21.66	0.000956	3.15	229.36	58.31	0.25
Crabtree	Reach 1	23056	Max	EC3yr0416	190.35	13.1	18.13		18.19	0.000687	1.97	96.62	31.08	0.2
Crabtree	Reach 1	23056	Max	EC25yr0416	491.69	13.1	20.65		20.76	0.000765	2.63	186.85	43.05	0.22
Crabtree	Reach 1	23056	Max	newEC25	491.88	13.1	20.52		20.63	0.000833	2.72	181.08	41.17	0.23
Crabtree	Reach 1	23056	Max	newEC100	709.32	13.1	21.39		21.55	0.001025	3.24	222.7	56.93	0.26
Crabtree	Reach 1	23056	Max	newEC3	190.09	13.1	18.1		18.16	0.000705	1.99	95.67	30.97	0.2
	Reach 1													
Crabtree	Reach 1	23030	Max	EC100	708.92	13.06	21.51		21.63	0.000819	2.83	288.49	226.6	0.23
Crabtree	Reach 1	23030	Max	EC3yr0416	190.35	13.06	18.13		18.18	0.00055	1.8	105.67	33.31	0.18
Crabtree	Reach 1	23030	Max	EC25yr0416	491.69	13.06	20.65		20.74	0.000606	2.44	201.72	42.48	0.2
Crabtree	Reach 1	23030	Max	newEC25	491.88	13.06	20.51		20.61	0.00066	2.51	195.91	42.08	0.21
Crabtree	Reach 1	23030	Max	newEC100	709.31	13.06	21.39		21.53	0.000917	2.96	263.94	186.95	0.24
Crabtree	Reach 1	23030	Max	newEC3	190.09	13.06	18.1		18.15	0.000564	1.82	104.64	33.18	0.18
	Reach 1													
Crabtree	Reach 1	23029	Lat											
	Reach 1													
Crabtree	Reach 1	22802	Max	EC100	708.88	12.67	21.27		21.42	0.001146	3.37	267.04	154.67	0.26
Crabtree	Reach 1	22802	Max	EC3yr0416	190.29	12.67	17.84		17.96	0.001431	2.71	70.2	22.6	0.27
Crabtree	Reach 1	22802	Max	EC25yr0416	491.64	12.67	20.29		20.5	0.001652	3.6	136.61	75.51	0.31
Crabtree	Reach 1	22802	Max	newEC25	491.65	12.67	20.11		20.33	0.001883	3.76	130.65	66.72	0.33
Crabtree	Reach 1	22802	Max	newEC100	709.27	12.67	21.11		21.29	0.001372	3.61	243.55	141.41	0.29
Crabtree	Reach 1	22802	Max	newEC3	189.98	12.67	17.8		17.92	0.001478	2.74	69.31	22.49	0.28
	Reach 1													
Crabtree	Reach 1	22751	Max	EC100	708.83	12.56	21.28		21.35	0.000519	2.51	378.48	185.03	0.19
Crabtree	Reach 1	22751	Max	EC3yr0416	190.29	12.56	17.82		17.89	0.000773	2.11	90.23	28.13	0.21

Crabtree	Reach 1	22751	Max	EC25yr0416	491.64	12.56	20.32		20.45	0.000859	2.86	172.78	115.61	0.23
Crabtree	Reach 1	22751	Max	newEC25	491.64	12.56	20.14		20.27	0.000986	2.98	165.16	99.97	0.25
Crabtree	Reach 1	22751	Max	newEC100	709.28	12.56	21.12		21.21	0.000616	2.69	349.89	172.9	0.2
Crabtree	Reach 1	22751	Max	newEC3	189.98	12.56	17.78		17.85	0.000799	2.13	89.09	28	0.21
	Reach 1													
Crabtree	Reach 1	22737	Max	EC100	706.92	12.54	21.22		21.35	0.001036	3.16	283.66	173.07	0.26
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29520	Max	EC100	225.46	24.12	29.8		29.92	0.001534	2.82	80.59	30.96	0.29

Crabtree	Reach 1	22611	Max	EC25yr0416	485.37	12.33	20.06		20.24	0.001592	3.38	145.92	46.39	0.31
Crabtree	Reach 1	22611	Max	newEC25	486.28	12.33	19.84		20.04	0.001936	3.61	135.99	43.63	0.34
Crabtree	Reach 1	22611	Max	newEC100	698.43	12.33	20.78		21.03	0.001803	3.99	185.05	79.88	0.33
Crabtree	Reach 1	22611	Max	newEC3	189.96	12.33	17.52		17.66	0.001949	2.92	64.96	24.64	0.32
	Reach 1													
Crabtree	Reach 1	22585	Max	EC100	696.69	12.3	20.99		21.15	0.00117	3.36	233.33	96.53	0.27
Crabtree	Reach 1	22585	Max	EC3yr0416	190.28	12.3	17.53		17.66	0.001904	2.87	66.28	25.39	0.31
Crabtree	Reach 1	22585	Max	EC25yr0416	485.22	12.3	20.04		20.21	0.001454	3.33	147.34	67.39	0.29
Crabtree	Reach 1	22585	Max	newEC25	486.28	12.3	19.81		20	0.001756	3.56	138.18	60.84	0.32
Crabtree	Reach 1	22585	Max	newEC100	698.27	12.3	20.79		20.98	0.001416	3.6	215.37	83.28	0.3
Crabtree	Reach 1	22585	Max	newEC3	189.95	12.3	17.48		17.61	0.00201	2.93	64.92	25.18	0.32
	Reach 1													
Crabtree	Reach 1	22569	Max	EC100	695.81	12.27	20.93		21.14	0.001323	3.67	199.47	66.64	0.29
Crabtree	Reach 1	22569	Max	EC3yr0416	190.29	12.27	17.52		17.63	0.001646	2.68	70.91	27.4	0.29
Crabtree	Reach 1	22569	Max	EC25yr0416	485.19	12.27	20.02		20.18	0.001238	3.2	152.77	42.35	0.27
Crabtree	Reach 1	22569	Max	newEC25	486.27	12.27	19.79		19.97	0.001484	3.4	143.6	38.33	0.3
Crabtree	Reach 1	22569	Max	newEC100	697.84	12.27	20.73		20.96	0.001555	3.87	187.26	54.71	0.31
Crabtree	Reach 1	22569	Max	newEC3	189.94	12.27	17.46		17.58	0.001739	2.74	69.41	27.15	0.3
	Reach 1													
Crabtree	Reach 1	22544	Max	EC100	695.8	12.22	20.91	17.58	21.1	0.001341	3.61	205.92	58.43	0.29
Crabtree	Reach 1	22544	Max	EC3yr0416	190.28	12.22	17.47	15.39	17.59	0.001581	2.73	69.74	24.81	0.29
Crabtree	Reach 1	22544	Max	EC25yr0416	485.12	12.22	19.99	16.8	20.15	0.001357	3.28	149.74	50.62	0.28
Crabtree	Reach 1	22544	Max	newEC25	486.26	12.22	19.74	16.8	19.93	0.00166	3.5	140.1	48.89	0.31
Crabtree	Reach 1	22544	Max	newEC100	697.84	12.22	20.7	17.59	20.92	0.001573	3.83	193.77	56.55	0.31
Crabtree	Reach 1	22544	Max	newEC3	189.89	12.22	17.42	15.38	17.54	0.001664	2.78	68.33	24.56	0.29
	Reach 1													
Crabtree	Reach 1	22500	Inl											
	Reach 1													
Crabtree	Reach 1	22469	Max	EC100	695.79	11.51	20.87		21	0.000749	3.05	250.29	62.37	0.22
Crabtree	Reach 1	22469	Max	EC3yr0416	190.28	11.51	17.44		17.5	0.000565	1.95	97.68	26.69	0.18
Crabtree	Reach 1	22469	Max	EC25yr0416	485.12	11.51	19.96		20.07	0.000674	2.67	195.55	58.24	0.21
Crabtree	Reach 1	22469	Max	newEC25	486.25	11.51	19.71		19.84	0.000858	2.94	166.85	57.13	0.23
Crabtree	Reach 1	22469	Max	newEC100	697.83	11.51	20.66		20.81	0.000861	3.22	237.44	61.34	0.24
Crabtree	Reach 1	22469	Max	newEC3	189.89	11.51	17.38		17.45	0.00059	1.98	96.12	26.57	0.18
	Reach 1													

Crabtree	Reach 1	22455	Max	EC100	692.48	12.06	20.86		20.98	0.000826	2.97	254.69	68.16	0.23
Crabtree	Reach 1	22455	Max	EC3yr0416	190.28	12.06	17.42		17.49	0.000885	2.15	88.52	29.37	0.22
Crabtree	Reach 1	22455	Max	EC25yr0416	483.75	12.06	19.93		20.06	0.000861	2.79	173.66	53.16	0.23
Crabtree	Reach 1	22455	Max	newEC25	485.29	12.06	19.68		19.82	0.00101	2.95	164.24	51.66	0.25
Crabtree	Reach 1	22455	Max	newEC100	695.05	12.06	20.64		20.78	0.000977	3.16	239.86	67.75	0.25
Crabtree	Reach 1	22455	Max	newEC3	189.89	12.06	17.36		17.43	0.000927	2.19	86.76	29.01	0.22
	Reach 1													
Crabtree	Reach 1	22429	Max	EC100	689.39	11.24	20.79		20.97	0.001191	3.42	208.26	55.76	0.27
Crabtree	Reach 1	22429	Max	EC3yr0416	190.28	11.24	17.39		17.47	0.00086	2.24	85.1	25.3	0.21
Crabtree	Reach 1	22429	Max	EC25yr0416	482.33	11.24	19.9		20.03	0.001028	2.95	163.25	37.21	0.25
Crabtree	Reach 1	22429	Max	newEC25	484.22	11.24	19.69		19.8	0.000808	2.85	235.98	69.26	0.22
Crabtree	Reach 1	22429	Max	newEC100	692.41	11.24	20.64		20.78	0.000889	3.27	302.82	71.28	0.24
Crabtree	Reach 1	22429	Max	newEC3	189.89	11.24	17.33		17.41	0.000891	2.27	84.57	38.59	0.22
	Reach 1													
Crabtree	Reach 1	22387	Max	EC100	689.36	11.94	20.75		20.92	0.001061	3.38	215.73	55.09	0.26
Crabtree	Reach 1	22387	Max	EC3yr0416	190.28	11.94	17.33		17.42	0.00123	2.45	77.79	27.38	0.26
Crabtree	Reach 1	22387	Max	EC25yr0416	482.32	11.94	19.85		19.99	0.001021	2.99	162.86	51.7	0.25
Crabtree	Reach 1	22387	Max	newEC25	484.21	11.94	19.65		19.76	0.000908	2.89	225.63	67.27	0.24
Crabtree	Reach 1	22387	Max	newEC100	692.4	11.94	20.59		20.74	0.00096	3.29	289.87	68.37	0.25
Crabtree	Reach 1	22387	Max	newEC3	189.89	11.94	17.27		17.37	0.00129	2.49	76.62	36.2	0.26
	Reach 1													
Crabtree	Reach 1	22369	Max	EC100	688.96	11.91	20.71		20.9	0.00129	3.61	209.77	64.75	0.28
Crabtree	Reach 1	22369	Max	EC3yr0416	190.28	11.91	17.3		17.4	0.00125	2.53	75.22	24.54	0.25
Crabtree	Reach 1	22369	Max	EC25yr0416	482.25	11.91	19.81		19.98	0.001283	3.29	149.08	62.31	0.27
Crabtree	Reach 1	22369	Max	newEC25	484.19	11.91	19.6		19.75	0.001156	3.31	191.9	62.52	0.26
Crabtree	Reach 1	22369	Max	newEC100	692.1	11.91	20.54		20.73	0.001276	3.76	251.64	64.4	0.28
Crabtree	Reach 1	22369	Max	newEC3	189.89	11.91	17.24		17.34	0.00131	2.58	74.09	31.25	0.26
	Reach 1													
Crabtree	Reach 1	22355	Max	EC100	684.71	11.79	20.71		20.89	0.001156	3.42	217.66	65.07	0.27
Crabtree	Reach 1	22355	Max	EC3yr0416	190.28	11.79	17.29		17.38	0.001201	2.51	75.84	24.48	0.25
Crabtree	Reach 1	22355	Max	EC25yr0416	480.31	11.79	19.81		19.96	0.001168	3.11	160	60.27	0.26
Crabtree	Reach 1	22355	Max	newEC25	482.72	11.79	19.57		19.74	0.001187	3.35	179	58.2	0.27
Crabtree	Reach 1	22355	Max	newEC100	688.4	11.79	20.51		20.71	0.001313	3.83	237.63	64.7	0.29
Crabtree	Reach 1	22355	Max	newEC3	189.89	11.79	17.22		17.33	0.001253	2.55	74.65	30.55	0.26
	Reach 1													

Crabtree	Reach 1	22338	Max	EC100	684.65	11.86	20.67		20.86	0.001163	3.53	201.84	50.28	0.27
Crabtree	Reach 1	22338	Max	EC3yr0416	190.28	11.86	17.27		17.36	0.001181	2.43	78.44	27.16	0.25
Crabtree	Reach 1	22338	Max	EC25yr0416	480.3	11.86	19.79		19.94	0.001041	3.04	160.16	44.04	0.25
Crabtree	Reach 1	22338	Max	newEC25	482.72	11.86	19.55		19.71	0.001109	3.24	167.2	46.18	0.26
Crabtree	Reach 1	22338	Max	newEC100	688.37	11.86	20.47		20.69	0.001261	3.78	212.51	52.12	0.29
Crabtree	Reach 1	22338	Max	newEC3	189.89	11.86	17.21		17.3	0.001247	2.47	76.92	30.48	0.26
	Reach 1													
Crabtree	Reach 1	22265	Max	EC100	684.55	11.73	20.55		20.77	0.001569	3.83	185.37	49.17	0.31
Crabtree	Reach 1	22265	Max	EC3yr0416	190.27	11.73	17.14		17.26	0.0016	2.76	69.06	24.15	0.29
Crabtree	Reach 1	22265	Max	EC25yr0416	480.25	11.73	19.67		19.85	0.001464	3.36	145.16	43.53	0.29
Crabtree	Reach 1	22265	Max	newEC25	482.7	11.73	19.49		19.63	0.001188	3.24	208.32	65.17	0.27
Crabtree	Reach 1	22265	Max	newEC100	688.35	11.73	20.42		20.6	0.001253	3.64	270.19	67.33	0.28
Crabtree	Reach 1	22265	Max	newEC3	189.89	11.73	17.08		17.2	0.001666	2.82	67.45	23.97	0.29
	Reach 1													
Crabtree	Reach 1	22252	Max	EC100	684.33	11.47	20.54		20.75	0.001375	3.74	190.71	47.64	0.29
Crabtree	Reach 1	22252	Max	EC3yr0416	190.27	11.47	17.15		17.24	0.00112	2.45	77.73	24.16	0.24
Crabtree	Reach 1	22252	Max	EC25yr0416	480.24	11.47	19.67		19.83	0.001206	3.22	151.72	42.22	0.26
Crabtree	Reach 1	22252	Max	newEC25	482.69	11.47	19.44		19.62	0.001212	3.4	163.76	44.09	0.27
Crabtree	Reach 1	22252	Max	newEC100	688.33	11.47	20.35		20.58	0.001446	4	206.43	49.88	0.3
Crabtree	Reach 1	22252	Max	newEC3	189.89	11.47	17.08		17.18	0.001174	2.49	76.22	30.3	0.25
	Reach 1													
Crabtree	Reach 1	22237	Max	EC100	684.33	11.68	20.52		20.73	0.001453	3.73	201.57	75.53	0.3
Crabtree	Reach 1	22237	Max	EC3yr0416	190.27	11.68	17.11		17.23	0.00139	2.67	71.22	23.4	0.27
Crabtree	Reach 1	22237	Max	EC25yr0416	480.24	11.68	19.63		19.81	0.001431	3.36	143.54	44.66	0.29
Crabtree	Reach 1	22237	Max	newEC25	482.69	11.68	19.42		19.6	0.001323	3.55	167.06	54.68	0.28
Crabtree	Reach 1	22237	Max	newEC100	688.34	11.68	20.34		20.57	0.001484	4.05	225.78	71.29	0.3
Crabtree	Reach 1	22237	Max	newEC3	189.89	11.68	17.05		17.16	0.001469	2.73	69.65	23.13	0.28
	Reach 1													
Crabtree	Reach 1	22224	Max	EC100	683.25	11.66	20.5		20.71	0.001725	3.91	200.33	79.9	0.32
Crabtree	Reach 1	22224	Max	EC3yr0416	190.26	11.66	17.04		17.2	0.002295	3.25	58.52	20.51	0.34
Crabtree	Reach 1	22224	Max	EC25yr0416	480.01	11.66	19.58		19.82	0.002004	3.96	124.65	65.48	0.34
Crabtree	Reach 1	22224	Max	newEC25	482.56	11.66	19.41		19.59	0.001585	3.67	190.03	63.55	0.3
Crabtree	Reach 1	22224	Max	newEC100	687.45	11.66	20.34		20.54	0.001736	3.98	254.08	73.98	0.32
Crabtree	Reach 1	22224	Max	newEC3	189.88	11.66	16.98		17.15	0.002416	3.31	57.36	20.34	0.35
	Reach 1													

Crabtree	Reach 1	22211	Max	EC100	682.55	11.63	20.5		20.69	0.001346	3.62	204.07	77.76	0.29
Crabtree	Reach 1	22211	Max	EC3yr0416	190.27	11.63	17.07		17.18	0.001379	2.64	72.14	23.95	0.27
Crabtree	Reach 1	22211	Max	EC25yr0416	479.95	11.63	19.6		19.77	0.00131	3.33	144.86	52.3	0.28
Crabtree	Reach 1	22211	Max	newEC25	482.5	11.63	19.37		19.56	0.001339	3.53	157.82	44.59	0.28
Crabtree	Reach 1	22211	Max	newEC100	686.92	11.63	20.28		20.53	0.001658	4.1	201.25	53.29	0.32
Crabtree	Reach 1	22211	Max	newEC3	189.88	11.63	17		17.11	0.001458	2.69	70.48	23.61	0.27
	Reach 1													
Crabtree	Reach 1	22173	Max	EC100	682.55	11.57	20.45		20.64	0.001224	3.53	210.41	69.77	0.28
Crabtree	Reach 1	22173	Max	EC3yr0416	190.26	11.57	17.01		17.12	0.001529	2.65	71.79	26.35	0.28
Crabtree	Reach 1	22173	Max	EC25yr0416	479.94	11.57	19.56		19.72	0.001289	3.17	153.71	49.6	0.28
Crabtree	Reach 1	22173	Max	newEC25	482.48	11.57	19.34		19.51	0.001298	3.31	168.44	53.47	0.28
Crabtree	Reach 1	22173	Max	newEC100	686.9	11.57	20.26		20.46	0.001298	3.77	223.27	66.89	0.29
Crabtree	Reach 1	22173	Max	newEC3	189.88	11.57	16.94		17.05	0.001648	2.72	69.87	26.14	0.29
	Reach 1													
Crabtree	Reach 1	21994	Max	EC100	776.95	11.26	20.1		20.33	0.001837	3.91	209.99	75.48	0.34
Crabtree	Reach 1	21994	Max	EC3yr0416	222.71	11.26	16.6		16.76	0.002225	3.16	70.47	26.38	0.34
Crabtree	Reach 1	21994	Max	EC25yr0416	550.12	11.26	19.21		19.41	0.00183	3.61	153.52	49.79	0.33
Crabtree	Reach 1	21994	Max	newEC25	552.86	10.83	19.11		19.25	0.001273	3.19	240.97	72.67	0.28
Crabtree	Reach 1	21994	Max	newEC100	779.25	10.83	20.03		20.19	0.001309	3.47	312.95	87.07	0.29
Crabtree	Reach 1	21994	Max	newEC3	222.4	10.83	16.56		16.71	0.002135	3.12	72.55	46.16	0.33
	Reach 1													
Crabtree	Reach 1	21968	Max	EC100	776.91	11.22	20.1		20.29	0.001293	3.61	236.28	86.26	0.29
Crabtree	Reach 1	21968	Max	EC3yr0416	222.72	11.22	16.61		16.71	0.001138	2.62	84.96	25.17	0.25
Crabtree	Reach 1	21968	Max	EC25yr0416	550.08	11.22	19.21		19.36	0.001343	3.23	176.43	54.29	0.28
Crabtree	Reach 1	21968	Max	newEC25	552.86	10.81	19.09		19.21	0.001067	2.99	250.97	74.34	0.26
Crabtree	Reach 1	21968	Max	newEC100	779.12	10.81	20.01		20.16	0.001057	3.33	322.96	84.87	0.26
Crabtree	Reach 1	21968	Max	newEC3	222.39	10.81	16.55		16.66	0.001189	2.65	85.07	44.26	0.25
	Reach 1													
Crabtree	Reach 1	21953	Max	EC100	772.33	10.91	20.15		20.25	0.00072	2.71	311.96	92.36	0.22
Crabtree	Reach 1	21953	Max	EC3yr0416	222.76	10.91	16.6		16.7	0.001056	2.5	89.22	41.36	0.24
Crabtree	Reach 1	21953	Max	EC25yr0416	547.38	10.91	19.2		19.35	0.001172	3.07	178.07	63.29	0.27
Crabtree	Reach 1	21953	Max	newEC25	550.38	10.8	19.1		19.2	0.00085	2.78	273.7	73.06	0.23
Crabtree	Reach 1	21953	Max	newEC100	774.79	10.8	20.01		20.14	0.000901	3.13	346.66	87.83	0.24
Crabtree	Reach 1	21953	Max	newEC3	222.41	10.8	16.55		16.64	0.001	2.42	105.56	53.4	0.24
	Reach 1													

Crabtree	Reach 1	21939	Max	EC100	763.32	11.17	20.16		20.25	0.000557	2.59	330.82	94.56	0.19
Crabtree	Reach 1	21939	Max	EC3yr0416	222.74	11.17	16.61		16.68	0.000721	2.15	103.79	44.15	0.2
Crabtree	Reach 1	21939	Max	EC25yr0416	540.95	11.17	19.26		19.33	0.000523	2.23	256.99	67.24	0.18
Crabtree	Reach 1	21939	Max	newEC25	544.34	10.78	19.1		19.18	0.000637	2.51	290.76	76.47	0.2
Crabtree	Reach 1	21939	Max	newEC100	766.13	10.78	20.01		20.12	0.000667	2.89	365.91	89.97	0.21
Crabtree	Reach 1	21939	Max	newEC3	222.38	10.78	16.56		16.62	0.00071	2.11	118.24	60.4	0.2
	Reach 1													
Crabtree	Reach 1	21905	Max	EC100	759.64	11.11	20.02		20.23	0.001557	3.79	215.42	70.23	0.31
Crabtree	Reach 1	21905	Max	EC3yr0416	222.63	11.11	16.49		16.64	0.002064	3.12	71.29	25.41	0.33
Crabtree	Reach 1	21905	Max	EC25yr0416	538.49	11.11	19.12		19.32	0.001747	3.53	152.89	56.19	0.32
Crabtree	Reach 1	21905	Max	newEC25	542.63	10.75	19.04		19.16	0.00122	3.12	242.7	74.6	0.27
Crabtree	Reach 1	21905	Max	newEC100	762.94	10.75	19.95		20.11	0.001157	3.47	313.92	81.68	0.27
Crabtree	Reach 1	21905	Max	newEC3	222.34	10.75	16.45		16.6	0.002084	3.12	72.56	44.97	0.33
	Reach 1													
Crabtree	Reach 1	21846	Max	EC100	759.27	10.81	19.97		20.15	0.001195	3.54	234.14	75.36	0.28
Crabtree	Reach 1	21846	Max	EC3yr0416	222.6	10.81	16.42		16.54	0.001397	2.75	80.97	25.86	0.27
Crabtree	Reach 1	21846	Max	EC25yr0416	538.35	10.81	19.06		19.22	0.001297	3.23	173.52	60.13	0.28
Crabtree	Reach 1	21846	Max	newEC25	542.58	10.7	18.98		19.1	0.000938	3.02	248.11	68.87	0.24
Crabtree	Reach 1	21846	Max	newEC100	762.34	10.7	19.89		20.04	0.000973	3.45	315.54	80.91	0.25
Crabtree	Reach 1	21846	Max	newEC3	222.27	10.7	16.38		16.49	0.001409	2.75	82.05	43.4	0.27
	Reach 1													
Crabtree	Reach 1	21825	Max	EC100	759.14	10.98	19.99		20.13	0.000746	3.07	276.45	85.96	0.22
Crabtree	Reach 1	21825	Max	EC3yr0416	222.59	10.98	16.43		16.52	0.000887	2.32	96.09	28.77	0.22
Crabtree	Reach 1	21825	Max	EC25yr0416	538.34	10.98	19.08		19.2	0.000763	2.77	208.2	68.8	0.22
Crabtree	Reach 1	21825	Max	newEC25	542.56	10.68	18.97		19.08	0.000678	2.8	257.32	67.75	0.21
Crabtree	Reach 1	21825	Max	newEC100	762.11	10.68	19.88		20.02	0.000747	3.25	323.88	83.1	0.23
Crabtree	Reach 1	21825	Max	newEC3	222.26	10.68	16.38		16.46	0.000913	2.33	96.25	45.83	0.22
	Reach 1													
Crabtree	Reach 1	21800	Max	EC100	750.94	10.93	20.02		20.11	0.000539	2.67	348.73	114.66	0.19
Crabtree	Reach 1	21800	Max	EC3yr0416	222.57	10.93	16.38		16.49	0.001277	2.66	83.65	26.65	0.26
Crabtree	Reach 1	21800	Max	EC25yr0416	535.03	10.93	19.09		19.18	0.000659	2.64	245.05	105.2	0.21
Crabtree	Reach 1	21800	Max	newEC25	539.78	10.65	18.96		19.08	0.000785	2.96	248.17	102.76	0.22
Crabtree	Reach 1	21800	Max	newEC100	754.6	10.65	19.89		20	0.000639	2.97	377.51	114.36	0.21
Crabtree	Reach 1	21800	Max	newEC3	222.25	10.65	16.33		16.44	0.001298	2.67	84.52	51.7	0.26
	Reach 1													

Crabtree	Reach 1	21783	Max	EC100	749.84	10.9	19.99		20.1	0.000593	2.83	302.19	81.57	0.2
Crabtree	Reach 1	21783	Max	EC3yr0416	222.59	10.9	16.38		16.47	0.001046	2.35	94.53	31.19	0.24
Crabtree	Reach 1	21783	Max	EC25yr0416	534.83	10.9	19.07		19.17	0.000642	2.64	217.07	75.59	0.2
Crabtree	Reach 1	21783	Max	newEC25	539.68	10.64	18.94		19.05	0.000686	2.76	245.77	79.3	0.21
Crabtree	Reach 1	21783	Max	newEC100	753.77	10.64	19.87		19.99	0.000663	3.01	333.41	84.95	0.21
Crabtree	Reach 1	21783	Max	newEC3	222.24	10.64	16.33		16.42	0.001075	2.37	95.03	54.27	0.24
	Reach 1													
Crabtree	Reach 1	21750	Max	EC100	749.59	10.85	19.94		20.08	0.000792	3.12	267.32	73.22	0.23
Crabtree	Reach 1	21750	Max	EC3yr0416	222.57	10.85	16.35		16.44	0.000815	2.35	94.83	24.84	0.21
Crabtree	Reach 1	21750	Max	EC25yr0416	534.74	10.85	19.02		19.15	0.000881	2.94	189.12	66.71	0.23
Crabtree	Reach 1	21750	Max	newEC25	539.65	10.61	18.91		19.03	0.000765	2.93	242.52	71.14	0.22
Crabtree	Reach 1	21750	Max	newEC100	752.94	10.61	19.82		19.97	0.000805	3.33	311.24	77.5	0.23
Crabtree	Reach 1	21750	Max	newEC3	222.24	10.61	16.3		16.39	0.000836	2.36	94.96	40.68	0.21
	Reach 1													
Crabtree	Reach 1	21694	Max	EC100	748.34	10.76	19.86		20.03	0.001094	3.45	235.37	73.23	0.27
Crabtree	Reach 1	21694	Max	EC3yr0416	222.43	10.76	16.28		16.38	0.001242	2.64	84.26	26.28	0.26
Crabtree	Reach 1	21694	Max	EC25yr0416	534.3	10.76	18.95		19.1	0.001086	3.13	177.43	51.65	0.26
Crabtree	Reach 1	21694	Max	newEC25	539.62	10.56	18.85		18.98	0.000947	3.09	220.38	54.86	0.24
Crabtree	Reach 1	21694	Max	newEC100	752.25	10.56	19.76		19.93	0.001059	3.51	278.48	74.39	0.26
Crabtree	Reach 1	21694	Max	newEC3	222.22	10.56	16.22		16.33	0.001272	2.66	84.9	49.11	0.26
	Reach 1													
Crabtree	Reach 1	21649	Max	EC100	747.77	10.69	19.81		19.99	0.000974	3.39	233.53	72.38	0.25
Crabtree	Reach 1	21649	Max	EC3yr0416	222.42	10.69	16.25		16.34	0.000907	2.33	95.27	28.12	0.22
Crabtree	Reach 1	21649	Max	EC25yr0416	534.3	10.69	18.92		19.05	0.000881	2.95	182.46	44.93	0.23
Crabtree	Reach 1	21649	Max	newEC25	539.6	10.52	18.83		18.94	0.000738	2.86	235.49	55.17	0.22
Crabtree	Reach 1	21649	Max	newEC100	751.63	10.52	19.72		19.88	0.000851	3.33	288.21	69.41	0.24
Crabtree	Reach 1	21649	Max	newEC3	222.22	10.52	16.2		16.28	0.000932	2.35	95.53	51.15	0.23
	Reach 1													
Crabtree	Reach 1	21619	Max	EC100	743.96	10.64	19.8		19.96	0.000901	3.24	243.73	67.93	0.24
Crabtree	Reach 1	21619	Max	EC3yr0416	222.42	10.64	16.24		16.32	0.000713	2.2	101.21	27.49	0.2
Crabtree	Reach 1	21619	Max	EC25yr0416	533.13	10.64	18.9		19.03	0.000791	2.88	185.08	44.67	0.22
Crabtree	Reach 1	21619	Max	newEC25	538.55	10.49	18.82		18.92	0.000643	2.74	255.26	60.97	0.2
Crabtree	Reach 1	21619	Max	newEC100	748.14	10.49	19.72		19.86	0.000743	3.17	314.19	73.28	0.22
Crabtree	Reach 1	21619	Max	newEC3	222.21	10.49	16.18		16.26	0.000737	2.22	101.01	54.67	0.2
	Reach 1													

Crabtree	Reach 1	21542	Max	EC100	739.37	10.51	19.68		19.89	0.001428	3.68	209.06	79.59	0.3
Crabtree	Reach 1	21542	Max	EC3yr0416	222.39	10.51	16.14		16.25	0.001158	2.6	85.47	25.28	0.25
Crabtree	Reach 1	21542	Max	EC25yr0416	532.01	10.51	18.79		18.96	0.001173	3.23	164.78	35.68	0.26
Crabtree	Reach 1	21542	Max	newEC25	537.65	10.43	18.75		18.87	0.000849	2.95	247.42	63.49	0.23
Crabtree	Reach 1	21542	Max	newEC100	744.87	10.43	19.65		19.8	0.000959	3.32	311.99	89.14	0.25
Crabtree	Reach 1	21542	Max	newEC3	222.07	10.43	16.09		16.19	0.001186	2.62	86.28	57.84	0.25
	Reach 1													
Crabtree	Reach 1	21436	Max	EC100	738.79	10.33	19.56		19.75	0.00123	3.6	235.97	128.32	0.28
Crabtree	Reach 1	21436	Max	EC3yr0416	228.91	10.33	15.97		16.1	0.001605	2.91	78.67	26.02	0.3
Crabtree	Reach 1	21436	Max	EC25yr0416	543.95	10.33	18.65		18.83	0.001308	3.4	160.42	40.61	0.28
Crabtree	Reach 1	21436	Max	newEC25	550.96	10.33	18.65		18.78	0.000927	3.08	242.56	67.05	0.24
Crabtree	Reach 1	21436	Max	newEC100	745.92	10.33	19.57		19.71	0.000871	3.32	331.8	137.92	0.24
Crabtree	Reach 1	21436	Max	newEC3	228.3	10.33	15.92		16.05	0.001633	2.93	79.95	56.87	0.3
	Reach 1													
Crabtree	Reach 1	21381	Max	EC100	736.17	10.23	19.51		19.68	0.001052	3.37	249.99	117.99	0.26
Crabtree	Reach 1	21381	Max	EC3yr0416	228.9	10.23	15.92		16.02	0.001086	2.54	90.19	26.54	0.24
Crabtree	Reach 1	21381	Max	EC25yr0416	543.81	10.23	18.6		18.75	0.00107	3.17	172.3	43.35	0.25
Crabtree	Reach 1	21381	Max	newEC25	550.57	10.23	18.56		18.72	0.001119	3.23	170.69	40.56	0.26
Crabtree	Reach 1	21381	Max	newEC100	742.58	10.23	19.48		19.65	0.001114	3.43	245.85	117.54	0.26
Crabtree	Reach 1	21381	Max	newEC3	228.22	10.23	15.86		15.97	0.001135	2.57	88.7	26.46	0.25
	Reach 1													
Crabtree	Reach 1	21313	Max	EC100	731.63	10.11	19.43		19.59	0.00112	3.33	240.16	115.66	0.27
Crabtree	Reach 1	21313	Max	EC3yr0416	228.66	10.11	15.83		15.94	0.001237	2.62	87.43	28.15	0.26
Crabtree	Reach 1	21313	Max	EC25yr0416	543.43	10.11	18.52		18.67	0.001071	3.12	174.31	43.97	0.26
Crabtree	Reach 1	21313	Max	newEC25	549.38	10.11	18.48		18.64	0.001116	3.19	172.49	41.75	0.26
Crabtree	Reach 1	21313	Max	newEC100	739.61	10.11	19.39		19.56	0.001184	3.41	235.78	109.88	0.27
Crabtree	Reach 1	21313	Max	newEC3	227.92	10.11	15.77		15.88	0.001301	2.66	85.71	27.99	0.27
	Reach 1													
Crabtree	Reach 1	21147	Max	EC100	726.88	9.83	19.3		19.44	0.000755	3.06	271.88	102.69	0.22
Crabtree	Reach 1	21147	Max	EC3yr0416	227.8	9.83	15.66		15.75	0.001006	2.47	92.41	27.1	0.24
Crabtree	Reach 1	21147	Max	EC25yr0416	541.71	9.83	18.37		18.51	0.000915	3	184.04	64.19	0.24
Crabtree	Reach 1	21147	Max	newEC25	544.17	9.83	18.32		18.46	0.000958	3.05	181.43	63.07	0.24
Crabtree	Reach 1	21147	Max	newEC100	734.69	9.83	19.25		19.4	0.000801	3.14	267.16	101.4	0.23
Crabtree	Reach 1	21147	Max	newEC3	227.48	9.83	15.58		15.68	0.001063	2.51	90.49	26.87	0.24
	Reach 1													

Crabtree	Reach 1	21119	Max	EC100	729.17	9.78	19.3		19.41	0.000735	2.9	299.92	124.01	0.22
Crabtree	Reach 1	21119	Max	EC3yr0416	227.48	9.78	15.6		15.72	0.001436	2.8	81.3	29.38	0.28
Crabtree	Reach 1	21119	Max	EC25yr0416	541.75	9.78	18.32		18.49	0.001226	3.28	165.15	59.8	0.27
Crabtree	Reach 1	21119	Max	newEC25	544.53	9.78	18.26		18.43	0.001295	3.34	162.86	58.96	0.28
Crabtree	Reach 1	21119	Max	newEC100	736.71	9.78	19.25		19.37	0.000784	2.97	294.02	123.43	0.22
Crabtree	Reach 1	21119	Max	newEC3	227.29	9.78	15.52		15.65	0.001535	2.86	79.36	28.97	0.29
	Reach 1													
Crabtree	Reach 1	21062	Max	EC100	736.7	9.68	19.25		19.37	0.000683	2.92	291.65	102.3	0.21
Crabtree	Reach 1	21062	Max	EC3yr0416	226.94	9.68	15.55		15.65	0.000997	2.48	91.53	26.31	0.23
Crabtree	Reach 1	21062	Max	EC25yr0416	543.98	9.68	18.3		18.42	0.000809	2.82	208.47	70.7	0.22
Crabtree	Reach 1	21062	Max	newEC25	547.45	9.68	18.24	14.27	18.37	0.000858	2.89	204.57	69.45	0.23
Crabtree	Reach 1	21062	Max	newEC100	742.59	9.68	19.2	14.9	19.33	0.000722	2.98	286.57	100.02	0.22
Crabtree	Reach 1	21062	Max	newEC3	227.12	9.68	15.47	12.91	15.57	0.001066	2.54	89.47	26.11	0.24
	Reach 1													
Crabtree	Reach 1	20962	Max	EC100	735.42	9.51	19.22		19.31	0.000607	2.65	364.82	170.51	0.2
Crabtree	Reach 1	20962	Max	EC3yr0416	226.33	9.51	15.45		15.55	0.001011	2.55	88.8	24.14	0.23
Crabtree	Reach 1	20962	Max	EC25yr0416	542.17	9.51	18.19		18.35	0.001149	3.19	173.3	124.21	0.26
Crabtree	Reach 1	20962	Max	newEC25	546.83	9.51	18.18		18.35	0.001178	3.23	172.78	123.85	0.27
Crabtree	Reach 1	20962	Max	newEC100	742.37	9.51	19.2		19.29	0.000632	2.7	361.35	170.17	0.2
Crabtree	Reach 1	20962	Max	newEC3	226.98	9.51	15.42		15.53	0.001034	2.57	88.27	24.09	0.24
	Reach 1													
Crabtree	Reach 1	20941	Max	EC100	739.28	9.48	19.23		19.29	0.000382	2.26	425.33	181.01	0.16
Crabtree	Reach 1	20941	Max	EC3yr0416	226.34	9.48	15.45		15.53	0.000833	2.26	100.28	34.65	0.22
Crabtree	Reach 1	20941	Max	EC25yr0416	543.71	9.48	18.22		18.31	0.000577	2.46	243.72	125.67	0.19
Crabtree	Reach 1	20941	Max	newEC25	547.93	9.48	18.22		18.3	0.000591	2.49	243.01	125.13	0.19
Crabtree	Reach 1	20941	Max	newEC100	746.07	9.48	19.21		19.27	0.000396	2.3	421.77	180.06	0.16
Crabtree	Reach 1	20941	Max	newEC3	226.97	9.48	15.43		15.51	0.000853	2.28	99.62	34.46	0.22
	Reach 1													
Crabtree	Reach 1	20922	Max	EC100	746.42	9.45	19.21		19.29	0.000488	2.51	420.6	219.15	0.18
Crabtree	Reach 1	20922	Max	EC3yr0416	226.25	9.45	15.41		15.51	0.001048	2.49	90.85	26.73	0.24
Crabtree	Reach 1	20922	Max	EC25yr0416	547.3	9.45	18.18		18.29	0.000776	2.8	227.02	137.6	0.22
Crabtree	Reach 1	20922	Max	newEC25	550.84	9.45	18.17		18.29	0.000792	2.83	225.84	135.09	0.22
Crabtree	Reach 1	20922	Max	newEC100	752.53	9.45	19.19		19.27	0.000508	2.56	416.15	218.88	0.18
Crabtree	Reach 1	20922	Max	newEC3	226.77	9.45	15.39		15.49	0.001071	2.51	90.25	26.63	0.24
	Reach 1													

Crabtree	Reach 1	20893	Max	EC100	746.7	9.4	19.22		19.27	0.000358	2.11	476.32	207.64	0.16
Crabtree	Reach 1	20893	Max	EC3yr0416	226.2	9.4	15.4		15.48	0.000859	2.31	98.03	28.18	0.22
Crabtree	Reach 1	20893	Max	EC25yr0416	547.29	9.4	18.18		18.26	0.000596	2.39	285.37	162.29	0.19
Crabtree	Reach 1	20893	Max	newEC25	550.82	9.4	18.17		18.25	0.000611	2.42	283.79	162.13	0.2
Crabtree	Reach 1	20893	Max	newEC100	752.58	9.4	19.2		19.25	0.000372	2.15	472.16	207.34	0.16
Crabtree	Reach 1	20893	Max	newEC3	226.08	9.4	15.38		15.46	0.000874	2.32	97.38	28.09	0.22
	Reach 1													
Crabtree	Reach 1	20848	Max	EC100	746.25	9.32	19.21		19.25	0.000291	1.98	481.89	183.47	0.14
Crabtree	Reach 1	20848	Max	EC3yr0416	225.89	9.32	15.36		15.45	0.00085	2.31	97.78	28.04	0.22
Crabtree	Reach 1	20848	Max	EC25yr0416	547.17	9.32	18.17		18.22	0.000398	2.05	327.46	127.65	0.16
Crabtree	Reach 1	20848	Max	newEC25	550.63	9.32	18.16		18.21	0.000407	2.08	326.14	127.54	0.16
Crabtree	Reach 1	20848	Max	newEC100	752.25	9.32	19.19		19.23	0.000301	2.01	478.19	182.12	0.14
Crabtree	Reach 1	20848	Max	newEC3	225.89	9.32	15.34		15.42	0.000863	2.33	97.12	27.89	0.22
	Reach 1													
Crabtree	Reach 1	20826	Max	EC100	753.43	9.28	19.22		19.24	0.000151	1.55	614.75	190	0.1
Crabtree	Reach 1	20826	Max	EC3yr0416	226.13	9.28	15.39		15.43	0.000387	1.69	133.7	70.74	0.15
Crabtree	Reach 1	20826	Max	EC25yr0416	550.4	9.28	18.19		18.24	0.000294	1.95	308.48	146.08	0.14
Crabtree	Reach 1	20826	Max	newEC25	553.46	9.28	18.18		18.24	0.000299	1.97	307.74	145.7	0.14
Crabtree	Reach 1	20826	Max	newEC100	758.59	9.28	19.2		19.22	0.000155	1.57	611.02	188.3	0.1
Crabtree	Reach 1	20826	Max	newEC3	225.98	9.28	15.36		15.41	0.000393	1.7	132.91	70.56	0.15
	Reach 1													
Crabtree	Reach 1	20815	Max	EC100	763.52	9.26	19.22		19.24	0.000113	1.32	681.29	183.4	0.09
Crabtree	Reach 1	20815	Max	EC3yr0416	226.12	9.26	15.37		15.43	0.000568	1.98	114.12	85.98	0.18
Crabtree	Reach 1	20815	Max	EC25yr0416	556.92	9.26	18.16		18.18	0.000175	1.47	431.59	147.78	0.11
Crabtree	Reach 1	20815	Max	newEC25	558.94	9.26	18.14		18.17	0.000178	1.48	430.06	146.9	0.11
Crabtree	Reach 1	20815	Max	newEC100	767.69	9.26	19.2		19.22	0.000116	1.33	677.71	183.08	0.09
Crabtree	Reach 1	20815	Max	newEC3	225.96	9.26	15.34		15.4	0.000577	1.99	113.4	85.62	0.18
	Reach 1													
Crabtree	Reach 1	20775	Max	EC100	775.62	9.2	19.2		19.23	0.000245	1.79	575.17	211.52	0.13
Crabtree	Reach 1	20775	Max	EC3yr0416	226.02	9.2	15.32		15.4	0.000776	2.22	101.72	49.07	0.21
Crabtree	Reach 1	20775	Max	EC25yr0416	564.07	9.2	18.15		18.2	0.000354	1.89	378.77	163.13	0.15
Crabtree	Reach 1	20775	Max	newEC25	565.16	9.2	18.14		18.19	0.00036	1.9	377.15	162.86	0.15
Crabtree	Reach 1	20775	Max	newEC100	778.51	9.2	19.18		19.22	0.000252	1.81	570.96	211.25	0.13
Crabtree	Reach 1	20775	Max	newEC3	225.71	9.2	15.3		15.38	0.00079	2.23	101.02	48.65	0.21
	Reach 1													

Crabtree	Reach 1	20529	Max	EC100	777.46	8.79	19.15		19.18	0.00019	1.64	647.4	235.44	0.11
Crabtree	Reach 1	20529	Max	EC3yr0416	225.28	8.79	15.14		15.22	0.000716	2.23	100.94	25.9	0.2
Crabtree	Reach 1	20529	Max	EC25yr0416	563.5	8.79	17.93		18.07	0.000826	2.97	192.71	193.59	0.23
Crabtree	Reach 1	20529	Max	newEC25	564.27	8.79	17.92		18.05	0.000835	2.98	192.21	193.34	0.23
Crabtree	Reach 1	20529	Max	newEC100	780.41	8.79	19.13		19.16	0.000195	1.65	642.45	234.49	0.11
Crabtree	Reach 1	20529	Max	newEC3	224.98	8.79	15.12		15.2	0.000727	2.24	100.24	25.79	0.2
	Reach 1													
Crabtree	Reach 1	20513	Max	EC100	777.09	8.76	19.14		19.18	0.000289	2.04	531.75	218.59	0.14
Crabtree	Reach 1	20513	Max	EC3yr0416	225.28	8.76	15.12		15.21	0.000835	2.35	96.01	25.87	0.21
Crabtree	Reach 1	20513	Max	EC25yr0416	563.76	8.76	17.97		18.1	0.000783	2.96	204.69	189.87	0.22
Crabtree	Reach 1	20513	Max	newEC25	564.59	8.76	17.96		18.1	0.000843	3.07	187.95	189.2	0.23
Crabtree	Reach 1	20513	Max	newEC100	779.89	8.76	19.12		19.16	0.000297	2.07	527.07	216.03	0.14
Crabtree	Reach 1	20513	Max	newEC3	224.94	8.76	15.1		15.18	0.00085	2.36	95.31	25.8	0.22
	Reach 1													
Crabtree	Reach 1	20497	Max	EC100	776.39	8.74	19.12	14.3	19.18	0.00038	2.28	431.07	152.63	0.16
Crabtree	Reach 1	20497	Max	EC3yr0416	225.28	8.74	15.11	11.92	15.2	0.000844	2.33	96.81	26.63	0.22
Crabtree	Reach 1	20497	Max	EC25yr0416	563.69	8.74	17.96	13.58	18.08	0.000758	2.81	209.72	124.73	0.22
Crabtree	Reach 1	20497	Max	newEC25	564.55	8.74	17.95	13.58	18.07	0.000768	2.82	208.9	124.5	0.22
Crabtree	Reach 1	20497	Max	newEC100	778.98	8.74	19.09	14.32	19.16	0.00039	2.3	427.73	151.97	0.16
Crabtree	Reach 1	20497	Max	newEC3	224.92	8.74	15.09	11.92	15.17	0.000852	2.34	96.08	26.35	0.22
	Reach 1													
Crabtree	Reach 1	20444	Bridge											
	Reach 1													
Crabtree	Reach 1	20424	Max	EC100	769.31	8.62	18.94		19.04	0.000684	2.71	366.34	231.9	0.21
Crabtree	Reach 1	20424	Max	EC3yr0416	224.94	8.62	15.03		15.11	0.000869	2.26	99.72	29.63	0.22
Crabtree	Reach 1	20424	Max	EC25yr0416	562.08	8.62	17.79		17.92	0.000885	2.91	193.68	42.99	0.23
Crabtree	Reach 1	20424	Max	newEC25	562.79	8.62	17.77		17.9	0.000893	2.92	193.08	42.65	0.23
Crabtree	Reach 1	20424	Max	newEC100	771.86	8.62	18.91		19.02	0.000706	2.75	360.11	228.43	0.21
Crabtree	Reach 1	20424	Max	newEC3	224.7	8.62	15		15.08	0.000889	2.27	98.85	29.54	0.22
	Reach 1													
Crabtree	Reach 1	20401	Max	EC100	770.63	8.58	18.97		19.01	0.000296	2.01	584.98	351.29	0.14
Crabtree	Reach 1	20401	Max	EC3yr0416	224.93	8.58	15.02		15.09	0.000625	2.04	110.43	30.47	0.19
Crabtree	Reach 1	20401	Max	EC25yr0416	562.13	8.58	17.8		17.91	0.000703	2.7	215.06	173.74	0.21
Crabtree	Reach 1	20401	Max	newEC25	562.77	8.58	17.79		17.9	0.000711	2.71	213.6	169.66	0.21
Crabtree	Reach 1	20401	Max	newEC100	772.87	8.58	18.94		18.99	0.000308	2.05	576.01	348.27	0.14

