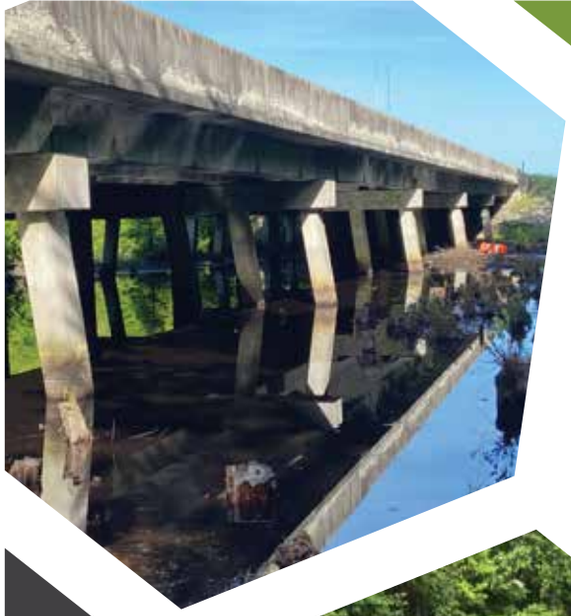

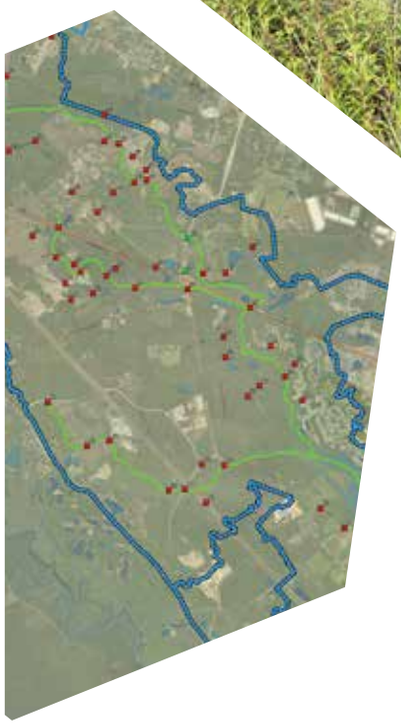

WEST CHATHAM REGIONAL WATERSHED STUDY

VOLUME 1

J-29965.0001

OCTOBER 2023

PREPARED FOR:

CHATHAM COUNTY | GEORGIA

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VOLUME 1

TABLE OF CONTENTS

APPENDICES

VOLUME 2

TABLE OF CONTENTS

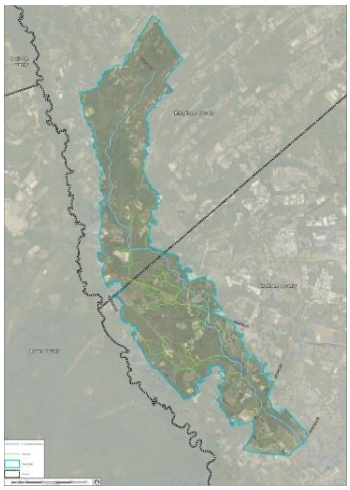
EXHIBITS

Items included on separate hard drive:

- 50% Annual Chance Event, Inundation Exhibit (A-C) (PDF)
- 4% Annual Chance Event, Inundation Exhibit (A-C) (PDF)
- 2% Annual Chance Event, Inundation Exhibit (A-C) (PDF)
- 1% Annual Chance Event, Inundation Exhibit (A-C) (PDF
- 1% +1.41-ft Sea Level Rise (SLR) Annual Chance Event, Inundation Exhibit (A-C) (PDF)
- 1% +1.64-ft Sea Level Rise (SLR) Annual Chance Event, Inundation Exhibit (A-C) (PDF)
- ICPR4 Model Data (ICPR 4 Format)

BACKGROUND AND INTRODUCTION

Chatham County and Effingham County, Georgia are experiencing significant growth that will be a continuing trend due to land availability and the area's growing transportation network. A large portion of the developable land within these counties drains to the Little Ogeechee River watershed. The Little Ogeechee River system drains southeast through a wide floodplain of heavily braided channels and tributaries before discharging into the Atlantic Ocean. To better prepare for future development, Thomas & Hutton was retained by Chatham County to develop an existing conditions watershed analysis for the Little Ogeechee River watershed, which is approximately 60 square miles and bounded by Midland Road to the north, Old River Road to the west, and US Highway 17 to the south. Please refer to Exhibit 1 – Study Location Map for the location of the project study area.



The Little Ogeechee River watershed has a long history of flooding concerns and has never been fully modeled or analyzed to understand the extent or cause of potential flooding issues. The West Chatham Regional Watershed Study was proposed as a multi–phase analysis of the watershed to better understand the flooding issues, identify system deficiencies, and provide recommendations for improved stormwater conveyance. This first phase included gathering existing data and developing a one–dimensional hydrologic and hydraulic model to simulate existing conditions, water surface elevations and conveyances with the watershed.

The hydrologic and hydraulic model was developed within Streamline Technologies' ICPR4 software. This report serves to document the modeling assumptions and methodologies used in the development of the West Chatham Regional Watershed Study Existing Conditions ICPR4 Model.

PURPOSE

The purpose of this study, as documented in this report is as follows:

- Compile existing conditions information, for both existing developments and primary conveyances within the study area,
- Develop a one–dimensional existing conditions model,
- Simulate the 50% (2–year), 4%(25–year), 2%(50–year), and 1%(100–year) annual chance, 24–hour design storm events with a tidally influenced tailwater,
- Simulate the 1% annual chance, 24–hour design storm event with a tidal tailwater that accounts for two different Sea Level Rise projections,
- Assist in deployment and management of several sensors to monitor rainfall and water levels at strategic locations throughout the watershed, and
- Acquire actual precipitation data and water surface elevation data for future model calibration.

EXISTING CONDITIONS MODEL DEVELOPMENT

The first phase of this study was to generate a one–dimensional existing conditions model for the study area. During the due diligence phase, Thomas & Hutton requested and obtained existing data from federal, state, and local sources. This effort resulted in a catalogue of existing data and a list of key components for incorporation into the study phase. Existing data included municipal comprehensive plans, approved development plans, record drawings, GIS inventory data, and detailed hydrologic and hydraulic analyses. The data was assessed for applicability based on vertical datum, age, and completeness, with the following items considered suitable for use in the detailed modeling:

- Watershed delineations – used for refining hydrologic parameters;
- Existing plans/details – used for hydraulic model input, where pertinent;
- Drainage studies within the Little Ogeechee River watershed – used for hydraulic model comparison, where pertinent;
- LiDAR topography – used for hydrologic and hydraulic model input.

The data gathered in the due diligence phase was supplemented with additional data required to create the one–dimensional existing conditions model. With the Little Ogeechee River watershed consisting of a network of braided streams and wetlands that extend approximately 26 miles in length, and with conveyance through several hydraulic structures, the additional key components to developing the existing conditions model were identified as field survey of the primary hydraulic conveyances and record information for the developed properties contributing 20 acres or more to the study area.

DATA COLLECTION AND ASSESSMENT

Using the latest 2018 LiDAR topography and aerial imagery for reference, areas of model significance were identified based on perceived level of potential impact to the watershed conveyance. These areas of significance include existing developments (residential, commercial, industrial, etc.) and areas where conveyance systems appear to be restricted, at culvert/pipe crossings and/or bridges. Data for the areas of significance were gathered through survey, field reconnaissance, and coordination with engineers of record for existing developments with a contributing drainage area greater than twenty acres.

SURVEY

Across the study area, 90 primary hydraulic conveyance structure locations were identified for field survey data collection and ultimate model incorporation. Sub–consultants Neil Engineering and Platinum Geomatics performed the field survey to collect existing data for the noted ninety locations, with the required reported data including:

- Detailed bridge, pipe, or culvert data including inverts, channel bathymetry at structure, wingwall shape and material, headwall size and material, presence of parapets and/or abutments, high chord elevation (roadway elevation), and low chord elevation.
- Two topographic cross–sections at each location, one upstream and one downstream with a sufficient separation from the actual crossing.

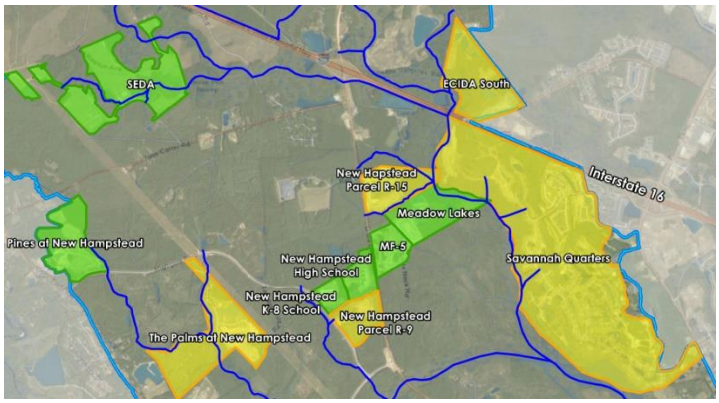
While the majority of the surveyed locations were pipe or culvert crossings, eleven bridges were surveyed and documented. Several locations were not found to have a pipe/culvert while other locations were not included in the final model due to insignificant impact to the primary conveyance or being outside of the primary study area. Please refer to Exhibit 2 – Survey Location Map for a depiction of the survey locations and their respective model links.

FIELD RECONNAISSANCE

At the beginning of this project, Thomas & Hutton conducted field reconnaissance to gain a better understanding of the existing conditions and functionality of the Little Ogeechee River watershed. The field reconnaissance was initially planned to gain an overall understanding of the study area, generally assess the data needs for the study, and document the findings. However, additional areas of significance became evident during the initial model development stages. Thomas & Hutton also utilized the field reconnaissance as an opportunity to record information on these additional areas of significance. The recorded information included additional pipe and culvert crossings along the main stormwater conveyances for the Little Ogeechee River watershed that were not apparent during the initial assessment. The field reconnaissance not only provided an understanding of the watershed functionality, but also supplied additional hydraulic crossing data that further refined the existing conditions one–dimensional ICPR4 model. Documentation of the field reconnaissance process and results can be found in Appendix A – West Chatham Field Investigation Memo.

EXISTING DEVELOPMENTS – THOMAS & HUTTON AND OTHERS

During the original discussions with Chatham County over the development of the West Chatham Regional Watershed Study, it was determined that existing developments of 20 acres or more should be incorporated into the existing conditions model to provide reasonably accurate model results, additional points for model calibration efforts, and potentially serve as part of future flood mitigation efforts. The existing developments were located based on readily available aerial imagery and generally included residential, commercial, and industrial projects. These identified areas were reviewed with the County for final input. A total of 18 existing developments were identified for model inclusion, 12 having an engineer of record different than Thomas & Hutton. Thomas & Hutton coordinated with the engineers of record and Chatham County for each of the 12 identified projects to obtain design and as–built files to model approximate onsite storage and ultimate outfall configurations for each of the identified existing developments. These files were provided for 5 of the requested projects. See Table 1 below for a summary of the developments,



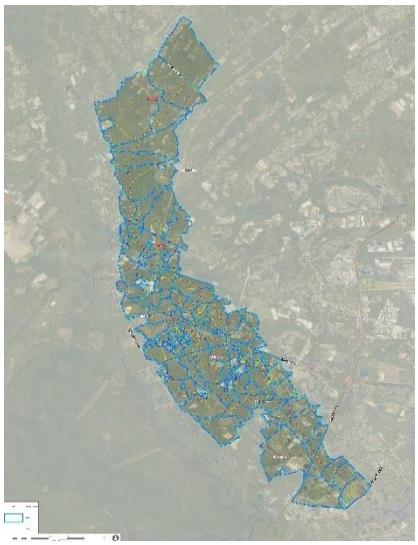
their engineer of record and if the data was provided. These existing developments, tabulated below, and their corresponding locations can be found in Exhibit 3 – Existing Developments Map.

Table 1. Existing Developments

Existing Development	Engineer of Record	Data Obtained
ECIDA North	Thomas & Hutton	Yes
ECIDA South	Hussey Gay Bell	No
Gateway Henderson Canal	Thomas & Hutton	Yes
International Paper	Hussey Gay Bell	No
Marlow Elementary	James W. Buckley & Associates, Inc.	Yes
Meadow Lakes	Coleman Company, Inc.	Yes
MF5	Thomas & Hutton	Yes
New Hampstead High School	Thomas & Hutton	Yes
New Hampstead K–8 School	Coleman Company, Inc.	Yes
New Hampstead Parcel R–15	Hussey Gay Bell	Yes
New Hampstead Parcel R–9	Kern & Company	No
Sand Hill Elementary	The Lominack Partnership	Yes
Savannah Quarters	Hussey Gay Bell	No
SEDA	Thomas & Hutton	Yes
SEDA North	Kern & Company	No
Stonegate Amenities	Poythress Land Surveying	Yes
The Palms at New Hampstead	Hussey Gay Bell	Yes
The Pines at New Hampstead	Thomas & Hutton	Yes

HYDROLOGIC PARAMETERS

The existing conditions hydrologic and hydraulic model simulates rainfall and stormwater runoff and performs hydraulic routing through the modeled stormwater conveyance network. The hydrologic input data consists of information specific to each drainage sub–basin within the study area. Input variables include runoff curve number, rainfall distribution pattern, hydrograph peaking factor, drainage basin area, time of concentration, etc. The ICPR4 program generates runoff hydrographs for each sub–basin based on these user–specified variables. The Soil Conservation Service (SCS) Runoff Curve Number method was used in the model to generate runoff flow hydrographs for each sub–basin dependent upon the use defined hydrologic input parameters.



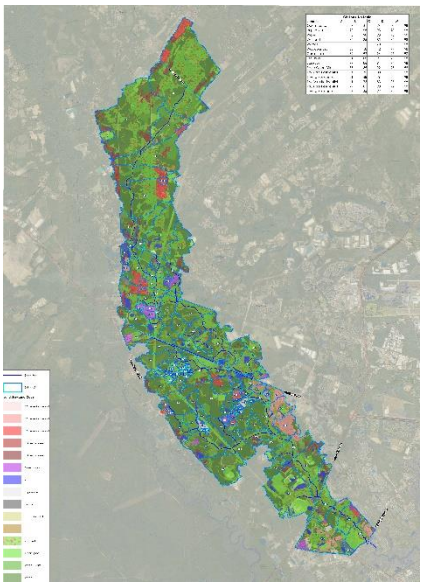
BASIN DELINEATION

The study area is approximately 60 square miles. The overall study area basin was delineated using 2018 LiDAR topography. The 2018 LiDAR topography was also used to generate the main stormwater conveyance and significant tributaries within the study area. Sub–basins were further delineated at major points of flow change such as outfalls of major existing developments, bridges, culverts, tributary confluences, etc. Ultimately,

143 sub–basins were delineated within the study area. Refer to Exhibit 4, Sub–basins Map, for a depiction of sub–basin delineations.

LAND USE AND CURVE NUMBER CALCULATIONS

To assist with the calculation of curve number (CN) values for the 143 sub–basins, a land use/land cover shapefile was developed within Esri ArcGIS version 10.7.1. The land use/land cover represents existing conditions from 2022 aerial imagery. The land use/land cover shape file also defined wetland coverage from data extracted from the National Wetland Inventory (NWI). In addition to the aerial imagery and NWI data, the existing development data for projects over 20 acres was used to generate the land use/land cover to accurately reflect these developments. Please refer to Exhibit 5 – Land Use/Land Cover Map for designated land use/land cover areas. The land use/land cover dataset includes an array of land uses, all defined based on the SCS methodology as described in the TR–55 manual.



Hydrologic soil group (HSG) data was also used to determine CN values of the model sub–basins. The United States Department of Agriculture (USDA) Soil Survey Geographic Database (SSURGO) GIS data was obtained for the study area and overlaid with the sub–basins. The HSG of a soil is directly related to its ability or inability to absorb and infiltrate stormwater runoff. Group A soils have low runoff potential and high infiltration rates even when thoroughly wetted and consist mainly of deep, well to excessively drained sand or gravel. Group B soils have moderate infiltration rates when thoroughly wetted and consist mainly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. Group C soils have moderate infiltration rates when thoroughly wetted and consist mainly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine texture. Group D soils have high runoff potential with very low infiltration rates when thoroughly wetted and consist mainly of clay soils with a high swelling potential, soils with a permanent high–water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. A dual HSG designation (i.e., A/D, B/D, C/D) indicates that the soil acts as a HSG D soil in "undrained conditions" or when thoroughly wetted. Please refer to Exhibit 6 – Hydrologic Soil Group Map for HSG designations within the study area.

The sub–basins, land use, and HSG were merged utilizing GIS tools to produce a coverage of unique areas that were used for the calculation of composite CNs for each sub–basin. A CN value matrix was developed to determine and assign each land use/HSG combination for each sub–basin. The matrix values were based on those presented in the TR–55 manual. See Table 2. below for the CN value matrix developed for this study can be found below. The composite number calculated for each sub–basin can be found in Appendix B – Sub–basin Parameters.

Table 2. CN Values					
Land Use	HSG				
	A	B	C	D	W
Open Space	39	61	74	80	98
Impervious	98	98	98	98	98
Water	98	98	98	98	98
Wetlands	85	85	85	85	98
Woods	30	55	70	77	98
Woods–Grass	32	58	72	79	98
Commercial	89	92	94	95	98
Industrial	81	88	91	93	98
Bare Soil	77	86	91	94	98
Road Open Ditch	83	89	92	93	98
1/8 Acre Residential	77	85	90	92	98
1/4 Acre Residential	61	75	83	87	98
1/2 Acre Residential	54	70	80	85	98
1 Acre Residential	51	68	79	84	98
2 Acre Residential	46	65	77	82	98

**HSG Column W=Water*

TIME OF CONCENTRATION CALCULATIONS

The model includes approximately 143 sub–basins, all of which have their own basin specific area and curve number assignment. Rather than computing a time of concentration for each individual sub–basin, separate groupings of sub–basins were created based on sub–basins of similar size, orientation, and existing land use. A single sub–basin within each grouping was then assigned as the reference sub–basin for the group and a time of concentration was computed for that single basin and then assigned to all other sub–basins within that relative group. There are a total of 33 groupings for the 143 sub–basins.

Times of concentration were calculated according to procedures set forth in SCS Hydrology Technical note no. n4 (as referenced in the TR–55 manual). The travel times (T_t) for over land flow, shallow concentrated flow, and channel flow are added together for the sub–basin to get the time of concentration (T_c). Slopes used for T_c calculations were derived from the 2018 LiDAR topography.

Overland Flow

The equation for overland flow travel time is as follows:

$$T_t = \frac{0.007\,(nL)^{0.8}}{P_2^{0.5} S^{0.4}}$$

Where: n = Manning's friction factor
L = slope length (ft)
S = Slope (ft/ft)
P_2 = 24–hour precipitation (inches)

The travel time as calculated in the above equation in hours. Multiply by 60 minutes per hour to convert to minutes.

Shallow Concentrated Flow

The equation for shallow concentrated flow travel time is as follows:

$T_t = \frac{L}{60v}$ (min) Where: L = length (ft)
v = velocity (ft/sec)

Channel and Pipe Flow

The equation for channel flow travel time is as follows:

$T_t = \frac{L}{60v}$ (min) Where: L = length of channel (ft)
v = velocity (ft/sec)

The velocity is determined using Manning's equation:

$v = (1.49/n)r^{2/3}S^{1/2}$ Where: r = hydraulic radius (ft) = A/P
A_x = cross–sectional area (sf)
P = wetted perimeter (ft)
S = slope (ft/ft)

Travel times for each reference sub–basin were added together to determine the time of concentration for each reference sub–basin. Please refer to Exhibit 7 – T_c Groupings Map for sub–basin T_c Group assignments and reference sub–basin designations. For a detailed list of sub–basins, their T_c Group, T_c values, and composite CNs, please refer to Appendix B – Sub–basin Parameters.

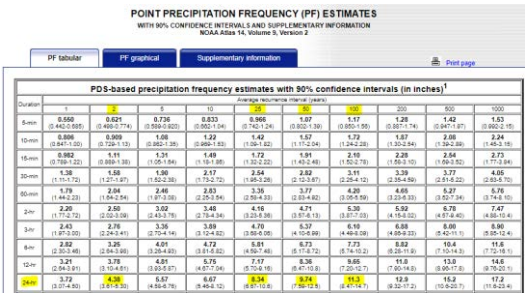
RAINFALL

SCS methodology was used to compute runoff associated with the sub–basins in the existing conditions model. The model was generated to simulate the 50%, 4%, 2%, and 1% annual chance, 24–hour design storm events. A Type III rainfall distribution was used based on the SCS Rainfall Distribution maps for this region. A 323 peaking factor is typically used in this region and was used for runoff computation. Rainfall depths for the simulated design storms were obtained from NOAA Atlas 14. Due to the large scale of the study area, rainfall depth values vary depending on location within the watershed, with a difference up to 1.2 inches for the 1% annual chance, 24–hour design storm. To account for this, the model was developed to assign separate and unique rainfall depths to 2 regions, north and south, which is generally bisected by Interstate 16. The locations of the applied rainfall areas can be found in Exhibit 8 – Rainfall Zones Map. NOAA Atlas 14 currently lists the following rainfall depths for the 2 assigned regions:

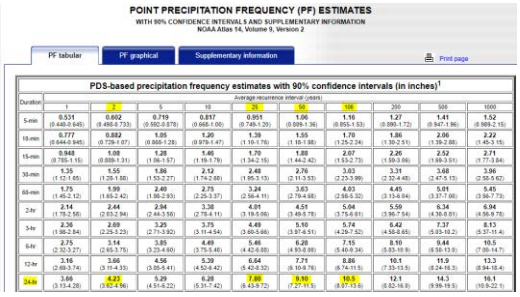
Table 3. NOAA Atlas 14 Rainfall Depths

% Annual Chance, 24–hour Design Storm	Rainfall Depth, North Region (inches)	Rainfall Depth, South Region (inches)
50%	4.23	4.38
4%	7.80	8.34
2%	9.10	9.74
1%	10.50	11.30

NOAA Atlas 14 South Region



NOAA Atlas 14 North Region



HYDRAULIC PARAMETERS

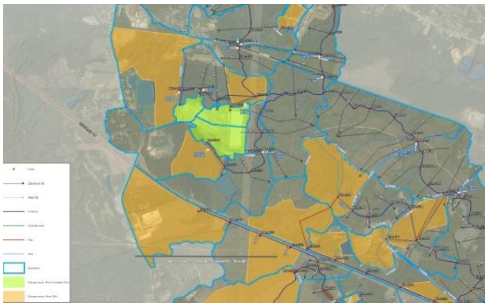
The hydraulic input data for the existing conditions model consists of a system of nodes and links derived from LiDAR topography and collected data from survey, field reconnaissance, and existing development documentation. Nodes represent locations where flows enter or exit the system, pipe or channel characteristics change, or where stage/storage/time relationships are provided. Links represent traditional types of hydraulic conveyance such as pipes, channels, drop structures, weirs, etc. These items are further described below.

LINKS

Links are used to convey stormwater generated from hydrographs through the drainage network. Links typically include channels, pipes, bridges, weirs and drop structures. Link geometry is obtained from field survey, field reconnaissance or LiDAR topographic data. Links connect an upstream and downstream node where stages are calculated for each time step. Links must have a minimum of two nodes attached to them, one on the upstream end and one on the downstream end.

NODES

A node is a point of connection and/or storage located upstream and/or downstream of every link. There are three predominant types of nodes, including time/stage nodes, stage/area nodes, and stage/volume nodes. Stage/area nodes and time/stage nodes were used in the model analysis.



Stage/area nodes define the relationship between the attached link invert, node invert, available stormwater storage area within the node or above the warning stage, and the resulting flooded area. Flooded areas can include ponds, lakes, or wetlands, as well as flooded ground surface areas above node warning stages. Stage area can also simulate the storage area associated with overbank flooding conditions for channels. Time/stage nodes are used for boundary conditions that simulate estimated tidal conditions.

Node warning stages represent a maximum elevation at which potential flooding may occur at that location. Warning stage elevations typically include top of structure elevations, the top of bank elevation for a channel or pond, or roadway elevations for roadway crossings. Warning stages were added to all major road crossings to better evaluate potential flooding. The lowest road elevations were selected as the warning stages for these crossings. This enables the model to identify areas where peak flood stages begin to encroach and cause flooding within roadways.