Crabtree	Reach 1	20401	Max	newEC3	224.7	8.58	14.99		15.06	0.000638	2.05	109.55	30.39	0.19
	Reach 1													
Crabtree	Reach 1	20387	Max	EC100	770.57	8.55	18.97		19.01	0.000273	1.86	607.64	299.38	0.14
Crabtree	Reach 1	20387	Max	EC3yr0416	224.82	8.55	14.99		15.08	0.000968	2.42	93.09	27.38	0.23
Crabtree	Reach 1	20387	Max	EC25yr0416	562.03	8.55	17.79		17.89	0.000741	2.64	281.02	246.07	0.21
Crabtree	Reach 1	20387	Max	newEC25	562.72	8.55	17.78		17.88	0.000758	2.66	277.42	244.77	0.22
Crabtree	Reach 1	20387	Max	newEC100	773.04	8.55	18.94		18.98	0.000285	1.89	599.98	299.07	0.14
Crabtree	Reach 1	20387	Max	newEC3	224.57	8.55	14.96		15.05	0.00099	2.43	92.27	27.3	0.23
	Reach 1													
Crabtree	Reach 1	20386	Lat											
	Reach 1													
Crabtree	Reach 1	20227	Max	EC100	762.4	8.28	18.95		18.97	0.000125	1.33	789.16	292.28	0.09
Crabtree	Reach 1	20227	Max	EC3yr0416	224.45	8.28	14.9		14.96	0.000511	1.97	113.81	27.98	0.17
Crabtree	Reach 1	20227	Max	EC25yr0416	557.83	8.28	17.67		17.77	0.000653	2.61	217.04	254.56	0.2
Crabtree	Reach 1	20227	Max	newEC25	558.37	8.28	17.65		17.76	0.000661	2.62	216.25	253.89	0.21
Crabtree	Reach 1	20227	Max	newEC100	765.01	8.28	18.93		18.94	0.00013	1.35	781.5	291.92	0.09
Crabtree	Reach 1	20227	Max	newEC3	224.24	8.28	14.87		14.93	0.000521	1.99	112.92	27.86	0.17
	Reach 1													
Crabtree	Reach 1	20155	Max	EC100	746.38	8.16	18.94		18.96	0.000136	1.38	765.17	299.65	0.1
Crabtree	Reach 1	20155	Max	EC3yr0416	224.37	8.16	14.87		14.92	0.000452	1.89	118.66	27.71	0.16
Crabtree	Reach 1	20155	Max	EC25yr0416	547.64	8.16	17.69		17.73	0.000351	1.92	405.7	265.68	0.15
Crabtree	Reach 1	20155	Max	newEC25	547.99	8.16	17.67		17.72	0.000359	1.93	401.39	264.71	0.15
Crabtree	Reach 1	20155	Max	newEC100	748.79	8.16	18.92		18.94	0.000141	1.4	757.2	299.47	0.1
Crabtree	Reach 1	20155	Max	newEC3	224.19	8.16	14.84		14.89	0.000461	1.9	117.76	27.64	0.16
	Reach 1													
Crabtree	Reach 1	20047	Max	EC100	743.63	7.98	18.93		18.95	0.000109	1.3	810.83	302.37	0.09
Crabtree	Reach 1	20047	Max	EC3yr0416	224.21	7.98	14.84		14.88	0.000356	1.68	133.26	32.21	0.15
Crabtree	Reach 1	20047	Max	EC25yr0416	546.31	7.98	17.64		17.68	0.000233	1.66	451.13	236.51	0.12
Crabtree	Reach 1	20047	Max	newEC25	546.66	7.98	17.62		17.66	0.000239	1.68	446.63	235.25	0.13
Crabtree	Reach 1	20047	Max	newEC100	746.33	7.98	18.9		18.92	0.000113	1.32	802.67	302.12	0.09
Crabtree	Reach 1	20047	Max	newEC3	224.1	7.98	14.8		14.85	0.000364	1.7	132.18	32.13	0.15
	Reach 1													
Crabtree	Reach 1	19942	Max	EC100	740.53	7.8	18.93		18.94	0.000081	1.18	932.82	352.71	0.08
Crabtree	Reach 1	19942	Max	EC3yr0416	224.12	7.8	14.79		14.84	0.00046	1.81	123.59	32.21	0.16
Crabtree	Reach 1	19942	Max	EC25yr0416	545.82	7.8	17.63		17.66	0.000167	1.5	521.54	266.46	0.11

Crabtree	Reach 1	19942	Max	newEC25	546.33	7.8	17.62		17.64	0.000171	1.52	516.55	265.07	0.11
Crabtree	Reach 1	19942	Max	newEC100	743.27	7.8	18.9		18.91	0.000084	1.2	923.24	352.47	0.08
Crabtree	Reach 1	19942	Max	newEC3	223.98	7.8	14.75		14.81	0.00047	1.83	122.48	31.99	0.16
	Reach 1													
Crabtree	Reach 1	19928	Max	EC100	739.43	7.78	18.93		18.94	0.000055	1.02	1053.56	359.67	0.06
Crabtree	Reach 1	19928	Max	EC3yr0416	224.5	7.78	14.81		14.83	0.00025	1.34	167.4	55.55	0.12
Crabtree	Reach 1	19928	Max	EC25yr0416	545.16	7.78	17.64		17.66	0.000094	1.19	641.06	284.81	0.08
Crabtree	Reach 1	19928	Max	newEC25	545.69	7.78	17.62		17.64	0.000096	1.2	635.82	283.72	0.08
Crabtree	Reach 1	19928	Max	newEC100	741.9	7.78	18.9		18.91	0.000056	1.03	1043.81	358.82	0.06
Crabtree	Reach 1	19928	Max	newEC3	224.34	7.78	14.77		14.8	0.000257	1.35	165.83	55	0.12
	Reach 1													
Crabtree	Reach 1	19905	Max	EC100	735.56	7.58	18.93		18.94	0.000021	0.73	1354.74	371.26	0.04
Crabtree	Reach 1	19905	Max	EC3yr0416	224.35	7.58	14.82		14.83	0.000024	0.55	411.31	74.68	0.04
Crabtree	Reach 1	19905	Max	EC25yr0416	540.52	7.58	17.65		17.66	0.000025	0.73	926.5	298.11	0.05
Crabtree	Reach 1	19905	Max	newEC25	541.03	7.58	17.63		17.64	0.000026	0.74	921.18	297.2	0.05
Crabtree	Reach 1	19905	Max	newEC100	738.05	7.58	18.9		18.91	0.000021	0.74	1344.7	370.75	0.04
Crabtree	Reach 1	19905	Max	newEC3	224.2	7.58	14.79		14.79	0.000024	0.55	408.77	74.39	0.04
	Reach 1													
Crabtree	Reach 1	19874	Max	EC100	732.22	7.5	18.93		18.94	0.000031	0.83	1225.55	370.63	0.05
Crabtree	Reach 1	19874	Max	EC3yr0416	224.07	7.5	14.81		14.83	0.000096	0.96	255.47	82.05	0.08
Crabtree	Reach 1	19874	Max	EC25yr0416	535.48	7.5	17.65		17.66	0.000047	0.92	803.51	296.62	0.06
Crabtree	Reach 1	19874	Max	newEC25	535.95	7.5	17.63		17.64	0.000048	0.92	798.18	295.98	0.06
Crabtree	Reach 1	19874	Max	newEC100	734.73	7.5	18.9		18.91	0.000032	0.84	1215.56	365.66	0.05
Crabtree	Reach 1	19874	Max	newEC3	223.94	7.5	14.78		14.79	0.000099	0.97	252.65	81.86	0.08
	Reach 1													
Crabtree	Reach 1	19831	Max	EC100	730.75	7.45	18.93		18.93	0.000037	0.88	1202.36	374.43	0.05
Crabtree	Reach 1	19831	Max	EC3yr0416	224.07	7.45	14.8		14.82	0.000109	1.06	211.41	42.68	0.08
Crabtree	Reach 1	19831	Max	EC25yr0416	534.73	7.45	17.64		17.67	0.000124	1.43	403.3	314.75	0.09
Crabtree	Reach 1	19831	Max	newEC25	535.22	7.45	17.62		17.65	0.000125	1.44	401.76	313.68	0.1
Crabtree	Reach 1	19831	Max	newEC100	733.29	7.45	18.9		18.91	0.000038	0.89	1192.25	370.81	0.05
Crabtree	Reach 1	19831	Max	newEC3	223.94	7.45	14.77		14.79	0.000111	1.07	209.95	42.55	0.08
	Reach 1													
Crabtree	Reach 1	19670	Max	EC100	1393.01	7.35	18.88		18.91	0.000112	1.5	1340.52	419.31	0.09
Crabtree	Reach 1	19670	Max	EC3yr0416	446.99	7.35	14.65		14.72	0.000452	2.14	209.21	69.58	0.17
Crabtree	Reach 1	19670	Max	EC25yr0416	1055.72	7.35	17.58		17.61	0.000192	1.75	849.34	334.32	0.12

Crabtree	Reach 1	19670	Max	newEC25	1057.57	7.35	17.56		17.59	0.000196	1.77	842.53	331.72	0.12
Crabtree	Reach 1	19670	Max	newEC100	1399.11	7.35	18.86		18.88	0.000115	1.52	1328.73	416.01	0.09
Crabtree	Reach 1	19670	Max	newEC3	446.99	7.35	14.62		14.69	0.000462	2.15	207.64	68.97	0.17
	Reach 1													
Crabtree	Reach 1	19509	Max	EC100	1394.85	7.07	18.87		18.89	0.000095	1.36	1425.14	409.3	0.08
Crabtree	Reach 1	19509	Max	EC3yr0416	446.68	7.07	14.58		14.65	0.000425	2.1	213.08	63.71	0.16
Crabtree	Reach 1	19509	Max	EC25yr0416	1056.28	7.07	17.43		17.57	0.000609	3.03	357.97	337.46	0.2
Crabtree	Reach 1	19509	Max	newEC25	1058.15	7.07	17.41		17.55	0.000618	3.05	356.43	333.78	0.21
Crabtree	Reach 1	19509	Max	newEC100	1401.46	7.07	18.84		18.86	0.000098	1.38	1413.42	408.63	0.08
Crabtree	Reach 1	19509	Max	newEC3	446.67	7.07	14.55		14.62	0.000434	2.11	211.46	63.28	0.17
	Reach 1													
Crabtree	Reach 1	19440	Max	EC100	1393.85	6.93	18.87		18.88	0.000087	1.32	1460.69	402.52	0.08
Crabtree	Reach 1	19440	Max	EC3yr0416	446.43	6.93	14.54		14.61	0.000505	2.22	200.97	68.68	0.18
Crabtree	Reach 1	19440	Max	EC25yr0416	1056.85	6.93	17.46		17.61	0.000598	3.06	361.22	348.16	0.2
Crabtree	Reach 1	19440	Max	newEC25	1058.69	6.93	17.44		17.58	0.000609	3.08	359.33	347.06	0.21
Crabtree	Reach 1	19440	Max	newEC100	1400.13	6.93	18.84		18.85	0.000089	1.34	1449.09	402.25	0.08
Crabtree	Reach 1	19440	Max	newEC3	446.46	6.93	14.5		14.58	0.000517	2.24	199.32	67.09	0.18
	Reach 1													
Crabtree	Reach 1	19426	Max	EC100	1393.51	6.91	18.86		18.88	0.000087	1.3	1470.01	408.88	0.08
Crabtree	Reach 1	19426	Max	EC3yr0416	446.41	6.91	14.54		14.61	0.000448	2.14	208.81	62.44	0.17
Crabtree	Reach 1	19426	Max	EC25yr0416	1057.19	6.91	17.49		17.52	0.000166	1.59	937.37	359.1	0.11
Crabtree	Reach 1	19426	Max	newEC25	1059.06	6.91	17.47		17.49	0.00017	1.61	928.86	357.4	0.11
Crabtree	Reach 1	19426	Max	newEC100	1399.8	6.91	18.83		18.85	0.00009	1.32	1458.2	408.56	0.08
Crabtree	Reach 1	19426	Max	newEC3	446.41	6.91	14.5		14.57	0.000459	2.15	207.17	60.54	0.17
	Reach 1													
Crabtree	Reach 1	19405	Max	EC100	1393.01	6.86	18.86		18.88	0.000082	1.29	1454.4	382.13	0.08
Crabtree	Reach 1	19405	Max	EC3yr0416	446.34	6.86	14.53		14.6	0.000452	2.13	209.74	122.55	0.17
Crabtree	Reach 1	19405	Max	EC25yr0416	1057.1	6.86	17.49		17.51	0.000144	1.53	966.35	336.3	0.1
Crabtree	Reach 1	19405	Max	newEC25	1058.97	6.86	17.46		17.49	0.000147	1.54	958.27	335.81	0.1
Crabtree	Reach 1	19405	Max	newEC100	1399.47	6.86	18.83		18.85	0.000084	1.31	1443.35	381.46	0.08
Crabtree	Reach 1	19405	Max	newEC3	446.37	6.86	14.49		14.56	0.000463	2.15	208.03	121.36	0.17
	Reach 1													
Crabtree	Reach 1	19390	Max	EC100	1396.4	6.83	18.86		18.88	0.000079	1.24	1518.04	410.48	0.08
Crabtree	Reach 1	19390	Max	EC3yr0416	446.27	6.83	14.52		14.59	0.000458	2.14	208.14	110.64	0.17
Crabtree	Reach 1	19390	Max	EC25yr0416	1057.14	6.83	17.49		17.51	0.000138	1.47	986.83	344.17	0.1

Crabtree	Reach 1	19390	Max	newEC25	1059.14	6.83	17.46		17.58	0.000533	2.88	389.17	342.87	0.19
Crabtree	Reach 1	19390	Max	newEC100	1403.09	6.83	18.83		18.85	0.000082	1.25	1506.15	409.8	0.08
Crabtree	Reach 1	19390	Max	newEC3	446.37	6.83	14.48		14.55	0.000469	2.16	206.45	108.26	0.17
	Reach 1													
Crabtree	Reach 1	19344	Max	EC100	1423.03	6.74	18.85		18.87	0.000089	1.4	1455.1	429.81	0.08
Crabtree	Reach 1	19344	Max	EC3yr0416	446.3	6.74	14.52		14.57	0.000295	1.78	251.3	49.94	0.14
Crabtree	Reach 1	19344	Max	EC25yr0416	1077.96	6.74	17.42		17.5	0.000345	2.42	474.31	352	0.16
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													

	Reach 1													
Crabtree	Reach 1	19155	Max	EC100	1385.96	6.44	18.67		18.71	0.000226	2.04	942.69	393.12	0.13
Crabtree	Reach 1	19155	Max	EC3yr0416	445.76	6.44	14.41		14.47	0.000395	1.97	226.3	46.99	0.16
Crabtree	Reach 1	19155	Max	EC25yr0416	1074.54	6.44	17.24		17.36	0.000577	2.84	381.8	223.87	0.2
Crabtree	Reach 1	19155	Max	newEC25	1076.85	6.44	17.21		17.34	0.000587	2.86	379.89	222.63	0.2
Crabtree	Reach 1	19155	Max	newEC100	1393.47	6.44	18.63		18.68	0.000236	2.08	929.63	383.83	0.13
Crabtree	Reach 1	19155	Max	newEC3	445.91	6.44	14.37		14.43	0.000405	1.99	224.33	46.86	0.16
	Reach 1													
Crabtree	Reach 1	19133	Max	EC100	1392.09	6.4	18.69		18.7	0.000036	0.86	2358.29	706.27	0.05
Crabtree	Reach 1	19133	Max	EC3yr0416	445.69	6.4	14.4		14.46	0.000337	1.9	234.67	53.93	0.15
Crabtree	Reach 1	19133	Max	EC25yr0416	1076.26	6.4	17.31		17.33	0.000135	1.47	1009.35	625.42	0.1
Crabtree	Reach 1	19133	Max	newEC25	1078.19	6.4	17.29		17.31	0.000139	1.49	1000.49	624.27	0.1
Crabtree	Reach 1	19133	Max	newEC100	1399.18	6.4	18.66		18.66	0.000037	0.87	2335.25	705.01	0.05
Crabtree	Reach 1	19133	Max	newEC3	445.89	6.4	14.36		14.42	0.000345	1.92	232.54	50.58	0.15
	Reach 1													
Crabtree	Reach 1	19054	Max	EC100	1369.29	6.27	18.59		18.69	0.000337	2.62	588.28	114.55	0.16
Crabtree	Reach 1	19054	Max	EC3yr0416	445.53	6.27	14.37		14.43	0.000394	1.99	224.37	51.73	0.16
Crabtree	Reach 1	19054	Max	EC25yr0416	1073.76	6.27	17.2		17.31	0.000442	2.66	440.61	99.05	0.18
Crabtree	Reach 1	19054	Max	newEC25	1076.03	6.27	17.18		17.28	0.000451	2.68	437.96	98.88	0.18
Crabtree	Reach 1	19054	Max	newEC100	1376	6.27	18.56		18.66	0.000346	2.65	584.3	114.18	0.16
Crabtree	Reach 1	19054	Max	newEC3	445.66	6.27	14.33		14.39	0.000404	2	222.4	49.94	0.16
	Reach 1													
Crabtree	Reach 1	19038	Max	EC100	1381.29	6.24	18.64	12.2	18.73	0.000306	2.55	609.79	109.9	0.15
Crabtree	Reach 1	19038	Max	EC3yr0416	445.49	6.24	14.37	10.17	14.43	0.000377	1.94	229.3	47.52	0.16
Crabtree	Reach 1	19038	Max	EC25yr0416	1073.93	6.24	17.21	11.64	17.32	0.000431	2.68	422.6	106.46	0.18
Crabtree	Reach 1	19038	Max	newEC25	1076.31	6.24	17.19	11.64	17.3	0.000439	2.7	420.52	106.39	0.18
Crabtree	Reach 1	19038	Max	newEC100	1386.81	6.24	18.61	12.21	18.7	0.000314	2.58	606.02	109.6	0.16
Crabtree	Reach 1	19038	Max	newEC3	445.62	6.24	14.32	10.17	14.38	0.000387	1.96	227.26	47.35	0.16
	Reach 1													
Crabtree	Reach 1	19025	Inl											
	Reach 1													
Crabtree	Reach 1	19000	Max	EC100	1374.85	6.18	18.6		18.69	0.000306	2.55	606.81	107.7	0.15
Crabtree	Reach 1	19000	Max	EC3yr0416	445.38	6.18	14.34		14.4	0.000345	1.9	233.82	45.97	0.15
Crabtree	Reach 1	19000	Max	EC25yr0416	1073.46	6.18	17.18		17.28	0.000431	2.67	423.99	105.38	0.18
Crabtree	Reach 1	19000	Max	newEC25	1075.58	6.18	17.15		17.26	0.000439	2.69	421.77	105.35	0.18

Crabtree	Reach 1	19000	Max	newEC100	1381.92	6.18	18.57		18.66	0.000315	2.58	603.09	107.58	0.16
Crabtree	Reach 1	19000	Max	newEC3	445.57	6.18	14.3		14.36	0.000353	1.92	231.84	45.82	0.15
	Reach 1													
Crabtree	Reach 1	18973	Max	EC100	1377.32	6.14	18.61		18.7	0.000307	2.57	603.52	109.95	0.15
Crabtree	Reach 1	18973	Max	EC3yr0416	445.38	6.14	14.34		14.39	0.000338	1.88	236.48	52.87	0.15
Crabtree	Reach 1	18973	Max	EC25yr0416	1073.58	6.14	17.18		17.28	0.000407	2.62	433.32	96.36	0.17
Crabtree	Reach 1	18973	Max	newEC25	1075.58	6.14	17.15		17.25	0.000414	2.64	431.09	96.14	0.17
Crabtree	Reach 1	18973	Max	newEC100	1384.18	6.14	18.58		18.67	0.000315	2.59	599.72	109.67	0.16
Crabtree	Reach 1	18973	Max	newEC3	445.55	6.14	14.29		14.35	0.000346	1.9	234.47	52.22	0.15
	Reach 1													
Crabtree	Reach 1	18950	Max	EC100	1373.33	6.1	18.6		18.68	0.000282	2.46	629.65	110.13	0.15
Crabtree	Reach 1	18950	Max	EC3yr0416	445.28	6.1	14.32		14.38	0.000389	1.97	226.26	55.28	0.16
Crabtree	Reach 1	18950	Max	EC25yr0416	1073.28	6.1	17.17		17.27	0.000407	2.61	443.73	107.2	0.17
Crabtree	Reach 1	18950	Max	newEC25	1075.46	6.1	17.14		17.24	0.000415	2.63	441.27	107.14	0.17
Crabtree	Reach 1	18950	Max	newEC100	1380.59	6.1	18.56		18.64	0.00029	2.49	625.83	109.94	0.15
Crabtree	Reach 1	18950	Max	newEC3	445.48	6.1	14.28		14.34	0.000397	1.99	224.21	53.09	0.16
	Reach 1													
Crabtree	Reach 1	18936	Max	EC100	1373.13	6.08	18.59		18.67	0.000269	2.43	635.95	108.56	0.14
Crabtree	Reach 1	18936	Max	EC3yr0416	445.31	6.08	14.33		14.38	0.000311	1.82	244.44	56.25	0.14
Crabtree	Reach 1	18936	Max	EC25yr0416	1073.34	6.08	17.16		17.25	0.000354	2.48	482.9	105.91	0.16
Crabtree	Reach 1	18936	Max	newEC25	1075.29	6.08	17.14		17.24	0.000412	2.67	422.95	105.84	0.17
Crabtree	Reach 1	18936	Max	newEC100	1379.45	6.08	18.56		18.64	0.000276	2.45	632.17	108.49	0.15
Crabtree	Reach 1	18936	Max	newEC3	445.51	6.08	14.28		14.34	0.000319	1.84	242.38	55.22	0.14
	Reach 1													
Crabtree	Reach 1	18919	Max	EC100	1370.83	6.05	18.59		18.67	0.000272	2.47	627.72	108.91	0.15
Crabtree	Reach 1	18919	Max	EC3yr0416	445.26	6.05	14.32		14.37	0.000322	1.83	243.31	57.34	0.14
Crabtree	Reach 1	18919	Max	EC25yr0416	1073.28	6.05	17.16		17.25	0.000348	2.48	475.52	101.35	0.16
Crabtree	Reach 1	18919	Max	newEC25	1075.23	6.05	17.13		17.23	0.000374	2.57	444.31	101.01	0.17
Crabtree	Reach 1	18919	Max	newEC100	1377.73	6.05	18.55		18.64	0.000279	2.5	623.9	108.84	0.15
Crabtree	Reach 1	18919	Max	newEC3	445.51	6.05	14.28		14.33	0.000331	1.85	241.17	54.83	0.15
	Reach 1													
Crabtree	Reach 1	18900	Max	EC100	1367.75	6.02	18.57		18.66	0.000318	2.56	601.22	108.92	0.16
Crabtree	Reach 1	18900	Max	EC3yr0416	445.19	6.02	14.31		14.37	0.000372	1.97	225.8	46.5	0.15
Crabtree	Reach 1	18900	Max	EC25yr0416	1072.86	6.02	17.14		17.24	0.000423	2.6	452.53	97.39	0.17
Crabtree	Reach 1	18900	Max	newEC25	1074.64	6.02	17.11		17.21	0.000432	2.62	449.61	97.27	0.18

Crabtree	Reach 1	18900	Max	newEC100	1374.66	6.02	18.54		18.63	0.000327	2.59	597.38	108.83	0.16
Crabtree	Reach 1	18900	Max	newEC3	445.35	6.02	14.26		14.32	0.000381	1.99	223.85	44.12	0.16
	Reach 1													
Crabtree	Reach 1	18872	Max	EC100	1351.42	5.97	18.52		18.59	0.000264	2.37	643.56	112.34	0.14
Crabtree	Reach 1	18872	Max	EC3yr0416	445.19	5.97	14.3		14.36	0.000337	1.91	233.32	55.23	0.15
Crabtree	Reach 1	18872	Max	EC25yr0416	1072.25	5.97	17.11		17.2	0.000363	2.46	488.09	107.68	0.16
Crabtree	Reach 1	18872	Max	newEC25	1073.97	5.97	17.08		17.17	0.000371	2.48	484.99	107.55	0.16
Crabtree	Reach 1	18872	Max	newEC100	1358.23	5.97	18.48		18.56	0.000272	2.4	639.5	112.34	0.14
Crabtree	Reach 1	18872	Max	newEC3	445.35	5.97	14.26		14.31	0.000345	1.92	231.35	54.76	0.15
	Reach 1													
Crabtree	Reach 1	18852	Max	EC100	1370.45	5.94	18.59		18.66	0.000236	2.27	685.49	116.12	0.14
Crabtree	Reach 1	18852	Max	EC3yr0416	445.14	5.94	14.3		14.35	0.000312	1.83	242.69	65.22	0.14
Crabtree	Reach 1	18852	Max	EC25yr0416	1072.49	5.94	17.12		17.24	0.000443	2.76	391.53	108	0.18
Crabtree	Reach 1	18852	Max	newEC25	1074.22	5.94	17.09		17.21	0.000451	2.77	389.89	107.89	0.18
Crabtree	Reach 1	18852	Max	newEC100	1377.53	5.94	18.55		18.62	0.000242	2.3	681.4	115.47	0.14
Crabtree	Reach 1	18852	Max	newEC3	445.35	5.94	14.25		14.31	0.000319	1.85	240.61	65.04	0.14
	Reach 1													
Crabtree	Reach 1	18836	Max	EC100	1364.84	5.91	18.56		18.65	0.000302	2.51	616.04	109.35	0.15
Crabtree	Reach 1	18836	Max	EC3yr0416	445.05	5.91	14.29		14.34	0.000364	1.96	227.07	44.02	0.15
Crabtree	Reach 1	18836	Max	EC25yr0416	1072	5.91	17.1		17.22	0.000465	2.75	419.98	106.33	0.18
Crabtree	Reach 1	18836	Max	newEC25	1073.79	5.91	17.07		17.19	0.000475	2.77	417.45	106.26	0.18
Crabtree	Reach 1	18836	Max	newEC100	1370.79	5.91	18.53		18.61	0.00031	2.53	612.12	109.29	0.15
Crabtree	Reach 1	18836	Max	newEC3	445.28	5.91	14.24		14.3	0.000374	1.98	225.11	43.91	0.15
	Reach 1													
Crabtree	Reach 1	18808	Max	EC100	1363.87	5.86	18.56	11.81	18.63	0.000248	2.32	670.55	112.26	0.14
Crabtree	Reach 1	18808	Max	EC3yr0416	445.03	5.86	14.28	9.73	14.33	0.000347	1.93	230.38	67.25	0.15
Crabtree	Reach 1	18808	Max	EC25yr0416	1071.24	5.86	17.08	11.26	17.21	0.000505	2.93	366.68	110.17	0.19
Crabtree	Reach 1	18808	Max	newEC25	1073.48	5.86	17.05	11.25	17.19	0.000514	2.95	365.16	110.11	0.19
Crabtree	Reach 1	18808	Max	newEC100	1370.02	5.86	18.52	11.82	18.6	0.000254	2.34	666.55	112.18	0.14
Crabtree	Reach 1	18808	Max	newEC3	445.26	5.86	14.23	9.73	14.29	0.000356	1.95	228.38	67.07	0.15
	Reach 1													
Crabtree	Reach 1	18800	Inl											
	Reach 1													
Crabtree	Reach 1	18796	Max	EC100	1352.84	5.84	18.51		18.6	0.000308	2.55	598.4	104.76	0.15
Crabtree	Reach 1	18796	Max	EC3yr0416	444.94	5.84	14.25		14.31	0.00037	1.97	225.51	48.24	0.15

Crabtree	Reach 1	18796	Max	EC25yr0416	1069.21	5.84	17.05		17.18	0.000526	2.94	364.91	99.91	0.19
Crabtree	Reach 1	18796	Max	newEC25	1072.02	5.84	17.01		17.15	0.000537	2.96	363.24	99.73	0.2
Crabtree	Reach 1	18796	Max	newEC100	1359.23	5.84	18.47		18.56	0.000316	2.57	594.58	104.69	0.16
Crabtree	Reach 1	18796	Max	newEC3	445.09	5.84	14.2		14.26	0.00038	1.99	223.53	47.94	0.16
	Reach 1													
Crabtree	Reach 1	18763	Max	EC100	1350.84	5.79	18.5		18.59	0.000286	2.52	611.49	110.26	0.15
Crabtree	Reach 1	18763	Max	EC3yr0416	444.89	5.79	14.24		14.3	0.000364	1.95	227.92	45.31	0.15
Crabtree	Reach 1	18763	Max	EC25yr0416	1068.8	5.79	17.04		17.15	0.000437	2.75	414.17	98.61	0.18
Crabtree	Reach 1	18763	Max	newEC25	1071.69	5.79	17.01		17.12	0.000447	2.78	411.63	98.36	0.18
Crabtree	Reach 1	18763	Max	newEC100	1357.44	5.79	18.47		18.55	0.000295	2.54	607.44	110.21	0.15
Crabtree	Reach 1	18763	Max	newEC3	445.07	5.79	14.19		14.25	0.000373	1.97	225.87	45.05	0.16
	Reach 1													
Crabtree	Reach 1	18760	Lat											
	Reach 1													
Crabtree	Reach 1	18759	Lat											
	Reach 1													
Crabtree	Reach 1	18738	Max	EC100	1334.08	5.75	18.44		18.52	0.00026	2.42	623.58	110.77	0.14
Crabtree	Reach 1	18738	Max	EC3yr0416	444.89	5.75	14.23		14.29	0.000323	1.86	239.35	65.49	0.15
Crabtree	Reach 1	18738	Max	EC25yr0416	1067.77	5.75	17.01		17.13	0.000428	2.77	401.75	99.36	0.18
Crabtree	Reach 1	18738	Max	newEC25	1070.82	5.75	16.98		17.1	0.000437	2.79	399.45	98.77	0.18
Crabtree	Reach 1	18738	Max	newEC100	1340.22	5.75	18.41		18.49	0.000267	2.45	619.44	110.77	0.15
Crabtree	Reach 1	18738	Max	newEC3	445.03	5.75	14.19		14.24	0.000333	1.88	237.15	65.03	0.15
	Reach 1													
Crabtree	Reach 1	18718	Max	EC100	1351.79	5.71	18.52		18.59	0.00026	2.39	627.75	102.79	0.14
Crabtree	Reach 1	18718	Max	EC3yr0416	444.8	5.71	14.22		14.28	0.000381	1.96	227.42	69.2	0.16
Crabtree	Reach 1	18718	Max	EC25yr0416	1067.84	5.71	17.02		17.15	0.000496	2.92	367.16	98.58	0.19
Crabtree	Reach 1	18718	Max	newEC25	1070.69	5.71	16.98		17.12	0.000507	2.94	365.35	98.44	0.19
Crabtree	Reach 1	18718	Max	newEC100	1357.76	5.71	18.48		18.56	0.000267	2.42	623.98	102.72	0.14
Crabtree	Reach 1	18718	Max	newEC3	444.96	5.71	14.18		14.24	0.000392	1.98	225.24	69.03	0.16
	Reach 1													
Crabtree	Reach 1	18706	Max	EC100	1337.44	5.69	18.49		18.56	0.000269	2.41	620.83	105.5	0.14
Crabtree	Reach 1	18706	Max	EC3yr0416	444.78	5.69	14.21		14.28	0.000435	2.03	219.86	74.37	0.17
Crabtree	Reach 1	18706	Max	EC25yr0416	1065.52	5.69	17.03		17.15	0.00048	2.84	393.09	100.54	0.19
Crabtree	Reach 1	18706	Max	newEC25	1068.63	5.69	16.99		17.12	0.000491	2.86	390.54	100.33	0.19
Crabtree	Reach 1	18706	Max	newEC100	1342.9	5.69	18.45		18.53	0.000276	2.43	616.94	105.4	0.15

Crabtree	Reach 1	18706	Max	newEC3	444.94	5.69	14.17		14.23	0.00045	2.06	217.4	73.86	0.17
	Reach 1													
Crabtree	Reach 1	18671	Max	EC100	1310.36	5.63	18.49		18.56	0.000238	2.32	630.28	105.2	0.14
Crabtree	Reach 1	18671	Max	EC3yr0416	443.98	5.63	14.21		14.26	0.000377	1.92	236.48	70.64	0.16
Crabtree	Reach 1	18671	Max	EC25yr0416	1046.19	5.63	17.01		17.11	0.000379	2.6	423.96	102.08	0.17
Crabtree	Reach 1	18671	Max	newEC25	1049.58	5.63	16.98		17.08	0.000389	2.62	421.25	101.99	0.17
Crabtree	Reach 1	18671	Max	newEC100	1315.73	5.63	18.45		18.52	0.000244	2.35	626.4	105.13	0.14
Crabtree	Reach 1	18671	Max	newEC3	444.2	5.63	14.16		14.22	0.00039	1.94	233.64	69.37	0.16
	Reach 1													
Crabtree	Reach 1	18644	Max	EC100	1279.74	5.59	18.41		18.49	0.00031	2.51	572.2	107.6	0.15
Crabtree	Reach 1	18644	Max	EC3yr0416	443.81	5.59	14.18		14.25	0.00042	2.08	213.67	55.08	0.16
Crabtree	Reach 1	18644	Max	EC25yr0416	1042.19	5.59	16.96		17.07	0.000471	2.72	408.41	102.15	0.18
Crabtree	Reach 1	18644	Max	newEC25	1044.69	5.59	16.93		17.04	0.000483	2.75	405.71	101.48	0.19
Crabtree	Reach 1	18644	Max	newEC100	1284.38	5.59	18.37		18.46	0.000319	2.54	568.08	107.6	0.16
Crabtree	Reach 1	18644	Max	newEC3	444.13	5.59	14.14		14.21	0.000431	2.1	211.66	51.28	0.17
	Reach 1													
Crabtree	Reach 1	18619	Max	EC100	1286.18	5.55	18.46		18.55	0.000326	2.56	575.32	116.34	0.16
Crabtree	Reach 1	18619	Max	EC3yr0416	443.79	5.55	14.18		14.24	0.00041	2.06	215.25	42.81	0.16
Crabtree	Reach 1	18619	Max	EC25yr0416	1041.63	5.55	16.96		17.09	0.000574	2.96	361.03	99.64	0.2
Crabtree	Reach 1	18619	Max	newEC25	1044.39	5.55	16.92		17.06	0.000588	2.99	358.3	99.32	0.2
Crabtree	Reach 1	18619	Max	newEC100	1291.77	5.55	18.42		18.52	0.000336	2.59	570.9	116.34	0.16
Crabtree	Reach 1	18619	Max	newEC3	444.08	5.55	14.13		14.2	0.000421	2.08	213.23	42.59	0.16
	Reach 1													
Crabtree	Reach 1	18596	Max	EC100	1278.4	5.51	18.45		18.54	0.000295	2.51	573.61	102.48	0.15
Crabtree	Reach 1	18596	Max	EC3yr0416	443.77	5.51	14.17		14.23	0.00037	1.99	222.57	43.08	0.15
Crabtree	Reach 1	18596	Max	EC25yr0416	1040.98	5.51	16.94		17.07	0.00051	2.9	362.14	99.52	0.19
Crabtree	Reach 1	18596	Max	newEC25	1041	5.51	16.91		17.04	0.000518	2.92	360.31	99.47	0.19
Crabtree	Reach 1	18596	Max	newEC100	1284.91	5.51	18.41		18.5	0.000304	2.54	569.66	102.4	0.15
Crabtree	Reach 1	18596	Max	newEC3	443.92	5.51	14.12		14.19	0.00038	2.01	220.53	42.9	0.16
	Reach 1													
Crabtree	Reach 1	18536	Max	EC100	1254.45	5.41	18.43		18.52	0.000296	2.48	566.59	100.33	0.15
Crabtree	Reach 1	18536	Max	EC3yr0416	443.6	5.41	14.15		14.21	0.000381	2.01	220.46	42.26	0.16
Crabtree	Reach 1	18536	Max	EC25yr0416	1036.16	5.41	16.91		17.05	0.000538	2.94	355.44	96.54	0.19
Crabtree	Reach 1	18536	Max	newEC25	1037.17	5.41	16.88		17.01	0.000548	2.96	353.49	96.47	0.2
Crabtree	Reach 1	18536	Max	newEC100	1261.35	5.41	18.39		18.48	0.000305	2.52	562.71	100.24	0.15

Crabtree	Reach 1	18536	Max	newEC3	443.89	5.41	14.1		14.16	0.000392	2.03	218.44	42.11	0.16
	Reach 1													
Crabtree	Reach 1	18472	Max	EC100	1231.32	5.3	18.41		18.5	0.000321	2.57	539.92	100.66	0.16
Crabtree	Reach 1	18472	Max	EC3yr0416	443.34	5.3	14.11		14.18	0.00043	2.11	209.91	41.22	0.17
Crabtree	Reach 1	18472	Max	EC25yr0416	1031.71	5.3	16.86		17.01	0.000598	3.07	339.31	95.43	0.2
Crabtree	Reach 1	18472	Max	newEC25	1034.7	5.3	16.83		16.97	0.000612	3.09	337.38	95.34	0.21
Crabtree	Reach 1	18472	Max	newEC100	1237.5	5.3	18.37		18.46	0.000331	2.6	535.93	100.44	0.16
Crabtree	Reach 1	18472	Max	newEC3	443.68	5.3	14.07		14.14	0.000442	2.13	207.9	41.06	0.17
	Reach 1													
Crabtree	Reach 1	18438	Max	EC100	1224.22	5.24	18.41		18.49	0.000273	2.38	584.02	101.68	0.14
Crabtree	Reach 1	18438	Max	EC3yr0416	443.24	5.24	14.1		14.17	0.000382	2.07	213.84	51.93	0.15
Crabtree	Reach 1	18438	Max	EC25yr0416	1029.73	5.24	16.87		17.02	0.000585	3.06	338.85	97.49	0.2
Crabtree	Reach 1	18438	Max	newEC25	1032.47	5.24	16.84		16.98	0.000599	3.09	336.9	97.29	0.2
Crabtree	Reach 1	18438	Max	newEC100	1230.37	5.24	18.37		18.45	0.000281	2.4	580	101.61	0.14
Crabtree	Reach 1	18438	Max	newEC3	443.56	5.24	14.05		14.12	0.000392	2.09	211.98	51.51	0.16
	Reach 1													
Crabtree	Reach 1	18404	Max	EC100	1182.48	5.18	18.41		18.49	0.000277	2.36	567.27	105.39	0.14
Crabtree	Reach 1	18404	Max	EC3yr0416	439.76	5.18	14.08		14.16	0.000473	2.2	200.19	45.9	0.17
Crabtree	Reach 1	18404	Max	EC25yr0416	1000.23	5.18	16.86		17	0.000583	2.99	349.48	98.77	0.2
Crabtree	Reach 1	18404	Max	newEC25	1003.73	5.18	16.82		16.96	0.0006	3.02	346.78	98.63	0.21
Crabtree	Reach 1	18404	Max	newEC100	1188.67	5.18	18.37		18.45	0.000286	2.39	563.07	105.39	0.15
Crabtree	Reach 1	18404	Max	newEC3	440.32	5.18	14.03		14.11	0.000487	2.22	198.21	45.3	0.17
	Reach 1													
Crabtree	Reach 1	18346	Max	EC100	1171.79	5.09	18.39		18.47	0.000252	2.41	561.84	102.86	0.14
Crabtree	Reach 1	18346	Max	EC3yr0416	439.65	5.09	14.06		14.13	0.000401	2.07	212.16	40.18	0.16
Crabtree	Reach 1	18346	Max	EC25yr0416	998.43	5.09	16.84		16.97	0.000467	2.91	365.86	91.77	0.18
Crabtree	Reach 1	18346	Max	newEC25	1003.03	5.09	16.8		16.93	0.000481	2.94	363.16	91.51	0.19
Crabtree	Reach 1	18346	Max	newEC100	1178.88	5.09	18.35		18.43	0.00026	2.44	557.7	102.05	0.14
Crabtree	Reach 1	18346	Max	newEC3	440.19	5.09	14.01		14.08	0.000413	2.09	210.13	40.06	0.16
	Reach 1													
Crabtree	Reach 1	18319	Max	EC100	1155.56	5.03	18.35		18.41	0.000205	2.07	627.41	106.69	0.13
Crabtree	Reach 1	18319	Max	EC3yr0416	439.58	5.03	14.06		14.12	0.000345	1.96	223.92	46.77	0.15
Crabtree	Reach 1	18319	Max	EC25yr0416	994.23	5.03	16.82		16.94	0.000465	2.74	365.87	105.12	0.18
Crabtree	Reach 1	18319	Max	newEC25	998.64	5.03	16.78		16.9	0.000478	2.77	363.76	105.08	0.18
Crabtree	Reach 1	18319	Max	newEC100	1162.06	5.03	18.31		18.37	0.000212	2.1	623.04	106.69	0.13

Crabtree	Reach 1	18319	Max	newEC3	440.17	5.03	14.01		14.07	0.000355	1.98	221.84	42.98	0.15
	Reach 1													
Crabtree	Reach 1	18301	Max	EC100	1153.94	5	18.41		18.45	0.000121	1.74	737.3	105.42	0.1
Crabtree	Reach 1	18301	Max	EC3yr0416	439.77	5	14.08		14.11	0.000167	1.44	304.98	65.57	0.11
Crabtree	Reach 1	18301	Max	EC25yr0416	988.58	5	16.87		16.94	0.000226	2.12	471.62	105.42	0.13
Crabtree	Reach 1	18301	Max	newEC25	992.51	5	16.83		16.9	0.000231	2.14	469.24	105.42	0.13
Crabtree	Reach 1	18301	Max	newEC100	1160.36	5	18.37		18.41	0.000124	1.76	733.11	105.42	0.1
Crabtree	Reach 1	18301	Max	newEC3	440.33	5	14.03		14.06	0.000171	1.46	302.31	65.08	0.11
	Reach 1													
Crabtree	Reach 1	18272	Max	EC100	1123.1	5.54	18.39		18.45	0.000211	2.17	583.56	104.71	0.13
Crabtree	Reach 1	18272	Max	EC3yr0416	440.24	5.54	14.05		14.11	0.000294	1.83	240.24	43.87	0.14
Crabtree	Reach 1	18272	Max	EC25yr0416	974.35	5.54	16.83		16.92	0.00035	2.46	429.76	93.76	0.16
Crabtree	Reach 1	18272	Max	newEC25	979.28	5.54	16.79		16.88	0.000362	2.49	426.06	93.55	0.16
Crabtree	Reach 1	18272	Max	newEC100	1130.02	5.54	18.35		18.41	0.000218	2.19	579.3	104.71	0.13
Crabtree	Reach 1	18272	Max	newEC3	440.71	5.54	14		14.06	0.000302	1.85	238.02	43.66	0.14
	Reach 1													
Crabtree	Reach 1	18216	Max	EC100	1101.07	5.52	18.38		18.44	0.000197	2.16	588.8	105.5	0.12
Crabtree	Reach 1	18216	Max	EC3yr0416	439.99	5.52	14.03		14.09	0.000309	1.89	232.79	42.52	0.14
Crabtree	Reach 1	18216	Max	EC25yr0416	968.55	5.52	16.81		16.92	0.000392	2.69	366.06	100.17	0.17
Crabtree	Reach 1	18216	Max	newEC25	973.95	5.52	16.77		16.88	0.000403	2.72	363.84	100.01	0.17
Crabtree	Reach 1	18216	Max	newEC100	1108.11	5.52	18.34		18.4	0.000204	2.18	584.46	105.5	0.13
Crabtree	Reach 1	18216	Max	newEC3	440.65	5.52	13.98		14.04	0.000318	1.91	230.62	42.39	0.14
	Reach 1													
Crabtree	Reach 1	18174	Max	EC100	1091.36	5.51	18.36		18.43	0.000223	2.21	542.57	92.29	0.13
Crabtree	Reach 1	18174	Max	EC3yr0416	439.92	5.51	14.02		14.08	0.000283	1.84	239.49	41.49	0.13
Crabtree	Reach 1	18174	Max	EC25yr0416	967.11	5.51	16.79		16.9	0.000398	2.62	374.41	81.39	0.17
Crabtree	Reach 1	18174	Max	newEC25	972.86	5.51	16.75		16.86	0.000409	2.65	372.28	79.14	0.17
Crabtree	Reach 1	18174	Max	newEC100	1097.79	5.51	18.32		18.39	0.00023	2.24	538.73	92.15	0.13
Crabtree	Reach 1	18174	Max	newEC3	440.53	5.51	13.97		14.03	0.00029	1.86	237.36	41.3	0.14
	Reach 1													
Crabtree	Reach 1	18108	Max	EC100	1077.59	5.49	18.36		18.42	0.000184	2.08	599.82	107.37	0.12
Crabtree	Reach 1	18108	Max	EC3yr0416	439.83	5.49	14		14.06	0.000313	1.91	230.53	47.65	0.14
Crabtree	Reach 1	18108	Max	EC25yr0416	964.88	5.49	16.78		16.87	0.000348	2.53	410.85	102.23	0.16
Crabtree	Reach 1	18108	Max	newEC25	971.24	5.49	16.73		16.83	0.00036	2.56	407.65	102.07	0.16
Crabtree	Reach 1	18108	Max	newEC100	1084.85	5.49	18.32		18.38	0.00019	2.11	595.32	107.37	0.12

Crabtree	Reach 1	18108	Max	newEC3	440.37	5.49	13.95		14.01	0.000322	1.93	228.38	46.79	0.14
	Reach 1													
Crabtree	Reach 1	18070	Max	EC100	1065.36	5.48	18.37		18.42	0.00016	1.93	635.88	108	0.11
Crabtree	Reach 1	18070	Max	EC3yr0416	439.83	5.48	13.99		14.05	0.000296	1.86	237.09	64.25	0.14
Crabtree	Reach 1	18070	Max	EC25yr0416	962.7	5.48	16.77		16.87	0.000375	2.62	373.68	99.85	0.16
Crabtree	Reach 1	18070	Max	newEC25	969.14	5.48	16.72		16.83	0.000387	2.65	371.34	99.74	0.17
Crabtree	Reach 1	18070	Max	newEC100	1073.73	5.48	18.32		18.38	0.000166	1.96	631.35	108	0.11
Crabtree	Reach 1	18070	Max	newEC3	440.25	5.48	13.94		13.99	0.000305	1.87	234.84	62.87	0.14
	Reach 1													
Crabtree	Reach 1	18040	Max	EC100	1036.02	5.47	18.37		18.41	0.000128	1.75	681.58	107.89	0.1
Crabtree	Reach 1	18040	Max	EC3yr0416	440.1	5.47	13.98		14.04	0.000329	1.94	227.08	71.4	0.15
Crabtree	Reach 1	18040	Max	EC25yr0416	944.1	5.47	16.77		16.88	0.000371	2.63	366.65	107.89	0.17
Crabtree	Reach 1	18040	Max	newEC25	950.55	5.47	16.73		16.84	0.000384	2.67	364.38	107.89	0.17
Crabtree	Reach 1	18040	Max	newEC100	1044.32	5.47	18.33		18.37	0.000133	1.78	677.07	107.89	0.1
Crabtree	Reach 1	18040	Max	newEC3	440.72	5.47	13.93		13.99	0.000336	1.96	224.9	69.61	0.15
	Reach 1													
Crabtree	Reach 1	17994	Max	EC100	1014.72	5.46	18.35		18.41	0.000195	2.1	558.28	101.82	0.12
Crabtree	Reach 1	17994	Max	EC3yr0416	439.16	5.46	13.95		14.02	0.000393	2.11	207.91	37.99	0.16
Crabtree	Reach 1	17994	Max	EC25yr0416	931.14	5.46	16.72		16.83	0.000425	2.72	366.18	89.82	0.17
Crabtree	Reach 1	17994	Max	newEC25	940.35	5.46	16.67		16.79	0.000443	2.76	363.09	89.35	0.18
Crabtree	Reach 1	17994	Max	newEC100	1023.01	5.46	18.31		18.37	0.000202	2.13	553.94	101.76	0.12
Crabtree	Reach 1	17994	Max	newEC3	439.91	5.46	13.9		13.97	0.000405	2.14	205.87	37.87	0.16
	Reach 1													
Crabtree	Reach 1	17956	Max	EC100	1048.56	5.45	18.29		18.34	0.000181	2.05	598.42	109.06	0.12
Crabtree	Reach 1	17956	Max	EC3yr0416	470.25	5.45	13.92		13.99	0.000426	2.19	214.34	46.67	0.17
Crabtree	Reach 1	17956	Max	EC25yr0416	989.88	5.45	16.66		16.8	0.000492	2.98	338.8	101.73	0.19
Crabtree	Reach 1	17956	Max	newEC25	995.73	5.45	16.62		16.76	0.000508	3.02	336.41	101.14	0.19
Crabtree	Reach 1	17956	Max	newEC100	1056.68	5.45	18.24		18.3	0.000188	2.08	593.61	109.06	0.12
Crabtree	Reach 1	17956	Max	newEC3	470.97	5.45	13.87		13.94	0.000439	2.22	212.19	44.7	0.17
	Reach 1													
Crabtree	Reach 1	17924	Max	EC100	1038.83	5.44	18.28		18.32	0.000129	1.72	690.29	111.75	0.1
Crabtree	Reach 1	17924	Max	EC3yr0416	470.1	5.44	13.91		13.98	0.00042	2.19	214.69	63.09	0.17
Crabtree	Reach 1	17924	Max	EC25yr0416	984.15	5.44	16.65		16.78	0.000484	2.92	342.02	108.08	0.19
Crabtree	Reach 1	17924	Max	newEC25	990.56	5.44	16.6		16.74	0.000501	2.95	339.76	107.98	0.19
Crabtree	Reach 1	17924	Max	newEC100	1046.55	5.44	18.24		18.28	0.000134	1.74	685.34	111.75	0.1