The Max (Maximum) Stage is the highest water surface elevation in feet recorded during the simulation of the model run. This parameter is provided in the results section and, when compared to warning stages, is used to indicate whether the node is subject to flooding.

CROSS SECTIONS

Cross sections display elevation data by creating a baseline of horizontal distance and elevation points through a surface/terrain. Cross sections are typically oriented perpendicular to the direction of the stream, from left to right facing the downstream direction. Model cross-sections were generated using 2018 LiDAR topography as required to define the upstream and downstream geometry of each channel link. Cross sections can be placed sufficiently to capture channel overbank topographic elevations to capture overbank storage, if applicable.

BRIDGES

ICPR4 does not have a specific bridge calculation/modeling routine. Bridges are modeled as channels using irregular cross section input to mimic the bridge geometry. Channel lids are used on the cross section to simulate the bridge low beam. If water surfaces are greater than the channel lid elevation, a weir is added to simulate flow over the bridge deck. ICPR4 allows for varying Mannings roughness coefficients along an irregular cross section, which if applied properly can further define concrete abutment, low chords and channel linings.

Geometry, sizes, inverts, lengths, and Manning's n values for all links are input into the model. The node and link conditions are analyzed within the model for a given storm, and flow conditions are determined. For an overview of the model layout including nodes and links, please see Exhibit 9 – ICPR Model Schematic Map.

LiDAR Derived Parameters

The 2018 LiDAR topography was used to define hydraulic parameters such as the alignment of the main stormwater conveyance and significant tributaries within the watershed, channel cross–sections, low–lying areas with runoff storage potential, inter-basin flow via overland flow (weirs), etc. The main stormwater conveyance and significant tributaries were modeled as channel links within the ICPR4 one–dimensional model, with their respective cross section geometry defined by the 2018 LiDAR topography. Nodes were defined upstream and downstream of all channels, culverts, pipe, bridge, and weir links. Cross–sections were generated using 2018 LiDAR topography at node locations to define the upstream and downstream geometry of each channel link. These cross–sections were placed to best represent the geometry of the channels and capture the adjoining floodplain and overbanks to accurately model the available flow area.

An initial model run was executed to generate a baseline from which the model could then be refined. The initial model run results were reviewed to identify model instabilities and areas of inter-basin flow transfer. Land weirs were added to the hydraulic model and were defined along sub–basin ridges with elevation data extracted from 2018 LiDAR topography.

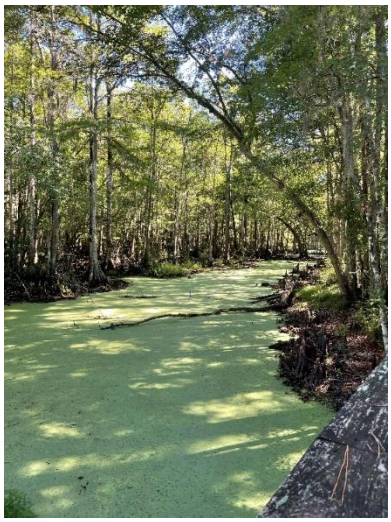
Potential stormwater runoff storage areas were simulated within the model to account for low–lying areas within the watershed where runoff has a higher potential to pool and collect before being conveyed downstream. The modeled storage was extracted within the ICPR4 model as a stage versus area relationship defined from the 2018 LiDAR topography. Storage was assigned to each of the most upstream sub–basin nodes to estimate the lag time between rainfall and runoff reaching the sub–basin outlet. Storage was also assigned to major confluences where a smaller tributary ties into the Little Ogeechee River to minimize potential model instabilities. Please see Exhibit 9 – ICPR Model Schematic Map Exhibits A-D, which show the location and extent of all modeled storage areas.

Collected Data

Survey, field reconnaissance, and existing development data were gathered to assist with modeling hydraulic features such as pipes, channels, drop structures, weirs, etc. Data gathered included elevations and locations of these hydraulic conveyances, as well as geometry, sizes, inverts, and material. The construction details and as–built information within the collected data were used to define the hydraulic conveyance input parameters for the model.

Survey

The survey conducted for the study area includes field survey of approximately 90 hydraulic conveyance features, of which included pipes, culverts, and bridges. The surveyed bridges were modeled by combining cross–sectional data from the 2018 LiDAR topography with the surveyed high chord and low chord data from the survey. The data collected from the survey for culvert/pipe crossings included length, material, inverts, channel bathymetry, wingwalls, headwalls, parapets, abutments, roadway weir elevations. This data was directly entered into the model



to define the various pipes and culverts along the study reaches. A portion of the field survey was not modeled due the location no longer being considered part of the primary flow path, the culvert or pipe being insignificant to the hydraulic conveyance, or there simply was no structure at the noted survey location. See Exhibit 2 – Survey Location Map for further details.

FIELD RECONNAISSANCE

The data collected from the field reconnaissance included several culvert and pipe crossings that were not originally identified as locations of needed survey but were noted as high priority hydraulic conveyance during the initial phase in model development. Field crews collected geometry, size, material, measure down distances, as well as general site observations for the 13 locations deemed necessary beyond the original survey limits. The 2018 LiDAR topography was then utilized to define the roadway elevation and, in turn, define the crossing inverts from the recorded measure down data.

EXISTING DEVELOPMENTS

For the identified existing developments, Thomas & Hutton requested design and as–built files to appropriately model the noted development within the study area. Of the 12 developments that had an engineer of record other than Thomas & Hutton, information for five projects was provided. To minimize further delays stemming from the lack of response for the remaining projects, Thomas & Hutton proceeded with modeling efforts, therefore making engineering assumptions within the model to represent the existing developments for which no information was provided. Further details regarding these assumptions can be found in Appendix C – West Chatham Model Assumptions Memo. The 11 existing developments that data was acquired for were incorporated into the model. See Table 1. for a list of the existing developments accounted for in the model and their associated engineer of record.

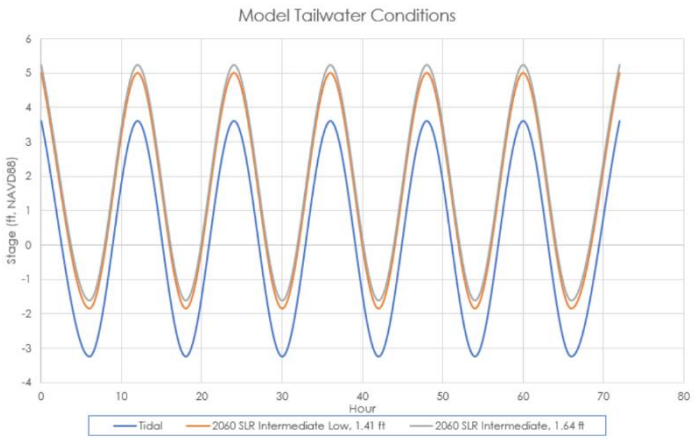
ROUGHNESS ZONES

Manning's n values were assigned to each ICPR4 model channel by using roughness zones within the modeling software. Each roughness zone type was assigned a shallow and deep Manning's *n* value, where the shallow value was used for flooded depths up to three feet and the deep value was used for flooded depths greater than three feet. Manning's n values were assigned based on the SCS methodology defined in the TR–55 manual. The zones were defined using the previously developed land use/land cover shape file in conjunction with the 2018 LiDAR topography and aerial imagery. The designation of the roughness zones can be found in Exhibit 10 – Roughness Zones Map. The roughness zones with their respective shallow and deep Manning's n values area as follows:

Table 4. Roughness Zones		
Zone Name	Shallow Manning' s n	Deep Manning's n
Channel	0.04	0.02
Development	0.015	0.0075
Grass	0.045	0.0225
Marsh/Open Water	0.03	0.015
Residential	0.02	0.01
Row Crops	0.06	0.03
Wetland	0.05	0.025
Wooded	0.1	0.05

TAILWATER CONDITIONS

The ultimate outfall point for this watershed study is approximately 2,000 linear feet downstream of the US Highway 17 bridge. This location is a tidally influenced area, therefore tidal curves were used as the boundary condition for the existing conditions model. The tidal curves were based on the average of the recorded high tides and low tides based on the data gathered from the existing sea level sensor located at the US Highway 17 bridge at the Little Ogeechee River. Tidal averages were based on data recorded between October 13, 2022, and December 6, 2022. The average high tide was calculated to be 3.60 feet (NAVD88) and the average low tide was calculated to be (-) 3.25 feet (NAVD88). These values were calculated from a filter of the data that excluded any anomalies and extreme tide events that would not be indicative of the average high or average low tides. The data and respective calculations can be found in Appendix D – Average High/Low Tides.



SEA LEVEL RISE EFFECTS

Two sea level rise projections were simulated and modeled for this study. 2022 NOAA Sea Level Rise (SLR) 2060 projections for the Fort Pulaski, Georgia local scenario were analyzed to understand the effects of SLR within the watershed. Using the intermediate low (+1.41-foot rise) and intermediate (+1.64-foot rise) scenario projections for year 2060, the tidal tailwater was adjusted to include projected increases, and simulated with the 1% annual chance, 24-hour rainfall event. Model results indicate that the increase of tailwater to include SLR projections does not cause significant water surface elevation increases west of Interstate 95. While there are peak water surface elevation increases of greater than 1-foot near Highway 17 due to the SLR projections coupled with rainfall, increased flooding does not occur. In conclusion, the West Chatham Watershed does not appear to be

greatly influenced by the intermediate low and intermediate high Seal Level Rise projections when combined with mean tidal cycles.

MODEL CALIBRATION

Calibration of numeric models to actual, historic data aids in determining the reasonableness of a model's results. Due to the lack of existing United States Geological Survey (USGS) river gauging stations along the Little Ogeechee River, a Smart Sea Level Sensor program has been implemented within the West Chatham study area. The Smart Sea Level Sensor program has been tracking and recording water levels of the Chatham County waterways to understand the effects of sea level rise, tropical storm impacts, and more. Each of the planned combination units consisted of water level sensor technology paired with a tipping bucket rain gauge (per the National Weather Service recommendation) and data transmission systems. Thomas & Hutton coordinated with County partners to determine ideal installation locations and approach. The real–time transmission of data provides water surface elevation measurements and rainfall data for use in calibrating the existing conditions hydrologic and hydraulic model.

The original plan was to include the installation and data collection of ten (10) combination sensor units at the locations listed below. These locations can also be found in Exhibit 11 – Gauging Station Location Map. Due to a shortage in the data collection equipment, four (4) stations have been installed with manual data loggers at Osteen Road, Little Neck Road, Meldrim Road and Honey Ridge Farm (Effingham). Two additional stations are to be installed at the I-16 Interchange and Savannah-Ogeechee Canal. Due to issues with cellular transmission of data and gateway availability, manual data loggers are being used to capture water surface elevation recordings. Rainfall measurements for these locations were collected from a standard manual reading rain gauge.

Since installation of the gauging stations, there has not been a significant rain event throughout the region that will allow for proper calibration of the model. Data will continue to be collected and model calibrated when a substantive event occurs within the entire study area.

RESULTS SUMMARY

The West Chatham Regional Watershed study was proposed as a multi–phase approach at providing the analysis and modeling to understand existing stormwater system flooding issues, system deficiencies, and recommend potential stormwater conveyance improvements within the Little Ogeechee River watershed. The 2% annual chance, 24-hour design storm has been selected as the design event for improvements due to the design storm event generally matching proposed stormwater level of service for other Chatham County projects. Phase 1 of the study includes

assessing existing stormwater conveyance systems, existing developments, and the overall functionality of the stormwater conveyance system within the study area to develop an existing conditions model for the 50%, 4%, 2%, and 1% annual chance, 24- hour design storm events. Refer to Exhibit 12 – Max Stage Results: 2% Annual Chance, 24-Hour Event for more detail on node peak water surface elevations.

The results from the existing conditions model 2% annual chance, 24-hour design storm were used to identify areas of potential flooding or areas identified for further assessment in Phase 2 of the watershed study. Phase 2 of the study is anticipated to evaluate identified areas further and determine stormwater improvements to potentially mitigate the areas of flooding or significant conveyance head loss. The following drainage system components were evaluated to determine areas of flooding or areas in need of further study.

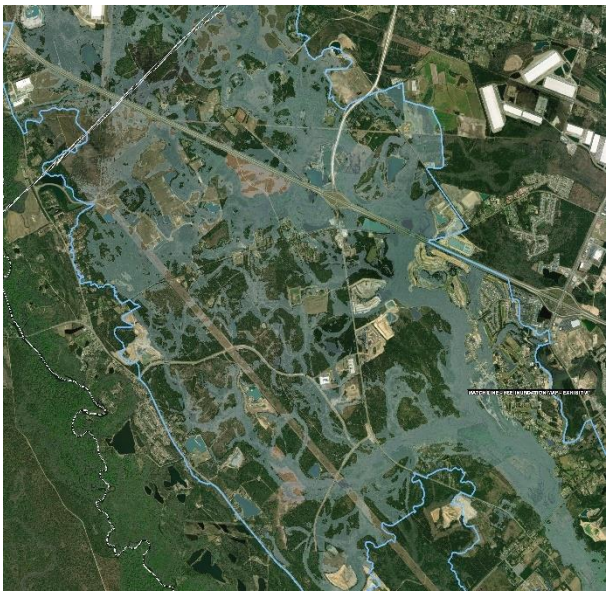
ROADWAY CONVEYANCE SUMMARY

The table below notes roadway crossings within the study area. The table compares the minimum road elevation at the road crossing (the warning stage), the simulated upstream (U/S) and downstream (D/S) peak water surface elevations (WSE) for the 2% annual chance storm event, calculates estimated head loss at the road crossing, and notes if flooding is occurring based on peak water surface elevations. The differences in water surface elevations from upstream to downstream locations are used to calculate the head loss across the crossing. "FLOODING" denotes roadway crossings that experience flooding or flood encroachment onto the roadways for the 2% annual chance, 24-hour design storm event. Areas noted as "FLOODING" are recommended for further investigation and/or proposed improvements during Phase 2 of the study. Refer to Culvert Crossing Summary Exhibit 13 for additional information and mapping. Results in tabular format follows.

Road Name	Elevation At Crossing [ft]	2% Annual Chance, 24 Hour Event			
		U/S WSE [ft]	D/S WSE [ft]	Crossing Headloss [ft]	Flooding
Ogeechee Rd, US Highway 17	8.40	3.78	3.73	0.05	
Little Neck Rd (6)	10.39	12.32	4.20	8.12	FLOODING
Little Neck Rd (4)	12.90	12.56	5.49	7.07	
Interstate 95	16.40	6.67	6.58	0.09	
Little Neck Rd (3)	8.89	8.23	6.67	1.56	
S+O Canal	12.40	13.27	10.19	3.08	FLOODING
Bush Rd and Little Neck Rd	19.54	15.20	13.27	1.93	
Little Neck Rd (5)	19.58	17.61	16.13	1.48	
Spanton Crescent	14.41	13.73	13.73	0.00	
Blue Moon Xing	16.04	14.39	14.11	0.28	
No Road Name	11.61	14.24	14.24	0.00	FLOODING
Old Little Neck Rd	15.61	15.73	14.68	1.05	FLOODING
Little Neck Rd (7)	18.50	17.49	14.68	2.81	
Little Neck Rd (8)	19.00	17.54	16.17	1.37	
Interstate 16	24.30	16.62	15.22	1.40	
Pine Barren Rd	22.36	18.14	16.66	1.48	
Bloomingdale Rd	29.83	17.18	17.14	0.04	
US 17 Bloomingdale Rd	26.30	19.53	17.91	1.62	
Osteen Rd (2)	23.60	20.36	20.34	0.02	
Osteen Rd (3)	19.71	20.43	20.42	0.01	FLOODING
Osteen Rd (4)	19.89	20.55	20.42	0.13	FLOODING
Osteen Rd (1)	19.05	20.44	20.42	0.02	FLOODING
Osteen Rd (5)	24.00	21.55	22.17	-0.62	
Seaboard Coastline Railroad	27.00	23.04	22.43	0.61	
Georgia Central Railroad	24.00	24.77	23.06	1.71	FLOODING
Faulkville Chip & Woodyard Rd	35.55	34.93	33.26	1.67	
Seaboard Coastline Railroad	29.20	23.04	22.43	0.61	
US Highway 80 (2)	41.04	38.97	37.02	1.95	
US Highway 80 (1)	35.80	31.62	31.32	0.30	
Meldrim Rd	30.00	28.85	26.49	2.36	
US Highway 80 (3)	36.34	31.58	31.06	0.52	
Wildwood Ln	32.67	32.91	31.82	1.09	FLOODING
US Highway 80 (4)	35.50	33.59	32.11	1.48	

Road Name	Elevation At Crossing [ft]	2% Annual Chance, 24 Hour Event			
		U/S WSE [ft]	D/S WSE [ft]	Crossing Headloss [ft]	Flooding
Blue Jay Rd	42.80	43.66	41.19	2.47	FLOODING
Blue Jay Rd	42.41	43.66	41.19	2.47	FLOODING
GA Highway 17	51.60	48.22	46.24	1.98	
Midland Rd	61.83	58.13	58.73	-0.60	
Little Neck Rd (2)	17.20	13.91	13.44	0.47	
Old Little Neck Rd (2)	13.30	13.98	13.95	0.03	FLOODING
New Hampstead Pkwy S	20.00	14.22	14.06	0.16	
Regatta Ln	15.75	15.74	15.49	0.25	
Highgate Blvd (4)	19.00	16.08	16.03	0.05	
John Carter Rd (2)	21.50	20.21	18.20	2.01	
John Carter Rd (3)	21.50	18.99	17.87	1.12	
Highgate Blvd (1)	24.32	17.43	17.40	0.03	
John Carter Rd (1)	21.50	20.13	18.49	1.64	
New Hampstead Pkwy N	18.91	14.78	14.47	0.31	
Highgate Blvd (2)	17.50	16.29	15.53	0.76	
Highgate Blvd (3)	19.00	16.57	15.73	0.84	
Interstate 16 Pond	17.92	18.98	18.77	0.21	FLOODING
Interstate 16 Pond	24.78	18.77	15.22	3.55	
Little Neck Rd (1)	34.86	18.99	18.98	0.01	
Orendorff Rd (1)	17.77	19.01	19.01	0.00	FLOODING
Orendorff Rd (2)	20.94	20.19	19.65	0.54	
Ted Newton Ave	21.19	21.07	20.88	0.19	

INUNDATION MAPPING SUMMARY



The West Chatham Watershed has a significant amount of undeveloped land and forested wetland. As such, it is difficult to associate a trigger, high-water warning stage for a cross section to determine if flooding of significance will occur in areas not immediately adjacent to primary roadways. To facilitate determining additional areas of potential flooding, flood inundation mapping was prepared and evaluated for inundation near structures, on roadways or generally expansive inundation outside the wetland systems. In addition to the road crossings discussed above, the following areas were also identified for further evaluation of stormwater drainage improvements to minimize flooding potential for the 2% annual chance, 24- hour event:

Chatham County

- Bush Road, between Little Neck Road and Scott Stell Road
- Wood Haven Lane/Court, Spanton Crescent, Savannah Quarters
- John Carter Road – All Crossings
- Little Neck Road/I-16/DOT Barn Road
- Orendorff Road (Horse Pen Swamp)
- Orendorff Road/Wallace Drive Area
- Orendorff Road adjacent to I-16
- Ted Newton Venue Area
- Osteen Road Area
- Chatham County/Effingham County Lien Southwest of I-16 (private property)

Effingham County

- Ballastone Circle (eastern edge lots adjacent to wetland)
- GA Highway 80/Old River Road Intersection Area
- Creekwood Drive Area
- Blue Jay Road Area

Exhibit 14 depicts the 2% annual chance, 24- hour design storm event modeled inundation areas within the West Chatham Watershed.

MODEL DATA OUTPUT

The staging results for all modeled nodes can be found in the Model Max Staging Results Table in Appendix E ICPR 4 Model Output, along with the maximum inflow and outflow

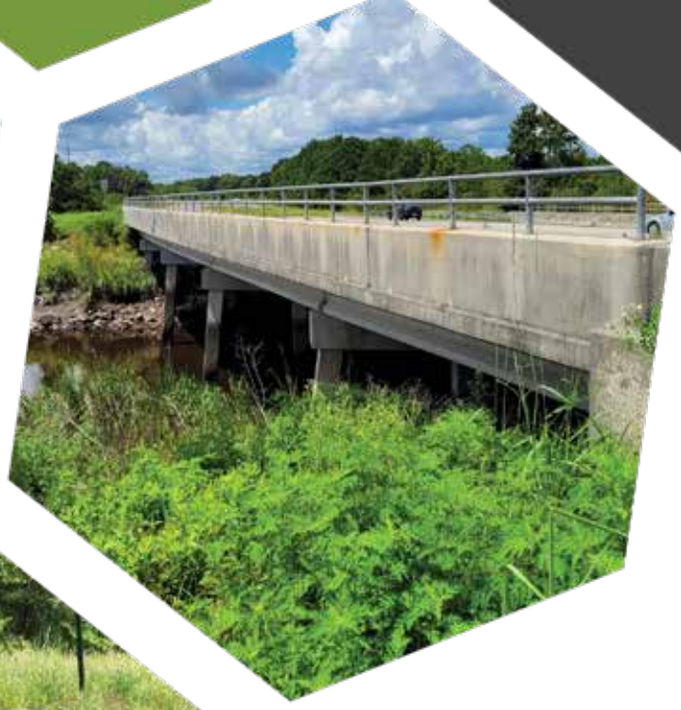
rates, and the time it takes to reach these maximum rates. Additionally, the maximum flow rates and time to maximum flow rate for all links modeled are also shown on the links report in Appendix E. To attempt to make this document less voluminous, complete model input and output reports are not included. Complete input and output reports can be printed from the model. The complete West Chatham Regional Watershed Study ICPR4 model has been delivered to Chatham County on a hard drive for County reference.

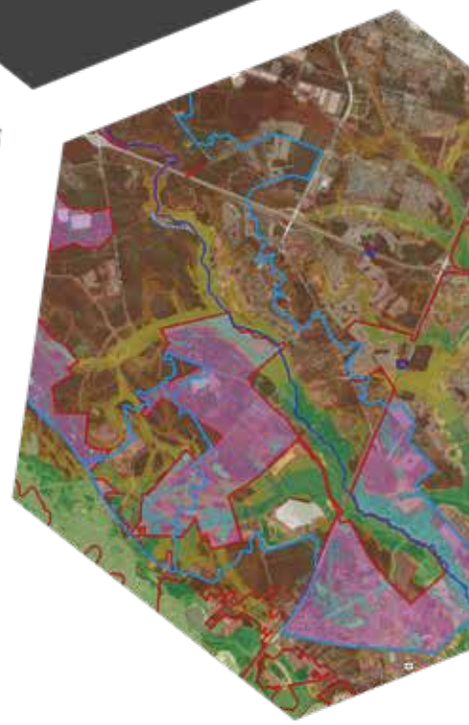
RECOMMENDATIONS

The West Chatham Watershed Study Phase 1 existing conditions modeling suggest areas of significant flooding within the watershed. The model further suggests that primary drainage conveyance components require improvements to reduce areas of significant head loss, and safely convey the 2% annual chance, 24-hour event. Based on the model results, the following tasks are recommended to be completed in Phase 2 of the watershed study:

1. Continue to install and capture rainfall and water level data so the model can be appropriately calibrated.
2. Identify additional survey data collection that will benefit proposed model development.
3. Update land use plan to consider additional areas of future development within the watershed.
4. Perform proposed stormwater conveyance and/or regional stormwater storage best management practice modeling to reduce the magnitude of flooding throughout the watershed during a 2% annual chance, 24- hour design storm event.
5. Future permanent maintenance of the stormwater conveyance system should be considered when proposed stormwater improvements are identified.
6. Identify secondary roadway improvements that may alleviate roadway inundation (e.g. raising road grade, etc.)
7. Identify potential property acquisition or easements required to construct the proposed stormwater improvements.
8. Create a capital improvements project plan that evaluates proposed stormwater improvement costs and available funding mechanisms and schedule for completion.
9. Adopt the capital improvement project plan.
10. Consider and evaluate stormwater funding programs to execute the proposed improvements.