Crabtree	Reach 1	17924	Max	newEC3	470.86	5.44	13.85		13.93	0.000432	2.22	212.54	62.7	0.17
	Reach 1													
Crabtree	Reach 1	17817	Max	EC100	987.72	5.41	18.29		18.33	0.000129	1.77	646.12	110.54	0.1
Crabtree	Reach 1	17817	Max	EC3yr0416	467.53	5.41	13.88		13.94	0.000326	1.96	238.49	42.8	0.15
Crabtree	Reach 1	17817	Max	EC25yr0416	959.4	5.41	16.64		16.74	0.000353	2.59	378.31	109.04	0.16
Crabtree	Reach 1	17817	Max	newEC25	965.14	5.41	16.59		16.7	0.000365	2.62	375.82	108.96	0.16
Crabtree	Reach 1	17817	Max	newEC100	995.82	5.41	18.24		18.29	0.000134	1.8	641.2	110.54	0.1
Crabtree	Reach 1	17817	Max	newEC3	468.39	5.41	13.83		13.89	0.000337	1.98	236.1	42.63	0.15
	Reach 1													
Crabtree	Reach 1	17658	Max	EC100	939.98	5.36	18.31		18.34	0.000113	1.61	660.78	110.71	0.1
Crabtree	Reach 1	17658	Max	EC3yr0416	467.07	5.36	13.82		13.88	0.000382	2.04	229.3	44.8	0.16
Crabtree	Reach 1	17658	Max	EC25yr0416	925.84	5.36	16.6		16.7	0.000362	2.51	372.41	106.9	0.16
Crabtree	Reach 1	17658	Max	newEC25	934.08	5.36	16.55		16.65	0.000378	2.55	369.45	106.66	0.17
Crabtree	Reach 1	17658	Max	newEC100	947.04	5.36	18.27		18.3	0.000118	1.64	655.87	110.61	0.1
Crabtree	Reach 1	17658	Max	newEC3	468.05	5.36	13.76		13.83	0.000396	2.06	226.7	44.52	0.16
	Reach 1													
Crabtree	Reach 1	17500	Max	EC100	846.45	5.32	18.3		18.32	0.000083	1.41	682.55	107.2	0.08
Crabtree	Reach 1	17500	Max	EC3yr0416	468.46	5.32	13.76		13.82	0.000368	2.05	228.99	62.13	0.16
Crabtree	Reach 1	17500	Max	EC25yr0416	861.53	5.32	16.57		16.65	0.000307	2.39	367.23	104.6	0.15
Crabtree	Reach 1	17500	Max	newEC25	869.63	5.32	16.51		16.6	0.00032	2.43	364.42	104.47	0.15
Crabtree	Reach 1	17500	Max	newEC100	857.4	5.32	18.25		18.28	0.000086	1.44	677.76	107.13	0.08
Crabtree	Reach 1	17500	Max	newEC3	469.2	5.32	13.7		13.77	0.00038	2.07	226.44	61.65	0.16
	Reach 1													
Crabtree	Reach 1	17408	Max	EC100	787.72	5.29	18.26		18.28	0.000067	1.25	722.35	110.54	0.07
Crabtree	Reach 1	17408	Max	EC3yr0416	469.46	5.29	13.73		13.79	0.000356	2	235.05	55.96	0.15
Crabtree	Reach 1	17408	Max	EC25yr0416	815.08	5.29	16.54		16.62	0.000266	2.18	380.58	110.54	0.14
Crabtree	Reach 1	17408	Max	newEC25	823.98	5.29	16.49		16.56	0.000279	2.22	377.58	110.54	0.14
Crabtree	Reach 1	17408	Max	newEC100	795.18	5.29	18.22		18.24	0.000069	1.27	717.29	110.54	0.07
Crabtree	Reach 1	17408	Max	newEC3	470.01	5.29	13.67		13.73	0.000367	2.02	232.36	55.61	0.16
	Reach 1													
Crabtree	Reach 1	17321	Max	EC100	733.12	5.27	18.26		18.28	0.000073	1.3	650.77	109.8	0.08
Crabtree	Reach 1	17321	Max	EC3yr0416	468.68	5.27	13.69		13.76	0.000357	2.03	230.57	42.19	0.15
Crabtree	Reach 1	17321	Max	EC25yr0416	777.25	5.27	16.52		16.58	0.000226	1.99	426.01	109.8	0.13
Crabtree	Reach 1	17321	Max	newEC25	788.47	5.27	16.47		16.54	0.000273	2.18	365.86	109.8	0.14
Crabtree	Reach 1	17321	Max	newEC100	741.55	5.27	18.21		18.23	0.000076	1.32	645.7	109.8	0.08

Crabtree	Reach 1	17321	Max	newEC3	469.28	5.27	13.63		13.7	0.00037	2.06	227.95	42.03	0.16
	Reach 1													
Crabtree	Reach 1	17273	Max	EC100	706.71	5.25	18.26		18.28	0.000068	1.27	639.87	111.25	0.07
Crabtree	Reach 1	17273	Max	EC3yr0416	468.6	5.25	13.68		13.74	0.000311	1.92	244.24	44.27	0.14
Crabtree	Reach 1	17273	Max	EC25yr0416	763.98	5.25	16.53		16.59	0.000223	1.99	387.18	111.25	0.13
Crabtree	Reach 1	17273	Max	newEC25	776.13	5.25	16.47		16.53	0.000236	2.04	384.03	111.25	0.13
Crabtree	Reach 1	17273	Max	newEC100	714.97	5.25	18.22		18.24	0.000072	1.29	634.74	111.25	0.07
Crabtree	Reach 1	17273	Max	newEC3	469.23	5.25	13.62		13.68	0.000322	1.94	241.48	44.09	0.15
	Reach 1													
Crabtree	Reach 1	17248	Max	EC100	701.1	5.25	18.27		18.3	0.000073	1.3	613.86	106.49	0.08
Crabtree	Reach 1	17248	Max	EC3yr0416	468.49	5.25	13.67		13.73	0.000331	1.96	238.92	44.13	0.15
Crabtree	Reach 1	17248	Max	EC25yr0416	762	5.25	16.52		16.58	0.000223	1.97	407.6	106.02	0.13
Crabtree	Reach 1	17248	Max	newEC25	773.72	5.25	16.46		16.53	0.000236	2.02	403.15	105.8	0.13
Crabtree	Reach 1	17248	Max	newEC100	710.57	5.25	18.23		18.25	0.000076	1.32	608.97	106.49	0.08
Crabtree	Reach 1	17248	Max	newEC3	469.2	5.25	13.61		13.67	0.000344	1.99	236.15	43.94	0.15
	Reach 1													
Crabtree	Reach 1	17226	Max	EC100	694.03	5.24	18.26		18.28	0.000064	1.23	648.7	111.01	0.07
Crabtree	Reach 1	17226	Max	EC3yr0416	468.44	5.24	13.67		13.73	0.000328	1.95	239.84	44.14	0.15
Crabtree	Reach 1	17226	Max	EC25yr0416	759.03	5.24	16.51		16.58	0.000229	2.01	379.2	109.01	0.13
Crabtree	Reach 1	17226	Max	newEC25	770.77	5.24	16.46		16.52	0.000243	2.06	376.14	108.85	0.13
Crabtree	Reach 1	17226	Max	newEC100	702.23	5.24	18.21		18.23	0.000067	1.25	643.56	111.01	0.07
Crabtree	Reach 1	17226	Max	newEC3	469.12	5.24	13.6		13.66	0.00034	1.98	237.05	43.94	0.15
	Reach 1													
Crabtree	Reach 1	17209	Max	EC100	685.6	5.24	18.26		18.28	0.000067	1.24	630.68	106.67	0.07
Crabtree	Reach 1	17209	Max	EC3yr0416	468.39	5.24	13.65		13.72	0.000373	2.06	227.83	42.5	0.16
Crabtree	Reach 1	17209	Max	EC25yr0416	754.5	5.24	16.5		16.57	0.000252	2.1	361.24	106.67	0.14
Crabtree	Reach 1	17209	Max	newEC25	766.19	5.24	16.45		16.52	0.000267	2.15	358.33	106.67	0.14
Crabtree	Reach 1	17209	Max	newEC100	693.87	5.24	18.21		18.23	0.00007	1.27	625.72	106.67	0.07
Crabtree	Reach 1	17209	Max	newEC3	469.07	5.24	13.59		13.66	0.000387	2.08	225.13	42.28	0.16
	Reach 1													
Crabtree	Reach 1	17187	Max	EC100	677.19	5.23	18.27		18.29	0.000063	1.22	627.27	105.58	0.07
Crabtree	Reach 1	17187	Max	EC3yr0416	468.33	5.23	13.65		13.71	0.000322	1.93	242.65	44.51	0.15
Crabtree	Reach 1	17187	Max	EC25yr0416	753.16	5.23	16.52		16.58	0.000207	1.92	411.83	95.94	0.12
Crabtree	Reach 1	17187	Max	newEC25	765.32	5.23	16.46		16.52	0.00022	1.97	407.42	95.47	0.13
Crabtree	Reach 1	17187	Max	newEC100	685.94	5.23	18.22		18.25	0.000066	1.24	622.41	105.42	0.07

Crabtree	Reach 1	17187	Max	newEC3	469.05	5.23	13.59		13.65	0.000335	1.96	239.82	44.36	0.15
	Reach 1													
Crabtree	Reach 1	17151	Max	EC100	677.17	5.22	18.28		18.29	0.000059	1.17	641.25	98.4	0.07
Crabtree	Reach 1	17151	Max	EC3yr0416	468.25	5.22	13.64		13.7	0.000344	1.98	236.37	47.04	0.15
Crabtree	Reach 1	17151	Max	EC25yr0416	752.01	5.22	16.51		16.56	0.000201	1.87	422.49	93.66	0.12
Crabtree	Reach 1	17151	Max	newEC25	763.72	5.22	16.45		16.51	0.000233	2.01	383.65	93.44	0.13
Crabtree	Reach 1	17151	Max	newEC100	686.72	5.22	18.23		18.25	0.000062	1.19	636.73	98.3	0.07
Crabtree	Reach 1	17151	Max	newEC3	468.89	5.22	13.58		13.64	0.000356	2.01	233.58	43.35	0.15
	Reach 1													
Crabtree	Reach 1	17091	Max	EC100	664.17	5.2	18.26		18.27	0.000036	0.96	781.68	111.51	0.05
Crabtree	Reach 1	17091	Max	EC3yr0416	467.61	5.2	13.62		13.68	0.000327	1.91	246.19	95.23	0.15
Crabtree	Reach 1	17091	Max	EC25yr0416	744.62	5.2	16.49		16.55	0.000185	1.92	394.16	106.75	0.12
Crabtree	Reach 1	17091	Max	newEC25	755.93	5.2	16.43		16.49	0.000195	1.96	391.08	106.66	0.12
Crabtree	Reach 1	17091	Max	newEC100	673.07	5.2	18.21		18.22	0.000038	0.98	776.49	111.51	0.06
Crabtree	Reach 1	17091	Max	newEC3	468.3	5.2	13.56		13.62	0.000342	1.93	242.91	93.31	0.15
	Reach 1													
Crabtree	Reach 1	17074	Max	EC100	652.08	5.2	18.25		18.27	0.000039	1.01	737.63	109.95	0.06
Crabtree	Reach 1	17074	Max	EC3yr0416	465.86	5.2	13.62		13.68	0.000339	1.96	238.92	86.99	0.15
Crabtree	Reach 1	17074	Max	EC25yr0416	734.37	5.2	16.49		16.53	0.000151	1.75	452.56	106.47	0.11
Crabtree	Reach 1	17074	Max	newEC25	745.41	5.2	16.43		16.48	0.000161	1.79	448.21	106.33	0.11
Crabtree	Reach 1	17074	Max	newEC100	661.31	5.2	18.21		18.22	0.000041	1.04	732.49	109.95	0.06
Crabtree	Reach 1	17074	Max	newEC3	466.6	5.2	13.55		13.61	0.000355	1.99	235.78	85.95	0.15
	Reach 1													
Crabtree	Reach 1	17055	Max	EC100	645.51	5.19	18.25		18.27	0.000042	1.06	712	111.09	0.06
Crabtree	Reach 1	17055	Max	EC3yr0416	465.86	5.19	13.6		13.67	0.000355	2.04	229.74	83.14	0.15
Crabtree	Reach 1	17055	Max	EC25yr0416	732.91	5.19	16.48		16.54	0.000206	2.06	358.55	104.9	0.13
Crabtree	Reach 1	17055	Max	newEC25	743.02	5.19	16.42		16.49	0.000217	2.11	355.85	102.99	0.13
Crabtree	Reach 1	17055	Max	newEC100	654.57	5.19	18.2		18.22	0.000044	1.08	706.79	111.09	0.06
Crabtree	Reach 1	17055	Max	newEC3	466.6	5.19	13.54		13.61	0.000371	2.07	226.79	82.81	0.16
	Reach 1													
Crabtree	Reach 1	17025	Max	EC100	634.63	5.18	18.27		18.28	0.000031	0.91	780.09	105.34	0.05
Crabtree	Reach 1	17025	Max	EC3yr0416	465.98	5.18	13.6		13.66	0.000291	1.9	246.79	80.26	0.14
Crabtree	Reach 1	17025	Max	EC25yr0416	724.61	5.18	16.48		16.54	0.000182	1.94	381.14	100.19	0.12
Crabtree	Reach 1	17025	Max	newEC25	735.39	5.18	16.42		16.48	0.000192	1.98	378.31	100.04	0.12
Crabtree	Reach 1	17025	Max	newEC100	643.87	5.18	18.22		18.24	0.000033	0.93	775.23	105.25	0.05

Crabtree	Reach 1	17025	Max	newEC3	466.61	5.18	13.54		13.6	0.000301	1.93	243.9	77.61	0.14
	Reach 1													
Crabtree	Reach 1	16998	Max	EC100	638.69	5.18	18.26		18.28	0.000046	1.07	680.32	107.62	0.06
Crabtree	Reach 1	16998	Max	EC3yr0416	505.44	5.18	13.56		13.64	0.000432	2.21	228.73	58.41	0.17
Crabtree	Reach 1	16998	Max	EC25yr0416	740.44	5.18	16.47		16.53	0.000222	2.03	366.98	102.13	0.13
Crabtree	Reach 1	16998	Max	newEC25	753.19	5.18	16.41		16.47	0.000236	2.09	363.93	101.97	0.13
Crabtree	Reach 1	16998	Max	newEC100	648.29	5.18	18.21		18.23	0.000049	1.09	675.29	107.26	0.06
Crabtree	Reach 1	16998	Max	newEC3	505.96	5.18	13.5		13.57	0.000447	2.24	225.88	57.19	0.17
	Reach 1													
Crabtree	Reach 1	16915	Max	EC100	621.5	5.15	18.27		18.28	0.000041	1	705.15	110.94	0.06
Crabtree	Reach 1	16915	Max	EC3yr0416	505.02	5.15	13.54		13.61	0.000348	2.03	249.3	48.15	0.15
Crabtree	Reach 1	16915	Max	EC25yr0416	732.36	5.15	16.46		16.51	0.000182	1.84	401.96	105.4	0.12
Crabtree	Reach 1	16915	Max	newEC25	746.55	5.15	16.4		16.45	0.000194	1.89	398.56	105.3	0.12
Crabtree	Reach 1	16915	Max	newEC100	632.08	5.15	18.22		18.24	0.000043	1.03	699.98	110.94	0.06
Crabtree	Reach 1	16915	Max	newEC3	505.64	5.15	13.48		13.54	0.000361	2.05	246.26	45.43	0.15
	Reach 1													
Crabtree	Reach 1	16897	Max	EC100	614.28	5.15	18.27		18.28	0.000039	0.99	706.72	110.23	0.06
Crabtree	Reach 1	16897	Max	EC3yr0416	504.98	5.15	13.54		13.6	0.000339	2	252.66	45.67	0.15
Crabtree	Reach 1	16897	Max	EC25yr0416	726.98	5.15	16.47		16.51	0.000158	1.75	440.07	105.06	0.11
Crabtree	Reach 1	16897	Max	newEC25	740.12	5.15	16.4		16.45	0.000169	1.8	435.31	104.85	0.11
Crabtree	Reach 1	16897	Max	newEC100	624.67	5.15	18.22		18.24	0.000041	1.02	701.58	110.23	0.06
Crabtree	Reach 1	16897	Max	newEC3	505.51	5.15	13.47		13.53	0.00035	2.03	249.57	45.29	0.15
	Reach 1													
Crabtree	Reach 1	16878	Max	EC100	603.16	5.14	18.25		18.27	0.000039	1	697.55	110.13	0.06
Crabtree	Reach 1	16878	Max	EC3yr0416	505.77	5.14	13.53		13.59	0.000347	2.04	247.85	48.8	0.15
Crabtree	Reach 1	16878	Max	EC25yr0416	720.27	5.14	16.46		16.51	0.000175	1.86	391.77	103.54	0.11
Crabtree	Reach 1	16878	Max	newEC25	734.07	5.14	16.39		16.45	0.000186	1.91	388.59	103.43	0.12
Crabtree	Reach 1	16878	Max	newEC100	613.6	5.14	18.21		18.22	0.000041	1.02	692.36	110.13	0.06
Crabtree	Reach 1	16878	Max	newEC3	506.3	5.14	13.46		13.53	0.000359	2.07	244.88	47.65	0.15
	Reach 1													
Crabtree	Reach 1	16856	Max	EC100	603.26	5.14	18.26		18.28	0.000045	1.06	650.33	108.42	0.06
Crabtree	Reach 1	16856	Max	EC3yr0416	505.44	5.14	13.52		13.59	0.000415	2.12	238.2	47.62	0.17
Crabtree	Reach 1	16856	Max	EC25yr0416	717.76	5.14	16.45		16.51	0.000183	1.87	387.17	93.49	0.12
Crabtree	Reach 1	16856	Max	newEC25	732.34	5.14	16.39		16.45	0.000196	1.92	383.91	93.22	0.12
Crabtree	Reach 1	16856	Max	newEC100	613.81	5.14	18.22		18.23	0.000047	1.09	645.26	108.29	0.06

Crabtree	Reach 1	16856	Max	newEC3	506.01	5.14	13.45		13.52	0.000434	2.15	234.93	47.32	0.17
	Reach 1													
Crabtree	Reach 1	16756	Max	EC100	598.74	5.11	18.26		18.27	0.000046	1.1	618.62	102.5	0.06
Crabtree	Reach 1	16756	Max	EC3yr0416	504.63	5.11	13.48		13.55	0.000408	2.09	242.06	49.78	0.17
Crabtree	Reach 1	16756	Max	EC25yr0416	715.06	5.11	16.44		16.49	0.000162	1.79	420.08	91.93	0.11
Crabtree	Reach 1	16756	Max	newEC25	731.91	5.11	16.38		16.43	0.000175	1.85	415.28	91.49	0.12
Crabtree	Reach 1	16756	Max	newEC100	609.08	5.11	18.21		18.23	0.000049	1.12	613.79	102.18	0.06
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													

Crabtree	Reach 1	16396	Max	newEC3	501.94	5.01	13.26		13.33	0.000417	2.15	233.82	67.75	0.17
	Reach 1													
Crabtree	Reach 1	16365	Max	EC100	572.13	5	18.25		18.26	0.000022	0.8	813.68	111.1	0.04
Crabtree	Reach 1	16365	Max	EC3yr0416	501.6	5	13.35		13.4	0.000258	1.82	277.34	70.27	0.13
Crabtree	Reach 1	16365	Max	EC25yr0416	696.41	5	16.39		16.43	0.000115	1.59	449.62	106.15	0.1
Crabtree	Reach 1	16365	Max	newEC25	707.13	5	16.31		16.35	0.000122	1.63	445.41	106.01	0.1
Crabtree	Reach 1	16365	Max	newEC100	583.13	5	18.2		18.21	0.000024	0.82	808.38	111.1	0.04
Crabtree	Reach 1	16365	Max	newEC3	502.13	5	13.27		13.32	0.00027	1.85	273.47	69.48	0.14
	Reach 1													
Crabtree	Reach 1	16350	Max	EC100	562.86	5	18.25		18.26	0.000028	0.84	756.78	109.95	0.05
Crabtree	Reach 1	16350	Max	EC3yr0416	489.82	5	13.33		13.4	0.000343	2	244.49	63.3	0.15
Crabtree	Reach 1	16350	Max	EC25yr0416	682.65	5	16.39		16.43	0.000153	1.72	401.1	105.13	0.11
Crabtree	Reach 1	16350	Max	newEC25	692.71	5	16.32		16.37	0.000163	1.76	397.32	105	0.11
Crabtree	Reach 1	16350	Max	newEC100	573.39	5	18.2		18.21	0.000029	0.86	751.53	109.76	0.05
Crabtree	Reach 1	16350	Max	newEC3	490.49	5	13.26		13.32	0.000357	2.03	241.1	62.59	0.15
	Reach 1													
Crabtree	Reach 1	16341	Max	EC100	558.22	4.99	18.25		18.26	0.000028	0.86	734.32	107.61	0.05
Crabtree	Reach 1	16341	Max	EC3yr0416	488.54	4.99	13.33		13.39	0.000317	1.94	251.25	57.15	0.15
Crabtree	Reach 1	16341	Max	EC25yr0416	675.08	4.99	16.38		16.42	0.000144	1.69	401.44	104	0.1
Crabtree	Reach 1	16341	Max	newEC25	687.16	4.99	16.31		16.36	0.000153	1.73	397.9	103.86	0.11
Crabtree	Reach 1	16341	Max	newEC100	569.09	4.99	18.2		18.21	0.00003	0.88	729.17	107.44	0.05
Crabtree	Reach 1	16341	Max	newEC3	489.45	4.99	13.26		13.32	0.000331	1.98	247.75	56.65	0.15
	Reach 1													
Crabtree	Reach 1	16285	Max	EC100	782.11	4.98	18.23		18.26	0.000063	1.26	700.88	107.99	0.07
Crabtree	Reach 1	16285	Max	EC3yr0416	549.41	4.98	13.26		13.35	0.000506	2.38	230.52	62.94	0.18
Crabtree	Reach 1	16285	Max	EC25yr0416	830.25	4.98	16.31		16.39	0.000261	2.22	377.07	102.03	0.14
Crabtree	Reach 1	16285	Max	newEC25	841.09	4.98	16.24		16.32	0.000277	2.27	373.23	101.88	0.14
Crabtree	Reach 1	16285	Max	newEC100	792.8	4.98	18.19		18.21	0.000067	1.29	695.64	107.99	0.07
Crabtree	Reach 1	16285	Max	newEC3	550.25	4.98	13.18		13.28	0.000531	2.42	226.99	58.9	0.19
	Reach 1													
Crabtree	Reach 1	16200	Max	EC100	771.1	4.95	18.23		18.25	0.00006	1.25	704.73	106.02	0.07
Crabtree	Reach 1	16200	Max	EC3yr0416	548.59	4.95	13.22		13.31	0.000475	2.36	232.87	64.16	0.18
Crabtree	Reach 1	16200	Max	EC25yr0416	824.81	4.95	16.3		16.37	0.000243	2.19	381.35	101.14	0.14
Crabtree	Reach 1	16200	Max	newEC25	834.29	4.95	16.22		16.29	0.000257	2.24	377.45	101	0.14
Crabtree	Reach 1	16200	Max	newEC100	781.68	4.95	18.18		18.2	0.000063	1.28	699.55	105.89	0.07

Crabtree	Reach 1	16200	Max	newEC3	549.19	4.95	13.14		13.23	0.000498	2.4	229.27	59.64	0.18
	Reach 1													
Crabtree	Reach 1	16125	Max	EC100	766.55	4.93	18.23		18.25	0.00006	1.23	703.78	107.69	0.07
Crabtree	Reach 1	16125	Max	EC3yr0416	547.97	4.93	13.19		13.28	0.000496	2.35	233.46	58.6	0.18
Crabtree	Reach 1	16125	Max	EC25yr0416	823.58	4.93	16.28		16.35	0.000245	2.14	386.98	100.71	0.14
Crabtree	Reach 1	16125	Max	newEC25	830.91	4.93	16.2		16.28	0.000258	2.19	382.89	100.6	0.14
Crabtree	Reach 1	16125	Max	newEC100	777.69	4.93	18.18		18.2	0.000063	1.26	698.52	107.69	0.07
Crabtree	Reach 1	16125	Max	newEC3	548.62	4.93	13.11		13.19	0.000517	2.39	229.79	56.63	0.18
	Reach 1													
Crabtree	Reach 1	15985	Max	EC100	739.97	4.9	18.22		18.24	0.000047	1.16	736.52	107.02	0.06
Crabtree	Reach 1	15985	Max	EC3yr0416	545.87	4.9	13.14		13.21	0.000416	2.21	247.95	67.01	0.17
Crabtree	Reach 1	15985	Max	EC25yr0416	820.51	4.9	16.26		16.32	0.000197	2.05	407.84	98.68	0.12
Crabtree	Reach 1	15985	Max	newEC25	829.17	4.9	16.18		16.24	0.000208	2.1	403.6	98.57	0.13
Crabtree	Reach 1	15985	Max	newEC100	751.89	4.9	18.17		18.19	0.00005	1.18	731.23	107.02	0.06
Crabtree	Reach 1	15985	Max	newEC3	546.48	4.9	13.05		13.13	0.000438	2.25	243.87	65.86	0.17
	Reach 1													
Crabtree	Reach 1	15867	Max	EC100	736.83	4.86	18.21		18.23	0.000048	1.14	723.9	103.3	0.06
Crabtree	Reach 1	15867	Max	EC3yr0416	544.38	4.86	13.09		13.16	0.000442	2.19	248.23	65.16	0.17
Crabtree	Reach 1	15867	Max	EC25yr0416	823.49	4.86	16.25		16.3	0.000158	1.78	496.74	98.32	0.11
Crabtree	Reach 1	15867	Max	newEC25	831.87	4.86	16.17		16.22	0.000168	1.83	490.09	98.16	0.11
Crabtree	Reach 1	15867	Max	newEC100	749.91	4.86	18.16		18.18	0.000051	1.17	718.76	103.17	0.07
Crabtree	Reach 1	15867	Max	newEC3	544.93	4.86	13		13.08	0.000469	2.24	243.82	64.68	0.18
	Reach 1													
Crabtree	Reach 1	15824	Max	EC100	745.61	4.85	18.2		18.21	0.000034	0.97	855.15	107.37	0.05
Crabtree	Reach 1	15824	Max	EC3yr0416	539.5	4.85	13.08		13.15	0.000367	2.04	264.91	77.49	0.16
Crabtree	Reach 1	15824	Max	EC25yr0416	824.59	4.85	16.23		16.29	0.000173	1.89	440.33	105.67	0.12
Crabtree	Reach 1	15824	Max	newEC25	841.17	4.85	16.15		16.21	0.000187	1.95	435.68	105.37	0.12
Crabtree	Reach 1	15824	Max	newEC100	759.35	4.85	18.15		18.16	0.000036	0.99	849.72	107.37	0.05
Crabtree	Reach 1	15824	Max	newEC3	540.27	4.85	12.99		13.06	0.000384	2.07	260.39	72.54	0.16
	Reach 1													
Crabtree	Reach 1	15772	Max	EC100	740.63	4.84	18.19		18.21	0.000039	1.05	801.9	110.91	0.06
Crabtree	Reach 1	15772	Max	EC3yr0416	532.98	4.84	13.07		13.13	0.00034	1.99	268.81	81.88	0.15
Crabtree	Reach 1	15772	Max	EC25yr0416	828.47	4.84	16.22		16.27	0.00015	1.8	497.52	107.65	0.11
Crabtree	Reach 1	15772	Max	newEC25	846.23	4.84	16.15		16.2	0.000172	1.91	519.49	108.73	0.12
Crabtree	Reach 1	15772	Max	newEC100	755.34	4.84	18.15		18.16	0.000047	1.14	825.11	110.91	0.06

Crabtree	Reach 1	15772	Max	newEC3	533.85	4.84	12.98		13.04	0.00036	2.02	266.97	95.96	0.15
	Reach 1													
Crabtree	Reach 1	15710	Max	EC100	715.61	4.82	18.19		18.2	0.000037	1.02	799.02	110.13	0.06
Crabtree	Reach 1	15710	Max	EC3yr0416	531.96	4.82	13.03		13.11	0.000405	2.16	246.95	83.55	0.16
Crabtree	Reach 1	15710	Max	EC25yr0416	812.77	4.82	16.21		16.27	0.000197	2.04	402.86	110.06	0.12
Crabtree	Reach 1	15710	Max	newEC25	831.92	4.82	16.13		16.19	0.000194	2.01	497.75	109.96	0.12
Crabtree	Reach 1	15710	Max	newEC100	730.19	4.82	18.14		18.16	0.000047	1.14	814.93	110.13	0.06
Crabtree	Reach 1	15710	Max	newEC3	532.97	4.82	12.94		13.02	0.000426	2.2	251.99	90.29	0.17
	Reach 1													
Crabtree	Reach 1	15627	Max	EC100	724.09	4.8	18.2		18.22	0.000041	1.04	785.3	113.67	0.06
Crabtree	Reach 1	15627	Max	EC3yr0416	529.92	4.8	13		13.07	0.000396	2.17	246.56	69.43	0.16
Crabtree	Reach 1	15627	Max	EC25yr0416	823.24	4.8	16.19		16.25	0.000212	2.04	408.09	104.74	0.13
Crabtree	Reach 1	15627	Max	newEC25	841.7	4.8	16.12		16.17	0.000206	1.98	521.95	104.64	0.12
Crabtree	Reach 1	15627	Max	newEC100	740.23	4.8	18.15		18.17	0.00006	1.25	779.55	113.67	0.07
Crabtree	Reach 1	15627	Max	newEC3	530.93	4.8	12.91		12.98	0.000414	2.18	268.01	70.98	0.17
	Reach 1													
Crabtree	Reach 1	15585	Max	EC100	736.76	4.78	18.18		18.2	0.000046	1.09	763.8	111.27	0.06
Crabtree	Reach 1	15585	Max	EC3yr0416	527.77	4.78	12.98		13.06	0.000426	2.19	241.11	71.73	0.17
Crabtree	Reach 1	15585	Max	EC25yr0416	835.62	4.78	16.17		16.24	0.000227	2.08	402.77	102.09	0.13
Crabtree	Reach 1	15585	Max	newEC25	853.5	4.78	16.11		16.16	0.000214	2.02	515.81	101.94	0.13
Crabtree	Reach 1	15585	Max	newEC100	754.47	4.78	18.13		18.16	0.000065	1.3	760.23	111.27	0.07
Crabtree	Reach 1	15585	Max	newEC3	528.8	4.78	12.89		12.97	0.000438	2.21	258.4	76.6	0.17
	Reach 1													
Crabtree	Reach 1	15550	Max	EC100	749.12	4.77	18.19		18.21	0.000056	1.2	704.4	107.4	0.07
Crabtree	Reach 1	15550	Max	EC3yr0416	524.82	4.77	12.96		13.04	0.000447	2.23	235.55	45.12	0.17
Crabtree	Reach 1	15550	Max	EC25yr0416	844.81	4.77	16.16		16.23	0.000237	2.1	404.07	97.55	0.13
Crabtree	Reach 1	15550	Max	newEC25	861.25	4.77	16.09		16.16	0.00023	2.1	485.47	101.32	0.13
Crabtree	Reach 1	15550	Max	newEC100	766.43	4.77	18.13		18.16	0.000067	1.32	735.68	107.24	0.07
Crabtree	Reach 1	15550	Max	newEC3	525.92	4.77	12.87		12.95	0.000465	2.27	233.3	72.41	0.18
	Reach 1													
Crabtree	Reach 1	15495	Max	EC100	759.02	4.76	18.17		18.19	0.000047	1.13	759.62	108.8	0.06
Crabtree	Reach 1	15495	Max	EC3yr0416	525.25	4.76	12.95		13.02	0.000384	2.1	249.71	60.12	0.16
Crabtree	Reach 1	15495	Max	EC25yr0416	847.19	4.76	16.15		16.22	0.000205	2.02	422.44	105.92	0.13
Crabtree	Reach 1	15495	Max	newEC25	863.51	4.76	16.08		16.14	0.000201	2.01	503.64	105.72	0.12
Crabtree	Reach 1	15495	Max	newEC100	776.86	4.76	18.12		18.15	0.000059	1.26	772.68	108.8	0.07

Crabtree	Reach 1	15495	Max	newEC3	526.35	4.76	12.85		12.93	0.0004	2.14	247.78	67.45	0.16
	Reach 1													
Crabtree	Reach 1	15415	Max	EC100	767.14	4.74	18.16		18.18	0.000051	1.15	752.04	110.4	0.06
Crabtree	Reach 1	15415	Max	EC3yr0416	523.95	4.74	12.9		12.98	0.000511	2.27	231.27	64.73	0.18
Crabtree	Reach 1	15415	Max	EC25yr0416	849.5	4.74	16.13		16.18	0.00019	1.9	483.37	106.94	0.12
Crabtree	Reach 1	15415	Max	newEC25	867.58	4.74	16.06		16.13	0.000237	2.15	490.45	106.62	0.13
Crabtree	Reach 1	15415	Max	newEC100	784.7	4.74	18.11		18.14	0.000069	1.35	759.61	110.4	0.07
Crabtree	Reach 1	15415	Max	newEC3	525	4.74	12.81		12.89	0.000498	2.31	235.07	73.15	0.18
	Reach 1													
Crabtree	Reach 1	15309	Max	EC100	784.91	4.71	18.15		18.16	0.000052	1.18	756.99	107.6	0.07
Crabtree	Reach 1	15309	Max	EC3yr0416	522.23	4.71	12.86		12.93	0.000429	2.22	235.68	66.86	0.17
Crabtree	Reach 1	15309	Max	EC25yr0416	857.74	4.71	16.1		16.17	0.00024	2.19	393.94	102.51	0.14
Crabtree	Reach 1	15309	Max	newEC25	874.4	4.71	16.03		16.1	0.000229	2.11	495.63	102.96	0.13
Crabtree	Reach 1	15309	Max	newEC100	801.79	4.71	18.1		18.13	0.000065	1.31	776.06	107.6	0.07
Crabtree	Reach 1	15309	Max	newEC3	523.34	4.71	12.76		12.84	0.000463	2.25	242	77.54	0.17
	Reach 1													
Crabtree	Reach 1	15232	Max	EC100	787.92	4.69	18.14		18.15	0.000044	1.12	803.32	111.7	0.06
Crabtree	Reach 1	15232	Max	EC3yr0416	521.08	4.69	12.83		12.9	0.0004	2.15	242.53	72.32	0.16
Crabtree	Reach 1	15232	Max	EC25yr0416	857.91	4.69	16.08		16.12	0.000139	1.71	574.53	107.15	0.1
Crabtree	Reach 1	15232	Max	newEC25	875.12	4.69	16.02		16.08	0.00021	2.09	512.4	106.59	0.13
Crabtree	Reach 1	15232	Max	newEC100	803.27	4.69	18.1		18.12	0.000061	1.31	803.73	111.7	0.07
Crabtree	Reach 1	15232	Max	newEC3	522.02	4.69	12.73		12.81	0.000419	2.18	257.4	74.63	0.17
	Reach 1													
Crabtree	Reach 1	15215	Max	EC100	792.95	4.68	18.14		18.15	0.000034	1	889.62	112.4	0.05
Crabtree	Reach 1	15215	Max	EC3yr0416	521.19	4.68	12.83		12.89	0.000377	2.11	247.73	87.22	0.16
Crabtree	Reach 1	15215	Max	EC25yr0416	863.33	4.68	16.08		16.15	0.000208	2.13	409.8	109.02	0.13
Crabtree	Reach 1	15215	Max	newEC25	879.52	4.68	16		16.08	0.000222	2.2	406.04	108.86	0.13
Crabtree	Reach 1	15215	Max	newEC100	807.58	4.68	18.09		18.1	0.000036	1.02	884.05	112.4	0.06
Crabtree	Reach 1	15215	Max	newEC3	522.15	4.68	12.73		12.8	0.0004	2.16	242.99	83.43	0.16
	Reach 1													
Crabtree	Reach 1	15190	Max	EC100	805.81	4.68	18.13		18.15	0.000036	1.03	888.6	114.5	0.06
Crabtree	Reach 1	15190	Max	EC3yr0416	526.02	4.68	12.82		12.88	0.000361	2.1	253.02	96.53	0.16
Crabtree	Reach 1	15190	Max	EC25yr0416	882.13	4.68	16.07		16.14	0.000202	2.14	418.76	114.5	0.13
Crabtree	Reach 1	15190	Max	newEC25	897.98	4.68	15.99		16.07	0.000216	2.2	414.91	114.5	0.13
Crabtree	Reach 1	15190	Max	newEC100	820.52	4.68	18.08		18.1	0.000038	1.06	882.91	114.5	0.06

Crabtree	Reach 1	15190	Max	newEC3	526.63	4.68	12.72		12.79	0.000385	2.14	247.99	93.43	0.16
	Reach 1													
Crabtree	Reach 1	15163	Max	EC100	807.08	4.67	18.13		18.14	0.000038	1.07	859.62	113.3	0.06
Crabtree	Reach 1	15163	Max	EC3yr0416	525.51	4.67	12.81		12.87	0.000371	2.12	250.6	88.89	0.16
Crabtree	Reach 1	15163	Max	EC25yr0416	884	4.67	16.06		16.13	0.000208	2.17	414.06	113.3	0.13
Crabtree	Reach 1	15163	Max	newEC25	900.36	4.67	15.99		16.06	0.000222	2.23	410.24	113.3	0.13
Crabtree	Reach 1	15163	Max	newEC100	821.66	4.67	18.08		18.09	0.000041	1.1	853.97	113.3	0.06
Crabtree	Reach 1	15163	Max	newEC3	526.12	4.67	12.7		12.78	0.000397	2.17	245.58	88.15	0.16
	Reach 1													
Crabtree	Reach 1	15128	Max	EC100	809.26	4.66	18.13		18.14	0.000039	1.08	861.09	114.39	0.06
Crabtree	Reach 1	15128	Max	EC3yr0416	524.89	4.66	12.79		12.86	0.000382	2.13	249.8	90.95	0.16
Crabtree	Reach 1	15128	Max	EC25yr0416	884.41	4.66	16.05		16.1	0.000161	1.89	520.66	114.39	0.11
Crabtree	Reach 1	15128	Max	newEC25	900.88	4.66	15.98		16.05	0.000226	2.22	412.61	114.39	0.13
Crabtree	Reach 1	15128	Max	newEC100	824.02	4.66	18.08		18.09	0.000042	1.1	855.36	114.39	0.06
Crabtree	Reach 1	15128	Max	newEC3	525.75	4.66	12.69		12.76	0.000409	2.18	244.64	89.83	0.17
	Reach 1													
Crabtree	Reach 1	15047	Max	EC100	816.82	4.64	18.12		18.13	0.000037	1.05	885.65	115.34	0.06
Crabtree	Reach 1	15047	Max	EC3yr0416	525.21	4.64	12.77		12.83	0.000334	2.02	261.77	95.68	0.15
Crabtree	Reach 1	15047	Max	EC25yr0416	888.96	4.64	16.04		16.11	0.000199	2.11	426.21	115.34	0.13
Crabtree	Reach 1	15047	Max	newEC25	906.54	4.64	15.96		16.03	0.000213	2.17	422.22	114.45	0.13
Crabtree	Reach 1	15047	Max	newEC100	831.51	4.64	18.07		18.08	0.000039	1.08	879.84	115.34	0.06
Crabtree	Reach 1	15047	Max	newEC3	525.82	4.64	12.67		12.73	0.000354	2.06	256.76	94.35	0.15
	Reach 1													
Crabtree	Reach 1	15016	Max	EC100	828.66	4.63	18.14		18.15	0.000017	0.73	1148.91	117.27	0.04
Crabtree	Reach 1	15016	Max	EC3yr0416	529.35	4.63	12.81		12.82	0.000058	0.89	542.19	102	0.06
Crabtree	Reach 1	15016	Max	EC25yr0416	906.33	4.63	16.08		16.1	0.000044	1.03	831.66	113.48	0.06
Crabtree	Reach 1	15016	Max	newEC25	921.62	4.63	16		16.02	0.000046	1.05	825	113.38	0.06
Crabtree	Reach 1	15016	Max	newEC100	844.12	4.63	18.09		18.1	0.000017	0.74	1143.12	117.27	0.04
Crabtree	Reach 1	15016	Max	newEC3	529.9	4.63	12.7		12.72	0.000061	0.9	533.42	98.43	0.07
	Reach 1													
Crabtree	Reach 1	14980	Max	EC100	872.67	4.62	18.13		18.14	0.000037	1.05	932.38	116.37	0.06
Crabtree	Reach 1	14980	Max	EC3yr0416	540.8	4.62	12.77		12.82	0.00026	1.78	317.72	93.7	0.13
Crabtree	Reach 1	14980	Max	EC25yr0416	951.91	4.62	16.05		16.09	0.000129	1.7	601.01	116.37	0.1
Crabtree	Reach 1	14980	Max	newEC25	967.64	4.62	15.97		16.02	0.000138	1.75	594.29	116.37	0.11
Crabtree	Reach 1	14980	Max	newEC100	887.95	4.62	18.08		18.09	0.000039	1.07	926.56	116.37	0.06

Crabtree	Reach 1	14980	Max	newEC3	541.05	4.62	12.67		12.72	0.000277	1.82	309.53	92.09	0.14
	Reach 1													
Crabtree	Reach 1	14939	Max	EC100	949.77	4.61	18.13		18.14	0.00004	1.09	975.02	117.28	0.06
Crabtree	Reach 1	14939	Max	EC3yr0416	572.76	4.61	12.76		12.8	0.000219	1.65	373.84	90.35	0.12
Crabtree	Reach 1	14939	Max	EC25yr0416	1012.23	4.61	16.05		16.08	0.000105	1.55	733.16	114.47	0.09
Crabtree	Reach 1	14939	Max	newEC25	1029.28	4.61	15.97		16.01	0.000113	1.6	724.36	114.21	0.09
Crabtree	Reach 1	14939	Max	newEC100	965.18	4.61	18.08		18.09	0.000042	1.12	969.16	117.28	0.06
Crabtree	Reach 1	14939	Max	newEC3	573.17	4.61	12.66		12.7	0.00023	1.68	364.8	84.31	0.12
	Reach 1													
Crabtree	Reach 1	14896	Max	EC100	937.48	4.6	18.11		18.13	0.000049	1.19	891.56	116.1	0.06
Crabtree	Reach 1	14896	Max	EC3yr0416	565.82	4.6	12.73		12.79	0.000344	2.04	285.94	80.37	0.15
Crabtree	Reach 1	14896	Max	EC25yr0416	992.62	4.6	16.02		16.06	0.000143	1.75	649.07	116.1	0.11
Crabtree	Reach 1	14896	Max	newEC25	1003.64	4.6	15.94		15.99	0.000152	1.79	639.96	116.1	0.11
Crabtree	Reach 1	14896	Max	newEC100	952.79	4.6	18.06		18.08	0.000052	1.22	885.68	116.1	0.07
Crabtree	Reach 1	14896	Max	newEC3	566.5	4.6	12.62		12.69	0.000368	2.09	277.73	75.69	0.16
	Reach 1													
Crabtree	Reach 1	14866	Max	EC100	930.99	4.59	18.11		18.13	0.000052	1.21	861.15	112.8	0.07
Crabtree	Reach 1	14866	Max	EC3yr0416	565.41	4.59	12.72		12.78	0.000316	1.97	287.47	57.84	0.15
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19

Crabtree	Reach 1	14781	Max	newEC3	567.5	4.57	12.6		12.66	0.000301	1.92	309.03	79.26	0.14
	Reach 1													
Crabtree	Reach 1	14763	Max	EC100	943.42	4.56	18.11		18.13	0.000049	1.19	888.98	116.96	0.06
Crabtree	Reach 1	14763	Max	EC3yr0416	565.82	4.56	12.7		12.76	0.000283	1.88	319.52	82.87	0.14
Crabtree	Reach 1	14763	Max	EC25yr0416	989.66	4.56	16.02		16.06	0.000133	1.71	647.1	111.27	0.1
Crabtree	Reach 1	14763	Max	newEC25	1001	4.56	15.94		15.98	0.000138	1.78	676.83	113.06	0.11
Crabtree	Reach 1	14763	Max	newEC100	960.14	4.56	18.06		18.08	0.000054	1.29	922.5	116.96	0.07
Crabtree	Reach 1	14763	Max	newEC3	566.45	4.56	12.6		12.65	0.000305	1.93	310.82	82.72	0.14
	Reach 1													
Crabtree	Reach 1	14743	Max	EC100	942.43	4.55	18.11		18.12	0.000044	1.14	923.29	115.7	0.06
Crabtree	Reach 1	14743	Max	EC3yr0416	565.82	4.55	12.71		12.75	0.000235	1.74	342.83	82.36	0.13
Crabtree	Reach 1	14743	Max	EC25yr0416	986.87	4.55	16.01		16.05	0.000116	1.62	681.08	115.7	0.1
Crabtree	Reach 1	14743	Max	newEC25	998.84	4.55	15.93		15.97	0.000124	1.7	702.85	115.7	0.1
Crabtree	Reach 1	14743	Max	newEC100	959.68	4.55	18.05		18.08	0.00005	1.24	948.31	115.7	0.07
Crabtree	Reach 1	14743	Max	newEC3	566.54	4.55	12.6		12.65	0.000251	1.78	334.21	81.53	0.13
	Reach 1													
Crabtree	Reach 1	14714	Max	EC100	951.89	4.55	18.11		18.12	0.000043	1.13	947.49	117.29	0.06
Crabtree	Reach 1	14714	Max	EC3yr0416	565.7	4.55	12.7		12.75	0.000237	1.72	349.71	91.36	0.13
Crabtree	Reach 1	14714	Max	EC25yr0416	993.22	4.55	16.01		16.05	0.000115	1.59	701.91	117.29	0.1
Crabtree	Reach 1	14714	Max	newEC25	1005.08	4.55	15.93		15.97	0.000127	1.71	723.91	117.29	0.1
Crabtree	Reach 1	14714	Max	newEC100	968.93	4.55	18.05		18.07	0.000051	1.24	972.92	117.29	0.07
Crabtree	Reach 1	14714	Max	newEC3	566.32	4.55	12.59		12.64	0.000262	1.79	339.89	90.69	0.13
	Reach 1													
Crabtree	Reach 1	14689	Max	EC100	960.9	4.54	18.1		18.12	0.000048	1.18	911.5	115.4	0.06
Crabtree	Reach 1	14689	Max	EC3yr0416	565.45	4.54	12.69		12.74	0.000251	1.76	328.67	72.65	0.13
Crabtree	Reach 1	14689	Max	EC25yr0416	1003.85	4.54	16		16.04	0.000129	1.68	669.37	115.4	0.1
Crabtree	Reach 1	14689	Max	newEC25	1015.89	4.54	15.92		15.97	0.000143	1.8	684.11	115.4	0.11
Crabtree	Reach 1	14689	Max	newEC100	978.28	4.54	18.05		18.07	0.000056	1.3	929.61	115.4	0.07
Crabtree	Reach 1	14689	Max	newEC3	565.93	4.54	12.58		12.63	0.000269	1.81	321.42	65.57	0.14
	Reach 1													
Crabtree	Reach 1	14651	Max	EC100	977.28	4.53	18.1		18.12	0.000057	1.28	852.93	116.82	0.07
Crabtree	Reach 1	14651	Max	EC3yr0416	565.12	4.53	12.68		12.73	0.000257	1.79	315.01	55.41	0.13
Crabtree	Reach 1	14651	Max	EC25yr0416	1012.37	4.53	15.99		16.04	0.000153	1.81	615.74	110.21	0.11
Crabtree	Reach 1	14651	Max	newEC25	1024.77	4.53	15.91		15.96	0.000166	1.92	628.09	110.09	0.11
Crabtree	Reach 1	14651	Max	newEC100	994.55	4.53	18.04		18.07	0.000067	1.41	868.13	116.82	0.08