The recommendations above are based on the findings of this Phase 1 Study of existing stormwater conveyance system of the West Chatham Watershed. Thomas & Hutton stands ready to assist with Phase 2 of the watershed study, should that be the County's desire.





WEST CHATHAM
REGIONAL WATERSHED STUDY

APPENDIX A:
WEST CHATHAM FIELD INVESTIGATION MEMORANDUM

J-29965.0001

OCTOBER 2023

THOMAS & HUTTON

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MEMORANDUM

TO: Mr. Bill Nicholson
Chatham County Drainage Engineer

FROM: Ms. Theresa Ingermann, EIT

DATE: February 23, 2023

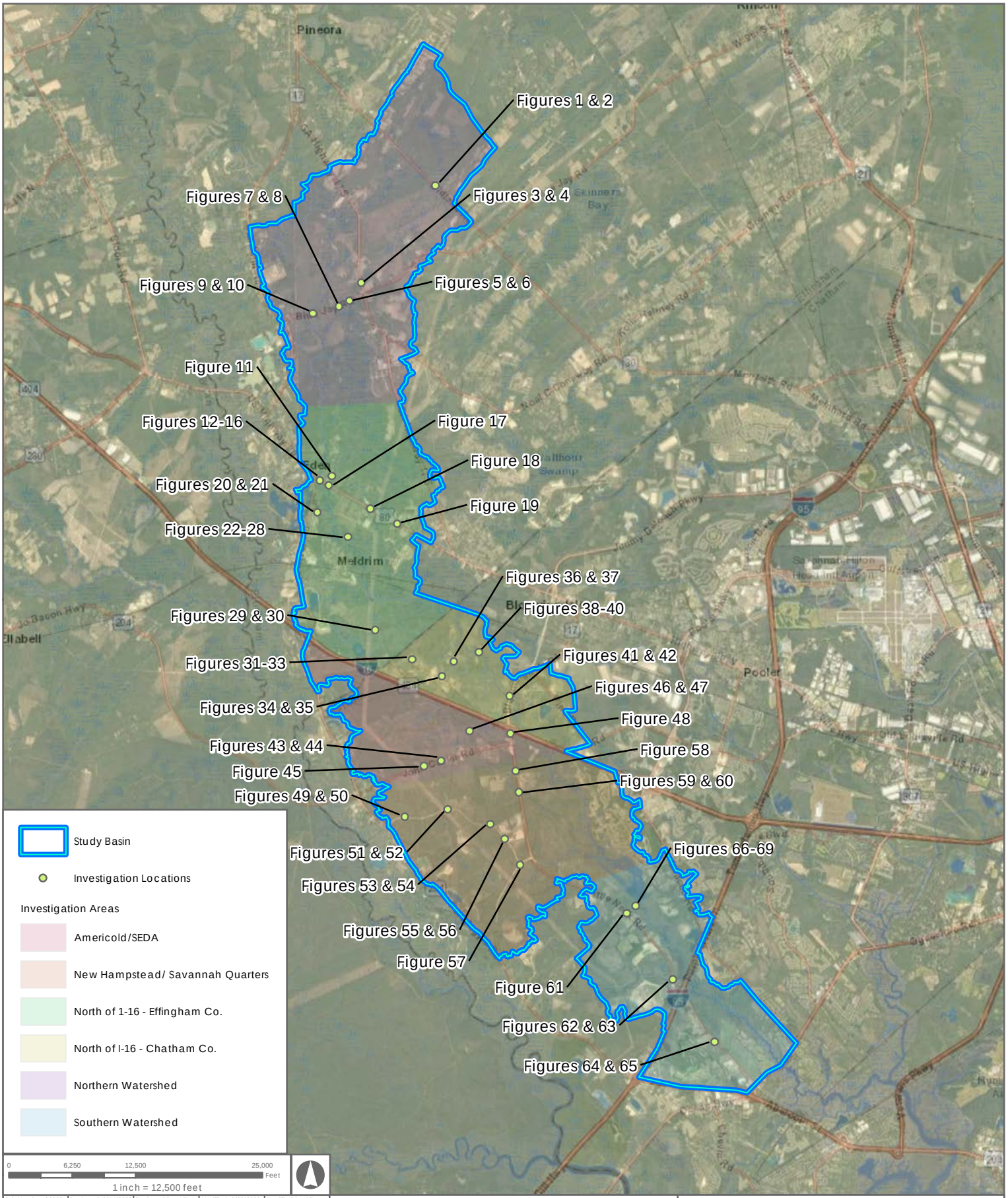
SUBJECT: West Chatham Regional Watershed Study – Field Investigation

JOB NO.: 29965.0001

Thomas & Hutton has been retained by Chatham County, Georgia to develop a watershed analysis for the Little Ogeechee River basin west of US Highway 17. The study area is approximately 60 square miles and spans several jurisdictions including Chatham County, Effingham County, City of Savannah, City of Pooler, and City of Bloomingdale. The West Chatham Regional Watershed Study is a multi-phase project providing analyses to understand the study area's existing stormwater system deficiencies and potential stormwater conveyance improvements. The first phase is to assess the existing conditions of the study area by identifying natural and constructed drainage patterns within the watershed and model the primary conveyances in order to note system deficiencies.

Using LiDAR topography and aerial imagery for reference, areas of significance were identified based on perceived level of potential impacts to the watershed conveyance. These areas of significance include existing developments (residential, commercial, industrial, etc.) and areas where conveyance systems appear to be restricted, at culvert/pipe crossings and bridges. Existing stormwater models and construction plans for existing developments with a contributing drainage area of 20 acres or more were obtained for incorporation into the existing conditions model. Primary conveyance structures including bridges, culverts and pipe crossings were field located and surveyed for input into the existing conditions model. Field reconnaissance was also performed by Thomas & Hutton personnel to gain a better understanding of the existing conditions and functionality of the system. This report documents the findings of the field investigation and their significance to this phase of the project.

Field investigations were performed over three days, August 9, 2022, November 1, 2022, and January 19, 2023. Prior to the field investigation, areas of interest were identified and mapped to maximize efficiency in the field. These areas of interest include Northern Watershed, North of Interstate 16 (I-16) – Effingham County, North of I-16 – Chatham County, Americold/SEDA, New Hampstead/Savannah Quarters, and Southern Watershed, all of which are depicted in the Field Investigation Location Map found on the following page with an enlarged exhibit attached at the end of this document. Observations at each noted area included pipe/culvert/channel conditions, presence of vegetation and/or sediment accumulation, obstructions of any kind, upstream/downstream land use, etc. Pipe/culvert sizes and measure downs from the adjacent roadways were also recorded in an effort to provide redundancy for locations that were field surveyed and clarity for areas that were not surveyed. This report provides a summary of the results of the field investigation.



Job Number: 29965	Produced: 2/14/2023	Produced By: ATI	Modified: 2/23/2023	Modified By: ATI

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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Photos	Thomas & Hutton	2022/2023
Basin	Thomas & Hutton	2022
Aerial Imagery	Google Earth	2022

Field Investigation Locations

Chatham County, Georgia

West Chatham Regional Watershed Study

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GEOGRAPHIC INFORMATION SYSTEMS

Northern Watershed

The Northern Watershed area of interest encompasses the portion of study area location just north of the City of Eden, Ga. Within this area of interest, the LiDAR topography indicates the following major stormwater conveyances:

- (1) along Midland Road (Crossing #1)
- (1) along GA Highway 17 S (Crossing #2)
- (3) along Blue Jay Road (Crossing #3 - #5)

The following was observed:

Crossing #1: Midland Road

The major stormwater conveyance along Midland Road is approximately 1.6 miles north of Blue Jay Road and consists of (7) 36" reinforced concrete pipes (RCPs) with a headwall that conveys stormwater from a well-defined upstream channel (Figures 1 & 2). Based on 2018 LiDAR topography, the crossing appears to convey stormwater from approximately 2,040 acres of upstream wetlands, woods, and residential land use. At the time of inspection, the upstream channel appeared to be a well-defined channel that passes through heavily vegetated wetlands with minimal vegetation overgrowth within the channel. A considerable amount of water was present within the channel, although it should be noted that this location was assessed during the winter months and may present different observations during summer months.

Crossing #2: GA Highway 17 S

This major stormwater conveyance along GA Highway 17 S is approximately 1,060 feet north of Blue Jay Road and consists of (4) 10'x9' (S x H) box culverts that convey stormwater from a well-defined upstream channel (Figures 3 & 4). Based on 2018 LiDAR topography, the crossing appears to convey stormwater from approximately 4,130 acres of upstream wetlands and woods. At the time of inspection, the upstream channel appeared to be a well-defined channel that passes through heavily vegetated wetlands with minimal vegetation overgrowth within the channel. A considerable amount of water was present within the channel, although it should be noted that this location was assessed during the winter months and may present different observations during summer months.

Crossing #3: Blue Jay Road

This major stormwater conveyance along Blue Jay Road is approximately 1,580 feet west of GA Highway 17 S and consists of (2) 36" RCP (Figure 5). Based on 2018 LiDAR topography, the crossing appears to be one of three crossings, noted here as Crossings 3, 4, and 5, that convey stormwater from approximately 7,060 acres of wetlands, woods, and residential land use. At the time of inspection, the upstream conveyance systems appear to consist primarily of heavily vegetated woods with no standing water (Figure 6). The downstream channel appeared to consist of a well-defined channel with minimal vegetation overgrowth at the crossing that passes through a wooded area further downstream. The downstream channel had a considerable amount of standing water, although it should be noted that this location was assessed during the winter months and may present difference observations during the summer months.

Crossing #4: Blue Jay Road

This major stormwater conveyance along Blue Jay Road is approximately 2,640 feet west of GA Highway 17 S and consists of (4) 42" RCPs that convey stormwater from the upstream conveyance systems (Figure 7). Based on 2018 LiDAR topography, the crossing appears to be one of three crossings, noted here as Crossings 3, 4, and 5, that convey stormwater from approximately 7,060 acres of wetlands, woods, and residential land use. At the time of inspection, the upstream conveyance systems appeared to consist primarily of heavily vegetated wetlands with a minimal amount of standing water (Figure 8). The downstream channel appeared to be a well-defined channel that passes through heavily vegetated wetlands with minimal vegetation overgrowth within the channel. A considerable amount of water was present within the downstream channel with no water present in the upstream channel. Note that this location was assessed during the winter months and may present different observations during summer months.

Crossing #5: Blue Jay Road

This major stormwater conveyance along Blue Jay Road is approximately 1 mile west of GA Highway 17 S and consists of (6) 36" RCPs with wingwalls and (2) 42" RCPs that convey stormwater from the upstream wetland conveyance system (Figures 9 & 10). Based on 2018 LiDAR topography, the crossing appears to be one of three crossings, noted here as Crossings 3, 4, and 5, that convey stormwater from approximately 7,060 acres of wetlands, woods, and residential land use. The upstream conveyance systems appeared to consist primarily of lightly vegetated wetlands with some standing water present around the invert of the crossing. Note that this location was assessed during the winter months and may present different observations during summer months.

Figure 1: Crossing #1 along Midland Road that consists of (7) 36" RCPs. The upstream inverts are approximately half-way full of water. The view is facing downstream.

Figure 2: Channel upstream of Midland Road. The view is facing upstream.

Figure 3: Crossing #2 along GA Highway 17 S that consists of (4) 10'x9' box culverts. The view is facing downstream.

Figure 4: Channel upstream of GA Highway 17 S. The view is facing upstream.

Figure 5: Crossing #3 along Blue Jay Road that consists of (2) 36" RCPs. The view is facing downstream.

Figure 6: Upstream conveyance of Crossing #3. The view is facing upstream.

Figure 7: Crossing #4 along Blue Jay Road that consists of (4) 42" RCPs. The view is facing west on the downstream side of Blue Jay Road.

Figure 8: Conveyance system upstream of Blue Jay Road. The view is facing upstream.

Figure 9: Crossing #5 along Blue Jay Road that consists of (6) 36" RCPs. The view is facing downstream.

Figure 10: Crossing #5 along Blue Jay Road that consists of (2) 42" RCPs. The view is facing downstream.

North of I-16 – Effingham County

The North of I-16 – Effingham County area of interest encompasses the portion of the study area within Effingham County from the City of Eden, Ga to I-16. Within this area of interest, the LiDAR topography indicates the following major stormwater conveyances:

- (1) along Wildwood Lane just north of US Highway 80 (Crossing #1)
- (4) along US Highway 80 (Crossings #2 – #5)
- (1) from Lake Jean just east of Old River Road (Crossing #6)
- (1) along Meldrim Road north of the City of Meldrim, Ga (Crossing #7)
- (1) major stormwater conveyance along Meldrim Road south of the City of Meldrim, Ga (Crossing #8)

The following was observed:

Crossing #1: Wildwood Lane

The Wildwood Lane crossing is approximately 530 feet east of Creekwood Drive and consists of a 30" RCP that conveys stormwater from the upstream conveyance system (Figure 11). Based on 2018 LiDAR topography, the crossing appears to convey approximately 410 acres of wetlands, woods, and residential land use. At the time of inspection, the downstream conveyance system appeared to be a lightly vegetated wetland area with some standing water. Note that this location was assessed during the winter months and may present different observations during summer months.

Crossing #2: US Highway 80

This major crossing along US Highway 80 is approximately 1,580 feet east of Old River Road and consists of a 9'x5' triple box culvert and (6) 9'x5' box culverts that convey stormwater from the upstream conveyance system (Figures 12 & 13). Based on 2018 LiDAR topography, the crossing appears to convey approximately 10,730 acres of wetlands, woods, and residential land use. At the time of inspection, the upstream conveyance systems of the triple box culvert appeared to be lightly vegetated wetlands with some standing water present (Figure 14). The upstream channel of the (6) box culverts appeared to be well defined with some forest debris, such as fallen trees, within the channel with a considerable amount of standing water (Figure 15). The downstream channel appeared to be well defined with some forest debris, such as fallen trees, within the channel with a considerable amount of standing water (Figure 16). Note that this location was assessed during the winter months and may present different observations during summer months.

Crossing #3: US Highway 80

This major crossing along US Highway 80 is approximately 2,640 feet east of Old River Road and consists of a 6'x4' triple box culvert that conveys stormwater from the upstream conveyance system (Figure 17). Based on 2018 LiDAR topography, the crossing appears to convey 470 acres of wetlands, woods, and residential land. At the time of inspection, the culvert was found with some sediment accumulation, but otherwise in good condition. The upstream and downstream conveyance systems appeared to consist of primarily heavily vegetated wetlands.

Crossing #4: US Highway 80

This major crossing along US Highway 80 is approximately 1.3 miles east of Old River Road and consists of an 8'x4' triple box culvert that conveys stormwater from the upstream conveyance system (Figure 18). Based on the 2018 LiDAR topography, the crossing appears to convey approximately 950 acres of wetlands and woods. At the time of inspection, the culvert was found with some sediment and forest debris accumulation at the bottom. The upstream and downstream conveyance systems appeared to consist of heavily vegetated wetlands.

Crossing #5: US Highway 80

This major crossing along US Highway 80 is approximately 1.9 miles east of Old River Road and consists of a 5'x4' box culvert that conveys stormwater from the upstream conveyance system (Figure 19). Based on the 2018 LiDAR topography, the crossing appears to convey approximately 620 acres of wetlands, woods, and residential land use. At the time of inspection, the culvert was found with some sediment accumulation, but otherwise in good condition. The upstream and downstream conveyance systems appear to consist primarily of lightly vegetated woods and residential properties.

Crossing #6: Lake Jean

The major crossing for Lake Jean is approximately 530 feet directly east of Old River road and consists of a 42" RCP that conveys stormwater overflow from the lake (Figure 20). Based on 2018 LiDAR, the crossing appears to convey approximately 130 acres of open water and residential land use. At the time of inspection, the culvert was found with minimal sediment accumulation and in otherwise good condition. From field notes, it is estimated that the existing culvert has approximately 2 feet of cover within the dirt roadway. No noted culvert damage or failures were observed during the field investigation. The upstream conveyance systems consist of a large pond system for residential developments in the area, including Stonegate Amenities. The downstream channel appeared to be well defined channel with some vegetation overgrowth that mainly consisted of grasses (Figure 21). Note that this location was assessed during the winter months and may present different observations during summer months.

Crossing #7: Meldrim Road

The major crossing along Meldrim Road north of the City of Meldrim, Ga is approximately 1 mile south of US Highway 80 and consists of (2) groupings of (3) 42" RCPS and (2) 20'x3' box culverts that convey stormwater from the upstream conveyance system (Figures 22 through 25). Based on 2018 LiDAR topography, the crossing appears to convey approximately 11,400 acres of wetlands, woods, and residential land use. The RCPs' headwalls included concrete pads at the downstream inverts. At the time of inspection, the box culverts were found with some sediment accumulation, but were otherwise in good condition. The upstream and downstream conveyance systems consist of lightly vegetated wetlands (Figures 26 through 28). One of the sets of RCPs and one of the box culverts had some standing water present downstream. Note that this location was assessed during the summer months and may present different observations during winter months.

Crossing #8: Meldrim Road

The major crossing along Meldrim Road south of the City of Meldrim, Ga is approximately 1.3 miles east of Old River Road and consists of (2) 24" RCPs that convey stormwater from the upstream conveyance system (Figure 29). Based on 2018 LiDAR topography, the crossing

appears to convey approximately 660 acres of wetlands and open space. At the time of inspection, the upstream and downstream channels appeared to be well defined and pass through densely vegetated wetlands. The downstream channel had some standing water present (Figure 30). Note that this location was assessed during the winter months and may present different observations during summer months.

Figure 11: Crossing #1 along Wildwood Lane that consists of (1) 30" RCP. The view is facing upstream.

Figure 12: Crossing #2 along US Highway 80 that consists of a 9'x5' triple box culvert. The view is facing downstream.

Figure 13: Crossing #2 along US Highway 80 that consists of (6) 9'x5' box culverts. The view is facing upstream.

Figure 14: Upstream conveyance system of US Highway 80 (near triple box culvert). The view is facing upstream.

Figure 15: Channel upstream of US Highway 80 (near the (6) box culverts). The view is facing upstream.

Figure 16: Channel downstream of US Highway 80. The view is facing downstream.

Figure 17: Crossing #3 along US Highway 80 that consists of a 6'x4' triple box culvert. The view is facing downstream.

Figure 18: Crossing #4 along US Highway 80 that consists of an 8'x4' triple box culvert. The view is facing downstream.

Figure 19: Crossing #5 along US Highway 80 that consists of a 5'x4' box culvert. The view is facing downstream.

Figure 20: Crossing #6, the outfall for Lake Jean, which consists of a 42" RCP. The view is facing downstream.

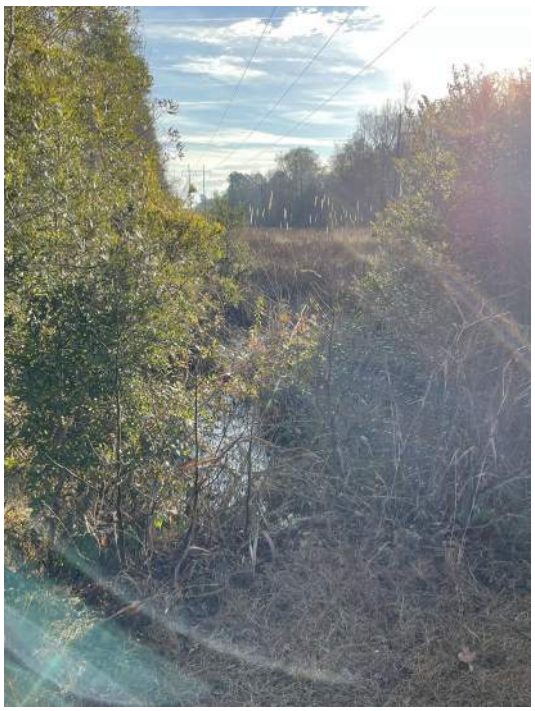


Figure 21: The downstream channel of the Lake Jean outfall. View is facing downstream.

Figure 22: Crossing #7 along Meldrim Road that consists of the first set of (3) 42" RCPs. The view is facing upstream.

Figure 23: Crossing #7 along Meldrim Road that consists of the second set of (3) 42" RCPs. The view is facing upstream.

Figure 24: Crossing #7 along Meldrim Road that consists of the first 20'x3' box culvert. The view is facing upstream.

Figure 25: Crossing #7 along Meldrim Road that consists of the second 20'x3' box culvert. The view is facing upstream.

Figure 26: The conveyance system upstream of Meldrim Road near Crossing #7. The view is facing upstream.

Figure 27: The conveyance system downstream of Meldrim Road near one of the Crossing #7 box culverts. The view is facing downstream.

Figure 28: The conveyance system downstream of Meldrim Road near one set of the Crossing #7 RCPs. The view is facing downstream.

Figure 29: Crossing #8 along Meldrim Road that consists of (2) 24" RCPs. The view is facing downstream.

Figure 30: Channel downstream of Meldrim Road, near Crossing #8. The view is facing downstream.

North of I-16 – Chatham County

The North of I-16 – Chatham County area of interest encompasses the portion of the study area within Chatham County that is north of I-16. Within this area of interest, the LiDAR topography indicates the following major stormwater conveyances:

- (4) along Osteen Road (Crossings #1 – #4)
- (1) along Bloomingdale Road (Crossing #5)

The following was observed:

Crossing #1: Osteen Road

This major crossing along Osteen Road is approximately 1,660 feet north of Douberly Hill and consists of a 30" corrugated plastic pipe (CPP) that conveys stormwater from a well-defined upstream channel (Figure 31). Based on 2018 LiDAR topography, the crossing appears to convey approximately 200 acres of wetlands and woods. At the time of the investigation, the culvert was found to have some sediment accumulation but was otherwise in good condition. From field notes, it is estimated that the existing culvert has approximately 4 feet of cover within the road right-of-way. No noted culvert damage or failures were observed during the field investigation. The upstream and downstream channels appeared to be well defined that pass through lightly vegetated woods (Figures 32 & 33). A considerable amount of standing water was observed in the upstream and downstream channels. Note that this location was assessed during the winter months and may present different observations during summer months.

Crossing #2: Osteen Road

This major crossing along Osteen Road is approximately 2,300 feet southeast of Douberly Hill and consists of an 18" RCP that conveys stormwater from the upstream conveyance system (Figure 34). Based on the LiDAR topography, the crossing appears to convey approximately 90 acres of wetlands, woods, and open space. At the time of the investigation, the upstream and downstream conveyance systems appeared to consist of heavily vegetated woods with some sediment accumulation (Figure 35). Note that this location was assessed during the winter months and may present different observations in summer months.

Crossing #3: Osteen Road

This major crossing along Osteen Road is approximately 1.2 miles southwest of Howard's Drive and consists of an 18" iron pipe that conveys stormwater from the upstream conveyance system (Figure 36). Based on the LiDAR topography, the crossing appears to convey approximately 360 acres of wetlands, woods, and residential land use. At the time of the investigation, the downstream invert of the pipe showed warping of the pipe end as well as missing sections. The upstream and downstream conveyance systems appeared to consist of woods with a significant number of leaves and other forest debris on the forest floor (Figure 37). Note that this location was assessed during the winter months and may present different observations in summer months.

Crossing #4: Osteen Road

This major crossing along Osteen Road is approximately 3,370 feet southwest of Howard's Drive and consists of a bridge spanning the Little Ogeechee River (Figure 38). Based on the LiDAR topography, the crossing appears to convey approximately 17,110 acres of wetlands, woods,

and open space. At the time of the investigation, the upstream and downstream river appeared to pass through heavily wooded wetlands (Figures 39 & 40).

Crossing #5: Jimmy Deloach Parkway

The major crossing along Jimmy Deloach Parkway is approximately 3,260 feet north of I-16 and consists of a recently built bridge spanning the Little Ogeechee River (Figure 41). Based on the LiDAR topography, the crossing appears to convey approximately 18,320 acres of wetlands, woods, and residential land. At the time of the investigation, the bridge appeared to be in good condition. The upstream and downstream river appeared to have well-defined channels and passed through heavily vegetated wetlands (Figure 42). The length of the river that passed under the bridge had riprap lining the banks.

Figure 31: Crossing #1 along Osteen Road. The level rod is rested horizontal to the sides of the 30" CPP. View is facing upstream.

Figure 32: Channel upstream of Osteen Road near Crossing #1. View is facing upstream.

Figure 33: Channel downstream of Osteen Road near Crossing #1. View is facing downstream.

Figure 34: Crossing #2 along Osteen Road that consists of an 18" RCP. View is facing upstream.

Figure 35: Downstream of Osteen Road near Crossing #2. The view is facing upstream.

Figure 36: Crossing #3 along Osteen Road that consists of an 18" iron pipe. The view is facing upstream.

Figure 37: Downstream of Osteen Road near Crossing #3. The view is facing downstream.

Figure 38: Crossing #4 along Osteen Road that consists of a bridge. The view is facing northeast along Osteen Road.

Figure 39: Upstream conveyance of the Little Ogeechee River that passes under Osteen Road at Crossing #4. The view is facing upstream.

Figure 40: Downstream channel of the Little Ogeechee River that passes under Osteen Road at Crossing #4. The view is facing downstream.

Figure 41: Crossing #5 along Jimmy Deloach Parkway which consists of a bridge. The view is facing upstream.

Figure 42: Downstream channel of the Little Ogeechee River that passes under Jimmy Deloach Parkway at Crossing #5. The view is facing upstream.

Americold/SEDA

The Americold/SEDA area of interest encompasses the portion of the study area south of I-16 and properties north of the New Hampstead development, including the Americold and SEDA properties. Within this area of interest, the LiDAR topography indicates the following major stormwater conveyances:

- (2) along John Carter Road (Crossings #1 & #2)
- (1) along Orendorff Road (Crossing #3)
- (1) along Little Neck Road (Crossing #4)

The following was observed:

Crossing #1: John Carter Road

This major crossing along John Carter Road is approximately 1,410 feet southwest of Ted Newton Road and consists of a 24" RCP that conveys stormwater from the upstream conveyance system (Figure 43). Based on 2018 LiDAR topography, the crossing appears to convey approximately 100 acres of wetlands, woods, and residential land use in addition to appearing to act as an overflow for 1,680 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the culvert was found to be full of sediment. From field notes, it is estimated that the culvert has approximately 2.5 feet of cover within the road right-of-way. No noted culvert damage or failures were observed during the field investigation. The upstream and downstream conveyance systems appeared to consist primarily of lightly vegetated wetlands with a considerable amount of pine straw and other forest debris on the forest floor (Figure 44).

Crossing #2: John Carter Road

This major crossing along John Carter Road is approximately 350 feet northeast of Ted Newton Road and consists of a 24" RCP that conveys stormwater from the upstream conveyance system (Figure 45). Based on 2018 LiDAR topography, the crossing appears to act as an overflow for approximately 2,030 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the culvert was found to be full of sediment. From field notes, it is estimated that that culvert has approximately 2 feet of cover within the road right-of way. No noted culvert damage or failures were observed during the field investigation. The upstream and downstream conveyance systems appeared to consist primarily of lightly vegetated wetlands with a considerable amount of pine straw and other forest debris on the forest floor.

Crossing #3: Orendorff Road

The major crossing along Orendorff Road is approximately 1,800 feet north of John Carter Road and consists of (7) 36" CPP that conveys stormwater from the upstream conveyance system (Figure 46). Based on 2018 LiDAR topography, the crossing appears to convey approximately 2,160 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the upstream and downstream conveyance systems appeared to consist primarily of lightly vegetated wetlands with considerable amounts of forest debris on the forest floor (Figure 47). Note that this location was assessed during the winter months and may present different observations during summer months.

Crossing #4: Little Neck Road

The major crossing along Little Neck Road is approximately 600 feet south of I-16 and consists of a 6'x6' double box culvert that conveys stormwater from a well-defined upstream channel (Figure 48). Based on 2018 LiDAR topography, the crossing appears to convey approximately 2,450 acres of wetlands, woods, open space, residential, and commercial/industrial land. At the time of the investigation, the downstream channel appeared to be occasionally maintained with woody debris near the downstream invert of the culvert. The upstream and downstream channel appeared to be grassed.

Figure 43: Crossing #1 along John Carter Road. The level rod is rested horizontal to the sides of the 24" RCP. The view is facing downstream.

Figure 44: Conveyance upstream of John Carter Road near Crossing #1. The view is facing upstream.

Figure 45: Crossing #2 along John Carter Road. The level rod is rested on the approximated 12" of sediment accumulation at the invert of the 24" RCP. The view is facing downstream.

Figure 46: Crossing #3 along Orendorff Road that consists of (7) 24" CPP. The view is facing downstream.

Figure 47: Conveyance system upstream of Orendorff Road. The view is facing upstream.

Figure 48: Crossing #4 along Little Neck Road that consists of a 6'x6' double box culvert. The view is facing upstream.

New Hampstead/Savannah Quarters

The New Hampstead/Savannah Quarters area of interest encompasses the portion of the study area south of John Carter Road to the south end of the Savannah Quarters development, just north of Canal Bank Road. Within this area of interest, the LiDAR topography indicates the following major stormwater conveyances:

- (4) along Highgate Boulevard (Crossings #1 - #4)
- (1) along New Hampstead Parkway (Crossing #5)
- (2) along Little Neck Road (Crossings #6 & #7)

The following was observed:

Crossing #1: Highgate Boulevard

This major crossing along Highgate Boulevard is approximately 2,020 feet east of Fort Argyle Road and consists of a bridge that conveys the Little Ogeechee Tributary from a well-defined upstream channel (Figure 49). Based on 2018 LiDAR topography, the crossing appears to convey approximately 830 acres of wetlands, woods, and residential land use. At the time of the investigation, the upstream and downstream channel appeared to have well-defined channels and passed through lightly vegetated woods (Figure 50). The length of the channel that passed under the bridge had riprap lining the banks with minimal standing water present. Note that this location was assessed in the winter months and may present different observations during summer months.

Crossing #2: Highgate Boulevard

This major crossing along Highgate Boulevard is approximately 1.2 miles east of Fort Argyle Road and consists of a 12'x4' triple box culvert that conveys the Tributary to the Little Ogeechee Tributary from a well-defined upstream channel (Figures 51 & 52). Based on 2018 LiDAR topography, the crossing appears to convey approximately 170 acres of woods and open space in addition to appearing to act as an overflow for approximately 2,370 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the culvert was found to have some sediment accumulation but was otherwise in good condition. From field notes, it is estimated that the existing culvert has approximately 1 foot of cover within the road right-of-way. No noted culvert damage or failures were observed during the field investigation. The upstream channel appeared to be well defined and conveyed stormwater overflow from an upstream pond. The downstream channel appeared to be well defined and passed through lightly vegetated woods.

Crossing #3: Highgate Boulevard

This major crossing along Highgate Boulevard is approximately 5,090 feet north of New Hampstead Parkway and consists of a 7'x4' double box culvert that conveys stormwater from a well-defined upstream channel (Figures 53 & 54). Based on 2018 LiDAR topography, the crossing appears to convey approximately 2,750 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the upstream and downstream channels pass through heavily vegetated woods with little vegetation growth within the channels. From field notes, it is estimated that the existing culvert has approximately 2.5 feet of cover within the road right-of-way. No noted damage or failures were observed during the field investigation.

Crossing #4: Highgate Boulevard

This major crossing along Highgate Boulevard is approximately 3,000 feet north of New Hampstead Parkway and consists of a 10'x4' box culvert that conveys stormwater from a well-defined upstream channel (Figures 55 & 56). Based on 2018 LiDAR topography, the crossing appears to convey approximately 300 acres of wetlands, woods, residential, and commercial land use. At the time of the investigation, the upstream and downstream channels pass through heavily vegetated woods with little vegetation growth within the channels. From field notes, it is estimated that the existing culvert has approximately 1 foot of cover within the road right-of way. No noted culvert damage or failures were observed during the field investigation.

Crossing #5: New Hampstead Parkway

The major crossing along New Hampstead Parkway is at the intersection of New Hampstead Parkway and Highgate Boulevard and consists of a 12'x5' double box culvert that conveys stormwater from the upstream conveyance systems (Figure 57). Based on 2018 LiDAR topography, the crossing appears to convey approximately 3,280 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the upstream and downstream channels had a significant amount of standing water and little vegetation within the channels. These upstream and downstream conveyances passed through heavily vegetated woods.

Crossing #6: Little Neck Road

This major crossing along Little Neck Road is approximately 4,350 feet south of I-16 and consists of a 30" RCP that conveys stormwater from the upstream conveyance system (Figure 58). Based on 2018 LiDAR topography, the crossing appears to convey approximately 350 acres of woods and residential land use. At the time of the investigation, the culvert was found with some sediment present at the bottom of the pipe, but otherwise in good condition. From field notes, it is estimated that the existing culvert has approximately 2 feet of cover within the road right-of-way. No noted culvert damage or failures were observed during the field investigation. The upstream conveyance system consisted of heavily vegetated woods. The downstream conveyance system consisted of lightly vegetated woods.

Crossing #7: Little Neck Road

This major crossing along Little Neck Road is approximately 1.2 miles south of I-16 and consists of a 36" RCP that conveys stormwater from the upstream conveyance system (Figure 59). Based on 2018 LiDAR topography, the crossing appears to convey approximately 100 acres of woods. At the time of the investigation, the culvert was found with some sediment present at the bottom of the pipe with a portion of the upstream pipe end broken off. From field notes, it is estimated that the existing culvert has approximately 2 feet of cover within the road right-of-way. No noted culvert failures were observed during the field investigation. The upstream and downstream conveyance systems consisted of heavily vegetated woods (Figure 60).

Figure 49: Crossing #1 along Highgate Boulevard which consist of a bridge. The view is facing upstream.

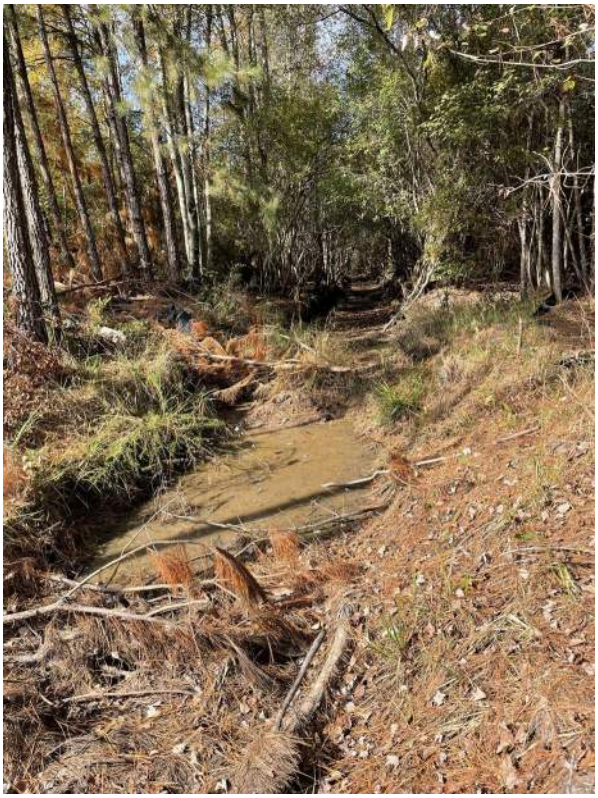


Figure 50: Channel downstream of Highgate Boulevard near Crossing #1. The view is facing downstream.

Figure 51: Crossing #2 along Highgate Boulevard consisting of a 12'x4' triple box culvert. The level rod is resting on the invert of the culvert. The view is facing upstream.

Figure 52: Crossing #2 along Highgate Boulevard consisting of a 12'x4' triple box culvert. The level rod is resting horizontal to the sides of one of the culver's openings. The view is facing upstream.

Figure 53: Crossing #3 along Highgate Boulevard consisting of a 7'x4' double box culvert. The level rod is resting on the invert of the culvert. The view is facing downstream.

Figure 54: Crossing #3 along Highgate Boulevard consisting of a 7'x4' double box culvert. The level rod is resting horizontal to the sides of the culvert opening. The view is facing downstream.

Figure 55: Crossing #4 along Highgate Boulevard consisting of a 10'x4' box culvert. The level rod is resting on the invert of the culvert. The view is facing downstream.

Figure 56: Crossing #4 along Highgate Boulevard consisting of a 10'x4' box culvert. The level rod is resting horizontal to the sides of the culvert opening. The view is facing downstream.

Figure 57: Crossing #5 along New Hampstead Parkway consisting of a 12'x5' double box culvert. The view is facing downstream.

Figure 58: Crossing #6 along Little Neck Road consisting of a 30" RCP. The tape is resting on the invert of the culvert. The view is facing downstream.

Figure 59: Crossing #7 along Little Neck Road consisting of a 36" RCP. The level rod is resting on the invert of the culvert. The view is facing downstream.

Figure 60: Crossing #7 along Little Neck Road consisting of a 36" RCP. The level rod is resting horizontal to the sides of the culvert. The view is facing upstream.

Southern Watershed

The Southern Watershed area of interest encompasses the portion of the study area south of the Savannah Quarters development. Within this area of interest, the LiDAR topography indicates the following major stormwater conveyances:

- (3) along Little Neck Road (Crossings #1 - #3)
- (1) Savannah/Ogeechee Canal pedestrian bridge (Crossing #4)

The following was observed:

Crossing #1: Little Neck Road

This major crossing is at the intersection of Little Neck Road and Bush Road and consists of an 8'x4' box culvert that conveys stormwater from the well-defined upstream channel (Figure 61). Based on 2018 LiDAR topography, the crossing appears to convey approximately 190 acres of woods and residential land use. At the time of the investigation, the culvert was found with some sediment accumulation but was otherwise in good condition. No noted culvert damage or failures were observed during the field investigation. The upstream channel appeared to be well defined with some vegetation overgrowth with no standing water. Note that this location was assessed during the winter months and may present different observations during summer months. The downstream channel appeared to consist primarily of heavily wooded wetlands.

Crossing #2: Little Neck Road

This major crossing along Little Neck Road is approximately 1,450 feet north of I-95 and consists of a 7'x4' double box culvert that conveys stormwater from the well-defined upstream channel (Figure 62). Based on 2018 LiDAR topography, the crossing appears to convey approximately 1,480 acres of wetlands, woods, open space, residential, and commercial land use. At the time of the investigation, the upstream channel appeared to consist primarily of heavily wooded wetlands with a significant amount of forest debris within the channel, some of which appear to be potential beaver dams (Figure 63). The downstream channel appeared to consist primarily of heavily wooded wetlands with some forest debris within the channel. There was a visible head loss in the channel from the upstream and downstream sides of the hydraulic crossing. Note that this location was assessed during the summer months and may present different observations during winter months.

Crossing #3: Little Neck Road

This major crossing along Little Neck Road is approximately 1.1 miles south of I-95 and consists of a 12'x8' Con/Span that conveys stormwater from the well-defined upstream channel (Figure 64). Based on 2018 LiDAR topography, the crossing appears to convey approximately 1,030 acres of woods, residential, commercial, and industrial land use. At the time of the investigation, the culvert was found to be in good condition with no noted culvert damage or failures. The upstream channel appeared to be two combined well-defined channels with minimal vegetation overgrowth and some standing water (Figure 65). Note that this location was assessed during the winter months and may present different observations during summer months. The upstream conveyance systems flow between a densely wooded area and open, grassed space.

Crossing #4: Little Ogeechee River and Savannah/Ogeechee Canal

The major crossing between Little Neck Road and Quacco Road at the intersection of the Little Ogeechee River and the Savannah/Ogeechee Canal is approximately 1.7 miles upstream of I-95 and consists of a pedestrian footbridge that conveys the upstream conveyance of the Little Ogeechee River (Figure 66). Based on 2018 LiDAR topography, the crossing appears to convey approximately 31,280 acres of wetlands, woods, open space, residential, and commercial/industrial land use. At the time of the investigation, the upstream and downstream channels consisted of heavily wooded wetlands (Figures 67 & 68). A number of beaver dams were present within the upstream conveyance system (Figure 69).

Figure 61: Crossing #1 along Little Neck Road consisting of an 8'x4' box culvert. The view is facing downstream.

Figure 62: Crossing #2 along Little Neck Road consisting of a 7'x4' double box culvert. The view is facing upstream.

Figure 63: Channel upstream of Little Neck Road near Crossing #2. The view is facing upstream.

Figure 64: Crossing #3 along Little Neck Road which consist of a 12'x8' Con/Span. The view is facing downstream.

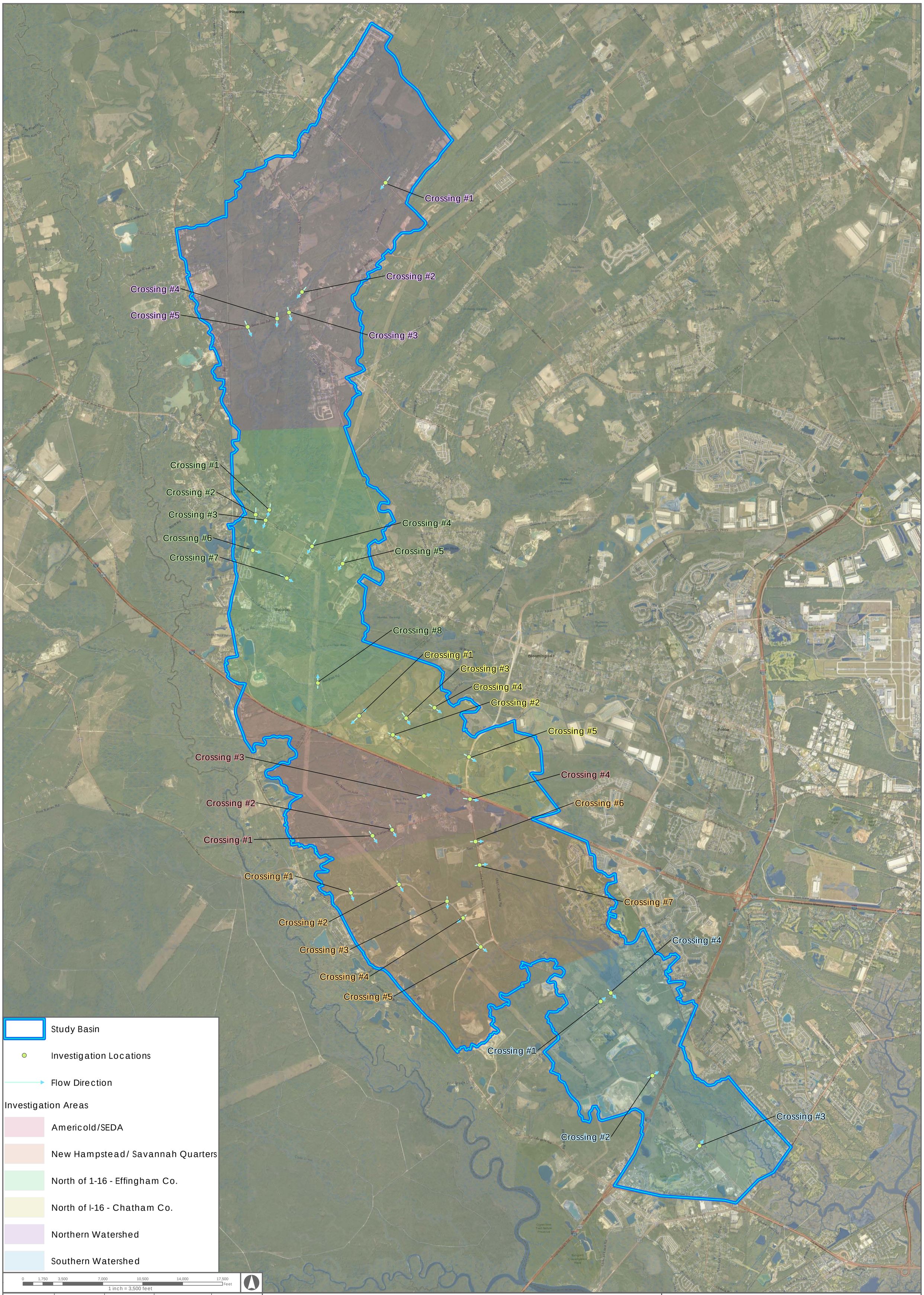
Figure 65: Channel upstream of Little Neck Road near Crossing #3. The view is facing upstream.

Figure 66: Crossing #4 between Little Neck Road and Quacco Road that consists of a pedestrian bridge. The view is facing upstream.

Figure 67: Channel upstream of Crossing #4. The view is facing upstream.

Figure 68: Channel downstream of Crossing #4. The view is facing downstream.

Figure 69: Beaver dam upstream of Crossing #4. The view is facing upstream.