Crabtree	Reach 1	14651	Max	newEC3	565.65	4.53	12.57		12.62	0.000272	1.83	309.24	55.07	0.14
	Reach 1													
Crabtree	Reach 1	14620	Max	EC100	979.38	4.52	18.1		18.12	0.00006	1.3	842.16	118.6	0.07
Crabtree	Reach 1	14620	Max	EC3yr0416	564.65	4.52	12.67		12.72	0.000261	1.83	308.44	53.38	0.13
Crabtree	Reach 1	14620	Max	EC25yr0416	1011.96	4.52	15.99		16.04	0.000166	1.85	596.67	113.85	0.11
Crabtree	Reach 1	14620	Max	newEC25	1024.81	4.52	15.91		15.96	0.000161	1.89	646.41	116.44	0.11
Crabtree	Reach 1	14620	Max	newEC100	996.81	4.52	18.04		18.07	0.000063	1.36	897.53	118.6	0.07
Crabtree	Reach 1	14620	Max	newEC3	565.41	4.52	12.56		12.61	0.000276	1.87	302.87	52.89	0.14
	Reach 1													
Crabtree	Reach 1	14593	Max	EC100	968.69	4.52	18.1		18.12	0.000049	1.18	899.14	118.25	0.06
Crabtree	Reach 1	14593	Max	EC3yr0416	564.84	4.52	12.67		12.72	0.000237	1.72	349.31	89.85	0.13
Crabtree	Reach 1	14593	Max	EC25yr0416	1005.08	4.52	15.99		16.03	0.000129	1.64	653.77	105.58	0.1
Crabtree	Reach 1	14593	Max	newEC25	1017.74	4.51	15.92		15.96	0.00012	1.66	726.84	118.81	0.1
Crabtree	Reach 1	14593	Max	newEC100	986.73	4.51	18.05		18.07	0.000048	1.22	982.41	120.94	0.06
Crabtree	Reach 1	14593	Max	newEC3	565.31	4.51	12.56		12.61	0.000255	1.76	339.7	89.1	0.13
	Reach 1													
Crabtree	Reach 1	14579	Max	EC100	958.4	4.51	18.1		18.12	0.000035	1.04	998.78	119.06	0.06
Crabtree	Reach 1	14579	Max	EC3yr0416	560.6	4.51	12.69		12.71	0.000126	1.34	451.75	91.74	0.1
Crabtree	Reach 1	14579	Max	EC25yr0416	995.81	4.51	16		16.03	0.000082	1.38	761.32	95.63	0.08
Crabtree	Reach 1	14579	Max	newEC25	1007.62	4.51	15.93		15.95	0.000078	1.41	833.36	120.22	0.08
Crabtree	Reach 1	14579	Max	newEC100	976.56	4.51	18.05		18.07	0.000034	1.07	1091.3	122.34	0.06
Crabtree	Reach 1	14579	Max	newEC3	561.46	4.51	12.58		12.61	0.000135	1.38	441.98	91.67	0.1
	Reach 1													
Crabtree	Reach 1	14564	Max	EC100	947.8	4.51	18.1		18.12	0.000046	1.14	899.75	121.21	0.06
Crabtree	Reach 1	14564	Max	EC3yr0416	557.28	4.51	12.67		12.71	0.000235	1.68	351.36	90.13	0.13
Crabtree	Reach 1	14564	Max	EC25yr0416	985.37	4.51	16		16.03	0.000118	1.57	668.79	97.66	0.1
Crabtree	Reach 1	14564	Max	newEC25	998.16	4.51	15.92		15.95	0.000113	1.6	736.97	121.35	0.1
Crabtree	Reach 1	14564	Max	newEC100	966.33	4.51	18.05		18.07	0.000044	1.16	997.95	123.48	0.06
Crabtree	Reach 1	14564	Max	newEC3	558.29	4.51	12.56		12.6	0.000254	1.72	341.76	88.19	0.13
	Reach 1													
Crabtree	Reach 1	14515	Max	EC100	1129.03	4.49	18.07		18.11	0.000096	1.56	777.01	106.61	0.09
Crabtree	Reach 1	14515	Max	EC3yr0416	626.19	4.49	12.62		12.68	0.000373	2.09	299.13	56.14	0.16
Crabtree	Reach 1	14515	Max	EC25yr0416	1127.39	4.49	15.94		16.01	0.000232	2.13	564.7	98.56	0.13
Crabtree	Reach 1	14515	Max	newEC25	1140.39	4.49	15.87		15.94	0.000217	2.15	635.22	123.1	0.13
Crabtree	Reach 1	14515	Max	newEC100	1148.24	4.49	18.03		18.06	0.000085	1.57	902.94	125.26	0.09

Crabtree	Reach 1	14515	Max	newEC3	627.2	4.49	12.5		12.57	0.000398	2.14	293.06	55.8	0.16
	Reach 1													
Crabtree	Reach 1	14441	Max	EC100	1111.51	4.47	18.07		18.1	0.000083	1.45	805.45	93.73	0.08
Crabtree	Reach 1	14441	Max	EC3yr0416	625.25	4.47	12.59		12.66	0.000393	2.1	307.06	84.26	0.16
Crabtree	Reach 1	14441	Max	EC25yr0416	1107.87	4.47	15.94		16	0.000189	1.94	608.32	91.42	0.12
Crabtree	Reach 1	14441	Max	newEC25	1120.69	4.47	15.86		15.92	0.000201	1.99	601.16	91.33	0.12
Crabtree	Reach 1	14441	Max	newEC100	1128.66	4.47	18.02		18.05	0.000087	1.49	800.76	93.66	0.08
Crabtree	Reach 1	14441	Max	newEC3	626.39	4.47	12.47		12.55	0.000404	2.16	297.48	80.43	0.16
	Reach 1													
Crabtree	Reach 1	14351	Max	EC100	1095.45	4.45	18.06		18.09	0.000078	1.46	803.87	97.29	0.08
Crabtree	Reach 1	14351	Max	EC3yr0416	624	4.45	12.55		12.62	0.000384	2.11	296.78	67.27	0.16
Crabtree	Reach 1	14351	Max	EC25yr0416	1086.59	4.45	15.93		15.98	0.000187	1.95	598.57	94.66	0.12
Crabtree	Reach 1	14351	Max	newEC25	1100.05	4.45	15.85		15.9	0.000198	2	591.03	94.57	0.12
Crabtree	Reach 1	14351	Max	newEC100	1113.36	4.45	18.01		18.05	0.000082	1.49	798.96	97.23	0.08
Crabtree	Reach 1	14351	Max	newEC3	625.09	4.45	12.43		12.51	0.00041	2.16	289.38	57.12	0.17
	Reach 1													
Crabtree	Reach 1	14175	Max	EC100	1075.66	4.4	18.06		18.08	0.000056	1.26	921.17	119.6	0.07
Crabtree	Reach 1	14175	Max	EC3yr0416	625.62	4.4	12.52		12.56	0.000248	1.81	376.64	87.08	0.13
Crabtree	Reach 1	14175	Max	EC25yr0416	1047.42	4.4	15.92		15.95	0.000122	1.63	679.1	91.65	0.1
Crabtree	Reach 1	14175	Max	newEC25	1063.56	4.4	15.84		15.88	0.00013	1.68	671.7	91.49	0.1
Crabtree	Reach 1	14175	Max	newEC100	1096.83	4.4	18.01		18.03	0.000059	1.29	915.06	119.48	0.07
Crabtree	Reach 1	14175	Max	newEC3	626.42	4.4	12.39		12.44	0.00027	1.86	366.12	86.98	0.14
	Reach 1													
Crabtree	Reach 1	14174	Lat											
	Reach 1													
Crabtree	Reach 1	14064	Max	EC100	1056.18	4.36	18.06		18.08	0.000048	1.2	979.12	125.01	0.06
Crabtree	Reach 1	14064	Max	EC3yr0416	628.17	4.36	12.47		12.53	0.000319	2	333.78	80.26	0.15
Crabtree	Reach 1	14064	Max	EC25yr0416	1022.24	4.36	15.91		15.94	0.000117	1.61	710.83	123.23	0.1
Crabtree	Reach 1	14064	Max	newEC25	1040.83	4.36	15.82		15.86	0.000126	1.67	700.71	122.93	0.1
Crabtree	Reach 1	14064	Max	newEC100	1082.13	4.36	18		18.03	0.000052	1.24	972.64	125.01	0.07
Crabtree	Reach 1	14064	Max	newEC3	629.06	4.36	12.34		12.41	0.000346	2.06	323.82	79.66	0.15
	Reach 1													
Crabtree	Reach 1	13881	Max	EC100	1013.73	4.31	18.05		18.07	0.000051	1.24	918.04	120.45	0.07
Crabtree	Reach 1	13881	Max	EC3yr0416	628.23	4.31	12.4		12.47	0.00035	2.08	313.22	73.49	0.16
Crabtree	Reach 1	13881	Max	EC25yr0416	993.57	4.31	15.88		15.92	0.000125	1.67	665.25	113.39	0.1

Crabtree	Reach 1	13881	Max	newEC25	1026.27	4.31	15.8		15.84	0.000139	1.75	655.42	113.25	0.11
Crabtree	Reach 1	13881	Max	newEC100	1051.62	4.31	17.99		18.02	0.000056	1.3	911.58	120.45	0.07
Crabtree	Reach 1	13881	Max	newEC3	628.45	4.31	12.27		12.34	0.000379	2.14	303.71	72.62	0.16
	Reach 1													
Crabtree	Reach 1	13821	Max	EC100	1012.42	4.3	18.04		18.06	0.000035	1.06	1058.89	121.38	0.06
Crabtree	Reach 1	13821	Max	EC3yr0416	633.99	4.3	12.4		12.45	0.000243	1.79	389.49	99.26	0.13
Crabtree	Reach 1	13821	Max	EC25yr0416	995.62	4.3	15.88		15.91	0.000082	1.39	796.36	121.38	0.08
Crabtree	Reach 1	13821	Max	newEC25	1034.54	4.3	15.79		15.82	0.000092	1.47	785.69	121.38	0.09
Crabtree	Reach 1	13821	Max	newEC100	1055.99	4.3	17.99		18	0.000039	1.11	1052.28	121.38	0.06
Crabtree	Reach 1	13821	Max	newEC3	633.99	4.3	12.27		12.32	0.000265	1.84	376.63	97.77	0.14
	Reach 1													
Crabtree	Reach 1	13776	Max	EC100	991.65	4.28	18.04		18.06	0.000047	1.22	930.96	124.25	0.06
Crabtree	Reach 1	13776	Max	EC3yr0416	627.62	4.28	12.37		12.44	0.000319	2.02	316.94	70.13	0.15
Crabtree	Reach 1	13776	Max	EC25yr0416	979.76	4.28	15.87		15.91	0.000117	1.67	660.43	119.4	0.1
Crabtree	Reach 1	13776	Max	newEC25	1023.47	4.28	15.78		15.82	0.000134	1.77	650.31	116.97	0.1
Crabtree	Reach 1	13776	Max	newEC100	1042.66	4.28	17.99		18.01	0.000053	1.29	924.07	124.25	0.07
Crabtree	Reach 1	13776	Max	newEC3	628.86	4.28	12.24		12.31	0.000346	2.08	307.72	68.87	0.15
	Reach 1													
Crabtree	Reach 1	13727	Max	EC100	990.3	4.27	18.04		18.06	0.000043	1.16	966.37	125.72	0.06
Crabtree	Reach 1	13727	Max	EC3yr0416	627.32	4.27	12.36		12.42	0.000315	2	328.12	78.13	0.15
Crabtree	Reach 1	13727	Max	EC25yr0416	983.28	4.27	15.87		15.9	0.00011	1.6	695.94	120.15	0.09
Crabtree	Reach 1	13727	Max	newEC25	1027.39	4.27	15.78		15.82	0.000125	1.7	685.09	119.72	0.1
Crabtree	Reach 1	13727	Max	newEC100	1045.19	4.27	17.98		18	0.000049	1.24	959.32	125.72	0.07
Crabtree	Reach 1	13727	Max	newEC3	628.34	4.27	12.23		12.29	0.000343	2.07	317.69	77.14	0.15
	Reach 1													
Crabtree	Reach 1	13665	Max	EC100	989.53	4.25	18.04		18.05	0.000036	1.08	1033.75	125.5	0.06
Crabtree	Reach 1	13665	Max	EC3yr0416	627.6	4.25	12.35		12.4	0.000272	1.88	363.04	97.85	0.14
Crabtree	Reach 1	13665	Max	EC25yr0416	991.53	4.25	15.87		15.9	0.000087	1.47	762.57	119.37	0.09
Crabtree	Reach 1	13665	Max	newEC25	1038.54	4.25	15.78		15.81	0.0001	1.56	751.74	118.87	0.09
Crabtree	Reach 1	13665	Max	newEC100	1052.77	4.25	17.98		18	0.000041	1.16	1026.65	125.5	0.06
Crabtree	Reach 1	13665	Max	newEC3	628.54	4.25	12.22		12.27	0.000301	1.94	349.98	94.92	0.15
	Reach 1													
Crabtree	Reach 1	13596	Max	EC100	988.85	4.23	18.03		18.05	0.000041	1.15	977.7	122.2	0.06
Crabtree	Reach 1	13596	Max	EC3yr0416	629.74	4.23	12.33		12.38	0.000307	1.99	346.54	102.54	0.15
Crabtree	Reach 1	13596	Max	EC25yr0416	1006.24	4.23	15.86		15.89	0.0001	1.57	722.35	109.99	0.09

Crabtree	Reach 1	13596	Max	newEC25	1056.38	4.23	15.76		15.8	0.000115	1.67	712.15	109.72	0.1
Crabtree	Reach 1	13596	Max	newEC100	1061.98	4.23	17.98		18	0.000048	1.25	970.59	122.2	0.07
Crabtree	Reach 1	13596	Max	newEC3	630.03	4.23	12.19		12.25	0.000341	2.06	332.38	102.32	0.15
	Reach 1													
Crabtree	Reach 1	13538	Max	EC100	952.46	4.21	18.04		18.05	0.00003	1.01	1039.87	111.62	0.05
Crabtree	Reach 1	13538	Max	EC3yr0416	622.36	4.21	12.33		12.37	0.000214	1.71	407.18	106.3	0.12
Crabtree	Reach 1	13538	Max	EC25yr0416	986.11	4.21	15.86		15.88	0.000074	1.38	796.58	111.62	0.08
Crabtree	Reach 1	13538	Max	newEC25	1037.21	4.21	15.78		15.79	0.00004	1.01	1135.31	166.21	0.06
Crabtree	Reach 1	13538	Max	newEC100	1027.83	4.21	17.99		17.99	0.000016	0.74	1502.23	166.21	0.04
Crabtree	Reach 1	13538	Max	newEC3	624.23	4.21	12.21		12.23	0.000136	1.36	546.95	160.4	0.1
	Reach 1													
Crabtree	Reach 1	13465	Max	EC100	915.11	4.19	18.03		18.04	0.000033	1.04	976.93	107.05	0.05
Crabtree	Reach 1	13465	Max	EC3yr0416	606.17	4.19	12.3		12.35	0.000248	1.79	369.6	96.3	0.13
Crabtree	Reach 1	13465	Max	EC25yr0416	956.56	4.19	15.84		15.87	0.000083	1.43	742.8	107.05	0.08
Crabtree	Reach 1	13465	Max	newEC25	1007.08	4.19	15.77		15.79	0.000035	0.95	1173.18	173.17	0.05
Crabtree	Reach 1	13465	Max	newEC100	984.24	4.19	17.98		17.99	0.000014	0.68	1555.87	173.17	0.04
Crabtree	Reach 1	13465	Max	newEC3	612.38	4.19	12.2		12.22	0.000122	1.28	560.8	161.86	0.09
	Reach 1													
Crabtree	Reach 1	13424	Max	EC100	896.98	4.18	18.02		18.04	0.000033	1.05	959.81	107.07	0.05
Crabtree	Reach 1	13424	Max	EC3yr0416	597.42	4.18	12.3		12.34	0.000228	1.77	364.94	81.53	0.13
Crabtree	Reach 1	13424	Max	EC25yr0416	940.03	4.18	15.83		15.86	0.000083	1.46	725.35	107.07	0.08
Crabtree	Reach 1	13424	Max	newEC25	996.17	4.18	15.77		15.78	0.000035	0.96	1157.63	172.37	0.05
Crabtree	Reach 1	13424	Max	newEC100	968.42	4.18	17.98		17.99	0.000014	0.69	1538.75	172.37	0.04
Crabtree	Reach 1	13424	Max	newEC3	608.95	4.18	12.2		12.22	0.000112	1.26	562.18	145.75	0.09
	Reach 1													
Crabtree	Reach 1	13325	Max	EC100	841.46	4.15	18.03		18.04	0.000027	0.96	969.91	101.62	0.05
Crabtree	Reach 1	13325	Max	EC3yr0416	573.45	4.15	12.29		12.32	0.000192	1.64	388.72	95.05	0.12
Crabtree	Reach 1	13325	Max	EC25yr0416	888.14	4.15	15.84		15.86	0.000067	1.32	747.37	101.62	0.08
Crabtree	Reach 1	13325	Max	newEC25	946.82	4.15	15.77		15.78	0.000027	0.86	1232.88	175.18	0.05
Crabtree	Reach 1	13325	Max	newEC100	908.11	4.15	17.98		17.99	0.00001	0.61	1620.27	175.18	0.03
Crabtree	Reach 1	13325	Max	newEC3	596.93	4.15	12.19		12.21	0.000095	1.18	608	167.24	0.08
	Reach 1													
Crabtree	Reach 1	13227	Max	EC100	776.29	4.13	18.03		18.04	0.000022	0.89	973.34	100.72	0.05
Crabtree	Reach 1	13227	Max	EC3yr0416	550.24	4.13	12.28		12.31	0.00017	1.56	396.09	97	0.11
Crabtree	Reach 1	13227	Max	EC25yr0416	825.75	4.13	15.84		15.86	0.000056	1.22	752.6	100.72	0.07

Crabtree	Reach 1	13227	Max	newEC25	883.09	4.12	15.77		15.78	0.000027	0.87	1174.7	173.05	0.05
Crabtree	Reach 1	13227	Max	newEC100	840.42	4.12	17.98		17.99	0.00001	0.6	1557.85	173.05	0.03
Crabtree	Reach 1	13227	Max	newEC3	580.46	4.12	12.18		12.2	0.000118	1.33	556	169.05	0.09
	Reach 1													
Crabtree	Reach 1	13120	Max	EC100	709.11	4.1	18.02		18.03	0.000017	0.78	1015.05	104.33	0.04
Crabtree	Reach 1	13120	Max	EC3yr0416	529.82	4.1	12.26		12.29	0.000145	1.47	413.76	104.33	0.1
Crabtree	Reach 1	13120	Max	EC25yr0416	756.99	4.1	15.83		15.85	0.000043	1.08	786.17	104.33	0.06
Crabtree	Reach 1	13120	Max	newEC25	818.13	4.1	15.76		15.77	0.000022	0.78	1208.51	174.94	0.04
Crabtree	Reach 1	13120	Max	newEC100	776.75	4.1	17.98		17.98	0.000008	0.54	1596.22	174.94	0.03
Crabtree	Reach 1	13120	Max	newEC3	565.65	4.1	12.17		12.19	0.0001	1.25	579.56	174.94	0.09
	Reach 1													
Crabtree	Reach 1	13077	Max	EC100	680.37	4.09	18.02		18.03	0.000014	0.7	1068.91	104.34	0.04
Crabtree	Reach 1	13077	Max	EC3yr0416	516.52	4.09	12.26		12.28	0.000101	1.22	467.63	104.34	0.09
Crabtree	Reach 1	13077	Max	EC25yr0416	724.19	4.09	15.83		15.84	0.000033	0.95	840	104.34	0.05
Crabtree	Reach 1	13077	Max	newEC25	790.56	4.08	15.75		15.76	0.000017	0.68	1278.73	174.33	0.04
Crabtree	Reach 1	13077	Max	newEC100	753.08	4.08	17.97		17.98	0.000007	0.49	1665.64	174.33	0.02
Crabtree	Reach 1	13077	Max	newEC3	555.07	4.08	12.16		12.17	0.00007	1.02	652.04	174.33	0.07
	Reach 1													
Crabtree	Reach 1	13045	Max	EC100	660.14	4.08	18.02		18.03	0.000012	0.66	1120.14	117.74	0.03
Crabtree	Reach 1	13045	Max	EC3yr0416	505.34	4.08	12.25		12.27	0.000123	1.35	440.56	117.74	0.09
Crabtree	Reach 1	13045	Max	EC25yr0416	698.26	4.08	15.82		15.83	0.000031	0.92	861.52	117.74	0.05
Crabtree	Reach 1	13045	Max	newEC25	768.6	4.08	15.76		15.77	0.000014	0.63	1347.06	182.25	0.04
Crabtree	Reach 1	13045	Max	newEC100	734.1	4.08	17.98		17.98	0.000006	0.46	1751.12	182.25	0.02
Crabtree	Reach 1	13045	Max	newEC3	547.49	4.08	12.16		12.17	0.000059	0.96	691.54	182.25	0.07
	Reach 1													
Crabtree	Reach 1	12902	Max	EC100	606.51	4.04	18.01		18.02	0.00001	0.61	1107	113.6	0.03
Crabtree	Reach 1	12902	Max	EC3yr0416	482.47	4.04	12.22		12.24	0.000103	1.27	449.2	113.6	0.09
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16

Crabtree	Reach 1	12782	Max	newEC25	636.32	4.01	15.75		15.75	0.000012	0.59	1258.1	181.69	0.03
Crabtree	Reach 1	12782	Max	newEC100	623.04	4.01	17.97		17.97	0.000005	0.42	1661.77	181.69	0.02
Crabtree	Reach 1	12782	Max	newEC3	512.73	4.01	12.14		12.15	0.000076	1.11	602.11	181.69	0.08
	Reach 1													
Crabtree	Reach 1	12697	Max	EC100	540.52	3.99	18.01		18.02	0.000009	0.57	1041.48	107.21	0.03
Crabtree	Reach 1	12697	Max	EC3yr0416	451.37	3.99	12.21		12.23	0.000106	1.23	419.35	105.52	0.09
Crabtree	Reach 1	12697	Max	EC25yr0416	550.51	3.99	15.81		15.82	0.000022	0.76	805.55	107.21	0.04
Crabtree	Reach 1	12697	Max	newEC25	603.01	3.98	15.75		15.75	0.000011	0.55	1259.15	181.65	0.03
Crabtree	Reach 1	12697	Max	newEC100	594.38	3.98	17.97		17.97	0.000004	0.4	1662.64	181.65	0.02
Crabtree	Reach 1	12697	Max	newEC3	507.04	3.98	12.13		12.14	0.000075	1.07	602.58	179.51	0.07
	Reach 1													
Crabtree	Reach 1	12648	Max	EC100	526.43	3.97	18.01		18.01	0.000008	0.53	1093.96	107.8	0.03
Crabtree	Reach 1	12648	Max	EC3yr0416	442.44	3.97	12.2		12.21	0.000079	1.07	467.59	107.8	0.08
Crabtree	Reach 1	12648	Max	EC25yr0416	533.15	3.97	15.81		15.81	0.000018	0.69	856.53	107.8	0.04
Crabtree	Reach 1	12648	Max	newEC25	583.94	3.97	15.74		15.75	0.000009	0.5	1319.37	181.23	0.03
Crabtree	Reach 1	12648	Max	newEC100	578.27	3.97	17.97		17.97	0.000004	0.37	1722.14	181.23	0.02
Crabtree	Reach 1	12648	Max	newEC3	502.58	3.97	12.12		12.13	0.000058	0.94	663.41	181.23	0.07
	Reach 1													
Crabtree	Reach 1	12624	Max	EC100	520.62	3.97	18.01		18.01	0.000008	0.54	1058.34	105.42	0.03
Crabtree	Reach 1	12624	Max	EC3yr0416	437.03	3.97	12.2		12.21	0.000085	1.11	445.63	105.42	0.08
Crabtree	Reach 1	12624	Max	EC25yr0416	526.19	3.97	15.81		15.81	0.000018	0.7	826.13	105.42	0.04
Crabtree	Reach 1	12624	Max	newEC25	573.15	3.96	15.74		15.75	0.000009	0.49	1302.39	179.74	0.03
Crabtree	Reach 1	12624	Max	newEC100	568.41	3.96	17.97		17.97	0.000004	0.36	1701.88	179.74	0.02
Crabtree	Reach 1	12624	Max	newEC3	499.32	3.96	12.12		12.13	0.000059	0.95	651.54	179.74	0.07
	Reach 1													
Crabtree	Reach 1	12575	Max	EC100	508.94	3.95	18.01		18.01	0.000009	0.55	1025.59	103.72	0.03
Crabtree	Reach 1	12575	Max	EC3yr0416	431.19	3.95	12.19		12.21	0.000091	1.14	422.37	103.72	0.08
Crabtree	Reach 1	12575	Max	EC25yr0416	512.74	3.95	15.8		15.81	0.000019	0.71	797.09	103.72	0.04
Crabtree	Reach 1	12575	Max	newEC25	566.06	3.95	15.73		15.73	0.000009	0.5	1279.25	179.1	0.03
Crabtree	Reach 1	12575	Max	newEC100	563.83	3.95	17.95		17.96	0.000004	0.37	1677.72	179.1	0.02
Crabtree	Reach 1	12575	Max	newEC3	500.32	3.95	12.11		12.12	0.000063	0.97	630.95	179.1	0.07
	Reach 1													
Crabtree	Reach 1	12517	Max	EC100	492.6	3.94	18.01		18.01	0.000008	0.53	1026.61	101.93	0.03
Crabtree	Reach 1	12517	Max	EC3yr0416	422.43	3.94	12.19		12.21	0.000079	1.09	434.41	99.38	0.08
Crabtree	Reach 1	12517	Max	EC25yr0416	493.5	3.94	15.81		15.81	0.000017	0.68	802.12	101.93	0.04

Crabtree	Reach 1	12517	Max	newEC25	561.79	3.93	15.74		15.74	0.000009	0.5	1269.1	178.51	0.03
Crabtree	Reach 1	12517	Max	newEC100	563.01	3.93	17.96		17.96	0.000004	0.37	1666.03	178.51	0.02
Crabtree	Reach 1	12517	Max	newEC3	503.33	3.93	12.11		12.12	0.000066	1.01	623.02	175.82	0.07
	Reach 1													
Crabtree	Reach 1	12501	Max	EC100	489.66	3.93	18.01		18.01	0.000007	0.51	1056.63	103.7	0.03
Crabtree	Reach 1	12501	Max	EC3yr0416	421.3	3.93	12.18		12.2	0.000073	1.05	452.85	103.7	0.07
Crabtree	Reach 1	12501	Max	EC25yr0416	489.45	3.93	15.8		15.81	0.000016	0.66	828.07	103.7	0.04
Crabtree	Reach 1	12501	Max	newEC25	560.21	3.93	15.73		15.74	0.000009	0.5	1267.41	175.11	0.03
Crabtree	Reach 1	12501	Max	newEC100	562.79	3.93	17.96		17.96	0.000004	0.38	1656.98	175.11	0.02
Crabtree	Reach 1	12501	Max	newEC3	504.17	3.93	12.11		12.12	0.000063	1	632.21	175.11	0.07
	Reach 1													
Crabtree	Reach 1	12487	Max	EC100	485.78	3.93	18.01		18.01	0.000007	0.51	1051.07	101.8	0.03
Crabtree	Reach 1	12487	Max	EC3yr0416	419.53	3.93	12.19		12.2	0.000072	1.03	458.45	101.8	0.07
Crabtree	Reach 1	12487	Max	EC25yr0416	485.29	3.93	15.8		15.81	0.000016	0.65	826.76	101.8	0.04
Crabtree	Reach 1	12487	Max	newEC25	558.08	3.93	15.73		15.74	0.000009	0.49	1293.22	177.95	0.03
Crabtree	Reach 1	12487	Max	newEC100	560.98	3.93	17.96		17.96	0.000004	0.37	1689.08	177.95	0.02
Crabtree	Reach 1	12487	Max	newEC3	505.29	3.93	12.11		12.12	0.000062	0.98	647.68	177.95	0.07
	Reach 1													
Crabtree	Reach 1	12467	Max	EC100	482.41	3.92	18.01		18.01	0.000008	0.54	1001.52	100.61	0.03
Crabtree	Reach 1	12467	Max	EC3yr0416	417.36	3.92	12.18		12.2	0.000087	1.13	415.46	100.61	0.08
Crabtree	Reach 1	12467	Max	EC25yr0416	480.77	3.92	15.8		15.81	0.000017	0.69	779.76	100.61	0.04
Crabtree	Reach 1	12467	Max	newEC25	556.6	3.92	15.73		15.74	0.000009	0.51	1260.56	178.74	0.03
Crabtree	Reach 1	12467	Max	newEC100	560.91	3.92	17.96		17.96	0.000004	0.38	1658.25	178.74	0.02
Crabtree	Reach 1	12467	Max	newEC3	505.82	3.92	12.1		12.12	0.00007	1.04	611.78	178.74	0.07
	Reach 1													
Crabtree	Reach 1	12395	Max	EC100	472.72	3.9	18		18.01	0.000008	0.54	977	97.7	0.03
Crabtree	Reach 1	12395	Max	EC3yr0416	419.72	3.9	12.17		12.19	0.000089	1.15	406.92	97.7	0.08
Crabtree	Reach 1	12395	Max	EC25yr0416	469.91	3.9	15.8		15.8	0.000017	0.69	761.49	97.7	0.04
Crabtree	Reach 1	12395	Max	newEC25	553.84	3.9	15.73		15.73	0.000009	0.5	1258.24	172.84	0.03
Crabtree	Reach 1	12395	Max	newEC100	560.65	3.9	17.96		17.96	0.000004	0.38	1643.02	172.84	0.02
Crabtree	Reach 1	12395	Max	newEC3	514.89	3.9	12.09		12.1	0.000064	1	629.81	172.84	0.07
	Reach 1													
Crabtree	Reach 1	12334	Max	EC100	469.12	3.88	18		18	0.000008	0.52	1011.57	103.7	0.03
Crabtree	Reach 1	12334	Max	EC3yr0416	425.86	3.88	12.16		12.18	0.0001	1.17	405.67	103.7	0.08
Crabtree	Reach 1	12334	Max	EC25yr0416	466.34	3.88	15.79		15.8	0.000017	0.66	782.73	103.7	0.04

Crabtree	Reach 1	12334	Max	newEC25	557.58	3.88	15.72		15.73	0.000009	0.49	1268.62	177.55	0.03
Crabtree	Reach 1	12334	Max	newEC100	566.15	3.88	17.95		17.95	0.000004	0.37	1664.09	177.55	0.02
Crabtree	Reach 1	12334	Max	newEC3	527.55	3.88	12.08		12.1	0.000072	1.03	622.06	177.55	0.07
	Reach 1													
Crabtree	Reach 1	12224	Max	EC100	471.26	3.85	18		18	0.000009	0.56	937.77	97.31	0.03
Crabtree	Reach 1	12224	Max	EC3yr0416	440.89	3.85	12.14		12.16	0.000123	1.3	367.47	96.95	0.09
Crabtree	Reach 1	12224	Max	EC25yr0416	472.86	3.85	15.79		15.79	0.00002	0.73	722.74	97.31	0.04
Crabtree	Reach 1	12224	Max	newEC25	586.09	3.85	15.71		15.72	0.00001	0.53	1228.5	173.63	0.03
Crabtree	Reach 1	12224	Max	newEC100	595.69	3.85	17.94		17.95	0.000005	0.4	1615.76	173.63	0.02
Crabtree	Reach 1	12224	Max	newEC3	552.35	3.85	12.06		12.08	0.000084	1.11	594.33	171.36	0.08
	Reach 1													
Crabtree	Reach 1	12141	Max	EC100	478.02	3.83	18		18	0.000009	0.56	953.48	101.7	0.03
Crabtree	Reach 1	12141	Max	EC3yr0416	447.48	3.83	12.13		12.15	0.000131	1.32	361.75	86.29	0.1
Crabtree	Reach 1	12141	Max	EC25yr0416	487.2	3.83	15.78		15.79	0.000022	0.75	728.56	101.7	0.04
Crabtree	Reach 1	12141	Max	newEC25	613.98	3.83	15.72		15.72	0.000012	0.56	1205.64	176.26	0.03
Crabtree	Reach 1	12141	Max	newEC100	622.05	3.83	17.95		17.95	0.000005	0.42	1598.84	176.26	0.02
Crabtree	Reach 1	12141	Max	newEC3	567.99	3.83	12.05		12.07	0.0001	1.18	566.79	159.84	0.09
	Reach 1													
Crabtree	Reach 1	12119	Max	EC100	480.67	3.82	17.99		18	0.000009	0.56	959.7	99.7	0.03
Crabtree	Reach 1	12119	Max	EC3yr0416	448.33	3.82	12.12		12.15	0.000122	1.28	378.9	85.06	0.09
Crabtree	Reach 1	12119	Max	EC25yr0416	492.39	3.82	15.78		15.79	0.000022	0.74	739.13	99.7	0.04
Crabtree	Reach 1	12119	Max	newEC25	621.87	3.82	15.71		15.72	0.000012	0.56	1231.09	175.64	0.03
Crabtree	Reach 1	12119	Max	newEC100	629.47	3.82	17.94		17.95	0.000005	0.42	1623.08	175.64	0.02
Crabtree	Reach 1	12119	Max	newEC3	571.88	3.82	12.05		12.06	0.000093	1.15	593.55	160.39	0.08
	Reach 1													
Crabtree	Reach 1	12087	Max	EC100	484.94	3.81	17.99		18	0.000011	0.59	914.24	97.8	0.03
Crabtree	Reach 1	12087	Max	EC3yr0416	450.81	3.81	12.12		12.14	0.000138	1.36	350.54	75.32	0.1
Crabtree	Reach 1	12087	Max	EC25yr0416	502.15	3.81	15.78		15.79	0.000026	0.8	697.72	97.8	0.05
Crabtree	Reach 1	12087	Max	newEC25	635.88	3.81	15.71		15.72	0.000013	0.57	1203.4	175.09	0.03
Crabtree	Reach 1	12087	Max	newEC100	640.84	3.81	17.94		17.95	0.000006	0.43	1594.17	175.09	0.02
Crabtree	Reach 1	12087	Max	newEC3	580.47	3.81	12.05		12.06	0.000098	1.19	574.35	151.22	0.08
	Reach 1													
Crabtree	Reach 1	12013	Max	EC100	500.08	3.79	17.99		18	0.000012	0.63	867.61	89.7	0.03
Crabtree	Reach 1	12013	Max	EC3yr0416	454.46	3.79	12.1		12.13	0.000134	1.36	346.62	74.23	0.1
Crabtree	Reach 1	12013	Max	EC25yr0416	527.05	3.79	15.77		15.78	0.000029	0.86	668.72	89.7	0.05

Crabtree	Reach 1	12013	Max	newEC25	658.73	3.79	15.71		15.72	0.000013	0.58	1215.04	170.53	0.03
Crabtree	Reach 1	12013	Max	newEC100	664.13	3.79	17.94		17.95	0.000006	0.44	1595.79	170.53	0.02
Crabtree	Reach 1	12013	Max	newEC3	589.19	3.79	12.04		12.06	0.00009	1.14	597.15	153.66	0.08
	Reach 1													
Crabtree	Reach 1	11983	Max	EC100	508.37	3.78	17.99		17.99	0.000011	0.61	903.73	91.54	0.03
Crabtree	Reach 1	11983	Max	EC3yr0416	456.01	3.78	12.1		12.13	0.000118	1.27	371.1	79.81	0.09
Crabtree	Reach 1	11983	Max	EC25yr0416	540.07	3.78	15.77		15.78	0.000027	0.84	700.67	91.54	0.05
Crabtree	Reach 1	11983	Max	newEC25	669.08	3.78	15.71		15.71	0.000007	0.44	1467.31	170.63	0.02
Crabtree	Reach 1	11983	Max	newEC100	673.92	3.78	17.94		17.95	0.000004	0.36	1848.2	170.63	0.02
Crabtree	Reach 1	11983	Max	newEC3	589.9	3.78	12.05		12.05	0.00003	0.65	848.86	157.83	0.05
	Reach 1													
Crabtree	Reach 1	11948	Max	EC100	624.02	3.77	17.98		17.99	0.00002	0.82	842.1	87.8	0.04
Crabtree	Reach 1	11948	Max	EC3yr0416	499.73	3.77	12.08		12.11	0.000201	1.6	329.35	75.88	0.12
Crabtree	Reach 1	11948	Max	EC25yr0416	642.54	3.77	15.75		15.77	0.000048	1.1	646.79	87.8	0.06
Crabtree	Reach 1	11948	Max	newEC25	764.68	3.77	15.7		15.7	0.000019	0.72	1190.26	167.84	0.04
Crabtree	Reach 1	11948	Max	newEC100	789.68	3.77	17.93		17.94	0.000008	0.55	1565.51	167.84	0.03
Crabtree	Reach 1	11948	Max	newEC3	629.83	3.77	12.03		12.05	0.000112	1.29	579.92	155.48	0.09
	Reach 1													
Crabtree	Reach 1	11909	Max	EC100	657.67	3.76	17.97		17.98	0.000023	0.89	821.28	85.73	0.05
Crabtree	Reach 1	11909	Max	EC3yr0416	509	3.76	12.06		12.1	0.000224	1.74	314.76	83	0.13
Crabtree	Reach 1	11909	Max	EC25yr0416	679.93	3.76	15.74		15.76	0.000056	1.21	630.06	85.73	0.07
Crabtree	Reach 1	11909	Max	newEC25	788.7	3.76	15.7		15.71	0.000016	0.67	1278.59	164.35	0.04
Crabtree	Reach 1	11909	Max	newEC100	815.03	3.76	17.94		17.94	0.000008	0.53	1645.92	164.35	0.03
Crabtree	Reach 1	11909	Max	newEC3	632.98	3.76	12.03		12.04	0.00007	1.04	675.46	161.09	0.07
	Reach 1													
Crabtree	Reach 1	11846	Max	EC100	716.99	3.74	17.96		17.97	0.000025	0.94	850.38	85.7	0.05
Crabtree	Reach 1	11846	Max	EC3yr0416	525.8	3.74	12.04		12.08	0.000192	1.67	343.6	84.79	0.12
Crabtree	Reach 1	11846	Max	EC25yr0416	738.89	3.74	15.73		15.75	0.000058	1.25	658.79	85.7	0.07
Crabtree	Reach 1	11846	Max	newEC25	828.52	3.74	15.69		15.7	0.000023	0.82	1150.34	159.13	0.05
Crabtree	Reach 1	11846	Max	newEC100	856.45	3.74	17.93		17.93	0.000011	0.63	1506.63	159.13	0.03
Crabtree	Reach 1	11846	Max	newEC3	633.99	3.74	12.01		12.03	0.000116	1.37	565.64	158.18	0.09
	Reach 1													
Crabtree	Reach 1	11777	Max	EC100	800.87	3.72	17.95		17.96	0.000033	1.06	835.33	87.7	0.05
Crabtree	Reach 1	11777	Max	EC3yr0416	547.78	3.72	12.01		12.07	0.000263	1.85	317.29	80.99	0.14
Crabtree	Reach 1	11777	Max	EC25yr0416	810.39	3.72	15.7		15.73	0.000078	1.41	638.52	87.7	0.08

Crabtree	Reach 1	11777	Max	newEC25	882.38	3.72	15.69		15.7	0.000029	0.87	1128.41	162.5	0.05
Crabtree	Reach 1	11777	Max	newEC100	909.97	3.72	17.93		17.93	0.000013	0.66	1492.58	162.5	0.03
Crabtree	Reach 1	11777	Max	newEC3	632.34	3.72	12		12.03	0.000144	1.41	532.32	155.6	0.1
	Reach 1													
Crabtree	Reach 1	11719	Max	EC100	894.19	3.71	17.92		17.94	0.00004	1.16	850.19	87.7	0.06
Crabtree	Reach 1	11719	Max	EC3yr0416	569.01	3.71	11.99		12.04	0.000269	1.86	329.61	87.07	0.14
Crabtree	Reach 1	11719	Max	EC25yr0416	884.26	3.71	15.67		15.7	0.000089	1.5	652.6	87.7	0.09
Crabtree	Reach 1	11719	Max	newEC25	935.04	3.71	15.66		15.68	0.000031	0.91	1131.52	159.79	0.05
Crabtree	Reach 1	11719	Max	newEC100	968.49	3.71	17.91		17.92	0.000014	0.7	1490.47	159.79	0.04
Crabtree	Reach 1	11719	Max	newEC3	628.55	3.71	11.99		12.01	0.000125	1.33	545.48	152.41	0.1
	Reach 1													
Crabtree	Reach 1	11683	Max	EC100	959.11	3.7	17.91		17.93	0.000041	1.16	911.98	95.7	0.06
Crabtree	Reach 1	11683	Max	EC3yr0416	582.91	3.7	11.97		12.02	0.000271	1.85	344.24	93.55	0.14
Crabtree	Reach 1	11683	Max	EC25yr0416	937.13	3.7	15.66		15.69	0.00009	1.49	696.03	95.7	0.09
Crabtree	Reach 1	11683	Max	newEC25	975.03	3.7	15.66		15.67	0.000032	0.93	1154	160.65	0.05
Crabtree	Reach 1	11683	Max	newEC100	1016.45	3.7	17.91		17.92	0.000015	0.73	1515.04	160.65	0.04
Crabtree	Reach 1	11683	Max	newEC3	624.5	3.7	11.99		12.01	0.000117	1.3	564.4	158.55	0.09
	Reach 1													
Crabtree	Reach 1	11660	Max	EC100	996.97	3.69	17.9		17.92	0.000045	1.24	888.92	91.16	0.06
Crabtree	Reach 1	11660	Max	EC3yr0416	589.32	3.69	11.96		12.01	0.00025	1.83	347.69	91.16	0.13
Crabtree	Reach 1	11660	Max	EC25yr0416	966.28	3.69	15.64		15.68	0.000096	1.56	682.92	91.16	0.09
Crabtree	Reach 1	11660	Max	newEC25	996.01	3.69	15.65		15.67	0.000035	0.98	1137.24	159.57	0.06
Crabtree	Reach 1	11660	Max	newEC100	1044.44	3.69	17.9		17.91	0.000016	0.77	1496.13	159.57	0.04
Crabtree	Reach 1	11660	Max	newEC3	621.61	3.69	11.98		12.01	0.000124	1.35	551.54	159.57	0.1
	Reach 1													
Crabtree	Reach 1	11638	Max	EC100	1039.33	3.68	17.89		17.91	0.000048	1.27	910.41	95.7	0.07
Crabtree	Reach 1	11638	Max	EC3yr0416	596.01	3.68	11.95		12	0.000282	1.89	341.89	95.7	0.14
Crabtree	Reach 1	11638	Max	EC25yr0416	998.58	3.68	15.63		15.66	0.000102	1.6	693.83	95.7	0.09
Crabtree	Reach 1	11638	Max	newEC25	1025.57	3.68	15.63		15.65	0.000055	1.17	983.24	146.01	0.07
Crabtree	Reach 1	11638	Max	newEC100	1084.78	3.68	17.89		17.9	0.000025	0.91	1312.57	146.01	0.05
Crabtree	Reach 1	11638	Max	newEC3	620.25	3.68	11.96		11.99	0.00021	1.63	446.69	146.01	0.12
	Reach 1													
Crabtree	Reach 1	11592	Max	EC100	1131.93	3.67	17.87		17.89	0.000062	1.44	875.07	91.7	0.07
Crabtree	Reach 1	11592	Max	EC3yr0416	614.16	3.67	11.93		11.99	0.000308	1.98	330.48	91.7	0.15
Crabtree	Reach 1	11592	Max	EC25yr0416	1070.68	3.67	15.59		15.64	0.000127	1.78	666.84	91.7	0.1

Crabtree	Reach 1	11592	Max	newEC25	1106.92	3.67	15.58		15.63	0.000137	1.85	665.53	91.7	0.11
Crabtree	Reach 1	11592	Max	newEC100	1189.76	3.67	17.85		17.88	0.000069	1.51	873.45	91.7	0.08
Crabtree	Reach 1	11592	Max	newEC3	631.89	3.67	11.92		11.98	0.000328	2.04	329.9	91.7	0.15
	Reach 1													
Crabtree	Reach 1	11533	Max	EC100	1263.63	3.65	17.82		17.86	0.000086	1.69	836.09	90.43	0.09
Crabtree	Reach 1	11533	Max	EC3yr0416	639.4	3.65	11.89		11.96	0.000364	2.18	305.6	73.37	0.16
Crabtree	Reach 1	11533	Max	EC25yr0416	1169.19	3.65	15.54		15.6	0.000175	2.07	629.81	90.43	0.12
Crabtree	Reach 1	11533	Max	newEC25	1193.83	3.65	15.53		15.59	0.000183	2.12	628.6	90.43	0.12
Crabtree	Reach 1	11533	Max	newEC100	1308.42	3.65	17.8		17.85	0.000093	1.75	834.46	90.43	0.09
Crabtree	Reach 1	11533	Max	newEC3	647.27	3.65	11.89		11.96	0.000374	2.2	305.35	73.24	0.16
	Reach 1													
Crabtree	Reach 1	11487	Max	EC100	1365.67	3.64	17.77		17.81	0.000101	1.8	836.4	91.03	0.09
Crabtree	Reach 1	11487	Max	EC3yr0416	648.1	3.64	11.86		11.93	0.00041	2.23	300.08	80.3	0.17
Crabtree	Reach 1	11487	Max	EC25yr0416	1239.66	3.64	15.48		15.55	0.0002	2.18	628.06	91.03	0.13
Crabtree	Reach 1	11487	Max	newEC25	1255.11	3.64	15.47		15.54	0.000206	2.21	626.97	91.03	0.13
Crabtree	Reach 1	11487	Max	newEC100	1400.93	3.64	17.75		17.8	0.000107	1.85	834.73	91.03	0.1
Crabtree	Reach 1	11487	Max	newEC3	651.66	3.64	11.86		11.93	0.000415	2.24	299.94	80.26	0.17
	Reach 1													
Crabtree	Reach 1	11416	Max	EC100	1527.42	3.62	17.73		17.79	0.000163	2.16	783.63	96.61	0.12
Crabtree	Reach 1	11416	Max	EC3yr0416	653.92	3.62	11.82		11.91	0.000466	2.37	276.13	48.86	0.17
Crabtree	Reach 1	11416	Max	EC25yr0416	1339.01	3.62	15.43		15.53	0.000325	2.6	561.89	96.61	0.16
Crabtree	Reach 1	11416	Max	newEC25	1345.9	3.62	15.42		15.52	0.00033	2.62	560.96	96.61	0.16
Crabtree	Reach 1	11416	Max	newEC100	1550.67	3.62	17.71		17.78	0.000169	2.2	782.04	96.61	0.12
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													

Crabtree	Reach 1	11284	Max	newEC25	1440.11	3.59	15.4		15.48	0.000262	2.34	686.46	122.1	0.14
Crabtree	Reach 1	11284	Max	newEC100	1744.05	3.59	17.69		17.75	0.000138	2	966.04	122.1	0.11
Crabtree	Reach 1	11284	Max	newEC3	672	3.59	11.76		11.84	0.00056	2.35	292.85	78.54	0.19
	Reach 1													
Crabtree	Reach 1	11228	Max	EC100	1803.37	3.57	17.65		17.7	0.000148	1.99	979.88	121.4	0.11
Crabtree	Reach 1	11228	Max	EC3yr0416	670.74	3.57	11.74		11.82	0.000482	2.28	307.02	78.13	0.18
Crabtree	Reach 1	11228	Max	EC25yr0416	1461.38	3.57	15.36		15.43	0.000271	2.26	701.83	121.4	0.15
Crabtree	Reach 1	11228	Max	newEC25	1464.13	3.57	15.35		15.42	0.000273	2.27	700.74	121.4	0.15
Crabtree	Reach 1	11228	Max	newEC100	1813.54	3.57	17.63		17.69	0.00015	2.01	978.02	121.4	0.11
Crabtree	Reach 1	11228	Max	newEC3	672.01	3.57	11.74		11.82	0.000484	2.29	306.91	78.12	0.18
	Reach 1													
Crabtree	Reach 1	11175	Max	EC100	1884.02	3.56	17.66		17.72	0.000148	2.04	990.76	121.5	0.11
Crabtree	Reach 1	11175	Max	EC3yr0416	670.74	3.56	11.74		11.8	0.000399	2.01	347.47	89.06	0.16
Crabtree	Reach 1	11175	Max	EC25yr0416	1486.38	3.56	15.37		15.44	0.000244	2.2	713.01	121.5	0.14
Crabtree	Reach 1	11175	Max	newEC25	1490.96	3.56	15.36		15.43	0.000246	2.21	711.89	121.5	0.14
Crabtree	Reach 1	11175	Max	newEC100	1890.27	3.56	17.64		17.7	0.00015	2.05	989	121.5	0.11
Crabtree	Reach 1	11175	Max	newEC3	672.01	3.56	11.74		11.8	0.000401	2.01	347.34	89.05	0.16
	Reach 1													
Crabtree	Reach 1	11148	Max	EC100	1947.25	3.55	17.63		17.71	0.000194	2.37	911.24	115.37	0.13
Crabtree	Reach 1	11148	Max	EC3yr0416	670.73	3.55	11.71		11.78	0.000462	2.14	322.77	75.15	0.18
Crabtree	Reach 1	11148	Max	EC25yr0416	1495.81	3.55	15.34		15.43	0.000295	2.47	653.92	100.85	0.15
Crabtree	Reach 1	11148	Max	newEC25	1495.65	3.55	15.34		15.42	0.000299	2.47	653.12	100.8	0.15
Crabtree	Reach 1	11148	Max	newEC100	1950.6	3.55	17.61		17.69	0.000197	2.37	909.65	115.37	0.13
Crabtree	Reach 1	11148	Max	newEC3	671.99	3.55	11.71		11.78	0.000465	2.15	322.65	75.15	0.18
	Reach 1													
Crabtree	Reach 1	11141	Max	EC100	1947.25	3.55	17.61		17.71	0.000222	2.49	843.81	110.9	0.14
Crabtree	Reach 1	11141	Max	EC3yr0416	670.73	3.55	11.7		11.78	0.00051	2.23	301.35	66.42	0.18
Crabtree	Reach 1	11141	Max	EC25yr0416	1495.81	3.55	15.33		15.43	0.000347	2.63	594.22	101.13	0.17
Crabtree	Reach 1	11141	Max	newEC25	1495.51	3.55	15.32		15.42	0.000365	2.61	593.32	101.05	0.17
Crabtree	Reach 1	11141	Max	newEC100	1950.6	3.55	17.6		17.69	0.00023	2.48	842.2	110.86	0.14
Crabtree	Reach 1	11141	Max	newEC3	671.99	3.55	11.7		11.77	0.000512	2.23	301.19	66.4	0.18
	Reach 1													
Crabtree	Reach 1	11119	Max	EC100	1947.25	3.55	17.61		17.7	0.000222	2.37	862.88	123.6	0.14
Crabtree	Reach 1	11119	Max	EC3yr0416	670.74	3.55	11.69		11.76	0.000445	2.07	323.81	72.15	0.17
Crabtree	Reach 1	11119	Max	EC25yr0416	1495.8	3.55	15.32		15.42	0.000347	2.47	605.07	84.44	0.16

Crabtree	Reach 1	11119	Max	newEC25	1494.9	3.55	15.32		15.41	0.000348	2.47	604.32	84.38	0.16
Crabtree	Reach 1	11119	Max	newEC100	1950.6	3.55	17.59		17.68	0.000235	2.36	860.82	123.62	0.14
Crabtree	Reach 1	11119	Max	newEC3	672	3.55	11.69		11.76	0.000447	2.08	323.7	72.17	0.17
	Reach 1													
Crabtree	Reach 1	11106	Max	EC100	1947.25	3.55	17.61		17.69	0.000219	2.27	892.93	129.8	0.13
Crabtree	Reach 1	11106	Max	EC3yr0416	670.73	3.55	11.69		11.75	0.000395	1.99	337.26	72.73	0.16
Crabtree	Reach 1	11106	Max	EC25yr0416	1495.8	3.55	15.32		15.41	0.000328	2.4	624.28	87.31	0.16
Crabtree	Reach 1	11106	Max	newEC25	1494.37	3.55	15.32		15.41	0.000328	2.4	623.67	87.22	0.16
Crabtree	Reach 1	11106	Max	newEC100	1950.6	3.55	17.59		17.67	0.000222	2.28	890.46	129.78	0.14
Crabtree	Reach 1	11106	Max	newEC3	671.99	3.55	11.69		11.75	0.000397	1.99	337.24	72.74	0.16
	Reach 1													
Crabtree	Reach 1	11081	Max	EC100	1947.25	3.51	17.61		17.69	0.000194	2.29	857.21	148.8	0.13
Crabtree	Reach 1	11081	Max	EC3yr0416	670.73	3.51	11.68		11.74	0.00041	1.95	343.81	81.64	0.17
Crabtree	Reach 1	11081	Max	EC25yr0416	1495.8	3.51	15.32		15.4	0.00028	2.31	647.92	95.81	0.15
Crabtree	Reach 1	11081	Max	newEC25	1492.73	3.51	15.31		15.4	0.00028	2.31	647.24	95.82	0.15
Crabtree	Reach 1	11081	Max	newEC100	1950.6	3.51	17.59		17.67	0.000196	2.3	855.5	148.77	0.13
Crabtree	Reach 1	11081	Max	newEC3	671.99	3.51	11.68		11.74	0.000412	1.96	343.56	81.65	0.17
	Reach 1													
Crabtree	Reach 1	11072	Max	EC100	1947.25	3.51	17.57		17.69	0.000252	2.68	726.25	155.9	0.15
Crabtree	Reach 1	11072	Max	EC3yr0416	670.71	3.51	11.66		11.73	0.000506	2.24	299.95	79.16	0.18
Crabtree	Reach 1	11072	Max	EC25yr0416	1495.8	3.51	15.29		15.4	0.000351	2.67	560.69	101.17	0.17
Crabtree	Reach 1	11072	Max	newEC25	1491.83	3.51	15.29		15.39	0.000326	2.61	571.29	100.97	0.16
Crabtree	Reach 1	11072	Max	newEC100	1950.6	3.51	17.56		17.67	0.00024	2.65	735.97	155.9	0.15
Crabtree	Reach 1	11072	Max	newEC3	671.99	3.51	11.66		11.73	0.000447	2.16	310.87	79.19	0.18
	Reach 1													
Crabtree	Reach 1	11060	Max	EC100	1947.25	3.51	17.51		17.68	0.000329	3.31	587.68	167.19	0.17
Crabtree	Reach 1	11060	Max	EC3yr0416	670.72	3.51	11.64		11.73	0.000451	2.38	282.04	74.12	0.18
Crabtree	Reach 1	11060	Max	EC25yr0416	1495.78	3.51	15.23		15.39	0.000411	3.19	469.09	93.9	0.19
Crabtree	Reach 1	11060	Max	newEC25	1490.77	3.51	15.23		15.39	0.000409	3.18	468.85	93.87	0.19
Crabtree	Reach 1	11060	Max	newEC100	1950.6	3.51	17.49		17.67	0.000331	3.32	588.89	167.19	0.17
Crabtree	Reach 1	11060	Max	newEC3	671.97	3.51	11.64		11.72	0.000453	2.38	281.97	74.11	0.18
	Reach 1													
Crabtree	Reach 1	11044	Max	EC100	1947.25	3.51	17.3	9.88	17.68	0.000661	4.96	392.88	160.9	0.25
Crabtree	Reach 1	11044	Max	EC3yr0416	670.7	3.51	11.55	7.43	11.72	0.000646	3.22	208.42	60.21	0.22
Crabtree	Reach 1	11044	Max	EC25yr0416	1495.75	3.51	15.05	9.1	15.39	0.000767	4.67	320.25	104.45	0.26

Crabtree	Reach 1	11044	Max	newEC25	1486.49	3.51	15.05	9.08	15.38	0.000758	4.64	320.19	104.44	0.26
Crabtree	Reach 1	11044	Max	newEC100	1950.6	3.51	17.28	9.89	17.66	0.000667	4.98	392.27	160.9	0.25
Crabtree	Reach 1	11044	Max	newEC3	671.97	3.51	11.55	7.43	11.71	0.000649	3.22	208.37	60.2	0.22
	Reach 1													
Crabtree	Reach 1	11000	Inl											
	Reach 1													
Crabtree	Reach 1	10846	Max	EC100	1947.22	2.91	15.17		15.19	0.000086	1.4	1794.81	428.89	0.08
Crabtree	Reach 1	10846	Max	EC3yr0416	670.43	2.91	10.97		11	0.000201	1.48	475.46	154.88	0.12
Crabtree	Reach 1	10846	Max	EC25yr0416	1494.3	2.91	13.94		13.97	0.00011	1.45	1302.57	369.73	0.09
Crabtree	Reach 1	10846	Max	newEC25	1504.53	2.91	13.93		13.95	0.000113	1.46	1297.51	369.04	0.09
Crabtree	Reach 1	10846	Max	newEC100	1950.6	2.91	15.14		15.17	0.000087	1.4	1784.2	428.25	0.08
Crabtree	Reach 1	10846	Max	newEC3	671.76	2.91	10.96		11	0.000203	1.49	474.64	154.6	0.12
	Reach 1													
Crabtree	Reach 1	10811	Max	EC100	1947.22	1	15.1		15.19	0.000238	2.44	919.94	312.61	0.13
Crabtree	Reach 1	10811	Max	EC3yr0416	670.45	1	10.96		10.99	0.000122	1.42	470.97	64.3	0.09
Crabtree	Reach 1	10811	Max	EC25yr0416	1494.15	1	13.89		13.97	0.000212	2.22	701.05	112.65	0.13
Crabtree	Reach 1	10811	Max	newEC25	1498.68	1	13.87		13.95	0.000215	2.23	699.33	112.11	0.13
Crabtree	Reach 1	10811	Max	newEC100	1950.6	1	15.08		15.17	0.000241	2.46	912.07	307.49	0.13
Crabtree	Reach 1	10811	Max	newEC3	671.75	1	10.96		10.99	0.000122	1.43	470.63	64.29	0.09
	Reach 1													
Crabtree	Reach 1	10788	Max	EC100	1947.21	1	15.03		15.21	0.000659	3.57	663.99	236.01	0.22
Crabtree	Reach 1	10788	Max	EC3yr0416	670.41	1	10.89		10.99	0.00051	2.55	263.49	46.92	0.19
Crabtree	Reach 1	10788	Max	EC25yr0416	1493.78	1	13.78		13.97	0.000734	3.55	452.06	102.84	0.23
Crabtree	Reach 1	10788	Max	newEC25	1497.38	1	13.76		13.96	0.000743	3.57	450.29	102.58	0.23
Crabtree	Reach 1	10788	Max	newEC100	1950.6	1	15		15.18	0.00067	3.59	657.54	233.43	0.22
Crabtree	Reach 1	10788	Max	newEC3	671.71	1	10.89		10.99	0.000513	2.56	263.22	46.88	0.19
	Reach 1													
Crabtree	Reach 1	10762	Max	EC100	1947.21	2.48	14.95		15.19	0.000797	3.99	526.03	131.88	0.24
Crabtree	Reach 1	10762	Max	EC3yr0416	670.4	2.48	10.89		10.98	0.00047	2.44	274.98	46.29	0.18
Crabtree	Reach 1	10762	Max	EC25yr0416	1493.69	2.48	13.75		13.95	0.000723	3.61	414.96	56.11	0.22
Crabtree	Reach 1	10762	Max	newEC25	1496.52	2.48	13.73		13.93	0.000729	3.62	413.99	54.67	0.23
Crabtree	Reach 1	10762	Max	newEC100	1950.6	2.48	14.92		15.17	0.00081	4.01	522.38	131.23	0.24
Crabtree	Reach 1	10762	Max	newEC3	671.7	2.48	10.88		10.97	0.000473	2.45	274.72	46.28	0.18
	Reach 1													
Crabtree	Reach 1	10714	Max	EC100	1947.21	2.23	14.92		15.15	0.000708	3.91	542.95	108.54	0.23

Crabtree	Reach 1	10714	Max	EC3yr0416	670.37	2.23	10.86		10.95	0.000483	2.45	273.57	47.23	0.18
Crabtree	Reach 1	10714	Max	EC25yr0416	1493.52	2.23	13.72		13.91	0.000684	3.56	435.01	78.69	0.22
Crabtree	Reach 1	10714	Max	newEC25	1495.93	2.23	13.7		13.9	0.000692	3.57	433.56	78.61	0.22
Crabtree	Reach 1	10714	Max	newEC100	1950.6	2.23	14.89		15.13	0.000716	3.93	539.93	107.06	0.23
Crabtree	Reach 1	10714	Max	newEC3	671.7	2.23	10.85		10.95	0.000487	2.46	273.29	47.22	0.18
	Reach 1													
Crabtree	Reach 1	10668	Max	EC100	1947.21	2	14.9		15.11	0.000716	3.88	575.72	132.51	0.23
Crabtree	Reach 1	10668	Max	EC3yr0416	670.35	2	10.83		10.93	0.000533	2.57	261.16	44.32	0.19
Crabtree	Reach 1	10668	Max	EC25yr0416	1493.4	2	13.69		13.88	0.000719	3.59	444.22	82.13	0.22
Crabtree	Reach 1	10668	Max	newEC25	1495.6	2	13.67		13.86	0.000728	3.6	442.66	81.84	0.22
Crabtree	Reach 1	10668	Max	newEC100	1950.6	2	14.87		15.09	0.000729	3.91	571.93	131.44	0.23
Crabtree	Reach 1	10668	Max	newEC3	671.68	2	10.82		10.92	0.000537	2.57	260.89	44.31	0.19
	Reach 1													
Crabtree	Reach 1	10599	Max	EC100	1947.21	1.96	14.91		15.06	0.000516	3.3	672.37	154.86	0.2
Crabtree	Reach 1	10599	Max	EC3yr0416	670.33	1.96	10.81		10.89	0.00049	2.37	283.87	58.86	0.18
Crabtree	Reach 1	10599	Max	EC25yr0416	1493.37	1.96	13.68		13.83	0.000561	3.16	515.57	112.2	0.2
Crabtree	Reach 1	10599	Max	newEC25	1495.41	1.96	13.66		13.81	0.000569	3.18	513.36	111.97	0.2
Crabtree	Reach 1	10599	Max	newEC100	1950.6	1.96	14.88		15.03	0.000526	3.32	667.93	153.91	0.2
Crabtree	Reach 1	10599	Max	newEC3	671.66	1.96	10.8		10.89	0.000493	2.38	283.49	58.44	0.18
	Reach 1													
Crabtree	Reach 1	10522	Max	EC100	1947.2	1.91	14.91		15.02	0.000347	2.96	827.69	215.67	0.17
Crabtree	Reach 1	10522	Max	EC3yr0416	670.32	1.91	10.79		10.86	0.000323	2.09	326.69	70.38	0.15
Crabtree	Reach 1	10522	Max	EC25yr0416	1493.4	1.91	13.68		13.79	0.000388	2.86	602.79	155.64	0.17
Crabtree	Reach 1	10522	Max	newEC25	1495.35	1.91	13.66		13.77	0.000393	2.87	599.74	151.89	0.17
Crabtree	Reach 1	10522	Max	newEC100	1950.6	1.91	14.88		15	0.000354	2.98	821.42	214.09	0.17
Crabtree	Reach 1	10522	Max	newEC3	671.65	1.91	10.78		10.85	0.000325	2.1	326.23	70.35	0.15
	Reach 1													
Crabtree	Reach 1	10395	Max	EC100	1947.2	1.84	14.93		14.98	0.000185	2.13	1205.6	277.74	0.12
Crabtree	Reach 1	10395	Max	EC3yr0416	670.28	1.84	10.74		10.81	0.000438	2.26	322.61	120.89	0.17
Crabtree	Reach 1	10395	Max	EC25yr0416	1493.37	1.84	13.69		13.74	0.000232	2.17	881.69	230.37	0.13
Crabtree	Reach 1	10395	Max	newEC25	1495.36	1.84	13.67		13.72	0.000236	2.19	877.12	229.55	0.14
Crabtree	Reach 1	10395	Max	newEC100	1950.59	1.84	14.9		14.95	0.000189	2.15	1197.61	277.43	0.12
Crabtree	Reach 1	10395	Max	newEC3	671.6	1.84	10.73		10.81	0.000441	2.26	321.76	120.73	0.17
	Reach 1													
Crabtree	Reach 1	10368	Max	EC100	1947.21	1.82	14.93		14.97	0.000159	1.92	1362.97	372.46	0.11

Crabtree	Reach 1	10368	Max	EC3yr0416	670.27	1.82	10.74		10.79	0.000357	1.88	368.21	117.99	0.15
Crabtree	Reach 1	10368	Max	EC25yr0416	1493.34	1.82	13.68		13.73	0.000205	1.97	966.82	288.55	0.13
Crabtree	Reach 1	10368	Max	newEC25	1495.36	1.82	13.66		13.71	0.000209	1.98	961.05	288.12	0.13
Crabtree	Reach 1	10368	Max	newEC100	1950.59	1.82	14.9		14.94	0.000157	1.9	1352.25	370.66	0.11
Crabtree	Reach 1	10368	Max	newEC3	671.6	1.82	10.73		10.79	0.00036	1.89	367.37	117.88	0.16
	Reach 1													
Crabtree	Reach 1	10355	Max	EC100	1947.19	1.81	14.86	8.3	14.98	0.000375	2.95	797.1	330.99	0.18
Crabtree	Reach 1	10355	Max	EC3yr0416	670.26	1.81	10.72	5.6	10.78	0.000427	2.1	319.22	67.79	0.17
Crabtree	Reach 1	10355	Max	EC25yr0416	1493.11	1.81	13.61	7.51	13.73	0.000416	2.81	553.6	100.44	0.18
Crabtree	Reach 1	10355	Max	newEC25	1495.15	1.81	13.59	7.51	13.71	0.000421	2.82	551.54	99.52	0.18
Crabtree	Reach 1	10355	Max	newEC100	1950.59	1.81	14.83	8.3	14.95	0.000384	2.98	787.12	324.86	0.18
Crabtree	Reach 1	10355	Max	newEC3	671.59	1.81	10.71	5.6	10.78	0.000431	2.11	318.73	67.7	0.17
	Reach 1													
Crabtree	Reach 1	10300	Bridge											
	Reach 1													
Crabtree	Reach 1	10287	Max	EC100	1947.19	3.13	14.8		14.85	0.000209	2.53	1353.84	456.58	0.14
Crabtree	Reach 1	10287	Max	EC3yr0416	670.06	3.13	10.49		10.63	0.000658	3.15	240.42	57.79	0.22
Crabtree	Reach 1	10287	Max	EC25yr0416	1492.3	3.13	13.49		13.61	0.00044	3.36	779.31	400.97	0.2
Crabtree	Reach 1	10287	Max	newEC25	1494.65	3.13	13.47		13.59	0.000452	3.4	770.1	399.5	0.2
Crabtree	Reach 1	10287	Max	newEC100	1950.59	3.13	14.77		14.83	0.000216	2.56	1339.99	456.58	0.14
Crabtree	Reach 1	10287	Max	newEC3	671.38	3.13	10.48		10.62	0.000665	3.16	239.89	57.74	0.23
	Reach 1													
Crabtree	Reach 1	10267	Max	EC100	1947.18	3.13	14.82		14.85	0.000122	1.86	1612.06	444.77	0.1
Crabtree	Reach 1	10267	Max	EC3yr0416	670.11	3.13	10.54		10.6	0.000338	2.15	340.41	76.97	0.16
Crabtree	Reach 1	10267	Max	EC25yr0416	1492.47	3.13	13.53		13.58	0.000221	2.29	1036.39	433.25	0.14
Crabtree	Reach 1	10267	Max	newEC25	1494.73	3.13	13.5		13.56	0.000227	2.31	1026.78	432.28	0.14
Crabtree	Reach 1	10267	Max	newEC100	1950.6	3.13	14.79		14.82	0.000125	1.88	1598.75	444.77	0.1
Crabtree	Reach 1	10267	Max	newEC3	671.42	3.13	10.53		10.59	0.000341	2.16	339.73	76.71	0.16
	Reach 1													
Crabtree	Reach 1	10230	Max	EC100	1947.18	3.12	14.69		14.88	0.000593	4.04	612.04	122.23	0.22
Crabtree	Reach 1	10230	Max	EC3yr0416	670.02	3.12	10.45		10.58	0.000651	2.95	247.59	55.12	0.21
Crabtree	Reach 1	10230	Max	EC25yr0416	1491.6	3.12	13.38		13.59	0.00071	4.03	459.41	107.35	0.24
Crabtree	Reach 1	10230	Max	newEC25	1494.07	3.12	13.36		13.56	0.000722	4.06	456.79	107.05	0.24
Crabtree	Reach 1	10230	Max	newEC100	1950.59	3.12	14.65		14.85	0.000605	4.08	608.12	122.23	0.23
Crabtree	Reach 1	10230	Max	newEC3	671.36	3.12	10.45		10.57	0.000658	2.96	247.06	55.07	0.22

	Reach 1													
Crabtree	Reach 1	10229	Lat											
	Reach 1													
Crabtree	Reach 1	10228	Lat											
	Reach 1													
Crabtree	Reach 1	10209	Max	EC100	1941.49	3.12	14.67		14.86	0.000585	3.89	624.24	121.51	0.22
Crabtree	Reach 1	10209	Max	EC3yr0416	669.97	3.12	10.43		10.56	0.000764	3.04	235.86	53.71	0.23
Crabtree	Reach 1	10209	Max	EC25yr0416	1489.5	3.12	13.37		13.57	0.000733	3.96	465.85	115.95	0.24
Crabtree	Reach 1	10209	Max	newEC25	1492.12	3.12	13.34		13.55	0.000747	3.99	462.99	115.67	0.24
Crabtree	Reach 1	10209	Max	newEC100	1945.02	3.12	14.64		14.83	0.000597	3.93	620.32	121.51	0.22
Crabtree	Reach 1	10209	Max	newEC3	671.31	3.12	10.42		10.55	0.000772	3.05	235.33	53.68	0.23
	Reach 1													
Crabtree	Reach 1	10189	Max	EC100	1919.45	3.12	14.7		14.85	0.000477	3.74	665.39	118.57	0.2
Crabtree	Reach 1	10189	Max	EC3yr0416	669.97	3.12	10.42		10.54	0.000619	3	245.92	52.46	0.21
Crabtree	Reach 1	10189	Max	EC25yr0416	1478.03	3.12	13.39		13.55	0.000599	3.83	510.21	118.57	0.22
Crabtree	Reach 1	10189	Max	newEC25	1480.69	3.12	13.36		13.53	0.000611	3.86	507.3	118.57	0.23
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25

Crabtree	Reach 1	10044	Max	EC25yr0416	1449.79	3.1	13.32		13.47	0.000616	3.14	491.27	99.84	0.22
Crabtree	Reach 1	10044	Max	newEC25	1453.12	3.1	13.3		13.45	0.000628	3.17	488.72	99.79	0.22
Crabtree	Reach 1	10044	Max	newEC100	1862.45	3.1	14.61		14.76	0.000524	3.27	626.05	114.9	0.21
Crabtree	Reach 1	10044	Max	newEC3	671	3.1	10.33		10.45	0.00088	2.76	243.18	58.99	0.24
	Reach 1													
Crabtree	Reach 1	9998	Max	EC100	1843	3.09	14.65		14.78	0.000404	3.54	676.59	111.89	0.19
Crabtree	Reach 1	9998	Max	EC3yr0416	669.6	3.09	10.32		10.45	0.00059	3.01	245.59	52.29	0.21
Crabtree	Reach 1	9998	Max	EC25yr0416	1445.18	3.09	13.32		13.46	0.000515	3.65	527.79	111.89	0.21
Crabtree	Reach 1	9998	Max	newEC25	1448.43	3.09	13.29		13.44	0.000525	3.68	524.86	111.89	0.21
Crabtree	Reach 1	9998	Max	newEC100	1847.45	3.09	14.61		14.75	0.000413	3.57	672.86	111.89	0.19
Crabtree	Reach 1	9998	Max	newEC3	670.98	3.09	10.31		10.44	0.000597	3.02	245.01	52.18	0.21
	Reach 1													
Crabtree	Reach 1	9974	Max	EC100	1834.55	3.09	14.63		14.78	0.000447	3.72	628.28	107.76	0.2
Crabtree	Reach 1	9974	Max	EC3yr0416	669.6	3.09	10.32		10.44	0.000553	2.92	251.06	51.48	0.21
Crabtree	Reach 1	9974	Max	EC25yr0416	1443.1	3.09	13.3		13.46	0.000548	3.76	492.08	99.18	0.22
Crabtree	Reach 1	9974	Max	newEC25	1446.58	3.09	13.27		13.43	0.000559	3.79	489.45	99.05	0.22
Crabtree	Reach 1	9974	Max	newEC100	1839.11	3.09	14.59		14.75	0.000456	3.75	624.66	107.42	0.2
Crabtree	Reach 1	9974	Max	newEC3	670.95	3.09	10.31		10.43	0.000559	2.93	250.49	51.44	0.21
	Reach 1													
Crabtree	Reach 1	9941	Max	EC100	1827.52	3.08	14.64		14.77	0.00038	2.89	667.43	99.82	0.18
Crabtree	Reach 1	9941	Max	EC3yr0416	669.64	3.08	10.34		10.42	0.000555	2.3	291.7	66.95	0.19
Crabtree	Reach 1	9941	Max	EC25yr0416	1443.73	3.08	13.32		13.44	0.000448	2.8	537.72	96.81	0.19
Crabtree	Reach 1	9941	Max	newEC25	1447.28	3.08	13.29		13.41	0.000456	2.82	535.21	96.75	0.19
Crabtree	Reach 1	9941	Max	newEC100	1832.23	3.08	14.61		14.73	0.000388	2.91	664.1	99.69	0.18
Crabtree	Reach 1	9941	Max	newEC3	671.02	3.08	10.33		10.41	0.000562	2.31	290.97	66.58	0.19
	Reach 1													
Crabtree	Reach 1	9864	Max	EC100	1812.8	3.09	14.59		14.74	0.0005	3.61	611.3	105.08	0.2
Crabtree	Reach 1	9864	Max	EC3yr0416	669.53	3.09	10.26		10.38	0.000673	2.85	245.64	53.82	0.21
Crabtree	Reach 1	9864	Max	EC25yr0416	1448.75	3.09	13.24		13.41	0.000654	3.74	474.78	98.35	0.23
Crabtree	Reach 1	9864	Max	newEC25	1452.44	3.09	13.21		13.38	0.000668	3.78	472.06	98.29	0.23
Crabtree	Reach 1	9864	Max	newEC100	1818.04	3.09	14.55		14.71	0.000512	3.64	607.65	104.9	0.2
Crabtree	Reach 1	9864	Max	newEC3	670.88	3.09	10.25		10.37	0.000681	2.87	245.01	53.77	0.21
	Reach 1													
Crabtree	Reach 1	9841	Max	EC100	1804.12	3.09	14.6		14.73	0.000412	3.35	672.21	113.26	0.19
Crabtree	Reach 1	9841	Max	EC3yr0416	669.5	3.09	10.25		10.37	0.000644	2.87	247.94	53.78	0.21

Crabtree	Reach 1	9841	Max	EC25yr0416	1449.84	3.09	13.25		13.39	0.000575	3.59	518.48	113.26	0.21
Crabtree	Reach 1	9841	Max	newEC25	1453.55	3.09	13.22		13.37	0.000588	3.62	515.41	113.26	0.22
Crabtree	Reach 1	9841	Max	newEC100	1809.56	3.09	14.57		14.7	0.000422	3.38	668.28	113.26	0.19
Crabtree	Reach 1	9841	Max	newEC3	670.88	3.09	10.24		10.36	0.000651	2.88	247.3	53.74	0.21
	Reach 1													
Crabtree	Reach 1	9820	Max	EC100	1791.16	3.06	14.58		14.73	0.000451	3.69	638.35	117.81	0.2
Crabtree	Reach 1	9820	Max	EC3yr0416	669.68	3.06	10.24		10.35	0.000583	2.93	254.03	56.08	0.21
Crabtree	Reach 1	9820	Max	EC25yr0416	1445.79	3.06	13.21		13.37	0.000529	3.64	487.21	100.62	0.21
Crabtree	Reach 1	9820	Max	newEC25	1449.57	3.06	13.19		13.35	0.00054	3.67	484.45	100.05	0.22
Crabtree	Reach 1	9820	Max	newEC100	1796.85	3.06	14.54		14.69	0.000462	3.73	634.2	117.81	0.2
Crabtree	Reach 1	9820	Max	newEC3	671.07	3.06	10.22		10.34	0.00059	2.94	253.35	56.04	0.21
	Reach 1													
Crabtree	Reach 1	9743	Max	EC100	1769.06	3.04	14.57		14.69	0.00037	3.33	714.74	138.16	0.18
Crabtree	Reach 1	9743	Max	EC3yr0416	669.59	3.04	10.19		10.3	0.000569	2.86	264.58	65.35	0.21
Crabtree	Reach 1	9743	Max	EC25yr0416	1445.96	3.04	13.19		13.33	0.000471	3.42	537.99	118.38	0.2
Crabtree	Reach 1	9743	Max	newEC25	1449.77	3.04	13.16		13.3	0.000482	3.45	534.6	118.12	0.2
Crabtree	Reach 1	9743	Max	newEC100	1775.64	3.04	14.53		14.66	0.00038	3.37	709.8	138.16	0.19
Crabtree	Reach 1	9743	Max	newEC3	670.98	3.04	10.18		10.28	0.000577	2.88	263.74	65.16	0.21
	Reach 1													
Crabtree	Reach 1	9720	Max	EC100	1747.95	3.03	14.59		14.67	0.00023	2.61	844.97	137.09	0.14
Crabtree	Reach 1	9720	Max	EC3yr0416	669.77	3.03	10.22		10.28	0.000285	2	371.89	86.82	0.15
Crabtree	Reach 1	9720	Max	EC25yr0416	1435.49	3.03	13.23		13.31	0.000256	2.5	661.69	116.15	0.15
Crabtree	Reach 1	9720	Max	newEC25	1439.33	3.03	13.2		13.28	0.000261	2.52	658.54	110.82	0.15
Crabtree	Reach 1	9720	Max	newEC100	1754.73	3.03	14.56		14.64	0.000236	2.64	840.12	137.09	0.15
Crabtree	Reach 1	9720	Max	newEC3	671.16	3.03	10.21		10.27	0.000289	2.01	370.81	86.77	0.15
	Reach 1													
Crabtree	Reach 1	9708	Max	EC100	1742.37	3.02	14.48		14.68	0.000525	3.88	509.13	79.22	0.22
Crabtree	Reach 1	9708	Max	EC3yr0416	669.3	3.02	10.15		10.27	0.000651	2.97	245.41	55.12	0.22
Crabtree	Reach 1	9708	Max	EC25yr0416	1430.95	3.02	13.12		13.31	0.000596	3.75	419.44	62.14	0.22
Crabtree	Reach 1	9708	Max	newEC25	1435.07	3.02	13.09		13.28	0.000607	3.77	417.61	62.07	0.23
Crabtree	Reach 1	9708	Max	newEC100	1749.17	3.02	14.44		14.65	0.000536	3.91	506.19	78.69	0.22
Crabtree	Reach 1	9708	Max	newEC3	670.72	3.02	10.14		10.26	0.00066	2.98	244.68	55.09	0.22
	Reach 1													
Crabtree	Reach 1	9696	Max	EC100	1737.36	3.02	14.56		14.66	0.000298	2.96	760.98	141.47	0.16
Crabtree	Reach 1	9696	Max	EC3yr0416	668.65	3.02	10.18		10.26	0.000475	2.56	301.44	78.17	0.19

Crabtree	Reach 1	9696	Max	EC25yr0416	1427.7	3.02	13.19		13.29	0.000376	3.01	583.03	107.88	0.18
Crabtree	Reach 1	9696	Max	newEC25	1431.54	3.02	13.16		13.27	0.000378	3.02	579.98	106.88	0.18
Crabtree	Reach 1	9696	Max	newEC100	1744.17	3.02	14.53		14.63	0.000306	2.99	755.9	141.47	0.17
Crabtree	Reach 1	9696	Max	newEC3	670.07	3.02	10.16		10.25	0.000481	2.57	300.42	78.11	0.19
	Reach 1													
Crabtree	Reach 1	9687	Max	EC100	1734.99	3.02	14.5		14.6	0.000307	2.98	747.39	138.6	0.17
Crabtree	Reach 1	9687	Max	EC3yr0416	668.51	3.02	10.13		10.25	0.000637	2.93	246.18	58.17	0.22
Crabtree	Reach 1	9687	Max	EC25yr0416	1425.39	3.02	13.13		13.26	0.000464	3.32	559.26	136.06	0.2
Crabtree	Reach 1	9687	Max	newEC25	1429.45	3.02	13.1		13.23	0.000475	3.35	555.26	136.02	0.2
Crabtree	Reach 1	9687	Max	newEC100	1741.87	3.02	14.46		14.56	0.000316	3.01	742.26	138.54	0.17
Crabtree	Reach 1	9687	Max	newEC3	669.93	3.02	10.12		10.24	0.000645	2.94	245.39	57.8	0.22
	Reach 1													
Crabtree	Reach 1	9664	Max	EC100	1723.72	3.01	14.58		14.63	0.00016	2.2	942.97	137.14	0.12
Crabtree	Reach 1	9664	Max	EC3yr0416	666.39	3.01	10.15		10.23	0.00049	2.65	335.69	136.77	0.19
Crabtree	Reach 1	9664	Max	EC25yr0416	1418.48	3.01	13.2		13.26	0.000217	2.33	754.32	137.14	0.14
Crabtree	Reach 1	9664	Max	newEC25	1422.34	3.01	13.17		13.23	0.000222	2.35	750.43	137.14	0.14
Crabtree	Reach 1	9664	Max	newEC100	1730.65	3.01	14.54		14.6	0.000164	2.22	938.07	137.14	0.12
Crabtree	Reach 1	9664	Max	newEC3	667.86	3.01	10.13		10.22	0.000499	2.67	333.8	136.57	0.19
	Reach 1													
Crabtree	Reach 1	9574	Max	EC100	1691.02	3.05	14.56		14.62	0.000185	2.11	879.31	135.79	0.12
Crabtree	Reach 1	9574	Max	EC3yr0416	661.69	3.05	10.11		10.18	0.000595	2.49	317.96	116.89	0.2
Crabtree	Reach 1	9574	Max	EC25yr0416	1398.17	3.05	13.18		13.24	0.000254	2.23	699.74	126.78	0.14
Crabtree	Reach 1	9574	Max	newEC25	1402.01	3.05	13.15		13.21	0.000259	2.25	696.07	126.73	0.14
Crabtree	Reach 1	9574	Max	newEC100	1698.22	3.05	14.52		14.58	0.00019	2.13	874.42	134.5	0.12
Crabtree	Reach 1	9574	Max	newEC3	663.25	3.05	10.09		10.17	0.000607	2.51	316.24	116.56	0.2
	Reach 1													
Crabtree	Reach 1	9524	Max	EC100	1669	2.98	14.56		14.61	0.000132	1.93	967.55	135.01	0.11
Crabtree	Reach 1	9524	Max	EC3yr0416	660.21	2.98	10.11		10.16	0.00032	2.02	390.84	123.81	0.15
Crabtree	Reach 1	9524	Max	EC25yr0416	1381.98	2.98	13.18		13.23	0.000172	1.99	783.81	131.1	0.12
Crabtree	Reach 1	9524	Max	newEC25	1385.82	2.98	13.15		13.21	0.000175	2.01	780.03	131.03	0.12
Crabtree	Reach 1	9524	Max	newEC100	1676.29	2.98	14.53		14.58	0.000135	1.95	962.69	134.91	0.11
Crabtree	Reach 1	9524	Max	newEC3	661.83	2.98	10.1		10.15	0.000326	2.03	389.02	123.75	0.15
	Reach 1													
Crabtree	Reach 1	9489	Max	EC100	1658.45	2.97	14.57		14.61	0.000114	1.92	1017.89	142.17	0.1
Crabtree	Reach 1	9489	Max	EC3yr0416	660.14	2.97	10.11		10.15	0.000254	2.01	425.29	125.64	0.14

Crabtree	Reach 1	9489	Max	EC25yr0416	1374.54	2.97	13.18		13.23	0.000145	1.98	825.36	134.86	0.11
Crabtree	Reach 1	9489	Max	newEC25	1378.4	2.97	13.16		13.2	0.000148	1.99	821.48	134.22	0.11
Crabtree	Reach 1	9489	Max	newEC100	1665.74	2.97	14.53		14.57	0.000117	1.94	1012.77	142.17	0.1
Crabtree	Reach 1	9489	Max	newEC3	661.75	2.97	10.09		10.14	0.000259	2.03	423.44	125.6	0.14
	Reach 1													
Crabtree	Reach 1	9458	Max	EC100	1640.87	2.97	14.56		14.59	0.000094	1.72	1094.53	142.93	0.09
Crabtree	Reach 1	9458	Max	EC3yr0416	658.96	2.97	10.11		10.14	0.000223	1.84	458.47	142.93	0.13
Crabtree	Reach 1	9458	Max	EC25yr0416	1362.11	2.97	13.18		13.21	0.000121	1.78	897.17	142.93	0.1
Crabtree	Reach 1	9458	Max	newEC25	1366.03	2.97	13.15		13.19	0.000124	1.79	893.04	142.93	0.1
Crabtree	Reach 1	9458	Max	newEC100	1648.2	2.97	14.52		14.56	0.000096	1.73	1089.36	142.93	0.09
Crabtree	Reach 1	9458	Max	newEC3	660.61	2.97	10.09		10.13	0.000227	1.85	456.37	142.93	0.13
	Reach 1													
Crabtree	Reach 1	9444	Max	EC100	1629.5	2.97	14.54		14.57	0.0001	1.72	1076.73	145.04	0.1
Crabtree	Reach 1	9444	Max	EC3yr0416	656.75	2.97	10.1		10.14	0.000234	1.81	433.3	140.31	0.13
Crabtree	Reach 1	9444	Max	EC25yr0416	1352.38	2.97	13.16		13.2	0.00013	1.79	876.73	145.04	0.11
Crabtree	Reach 1	9444	Max	newEC25	1356.25	2.97	13.13		13.17	0.000133	1.8	872.51	145.04	0.11
Crabtree	Reach 1	9444	Max	newEC100	1636.86	2.97	14.5		14.54	0.000102	1.74	1071.43	145.04	0.1
Crabtree	Reach 1	9444	Max	newEC3	658.42	2.97	10.08		10.12	0.000238	1.82	431.23	139.69	0.13
	Reach 1													
Crabtree	Reach 1	9424	Max	EC100	1616.26	2.96	14.55		14.6	0.000119	1.94	991.41	143.3	0.1
Crabtree	Reach 1	9424	Max	EC3yr0416	655.77	2.96	10.09		10.14	0.000238	1.91	414.2	106.29	0.14
Crabtree	Reach 1	9424	Max	EC25yr0416	1342.95	2.96	13.17		13.22	0.000153	2.01	794.52	135.38	0.12
Crabtree	Reach 1	9424	Max	newEC25	1346.83	2.96	13.14		13.19	0.000156	2.02	790.59	134.99	0.12
Crabtree	Reach 1	9424	Max	newEC100	1623.59	2.96	14.52		14.56	0.000122	1.96	986.2	143.3	0.11
Crabtree	Reach 1	9424	Max	newEC3	657.48	2.96	10.08		10.12	0.000242	1.92	412.61	106.26	0.14
	Reach 1													
Crabtree	Reach 1	9390	Max	EC100	1592.6	2.95	14.55		14.6	0.000129	1.98	943.47	140.95	0.11
Crabtree	Reach 1	9390	Max	EC3yr0416	653.71	2.95	10.08		10.13	0.000256	1.92	402.23	102.9	0.14
Crabtree	Reach 1	9390	Max	EC25yr0416	1328.3	2.95	13.16		13.21	0.000172	2.08	753.8	133.21	0.12
Crabtree	Reach 1	9390	Max	newEC25	1332.3	2.95	13.13		13.19	0.000176	2.1	749.9	133.13	0.12
Crabtree	Reach 1	9390	Max	newEC100	1600.07	2.95	14.51		14.56	0.000133	2	938.33	140.95	0.11
Crabtree	Reach 1	9390	Max	newEC3	655.48	2.95	10.07		10.11	0.00026	1.94	400.67	102.85	0.14
	Reach 1													
Crabtree	Reach 1	9369	Max	EC100	1579.76	3.02	14.55		14.59	0.000125	1.84	972.17	142.07	0.1
Crabtree	Reach 1	9369	Max	EC3yr0416	652.53	3.02	10.08		10.12	0.000234	1.73	421.09	104.75	0.13

Crabtree	Reach 1	9369	Max	EC25yr0416	1320.14	3.02	13.16		13.21	0.000173	1.97	775.41	142.07	0.12
Crabtree	Reach 1	9369	Max	newEC25	1324.27	3.02	13.13		13.18	0.000177	1.99	771.26	142.07	0.12
Crabtree	Reach 1	9369	Max	newEC100	1587.36	3.02	14.51		14.55	0.000128	1.86	966.98	142.07	0.1
Crabtree	Reach 1	9369	Max	newEC3	654.28	3.02	10.07		10.11	0.000238	1.74	419.5	104.72	0.13
	Reach 1													
Crabtree	Reach 1	9337	Max	EC100	1557.77	3.02	14.54		14.59	0.000121	1.9	949.4	138.36	0.1
Crabtree	Reach 1	9337	Max	EC3yr0416	650.15	3.02	10.08		10.11	0.000202	1.71	435.08	104.57	0.12
Crabtree	Reach 1	9337	Max	EC25yr0416	1305.34	3.02	13.16		13.2	0.00014	1.86	765	114.47	0.11
Crabtree	Reach 1	9337	Max	newEC25	1309.49	3.02	13.13		13.18	0.000142	1.87	761.71	111.35	0.11
Crabtree	Reach 1	9337	Max	newEC100	1565.22	3.02	14.51		14.55	0.000125	1.92	944.34	138.36	0.1
Crabtree	Reach 1	9337	Max	newEC3	651.94	3.02	10.06		10.1	0.000206	1.72	433.49	104.55	0.12
	Reach 1													
Crabtree	Reach 1	9316	Max	EC100	1543.25	2.94	14.54		14.59	0.000117	1.91	951.69	138.36	0.1
Crabtree	Reach 1	9316	Max	EC3yr0416	648.12	2.94	10.08		10.11	0.00017	1.61	455.26	103.13	0.11
Crabtree	Reach 1	9316	Max	EC25yr0416	1295.45	2.94	13.16		13.2	0.000127	1.82	780.27	108.56	0.11
Crabtree	Reach 1	9316	Max	newEC25	1299.53	2.94	13.13		13.17	0.00013	1.84	777.09	108.48	0.11
Crabtree	Reach 1	9316	Max	newEC100	1550.56	2.94	14.51		14.55	0.00012	1.93	946.63	138.36	0.1
Crabtree	Reach 1	9316	Max	newEC3	649.97	2.94	10.06		10.1	0.000173	1.62	453.69	103.12	0.11
	Reach 1													
Crabtree	Reach 1	9292	Max	EC100	1529.83	3.01	14.54		14.59	0.000115	1.85	954.32	138.15	0.1
Crabtree	Reach 1	9292	Max	EC3yr0416	646.05	3.01	10.07		10.11	0.000195	1.68	436.36	103.31	0.12
Crabtree	Reach 1	9292	Max	EC25yr0416	1285.13	3.01	13.16		13.2	0.000135	1.83	766.18	121.53	0.11
Crabtree	Reach 1	9292	Max	newEC25	1289.28	3.01	13.13		13.17	0.000138	1.84	762.62	120.61	0.11
Crabtree	Reach 1	9292	Max	newEC100	1537.02	3.01	14.51		14.55	0.000118	1.87	949.26	138.15	0.1
Crabtree	Reach 1	9292	Max	newEC3	647.93	3.01	10.06		10.09	0.000199	1.69	434.77	103.29	0.12
	Reach 1													
Crabtree	Reach 1	9276	Max	EC100	1520.99	2.93	14.55		14.58	0.000102	1.77	998.59	137.54	0.1
Crabtree	Reach 1	9276	Max	EC3yr0416	645.06	2.93	10.07		10.1	0.000184	1.65	443.8	103.26	0.12
Crabtree	Reach 1	9276	Max	EC25yr0416	1279.26	2.93	13.16		13.2	0.000137	1.87	807.71	137.54	0.11
Crabtree	Reach 1	9276	Max	newEC25	1283.38	2.93	13.13		13.17	0.00014	1.89	803.67	137.54	0.11
Crabtree	Reach 1	9276	Max	newEC100	1528.11	2.93	14.51		14.55	0.000104	1.79	993.57	137.54	0.1
Crabtree	Reach 1	9276	Max	newEC3	646.96	2.93	10.05		10.09	0.000187	1.66	442.22	103.09	0.12
	Reach 1													
Crabtree	Reach 1	9265	Max	EC100	1506.1	3.01	14.55		14.58	0.000094	1.7	1020.36	134.59	0.09
Crabtree	Reach 1	9265	Max	EC3yr0416	641.63	3.01	10.07		10.1	0.00018	1.64	455.3	114.81	0.12

Crabtree	Reach 1	9265	Max	EC25yr0416	1267.2	3.01	13.16		13.2	0.000125	1.79	833.56	134.59	0.1
Crabtree	Reach 1	9265	Max	newEC25	1271.29	3.01	13.13		13.17	0.000128	1.8	829.61	134.59	0.1
Crabtree	Reach 1	9265	Max	newEC100	1513.25	3.01	14.51		14.55	0.000096	1.72	1015.44	134.59	0.09
Crabtree	Reach 1	9265	Max	newEC3	643.54	3.01	10.05		10.09	0.000183	1.65	453.53	114.77	0.12
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29520	Max	EC100	225.46	24.12	29.8		29.92	0.001534	2.82	80.59	30.96	0.29
Crabtree Swamp	Reach 1	29520	Max	EC3yr0416	62.76	24.12	28.97		28.99	0.000272	1.07	58.78	23.2	0.12
Crabtree Swamp	Reach 1	29520	Max	EC25yr0416	159.4	24.12	29.46		29.54	0.001106	2.25	70.75	26.39	0.24