Job Number: 29965.0001	Produced: 2/17/2023	Produced By: ATI	Modified: 2/23/2023	Modified By:

File: \\thomas-hutton.local\dfs\Projects\29965\29965.0001\GIS\Mxd\Exhibits\29965.0001 - Field Memo Areas 24x36.mxd Datum: NAVD88

Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Photots	Thomas & Hutton	2022/2023
Basin	Thomas & Hutton	2022
Aerial Imagery	Google Earth	2022

Field Investigation Locations

Chatham County, Georgia

West Chatham Regional Watershed Study

THOMAS & HUTTON

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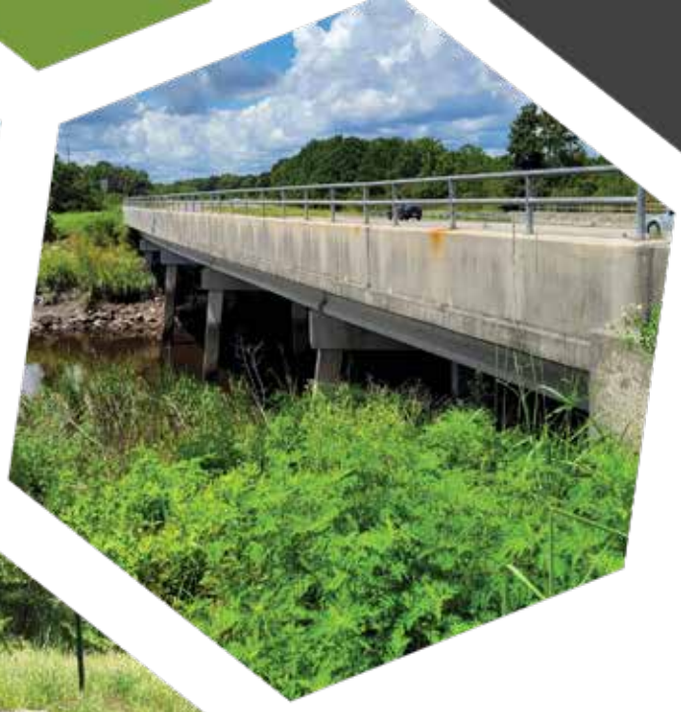
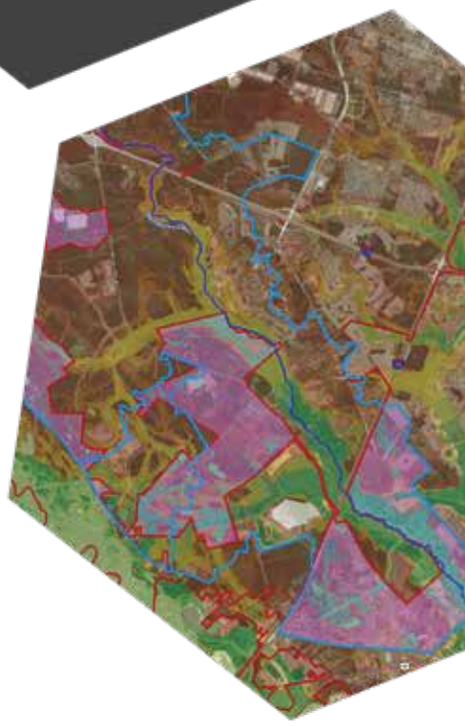
GEOGRAPHIC INFORMATION SYSTEMS





WEST CHATHAM
REGIONAL WATERSHED STUDY

APPENDIX B:
SUB-BASIN PARAMETERS

J-29965.0001

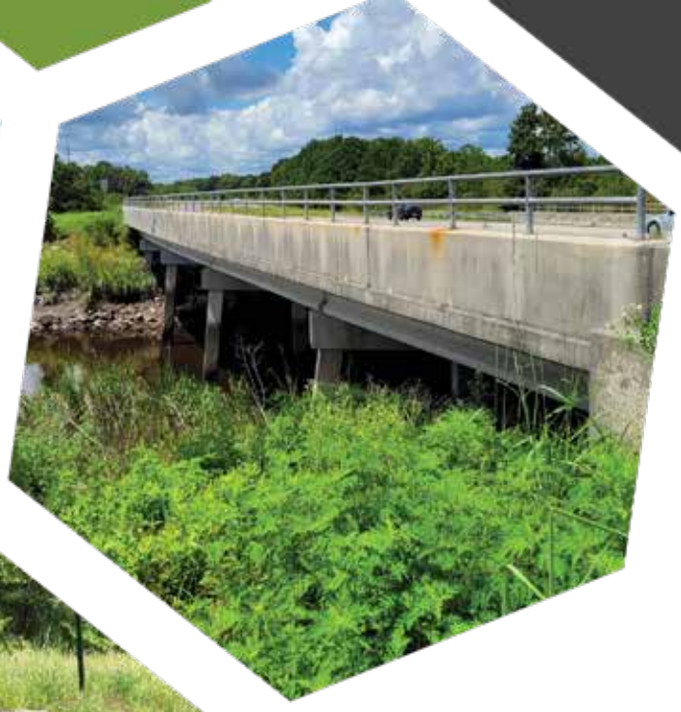
OCTOBER 2023

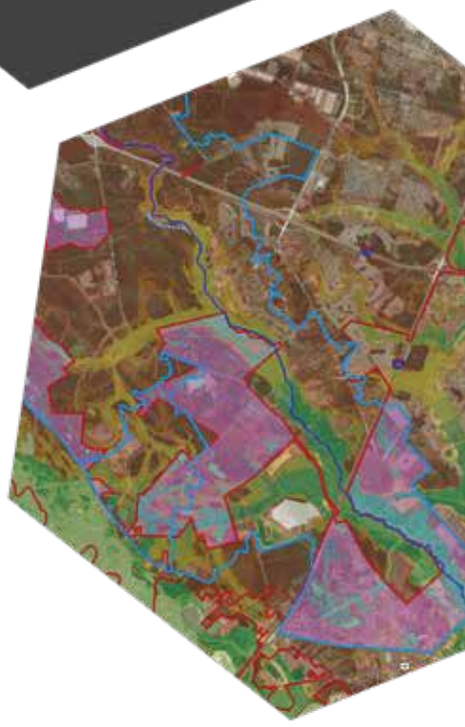
THOMAS & HUTTON

Sub-Basin Parameters					
Sub-Basin	**Area (AC)**	**Tc Group**	**Reference Sub-basin**	**Tc (min)**	**Composite CN**
Basin 1	2039	Z	No	178	70
Basin 10	55	W	Yes	46	76
Basin 100	408	A	No	221	71
Basin 101	284	BB	No	184	78
Basin 102	246	G	No	79	73
Basin 103	306	F	No	114	72
Basin 104	358	A	Yes	221	65
Basin 105	750	D	No	217	61
Basin 106	187	W	No	46	64
Basin 107	111	W	No	46	64
Basin 108	529	G	Yes	79	72
Basin 109	1480	EE	Yes	238	72
Basin 11	953	R	No	182	68
Basin 110	694	G	No	79	73
Basin 111	359	C	No	54	78
Basin 112	389	C	No	54	75
Basin 113	296	C	No	54	73
Basin 114	379	C	Yes	54	75
Basin 115	471	C	No	54	71
Basin 116	1033	CC	Yes	240	76
Basin 117	65	L	No	51	77
Basin 118	1418	M	No	205	65
Basin 119	40	L	No	51	54
Basin 12	622	R	No	182	60
Basin 120	13	H	No	36	56
Basin 121	35	H	No	36	74
Basin 122	39	L	No	51	91
Basin 123	58	L	No	51	87
Basin 124	89	L	No	51	86
Basin 125	5	H	No	36	56
Basin 126	15	H	No	36	72
Basin 127	68	H	No	36	64
Basin 128	65	H	No	36	75
Basin 129	21	L	Yes	51	83
Basin 13	66	W	No	46	73
Basin 130	23	GG	No	19	89
Basin 131	10	GG	Yes	19	88
Basin 132	8	GG	No	19	86
Basin 133	5	GG	No	19	83
Basin 134	9	I	No	16	81
Basin 135	29	H	No	36	79
Basin 136	61	H	No	36	75
Basin 137	4	GG	No	19	70
Basin 138	8	GG	No	19	71
Basin 139	94	U	No	113	64
Basin 14	106	U	No	113	68
Basin 140	56	H	No	36	87
Basin 141	10	GG	No	19	88

Sub-Basin Parameters					
Sub-Basin	**Area (AC)**	**Tc Group**	**Reference Sub-basin**	**Tc (min)**	**Composite CN**
Basin 142	10	GG	No	19	89
Basin 143	5	GG	No	19	87
Basin 15	454	T	Yes	100	63
Basin 16	123	U	No	113	68
Basin 17	110	U	No	113	53
Basin 18	59	N	No	83	76
Basin 19	67	N	Yes	83	78
Basin 2	1423	Z	Yes	178	63
Basin 20	114	U	Yes	113	68
Basin 21	224	O	Yes	86	75
Basin 22	150	O	No	86	82
Basin 23	447	T	No	100	73
Basin 24	119	O	No	86	79
Basin 25	224	O	No	86	72
Basin 26	35	L	No	51	89
Basin 27	133	A	No	221	71
Basin 28	60	N	No	83	77
Basin 29	313	B	No	136	72
Basin 3	2809	AA	Yes	302	65
Basin 30	254	B	No	136	72
Basin 31	60	N	No	83	82
Basin 32	330	P	Yes	173	72
Basin 33	253	B	No	136	66
Basin 34	437	P	No	173	75
Basin 35	206	B	No	136	63
Basin 36	288	B	No	136	71
Basin 37	157	B	No	136	68
Basin 38	220	B	Yes	136	69
Basin 39	89	L	No	51	66
Basin 4	668	R	No	182	64
Basin 40	217	DD	Yes	128	71
Basin 41	289	K	No	120	77
Basin 42	529	P	No	173	73
Basin 43	47	L	No	51	83
Basin 44	280	V	No	226	70
Basin 45	207	V	Yes	226	67
Basin 46	398	P	No	173	78
Basin 47	127	L	No	51	82
Basin 48	334	X	Yes	97	68
Basin 49	285	J	No	222	66
Basin 5	1111	M	Yes	205	58
Basin 50	330	J	Yes	222	61
Basin 51	87	Y	No	169	71
Basin 52	461	K	Yes	120	71
Basin 53	99	Y	No	169	71
Basin 54	58	Y	No	169	78
Basin 55	21	H	No	36	77
Basin 56	23	H	Yes	36	77
Basin 57	34	H	No	36	73

Sub-Basin Parameters					
Sub-Basin	**Area (AC)**	**Tc Group**	**Reference Sub-basin**	**Tc (min)**	**Composite CN**
Basin 58	21	H	No	36	70
Basin 59	12	I	No	16	75
Basin 6	685	M	No	205	67
Basin 60	9	I	No	16	75
Basin 61	21	H	No	36	74
Basin 62	46	H	No	36	73
Basin 63	4	I	No	16	75
Basin 64	7	I	No	16	71
Basin 65	11	I	No	16	65
Basin 66	12	I	Yes	16	65
Basin 67	33	Y	No	169	71
Basin 68	21	H	No	36	72
Basin 69	17	I	No	16	77
Basin 7	119	U	No	113	52
Basin 70	86	Y	Yes	169	61
Basin 71	383	A	No	221	66
Basin 72	98	Y	No	169	74
Basin 73	18	H	No	36	68
Basin 74	344	A	No	221	64
Basin 75	167	A	No	221	67
Basin 76	721	D	Yes	217	64
Basin 77	248	K	No	120	64
Basin 78	99	Q	No	137	59
Basin 79	90	Q	No	137	73
Basin 8	320	S	Yes	134	69
Basin 80	76	Q	Yes	137	63
Basin 81	178	F	No	114	80
Basin 82	87	FF	Yes	99	79
Basin 83	150	BB	Yes	184	81
Basin 84	93	U	No	113	70
Basin 85	137	F	Yes	114	82
Basin 86	342	A	No	221	62
Basin 87	197	A	No	221	64
Basin 88	841	D	No	217	65
Basin 89	225	E	No	115	54
Basin 9	410	R	Yes	182	73
Basin 90	86	K	No	120	66
Basin 91	34	L	No	51	89
Basin 92	33	L	No	51	86
Basin 93	39	H	No	36	69
Basin 94	80	K	No	120	67
Basin 95	17	N	No	83	85
Basin 96	230	E	No	115	63
Basin 97	149	E	Yes	115	68
Basin 98	347	BB	No	184	78
Basin 99	28	H	No	36	66





WEST CHATHAM
REGIONAL WATERSHED STUDY

APPENDIX C:
WEST CHATHAM MODEL ASSUMPTIONS MEMORANDUM

J-29965.0001

OCTOBER 2023

THOMAS & HUTTON

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MEMORANDUM

TO: Mr. Bill Nicholson
Chatham County Drainage Engineer

FROM: Ms. Theresa Ingermann

DATE: March 16, 2023

SUBJECT: West Chatham Regional Watershed Study
Existing Conditions Model
Assumptions for Existing Project Files Not Provided

JOB NO.: 29965.0001

Thomas & Hutton has been retained by Chatham County, Georgia to develop a watershed analysis for the Little Ogeechee River basin west of US Highway 17. The study area is approximately 60 square miles and spans several jurisdictions including Chatham County, Effingham County, City of Savannah, City of Pooler, and City of Bloomingdale. The West Chatham Regional Watershed Study is a multi–phase project providing analyses to understand the study area's existing stormwater system deficiencies and potential stormwater conveyance improvements. The first phase is to assess the existing conditions of the study area by identifying natural and constructed drainage patterns within the watershed and model the primary conveyances to note system deficiencies.

Existing development projects with a contributing drainage area of 20 acres or more within the study area were identified as areas requiring additional data collection for incorporation into the existing conditions model. Thomas & Hutton coordinated with the engineer of record for each identified project to obtain design and as-built files to appropriately model onsite storage and ultimate outfall configurations for each of the identified existing developments. Out of the twelve (12) identified existing developments that had an engineer of record other than Thomas & Hutton, Thomas & Hutton was provided pertinent data for five (5). To minimize further delays stemming from the lack of response for the remaining seven (7) projects, Thomas & Hutton has proceeded with modeling efforts therefore making engineering assumptions within the model to represent the existing developments. Location exhibits for each of the development areas are attached to provide further clarification. The existing developments not provided, and their associated modeling assumptions are as follows:

<u>Americold/Fresh Port:</u>

- Location: Southeast quadrant of Old River Road and Interstate 16 (I–16) intersection.
- Data Provided: None
- Engineer of Record: Hussey Gay Bell

- Assumptions:
    - Land use accounted for the development as seen in 2023 aerial imagery, which included the industrial warehouse and associated open space and detention ponds.
    - Storage was assigned within the model for the entire subbasin. The corresponding stage/area table was generated within the model using 2018 LiDAR topography.
    - The basin and its associated storage were applied to a single model node that was conveyed to a channel link representing the channel along the south side of I-16.

International Paper:

- Location: US Highway 80, approximately 2.3 miles southeast of the intersection of US Highway 80 and Old River Road.
- Data Provided:
    - April 2001 – New Chipping Mill Plan Set – Provided by Chatham County
        - Indicates a proposed pond that does not appear to have ever been constructed.
    - March 2005 – Erosion, Sedimentation, & Pollution Control Plan – Provided by Chatham County
        - Indicates an existing pond but does not indicate an outfall.
- Engineer or Record: Hussey Gay Bell
- Assumptions:
    - Land use accounted for the development as seen in 2023 aerial imagery, which included the wood chipping area associated roads, open space and detention pond.
    - Based on the 2018 LiDAR topography, a portion of the property was delineated into its own subbasin that appears to drain to the existing pond.
    - Storage was assigned within the model for the entire subbasin. The corresponding stage/area table was generated within the model using 2018 LiDAR topography.
    - The outfall of the site was assumed to be a land weir along the existing pond bank that was defined using 2018 LiDAR topography.
    - The remainder of the property not included in the delineated subbasin was assumed to direct discharge to the east with no designated detention.

New Hampstead Parcel R–9:

- Location: Highgate Boulevard, approximately 2,800 feet north of the intersection of Highgate Boulevard and New Hampstead Parkway.
- Data Provided: None
- Engineer of Record: Kern & Company

- Assumptions:
    - Land use accounted for the development as seen in 2023 aerial imagery, which included ½-acre residential lots and associated roads, open space, and detention ponds.
    - Outfalls for each pond were not modeled as they were not provided. Runoff from the development was assumed to be undetained and direct discharge to the downstream wetland system.
    - The time of concentration (Tc) assigned to this area accounted for flow travel time through the onsite ponds identified using the 2023 aerial imagery.

Savannah Quarters:

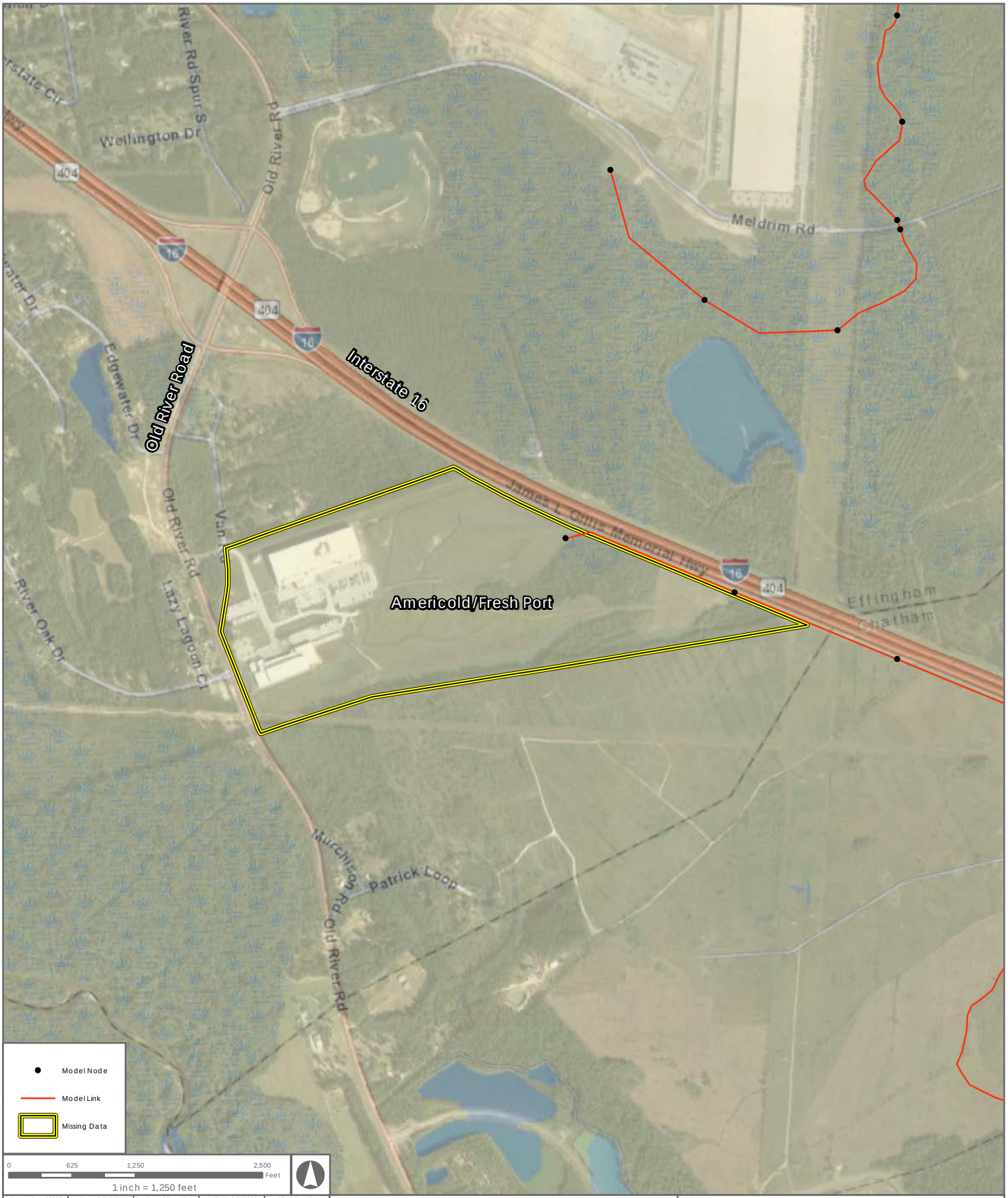
- Location: Southwest quadrant of Pooler Parkway and I–16 intersection.
- Data Provided:
    - February 27, 2007 – Westbrook Phase 7 Storm Drainage Analysis
        - No pertinent data provided.
    - May 28, 2014 – Westbrook Phase 9 Storm Drainage Analysis
        - No pertinent data provided.
    - May 28, 2014 – Westbrook Phase 9 Post-Development Drainage Areas Exhibit
        - Indicates post-development drainage areas and ponds onsite.
        - No outfall details provided.
    - August 8, 2014 – Westbrook Phase 6 Storm Drainage Analysis
        - No pertinent data provided.
    - August 8, 2014 – Westbrook Phase 6 Post-Development Drainage Areas Exhibit
        - Indicates post-development drainage areas and ponds onsite.
        - No outfall details provided.
    - February 5, 2019 – Westbrook Greens Storm Drainage Analysis
        - No pertinent data provided.
    - February 5, 2019 – Westbrook Greens Post-Development Drainage Areas Exhibit
        - Indicates post-development drainage areas and ponds onsite.
        - No outfall details provided.
    - April 24, 2020 – Savannah Quarters Land Exhibit w/ Estimated Outfall Locations – Provided by HGB
        - Indicates location of ponds with no outfall details.
        - During an in–person meeting in December 2022 with HGB employees, they included hand–drawn locations of estimated outfalls based on memory of the plans.
    - May 7, 2021 – Westbrook Area 13 Storm Drainage Analysis
        - Indicate post-development drainage areas onsite.

        - No outfall details provided.
    - April 28, 2022 – Westbrook Remainder Areas K1-K4 & L1-L3 Storm Drainage Analysis
        - Indicates post-development drainage areas and ponds onsite.
        - No outfall details provided.
    - Westbrook Phase 4-A Storm Drainage Analysis – Incomplete
        - No pertinent data provided.
    - Westbrook Phase 4-A Drainage CAD Drawing
        - Provides full details of drainage structures, pond grading and locations, site drainage patterns, and ultimate site outfalls.
    - Three (3) Culvert Crossing Surveys – Platinum Geomatics
        - Northern Hydraulic Crossing
            - Crosses a dirt road in the northern section of the Savannah Quarters development. This area was not fully developed and consisted of graded open spaces and wetlands. The hydraulic crossing consists of four (4) 30'' corrugated plastic pipes (CPP).
        - Blue Moon Crossing Hydraulic Crossing
            - Crosses Blue Moon Crossing just south of the intersection of Blue Moon Crossing and Harvest Hill. The hydraulic crossing consists of two (2) 30'' reinforced concrete pipes (RCP).
        - Spanton Crescent Hydraulic Crossing
            - Crosses Spanton Crescent 2,510 feet south of the intersection of Spanton Crescent and Blue Moon Crossing. The hydraulic crossing consists of five (5) 30'' RCPs.
- Engineer of Record: Hussey Gay Bell
- Assumptions
    - Land use accounted for the development as seen in 2023 aerial imagery and provided exhibit, which included ¼-acre residential lots and associated roads, open space, and detention ponds.
    - Subbasins were delineated based on 2018 LiDAR topography and assumed pond interconnectivity.
    - Wetland areas within the residential development subbasins were designated as storage areas and modeled with corresponding stage/area tables generated using 2018 LiDAR topography.
    - A hydraulic connection between the onsite wetlands that are bisected by Blue Moon Crossing was assumed and modeled as a single 18'' RCP with a land weir representing the roadway defined by the 2018 LiDAR topography. A field visit will be conducted to determine pipe size and quantity.
    - The southern subbasin of the development was divided from the main conveyance of the Little Ogeechee River by modeling a land weir from Wood Haven Lane to Kent Trail. The land weir was defined by the 2018 LiDAR topography.

  - The Tc assigned to this area accounts for flow travel time through the onsite ponds identified using the 2023 aerial imagery.
  - Although sufficient data was provided for the Westbrook Phase 4-A area of Savannah Quarters, it was decided to model the area similarly to the rest of Savannah Quarters since no other usable data was provided for the development.

SEDA East:

- Location: Pine Barren Road, directly north of I–16.
- Data Provided: None
- Engineer of Record: Kern & Company
- Assumptions:
  - Land use accounted for the development as seen in 2023 aerial imagery, which included open space, wetlands, detention ponds, and industrial development.
  - Pond outfalls were not modeled as they were not provided. Runoff from the development was assumed to be undetained and direct discharge to the wetland system to the west.
  - The Tc assigned to this area accounts for flow travel time through the onsite ponds identified using the 2023 aerial imagery.