Crabtree	Reach 1	9005	Max	EC25yr0416	1138.57	1.9	13.15		13.18	0.000078	1.56	881.76	134.07	0.08
Crabtree	Reach 1	9005	Max	newEC25	1143.03	1.9	13.12		13.15	0.000079	1.58	877.77	134.07	0.09
Crabtree	Reach 1	9005	Max	newEC100	1333.52	1.9	14.5		14.53	0.00006	1.49	1063.6	134.07	0.08
Crabtree	Reach 1	9005	Max	newEC3	619.54	1.9	10.02		10.05	0.000115	1.51	498.43	115.16	0.1
	Reach 1													
Crabtree	Reach 1	8914	Max	EC100	1269.36	1.86	14.54		14.56	0.000052	1.35	1078.43	135.44	0.07
Crabtree	Reach 1	8914	Max	EC3yr0416	614.63	1.86	10.03		10.05	0.000121	1.49	501.25	123.91	0.1
Crabtree	Reach 1	8914	Max	EC25yr0416	1097.94	1.86	13.15		13.17	0.000068	1.42	894.85	129.24	0.08
Crabtree	Reach 1	8914	Max	newEC25	1102.65	1.86	13.12		13.14	0.000069	1.43	891	129.19	0.08
Crabtree	Reach 1	8914	Max	newEC100	1276.08	1.86	14.5		14.53	0.000054	1.37	1073.45	135.25	0.07
Crabtree	Reach 1	8914	Max	newEC3	616.6	1.86	10.01		10.04	0.000123	1.5	499.25	123.89	0.1
	Reach 1													
Crabtree	Reach 1	8870	Max	EC100	1241.69	1.84	14.54		14.56	0.000036	1.12	1271.21	149.8	0.06
Crabtree	Reach 1	8870	Max	EC3yr0416	608.39	1.84	10.03		10.05	0.000086	1.23	596.13	141.35	0.08
Crabtree	Reach 1	8870	Max	EC25yr0416	1075.69	1.84	13.15		13.17	0.000047	1.17	1062.3	149.8	0.07
Crabtree	Reach 1	8870	Max	newEC25	1080.41	1.84	13.12		13.14	0.000049	1.18	1057.84	149.8	0.07
Crabtree	Reach 1	8870	Max	newEC100	1248.33	1.84	14.51		14.52	0.000037	1.13	1265.71	149.8	0.06
Crabtree	Reach 1	8870	Max	newEC3	610.36	1.84	10.02		10.03	0.000087	1.24	593.85	141.09	0.08
	Reach 1													
Crabtree	Reach 1	8829	Max	EC100	1212.01	1.82	14.54		14.56	0.000044	1.21	1141.82	151.12	0.06
Crabtree	Reach 1	8829	Max	EC3yr0416	605.43	1.82	10.02		10.05	0.000106	1.35	523.07	128.14	0.09
Crabtree	Reach 1	8829	Max	EC25yr0416	1053.72	1.82	13.14		13.17	0.000058	1.28	935.16	140.83	0.07
Crabtree	Reach 1	8829	Max	newEC25	1058.49	1.82	13.11		13.14	0.00006	1.3	930.96	140.71	0.07
Crabtree	Reach 1	8829	Max	newEC100	1218.5	1.82	14.5		14.52	0.000045	1.23	1136.26	151.12	0.06
Crabtree	Reach 1	8829	Max	newEC3	607.38	1.82	10.01		10.03	0.000108	1.36	520.99	128.11	0.09
	Reach 1													
Crabtree	Reach 1	8725	Max	EC100	1148.54	1.77	14.54		14.56	0.000035	1.11	1174.31	143.21	0.06
Crabtree	Reach 1	8725	Max	EC3yr0416	608.46	1.77	10.01		10.04	0.000095	1.34	551.34	132.75	0.09
Crabtree	Reach 1	8725	Max	EC25yr0416	1010.6	1.77	13.14		13.16	0.000047	1.19	976.39	139.3	0.06
Crabtree	Reach 1	8725	Max	newEC25	1015.61	1.77	13.11		13.13	0.000048	1.2	972.22	139.17	0.07
Crabtree	Reach 1	8725	Max	newEC100	1154.91	1.77	14.5		14.52	0.000036	1.12	1169.04	143.15	0.06
Crabtree	Reach 1	8725	Max	newEC3	610.33	1.77	10		10.02	0.000097	1.35	549.15	132.7	0.09
	Reach 1													
Crabtree	Reach 1	8573	Max	EC100	1074.73	1.7	14.54		14.55	0.000031	1.06	1165.75	140.98	0.05
Crabtree	Reach 1	8573	Max	EC3yr0416	619.06	1.7	10		10.02	0.000093	1.35	563.32	128.19	0.09

Crabtree	Reach 1	8573	Max	EC25yr0416	959.31	1.7	13.14		13.16	0.000041	1.13	973.49	133.21	0.06
Crabtree	Reach 1	8573	Max	newEC25	964.59	1.7	13.11		13.13	0.000042	1.14	969.49	133.12	0.06
Crabtree	Reach 1	8573	Max	newEC100	1081.29	1.7	14.5		14.52	0.000031	1.07	1160.55	140.79	0.05
Crabtree	Reach 1	8573	Max	newEC3	620.82	1.7	9.98		10	0.000095	1.35	561.18	128.16	0.09
	Reach 1													
Crabtree	Reach 1	8529	Max	EC100	1051.16	1.68	14.54		14.55	0.00003	1.03	1176.04	148.37	0.05
Crabtree	Reach 1	8529	Max	EC3yr0416	623.97	1.68	9.99		10.02	0.000102	1.37	546.94	131.62	0.09
Crabtree	Reach 1	8529	Max	EC25yr0416	942.61	1.68	13.14		13.16	0.000042	1.12	973.06	141.44	0.06
Crabtree	Reach 1	8529	Max	newEC25	947.97	1.68	13.11		13.13	0.000043	1.14	968.8	141.29	0.06
Crabtree	Reach 1	8529	Max	newEC100	1057.6	1.68	14.5		14.52	0.000031	1.04	1170.57	148.19	0.05
Crabtree	Reach 1	8529	Max	newEC3	625.7	1.68	9.98		10	0.000103	1.38	544.74	131.59	0.09
	Reach 1													
Crabtree	Reach 1	8488	Max	EC100	1011.37	1.66	14.54		14.55	0.000016	0.8	1452.9	149.96	0.04
Crabtree	Reach 1	8488	Max	EC3yr0416	621.96	1.66	10		10.01	0.000046	0.99	771.67	149.96	0.06
Crabtree	Reach 1	8488	Max	EC25yr0416	912.09	1.66	13.14		13.15	0.000021	0.85	1243.06	149.96	0.05
Crabtree	Reach 1	8488	Max	newEC25	917.51	1.66	13.11		13.12	0.000022	0.86	1238.56	149.96	0.05
Crabtree	Reach 1	8488	Max	newEC100	1017.78	1.66	14.51		14.51	0.000016	0.8	1447.37	149.96	0.04
Crabtree	Reach 1	8488	Max	newEC3	623.68	1.66	9.98		9.99	0.000046	0.99	769.17	149.96	0.06
	Reach 1													
Crabtree	Reach 1	8460	Max	EC100	975.88	1.65	14.54		14.55	0.000026	0.95	1186.89	147.81	0.05
Crabtree	Reach 1	8460	Max	EC3yr0416	621.86	1.65	9.99		10.01	0.000112	1.43	532.44	134.23	0.09
Crabtree	Reach 1	8460	Max	EC25yr0416	886.2	1.65	13.14		13.15	0.000038	1.06	979.82	147.81	0.06
Crabtree	Reach 1	8460	Max	newEC25	891.66	1.65	13.11		13.12	0.000039	1.07	975.37	147.81	0.06
Crabtree	Reach 1	8460	Max	newEC100	982.34	1.65	14.5		14.52	0.000026	0.96	1181.44	147.81	0.05
Crabtree	Reach 1	8460	Max	newEC3	623.64	1.65	9.97		9.99	0.000114	1.44	530.17	134.18	0.09
	Reach 1													
Crabtree	Reach 1	8430	Max	EC100	952.05	1.64	14.54		14.55	0.000021	0.88	1248.33	147.81	0.04
Crabtree	Reach 1	8430	Max	EC3yr0416	624.74	1.64	9.99		10.01	0.00009	1.33	580.43	136.18	0.09
Crabtree	Reach 1	8430	Max	EC25yr0416	870.34	1.64	13.14		13.15	0.000031	0.99	1041.26	147.81	0.05
Crabtree	Reach 1	8430	Max	newEC25	875.87	1.64	13.11		13.12	0.000032	1	1036.81	147.81	0.05
Crabtree	Reach 1	8430	Max	newEC100	958.57	1.64	14.5		14.51	0.000022	0.89	1242.87	147.81	0.05
Crabtree	Reach 1	8430	Max	newEC3	626.5	1.64	9.97		9.99	0.000092	1.34	578.13	136.12	0.09
	Reach 1													
Crabtree	Reach 1	8404	Max	EC100	936.6	1.63	14.54		14.55	0.000024	0.94	1163.24	146.69	0.05
Crabtree	Reach 1	8404	Max	EC3yr0416	627.29	1.63	9.98		10	0.000106	1.42	543.22	129.96	0.09

Crabtree	Reach 1	8404	Max	EC25yr0416	860.96	1.63	13.14		13.15	0.000035	1.04	963.7	136.45	0.06
Crabtree	Reach 1	8404	Max	newEC25	866.55	1.63	13.11		13.12	0.000036	1.05	959.58	136.4	0.06
Crabtree	Reach 1	8404	Max	newEC100	943.3	1.63	14.5		14.51	0.000025	0.95	1157.82	146.69	0.05
Crabtree	Reach 1	8404	Max	newEC3	628.99	1.63	9.96		9.99	0.000107	1.43	541.02	129.94	0.09
	Reach 1													
Crabtree	Reach 1	8255	Max	EC100	908.1	1.56	14.53		14.54	0.000029	1.05	1016.69	126.81	0.05
Crabtree	Reach 1	8255	Max	EC3yr0416	655.9	1.56	9.95		9.98	0.000135	1.65	478.16	100.27	0.11
Crabtree	Reach 1	8255	Max	EC25yr0416	843.91	1.56	13.13		13.14	0.000044	1.2	840.51	124.02	0.06
Crabtree	Reach 1	8255	Max	newEC25	851.12	1.56	13.09		13.11	0.000046	1.21	836.71	123.96	0.07
Crabtree	Reach 1	8255	Max	newEC100	914.39	1.56	14.49		14.51	0.00003	1.06	1011.98	126.74	0.05
Crabtree	Reach 1	8255	Max	newEC3	658.25	1.56	9.93		9.97	0.000137	1.66	476.4	100.23	0.11
	Reach 1													
Crabtree	Reach 1	8110	Max	EC100	866.21	1.49	14.49		14.5	0.00002	0.87	1228.36	163.91	0.04
Crabtree	Reach 1	8110	Max	EC3yr0416	650.1	1.49	9.89		9.91	0.000123	1.57	525.7	136.62	0.1
Crabtree	Reach 1	8110	Max	EC25yr0416	807.1	1.49	13.08		13.09	0.000032	1.01	997.31	163.91	0.05
Crabtree	Reach 1	8110	Max	newEC25	814.48	1.49	13.05		13.06	0.000033	1.03	992.1	163.91	0.06
Crabtree	Reach 1	8110	Max	newEC100	872.69	1.49	14.45		14.46	0.000021	0.88	1222.13	163.91	0.04
Crabtree	Reach 1	8110	Max	newEC3	652.65	1.49	9.87		9.9	0.000125	1.58	523.19	136.5	0.1
	Reach 1													
Crabtree	Reach 1	8061	Max	EC100	856.4	1.47	14.51		14.51	0.000019	0.85	1192.5	147.08	0.04
Crabtree	Reach 1	8061	Max	EC3yr0416	643.31	1.47	9.9		9.93	0.000095	1.39	560.14	125.14	0.09
Crabtree	Reach 1	8061	Max	EC25yr0416	793.54	1.47	13.1		13.11	0.000029	0.97	985.44	147.08	0.05
Crabtree	Reach 1	8061	Max	newEC25	800.94	1.47	13.07		13.08	0.00003	0.98	980.83	147.08	0.05
Crabtree	Reach 1	8061	Max	newEC100	862.9	1.47	14.47		14.48	0.000019	0.86	1186.95	147.08	0.04
Crabtree	Reach 1	8061	Max	newEC3	645.91	1.47	9.89		9.91	0.000097	1.41	557.86	125.1	0.09
	Reach 1													
Crabtree	Reach 1	8031	Max	EC100	878.77	1.45	14.44		14.45	0.000017	0.82	1249.2	140.9	0.04
Crabtree	Reach 1	8031	Max	EC3yr0416	649.9	1.45	9.81		9.83	0.000094	1.39	596.68	140.9	0.09
Crabtree	Reach 1	8031	Max	EC25yr0416	807.58	1.45	13.03		13.03	0.000025	0.91	1050.07	140.9	0.05
Crabtree	Reach 1	8031	Max	newEC25	815.11	1.45	12.99		13	0.000026	0.93	1045.4	140.9	0.05
Crabtree	Reach 1	8031	Max	newEC100	885.57	1.45	14.4		14.41	0.000018	0.83	1243.67	140.9	0.04
Crabtree	Reach 1	8031	Max	newEC3	652.62	1.45	9.79		9.81	0.000096	1.4	593.93	140.9	0.09
	Reach 1													
Crabtree	Reach 1	7992	Max	EC100	910.34	1.44	14.48		14.49	0.000021	0.89	1187.14	139.1	0.04
Crabtree	Reach 1	7992	Max	EC3yr0416	648.54	1.44	9.86		9.89	0.000097	1.4	565.01	123.99	0.09

Crabtree	Reach 1	7992	Max	EC25yr0416	827.94	1.44	13.07		13.08	0.00003	0.99	991.05	139.1	0.05
Crabtree	Reach 1	7992	Max	newEC25	835.51	1.44	13.04		13.05	0.000031	1	986.58	139.1	0.05
Crabtree	Reach 1	7992	Max	newEC100	917.33	1.44	14.44		14.45	0.000021	0.9	1181.8	139.1	0.05
Crabtree	Reach 1	7992	Max	newEC3	651.27	1.44	9.85		9.87	0.000099	1.41	562.67	123.91	0.09
	Reach 1													
Crabtree	Reach 1	7956	Max	EC100	932.5	1.42	14.45		14.46	0.000025	0.93	1136.01	135.53	0.05
Crabtree	Reach 1	7956	Max	EC3yr0416	639.36	1.42	9.83		9.86	0.000111	1.41	528.03	119.05	0.09
Crabtree	Reach 1	7956	Max	EC25yr0416	837.98	1.42	13.04		13.05	0.000035	1.02	944.85	135.53	0.06
Crabtree	Reach 1	7956	Max	newEC25	845.67	1.42	13.01		13.02	0.000036	1.03	940.4	135.53	0.06
Crabtree	Reach 1	7956	Max	newEC100	939.99	1.42	14.41		14.42	0.000025	0.94	1130.72	135.53	0.05
Crabtree	Reach 1	7956	Max	newEC3	642.19	1.42	9.81		9.84	0.000114	1.42	525.72	118.92	0.1
	Reach 1													
Crabtree	Reach 1	7894	Max	EC100	971.99	1.39	14.46		14.47	0.000032	1.07	1043.5	127	0.05
Crabtree	Reach 1	7894	Max	EC3yr0416	622.37	1.39	9.84		9.86	0.000101	1.39	514.49	107.91	0.09
Crabtree	Reach 1	7894	Max	EC25yr0416	859.37	1.39	13.05		13.06	0.00004	1.12	874.64	116.28	0.06
Crabtree	Reach 1	7894	Max	newEC25	867.35	1.39	13.02		13.03	0.000042	1.13	870.84	116.19	0.06
Crabtree	Reach 1	7894	Max	newEC100	980.29	1.39	14.42		14.43	0.000032	1.09	1038.57	126.12	0.06
Crabtree	Reach 1	7894	Max	newEC3	625.3	1.39	9.82		9.84	0.000104	1.4	512.4	107.87	0.09
	Reach 1													
Crabtree	Reach 1	7835	Max	EC100	1005.75	1.37	14.46		14.47	0.000022	0.91	1250.83	133.1	0.05
Crabtree	Reach 1	7835	Max	EC3yr0416	607.55	1.37	9.84		9.86	0.000067	1.15	636.53	133.1	0.07
Crabtree	Reach 1	7835	Max	EC25yr0416	876.78	1.37	13.05		13.06	0.000028	0.94	1063.29	133.1	0.05
Crabtree	Reach 1	7835	Max	newEC25	885.22	1.37	13.01		13.03	0.000029	0.95	1058.93	133.1	0.05
Crabtree	Reach 1	7835	Max	newEC100	1015.06	1.37	14.42		14.43	0.000023	0.92	1245.63	133.1	0.05
Crabtree	Reach 1	7835	Max	newEC3	610.6	1.37	9.82		9.84	0.000069	1.16	633.95	133.1	0.07
	Reach 1													
Crabtree	Reach 1	7822	Max	EC100	1024.62	1.36	14.45		14.47	0.000028	1.01	1155.53	129.49	0.05
Crabtree	Reach 1	7822	Max	EC3yr0416	606.21	1.36	9.84		9.86	0.000083	1.27	561.17	120.01	0.08
Crabtree	Reach 1	7822	Max	EC25yr0416	889.35	1.36	13.04		13.06	0.000036	1.06	973.08	129.49	0.06
Crabtree	Reach 1	7822	Max	newEC25	898.09	1.36	13.01		13.03	0.000037	1.07	968.83	129.49	0.06
Crabtree	Reach 1	7822	Max	newEC100	1034.52	1.36	14.41		14.43	0.000029	1.03	1150.47	129.49	0.05
Crabtree	Reach 1	7822	Max	newEC3	609.3	1.36	9.82		9.84	0.000085	1.28	558.84	119.81	0.08
	Reach 1													
Crabtree	Reach 1	7791	Max	EC100	1048.1	1.35	14.45		14.46	0.000033	1.12	1101.63	130.2	0.06
Crabtree	Reach 1	7791	Max	EC3yr0416	595.83	1.35	9.83		9.86	0.000089	1.35	530.23	111.6	0.09

Crabtree	Reach 1	7791	Max	EC25yr0416	901.93	1.35	13.04		13.06	0.000042	1.17	918.19	130.2	0.06
Crabtree	Reach 1	7791	Max	newEC25	910.85	1.35	13.01		13.02	0.000043	1.19	913.9	130.2	0.06
Crabtree	Reach 1	7791	Max	newEC100	1058.46	1.35	14.41		14.43	0.000034	1.14	1096.52	130.2	0.06
Crabtree	Reach 1	7791	Max	newEC3	598.96	1.35	9.81		9.84	0.000091	1.36	528.05	111.55	0.09
	Reach 1													
Crabtree	Reach 1	7734	Max	EC100	1131.79	1.32	14.23		14.25	0.000039	1.13	1107.54	128.32	0.06
Crabtree	Reach 1	7734	Max	EC3yr0416	586.49	1.32	9.67		9.69	0.000103	1.29	521.65	128.32	0.09
Crabtree	Reach 1	7734	Max	EC25yr0416	959.87	1.32	12.84		12.85	0.000048	1.15	928.32	128.32	0.06
Crabtree	Reach 1	7734	Max	newEC25	968.84	1.32	12.8		12.82	0.00005	1.17	923.39	128.32	0.07
Crabtree	Reach 1	7734	Max	newEC100	1142.53	1.32	14.19		14.21	0.00004	1.14	1101.75	128.32	0.06
Crabtree	Reach 1	7734	Max	newEC3	589.87	1.32	9.64		9.67	0.000106	1.3	518.74	128.32	0.09
	Reach 1													
Crabtree	Reach 1	7638	Max	EC100	1392.2	1.28	13.54		13.57	0.000069	1.49	1044.27	129.89	0.08
Crabtree	Reach 1	7638	Max	EC3yr0416	627.73	1.28	9.3		9.32	0.000125	1.44	497.35	118.59	0.1
Crabtree	Reach 1	7638	Max	EC25yr0416	1143.13	1.28	12.24		12.27	0.00008	1.47	875.07	129.89	0.08
Crabtree	Reach 1	7638	Max	newEC25	1151.42	1.28	12.18		12.21	0.000084	1.49	868.15	129.89	0.09
Crabtree	Reach 1	7638	Max	newEC100	1402.7	1.28	13.48		13.51	0.000072	1.51	1036.12	129.89	0.08
Crabtree	Reach 1	7638	Max	newEC3	630.85	1.28	9.27		9.29	0.000129	1.46	493.83	118.52	0.1
	Reach 1													
Crabtree	Reach 1	7535	Max	EC100	1649.01	1.23	13.35		13.4	0.00012	2.01	976.02	144.64	0.11
Crabtree	Reach 1	7535	Max	EC3yr0416	657.93	1.23	9.2		9.24	0.000154	1.68	459.78	97.87	0.11
Crabtree	Reach 1	7535	Max	EC25yr0416	1309.94	1.23	12.08		12.13	0.000133	1.96	791.96	143.97	0.11
Crabtree	Reach 1	7535	Max	newEC25	1316.52	1.23	12.02		12.07	0.000138	1.99	783.78	142.6	0.11
Crabtree	Reach 1	7535	Max	newEC100	1657.89	1.23	13.28		13.34	0.000124	2.05	966.28	144.64	0.11
Crabtree	Reach 1	7535	Max	newEC3	660.62	1.23	9.17		9.21	0.000158	1.7	456.69	97.79	0.11
	Reach 1													
Crabtree	Reach 1	7421	Max	EC100	1885.17	1.18	13.31		13.38	0.000168	2.31	1009.34	168.56	0.12
Crabtree	Reach 1	7421	Max	EC3yr0416	685.78	1.18	9.16		9.21	0.00023	1.95	421.08	110	0.13
Crabtree	Reach 1	7421	Max	EC25yr0416	1466.04	1.18	12.04		12.1	0.000189	2.25	806.19	154.9	0.13
Crabtree	Reach 1	7421	Max	newEC25	1471.17	1.18	11.98		12.04	0.000197	2.29	797.15	154.73	0.13
Crabtree	Reach 1	7421	Max	newEC100	1891.87	1.18	13.24		13.31	0.000175	2.35	997.8	168.56	0.13
Crabtree	Reach 1	7421	Max	newEC3	687.99	1.18	9.13		9.18	0.000237	1.97	417.52	108.99	0.14
#	Plans	=	6											
#	Profiles	=	1											

Crabtree	Reach 1	7337	Max	EC25yr0416	1516.65	1.14	11.91		12.03	0.000393	3.3	624.9	138.56	0.19
Crabtree	Reach 1	7337	Max	newEC25	1521.05	1.14	11.85		11.97	0.00041	3.35	616.46	138.32	0.19
Crabtree	Reach 1	7337	Max	newEC100	1974.88	1.14	13.08		13.2	0.000343	3.32	787.11	139.19	0.18
Crabtree	Reach 1	7337	Max	newEC3	688.15	1.14	9.07		9.16	0.000387	2.6	303.23	64.15	0.17
	Reach 1													
Crabtree	Reach 1	7305	Max	EC100	2122.84	1.12	13.12		13.24	0.000354	3.35	841.02	163.66	0.18
Crabtree	Reach 1	7305	Max	EC3yr0416	742.25	1.12	9.08		9.17	0.000364	2.49	332.54	70.14	0.17
Crabtree	Reach 1	7305	Max	EC25yr0416	1616.91	1.12	11.89		12.02	0.000415	3.34	640.62	158.97	0.19
Crabtree	Reach 1	7305	Max	newEC25	1620.93	1.12	11.83		11.97	0.000433	3.4	630.77	158.47	0.19
Crabtree	Reach 1	7305	Max	newEC100	2125.88	1.12	13.05		13.18	0.000369	3.4	829.25	163.66	0.18
Crabtree	Reach 1	7305	Max	newEC3	744.82	1.12	9.04		9.13	0.000374	2.52	330.12	69.93	0.17
	Reach 1													
Crabtree	Reach 1	7287	Max	EC100	2122.75	1.11	13.1	7.33	13.28	0.000511	4	697.45	160.62	0.22
Crabtree	Reach 1	7287	Max	EC3yr0416	742.25	1.11	9.06	4.95	9.16	0.000449	2.73	308.25	68.39	0.19
Crabtree	Reach 1	7287	Max	EC25yr0416	1616.68	1.11	11.87	6.48	12.03	0.000487	3.6	532.64	102.91	0.21
Crabtree	Reach 1	7287	Max	newEC25	1620.81	1.11	11.8	6.47	11.97	0.000504	3.64	526.37	95.87	0.21
Crabtree	Reach 1	7287	Max	newEC100	2125.73	1.11	13.02	7.35	13.22	0.000531	4.06	686.02	154.63	0.22
Crabtree	Reach 1	7287	Max	newEC3	744.82	1.11	9.02	4.95	9.13	0.000461	2.75	305.86	68.06	0.19
	Reach 1													
Crabtree	Reach 1	7230	Bridge											
	Reach 1													
Crabtree	Reach 1	7218	Max	EC100	2121.98	1.08	12.9		13.09	0.00054	4.06	667.23	147.06	0.22
Crabtree	Reach 1	7218	Max	EC3yr0416	742.24	1.08	9.02		9.12	0.000457	2.74	306.07	68.02	0.19
Crabtree	Reach 1	7218	Max	EC25yr0416	1615.46	1.08	11.79		11.96	0.000503	3.64	525.46	95.33	0.21
Crabtree	Reach 1	7218	Max	newEC25	1620.18	1.08	11.73		11.9	0.000521	3.69	519.61	92.87	0.21
Crabtree	Reach 1	7218	Max	newEC100	2125.02	1.08	12.83		13.03	0.00056	4.12	657.12	144.89	0.23
Crabtree	Reach 1	7218	Max	newEC3	744.81	1.08	8.98		9.09	0.00047	2.77	303.63	67.69	0.19
	Reach 1													
Crabtree	Reach 1	7217	Max	EC100	2121.68	1.08	12.84		12.99	0.000478	3.9	798.19	192.12	0.21
Crabtree	Reach 1	7217	Max	EC3yr0416	742.24	1.08	9		9.13	0.000515	3.02	289.88	70.12	0.2
Crabtree	Reach 1	7217	Max	EC25yr0416	1614.98	1.08	11.75		11.94	0.000598	4.07	589.87	192.12	0.23
Crabtree	Reach 1	7217	Max	newEC25	1619.84	1.08	11.69		11.89	0.000632	4.16	577.85	192.12	0.24
Crabtree	Reach 1	7217	Max	newEC100	2124.55	1.08	12.77		12.93	0.000502	3.98	784.73	192.12	0.22
Crabtree	Reach 1	7217	Max	newEC3	744.81	1.08	8.97		9.09	0.000531	3.05	287.33	69.73	0.21
	Reach 1													

Crabtree	Reach 1	7198	Max	EC100	2121.6	1.07	12.83		13	0.00055	3.6	746.07	183.59	0.21
Crabtree	Reach 1	7198	Max	EC3yr0416	742.24	1.07	8.99		9.11	0.000718	2.83	267.86	61.92	0.22
Crabtree	Reach 1	7198	Max	EC25yr0416	1614.83	1.07	11.74		11.92	0.000656	3.6	545.56	181.18	0.23
Crabtree	Reach 1	7198	Max	newEC25	1619.58	1.07	11.68		11.87	0.000688	3.67	534.16	177.94	0.23
Crabtree	Reach 1	7198	Max	newEC100	2124.55	1.07	12.76		12.93	0.000576	3.67	733.06	183.59	0.22
Crabtree	Reach 1	7198	Max	newEC3	744.8	1.07	8.95		9.07	0.000742	2.86	265.58	61.7	0.22
	Reach 1													
Crabtree	Reach 1	7182	Max	EC100	2122.21	1.06	12.93		13.04	0.00034	3.07	859.08	162.83	0.17
Crabtree	Reach 1	7182	Max	EC3yr0416	742.25	1.06	9.02		9.1	0.000417	2.42	350.26	99.33	0.18
Crabtree	Reach 1	7182	Max	EC25yr0416	1615.8	1.06	11.81		11.92	0.000359	2.92	682.21	148.77	0.17
Crabtree	Reach 1	7182	Max	newEC25	1620.34	1.06	11.75		11.86	0.000373	2.96	673.08	146.79	0.18
Crabtree	Reach 1	7182	Max	newEC100	2125.1	1.06	12.86		12.98	0.000353	3.12	847.86	162.83	0.18
Crabtree	Reach 1	7182	Max	newEC3	744.81	1.06	8.98		9.06	0.000431	2.45	346.66	97.92	0.18
	Reach 1													
Crabtree	Reach 1	7030	Lat											
	Reach 1													
Crabtree	Reach 1	7028	Max	EC100	2121.44	0.99	12.79	7.74	12.98	0.000586	3.95	652.87	117.51	0.22
Crabtree	Reach 1	7028	Max	EC3yr0416	742.23	0.99	8.9	5.58	9.02	0.000656	2.97	272.77	64.6	0.22
Crabtree	Reach 1	7028	Max	EC25yr0416	1613.99	0.99	11.69	7.1	11.86	0.000595	3.67	526.35	112.51	0.22
Crabtree	Reach 1	7028	Max	newEC25	1619.01	0.99	11.62	7.11	11.8	0.00062	3.73	518.84	112.22	0.22
Crabtree	Reach 1	7028	Max	newEC100	2124.3	0.99	12.72	7.74	12.92	0.000606	4	644.28	116.64	0.23
Crabtree	Reach 1	7028	Max	newEC3	744.8	0.99	8.86	5.58	8.98	0.000679	3.01	270.15	64.35	0.22
	Reach 1													
Crabtree	Reach 1	7000	Inl											
	Reach 1													
Crabtree	Reach 1	6885	Max	EC100	2121.31	0.93	12.74		12.89	0.000372	3.26	785.59	152.98	0.18
Crabtree	Reach 1	6885	Max	EC3yr0416	742.21	0.93	8.79		8.87	0.000338	2.22	344.8	64.85	0.16
Crabtree	Reach 1	6885	Max	EC25yr0416	1613.43	0.93	11.63		11.75	0.000356	2.94	633.04	124.91	0.17
Crabtree	Reach 1	6885	Max	newEC25	1618.6	0.93	11.56		11.69	0.00037	2.99	624.51	124	0.18
Crabtree	Reach 1	6885	Max	newEC100	2124.1	0.93	12.67		12.81	0.000385	3.3	774.28	149.67	0.18
Crabtree	Reach 1	6885	Max	newEC3	744.77	0.93	8.75		8.82	0.00035	2.24	341.71	64.73	0.16
	Reach 1													
Crabtree	Reach 1	6858	Max	EC100	2122.68	0.92	12.75		12.87	0.00034	3.18	832.45	163.32	0.18
Crabtree	Reach 1	6858	Max	EC3yr0416	742.22	0.92	8.78		8.86	0.000332	2.26	345.92	67.38	0.16
Crabtree	Reach 1	6858	Max	EC25yr0416	1614.36	0.92	11.63		11.75	0.000352	2.99	660.52	148.33	0.17

Crabtree	Reach 1	6858	Max	newEC25	1619.32	0.92	11.56		11.68	0.000368	3.04	650.22	147.63	0.18
Crabtree	Reach 1	6858	Max	newEC100	2125.5	0.92	12.67		12.8	0.000354	3.23	820.23	161.43	0.18
Crabtree	Reach 1	6858	Max	newEC3	744.77	0.92	8.74		8.81	0.000343	2.29	342.69	67.09	0.16
	Reach 1													
Crabtree	Reach 1	6818	Max	EC100	2114.7	0.9	12.72		12.86	0.000426	3.3	766.2	143.76	0.19
Crabtree	Reach 1	6818	Max	EC3yr0416	743.68	0.9	8.73		8.84	0.000593	2.68	289.64	77.59	0.21
Crabtree	Reach 1	6818	Max	EC25yr0416	1611.78	0.9	11.6		11.73	0.00045	3.12	610.9	133.48	0.19
Crabtree	Reach 1	6818	Max	newEC25	1616.87	0.9	11.53		11.66	0.000471	3.17	601.51	132.96	0.2
Crabtree	Reach 1	6818	Max	newEC100	2117.95	0.9	12.65		12.79	0.000444	3.35	755.22	142.99	0.19
Crabtree	Reach 1	6818	Max	newEC3	746.25	0.9	8.68		8.8	0.000618	2.72	285.79	76.31	0.21
	Reach 1													
Crabtree	Reach 1	6800	Max	EC100	2112.71	0.89	12.69		12.86	0.000423	3.55	719.35	132.21	0.2
Crabtree	Reach 1	6800	Max	EC3yr0416	743.79	0.89	8.75		8.83	0.000376	2.42	327.03	63.72	0.17
Crabtree	Reach 1	6800	Max	EC25yr0416	1610.58	0.89	11.58		11.72	0.000413	3.25	581.4	116.07	0.19
Crabtree	Reach 1	6800	Max	newEC25	1615.66	0.89	11.51		11.66	0.000431	3.3	573.21	115.37	0.19
Crabtree	Reach 1	6800	Max	newEC100	2115.86	0.89	12.62		12.79	0.000439	3.59	709.19	130.89	0.2
Crabtree	Reach 1	6800	Max	newEC3	746.36	0.89	8.7		8.79	0.000388	2.45	323.91	62.96	0.17
	Reach 1													
Crabtree	Reach 1	6725	Max	EC100	2112.94	0.85	12.67		12.82	0.000553	3.22	696.21	124.57	0.21
Crabtree	Reach 1	6725	Max	EC3yr0416	743.78	0.85	8.72		8.8	0.000469	2.3	316.11	64.7	0.18
Crabtree	Reach 1	6725	Max	EC25yr0416	1610.18	0.85	11.55		11.68	0.000594	2.99	565.25	111.86	0.21
Crabtree	Reach 1	6725	Max	newEC25	1615.26	0.85	11.48		11.61	0.000624	3.04	557.19	110.38	0.22
Crabtree	Reach 1	6725	Max	newEC100	2116.03	0.85	12.59		12.74	0.000577	3.26	686.52	122.34	0.21
Crabtree	Reach 1	6725	Max	newEC3	746.35	0.85	8.66		8.75	0.000485	2.33	312.84	64.28	0.18
	Reach 1													
Crabtree	Reach 1	6695	Max	EC100	2112.92	0.84	12.67		12.8	0.000489	3.11	736.72	124.79	0.2
Crabtree	Reach 1	6695	Max	EC3yr0416	743.78	0.84	8.7		8.79	0.000473	2.1	325.57	70.99	0.18
Crabtree	Reach 1	6695	Max	EC25yr0416	1610.03	0.84	11.55		11.66	0.00051	2.85	602.61	116.05	0.2
Crabtree	Reach 1	6695	Max	newEC25	1615.21	0.84	11.48		11.6	0.000536	2.9	594.19	115.77	0.2
Crabtree	Reach 1	6695	Max	newEC100	2116.03	0.84	12.59		12.72	0.00051	3.15	726.96	124.14	0.2
Crabtree	Reach 1	6695	Max	newEC3	746.34	0.84	8.65		8.74	0.000462	2.17	322.07	66.84	0.18
	Reach 1													
Crabtree	Reach 1	6669	Max	EC100	2113.27	0.83	12.68		12.79	0.0004	2.76	827.31	138.85	0.18
Crabtree	Reach 1	6669	Max	EC3yr0416	744.2	0.83	8.7		8.78	0.000499	1.84	348.35	99.03	0.18
Crabtree	Reach 1	6669	Max	EC25yr0416	1610.35	0.83	11.56		11.65	0.000406	2.5	679.44	128.03	0.18

Crabtree	Reach 1	6669	Max	newEC25	1615.32	0.83	11.49		11.58	0.000426	2.54	670.18	127.79	0.18
Crabtree	Reach 1	6669	Max	newEC100	2116.38	0.83	12.6		12.71	0.000416	2.8	816.52	137.89	0.18
Crabtree	Reach 1	6669	Max	newEC3	746.77	0.83	8.65		8.73	0.000524	1.87	343.18	98.95	0.18
	Reach 1													
Crabtree	Reach 1	6639	Max	EC100	2111.13	0.81	12.69		12.77	0.000283	2.53	931.42	154.01	0.15
Crabtree	Reach 1	6639	Max	EC3yr0416	749.01	0.81	8.7		8.76	0.000418	2	386.98	124.73	0.17
Crabtree	Reach 1	6639	Max	EC25yr0416	1608.27	0.81	11.57		11.64	0.00029	2.33	767.92	142.19	0.15
Crabtree	Reach 1	6639	Max	newEC25	1613.54	0.81	11.5		11.57	0.000304	2.37	757.65	141.75	0.16
Crabtree	Reach 1	6639	Max	newEC100	2114.25	0.81	12.61		12.7	0.000294	2.57	919.56	151.03	0.16
Crabtree	Reach 1	6639	Max	newEC3	751.6	0.81	8.65		8.71	0.000438	2.03	380.52	123.2	0.17
	Reach 1													
Crabtree	Reach 1	6614	Max	EC100	2107.88	0.8	12.69		12.76	0.00027	2.36	992.02	174.61	0.15
Crabtree	Reach 1	6614	Max	EC3yr0416	750.08	0.8	8.69		8.75	0.00044	1.93	405.59	119.28	0.17
Crabtree	Reach 1	6614	Max	EC25yr0416	1606.21	0.8	11.57		11.63	0.000274	2.14	798.11	157.44	0.15
Crabtree	Reach 1	6614	Max	newEC25	1611.62	0.8	11.5		11.56	0.000288	2.18	786.74	156.5	0.15
Crabtree	Reach 1	6614	Max	newEC100	2111.1	0.8	12.61		12.69	0.000283	2.4	978.46	174.61	0.15
Crabtree	Reach 1	6614	Max	newEC3	752.69	0.8	8.64		8.7	0.000464	1.96	399.34	118.84	0.17
	Reach 1													
Crabtree	Reach 1	6552	Max	EC100	2106.64	0.77	12.68		12.75	0.000248	2.04	1009.81	162.11	0.14
Crabtree	Reach 1	6552	Max	EC3yr0416	750.07	0.77	8.66		8.72	0.000397	2.23	401.03	118.92	0.17
Crabtree	Reach 1	6552	Max	EC25yr0416	1605.94	0.77	11.56		11.62	0.000269	1.94	828.87	159.48	0.14
Crabtree	Reach 1	6552	Max	newEC25	1611.34	0.77	11.48		11.54	0.000283	1.98	817.22	159.25	0.14
Crabtree	Reach 1	6552	Max	newEC100	2109.91	0.77	12.6		12.67	0.000259	2.07	997.14	161.96	0.14
Crabtree	Reach 1	6552	Max	newEC3	752.66	0.77	8.61		8.67	0.000419	2.28	394.58	118.62	0.17
	Reach 1													
Crabtree	Reach 1	6315	Max	EC100	2121.02	0.67	12.55		12.68	0.00036	2.99	767.76	114.21	0.17
Crabtree	Reach 1	6315	Max	EC3yr0416	750.27	0.67	8.56		8.63	0.000375	2.08	361.78	78.01	0.16
Crabtree	Reach 1	6315	Max	EC25yr0416	1611.19	0.67	11.44		11.55	0.000344	2.68	642.85	109.15	0.17
Crabtree	Reach 1	6315	Max	newEC25	1616.48	0.67	11.36		11.47	0.00036	2.72	634.37	108.31	0.17
Crabtree	Reach 1	6315	Max	newEC100	2123.52	0.67	12.47		12.6	0.000374	3.03	758.34	114.11	0.18
Crabtree	Reach 1	6315	Max	newEC3	752.87	0.67	8.51		8.57	0.000391	2.11	357.31	75.67	0.17
	Reach 1													
Crabtree	Reach 1	6262	Max	EC100	2120.88	0.64	12.51	6.35	12.64	0.000373	3.07	787.45	129.29	0.18
Crabtree	Reach 1	6262	Max	EC3yr0416	750.27	0.64	8.54	4.38	8.61	0.000403	2.2	350.96	75.86	0.17
Crabtree	Reach 1	6262	Max	EC25yr0416	1610.99	0.64	11.41	5.7	11.52	0.000368	2.8	646.76	124.53	0.17

Crabtree	Reach 1	6262	Max	newEC25	1616.27	0.64	11.33	5.69	11.45	0.000385	2.85	636.98	123.69	0.18
Crabtree	Reach 1	6262	Max	newEC100	2123.4	0.64	12.43	6.33	12.56	0.000389	3.12	776.69	129.22	0.18
Crabtree	Reach 1	6262	Max	newEC3	752.83	0.64	8.48	4.36	8.55	0.000422	2.24	346.51	73.85	0.17
	Reach 1													
Crabtree	Reach 1	6130	Bridge											
	Reach 1													
Crabtree	Reach 1	5998	Max	EC100	2120.26	0.52	12.31		12.47	0.000461	3.33	699.43	118	0.2
Crabtree	Reach 1	5998	Max	EC3yr0416	750.2	0.52	8.4		8.48	0.000422	2.26	333.93	66.53	0.17
Crabtree	Reach 1	5998	Max	EC25yr0416	1609.68	0.52	11.23		11.36	0.000436	2.97	580.37	104.92	0.19
Crabtree	Reach 1	5998	Max	newEC25	1615.12	0.52	11.14		11.28	0.000458	3.03	571.33	104.45	0.19
Crabtree	Reach 1	5998	Max	newEC100	2122.62	0.52	12.22		12.38	0.000482	3.39	688.61	117.83	0.2
Crabtree	Reach 1	5998	Max	newEC3	752.78	0.52	8.34		8.42	0.000442	2.3	329.65	66.29	0.18
	Reach 1													
Crabtree	Reach 1	5985	Max	EC100	2120.26	0.51	12.29		12.45	0.000483	3.38	690.11	116.1	0.2
Crabtree	Reach 1	5985	Max	EC3yr0416	750.2	0.51	8.39		8.47	0.000466	2.33	322.98	65.48	0.18
Crabtree	Reach 1	5985	Max	EC25yr0416	1608.57	0.51	11.22		11.35	0.000463	3.04	570.43	107.57	0.19
Crabtree	Reach 1	5985	Max	newEC25	1615.01	0.51	11.13		11.27	0.000488	3.1	561.14	106.81	0.2
Crabtree	Reach 1	5985	Max	newEC100	2122.51	0.51	12.2		12.37	0.000504	3.43	679.55	115	0.2
Crabtree	Reach 1	5985	Max	newEC3	752.78	0.51	8.32		8.41	0.000488	2.37	318.73	65.18	0.18
	Reach 1													
Crabtree	Reach 1	5947	Lat											
	Reach 1													
Crabtree	Reach 1	5946	Lat											
	Reach 1													
Crabtree	Reach 1	5945	Max	EC100	2103.49	0.49	12.25		12.45	0.000509	3.68	614.14	78.46	0.21
Crabtree	Reach 1	5945	Max	EC3yr0416	750.23	0.49	8.37		8.46	0.000434	2.4	318.38	65.43	0.18
Crabtree	Reach 1	5945	Max	EC25yr0416	1599.54	0.49	11.19		11.34	0.000456	3.22	530.63	78.46	0.19
Crabtree	Reach 1	5945	Max	newEC25	1606.3	0.49	11.1		11.26	0.000478	3.27	523.74	78.46	0.2
Crabtree	Reach 1	5945	Max	newEC100	2106.17	0.49	12.16		12.36	0.000529	3.72	606.87	78.46	0.21
Crabtree	Reach 1	5945	Max	newEC3	752.79	0.49	8.3		8.39	0.000455	2.44	314.1	64.64	0.18
	Reach 1													
Crabtree	Reach 1	5926	Max	EC100	2083.97	0.48	12.25		12.41	0.000421	3.3	669.68	81.96	0.19
Crabtree	Reach 1	5926	Max	EC3yr0416	750.97	0.48	8.37		8.45	0.000378	2.19	354.08	77.14	0.17
Crabtree	Reach 1	5926	Max	EC25yr0416	1587.72	0.48	11.19		11.31	0.000377	2.88	582.86	81.96	0.18
Crabtree	Reach 1	5926	Max	newEC25	1594.8	0.48	11.1		11.23	0.000395	2.93	575.71	81.96	0.18

Crabtree	Reach 1	5926	Max	newEC100	2086.68	0.48	12.16		12.32	0.000437	3.34	662.13	81.96	0.19
Crabtree	Reach 1	5926	Max	newEC3	753.57	0.48	8.31		8.38	0.000397	2.22	349.02	76.67	0.17
	Reach 1													
Crabtree	Reach 1	5917	Max	EC100	2059.27	0.48	12.3		12.41	0.000284	2.83	788.91	91.8	0.16
Crabtree	Reach 1	5917	Max	EC3yr0416	750.23	0.48	8.39		8.44	0.000243	1.87	430.34	91.8	0.14
Crabtree	Reach 1	5917	Max	EC25yr0416	1571.52	0.48	11.23		11.31	0.000251	2.46	690.54	91.8	0.15
Crabtree	Reach 1	5917	Max	newEC25	1577.62	0.48	11.14		11.23	0.000262	2.5	682.63	91.8	0.15
Crabtree	Reach 1	5917	Max	newEC100	2061.8	0.48	12.21		12.32	0.000295	2.86	780.57	91.8	0.16
Crabtree	Reach 1	5917	Max	newEC3	753.01	0.48	8.33		8.38	0.000256	1.9	424.36	91.8	0.14
	Reach 1													
Crabtree	Reach 1	5906	Max	EC100	2034.6	0.47	12.27		12.37	0.000275	2.77	804.11	96.95	0.16
Crabtree	Reach 1	5906	Max	EC3yr0416	748.26	0.47	8.38		8.43	0.000263	1.93	426.75	96.95	0.14
Crabtree	Reach 1	5906	Max	EC25yr0416	1552.92	0.47	11.2		11.28	0.000246	2.43	700.86	96.95	0.15
Crabtree	Reach 1	5906	Max	newEC25	1560.18	0.47	11.12		11.2	0.000258	2.47	692.44	96.95	0.15
Crabtree	Reach 1	5906	Max	newEC100	2037.22	0.47	12.18		12.28	0.000286	2.8	795.24	96.95	0.16
Crabtree	Reach 1	5906	Max	newEC3	751.27	0.47	8.31		8.37	0.000278	1.96	420.37	96.95	0.14
	Reach 1													
Crabtree	Reach 1	5895	Max	EC100	2013.77	0.47	12.23		12.35	0.000277	2.87	771.47	89.97	0.16
Crabtree	Reach 1	5895	Max	EC3yr0416	746.87	0.47	8.37		8.42	0.000242	1.95	423.44	89.97	0.14
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09

Crabtree	Reach 1	5760	Max	newEC100	1912.29	0.41	12.12		12.26	0.000362	3.09	714.92	144.52	0.18
Crabtree	Reach 1	5760	Max	newEC3	744.71	0.41	8.24		8.32	0.000377	2.23	335.42	61.35	0.16
	Reach 1													
Crabtree	Reach 1	5688	Max	EC100	1900.4	0.38	12.17		12.32	0.000405	3.17	662.88	129.44	0.18
Crabtree	Reach 1	5688	Max	EC3yr0416	740.21	0.38	8.28		8.36	0.000417	2.24	330.64	61.58	0.17
Crabtree	Reach 1	5688	Max	EC25yr0416	1477.26	0.38	11.11		11.24	0.000397	2.89	531.69	105.76	0.18
Crabtree	Reach 1	5688	Max	newEC25	1486.23	0.38	11.02		11.15	0.000418	2.95	522.19	99.88	0.18
Crabtree	Reach 1	5688	Max	newEC100	1906.26	0.38	12.08		12.23	0.000426	3.23	650.43	128.98	0.19
Crabtree	Reach 1	5688	Max	newEC3	744.68	0.38	8.21		8.29	0.000441	2.28	326.27	61.36	0.17
	Reach 1													
Crabtree	Reach 1	5653	Max	EC100	1900.37	0.36	12.18		12.32	0.000377	3.1	674.01	119.45	0.18
Crabtree	Reach 1	5653	Max	EC3yr0416	740.21	0.36	8.27		8.35	0.000375	2.18	340.22	61.91	0.16
Crabtree	Reach 1	5653	Max	EC25yr0416	1477.16	0.36	11.1		11.22	0.00037	2.84	548.62	113.16	0.17
Crabtree	Reach 1	5653	Max	newEC25	1486.2	0.36	11.01		11.14	0.00039	2.89	538.24	108.14	0.18
Crabtree	Reach 1	5653	Max	newEC100	1906.22	0.36	12.08		12.23	0.000396	3.16	662.37	118.94	0.18
Crabtree	Reach 1	5653	Max	newEC3	744.68	0.36	8.2		8.28	0.000396	2.22	335.8	61.72	0.17
	Reach 1													
Crabtree	Reach 1	5510	Max	EC100	1899.48	0.29	12.16		12.27	0.000297	2.82	767.4	135.3	0.16
Crabtree	Reach 1	5510	Max	EC3yr0416	740.19	0.29	8.23		8.29	0.000334	2.11	353.33	66.44	0.16
Crabtree	Reach 1	5510	Max	EC25yr0416	1477.07	0.29	11.08		11.18	0.000297	2.61	627.43	122.72	0.16
Crabtree	Reach 1	5510	Max	newEC25	1485.98	0.29	10.98		11.09	0.000315	2.67	615.74	122.04	0.16
Crabtree	Reach 1	5510	Max	newEC100	1905.61	0.29	12.06		12.17	0.000313	2.88	754.05	135.13	0.16
Crabtree	Reach 1	5510	Max	newEC3	744.66	0.29	8.15		8.22	0.000353	2.15	348.4	66.17	0.16
	Reach 1													
Crabtree	Reach 1	5355	Max	EC100	1877.52	0.22	12.1		12.2	0.000276	2.65	833.76	157.71	0.15
Crabtree	Reach 1	5355	Max	EC3yr0416	740.17	0.22	8.17		8.24	0.000383	2.18	340.27	64.23	0.16
Crabtree	Reach 1	5355	Max	EC25yr0416	1474.49	0.22	11.03		11.12	0.000295	2.53	670.45	142.94	0.15
Crabtree	Reach 1	5355	Max	newEC25	1484.05	0.22	10.93		11.03	0.000315	2.6	656.45	142.54	0.16
Crabtree	Reach 1	5355	Max	newEC100	1886.36	0.22	12		12.1	0.000294	2.72	817.75	157.71	0.16
Crabtree	Reach 1	5355	Max	newEC3	744.63	0.22	8.09		8.16	0.000407	2.23	335.26	63.93	0.17
	Reach 1													
Crabtree	Reach 1	5221	Max	EC100	1905.2	0.16	11.97		12.07	0.000296	2.71	812.77	137.86	0.16
Crabtree	Reach 1	5221	Max	EC3yr0416	740.15	0.16	8.1		8.18	0.000443	2.31	322.98	72.92	0.18
Crabtree	Reach 1	5221	Max	EC25yr0416	1503.71	0.16	10.92		11.02	0.00032	2.6	668.06	137.86	0.16
Crabtree	Reach 1	5221	Max	newEC25	1511.36	0.16	10.82		10.92	0.000342	2.67	654.06	137.86	0.17

Crabtree	Reach 1	5221	Max	newEC100	1917.03	0.16	11.87		11.97	0.000316	2.78	798.01	137.86	0.16
Crabtree	Reach 1	5221	Max	newEC3	744.59	0.16	8.02		8.11	0.000473	2.36	317.15	69.25	0.18
	Reach 1													
Crabtree	Reach 1	5168	Max	EC100	1934.68	0.14	12		12.1	0.000329	2.73	802.71	135.96	0.16
Crabtree	Reach 1	5168	Max	EC3yr0416	740.11	0.14	8.06		8.16	0.000604	2.46	304.76	84.81	0.2
Crabtree	Reach 1	5168	Max	EC25yr0416	1523.38	0.14	10.94		11.03	0.000365	2.63	657.72	135.96	0.17
Crabtree	Reach 1	5168	Max	newEC25	1529.86	0.14	10.83		10.93	0.000391	2.7	643.82	135.96	0.17
Crabtree	Reach 1	5168	Max	newEC100	1945.56	0.14	11.9		12	0.000351	2.8	788.18	135.96	0.17
Crabtree	Reach 1	5168	Max	newEC3	744.48	0.14	7.98		8.08	0.000646	2.52	297.65	81.44	0.21
	Reach 1													
Crabtree	Reach 1	5120	Max	EC100	1962.81	0.12	12.01		12.09	0.000247	2.4	910.93	135.7	0.14
Crabtree	Reach 1	5120	Max	EC3yr0416	740.55	0.12	8.07		8.13	0.000405	2.06	381.44	107.9	0.17
Crabtree	Reach 1	5120	Max	EC25yr0416	1545.03	0.12	10.95		11.02	0.00026	2.26	766.06	135.7	0.14
Crabtree	Reach 1	5120	Max	newEC25	1550.61	0.12	10.84		10.92	0.000277	2.31	752.28	135.7	0.15
Crabtree	Reach 1	5120	Max	newEC100	1973.95	0.12	11.91		11.99	0.000263	2.45	896.49	135.7	0.15
Crabtree	Reach 1	5120	Max	newEC3	744.84	0.12	7.98		8.05	0.000432	2.11	372.45	101.99	0.17
	Reach 1													
Crabtree	Reach 1	5055	Max	EC100	2004.59	0.09	11.98		12.06	0.000245	2.28	914.44	137.15	0.14
Crabtree	Reach 1	5055	Max	EC3yr0416	747.44	0.09	8.06		8.11	0.00028	1.83	438.17	105.55	0.14
Crabtree	Reach 1	5055	Max	EC25yr0416	1578.79	0.09	10.92		10.99	0.000256	2.12	769.06	137.15	0.14
Crabtree	Reach 1	5055	Max	newEC25	1583.78	0.09	10.82		10.89	0.000272	2.17	755.13	134.34	0.15
Crabtree	Reach 1	5055	Max	newEC100	2015.58	0.09	11.87		11.95	0.00026	2.33	899.69	137.15	0.15
Crabtree	Reach 1	5055	Max	newEC3	750.61	0.09	7.97		8.03	0.000299	1.88	429.1	104.94	0.15
	Reach 1													
Crabtree	Reach 1	5034	Max	EC100	2017.93	0.08	11.98		12.05	0.000231	2.17	946.92	138.15	0.14
Crabtree	Reach 1	5034	Max	EC3yr0416	748.61	0.08	8.06		8.1	0.000269	1.74	461.44	111.4	0.14
Crabtree	Reach 1	5034	Max	EC25yr0416	1590.17	0.08	10.92		10.98	0.000238	2	800.79	128.38	0.14
Crabtree	Reach 1	5034	Max	newEC25	1594.93	0.08	10.82		10.88	0.000253	2.04	787.76	126.57	0.14
Crabtree	Reach 1	5034	Max	newEC100	2028.84	0.08	11.87		11.95	0.000245	2.21	932.08	138.15	0.14
Crabtree	Reach 1	5034	Max	newEC3	750.74	0.08	7.97		8.02	0.000288	1.79	451.88	110.97	0.14
	Reach 1													
Crabtree	Reach 1	5015	Max	EC100	2036.89	0.07	11.95		12.04	0.000291	2.42	872.94	137.15	0.15
Crabtree	Reach 1	5015	Max	EC3yr0416	752.04	0.07	8.04		8.1	0.000365	2.03	405.48	106.03	0.16
Crabtree	Reach 1	5015	Max	EC25yr0416	1607.9	0.07	10.89		10.97	0.000309	2.26	729.12	125.59	0.15
Crabtree	Reach 1	5015	Max	newEC25	1612.85	0.07	10.79		10.87	0.000329	2.31	716.26	123.67	0.16

Crabtree	Reach 1	5015	Max	newEC100	2047.64	0.07	11.84		11.93	0.000309	2.47	858.03	137.15	0.16
Crabtree	Reach 1	5015	Max	newEC3	752.67	0.07	7.95		8.01	0.00039	2.09	396.28	105.59	0.16
	Reach 1													
Crabtree	Reach 1	4989	Max	EC100	2038.3	0.05	11.94		12.03	0.000267	2.52	879.17	136.84	0.15
Crabtree	Reach 1	4989	Max	EC3yr0416	752.05	0.05	8.03		8.09	0.000319	1.95	417.54	104.77	0.15
Crabtree	Reach 1	4989	Max	EC25yr0416	1606.92	0.05	10.88		10.96	0.000274	2.35	734.84	136.22	0.15
Crabtree	Reach 1	4989	Max	newEC25	1612.65	0.05	10.78		10.86	0.00029	2.39	720.83	131.85	0.15
Crabtree	Reach 1	4989	Max	newEC100	2048.96	0.05	11.83		11.92	0.000283	2.58	864.22	136.84	0.15
Crabtree	Reach 1	4989	Max	newEC3	752.67	0.05	7.95		8	0.000341	1.99	408.39	104.62	0.15
	Reach 1													
Crabtree	Reach 1	4955	Max	EC100	2038.24	0.04	11.91		12.01	0.000286	2.67	858.95	135.32	0.15
Crabtree	Reach 1	4955	Max	EC3yr0416	752.04	0.04	8.01		8.08	0.00036	2.08	388.52	105.56	0.16
Crabtree	Reach 1	4955	Max	EC25yr0416	1606.79	0.04	10.86		10.95	0.000296	2.51	716.75	135.32	0.15
Crabtree	Reach 1	4955	Max	newEC25	1612.59	0.04	10.75		10.85	0.000315	2.56	702.57	135.32	0.16
Crabtree	Reach 1	4955	Max	newEC100	2048.82	0.04	11.8		11.9	0.000304	2.73	844	135.32	0.16
Crabtree	Reach 1	4955	Max	newEC3	752.66	0.04	7.92		7.99	0.000385	2.13	379.16	105.31	0.16
	Reach 1													
Crabtree	Reach 1	4886	Culvert											
	Reach 1													
Crabtree	Reach 1	4885	Max	EC100	2029.89	0.01	11.05	5.86	11.28	0.00237	3.86	528	5.32	0.2
Crabtree	Reach 1	4885	Max	EC3yr0416	751.9	0.01	7.71	4.05	7.81	0.000791	2.48	303.17	63.58	0.16
Crabtree	Reach 1	4885	Max	EC25yr0416	1598.51	0.01	10.24	5.31	10.42	0.000999	3.39	472.13	68.52	0.19
Crabtree	Reach 1	4885	Max	newEC25	1603.38	0.01	10.11	5.31	10.3	0.001062	3.46	463.39	68.52	0.19
Crabtree	Reach 1	4885	Max	newEC100	2041.02	0.01	10.9	5.88	11.14	0.001241	3.94	520.43	73.84	0.21
Crabtree	Reach 1	4885	Max	newEC3	752.57	0.01	7.61	4.05	7.71	0.000841	2.54	296.8	63.24	0.16
	Reach 1													
Crabtree	Reach 1	4877	Max	EC100	2029.4	0	11.04		11.27	0.002368	3.86	528.1	5.32	0.2
Crabtree	Reach 1	4877	Max	EC3yr0416	751.9	0	7.71		7.8	0.000793	2.48	302.91	63.55	0.16
Crabtree	Reach 1	4877	Max	EC25yr0416	1598.38	0	10.23		10.41	0.001003	3.39	471.65	68.52	0.19
Crabtree	Reach 1	4877	Max	newEC25	1603.25	0	10.1		10.29	0.001066	3.46	462.87	68.52	0.19
Crabtree	Reach 1	4877	Max	newEC100	2040.65	0	10.89		11.13	0.001245	3.94	519.68	73.84	0.21
Crabtree	Reach 1	4877	Max	newEC3	752.57	0	7.6		7.7	0.000844	2.54	296.51	63.22	0.16
	Reach 1													
Crabtree	Reach 1	4839	Culvert											
	Reach 1													

Crabtree	Reach 1	4829	Max	EC100	1982.61	-0.02	10.11	5.79	10.39	0.001623	4.28	463.66	68.52	0.24
Crabtree	Reach 1	4829	Max	EC3yr0416	751.22	-0.02	7.38	4.04	7.49	0.000967	2.66	282.63	62.67	0.17
Crabtree	Reach 1	4829	Max	EC25yr0416	1557.89	-0.02	9.57	5.25	9.77	0.001285	3.65	426.43	68.53	0.21
Crabtree	Reach 1	4829	Max	newEC25	1558.22	-0.02	9.4	5.25	9.62	0.00139	3.76	414.9	68.17	0.22
Crabtree	Reach 1	4829	Max	newEC100	1987.86	-0.02	9.85	5.8	10.16	0.001832	4.46	445.86	68.52	0.25
Crabtree	Reach 1	4829	Max	newEC3	752.1	-0.02	7.26	4.04	7.38	0.001048	2.73	275.2	62.44	0.18
	Reach 1													
Crabtree	Reach 1	4805	Max	EC100	1988.41	-0.03	10.2		10.36	0.000552	3.26	643.23	119.42	0.21
Crabtree	Reach 1	4805	Max	EC3yr0416	751.3	-0.03	7.41		7.47	0.000371	2.02	380.18	85.26	0.16
Crabtree	Reach 1	4805	Max	EC25yr0416	1563.67	-0.03	9.63		9.75	0.000452	2.8	579	107.2	0.19
Crabtree	Reach 1	4805	Max	newEC25	1565.79	-0.03	9.47		9.59	0.000494	2.88	561.32	106.25	0.19
Crabtree	Reach 1	4805	Max	newEC100	1995.76	-0.03	9.95		10.12	0.000629	3.4	613.59	111.85	0.22
Crabtree	Reach 1	4805	Max	newEC3	752.16	-0.03	7.29		7.36	0.000403	2.08	370.13	85.07	0.17
	Reach 1													
Crabtree	Reach 1	4789	Lat											
	Reach 1													
Crabtree	Reach 1	4788	Lat											
	Reach 1													
Crabtree	Reach 1	4787	Max	EC100	1981.56	-0.04	10.19		10.35	0.000497	3.31	646.88	117.5	0.2
Crabtree	Reach 1	4787	Max	EC3yr0416	750.88	-0.04	7.4		7.47	0.000315	2.01	384.13	84.82	0.15
Crabtree	Reach 1	4787	Max	EC25yr0416	1557.75	-0.04	9.63		9.75	0.000402	2.84	582.44	111.23	0.18
Crabtree	Reach 1	4787	Max	newEC25	1560.34	-0.04	9.46		9.59	0.000436	2.92	564.76	103.09	0.19
Crabtree	Reach 1	4787	Max	newEC100	1989.03	-0.04	9.94		10.11	0.000564	3.45	617.59	113.28	0.21
Crabtree	Reach 1	4787	Max	newEC3	751.82	-0.04	7.29		7.35	0.00034	2.06	374.1	84.64	0.16
	Reach 1													
Crabtree	Reach 1	4693	Max	EC100	1924.9	-0.06	10.14		10.31	0.000569	3.45	607.79	111.37	0.21
Crabtree	Reach 1	4693	Max	EC3yr0416	751.38	-0.06	7.35		7.43	0.000415	2.22	342.61	80.86	0.17
Crabtree	Reach 1	4693	Max	EC25yr0416	1513.3	-0.06	9.58		9.71	0.000467	2.98	546.14	108.63	0.19
Crabtree	Reach 1	4693	Max	newEC25	1518.43	-0.06	9.41		9.55	0.000515	3.08	527.41	107.47	0.2
Crabtree	Reach 1	4693	Max	newEC100	1936.95	-0.06	9.87		10.07	0.000658	3.63	578.31	110.18	0.23
Crabtree	Reach 1	4693	Max	newEC3	752.23	-0.06	7.23		7.31	0.000449	2.28	333	76.17	0.18
	Reach 1													
Crabtree	Reach 1	4647	Max	EC100	1876.06	-0.07	10.15		10.24	0.0003	2.54	801.73	116.12	0.16
Crabtree	Reach 1	4647	Max	EC3yr0416	765.33	-0.07	7.36		7.4	0.000249	1.75	477.52	116.12	0.13
Crabtree	Reach 1	4647	Max	EC25yr0416	1475.58	-0.07	9.59		9.66	0.000242	2.18	736.88	116.12	0.14

Crabtree	Reach 1	4647	Max	newEC25	1488.3	-0.07	9.42		9.49	0.000268	2.26	716.79	116.12	0.15
Crabtree	Reach 1	4647	Max	newEC100	1893.8	-0.07	9.89		9.99	0.000345	2.67	771.13	116.12	0.17
Crabtree	Reach 1	4647	Max	newEC3	767.9	-0.07	7.24		7.28	0.000275	1.81	463.32	116.12	0.14
	Reach 1													
Crabtree	Reach 1	4605	Max	EC100	1828.08	-0.08	10.12		10.25	0.000461	3.09	655.99	113.83	0.19
Crabtree	Reach 1	4605	Max	EC3yr0416	758.35	-0.08	7.31		7.39	0.000471	2.33	340.45	99.67	0.18
Crabtree	Reach 1	4605	Max	EC25yr0416	1435.37	-0.08	9.56		9.66	0.000383	2.68	592.99	113.83	0.18
Crabtree	Reach 1	4605	Max	newEC25	1451.83	-0.08	9.38		9.5	0.000433	2.81	572.62	113.83	0.19
Crabtree	Reach 1	4605	Max	newEC100	1847.75	-0.08	9.84		9.99	0.000543	3.28	624.99	113.83	0.21
Crabtree	Reach 1	4605	Max	newEC3	705.79	-0.08	7.18		7.26	0.000447	2.23	327.96	95.34	0.18
	Reach 1													
Crabtree	Reach 1	4564	Max	EC100	1800.53	-0.09	10.11		10.23	0.000453	2.94	668.45	116.46	0.19
Crabtree	Reach 1	4564	Max	EC3yr0416	757.53	-0.09	7.29		7.37	0.000528	2.31	348.74	105.89	0.19
Crabtree	Reach 1	4564	Max	EC25yr0416	1416.53	-0.09	9.55		9.65	0.000381	2.56	604.17	116.46	0.17
Crabtree	Reach 1	4564	Max	newEC25	1434.79	-0.09	9.37		9.47	0.000435	2.69	583.1	116.46	0.18
Crabtree	Reach 1	4564	Max	newEC100	1824.28	-0.09	9.83		9.97	0.00054	3.13	636.33	116.46	0.21
Crabtree	Reach 1	4564	Max	newEC3	704.85	-0.09	7.17		7.24	0.000509	2.23	335.16	105.29	0.19
	Reach 1													
Crabtree	Reach 1	4439	Max	EC100	1707.67	-0.12	10.05		10.16	0.000364	2.69	689.29	125.46	0.17
Crabtree	Reach 1	4439	Max	EC3yr0416	750.47	-0.12	7.25		7.32	0.000389	2.06	371.52	104.69	0.16
Crabtree	Reach 1	4439	Max	EC25yr0416	1348.2	-0.12	9.51		9.59	0.000302	2.33	621.67	123.4	0.15
Crabtree	Reach 1	4439	Max	newEC25	1372.97	-0.12	9.33		9.41	0.000347	2.46	598.78	119.85	0.16
Crabtree	Reach 1	4439	Max	newEC100	1742.04	-0.12	9.77		9.89	0.00044	2.88	653.25	125.46	0.19
Crabtree	Reach 1	4439	Max	newEC3	698.73	-0.12	7.12		7.19	0.000367	1.97	358.88	96.15	0.16
	Reach 1													
Crabtree	Reach 1	4423	Max	EC100	1698.83	-0.13	10.03		10.14	0.000378	2.79	677.83	129.39	0.18
Crabtree	Reach 1	4423	Max	EC3yr0416	750.4	-0.13	7.24		7.31	0.000426	2.2	351.62	99.2	0.17
Crabtree	Reach 1	4423	Max	EC25yr0416	1341.73	-0.13	9.5		9.58	0.000317	2.44	608.68	129.39	0.16
Crabtree	Reach 1	4423	Max	newEC25	1366.62	-0.13	9.31		9.4	0.000366	2.57	584.79	123.84	0.17
Crabtree	Reach 1	4423	Max	newEC100	1733.9	-0.13	9.74		9.87	0.000462	3	640.19	129.39	0.19
Crabtree	Reach 1	4423	Max	newEC3	698.31	-0.13	7.11		7.18	0.000403	2.1	339.41	95.56	0.17
	Reach 1													
Crabtree	Reach 1	4407	Max	EC100	1690	-0.13	10.03		10.13	0.000332	2.63	723.54	135.36	0.17
Crabtree	Reach 1	4407	Max	EC3yr0416	750.02	-0.13	7.24		7.3	0.000378	2.1	376.09	105.01	0.16
Crabtree	Reach 1	4407	Max	EC25yr0416	1335.81	-0.13	9.5		9.57	0.000279	2.31	651.32	135.36	0.15

Crabtree	Reach 1	4407	Max	newEC25	1361.38	-0.13	9.31		9.39	0.000324	2.44	625.6	135.36	0.16
Crabtree	Reach 1	4407	Max	newEC100	1726.53	-0.13	9.74		9.85	0.000406	2.84	684.07	135.36	0.18
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC25	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19
Crabtree Swamp	Reach 1	29580	Max	newEC100	227.2	24.22	29.86		29.95	0.00091	2.41	95.16	28.77	0.23
Crabtree Swamp	Reach 1	29580	Max	newEC3	63.23	24.22	28.98		28.99	0.000173	0.9	70.25	27.34	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29520	Max	EC100	225.46	24.12	29.8		29.92	0.001534	2.82	80.59	30.96	0.29
Crabtree Swamp	Reach 1	29520	Max	EC3yr0416	62.76	24.12	28.97		28.99	0.000272	1.07	58.78	23.2	0.12
Crabtree Swamp	Reach 1	29520	Max	EC25yr0416	159.4	24.12	29.46		29.54	0.001106	2.25	70.75	26.39	0.24
Crabtree Swamp	Reach 1	29520	Max	newEC25	159.4	24.12	29.46		29.54	0.001106	2.25	70.75	26.39	0.24
Crabtree Swamp	Reach 1	29520	Max	newEC100	225.89	24.12	29.75		29.88	0.00162	2.87	79.06	30.82	0.3

Crabtree	Reach 1	4132	Max	newEC25	1275.53	-0.2	9.2		9.28	0.000308	2.32	604.06	135.65	0.16
Crabtree	Reach 1	4132	Max	newEC100	1604.46	-0.2	9.6		9.71	0.000387	2.7	657.91	135.65	0.18
Crabtree	Reach 1	4132	Max	newEC3	687.68	-0.2	7.03		7.08	0.000356	1.95	353.76	81.88	0.16
	Reach 1													
Crabtree	Reach 1	4109	Max	EC100	1525.73	-0.2	9.9		9.96	0.00024	2.18	771.15	133.62	0.14
Crabtree	Reach 1	4109	Max	EC3yr0416	737.46	-0.2	7.13		7.19	0.00035	1.95	401.65	129.51	0.16
Crabtree	Reach 1	4109	Max	EC25yr0416	1220.37	-0.2	9.39		9.44	0.000203	1.92	703.71	133.62	0.13
Crabtree	Reach 1	4109	Max	newEC25	1261.13	-0.21	9.18		9.24	0.000241	2.06	677.87	133.62	0.14
Crabtree	Reach 1	4109	Max	newEC100	1586.33	-0.21	9.57		9.65	0.000306	2.4	729.75	133.62	0.16
Crabtree	Reach 1	4109	Max	newEC3	687.37	-0.21	7.01		7.07	0.000325	1.87	388.89	124.83	0.15
	Reach 1													
Crabtree	Reach 1	4086	Max	EC100	1503.82	-0.21	9.93		9.99	0.000197	1.97	825.98	133.14	0.13
Crabtree	Reach 1	4086	Max	EC3yr0416	732.03	-0.21	7.14		7.18	0.000268	1.69	457.1	121.97	0.14
Crabtree	Reach 1	4086	Max	EC25yr0416	1203.66	-0.21	9.42		9.46	0.000165	1.72	757.5	133.14	0.11
Crabtree	Reach 1	4086	Max	newEC25	1245.64	-0.23	9.21		9.25	0.000153	1.64	827.02	150.73	0.11
Crabtree	Reach 1	4086	Max	newEC100	1564.41	-0.23	9.62		9.67	0.000193	1.92	887.72	150.73	0.13
Crabtree	Reach 1	4086	Max	newEC3	682.64	-0.23	7.03		7.06	0.000214	1.51	497.1	150.73	0.12
	Reach 1													
Crabtree	Reach 1	4071	Max	EC100	1482.41	-0.21	9.91		9.96	0.000198	2.01	806.91	134.55	0.13
Crabtree	Reach 1	4071	Max	EC3yr0416	728.56	-0.21	7.13		7.18	0.000283	1.79	433.28	134.55	0.14
Crabtree	Reach 1	4071	Max	EC25yr0416	1185.68	-0.21	9.4		9.44	0.000166	1.76	738.67	134.55	0.12
Crabtree	Reach 1	4071	Max	newEC25	1226.64	-0.22	9.19		9.23	0.000154	1.67	827.65	164.64	0.11
Crabtree	Reach 1	4071	Max	newEC100	1541.56	-0.22	9.58		9.63	0.000193	1.94	892.01	164.64	0.13
Crabtree	Reach 1	4071	Max	newEC3	680.06	-0.22	7.01		7.05	0.000237	1.62	469.13	164.64	0.13
	Reach 1													
Crabtree	Reach 1	4054	Max	EC100	1468.91	-0.22	9.9		9.96	0.000223	2.12	763.61	133.45	0.13
Crabtree	Reach 1	4054	Max	EC3yr0416	728.37	-0.22	7.12		7.18	0.000329	1.91	398.21	124.07	0.15
Crabtree	Reach 1	4054	Max	EC25yr0416	1175.56	-0.22	9.39		9.44	0.000188	1.86	696.06	133.45	0.12
Crabtree	Reach 1	4054	Max	newEC25	1216.16	-0.22	9.19		9.23	0.000166	1.72	800.03	164.14	0.11
Crabtree	Reach 1	4054	Max	newEC100	1527.49	-0.22	9.58		9.63	0.000207	2	864.18	164.14	0.13
Crabtree	Reach 1	4054	Max	newEC3	678.98	-0.22	7		7.05	0.000267	1.7	442.58	157.21	0.14
	Reach 1													
Crabtree	Reach 1	3956	Max	EC100	1434.43	-0.24	9.84		9.94	0.000333	2.53	618.1	128.08	0.16
Crabtree	Reach 1	3956	Max	EC3yr0416	728.06	-0.24	7.07		7.14	0.000435	2.17	335.42	68.52	0.17
Crabtree	Reach 1	3956	Max	EC25yr0416	1152.05	-0.24	9.35		9.42	0.000282	2.23	556.77	120.14	0.15

Crabtree	Reach 1	3956	Max	newEC25	1169.59	-0.24	9.19		9.23	0.000182	1.79	741.73	161.56	0.12
Crabtree	Reach 1	3956	Max	newEC100	1464.33	-0.24	9.58		9.64	0.000224	2.06	805.62	161.56	0.13
Crabtree	Reach 1	3956	Max	newEC3	673.63	-0.24	6.98		7.03	0.000315	1.84	408.63	137.92	0.15
	Reach 1													
Crabtree	Reach 1	3849	Max	EC100	1401.2	-0.27	9.85		9.92	0.000242	2.2	693.7	121.47	0.14
Crabtree	Reach 1	3849	Max	EC3yr0416	727.81	-0.27	7.03		7.1	0.000377	2.04	365.28	95.22	0.16
Crabtree	Reach 1	3849	Max	EC25yr0416	1128.88	-0.27	9.35		9.4	0.000205	1.94	632.98	120.38	0.13
Crabtree	Reach 1	3849	Max	newEC25	1100.01	-0.27	9.18		9.22	0.000138	1.58	799.36	166.03	0.1
Crabtree	Reach 1	3849	Max	newEC100	1371.63	-0.27	9.58		9.63	0.000168	1.81	865.45	166.03	0.12
Crabtree	Reach 1	3849	Max	newEC3	678.53	-0.27	6.95		6.99	0.000297	1.79	427.87	158.46	0.14
	Reach 1													
Crabtree	Reach 1	3831	Max	EC100	1385.5	-0.27	9.82		9.88	0.000218	2.08	736.35	135.93	0.13
Crabtree	Reach 1	3831	Max	EC3yr0416	727.78	-0.27	7.03		7.09	0.000349	1.95	373.12	79.25	0.16
Crabtree	Reach 1	3831	Max	EC25yr0416	1116.19	-0.27	9.33		9.38	0.000186	1.84	669.62	135.93	0.12
Crabtree	Reach 1	3831	Max	newEC25	1073.36	-0.27	9.15		9.18	0.000127	1.51	806.14	166.06	0.1
Crabtree	Reach 1	3831	Max	newEC100	1339.19	-0.27	9.53		9.57	0.000157	1.74	869.52	166.06	0.11
Crabtree	Reach 1	3831	Max	newEC3	681.49	-0.27	6.93		6.97	0.000267	1.7	444.21	148.26	0.14
	Reach 1													
Crabtree	Reach 1	3816	Max	EC100	1375.04	-0.28	9.82		9.88	0.000217	2.07	735.54	136.4	0.13
Crabtree	Reach 1	3816	Max	EC3yr0416	726.5	-0.28	7.02		7.08	0.000351	1.95	374.52	89.72	0.16
Crabtree	Reach 1	3816	Max	EC25yr0416	1108.11	-0.28	9.33		9.37	0.000185	1.83	668.74	136.4	0.12
Crabtree	Reach 1	3816	Max	newEC25	1046.14	-0.28	9.16		9.19	0.00012	1.5	809.31	172.58	0.1
Crabtree	Reach 1	3816	Max	newEC100	1303.01	-0.28	9.54		9.58	0.000148	1.72	875.75	172.58	0.11
Crabtree	Reach 1	3816	Max	newEC3	687.4	-0.28	6.93		6.97	0.000264	1.74	436.73	142.03	0.14
	Reach 1													
Crabtree	Reach 1	3804	Max	EC100	1370.6	-0.28	9.84		9.91	0.000244	2.18	684.81	127.48	0.14
Crabtree	Reach 1	3804	Max	EC3yr0416	726.4	-0.28	7.02		7.08	0.000362	2	363.83	75.34	0.16
Crabtree	Reach 1	3804	Max	EC25yr0416	1105.76	-0.28	9.34		9.39	0.000208	1.92	621.34	126.52	0.13
Crabtree	Reach 1	3804	Max	newEC25	1039.42	-0.28	9.18		9.21	0.000125	1.51	783.29	163.23	0.1
Crabtree	Reach 1	3804	Max	newEC100	1292.88	-0.28	9.58		9.62	0.000153	1.74	848.34	164	0.11
Crabtree	Reach 1	3804	Max	newEC3	689.91	-0.28	6.93		6.98	0.000274	1.76	434.29	134.56	0.14
	Reach 1													
Crabtree	Reach 1	3692	Max	EC100	1351.73	-0.31	9.79		9.84	0.000188	1.91	782.37	144.91	0.12
Crabtree	Reach 1	3692	Max	EC3yr0416	726.12	-0.31	6.98		7.04	0.000344	1.89	401.19	109.44	0.15
Crabtree	Reach 1	3692	Max	EC25yr0416	1092.83	-0.31	9.3		9.34	0.000162	1.7	711.91	144.91	0.11

Crabtree	Reach 1	3692	Max	newEC25	995.19	-0.31	9.14		9.17	0.000102	1.37	837.36	175.5	0.09
Crabtree	Reach 1	3692	Max	newEC100	1240.44	-0.31	9.52		9.55	0.000126	1.58	904.2	175.5	0.1
Crabtree	Reach 1	3692	Max	newEC3	696.28	-0.31	6.89		6.93	0.000275	1.76	449.73	167.51	0.14
	Reach 1													
Crabtree	Reach 1	3672	Max	EC100	1336.56	-0.31	9.8		9.84	0.000149	1.8	830.8	136.62	0.11
Crabtree	Reach 1	3672	Max	EC3yr0416	723.55	-0.31	6.98		7.03	0.000248	1.76	448.92	122.23	0.13
Crabtree	Reach 1	3672	Max	EC25yr0416	1081.47	-0.31	9.31		9.34	0.000126	1.59	764.06	136.62	0.1
Crabtree	Reach 1	3672	Max	newEC25	981.25	-0.31	9.15		9.17	0.000085	1.27	888.63	173.11	0.08
Crabtree	Reach 1	3672	Max	newEC100	1222.24	-0.31	9.53		9.56	0.000106	1.47	954.97	173.11	0.09
Crabtree	Reach 1	3672	Max	newEC3	700.92	-0.31	6.89		6.92	0.000221	1.61	497.89	167.16	0.13
	Reach 1													
Crabtree	Reach 1	3658	Max	EC100	1319.92	-0.31	9.77		9.81	0.000147	1.79	831.7	140.9	0.11
Crabtree	Reach 1	3658	Max	EC3yr0416	719.2	-0.31	6.97		7.02	0.000267	1.82	436.95	136.83	0.14
Crabtree	Reach 1	3658	Max	EC25yr0416	1066.5	-0.31	9.29		9.32	0.000124	1.58	763.85	140.9	0.1
Crabtree	Reach 1	3658	Max	newEC25	965.11	-0.32	9.13		9.15	0.000089	1.27	868.45	175.11	0.08
Crabtree	Reach 1	3658	Max	newEC100	1201.93	-0.32	9.5		9.53	0.00011	1.47	934.26	175.11	0.09
Crabtree	Reach 1	3658	Max	newEC3	706.92	-0.32	6.86		6.91	0.000269	1.71	471.95	175.11	0.14
	Reach 1													
Crabtree	Reach 1	3649	Max	EC100	1309.71	-0.32	9.78		9.82	0.000146	1.77	819.11	135.35	0.11
Crabtree	Reach 1	3649	Max	EC3yr0416	718.92	-0.32	6.97		7.02	0.000249	1.74	445.67	127.99	0.13
Crabtree	Reach 1	3649	Max	EC25yr0416	1058.98	-0.32	9.3		9.33	0.000123	1.56	753.52	135.35	0.1
Crabtree	Reach 1	3649	Max	newEC25	950.64	-0.32	9.14		9.16	0.000099	1.36	776.56	145.77	0.09
Crabtree	Reach 1	3649	Max	newEC100	1183.65	-0.32	9.52		9.55	0.000124	1.58	831.97	145.77	0.1
Crabtree	Reach 1	3649	Max	newEC3	712.89	-0.32	6.87		6.91	0.000257	1.71	453.31	138.2	0.13
	Reach 1													
Crabtree	Reach 1	3633	Max	EC100	1306.14	-0.32	9.8		9.85	0.000153	1.77	806.32	136.81	0.11
Crabtree	Reach 1	3633	Max	EC3yr0416	718.74	-0.32	6.97		7.02	0.000266	1.73	441.66	125.16	0.14
Crabtree	Reach 1	3633	Max	EC25yr0416	1057.48	-0.32	9.31		9.35	0.000127	1.55	740.97	131.64	0.1
Crabtree	Reach 1	3633	Max	newEC25	948.11	-0.32	9.15		9.18	0.000107	1.41	730.61	131.1	0.09
Crabtree	Reach 1	3633	Max	newEC100	1179.16	-0.32	9.54		9.58	0.000135	1.64	781.52	132.52	0.11
Crabtree	Reach 1	3633	Max	newEC3	713.19	-0.32	6.87		6.92	0.00027	1.73	439.5	124.94	0.14
	Reach 1													
Crabtree	Reach 1	3479	Max	EC100	1248.39	-0.36	9.76		9.81	0.000176	1.91	727.52	144.8	0.12
Crabtree	Reach 1	3479	Max	EC3yr0416	718.1	-0.36	6.92		6.98	0.000302	1.87	395.34	92.63	0.15
Crabtree	Reach 1	3479	Max	EC25yr0416	1018.87	-0.36	9.28		9.32	0.00015	1.69	658.41	139	0.11

Crabtree	Reach 1	3479	Max	newEC25	918.45	-0.32	9.12		9.16	0.000132	1.57	637.32	135.92	0.1
Crabtree	Reach 1	3479	Max	newEC100	1134.12	-0.32	9.5		9.54	0.000165	1.81	689.98	143.7	0.12
Crabtree	Reach 1	3479	Max	newEC3	713.26	-0.32	6.82		6.87	0.000316	1.9	386.07	91.96	0.15
	Reach 1													
Crabtree	Reach 1	3320	Max	EC100	1242.32	-0.4	9.72		9.78	0.000216	2.05	653.48	133.78	0.13
Crabtree	Reach 1	3320	Max	EC3yr0416	717.47	-0.4	6.86		6.92	0.000357	1.99	359.76	71.77	0.16
Crabtree	Reach 1	3320	Max	EC25yr0416	1012.71	-0.4	9.24		9.29	0.000185	1.82	590.96	126.01	0.12
Crabtree	Reach 1	3320	Max	newEC25	912.98	-0.4	9.09		9.13	0.00016	1.67	574.51	116.23	0.11
Crabtree	Reach 1	3320	Max	newEC100	1129.02	-0.4	9.46		9.51	0.000202	1.94	621	132.78	0.13
Crabtree	Reach 1	3320	Max	newEC3	713.18	-0.4	6.75		6.82	0.000367	2.01	354.2	71.27	0.16
	Reach 1													
Crabtree	Reach 1	3297	Max	EC100	1239.8	-0.4	9.7		9.76	0.000192	1.97	702.54	143.75	0.12
Crabtree	Reach 1	3297	Max	EC3yr0416	717.32	-0.4	6.85		6.91	0.000365	2	359.14	82.49	0.16
Crabtree	Reach 1	3297	Max	EC25yr0416	1009.84	-0.4	9.23		9.27	0.000166	1.76	634.94	143.75	0.11
Crabtree	Reach 1	3297	Max	newEC25	911.32	-0.4	9.08		9.12	0.000146	1.63	615.41	143.75	0.11
Crabtree	Reach 1	3297	Max	newEC100	1126.5	-0.4	9.44		9.49	0.000181	1.88	667.58	143.75	0.12
Crabtree	Reach 1	3297	Max	newEC3	713.18	-0.4	6.74		6.81	0.000379	2.03	352.53	77.46	0.16
	Reach 1													
Crabtree	Reach 1	3280	Max	EC100	1233.85	-0.41	9.7		9.74	0.000162	1.81	759.87	144.06	0.11
Crabtree	Reach 1	3280	Max	EC3yr0416	717.27	-0.41	6.85		6.91	0.000336	1.93	379.85	103.74	0.15
Crabtree	Reach 1	3280	Max	EC25yr0416	1005.88	-0.41	9.23		9.27	0.00014	1.62	692.2	144.06	0.11
Crabtree	Reach 1	3280	Max	newEC25	907.91	-0.41	9.08		9.11	0.000123	1.5	673.02	144.06	0.1
Crabtree	Reach 1	3280	Max	newEC100	1121.61	-0.41	9.44		9.48	0.000152	1.73	725.25	144.06	0.11
Crabtree	Reach 1	3280	Max	newEC3	713.25	-0.41	6.74		6.8	0.000351	1.95	371.06	101.74	0.16
	Reach 1													
Crabtree	Reach 1	3259	Max	EC100	1229.8	-0.41	9.7		9.75	0.000157	1.79	769.3	146.06	0.11
Crabtree	Reach 1	3259	Max	EC3yr0416	717.21	-0.41	6.85		6.9	0.000324	1.9	386.89	102.21	0.15
Crabtree	Reach 1	3259	Max	EC25yr0416	1003.15	-0.41	9.23		9.27	0.000137	1.6	700.3	146.06	0.1
Crabtree	Reach 1	3259	Max	newEC25	906.7	-0.41	9.08		9.11	0.000119	1.48	680.47	142.37	0.1
Crabtree	Reach 1	3259	Max	newEC100	1118.51	-0.41	9.45		9.49	0.000148	1.7	733.66	146.06	0.11
Crabtree	Reach 1	3259	Max	newEC3	713.23	-0.41	6.74		6.79	0.000338	1.92	378	98.55	0.15
	Reach 1													
Crabtree	Reach 1	3205	Max	EC100	1212.61	-0.43	9.66		9.71	0.000158	1.76	776.73	145.47	0.11
Crabtree	Reach 1	3205	Max	EC3yr0416	716.8	-0.43	6.81		6.87	0.000399	2.03	372.57	115.75	0.17
Crabtree	Reach 1	3205	Max	EC25yr0416	989.6	-0.43	9.2		9.24	0.000138	1.57	709.4	145.47	0.1

Crabtree	Reach 1	3205	Max	newEC25	898.02	-0.43	9.06		9.09	0.000122	1.47	690.19	145.47	0.1
Crabtree	Reach 1	3205	Max	newEC100	1106.26	-0.43	9.41		9.45	0.00015	1.68	741.9	145.47	0.11
Crabtree	Reach 1	3205	Max	newEC3	713.22	-0.43	6.7		6.76	0.00042	2.07	362.33	110	0.17
	Reach 1													
Crabtree	Reach 1	3191	Max	EC100	1206.41	-0.43	9.68		9.71	0.000124	1.6	840.13	149.58	0.1
Crabtree	Reach 1	3191	Max	EC3yr0416	718.94	-0.43	6.82		6.86	0.000271	1.75	439.14	116.32	0.14
Crabtree	Reach 1	3191	Max	EC25yr0416	982.12	-0.43	9.21		9.24	0.000106	1.42	770.6	149.58	0.09
Crabtree	Reach 1	3191	Max	newEC25	895.4	-0.43	9.06		9.09	0.000096	1.33	748.33	149.58	0.09
Crabtree	Reach 1	3191	Max	newEC100	1099.35	-0.43	9.42		9.45	0.000118	1.53	801.94	149.58	0.1
Crabtree	Reach 1	3191	Max	newEC3	716.77	-0.43	6.71		6.75	0.000293	1.8	426.34	114.82	0.14
	Reach 1													
Crabtree	Reach 1	3172	Max	EC100	1202.91	-0.43	9.69		9.72	0.000098	1.43	910.1	149.81	0.09
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1

Crabtree	Reach 1	3060	Max	newEC25	879.2	-0.46	9.03		9.08	0.000164	1.66	571.24	142.99	0.11
Crabtree	Reach 1	3060	Max	newEC100	1072.77	-0.46	9.39		9.44	0.000199	1.89	621.77	144	0.12
Crabtree	Reach 1	3060	Max	newEC3	730.52	-0.46	6.63		6.71	0.000474	2.2	332.79	71.62	0.18
	Reach 1													
Crabtree	Reach 1	2930	Max	EC100	1178.34	-0.49	9.59		9.64	0.000175	1.83	718.36	148	0.12
Crabtree	Reach 1	2930	Max	EC3yr0416	723.84	-0.49	6.7		6.76	0.000411	2.05	352.42	76.57	0.17
Crabtree	Reach 1	2930	Max	EC25yr0416	950.53	-0.49	9.15		9.18	0.000148	1.62	652.67	148	0.11
Crabtree	Reach 1	2930	Max	newEC25	876.33	-0.49	9		9.04	0.000137	1.53	631.41	148	0.1
Crabtree	Reach 1	2930	Max	newEC100	1069.23	-0.49	9.35		9.39	0.000166	1.74	681.99	148	0.11
Crabtree	Reach 1	2930	Max	newEC3	730.38	-0.49	6.57		6.65	0.000453	2.13	343.12	75.12	0.18
	Reach 1													
Crabtree	Reach 1	2857	Max	EC100	1182.52	-0.51	9.56		9.6	0.000162	1.79	744.02	147.92	0.11
Crabtree	Reach 1	2857	Max	EC3yr0416	723.2	-0.51	6.66		6.73	0.000416	2.07	361.07	102.14	0.17
Crabtree	Reach 1	2857	Max	EC25yr0416	948.59	-0.51	9.12		9.16	0.000134	1.56	679.79	147.92	0.1
Crabtree	Reach 1	2857	Max	newEC25	878.45	-0.51	8.98		9.01	0.000126	1.49	658.77	147.92	0.1
Crabtree	Reach 1	2857	Max	newEC100	1075.08	-0.51	9.32		9.36	0.000154	1.7	708.12	147.92	0.11
Crabtree	Reach 1	2857	Max	newEC3	730.36	-0.51	6.54		6.61	0.000468	2.16	348.39	99.77	0.18
	Reach 1													
Crabtree	Reach 1	2833	Max	EC100	1191.31	-0.52	9.58		9.61	0.000122	1.6	820.09	143.33	0.1
Crabtree	Reach 1	2833	Max	EC3yr0416	725.61	-0.52	6.68		6.72	0.000264	1.73	438.66	103.56	0.14
Crabtree	Reach 1	2833	Max	EC25yr0416	954.87	-0.52	9.14		9.17	0.000099	1.39	756.99	143.33	0.09
Crabtree	Reach 1	2833	Max	newEC25	887.04	-0.52	8.99		9.02	0.000093	1.32	736.31	143.33	0.09
Crabtree	Reach 1	2833	Max	newEC100	1084.36	-0.52	9.33		9.37	0.000115	1.52	784.88	143.33	0.1
Crabtree	Reach 1	2833	Max	newEC3	732.72	-0.52	6.55		6.6	0.000295	1.8	425.77	102.5	0.14
	Reach 1													
Crabtree	Reach 1	2813	Max	EC100	1198.55	-0.52	9.59		9.61	0.000087	1.38	937.84	149.13	0.09
Crabtree	Reach 1	2813	Max	EC3yr0416	732.49	-0.52	6.68		6.72	0.000167	1.42	525.07	113.56	0.11
Crabtree	Reach 1	2813	Max	EC25yr0416	961.16	-0.52	9.14		9.16	0.000069	1.18	871.95	149.13	0.08
Crabtree	Reach 1	2813	Max	newEC25	895.23	-0.52	9		9.02	0.000065	1.13	850.33	149.13	0.07
Crabtree	Reach 1	2813	Max	newEC100	1090.03	-0.52	9.34		9.36	0.000081	1.3	901.14	149.13	0.08
Crabtree	Reach 1	2813	Max	newEC3	741.65	-0.52	6.56		6.59	0.000186	1.47	510.98	112.06	0.12
	Reach 1													
Crabtree	Reach 1	2790	Max	EC100	1208.18	-0.53	9.56		9.59	0.0001	1.47	926.57	160.41	0.09
Crabtree	Reach 1	2790	Max	EC3yr0416	742.09	-0.53	6.66		6.7	0.000249	1.72	469.07	137.16	0.13
Crabtree	Reach 1	2790	Max	EC25yr0416	966.52	-0.53	9.12		9.15	0.000081	1.27	857.04	160.41	0.08

Crabtree	Reach 1	2790	Max	newEC25	903.92	-0.53	8.98		9	0.000077	1.22	834.01	160.41	0.08
Crabtree	Reach 1	2790	Max	newEC100	1098.19	-0.53	9.31		9.34	0.000094	1.39	887.66	160.41	0.09
Crabtree	Reach 1	2790	Max	newEC3	754.78	-0.53	6.53		6.58	0.000284	1.8	452.02	129.97	0.14
	Reach 1													
Crabtree	Reach 1	2773	Max	EC100	1212.82	-0.53	9.54		9.58	0.000115	1.56	877.5	159.53	0.1
Crabtree	Reach 1	2773	Max	EC3yr0416	742.23	-0.53	6.65		6.7	0.00029	1.84	423.91	124.9	0.14
Crabtree	Reach 1	2773	Max	EC25yr0416	968.28	-0.53	9.11		9.14	0.000093	1.36	808.98	159.53	0.09
Crabtree	Reach 1	2773	Max	newEC25	907.03	-0.53	8.97		9	0.000089	1.31	786.14	159.53	0.08
Crabtree	Reach 1	2773	Max	newEC100	1102.81	-0.53	9.3		9.33	0.000109	1.49	839.03	159.53	0.09
Crabtree	Reach 1	2773	Max	newEC3	755.05	-0.53	6.52		6.57	0.00033	1.93	408.04	120.06	0.15
	Reach 1													
Crabtree	Reach 1	2751	Max	EC100	1220.28	-0.54	9.55		9.58	0.000131	1.63	849.11	161	0.1
Crabtree	Reach 1	2751	Max	EC3yr0416	742.14	-0.54	6.64		6.69	0.000372	1.99	398.2	130.22	0.16
Crabtree	Reach 1	2751	Max	EC25yr0416	972.2	-0.54	9.12		9.14	0.000107	1.41	779.76	161	0.09
Crabtree	Reach 1	2751	Max	newEC25	913.15	-0.54	8.97		9	0.000103	1.37	756.59	161	0.09
Crabtree	Reach 1	2751	Max	newEC100	1110.13	-0.54	9.3		9.34	0.000125	1.55	810.13	161	0.1
Crabtree	Reach 1	2751	Max	newEC3	755.01	-0.54	6.5		6.57	0.000429	2.1	381.54	123.88	0.17
	Reach 1													
Crabtree	Reach 1	2718	Max	EC100	1224.39	-0.55	9.55		9.59	0.000134	1.73	828.51	151.96	0.11
Crabtree	Reach 1	2718	Max	EC3yr0416	741.83	-0.55	6.63		6.69	0.000307	1.96	423.77	120.32	0.15
Crabtree	Reach 1	2718	Max	EC25yr0416	973.32	-0.55	9.12		9.15	0.000108	1.5	762.92	150.49	0.09
Crabtree	Reach 1	2718	Max	newEC25	918.91	-0.55	8.98		9	0.000105	1.46	741.1	149.89	0.09
Crabtree	Reach 1	2718	Max	newEC100	1117.58	-0.55	9.31		9.34	0.000128	1.65	791.5	151.13	0.1
Crabtree	Reach 1	2718	Max	newEC3	754.94	-0.55	6.5		6.56	0.000354	2.06	407.82	120.01	0.16
	Reach 1													
Crabtree	Reach 1	2704	Max	EC100	1224.86	-0.55	9.51		9.54	0.000106	1.52	929.65	162.39	0.09
Crabtree	Reach 1	2704	Max	EC3yr0416	741.4	-0.55	6.6		6.65	0.000301	1.91	459.88	151.63	0.15
Crabtree	Reach 1	2704	Max	EC25yr0416	971.93	-0.55	9.09		9.11	0.000084	1.31	861.67	162.39	0.08
Crabtree	Reach 1	2704	Max	newEC25	917.25	-0.55	8.95		8.97	0.000082	1.28	838.51	162.39	0.08
Crabtree	Reach 1	2704	Max	newEC100	1117.75	-0.55	9.27		9.3	0.000101	1.46	890.98	162.39	0.09
Crabtree	Reach 1	2704	Max	newEC3	755.51	-0.55	6.47		6.52	0.000353	2.03	439.51	150.29	0.16
	Reach 1													
Crabtree	Reach 1	2690	Max	EC100	1239.56	-0.55	9.54		9.56	0.000059	1.14	1155.24	164.04	0.07
Crabtree	Reach 1	2690	Max	EC3yr0416	746.83	-0.55	6.64		6.65	0.000118	1.2	677.97	164.04	0.09
Crabtree	Reach 1	2690	Max	EC25yr0416	984.06	-0.55	9.12		9.13	0.000045	0.97	1084.75	164.04	0.06