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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Basin Aerial Imagery	Thomas & Hutton Google Earth	2022 2022

Americold/Fresh Port Development Location Map

Chatham County, Georgia

West Chatham Regional Watershed Study

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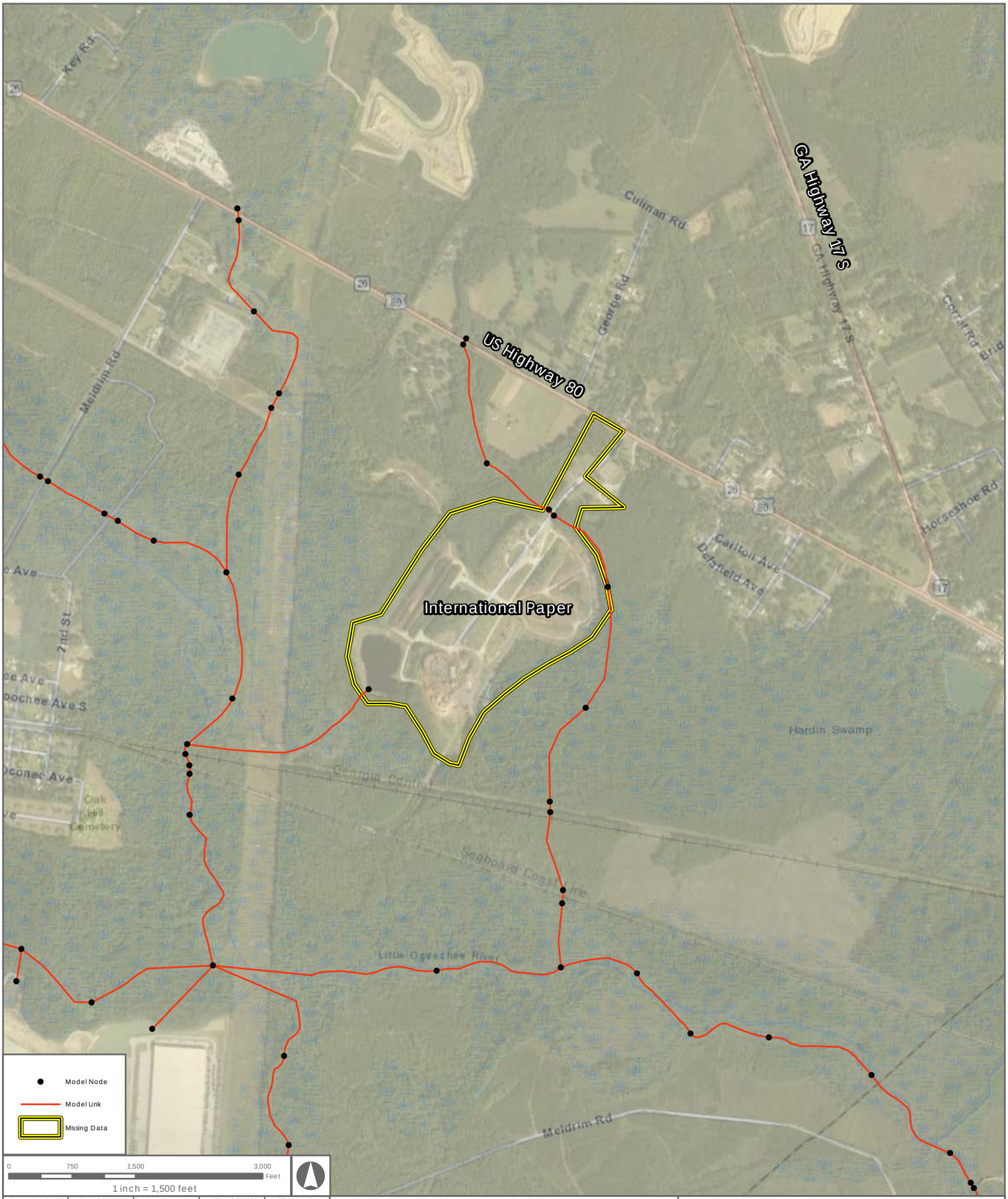

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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Basin	Thomas & Hutton	2022
Aerial Imagery	Google Earth	2022

International Paper
Development Location Map
Chatham County, Georgia
West Chatham
Regional Watershed Study

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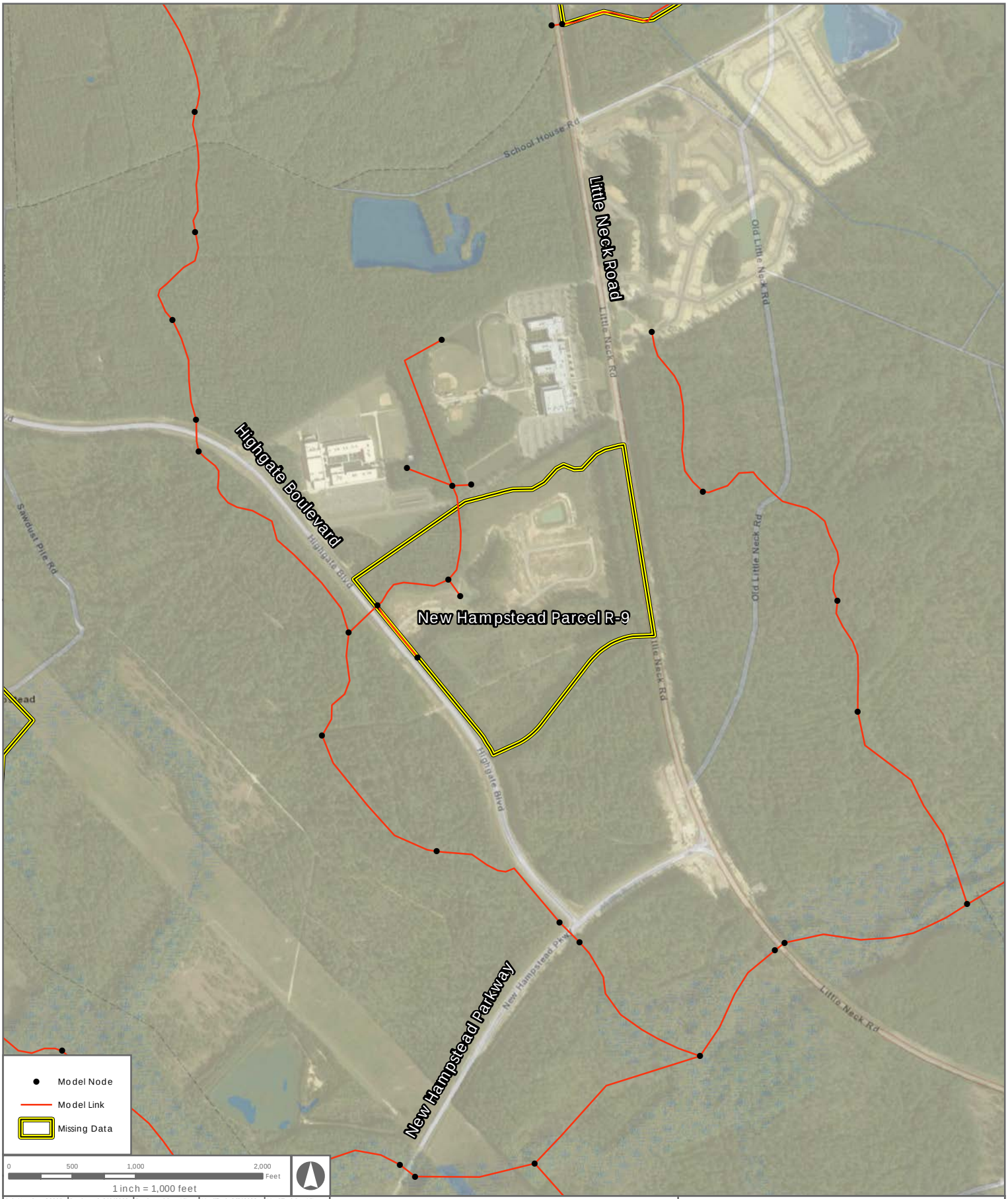

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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Basin Aerial Imagery	Thomas & Hutton Google Earth	2022 2022

New Hampstead Parcel R-9
Development Location Map
Chatham County, Georgia
West Chatham
Regional Watershed Study

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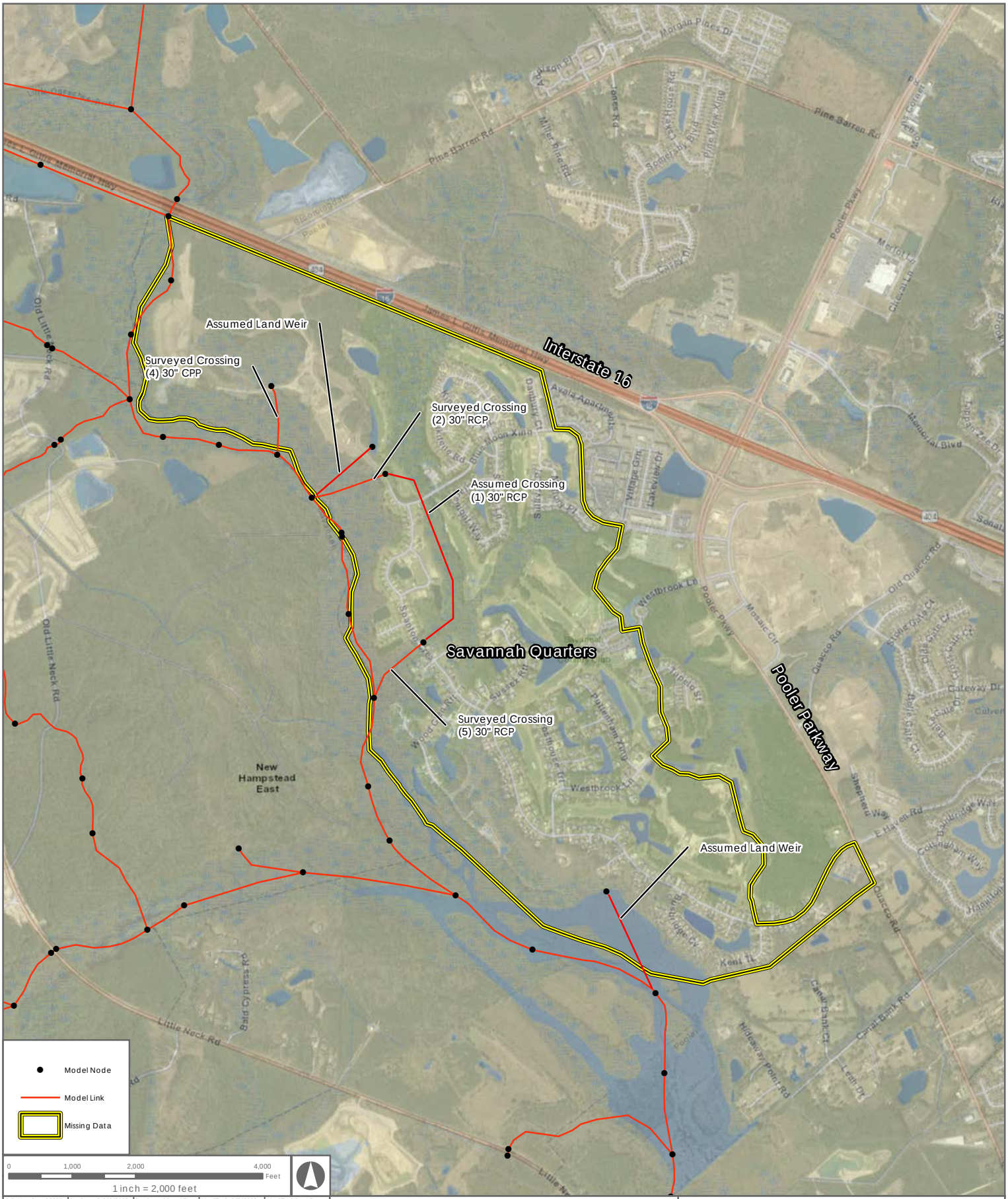

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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Basin	Thomas & Hutton	2022
Aerial Imagery	Google Earth	2022

Savannah Quarters Development Location Map

Chatham County, Georgia

West Chatham Regional Watershed Study

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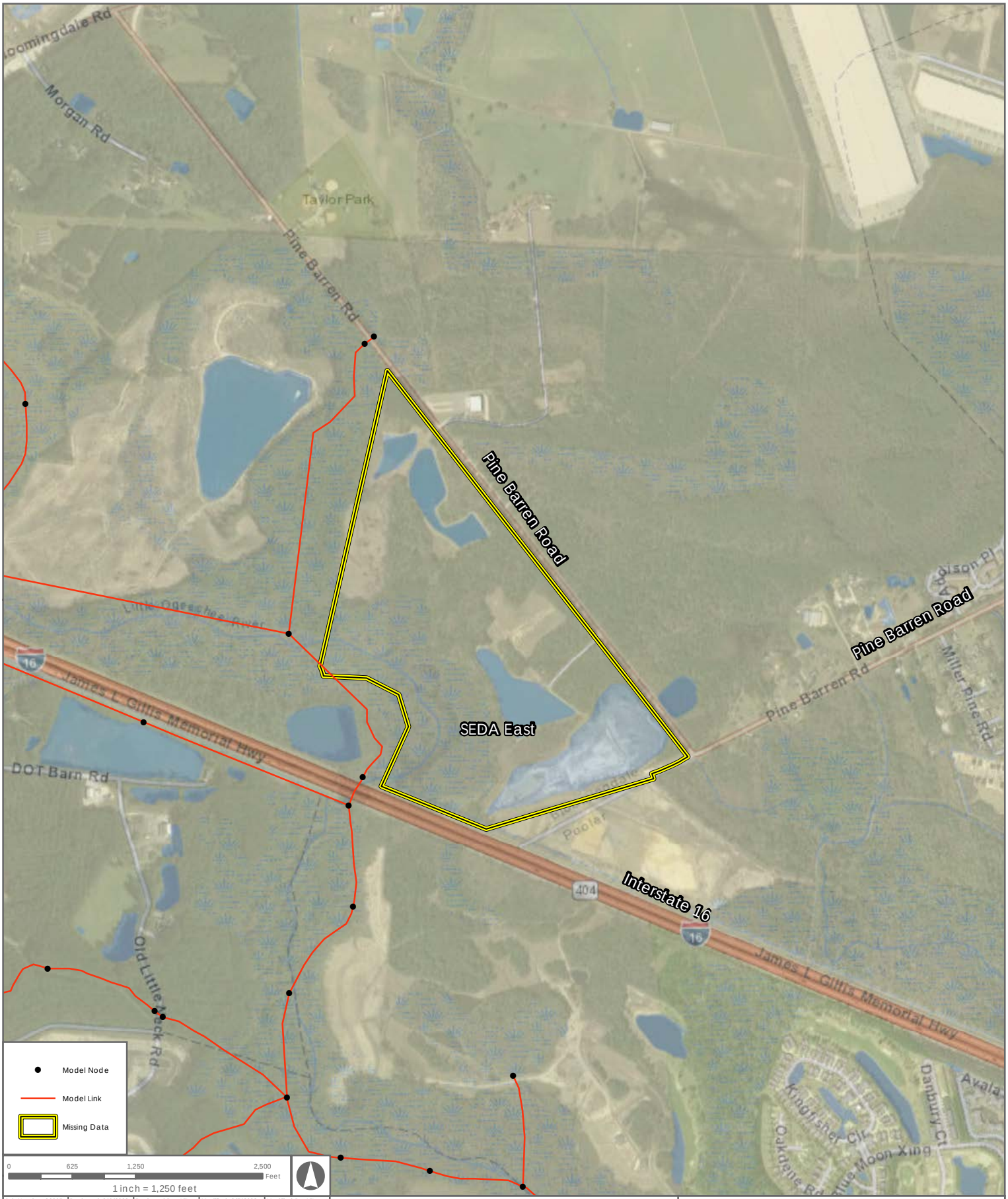

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Thomas & Hutton compiled the map information from the following sources:

Data	Source	Date
Basin Aerial Imagery	Thomas & Hutton Google Earth	2022 2022

SEDA East
Development Location Map
Chatham County, Georgia
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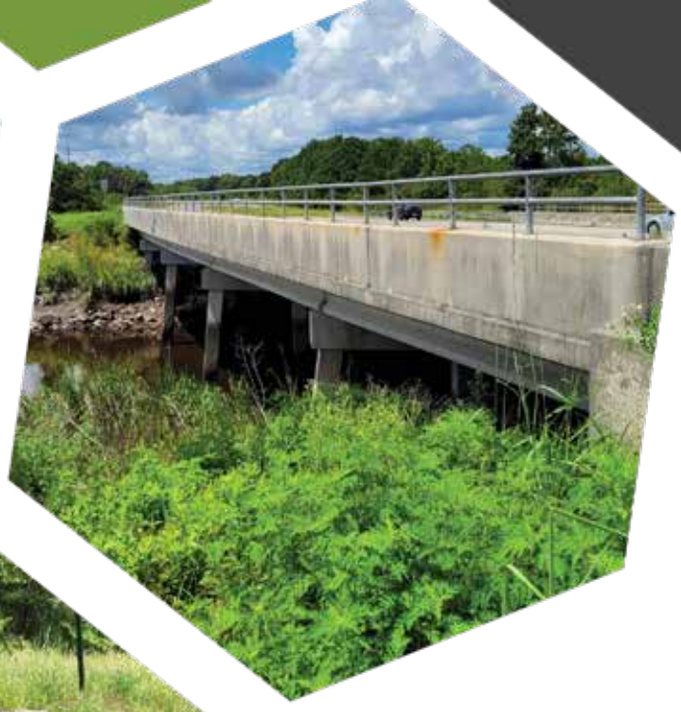
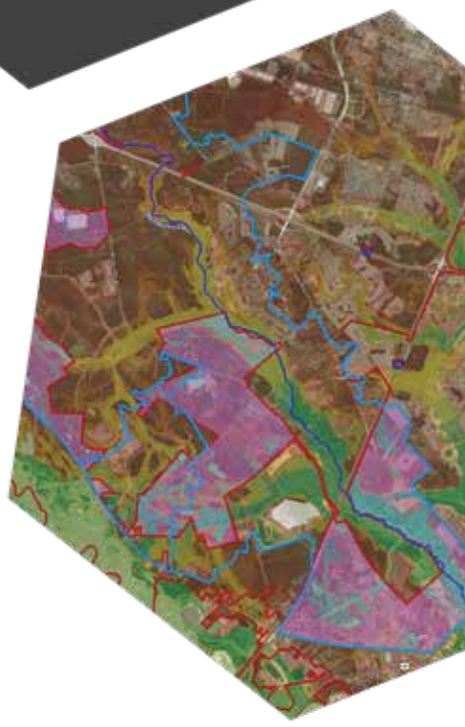




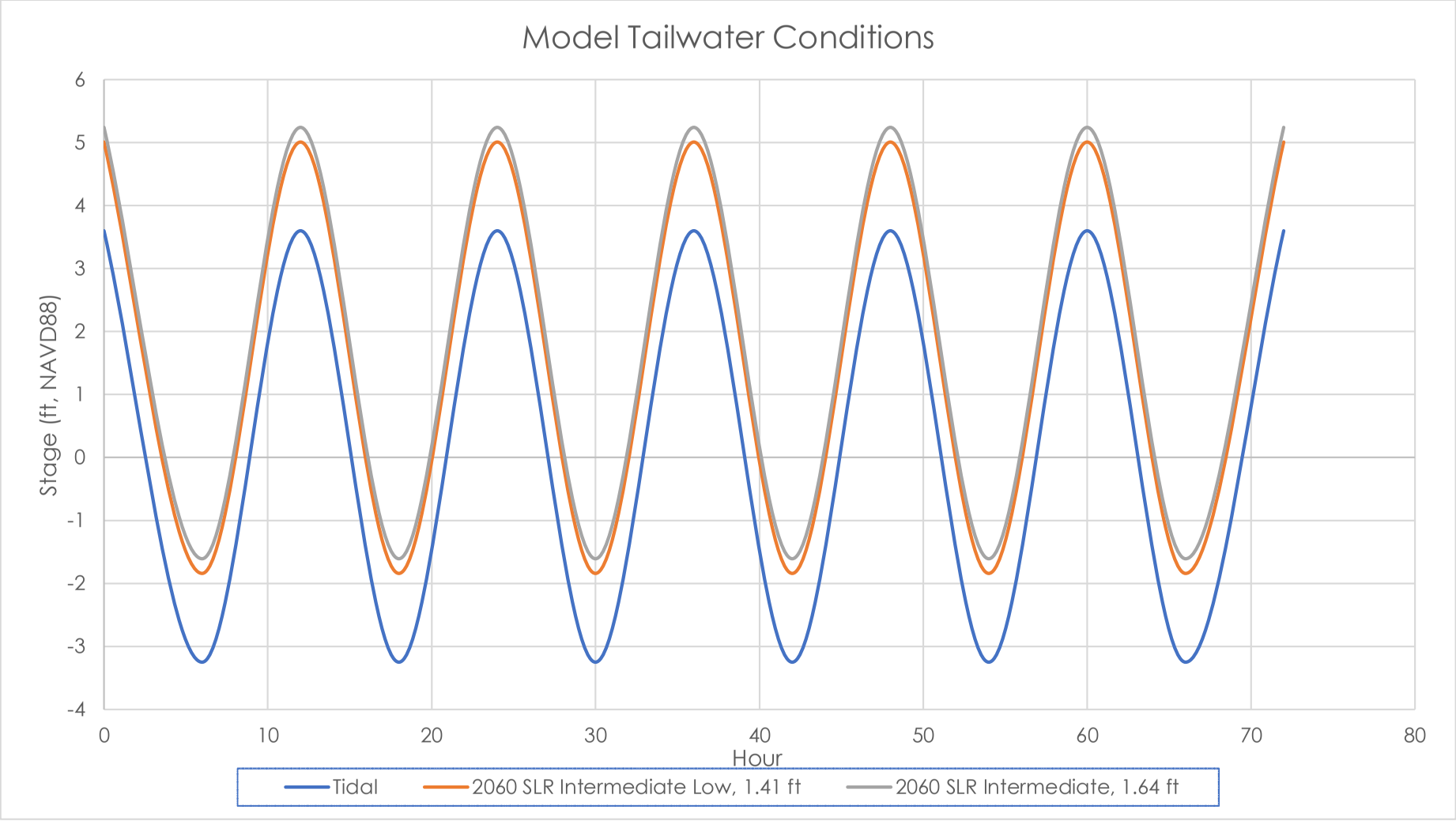
WEST CHATHAM
REGIONAL WATERSHED STUDY

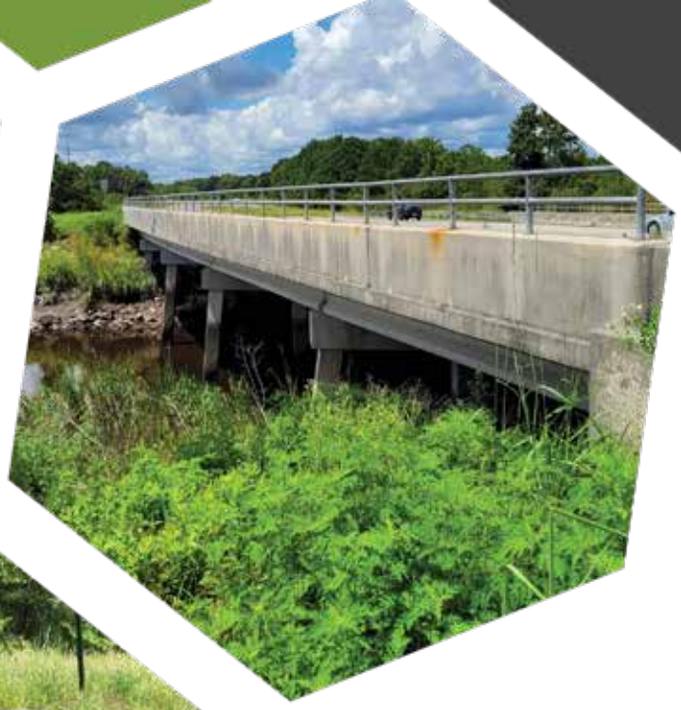
APPENDIX D:
TAILWATER

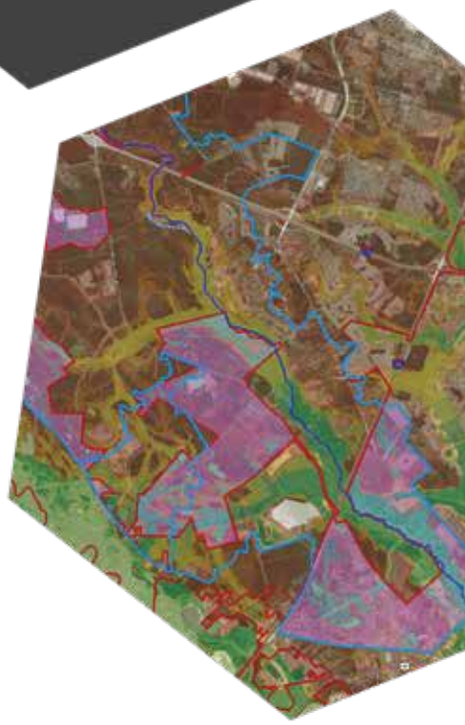
J-29965.0001

OCTOBER 2023

THOMAS & HUTTON


Model Tailwater Conditions
Stage (ft, NAVD88)
6
5
4
3
2
1
0
-1
-2
-3
-4
0
10
20
30
40
50
60
70
80
Hour
Tidal
2060 SLR Intermediate Low, 1.41 ft
2060 SLR Intermediate, 1.64 ft





WEST CHATHAM
REGIONAL WATERSHED STUDY

APPENDIX E:
ICPR 4 MODEL RESULTS

J-29965.0001

OCTOBER 2023

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50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-00	4.09	574.51	71.42	574.93	37.64	0.00
NZA-01	3.63	574.93	37.64	626.92	37.55	0.00
NZA-010	23.73	565.83	35.79	565.65	35.89	29.20
NZA-0100	48.21	524.31	17.24	514.61	17.79	0.00
NZA-0101	43.44	510.74	18.18	508.64	18.41	0.00
NZA-0102	42.24	820.27	18.14	833.00	18.25	0.00
NZA-0103	40.48	510.39	22.81	507.90	23.99	0.00
NZA-0104	39.79	507.90	23.99	505.97	24.81	0.00
NZA-0105	39.06	529.71	24.15	524.69	25.20	0.00
NZA-0106	38.61	524.69	25.20	521.56	26.14	0.00
NZA-0107	38.22	521.56	26.14	521.38	26.35	40.94
NZA-0108	37.95	521.38	26.35	521.33	26.49	0.00
NZA-0109	37.33	521.33	26.49	520.74	26.88	0.00
NZA-011	23.45	565.65	35.89	565.03	36.06	0.00
NZA-0110	36.77	520.75	26.87	520.58	27.40	0.00
NZA-0111	36.41	544.01	26.17	542.55	26.73	0.00
NZA-0112	35.96	542.55	26.73	542.31	27.14	0.00
NZA-0113	34.55	542.31	27.14	542.02	27.61	0.00
NZA-0114	33.30	542.02	27.61	538.39	28.37	0.00
NZA-0115	32.75	538.39	28.37	535.68	29.01	0.00
NZA-0116	32.50	536.17	28.95	535.07	29.35	0.00
NZA-0117	32.04	535.07	29.35	534.17	29.70	0.00
NZA-0118	31.63	534.17	29.70	533.80	29.97	35.50
NZA-0119	31.31	533.80	29.97	533.73	30.05	0.00
NZA-012	36.17	74.69	15.03	74.09	15.10	41.04
NZA-0120	30.13	561.00	30.18	563.20	30.96	0.00
NZA-0121	29.13	563.21	30.96	558.21	31.43	0.00
NZA-0122	27.99	558.21	31.43	557.36	31.81	0.00
NZA-0123	27.02	557.07	32.01	556.74	32.33	0.00
NZA-0124	26.44	556.74	32.33	554.16	32.85	0.00
NZA-0125	26.14	554.16	32.85	552.94	33.37	30.00
NZA-0126	25.80	552.94	33.37	552.62	33.53	0.00