Crabtree	Reach 1	2690	Max	newEC25	929.2	-0.55	8.97		8.98	0.000043	0.93	1061.03	164.04	0.06
Crabtree	Reach 1	2690	Max	newEC100	1128.26	-0.55	9.3		9.32	0.000054	1.08	1115.53	164.04	0.07
Crabtree	Reach 1	2690	Max	newEC3	762.94	-0.55	6.5		6.53	0.000136	1.27	656.28	164.04	0.1
	Reach 1													
Crabtree	Reach 1	2649	Max	EC100	1244.05	-0.56	9.52		9.55	0.000142	1.31	1004.75	149.89	0.08
Crabtree	Reach 1	2649	Max	EC3yr0416	744.71	-0.56	6.61		6.64	0.000233	1.38	573.22	138.11	0.11
Crabtree	Reach 1	2649	Max	EC25yr0416	986.03	-0.56	9.1		9.12	0.000106	1.11	941.41	149.89	0.07
Crabtree	Reach 1	2649	Max	newEC25	929.29	-0.56	8.96		8.97	0.000101	1.07	919.94	149.89	0.07
Crabtree	Reach 1	2649	Max	newEC100	1127.81	-0.56	9.28		9.3	0.000129	1.23	968.96	149.89	0.08
Crabtree	Reach 1	2649	Max	newEC3	765.63	-0.56	6.48		6.51	0.00027	1.47	554.55	137.4	0.11
	Reach 1													
Crabtree	Reach 1	2633	Max	EC100	1239.11	-0.57	9.46		9.49	0.000102	1.52	926.89	153.51	0.09
Crabtree	Reach 1	2633	Max	EC3yr0416	743.69	-0.57	6.56		6.61	0.00025	1.78	481.95	153.51	0.14
Crabtree	Reach 1	2633	Max	EC25yr0416	980.66	-0.57	9.06		9.08	0.000079	1.29	864.86	153.51	0.08
Crabtree	Reach 1	2633	Max	newEC25	921.98	-0.57	8.92		8.94	0.000075	1.25	843.39	153.51	0.08
Crabtree	Reach 1	2633	Max	newEC100	1122.69	-0.57	9.23		9.26	0.000094	1.43	891.45	153.51	0.09
Crabtree	Reach 1	2633	Max	newEC3	765.53	-0.57	6.42		6.47	0.000299	1.91	460.23	153.51	0.15
	Reach 1													
Crabtree	Reach 1	2620	Lat											
	Reach 1													
Crabtree	Reach 1	2619	Lat											
	Reach 1													
Crabtree	Reach 1	2618	Max	EC100	1243.69	-0.57	9.48		9.51	0.000111	1.6	887.2	151.95	0.1
Crabtree	Reach 1	2618	Max	EC3yr0416	742.39	-0.57	6.58		6.62	0.000247	1.79	453.66	129.54	0.13
Crabtree	Reach 1	2618	Max	EC25yr0416	983.77	-0.57	9.07		9.09	0.000087	1.36	824.96	151.95	0.09
Crabtree	Reach 1	2618	Max	newEC25	920.13	-0.57	8.93		8.95	0.000082	1.31	803.71	151.95	0.08
Crabtree	Reach 1	2618	Max	newEC100	1120.02	-0.57	9.25		9.28	0.000102	1.5	851.98	151.95	0.09
Crabtree	Reach 1	2618	Max	newEC3	764.28	-0.57	6.44		6.49	0.000291	1.91	435.77	125.81	0.15
	Reach 1													
Crabtree	Reach 1	2598	Max	EC100	1241.97	-0.58	9.49		9.54	0.000165	1.84	743.5	131.27	0.12
Crabtree	Reach 1	2598	Max	EC3yr0416	741.27	-0.58	6.56		6.63	0.000376	2.03	384.09	104.51	0.16
Crabtree	Reach 1	2598	Max	EC25yr0416	981.29	-0.58	9.08		9.11	0.000128	1.56	689.3	130.1	0.1
Crabtree	Reach 1	2598	Max	newEC25	915.54	-0.58	8.94		8.97	0.000121	1.5	671.02	129.7	0.1
Crabtree	Reach 1	2598	Max	newEC100	1113.61	-0.58	9.26		9.3	0.00015	1.72	712.89	130.61	0.11
Crabtree	Reach 1	2598	Max	newEC3	763.61	-0.58	6.42		6.49	0.000446	2.17	369.12	104.01	0.18

	Reach 1													
Crabtree	Reach 1	2476	Max	EC100	1202.86	-0.61	9.48		9.52	0.000146	1.78	746.42	126.56	0.11
Crabtree	Reach 1	2476	Max	EC3yr0416	738.88	-0.61	6.52		6.58	0.000329	1.98	384.81	102.6	0.15
Crabtree	Reach 1	2476	Max	EC25yr0416	948.16	-0.61	9.07		9.1	0.000112	1.51	694.48	125.82	0.1
Crabtree	Reach 1	2476	Max	newEC25	886.38	-0.61	8.93		8.96	0.000105	1.44	676.82	125.6	0.09
Crabtree	Reach 1	2476	Max	newEC100	1076.76	-0.61	9.25		9.28	0.000132	1.66	717.05	126.13	0.1
Crabtree	Reach 1	2476	Max	newEC3	715.58	-0.61	6.38		6.44	0.000341	1.98	370.34	96.7	0.16
	Reach 1													
Crabtree	Reach 1	2453	Max	EC100	1196.06	-0.61	9.45		9.49	0.000143	1.79	766.09	141.99	0.11
Crabtree	Reach 1	2453	Max	EC3yr0416	738.54	-0.61	6.51		6.57	0.000326	2.01	384.48	92.3	0.15
Crabtree	Reach 1	2453	Max	EC25yr0416	941.91	-0.61	9.05		9.08	0.000111	1.52	709	141.99	0.1
Crabtree	Reach 1	2453	Max	newEC25	880.25	-0.61	8.91		8.94	0.000105	1.46	689.33	141.99	0.09
Crabtree	Reach 1	2453	Max	newEC100	1069.88	-0.61	9.22		9.26	0.00013	1.67	733.79	141.99	0.1
Crabtree	Reach 1	2453	Max	newEC3	714.73	-0.61	6.37		6.43	0.000337	2.01	371.29	88.94	0.16
	Reach 1													
Crabtree	Reach 1	2435	Max	EC100	1200.46	-0.62	9.44		9.49	0.000158	1.84	740.04	141.09	0.11
Crabtree	Reach 1	2435	Max	EC3yr0416	737.14	-0.62	6.5		6.57	0.000361	2.05	365.44	85.93	0.16
Crabtree	Reach 1	2435	Max	EC25yr0416	943.82	-0.62	9.04		9.08	0.000122	1.56	683.73	141.09	0.1
Crabtree	Reach 1	2435	Max	newEC25	873.54	-0.62	8.91		8.93	0.00008	1.25	816.42	169.84	0.08
Crabtree	Reach 1	2435	Max	newEC100	1066.48	-0.62	9.23		9.25	0.000099	1.42	869.68	169.84	0.09
Crabtree	Reach 1	2435	Max	newEC3	707.75	-0.62	6.36		6.42	0.000349	1.97	394.3	146.61	0.16
	Reach 1													
Crabtree	Reach 1	2418	Max	EC100	1199.09	-0.62	9.46		9.51	0.000156	1.77	730.62	123.57	0.11
Crabtree	Reach 1	2418	Max	EC3yr0416	737.22	-0.62	6.5		6.56	0.000352	1.94	381.4	87.83	0.16
Crabtree	Reach 1	2418	Max	EC25yr0416	942.63	-0.62	9.06		9.09	0.000118	1.49	680.57	122.49	0.1
Crabtree	Reach 1	2418	Max	newEC25	869.82	-0.62	8.93		8.95	0.000077	1.19	829.27	167.35	0.08
Crabtree	Reach 1	2418	Max	newEC100	1061.6	-0.62	9.25		9.27	0.000095	1.36	882.79	167.35	0.09
Crabtree	Reach 1	2418	Max	newEC3	704.35	-0.62	6.37		6.42	0.000339	1.85	409.61	146.34	0.15
	Reach 1													
Crabtree	Reach 1	2147	Max	EC100	1181.45	-0.69	9.42		9.46	0.000138	1.71	777.92	141.57	0.11
Crabtree	Reach 1	2147	Max	EC3yr0416	733.63	-0.69	6.41		6.47	0.000344	1.97	393.65	113.81	0.16
Crabtree	Reach 1	2147	Max	EC25yr0416	920.74	-0.69	9.03		9.05	0.0001	1.41	724.37	131.01	0.09
Crabtree	Reach 1	2147	Max	newEC25	777.41	-0.69	8.91		8.93	0.000061	1.09	817.48	161.15	0.07
Crabtree	Reach 1	2147	Max	newEC100	975.02	-0.69	9.22		9.25	0.00008	1.29	867.78	161.15	0.08
Crabtree	Reach 1	2147	Max	newEC3	660.11	-0.69	6.29		6.34	0.000293	1.8	400.38	147.94	0.14

	Reach 1													
Crabtree	Reach 1	2124	Max	EC100	1187.75	-0.69	9.4		9.43	0.000106	1.55	863.86	140.01	0.1
Crabtree	Reach 1	2124	Max	EC3yr0416	734.18	-0.69	6.4		6.45	0.000273	1.85	444.44	133.98	0.14
Crabtree	Reach 1	2124	Max	EC25yr0416	920.34	-0.69	9.01		9.04	0.000078	1.29	809.79	140.01	0.08
Crabtree	Reach 1	2124	Max	newEC25	770.15	-0.69	8.9		8.92	0.000051	1.03	865.49	157.74	0.06
Crabtree	Reach 1	2124	Max	newEC100	970.46	-0.69	9.21		9.23	0.000068	1.22	913.83	157.74	0.08
Crabtree	Reach 1	2124	Max	newEC3	656.63	-0.69	6.28		6.32	0.000233	1.67	452.56	157.74	0.13
	Reach 1													
Crabtree	Reach 1	2111	Max	EC100	1199.13	-0.7	9.39		9.43	0.000101	1.54	881	140.2	0.09
Crabtree	Reach 1	2111	Max	EC3yr0416	734.65	-0.7	6.4		6.45	0.000245	1.79	461.41	137.8	0.13
Crabtree	Reach 1	2111	Max	EC25yr0416	925.32	-0.7	9.01		9.03	0.000073	1.27	827.3	140.2	0.08
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25
Crabtree Swamp	Reach 1	29629	Max	newEC3	63.25	24.3	28.98		29	0.000171	0.94	67.13	22.1	0.1
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29580	Max	EC100	226.94	24.22	29.91		29.99	0.000874	2.38	96.41	28.83	0.22
Crabtree Swamp	Reach 1	29580	Max	EC3yr0416	62.78	24.22	28.99		29	0.000169	0.89	70.57	27.36	0.1
Crabtree Swamp	Reach 1	29580	Max	EC25yr0416	159.86	24.22	29.53		29.59	0.000614	1.88	85.75	28.25	0.19

	Reach 1													
Crabtree	Reach 1	1946	Max	EC100	1298.67	-0.74	9.35		9.39	0.000129	1.66	858.41	139.21	0.1
Crabtree	Reach 1	1946	Max	EC3yr0416	724.29	-0.74	6.36		6.4	0.000275	1.77	443.93	133.49	0.14
Crabtree	Reach 1	1946	Max	EC25yr0416	982.06	-0.74	8.98		9.01	0.000089	1.34	807.5	139.21	0.09
Crabtree	Reach 1	1946	Max	newEC25	738	-0.74	8.89		8.9	0.000053	0.96	862.93	173.16	0.07
Crabtree	Reach 1	1946	Max	newEC100	960.21	-0.74	9.18		9.2	0.000075	1.17	914.07	173.16	0.08
Crabtree	Reach 1	1946	Max	newEC3	617.34	-0.74	6.24		6.28	0.00033	1.7	407.15	168.29	0.15
	Reach 1													
Crabtree	Reach 1	1930	Max	EC100	1310.74	-0.74	9.34		9.39	0.000149	1.78	827.09	141.8	0.11
Crabtree	Reach 1	1930	Max	EC3yr0416	724.06	-0.74	6.35		6.4	0.000311	1.88	422.43	126.67	0.15
Crabtree	Reach 1	1930	Max	EC25yr0416	989.37	-0.74	8.98		9.01	0.000103	1.44	775.57	141.8	0.09
Crabtree	Reach 1	1930	Max	newEC25	737.5	-0.74	8.89		8.9	0.00006	1.09	762.06	141.8	0.07
Crabtree	Reach 1	1930	Max	newEC100	965.37	-0.74	9.18		9.2	0.000088	1.35	803.78	141.8	0.09
Crabtree	Reach 1	1930	Max	newEC3	603.82	-0.74	6.24		6.28	0.000236	1.61	408.9	126.54	0.13
	Reach 1													
Crabtree	Reach 1	1781	Max	EC100	1363.37	-0.78	9.31		9.36	0.000185	1.9	801.66	151.8	0.12
Crabtree	Reach 1	1781	Max	EC3yr0416	721.41	-0.78	6.28		6.34	0.000439	2.07	373.98	122.76	0.17
Crabtree	Reach 1	1781	Max	EC25yr0416	1021.42	-0.78	8.96		8.99	0.000127	1.53	748.31	151.8	0.1
Crabtree	Reach 1	1781	Max	newEC25	740.51	-0.78	8.87		8.89	0.00007	1.13	735.62	151.8	0.07
Crabtree	Reach 1	1781	Max	newEC100	984.7	-0.78	9.16		9.19	0.000105	1.42	779.27	151.8	0.09
Crabtree	Reach 1	1781	Max	newEC3	597.84	-0.78	6.19		6.23	0.000326	1.76	363.33	119.12	0.15
	Reach 1													
Crabtree	Reach 1	1743	Max	EC100	1377.4	-0.79	9.32		9.35	0.000107	1.52	971.21	147.32	0.09
Crabtree	Reach 1	1743	Max	EC3yr0416	723.38	-0.79	6.3		6.33	0.000174	1.41	529.81	134.39	0.11
Crabtree	Reach 1	1743	Max	EC25yr0416	1031.31	-0.79	8.96		8.98	0.000071	1.2	919.13	147.32	0.08
Crabtree	Reach 1	1743	Max	newEC25	744.46	-0.79	8.88		8.89	0.000039	0.88	906.5	147.32	0.06
Crabtree	Reach 1	1743	Max	newEC100	991.78	-0.79	9.17		9.18	0.00006	1.12	949.06	147.32	0.07
Crabtree	Reach 1	1743	Max	newEC3	599.15	-0.79	6.2		6.22	0.000127	1.2	517.57	129.71	0.1
	Reach 1													
Crabtree	Reach 1	1725	Max	EC100	1376.24	-0.79	9.3	3.13	9.35	0.000155	1.87	814.86	148.82	0.12
Crabtree	Reach 1	1725	Max	EC3yr0416	721.95	-0.79	6.28	2.33	6.32	0.000224	1.65	448.94	96.66	0.13
Crabtree	Reach 1	1725	Max	EC25yr0416	1029.76	-0.79	8.95	2.74	8.98	0.000102	1.47	764.93	138.17	0.09
Crabtree	Reach 1	1725	Max	newEC25	743.52	-0.79	8.87	2.36	8.89	0.000055	1.07	753.87	135.17	0.07
Crabtree	Reach 1	1725	Max	newEC100	991.02	-0.79	9.16	2.69	9.18	0.000086	1.37	793.67	143.95	0.09
Crabtree	Reach 1	1725	Max	newEC3	597.85	-0.79	6.19	2.13	6.22	0.000163	1.39	440.4	96.19	0.11

	Reach 1													
Crabtree	Reach 1	1702	Bridge											
	Reach 1													
Crabtree	Reach 1	1678	Max	EC100	1371.76	-0.8	9.24		9.29	0.000148	1.79	829.71	144.46	0.11
Crabtree	Reach 1	1678	Max	EC3yr0416	720.51	-0.8	6.25		6.29	0.000223	1.61	456.6	103.1	0.13
Crabtree	Reach 1	1678	Max	EC25yr0416	1024.32	-0.8	8.92		8.95	0.000097	1.41	783	144.37	0.09
Crabtree	Reach 1	1678	Max	newEC25	741.95	-0.8	8.86		8.87	0.000053	1.03	773.85	144.3	0.07
Crabtree	Reach 1	1678	Max	newEC100	988.53	-0.8	9.13		9.15	0.000081	1.32	813.13	144.46	0.08
Crabtree	Reach 1	1678	Max	newEC3	595.9	-0.8	6.17		6.2	0.000161	1.36	448.14	102.41	0.11
	Reach 1													
Crabtree	Reach 1	1666	Max	EC100	1371.89	-0.81	9.24		9.29	0.000142	1.83	846.39	143.57	0.11
Crabtree	Reach 1	1666	Max	EC3yr0416	720.47	-0.81	6.25		6.29	0.000223	1.71	447.32	100.75	0.13
Crabtree	Reach 1	1666	Max	EC25yr0416	1024.25	-0.81	8.92		8.95	0.000093	1.44	800.08	142.64	0.09
Crabtree	Reach 1	1666	Max	newEC25	742.09	-0.81	8.86		8.87	0.000051	1.06	791.02	142.46	0.07
Crabtree	Reach 1	1666	Max	newEC100	988.48	-0.81	9.13		9.15	0.000078	1.34	829.89	143.24	0.08
Crabtree	Reach 1	1666	Max	newEC3	595.35	-0.81	6.17		6.2	0.000161	1.44	439.24	99.24	0.11
	Reach 1													
Crabtree	Reach 1	1653	Lat											
	Reach 1													
Crabtree	Reach 1	1652	Lat											
	Reach 1													
Crabtree	Reach 1	1651	Max	EC100	1371.41	-0.81	9.23		9.29	0.000183	1.98	774.4	135.4	0.12
Crabtree	Reach 1	1651	Max	EC3yr0416	719.02	-0.81	6.23		6.29	0.000333	1.95	395.51	115.1	0.15
Crabtree	Reach 1	1651	Max	EC25yr0416	1023.12	-0.81	8.91		8.95	0.000121	1.56	731.21	134.66	0.1
Crabtree	Reach 1	1651	Max	newEC25	741.46	-0.81	8.85		8.87	0.000066	1.15	723.08	134.52	0.07
Crabtree	Reach 1	1651	Max	newEC100	988.32	-0.81	9.12		9.15	0.000101	1.45	759.49	135.14	0.09
Crabtree	Reach 1	1651	Max	newEC3	594.58	-0.81	6.16		6.2	0.000242	1.64	386.74	114.58	0.13
	Reach 1													
Crabtree	Reach 1	1638	Max	EC100	1371.51	-0.81	9.22		9.28	0.000192	2.03	744.82	131.94	0.13
Crabtree	Reach 1	1638	Max	EC3yr0416	718.93	-0.81	6.23		6.28	0.000315	1.9	396.78	104.33	0.15
Crabtree	Reach 1	1638	Max	EC25yr0416	1022.52	-0.81	8.91		8.94	0.000125	1.6	703.4	128.92	0.1
Crabtree	Reach 1	1638	Max	newEC25	740.9	-0.81	8.85		8.87	0.000068	1.17	695.92	127.72	0.07
Crabtree	Reach 1	1638	Max	newEC100	988.4	-0.81	9.12		9.15	0.000105	1.49	730.77	131.1	0.09
Crabtree	Reach 1	1638	Max	newEC3	594.03	-0.81	6.15		6.19	0.000227	1.6	388.94	103.68	0.13
	Reach 1													

Crabtree	Reach 1	1628	Max	EC100	1371.36	-0.82	9.22		9.28	0.000204	2.06	731.49	133.33	0.13
Crabtree	Reach 1	1628	Max	EC3yr0416	718.08	-0.82	6.22		6.28	0.00034	1.93	386.76	103.71	0.15
Crabtree	Reach 1	1628	Max	EC25yr0416	1022.2	-0.82	8.91		8.94	0.000132	1.61	690.42	127.16	0.1
Crabtree	Reach 1	1628	Max	newEC25	740.97	-0.82	8.85		8.87	0.000071	1.18	683.18	126.12	0.08
Crabtree	Reach 1	1628	Max	newEC100	988.3	-0.82	9.12		9.15	0.000112	1.51	717.6	131.69	0.1
Crabtree	Reach 1	1628	Max	newEC3	593.89	-0.82	6.15		6.19	0.000246	1.63	379.14	103.3	0.13
	Reach 1													
Crabtree	Reach 1	1608	Max	EC100	1372.83	-0.82	9.22		9.28	0.000203	2	751.15	136.2	0.13
Crabtree	Reach 1	1608	Max	EC3yr0416	717.31	-0.82	6.21		6.27	0.000409	2.02	373.81	113.83	0.17
Crabtree	Reach 1	1608	Max	EC25yr0416	1022.95	-0.82	8.9		8.94	0.000134	1.58	708.47	133.81	0.1
Crabtree	Reach 1	1608	Max	newEC25	741.25	-0.82	8.85		8.87	0.000073	1.16	700.88	133.15	0.08
Crabtree	Reach 1	1608	Max	newEC100	989.12	-0.82	9.12		9.15	0.000112	1.47	736.92	135.73	0.1
Crabtree	Reach 1	1608	Max	newEC3	592.68	-0.82	6.14		6.18	0.000292	1.69	365.88	109.3	0.14
	Reach 1													
Crabtree	Reach 1	1597	Max	EC100	1378.91	-0.82	9.22		9.27	0.000207	2.04	747.62	135.06	0.13
Crabtree	Reach 1	1597	Max	EC3yr0416	716.5	-0.82	6.21		6.27	0.000388	2	375.4	112.15	0.16
Crabtree	Reach 1	1597	Max	EC25yr0416	1027.48	-0.82	8.9		8.94	0.000136	1.6	705.79	131.83	0.1
Crabtree	Reach 1	1597	Max	newEC25	743.41	-0.82	8.85		8.87	0.000073	1.17	698.48	131.36	0.08
Crabtree	Reach 1	1597	Max	newEC100	992.83	-0.82	9.11		9.14	0.000113	1.49	733.83	133.84	0.1
Crabtree	Reach 1	1597	Max	newEC3	591.48	-0.82	6.14		6.18	0.000278	1.68	367.81	105.39	0.14
	Reach 1													
Crabtree	Reach 1	1582	Max	EC100	1385.03	-0.83	9.2		9.27	0.000248	2.22	692.73	132.83	0.14
Crabtree	Reach 1	1582	Max	EC3yr0416	715.16	-0.83	6.19		6.26	0.000456	2.14	345.32	100.5	0.18
Crabtree	Reach 1	1582	Max	EC25yr0416	1031.07	-0.83	8.89		8.94	0.000163	1.75	652.12	130.69	0.11
Crabtree	Reach 1	1582	Max	newEC25	745.35	-0.83	8.84		8.86	0.000087	1.27	645.47	130.41	0.08
Crabtree	Reach 1	1582	Max	newEC100	996.58	-0.83	9.11		9.14	0.000135	1.62	680.07	132.02	0.1
Crabtree	Reach 1	1582	Max	newEC3	589.86	-0.83	6.13		6.18	0.000326	1.8	338.84	99.83	0.15
	Reach 1													
Crabtree	Reach 1	1295	Max	EC100	1431.92	-0.9	9.13		9.19	0.000239	2.14	713.87	118.08	0.14
Crabtree	Reach 1	1295	Max	EC3yr0416	698.15	-0.9	6.07		6.13	0.000439	2.02	363.73	105.44	0.17
Crabtree	Reach 1	1295	Max	EC25yr0416	1055.59	-0.9	8.85		8.89	0.000151	1.66	680.81	117.62	0.11
Crabtree	Reach 1	1295	Max	newEC25	761.24	-0.9	8.82		8.84	0.00008	1.2	677.33	117.58	0.08
Crabtree	Reach 1	1295	Max	newEC100	1027.6	-0.9	9.07		9.1	0.000127	1.55	706.68	117.94	0.1
Crabtree	Reach 1	1295	Max	newEC3	578.29	-0.9	6.04		6.08	0.000309	1.69	360.73	105.31	0.14
	Reach 1													

Crabtree	Reach 1	1281	Max	EC100	1439.53	-0.9	9.12		9.18	0.000204	2.03	781.54	132.12	0.13
Crabtree	Reach 1	1281	Max	EC3yr0416	698.14	-0.9	6.07		6.13	0.00036	1.91	387.74	113.57	0.16
Crabtree	Reach 1	1281	Max	EC25yr0416	1060.14	-0.9	8.85		8.88	0.000128	1.57	744.83	132.12	0.1
Crabtree	Reach 1	1281	Max	newEC25	764.33	-0.9	8.82		8.84	0.000068	1.14	741.13	132.12	0.07
Crabtree	Reach 1	1281	Max	newEC100	1032.64	-0.9	9.06		9.09	0.000108	1.47	773.87	132.12	0.09
Crabtree	Reach 1	1281	Max	newEC3	578.28	-0.9	6.04		6.08	0.000253	1.6	384.5	112.81	0.13
	Reach 1													
Crabtree	Reach 1	1268	Max	EC100	1459.53	-0.91	9.12		9.18	0.000204	2.03	786.64	129.51	0.13
Crabtree	Reach 1	1268	Max	EC3yr0416	695.45	-0.91	6.07		6.12	0.000351	1.89	394.1	120.78	0.16
Crabtree	Reach 1	1268	Max	EC25yr0416	1075.31	-0.91	8.84		8.88	0.000128	1.57	750.81	129.51	0.1
Crabtree	Reach 1	1268	Max	newEC25	777.42	-0.91	8.82		8.83	0.000062	1.04	821.91	152.89	0.07
Crabtree	Reach 1	1268	Max	newEC100	1051.26	-0.91	9.07		9.09	0.000099	1.34	860.03	152.89	0.09
Crabtree	Reach 1	1268	Max	newEC3	575.45	-0.91	6.04		6.08	0.000276	1.55	397.42	151.59	0.14
	Reach 1													
Crabtree	Reach 1	1251	Max	EC100	1473.43	-0.91	9.12		9.18	0.000225	2.12	762.9	132.16	0.14
Crabtree	Reach 1	1251	Max	EC3yr0416	695.37	-0.91	6.06		6.12	0.000357	1.89	388.46	111.24	0.16
Crabtree	Reach 1	1251	Max	EC25yr0416	1084.34	-0.91	8.84		8.88	0.000141	1.64	726.57	132.16	0.11
Crabtree	Reach 1	1251	Max	newEC25	787.21	-0.91	8.82		8.83	0.000066	1.09	805.85	155.64	0.07
Crabtree	Reach 1	1251	Max	newEC100	1066.1	-0.91	9.07		9.09	0.000105	1.4	844.54	155.64	0.09
Crabtree	Reach 1	1251	Max	newEC3	573.23	-0.91	6.04		6.07	0.00026	1.53	400.92	140.2	0.13
	Reach 1													
Crabtree	Reach 1	928	Max	EC100	1630.31	-0.99	9		9.08	0.000272	2.41	750.86	128.45	0.15
Crabtree	Reach 1	928	Max	EC3yr0416	674.19	-0.99	5.95		6	0.000306	1.86	381.91	109.72	0.15
Crabtree	Reach 1	928	Max	EC25yr0416	1175.73	-0.99	8.77		8.82	0.000158	1.8	721.69	126.84	0.11
Crabtree	Reach 1	928	Max	newEC25	969.04	-0.99	8.78		8.8	0.000091	1.29	837	161.17	0.09
Crabtree	Reach 1	928	Max	newEC100	1331.09	-0.99	9		9.04	0.000152	1.7	872.78	162.92	0.11
Crabtree	Reach 1	928	Max	newEC3	616.91	-0.99	5.93		5.98	0.00029	1.64	391.36	119.06	0.14
	Reach 1													
Crabtree	Reach 1	906	Max	EC100	1639.2	-0.99	8.99		9.06	0.000244	2.24	811.7	136.98	0.14
Crabtree	Reach 1	906	Max	EC3yr0416	674.03	-0.99	5.95		6	0.000303	1.79	401.73	116.61	0.15
Crabtree	Reach 1	906	Max	EC25yr0416	1183.11	-0.99	8.77		8.81	0.000143	1.68	781.3	136.98	0.11
Crabtree	Reach 1	906	Max	newEC25	983.77	-0.99	8.77		8.79	0.000096	1.31	824.09	151.32	0.09
Crabtree	Reach 1	906	Max	newEC100	1354.22	-0.99	8.98		9.02	0.000162	1.73	856.38	151.32	0.11
Crabtree	Reach 1	906	Max	newEC3	620.93	-0.99	5.93		5.97	0.000301	1.62	399.63	116.26	0.14
	Reach 1													

Crabtree	Reach 1	884	Max	EC100	1662.67	-1	8.98		9.05	0.000227	2.15	845.86	138.71	0.14
Crabtree	Reach 1	884	Max	EC3yr0416	671.06	-1	5.95		5.99	0.000263	1.65	428.53	120.62	0.14
Crabtree	Reach 1	884	Max	EC25yr0416	1197.73	-1	8.76		8.8	0.000132	1.61	815.34	138.71	0.1
Crabtree	Reach 1	884	Max	newEC25	999.74	-1	8.77		8.79	0.000081	1.26	872.15	148.21	0.08
Crabtree	Reach 1	884	Max	newEC100	1377.45	-1	8.98		9.02	0.000137	1.67	903.52	148.21	0.11
Crabtree	Reach 1	884	Max	newEC3	619.03	-1	5.93		5.96	0.000206	1.46	454.49	131.74	0.12
	Reach 1													
Crabtree	Reach 1	872	Max	EC100	1676.13	-1	8.99		9.06	0.000255	2.3	796.17	136.18	0.14
Crabtree	Reach 1	872	Max	EC3yr0416	667.39	-1	5.94		5.99	0.000279	1.73	407.27	121.58	0.14
Crabtree	Reach 1	872	Max	EC25yr0416	1206.68	-1	8.76		8.81	0.000148	1.72	766.6	132.8	0.11
Crabtree	Reach 1	872	Max	newEC25	1021.12	-1	8.77		8.79	0.000082	1.28	898.69	159.9	0.08
Crabtree	Reach 1	872	Max	newEC100	1404.21	-1	8.98		9.02	0.000138	1.69	932.99	159.9	0.11
Crabtree	Reach 1	872	Max	newEC3	613.91	-1	5.93		5.96	0.000211	1.5	445.9	140.16	0.12
	Reach 1													
Crabtree	Reach 1	793	Max	EC100	1723.14	-1.02	8.92		9.03	0.000395	2.72	688.18	125.81	0.18
Crabtree	Reach 1	793	Max	EC3yr0416	656.4	-1.02	5.89		5.96	0.000447	2.02	329.14	89.16	0.17
#	Plans	=	6											
#	Profiles	=	1											
River	**Reach**	**River Sta**	**Profile**	**Plan**	**Q Total**	**Min Ch El**	**W.S. Elev**	**Crit W.S.**	**E.G. Elev**	**E.G. Slope**	**Vel Chnl**	**Flow Area**	**Top Width**	**Froude #**
					(cfs)	**(ft)**	**(ft)**	**(ft)**	**(ft)**	**(ft/ft)**	**(ft/s)**	**(sq ft)**	**(ft)**	
Crabtree Swamp	Reach 1	29747	Max WS	EC100	229.9	24.5	30.07		30.14	0.000692	2.16	106.35	29.04	0.2
Crabtree Swamp	Reach 1	29747	Max WS	EC3yr0416	62.82	24.5	29.01		29.02	0.000126	0.81	77.47	26.02	0.08
Crabtree Swamp	Reach 1	29747	Max WS	EC25yr0416	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC25	160.9	24.5	29.64		29.69	0.000474	1.71	94.24	27.69	0.16
Crabtree Swamp	Reach 1	29747	Max WS	newEC100	229.9	24.5	30.03		30.1	0.000712	2.18	105.26	28.93	0.2
Crabtree Swamp	Reach 1	29747	Max WS	newEC3	63.27	24.5	29		29.01	0.000129	0.82	77.18	26	0.08
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29740	Lat											
Crabtree Swamp	Reach 1													
Crabtree Swamp	Reach 1	29629	Max	EC100	229.9	24.3	29.94		30.04	0.001054	2.56	89.82	25.75	0.24
Crabtree Swamp	Reach 1	29629	Max	EC3yr0416	62.81	24.3	28.99		29.01	0.000167	0.93	67.38	22.14	0.09
Crabtree Swamp	Reach 1	29629	Max	EC25yr0416	160.9	24.3	29.56		29.62	0.000684	2	80.35	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC25	160.9	24.3	29.56		29.62	0.000684	2	80.36	24.04	0.19
Crabtree Swamp	Reach 1	29629	Max	newEC100	229.9	24.3	29.89		30	0.001086	2.59	88.75	25.56	0.25

Crabtree	Reach 1	556	Max	newEC25	895.32	-1.08	8.7		8.72	0.000091	1.3	767.73	154.43	0.09
Crabtree	Reach 1	556	Max	newEC100	1719.1	-1.08	8.85		8.93	0.000308	2.43	790.36	154.66	0.16
Crabtree	Reach 1	556	Max	newEC3	604.17	-1.08	5.81		5.86	0.000297	1.72	351.34	78.82	0.14
	Reach 1													
Crabtree	Reach 1	532	Max	EC100	1707.27	-1.09	8.8		8.92	0.000429	2.78	628.85	100.58	0.18
Crabtree	Reach 1	532	Max	EC3yr0416	618.65	-1.09	5.81		5.86	0.00032	1.74	354.66	81.05	0.15
Crabtree	Reach 1	532	Max	EC25yr0416	873.53	-1.09	8.69		8.72	0.000118	1.44	618.32	100.13	0.1
Crabtree	Reach 1	532	Max	newEC25	898.91	-1.09	8.7		8.72	0.000092	1.29	774.78	155.08	0.09
Crabtree	Reach 1	532	Max	newEC100	1733.04	-1.09	8.84		8.92	0.000314	2.41	796.58	155.47	0.16
Crabtree	Reach 1	532	Max	newEC3	601.52	-1.09	5.8		5.85	0.000306	1.7	355.11	86.6	0.14
	Reach 1													
Crabtree	Reach 1	511	Max	EC100	1703.8	-1.09	8.78		8.91	0.000461	2.9	596.58	91.67	0.19
Crabtree	Reach 1	511	Max	EC3yr0416	613.58	-1.09	5.81		5.85	0.000303	1.76	349	74.81	0.14
Crabtree	Reach 1	511	Max	EC25yr0416	863.61	-1.09	8.69		8.72	0.000124	1.49	588.41	91.2	0.1
Crabtree	Reach 1	511	Max	newEC25	872.68	-1.09	8.68		8.72	0.000127	1.51	587.91	91.17	0.1
Crabtree	Reach 1	511	Max	newEC100	1736.42	-1.09	8.78		8.91	0.000479	2.96	596.48	91.66	0.19
Crabtree	Reach 1	511	Max	newEC3	598.89	-1.09	5.8		5.84	0.000288	1.72	348.35	74.49	0.14
	Reach 1													
Crabtree	Reach 1	493	Max	EC100	1702.43	-1.1	8.77		8.9	0.000454	2.89	600.24	95.73	0.19
Crabtree	Reach 1	493	Max	EC3yr0416	609.97	-1.1	5.8		5.85	0.000301	1.75	348.49	74.95	0.14
Crabtree	Reach 1	493	Max	EC25yr0416	858.99	-1.1	8.68		8.72	0.00012	1.48	592.26	94.81	0.1
Crabtree	Reach 1	493	Max	newEC25	869.43	-1.1	8.68		8.71	0.000124	1.5	591.74	94.78	0.1
Crabtree	Reach 1	493	Max	newEC100	1735.24	-1.1	8.77		8.9	0.000472	2.95	600.11	95.71	0.19
Crabtree	Reach 1	493	Max	newEC3	596.13	-1.1	5.79		5.84	0.000289	1.71	347.86	74.93	0.14
	Reach 1													
Crabtree	Reach 1	326	Max	EC100	1698.89	-1.12	8.75		8.86	0.000371	2.68	662.6	113.24	0.17
Crabtree	Reach 1	326	Max	EC3yr0416	598.14	-1.12	5.78		5.82	0.000241	1.59	376.86	80.32	0.13
Crabtree	Reach 1	326	Max	EC25yr0416	849.6	-1.12	8.68		8.71	0.000096	1.35	654.79	112.96	0.09
Crabtree	Reach 1	326	Max	newEC25	853.97	-1.12	8.67		8.7	0.000097	1.36	654.16	112.94	0.09
Crabtree	Reach 1	326	Max	newEC100	1731.75	-1.12	8.75		8.86	0.000386	2.73	662.34	113.23	0.17
Crabtree	Reach 1	326	Max	newEC3	586.71	-1.12	5.77		5.81	0.000233	1.56	376.23	80.27	0.13
	Reach 1													
Crabtree	Reach 1	289	Max	EC100	1700.4	-1.12	8.76		8.85	0.000332	2.56	710.91	124.43	0.16
Crabtree	Reach 1	289	Max	EC3yr0416	595.8	-1.12	5.78		5.82	0.000236	1.57	382.01	87.18	0.13
Crabtree	Reach 1	289	Max	EC25yr0416	852.1	-1.12	8.68		8.71	0.000087	1.3	701.74	124.2	0.08

Crabtree	Reach 1	289	Max	newEC25	857.23	-1.12	8.68		8.7	0.000088	1.31	701.05	124.19	0.08
Crabtree	Reach 1	289	Max	newEC100	1732.84	-1.12	8.75		8.85	0.000345	2.61	710.67	124.42	0.17
Crabtree	Reach 1	289	Max	newEC3	584.52	-1.12	5.77		5.81	0.000228	1.54	381.34	87.13	0.13
	Reach 1													
Crabtree	Reach 1	265	Max	EC100	1701.08	-1.13	8.75		8.85	0.000327	2.51	722.93	124.38	0.16
Crabtree	Reach 1	265	Max	EC3yr0416	592.37	-1.13	5.77		5.81	0.000256	1.59	374.56	95.45	0.13
Crabtree	Reach 1	265	Max	EC25yr0416	852.32	-1.13	8.68		8.7	0.000085	1.27	713.82	124.26	0.08
Crabtree	Reach 1	265	Max	newEC25	856.75	-1.13	8.68		8.7	0.000086	1.28	713.13	124.25	0.08
Crabtree	Reach 1	265	Max	newEC100	1733.61	-1.13	8.75		8.85	0.00034	2.56	722.69	124.37	0.17
Crabtree	Reach 1	265	Max	newEC3	582.09	-1.13	5.76		5.8	0.000249	1.57	373.84	95.21	0.13
	Reach 1													
Crabtree	Reach 1	144	Max	EC100	1706.45	-1.15	8.75		8.82	0.000247	2.3	803.91	131.07	0.14
Crabtree	Reach 1	144	Max	EC3yr0416	586.36	-1.15	5.76		5.79	0.000171	1.4	442.55	114.74	0.11
Crabtree	Reach 1	144	Max	EC25yr0416	850.49	-1.15	8.68		8.7	0.000063	1.16	795.13	130.07	0.07
Crabtree	Reach 1	144	Max	newEC25	855.01	-1.15	8.67		8.69	0.000064	1.16	794.4	130.06	0.07
Crabtree	Reach 1	144	Max	newEC100	1735.49	-1.15	8.75		8.82	0.000256	2.33	803.71	131	0.15
Crabtree	Reach 1	144	Max	newEC3	573.82	-1.15	5.76		5.79	0.000165	1.37	441.72	114.7	0.11
	Reach 1													
Crabtree	Reach 1	117	Max	EC100	1717.19	-1.15	8.73		8.8	0.000267	2.35	793.91	129.82	0.15
Crabtree	Reach 1	117	Max	EC3yr0416	582.26	-1.15	5.76		5.79	0.000188	1.43	426.52	107.43	0.12
Crabtree	Reach 1	117	Max	EC25yr0416	843.79	-1.15	8.67		8.69	0.000066	1.16	787.17	129.82	0.07
Crabtree	Reach 1	117	Max	newEC25	850.93	-1.15	8.67		8.69	0.000067	1.17	786.46	129.82	0.07
Crabtree	Reach 1	117	Max	newEC100	1742.96	-1.15	8.72		8.81	0.000275	2.38	793.7	129.82	0.15
Crabtree	Reach 1	117	Max	newEC3	567.71	-1.15	5.75		5.78	0.00018	1.4	425.77	107.41	0.11
	Reach 1													
Crabtree	Reach 1	102	Max	EC100	1729.85	-1.16	8.72		8.8	0.000258	2.33	800.19	125.71	0.15
Crabtree	Reach 1	102	Max	EC3yr0416	576.71	-1.16	5.76		5.79	0.000174	1.4	437.56	110.98	0.11
Crabtree	Reach 1	102	Max	EC25yr0416	850.95	-1.16	8.67		8.69	0.000064	1.16	793.92	125.71	0.07
Crabtree	Reach 1	102	Max	newEC25	856.24	-1.16	8.67		8.69	0.000065	1.17	793.25	125.71	0.07
Crabtree	Reach 1	102	Max	newEC100	1753.45	-1.16	8.72		8.8	0.000265	2.37	800.04	125.71	0.15
Crabtree	Reach 1	102	Max	newEC3	566.61	-1.16	5.75		5.78	0.000169	1.37	436.78	110.92	0.11
	Reach 1													
Crabtree	Reach 1	83	Max	EC100	1751.15	-1.16	8.73		8.8	0.000208	2.14	869.45	125.25	0.13
Crabtree	Reach 1	83	Max	EC3yr0416	585.67	-1.16	5.76		5.78	0.000128	1.23	499.81	116.43	0.1
Crabtree	Reach 1	83	Max	EC25yr0416	866.74	-1.16	8.68		8.69	0.000052	1.07	862.36	125.25	0.07

Crabtree	Reach 1	83	Max	newEC25	870.54	-1.16	8.67		8.69	0.000053	1.07	861.71	125.25	0.07
Crabtree	Reach 1	83	Max	newEC100	1771.83	-1.16	8.73		8.8	0.000213	2.16	869.4	125.25	0.13
Crabtree	Reach 1	83	Max	newEC3	572.79	-1.16	5.75		5.77	0.000123	1.21	498.98	116.38	0.09
	Reach 1													
Crabtree	Reach 1	66	Max	EC100	1805.46	-1.17	8.75		8.79	0.000148	1.67	1127.27	178.9	0.11
Crabtree	Reach 1	66	Max	EC3yr0416	597.06	-1.17	5.76		5.78	0.000122	1.06	594.76	172.18	0.09
Crabtree	Reach 1	66	Max	EC25yr0416	910.23	-1.17	8.68		8.69	0.000039	0.85	1114.9	178.9	0.06
Crabtree	Reach 1	66	Max	newEC25	903.34	-1.17	8.67		8.68	0.000039	0.84	1114.05	178.9	0.06
Crabtree	Reach 1	66	Max	newEC100	1817.38	-1.17	8.75		8.79	0.00015	1.68	1127.46	178.9	0.11
Crabtree	Reach 1	66	Max	newEC3	584.71	-1.17	5.76		5.77	0.000118	1.04	593.5	172.09	0.09
	Reach 1													
Crabtree	Reach 1	50	Max	EC100	1842.4	-1.17	8.7		8.78	0.000275	2.43	818.76	123.42	0.15
Crabtree	Reach 1	50	Max	EC3yr0416	587.05	-1.17	5.75		5.78	0.000168	1.39	455.38	117.66	0.11
Crabtree	Reach 1	50	Max	EC25yr0416	907.08	-1.17	8.67		8.69	0.000068	1.2	814.9	123.42	0.08
Crabtree	Reach 1	50	Max	newEC25	901.47	-1.17	8.66		8.68	0.000067	1.19	814.37	123.42	0.07
Crabtree	Reach 1	50	Max	newEC100	1845.92	-1.17	8.7		8.78	0.000275	2.43	818.96	123.42	0.15
Crabtree	Reach 1	50	Max	newEC3	579.02	-1.17	5.74		5.77	0.000164	1.38	454.58	117.59	0.11
	Reach 1													
Crabtree	Reach 1	30	Max	EC100	1856.95	-1.17	8.69		8.77	0.000282	2.41	822.33	125.2	0.15
Crabtree	Reach 1	30	Max	EC3yr0416	586.43	-1.17	5.75		5.77	0.000172	1.36	455.34	117.73	0.11
Crabtree	Reach 1	30	Max	EC25yr0416	911.92	-1.17	8.66		8.68	0.000069	1.19	819.3	125.2	0.08
Crabtree	Reach 1	30	Max	newEC25	906.22	-1.17	8.66		8.68	0.000068	1.18	818.78	125.2	0.08
Crabtree	Reach 1	30	Max	newEC100	1858.59	-1.17	8.69		8.77	0.000283	2.41	822.59	125.2	0.15
Crabtree	Reach 1	30	Max	newEC3	577.98	-1.17	5.74		5.77	0.000168	1.35	454.54	117.66	0.11
	Reach 1													
Crabtree	Reach 1	11	Max	EC100	1845.75	-1.18	8.64	4.16	8.75	0.000454	2.86	707.01	130.11	0.19
Crabtree	Reach 1	11	Max	EC3yr0416	562.76	-1.18	5.72	2.44	5.77	0.000327	1.7	342.32	101.25	0.15
Crabtree	Reach 1	11	Max	EC25yr0416	888.87	-1.18	8.65	2.98	8.68	0.000105	1.38	708.78	130.11	0.09
Crabtree	Reach 1	11	Max	newEC25	883.76	-1.18	8.65	2.97	8.67	0.000104	1.37	708.26	130.11	0.09
Crabtree	Reach 1	11	Max	newEC100	1847.34	-1.18	8.64	4.16	8.76	0.000454	2.87	707.28	130.11	0.19
Crabtree	Reach 1	11	Max	newEC3	558.52	-1.18	5.72	2.43	5.76	0.000324	1.69	341.69	101.14	0.15
	Reach 1													
Crabtree	Reach 1	-31	Bridge											
	Reach 1													
Crabtree	Reach 1	-50	Max	EC100	1804.4	-1.2	8.53		8.63	0.000354	2.73	732.47	121.9	0.17

Crabtree	Reach 1	-50	Max	EC3yr0416	544.45	-1.2	5.7		5.74	0.000205	1.54	392.84	110.19	0.12
Crabtree	Reach 1	-50	Max	EC25yr0416	860.46	-1.2	8.62		8.64	0.000077	1.28	743.14	121.9	0.08
Crabtree	Reach 1	-50	Max	newEC25	857.6	-1.2	8.62		8.64	0.000077	1.28	742.68	121.9	0.08
Crabtree	Reach 1	-50	Max	newEC100	1806.12	-1.2	8.53		8.64	0.000354	2.73	732.68	121.9	0.17
Crabtree	Reach 1	-50	Max	newEC3	543.66	-1.2	5.7		5.73	0.000206	1.54	392.16	110.15	0.12
	Reach 1													
Crabtree	Reach 1	-72	Max	EC100	1800.05	-1.2	8.52	3.94	8.62	0.000354	2.73	731.18	121.9	0.17
Crabtree	Reach 1	-72	Max	EC3yr0416	537.54	-1.2	5.7	1.85	5.73	0.000201	1.52	392.35	110.16	0.12
Crabtree	Reach 1	-72	Max	EC25yr0416	856.65	-1.2	8.62	2.51	8.64	0.000076	1.28	742.87	121.9	0.08
Crabtree	Reach 1	-72	Max	newEC25	853.31	-1.2	8.61	2.51	8.64	0.000076	1.27	742.41	121.9	0.08
Crabtree	Reach 1	-72	Max	newEC100	1800.68	-1.2	8.52	3.94	8.62	0.000354	2.73	731.39	121.9	0.17
Crabtree	Reach 1	-72	Max	newEC3	539.17	-1.2	5.69	1.86	5.72	0.000203	1.53	391.66	110.11	0.12