50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0127	25.45	552.12	33.68	551.65	33.81	0.00
NZA-0128	25.55	552.62	33.53	552.12	33.68	20.80
NZA-0129	25.39	551.65	33.81	550.49	34.19	0.00
NZA-013	36.09	74.09	15.10	73.07	15.15	0.00
NZA-0130	24.00	566.92	35.30	565.95	35.71	0.00
NZA-0131	23.92	565.95	35.71	565.83	35.79	0.00
NZA-0134	21.73	265.17	38.36	264.00	39.33	0.00
NZA-0135	22.21	572.26	38.62	571.39	39.22	0.00
NZA-0136	12.14	217.26	22.55	214.31	23.23	17.20
NZA-0137	12.04	214.31	23.23	212.59	23.72	0.00
NZA-0138	16.37	62.56	17.18	62.01	17.38	24.32
NZA-0139	16.34	62.01	17.38	61.50	17.72	0.00
NZA-014	34.43	66.44	17.09	66.05	17.29	35.55
NZA-0140	15.52	33.26	15.30	30.34	18.48	15.61
NZA-0142	13.32	103.31	20.54	103.24	20.79	18.90
NZA-0143	12.57	116.97	19.46	112.42	20.39	20.00
NZA-0144	12.51	112.42	20.39	110.97	20.71	0.00
NZA-0145	12.51	94.38	15.57	2.20	29.50	0.00
NZA-0146	15.00	83.04	24.18	82.48	24.95	15.75
NZA-0147	14.19	82.48	24.95	82.22	25.30	0.00
NZA-0148	15.23	78.05	19.60	72.82	20.37	16.00
NZA-0149	15.11	72.82	20.37	70.72	20.56	0.00
NZA-015	31.89	66.05	17.29	66.16	17.44	0.00
NZA-0150	24.11	180.63	13.40	58.52	16.39	24.17
NZA-0151	23.56	58.52	16.39	56.38	17.53	0.00
NZA-0152	23.27	43.79	14.39	17.69	26.20	23.66
NZA-0153	22.22	17.69	26.20	17.27	47.93	0.00
NZA-0154	11.50	223.85	24.69	212.82	26.61	0.00
NZA-0155	11.62	228.88	24.06	221.75	24.83	0.00
NZA-0156	12.24	227.87	21.05	217.26	22.55	0.00
NZA-0157	12.33	112.28	20.76	112.84	27.27	13.30
NZA-0158	13.03	137.02	16.32	130.46	17.90	0.00

50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0159	13.37	82.58	26.09	82.53	26.94	0.00
NZA-016	28.51	96.21	19.04	96.17	19.16	26.19
NZA-0160	13.54	82.91	25.23	81.76	26.15	0.00
NZA-0161	15.02	70.72	20.56	63.47	22.52	0.00
NZA-0162	15.52	90.06	17.70	78.05	19.60	0.00
NZA-0163	15.73	61.50	17.72	56.51	19.21	0.00
NZA-0164	25.22	571.60	33.73	568.32	34.68	0.00
NZA-0165	23.32	565.03	36.06	563.26	36.51	0.00
NZA-0166	19.76	434.77	42.32	434.03	42.77	0.00
NZA-0167	18.03	379.14	43.69	377.01	44.23	0.00
NZA-0168	18.63	395.99	43.40	379.14	43.69	0.00
NZA-0169	17.46	163.84	13.78	140.27	14.17	0.00
NZA-017	27.72	96.17	19.16	96.31	19.30	0.00
NZA-0170	24.60	568.32	34.68	566.67	35.31	0.00
NZA-0171	12.70	130.46	17.90	116.97	19.46	0.00
NZA-0172	23.00	60.07	18.77	59.00	19.41	0.00
NZA-0173	23.34	132.95	13.93	18.39	20.01	0.00
NZA-0176	17.04	24.47	22.68	24.90	22.53	0.00
NZA-0177	30.17	191.63	14.75	90.77	18.23	35.80
NZA-0178	30.14	90.77	18.23	89.23	18.71	0.00
NZA-0179	16.98	61.80	16.82	61.79	17.16	0.00
NZA-018	31.21	533.73	30.05	533.70	30.14	31.49
NZA-0180	16.41	33.76	15.48	7.71	24.50	22.36
NZA-0181	15.51	7.71	24.50	7.68	25.15	0.00
NZA-0182	17.32	124.81	15.25	124.18	15.38	17.77
NZA-0183	17.17	124.18	15.38	121.24	15.72	0.00
NZA-0185	20.42	10.49	39.75	10.49	40.19	0.00
NZA-0186	19.84	38.83	12.77	33.23	13.15	19.89
NZA-0188	19.74	103.64	43.09	103.62	43.26	19.05
NZA-019	30.70	533.70	30.14	533.64	30.22	0.00
NZA-0192	11.77	224.66	23.52	218.58	24.55	0.00
NZA-0193	17.41	131.95	14.50	124.81	15.25	0.00

50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0194	16.93	121.24	15.72	115.82	16.32	0.00
NZA-0195	16.72	180.47	15.78	157.42	15.98	0.00
NZA-0196	16.71	157.42	15.98	114.09	17.51	0.00
NZA-0197	16.08	533.05	50.93	530.96	51.32	0.00
NZA-0198	16.65	98.43	17.88	57.60	32.95	24.78
NZA-0199	16.53	57.60	32.95	57.60	33.20	17.92
NZA-02	3.60	626.92	37.55	717.08	37.37	0.00
NZA-020	30.17	51.31	12.73	45.48	12.94	36.34
NZA-0202	17.91	175.86	46.22	174.13	46.80	0.00
NZA-0205	18.76	183.50	43.34	175.99	45.68	0.00
NZA-0206	18.59	175.99	45.68	175.86	46.22	0.00
NZA-0208	20.13	10.49	40.19	10.33	43.30	0.00
NZA-0209	19.85	130.44	42.59	130.17	42.99	0.00
NZA-021	30.13	45.48	12.94	40.06	13.43	0.00
NZA-0210	23.28	78.53	13.96	43.79	14.39	0.00
NZA-0211	22.21	33.97	14.10	30.31	50.92	0.00
NZA-0212	22.22	33.07	13.13	23.37	50.16	0.00
NZA-0213	23.33	62.22	17.28	60.07	18.77	0.00
NZA-0214	22.98	565.09	36.49	559.05	37.96	0.00
NZA-0215	34.48	81.64	15.00	66.44	17.09	0.00
NZA-0216	28.99	66.16	17.44	63.38	17.99	0.00
NZA-0217	24.40	99.40	13.13	49.25	13.16	0.00
NZA-0218	19.06	55.63	21.72	55.60	21.93	0.00
NZA-0219	19.90	55.63	21.75	55.63	21.72	20.94
NZA-022	32.06	107.02	14.62	36.00	19.77	32.67
NZA-0220	20.37	20.34	14.67	18.10	15.67	0.00
NZA-0221	18.65	56.01	21.91	56.38	22.00	0.00
NZA-0222	17.95	56.38	22.00	55.92	23.12	0.00
NZA-0223	17.47	55.92	23.12	55.96	23.33	17.73
NZA-0224	20.30	10.86	12.30	4.86	12.68	0.00
NZA-0226	19.17	25.49	15.53	19.56	18.75	0.00
NZA-0228	19.40	34.12	14.65	4.91	29.93	19.72

50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0229	20.35	33.62	14.57	11.01	19.12	0.00
NZA-023	30.42	36.00	19.77	36.40	19.03	0.00
NZA-0230	19.94	48.02	22.46	48.45	23.51	19.47
NZA-0231	19.99	34.16	19.95	33.04	21.76	0.00
NZA-0232	13.30	103.24	20.79	103.24	20.79	0.00
NZA-0233	14.49	115.53	13.42	110.54	13.54	17.50
NZA-0234	14.30	105.61	19.19	104.13	19.90	0.00
NZA-0235	14.01	104.13	19.90	103.31	20.54	0.00
NZA-0236	15.01	85.62	18.03	85.11	18.02	19.00
NZA-0237	14.96	85.11	18.02	81.96	19.28	0.00
NZA-0238	14.49	110.54	13.54	97.93	19.58	0.00
NZA-0239	24.38	49.25	13.16	42.88	21.76	24.00
NZA-024	40.78	478.58	23.37	478.06	23.87	0.00
NZA-0240	21.98	42.88	21.76	37.13	23.51	0.00
NZA-0241	21.96	40.45	13.08	37.00	25.43	27.00
NZA-0242	21.73	37.00	25.43	34.35	25.99	0.00
NZA-0243	15.09	15.42	19.75	15.41	19.75	19.00
NZA-0244	15.07	23.77	14.12	23.29	14.35	0.00
NZA-0245	15.00	53.13	15.45	49.25	15.35	0.00
NZA-0246	15.06	23.29	14.35	22.22	15.30	0.00
NZA-0247	20.42	40.93	15.65	13.25	22.96	21.19
NZA-0248	20.40	11.09	22.57	11.08	23.05	0.00
NZA-0249	19.97	43.84	22.36	44.13	23.20	0.00
NZA-025	41.55	833.55	18.25	478.58	23.37	42.41
NZA-0250	20.00	12.24	15.41	11.23	24.19	0.00
NZA-0251	22.62	11.83	22.22	11.83	23.01	0.00
NZA-0252	21.47	52.60	15.92	34.16	19.95	0.00
NZA-0253	21.92	11.83	23.01	12.10	24.35	0.00
NZA-0254	16.49	57.04	13.85	25.37	16.96	19.00
NZA-0255	15.95	25.37	16.96	25.93	17.97	0.00
NZA-0256	14.87	14.61	14.27	14.60	14.29	18.50
NZA-0258	15.67	35.14	15.31	33.26	15.30	0.00

50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-026	44.84	510.73	18.09	510.74	18.18	0.00
NZA-0261	10.41	323.82	15.48	48.16	26.12	11.50
NZA-0261A	7.38	48.16	26.12	48.23	26.72	11.50
NZA-0262	6.95	48.23	26.72	45.61	29.04	0.00
NZA-0263	21.10	55.55	14.07	45.53	15.46	0.00
NZA-0265	18.23	24.97	15.73	22.39	19.36	0.00
NZA-0266	17.49	11.71	17.47	10.82	18.35	0.00
NZA-0267	17.51	174.13	46.80	167.72	48.65	0.00
NZA-0268	17.50	11.98	41.20	10.51	63.58	0.00
NZA-0269	20.24	36.84	14.90	12.18	19.54	0.00
NZA-027	44.95	514.61	17.79	510.73	18.09	51.60
NZA-0270	20.12	17.94	13.58	14.42	14.30	0.00
NZA-0271	20.27	65.91	13.85	64.33	14.09	0.00
NZA-0272	18.67	48.00	14.30	36.32	17.22	0.00
NZA-0273	18.94	76.34	15.58	21.33	24.55	21.50
NZA-0274	18.31	21.33	24.55	21.33	24.80	0.00
NZA-0275	17.98	21.33	24.80	21.33	25.28	0.00
NZA-0276	17.13	21.33	25.28	21.69	25.72	0.00
NZA-0277	17.34	29.87	15.38	15.42	19.75	0.00
NZA-0278	15.88	106.25	12.30	73.01	12.37	0.00
NZA-0279	15.84	52.95	12.50	51.46	12.82	0.00
NZA-028	57.72	165.12	15.14	54.39	21.81	61.83
NZA-0280	12.94	89.38	13.12	78.90	13.90	0.00
NZA-0281	12.78	35.58	13.59	31.34	14.51	0.00
NZA-0282	15.23	9.87	12.53	2.50	17.60	0.00
NZA-0283	11.50	88.56	13.90	87.80	13.85	0.00
NZA-0285	16.00	0.00	0.00	0.00	0.00	0.00
NZA-0286	29.98	97.59	18.40	96.21	19.04	0.00
NZA-0287	25.90	102.82	19.00	101.58	19.50	0.00
NZA-0288	10.83	562.73	65.25	561.94	66.05	0.00
NZA-0289	15.47	37.48	12.67	28.74	13.15	0.00
NZA-029	57.77	463.86	14.63	451.32	15.16	0.00

50% Annual Chance Event
Max Stage Results

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NZA-0290	15.19	21.80	12.67	15.11	13.47	0.00
NZA-0291	16.53	43.00	12.65	20.11	13.66	0.00
NZA-0292	15.10	63.88	13.37	63.89	13.38	0.00
NZA-0293	15.03	21.99	13.78	21.96	13.84	0.00
NZA-0295	15.86	27.82	12.53	27.76	12.56	0.00
NZA-0296	17.43	5.48	14.25	0.40	18.32	21.50
NZA-0297	15.83	9.22	12.17	1.81	13.43	0.00
NZA-0298	19.41	37.94	14.38	37.64	14.65	21.50
NZA-0299	18.01	3.57	21.91	3.81	14.60	0.00
NZA-03	3.60	1325.38	13.35	1379.18	13.36	8.40
NZA-030	16.09	38.58	12.79	29.43	13.25	0.00
NZA-0300	17.28	3.44	24.89	3.30	27.03	0.00
NZA-0301	17.31	3.81	14.60	3.38	25.04	0.00
NZA-0302	17.25	3.30	27.03	3.27	28.81	0.00
NZA-0303	16.95	6.28	18.56	3.49	30.07	0.00
NZA-0304	16.94	10.39	16.67	4.20	18.53	0.00
NZA-0305	17.12	18.08	14.98	10.39	16.67	0.00
NZA-0306	17.13	109.79	15.43	102.94	16.11	0.00
NZA-0307	16.61	89.08	16.66	89.73	17.13	0.00
NZA-0308	15.86	89.73	17.13	87.91	17.55	0.00
NZA-0309	15.47	87.91	17.55	85.62	18.03	0.00
NZA-031	16.10	45.74	12.67	38.58	12.79	29.83
NZA-0310	21.25	26.73	12.28	3.62	13.56	0.00
NZA-0311	22.41	16.85	12.30	1.45	14.90	0.00
NZA-0312	21.89	15.50	12.52	2.68	14.80	0.00
NZA-0313	20.34	3.24	19.07	0.63	28.91	0.00
NZA-0314	20.82	24.71	12.52	7.86	13.86	0.00
NZA-0315	21.59	19.28	12.52	2.26	16.02	0.00
NZA-0316	20.58	41.57	12.38	7.84	14.15	0.00
NZA-0317	15.83	6.18	12.19	1.22	13.43	0.00
NZA-0318	20.01	13.28	12.30	4.26	12.78	0.00
NZA-0319	19.84	17.10	12.52	2.02	16.17	0.00

50% Annual Chance Event
Max Stage Results

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NZA-032	14.06	554.56	56.09	554.18	56.33	0.00
NZA-0320	19.17	21.47	12.50	3.39	13.62	0.00
NZA-0321	20.33	5.15	12.30	0.45	14.76	0.00
NZA-0322	20.36	8.57	12.30	1.08	13.88	0.00
NZA-0323	18.19	9.60	12.30	0.00	0.00	0.00
NZA-0324	20.48	40.03	12.52	5.65	15.27	0.00
NZA-0325	9.40	268.35	15.40	243.32	16.77	12.90
NZA-0326	8.47	53.74	12.70	44.81	13.11	10.39
NZA-0327	17.05	12.82	12.52	3.44	12.85	0.00
NZA-0328	22.70	113.38	13.42	11.83	22.22	0.00
NZA-0329	17.04	3.44	12.85	3.43	12.84	0.00
NZA-033	15.48	510.15	55.55	509.26	56.33	24.30
NZA-0331	24.87	42.14	12.65	6.20	15.38	0.00
NZA-0332	24.89	65.44	12.67	6.87	16.83	0.00
NZA-0333	3.60	1495.49	13.48	1280.75	12.00	0.00
NZA-0335	20.80	321.62	39.22	321.23	39.75	20.55
NZA-0336	16.00	0.00	0.00	0.00	0.00	0.00
NZA-0337	27.99	27.14	15.28	22.44	13.95	0.00
NZA-0338	15.85	9.27	12.17	9.22	12.17	16.04
NZA-0339	29.58	3.12	12.63	0.68	14.88	0.00
NZA-034	10.28	562.18	66.49	562.14	66.71	12.40
NZA-0340	29.48	15.35	13.20	14.77	13.40	0.00
NZA-0341	30.26	29.74	12.52	15.35	13.20	0.00
NZA-0342	28.51	49.49	12.65	34.03	13.26	0.00
NZA-0343	45.95	9.09	14.25	0.88	25.79	0.00
NZA-0344	65.39	6.09	12.95	5.98	13.10	0.00
NZA-0345	17.56	11.94	12.53	0.74	18.96	0.00
NZA-0346	16.63	1.41	12.63	0.42	12.29	0.00
NZA-0347	17.10	35.75	12.55	6.50	13.16	0.00
NZA-0348	25.25	97.22	12.67	36.99	13.90	0.00
NZA-0349	17.54	0.74	18.96	0.74	19.39	0.00
NZA-035	9.56	562.14	66.71	562.14	66.89	0.00

50% Annual Chance Event
Max Stage Results

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NZA-0350	16.62	0.42	12.29	0.11	22.35	0.00
NZA-0351	17.05	6.50	13.16	6.49	13.16	0.00
NZA-0352	15.85	6.23	12.19	6.18	12.19	0.00
NZA-0353	15.85	9.88	12.52	9.87	12.53	0.00
NZA-0354	10.96	13.48	13.44	1.40	72.00	0.00
NZA-0355	13.53	0.00	0.00	0.00	0.00	0.00
NZA-0356	13.54	9.71	12.32	9.47	12.37	0.00
NZA-0357	13.81	58.57	12.50	22.90	13.41	0.00
NZA-0358	13.37	4.80	12.32	3.68	12.52	0.00
NZA-0359	15.12	82.89	12.47	1.67	19.42	0.00
NZA-036	14.21	83.38	12.70	9.04	18.03	19.54
NZA-0360	15.85	21.74	12.30	6.06	12.89	0.00
NZA-0361	16.22	9.42	12.30	5.20	12.62	0.00
NZA-0362	15.09	21.03	12.30	3.09	13.39	0.00
NZA-037	12.11	97.85	14.53	97.35	14.75	14.41
NZA-038	13.08	63.68	14.25	48.51	16.29	0.00
NZA-039	12.74	49.23	13.32	49.23	13.33	11.61
NZA-04	3.60	1379.18	13.36	1495.49	13.48	0.00
NZA-040	16.70	114.09	17.51	87.75	17.97	34.86
NZA-042	12.50	548.17	59.04	547.87	59.19	11.60
NZA-043	12.49	547.87	59.19	547.41	59.41	0.00
NZA-044	20.43	556.95	41.56	556.76	41.69	19.95
NZA-045	20.39	556.76	41.69	556.57	41.84	0.00
NZA-046	19.54	380.15	42.85	380.01	43.03	23.60
NZA-047	19.53	380.01	43.03	379.94	43.03	0.00
NZA-0470	54.92	5.98	13.10	5.98	13.10	53.88
NZA-048	17.33	528.15	49.38	527.99	49.59	26.30
NZA-049	17.01	527.99	49.59	527.86	49.74	0.00
NZA-05	5.37	580.09	69.76	579.72	69.93	16.40
NZA-050	4.55	576.52	71.53	574.51	71.42	0.00
NZA-051	4.93	577.81	71.07	576.52	71.53	0.00
NZA-052	5.16	578.81	70.55	577.81	71.07	0.00

50% Annual Chance Event
Max Stage Results

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NZA-053	5.30	579.61	70.03	578.81	70.55	0.00
NZA-054	3.60	734.05	12.04	1012.69	37.44	0.00
NZA-055	3.60	1012.69	37.44	1134.60	37.39	0.00
NZA-056	3.60	1238.36	13.33	1325.38	13.35	0.00
NZA-057	5.46	560.85	69.16	559.74	69.78	0.00
NZA-058	5.78	561.52	68.67	560.85	69.16	0.00
NZA-059	6.44	561.42	68.14	561.52	68.67	0.00
NZA-06	5.37	579.72	69.93	579.61	70.03	0.00
NZA-060	7.11	561.78	67.41	561.42	68.14	0.00
NZA-061	7.66	562.14	66.89	561.78	67.41	0.00
NZA-062	10.59	561.94	66.05	561.73	66.51	0.00
NZA-063	10.96	565.44	64.02	563.21	65.09	0.00
NZA-064	11.26	567.01	63.13	565.44	64.02	0.00
NZA-065	11.44	570.26	61.87	567.01	63.13	0.00
NZA-066	11.72	543.67	61.14	542.76	61.53	0.00
NZA-067	11.95	544.40	60.71	543.67	61.14	0.00
NZA-068	12.11	546.19	59.92	544.54	60.62	0.00
NZA-069	12.28	547.41	59.41	546.19	59.92	0.00
NZA-07	5.40	45.61	29.04	45.61	29.03	8.89
NZA-070	12.61	549.10	58.64	548.37	58.97	0.00
NZA-071	12.74	549.75	58.35	549.10	58.64	0.00
NZA-072	12.94	550.30	58.06	549.75	58.35	0.00
NZA-073	13.08	551.04	57.67	550.30	58.06	0.00
NZA-074	13.26	553.58	57.02	551.90	57.65	0.00
NZA-075	13.50	553.15	56.83	552.74	57.04	0.00
NZA-076	13.72	554.18	56.33	553.15	56.83	0.00
NZA-077	15.50	530.96	51.32	510.15	55.55	0.00
NZA-078	14.90	62.12	12.50	2.24	23.27	0.00
NZA-079	14.87	16.85	12.55	0.18	24.80	0.00
NZA-08	16.18	49.35	12.70	19.21	13.89	19.57
NZA-082	16.36	527.11	50.19	525.12	50.78	0.00
NZA-083	16.78	527.86	49.74	527.11	50.19	0.00

50% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-084	17.48	530.04	48.52	528.15	49.38	0.00
NZA-085	17.62	373.35	45.40	370.13	46.10	0.00
NZA-086	17.86	377.01	44.23	373.35	45.40	0.00
NZA-087	19.61	434.03	42.77	433.43	43.12	19.71
NZA-088	19.40	379.94	43.03	395.99	43.40	0.00
NZA-089	19.86	555.81	42.13	554.86	42.45	0.00
NZA-09	15.85	19.21	13.89	18.56	14.59	0.00
NZA-090	20.05	556.57	41.84	555.81	42.13	0.00
NZA-091	20.51	558.61	40.93	556.95	41.56	0.00
NZA-092	20.66	262.18	41.27	261.70	42.68	0.00
NZA-093	21.00	262.56	40.62	262.18	41.27	0.00
NZA-094	21.18	263.17	39.98	262.56	40.62	0.00
NZA-095	21.31	264.00	39.33	263.17	39.98	0.00
NZA-096	57.08	286.21	15.16	265.85	16.41	0.00
NZA-097	55.91	457.63	16.00	457.75	16.42	0.00
NZA-098	52.98	457.75	16.42	453.64	16.98	0.00
NZA-099	50.76	453.64	16.9815	448.28	17.4404	0

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-00	286.21	15.16
L-01	1325.38	13.35
L-010	559.74	69.78
L-0100	542.55	26.73
L-0101	520.58	27.40
L-0102	520.74	26.88
L-0103	521.33	26.49
L-0104P1	29.39	22.92
L-0104P2	31.74	22.82
L-0104P3	29.58	23.83
L-0104P4	42.33	22.55
L-0104W	402.57	26.37
L-0105	521.56	26.14
L-0106	524.69	25.20
L-0107	505.97	24.81
L-0108	507.90	23.99
L-0109	833.00	18.25
L-011	578.81	70.55
L-0110	508.64	18.41
L-0111P1	200.82	23.35
L-0111P2	214.58	23.35
L-0111P3	63.18	23.46
L-0111W	0.00	0.00
L-0112	478.06	23.87
L-0113	514.61	17.79
L-0114P	510.73	18.09
L-0114W	0.00	0.00
L-0115	510.74	18.18
L-0116	448.28	17.44
L-0117	453.64	16.98
L-0118	457.75	16.42
L-0119	265.85	16.41
L-012	579.61	70.03
L-0120P	36.00	19.77
L-0120W	0.00	0.00
L-0121	40.06	13.43
L-0122P	45.48	12.94
L-0122W	0.00	0.00
L-0123	36.40	19.03
L-0124P1	28.44	18.16
L-0124P2	62.36	18.35
L-0124W	0.00	0.00
L-0125	101.58	19.50
L-0126P	14.46	19.15
L-0126W	81.71	19.16

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0127	96.21	19.04
L-0128P	74.09	15.10
L-0128W	0.00	0.00
L-0129	34.35	25.99
L-0130B	37.00	25.43
L-0131	37.13	23.51
L-0132W	42.88	21.76
L-0133	49.25	13.16
L-0134	63.38	17.99
L-0135	66.16	17.44
L-0136P	24.23	15.91
L-0136W	43.68	17.29
L-0137	66.44	17.09
L-0138	73.07	15.15
L-013B	579.72	69.93
L-014	561.52	68.67
L-0140	60.07	18.77
L-0142	59.00	19.41
L-0143	56.38	17.53
L-0144P	50.50	16.12
L-0144W	8.10	16.58
L-0146	18.39	20.01
L-0147	43.79	14.39
L-0148	17.27	47.93
L-0149P	17.27	26.40
L-0149W	0.42	26.17
L-015	560.85	69.16
L-0150	23.37	50.16
L-0151	24.90	22.53
L-0152	116.97	19.46
L-0153	112.84	27.27
L-0154	110.97	20.71
L-0155B	112.42	20.39
L-0156	70.72	20.56
L-0157W	72.82	20.37
L-0158	82.53	26.94
L-0159	130.46	17.90
L-016	562.14	66.89
L-0160	218.58	24.55
L-0161	217.26	22.55
L-0162	212.59	23.72
L-0163B	214.31	23.23
L-0164	221.75	24.83
L-0165	212.82	26.61
L-0166	56.51	19.21

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0167	78.05	19.60
L-0168	63.47	22.52
L-0169	82.22	25.30
L-017	561.78	67.41
L-0170P1	21.38	25.00
L-0170P2	39.66	24.78
L-0170W	21.44	24.96
L-0171	61.79	17.16
L-0172	61.50	17.72
L-0173B	62.01	17.38
L-0174P	45.61	29.03
L-0174W	0.00	0.00
L-0175P	9.04	18.03
L-0175W	0.00	0.00
L-0176P	19.21	13.89
L-0176W	0.00	0.00
L-0177	18.56	14.59
L-018	561.42	68.14
L-0180P	2.20	29.50
L-0180W	0.00	0.00
L-0181P1	1.94	14.75
L-0181P2	1.97	14.75
L-0181P3	2.02	14.75
L-0181P4	1.97	14.75
L-0181P5	1.84	14.75
L-0181W	87.61	14.75
L-0182P1	26.86	16.04
L-0182P2	21.78	16.63
L-0182W	0.00	0.00
L-0183P1	0.26	13.33
L-0183P2	0.10	13.33
L-0183P3	0.08	13.33
L-0183P4	0.00	59.72
L-0183W	48.80	13.33
L-0184P	19.20	18.49
L-0184W	11.14	18.48
L-0187P	38.58	12.79
L-0187W	0.00	0.00
L-0188	29.43	13.25
L-0189P	7.71	24.50
L-0189W	0.00	0.00
L-019	561.73	66.51
L-0192	7.68	25.15
L-0193	131.95	14.50
L-0194	57.60	33.20

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0195	124.81	15.25
L-0196	121.24	15.72
L-0197P1	5.73	14.36
L-0197P2	4.02	14.63
L-0197P3	8.04	14.09
L-0197P4	7.39	14.14
L-0197P5	6.74	14.22
L-0197P6	3.72	14.65
L-0197P7	7.08	14.17
L-0197W	86.37	15.50
L-0198	114.09	17.51
L-0199	157.42	15.98
L-02	1495.49	13.48
L-0200	115.82	16.32
L-0201	57.60	32.95
L-0202P1	51.48	17.93
L-0202P2	36.30	18.02
L-0202W	0.00	0.00
L-0204P	10.49	39.75
L-0204W	0.00	0.00
L-0205	175.86	46.22
L-0206	174.13	46.80
L-0207	164.63	49.55
L-0208	10.33	43.30
L-0209	10.49	40.19
L-020B	562.14	66.71
L-021	567.01	63.13
L-0210	103.64	43.09
L-0212	175.99	45.68
L-0214P	6.13	43.26
L-0214W	97.50	43.26
L-0215P	6.84	43.16
L-0215W	19.67	43.16
L-0216P1	16.26	43.21
L-0216P2	16.98	42.08
L-0216W	20.23	43.75
L-0218P1	34.52	20.79
L-0218P2	68.72	20.79
L-0218W	0.00	0.00
L-0219	103.24	20.79
L-022	565.44	64.02
L-0220P	3.29	30.41
L-0220W	1.54	22.33
L-0222	18.75	22.49
L-0225W	4.86	12.68

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0226	55.92	23.12
L-0227	56.38	22.00
L-0228P	11.37	21.92
L-0228W	44.26	21.72
L-0229	55.60	21.93
L-023	562.73	65.25
L-0230P	1.95	25.74
L-0230W	54.01	23.33
L-0231	44.13	23.20
L-0232	33.04	21.76
L-0233P1	0.72	24.10
L-0233P2	0.61	23.51
L-0233P3	0.73	24.10
L-0233P4	0.72	24.10
L-0233W	45.67	23.51
L-0234	11.83	23.01
L-0235	12.10	24.35
L-0236	34.16	19.95
L-0237P1	0.09	16.85
L-0237P2	6.91	14.61
L-0237W	0.00	0.00
L-0238	7.77	19.35
L-0239P	110.54	13.54
L-0239W	0.00	0.00
L-024	544.40	60.71
L-0240	103.31	20.54
L-0241	97.93	19.58
L-0242	104.13	19.90
L-0243	81.96	19.28
L-0244P	85.11	18.02
L-0244W	0.00	0.00
L-0245P	15.41	19.75
L-0245W	0.00	0.00
L-0246	22.22	15.30
L-0247	49.25	15.35
L-0249P1	5.54	22.57
L-0249P2	5.54	22.57
L-0249W	0.00	0.00
L-025	543.67	61.14
L-0250	11.23	24.19
L-0251	11.08	23.05
L-0252	33.26	15.30
L-0253P	25.37	16.96
L-0253W	0.00	0.00
L-0254	25.93	17.97

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0255P	14.60	14.29
L-0255W	0.00	0.00
L-0259P	54.39	21.81
L-0259W	0.00	0.00
L-026	542.76	61.53
L-0260B	1379.18	13.36
L-0261	626.92	37.55
L-0262	81.76	26.15
L-0263	30.31	50.92
L-0264	26.27	15.58
L-0266	12.18	19.54
L-0267	12.51	19.69
L-0268	48.00	14.30
L-0269	24.97	15.73
L-027	546.19	59.92
L-0270W	0.00	0.00
L-0271	10.82	18.35
L-0272	10.51	63.58
L-0273P1	8.34	24.55
L-0273P2	12.99	24.55
L-0273W	0.00	0.00
L-0274	21.33	24.80
L-0275	21.69	25.72
L-0276	21.33	25.28
L-0277W	87.80	13.85
L-028	547.41	59.41
L-0280P	52.95	12.50
L-0280W	0.00	0.00
L-0281	51.46	12.82
L-0282	35.58	13.59
L-0283	31.34	14.51
L-0285	89.23	18.71
L-0286	96.31	19.30
L-0287	48.23	26.72
L-0288	45.61	29.04
L-0289	561.94	66.05
L-0290P	3.81	12.08
L-0290W	25.90	13.16
L-0291W1	2.68	12.07
L-0291W2	13.22	13.46
L-0292P	63.89	13.38
L-0293W1	5.77	13.66
L-0293W2	14.34	13.66
L-0294	21.96	13.84
L-0295	27.76	12.56

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0297P	3.57	21.91
L-0297W	0.00	0.00
L-0298P	0.09	15.98
L-0298W	0.00	0.00
L-0299	3.81	14.60
L-029W	547.87	59.19
L-03	717.08	37.37
L-030	552.74	57.04
L-0300	3.38	25.04
L-0302	3.30	27.03
L-0303	3.27	28.81
L-0304	3.49	30.07
L-0305	3.86	29.69
L-0306	4.61	27.23
L-0307	89.08	16.66
L-0308	89.73	17.13
L-0309	87.91	17.55
L-031	550.91	57.67
L-0310	85.62	18.03
L-0311W	3.62	13.56
L-0312W	2.68	14.80
L-0313W	1.45	14.90
L-0314W	0.63	28.91
L-0315	2.26	16.02
L-0317W	7.84	14.15
L-0318W	7.86	13.86
L-0319W	2.02	16.17
L-032	550.30	58.06
L-0320W	4.26	12.78
L-0321W	3.39	13.62
L-0322W	5.65	15.27
L-0323P	0.45	14.76
L-0323W	0.00	0.00
L-0324P	1.08	13.88
L-0324W	0.00	0.00
L-0325P	0.00	0.00
L-0325W	0.00	0.00
L-0326P	243.32	16.77
L-0326W	0.00	0.00
L-0327P	44.81	13.11
L-0327W	0.00	0.00
L-0328P	3.44	12.85
L-0328W	3.43	12.84
L-0329	11.83	22.22
L-033	549.75	58.35

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0330	0.32	18.36
L-0332	1.36	32.49
L-0334DS	5.43	16.83
L-0334P	1.44	16.74
L-0334W1	0.00	0.00
L-0334W2	0.00	0.00
L-0335DS	6.20	15.38
L-0335W	0.00	0.00
L-0336W	0.00	0.00
L-0337	0.00	0.00
L-0337W	15.42	19.75
L-0338	22.39	19.36
L-034	549.10	58.64
L-0340P	9.63	38.83
L-0341P	22.44	13.95
L-0342P	15.35	13.20
L-0343P	0.68	14.88
L-0344W	34.03	13.26
L-0345	14.76	13.51
L-0345P	0.42	12.29
L-0345W1	0.11	22.35
L-0345W2	0.00	0.00
L-0345W3	0.00	0.00
L-0346W	0.88	25.79
L-0347P	5.98	13.10
L-0348P	6.50	13.16
L-0348W1	6.49	13.16
L-0348W2	0.00	0.00
L-035	548.17	59.04
L-0350P	0.74	18.96
L-0350W1	0.74	19.39
L-0350W2	0.00	0.00
L-0351P1	22.51	13.88
L-0351P2	6.42	13.89
L-0351W1	8.05	13.90
L-0351W2	0.00	0.00
L-036DS	2.24	23.28
L-037	510.15	55.55
L-038	553.15	56.83
L-039	554.18	56.33
L-04	1134.60	37.39
L-0400P	1.22	13.43
L-0400W	1.23	13.43
L-0401P	1.81	13.43
L-0401W	1.82	13.43

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0402P	0.00	0.00
L-0402W	0.00	0.00
L-0403P	2.50	17.60
L-0403W	2.50	17.60
L-040B	509.26	56.33
L-041	530.96	51.32
L-045	370.13	46.10
L-046	528.15	49.38
L-047	527.11	50.19
L-048	525.12	50.78
L-049	527.86	49.74
L-05	1012.69	37.44
L-050B	527.99	49.59
L-050W	0.00	0.00
L-051	379.14	43.69
L-052	377.01	44.23
L-053	395.99	43.40
L-054	373.35	45.40
L-055	434.03	42.77
L-056	555.81	42.13
L-057	434.77	42.32
L-058	556.57	41.84
L-059P1	4.19	17.10
L-059P2	33.09	17.14
L-059P3	33.10	17.11
L-059P4	21.46	17.62
L-059W	506.40	41.72
L-06	577.81	71.07
L-060	380.15	42.85
L-061	379.94	43.03
L-062B	88.04	40.01
L-062W	296.09	43.03
L-064	559.05	37.96
L-065	249.77	39.19
L-066	264.00	39.33
L-067	263.17	39.98
L-068	262.56	40.62
L-069	262.18	41.27
L-07	576.52	71.53
L-070	261.70	42.68
L-071	556.95	41.56
L-072	563.26	36.51
L-074	565.83	35.79
L-075	565.95	35.71
L-076	565.03	36.06

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-077B	565.65	35.89
L-078W	552.12	33.68
L-079	551.65	33.81
L-08	574.51	71.42
L-080	552.62	33.53
L-081	566.67	35.31
L-082	568.32	34.68
L-083	550.49	34.19
L-084P1	80.35	33.41
L-084P2	227.60	33.31
L-084P3	221.05	33.34
L-084P4	23.94	33.43
L-084W	0.00	0.00
L-085	554.16	32.85
L-086	556.74	32.33
L-087	556.80	32.02
L-088	558.21	31.43
L-089	563.20	30.96
L-09	574.93	37.64
L-090	533.64	30.22
L-091W	533.70	30.14
L-092	533.73	30.05
L-093P1	381.66	29.97
L-093P2	152.14	29.97
L-093W	0.00	0.00
L-094	534.17	29.70
L-095	535.07	29.35
L-096	535.68	29.01
L-097	538.39	28.37
L-098	542.02	27.61
L-099	542.31	27.14
L-2320W	0.18	24.80
L-2410W	0.00	0.00
L-2420W	0.00	0.00
L-2430P	0.00	0.00
L-2430W	0.00	0.00
L-2440W	1.40	72.00
L-2480W	5.98	13.10
L-2520W	9.47	12.37
L-2530W	22.90	13.41
L-2540W	3.68	12.52
L-2550P	11.37	14.35
L-2560P	11.93	14.34
L-2570P	1.67	19.42
L-2580DS	4.34	12.89

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-2590W	1.72	12.89
L-2600W	0.00	0.00
L-2610DS	5.20	12.62
L-2620DS	2.29	13.40
L-2640W	0.80	13.39
L-2650W	0.00	0.00
L-2660W	0.00	0.00
L-2670W	321.62	39.22
L-2680W	0.00	0.00
L-2700W	120.12	42.57
L-2710W	26.54	42.86
L-2720W	0.00	0.00
L-2730W	11.71	17.47
L-2740W	12.14	16.31
L-2750W	0.00	0.00
L-2760W	0.00	0.00
L-2790P	24.08	26.13
L-2800W	24.08	26.12
L-2840W	0.00	0.00
~~D~L-0334DS~W0	3.49	16.82
~~D~L-0334DS~W1	1.94	16.83
~~D~L-0334DS~W2	0.00	0.00
~~D~L-0335DS~W0	6.20	15.38
~~D~L-0335DS~W1	0.00	0.00
~~D~L-0335DS~W2	0.00	0.00
~~D~L-036DS~W0	2.24	23.27
~~D~L-036DS~W1	0.00	0.00
~~D~L-2580DS~W0	3.11	13.23
~~D~L-2580DS~W1	1.25	12.89
~~D~L-2580DS~W2	0.00	0.00
~~D~L-2610DS~W0	3.24	12.62
~~D~L-2610DS~W1	1.96	12.61
~~D~L-2620DS~W0	1.30	15.59
~~D~L-2620DS~W1	1.07	13.39

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-00	5.24	1984.23	26.66	1994.82	27.11	0.00
NZA-01	4.80	1994.82	27.11	2017.85	27.26	0.00
NZA-010	24.77	1351.03	27.79	1351.01	27.88	29.20
NZA-0100	49.43	1982.51	16.49	1968.32	16.71	0.00
NZA-0101	44.39	1938.59	17.21	1935.40	17.30	0.00
NZA-0102	43.23	3034.78	17.09	2999.02	16.99	0.00
NZA-0103	40.73	955.27	18.37	945.66	19.61	0.00
NZA-0104	40.13	945.66	19.61	942.63	20.64	0.00
NZA-0105	39.52	1103.90	18.61	1078.72	19.82	0.00
NZA-0106	39.08	1078.72	19.82	1071.07	20.64	0.00
NZA-0107	38.55	1071.07	20.64	1070.60	20.79	40.94
NZA-0108	38.38	1070.60	20.79	1070.18	20.92	0.00
NZA-0109	37.82	1070.18	20.92	1068.98	21.29	0.00
NZA-011	24.09	1351.01	27.88	1350.84	28.00	0.00
NZA-0110	37.36	1071.48	21.29	1075.59	21.72	0.00
NZA-0111	37.05	1302.24	20.08	1298.14	20.50	0.00
NZA-0112	36.51	1298.14	20.50	1298.59	20.82	0.00
NZA-0113	35.08	1298.59	20.82	1291.84	21.21	0.00
NZA-0114	34.06	1291.84	21.21	1260.00	22.01	0.00
NZA-0115	33.72	1260.00	22.01	1236.08	22.98	0.00
NZA-0116	33.57	1262.79	22.84	1255.85	23.33	0.00
NZA-0117	33.37	1202.29	23.01	1197.58	23.64	0.00
NZA-0118	33.22	1197.58	23.64	1196.86	23.97	35.50
NZA-0119	31.99	1196.86	23.97	1196.81	24.00	0.00
NZA-012	38.34	305.74	14.62	258.79	16.06	41.04
NZA-0120	30.77	1297.36	24.11	1295.74	24.42	0.00
NZA-0121	29.66	1302.76	24.34	1304.84	24.68	0.00
NZA-0122	28.52	1304.84	24.68	1290.29	24.97	0.00
NZA-0123	28.07	1288.82	24.99	1262.04	26.07	0.00
NZA-0124	27.98	1273.04	25.28	1251.28	27.06	0.00
NZA-0125	27.95	1251.28	27.06	1249.24	27.73	30.00
NZA-0126	26.33	1249.24	27.73	1249.31	27.83	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0127	26.02	1249.60	27.95	1249.82	28.03	0.00
NZA-0128	26.10	1249.38	27.82	1249.60	27.95	20.80
NZA-0129	25.95	1249.89	28.02	1251.07	28.25	0.00
NZA-013	36.89	258.79	16.06	258.70	16.17	0.00
NZA-0130	24.84	1352.68	27.13	1351.19	27.64	0.00
NZA-0131	24.81	1351.19	27.64	1351.03	27.79	0.00
NZA-0134	22.23	776.65	20.35	760.93	21.21	0.00
NZA-0135	22.65	1472.15	26.48	1472.30	26.84	0.00
NZA-0136	13.50	876.64	21.68	870.79	22.19	17.20
NZA-0137	12.95	870.79	22.19	862.22	22.43	0.00
NZA-0138	17.21	223.45	16.26	221.90	16.41	24.32
NZA-0139	17.18	221.90	16.41	220.70	16.58	0.00
NZA-014	34.86	288.28	15.93	288.21	16.01	35.55
NZA-0140	15.68	73.73	15.56	73.66	15.65	15.61
NZA-0142	14.43	379.24	17.96	378.26	18.01	18.90
NZA-0143	13.82	560.00	20.44	549.58	20.85	20.00
NZA-0144	13.68	549.58	20.85	542.63	21.17	0.00
NZA-0145	13.61	380.38	15.10	14.92	30.24	0.00
NZA-0146	15.60	431.32	19.19	430.56	19.36	15.75
NZA-0147	15.20	430.56	19.36	427.97	19.55	0.00
NZA-0148	16.04	297.16	18.37	291.89	18.97	16.00
NZA-0149	15.84	291.89	18.97	291.08	19.13	0.00
NZA-015	33.09	288.21	16.01	288.29	16.10	0.00
NZA-0150	24.56	516.25	13.30	381.32	14.33	24.17
NZA-0151	24.20	381.32	14.33	332.38	14.75	0.00
NZA-0152	23.78	182.61	17.34	181.19	17.73	23.66
NZA-0153	22.67	181.19	17.73	169.36	18.21	0.00
NZA-0154	12.84	876.28	22.80	829.01	23.09	0.00
NZA-0155	12.84	881.57	22.60	864.96	22.84	0.00
NZA-0156	13.55	914.94	20.50	876.64	21.68	0.00
NZA-0157	13.59	542.63	21.17	529.35	22.33	13.30
NZA-0158	14.09	623.58	19.04	591.47	19.61	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0159	14.41	423.81	20.02	417.20	20.59	0.00
NZA-016	29.27	458.84	16.89	458.62	16.99	26.19
NZA-0160	14.61	430.07	19.55	421.90	20.03	0.00
NZA-0161	15.67	291.08	19.13	290.25	19.47	0.00
NZA-0162	16.27	338.34	16.62	297.16	18.37	0.00
NZA-0163	16.42	220.70	16.58	197.62	18.08	0.00
NZA-0164	25.77	1356.86	26.00	1353.13	26.77	0.00
NZA-0165	23.95	1350.98	27.97	1350.68	28.23	0.00
NZA-0166	20.33	946.14	24.41	938.20	25.13	0.00
NZA-0167	19.12	698.59	27.39	663.87	29.85	0.00
NZA-0168	19.33	713.45	27.18	698.59	27.39	0.00
NZA-0169	18.52	514.17	13.62	475.20	14.28	0.00
NZA-017	28.40	458.62	16.99	460.35	17.12	0.00
NZA-0170	25.21	1354.74	26.54	1351.28	27.21	0.00
NZA-0171	13.90	591.47	19.61	560.00	20.44	0.00
NZA-0172	23.58	297.82	15.58	280.81	16.03	0.00
NZA-0173	23.93	406.07	13.57	109.08	18.04	0.00
NZA-0176	17.70	61.02	20.27	66.50	20.20	0.00
NZA-0177	31.27	616.83	14.48	424.70	16.60	35.80
NZA-0178	31.09	424.70	16.60	422.93	16.83	0.00
NZA-0179	17.67	222.16	15.80	219.22	16.27	0.00
NZA-018	31.85	1196.81	24.00	1196.77	24.06	31.49
NZA-0180	17.71	110.58	15.13	17.35	29.76	22.36
NZA-0181	16.41	17.35	29.76	15.06	49.37	0.00
NZA-0182	18.51	453.74	14.73	447.87	14.83	17.77
NZA-0183	18.51	447.87	14.83	440.31	14.93	0.00
NZA-0185	20.81	46.63	25.49	46.39	25.73	0.00
NZA-0186	20.35	340.16	26.47	340.12	26.57	19.89
NZA-0188	20.14	371.51	24.78	368.43	25.67	19.05
NZA-019	31.34	1201.13	23.98	1200.91	24.06	0.00
NZA-0192	12.84	875.14	22.35	853.60	22.74	0.00
NZA-0193	18.52	467.64	14.41	453.74	14.73	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0194	18.51	440.31	14.93	398.77	15.05	0.00
NZA-0195	18.50	663.64	14.54	513.06	14.36	0.00
NZA-0196	18.50	513.06	14.36	248.66	15.00	0.00
NZA-0197	16.87	1463.35	38.02	1461.65	38.46	0.00
NZA-0198	18.49	236.14	15.46	145.81	31.75	24.78
NZA-0199	18.29	145.81	31.75	145.81	31.86	17.92
NZA-02	4.42	2017.93	27.25	2046.06	27.21	0.00
NZA-020	30.84	217.97	16.74	207.25	16.85	36.34
NZA-0202	19.34	915.20	26.93	892.21	27.74	0.00
NZA-0205	20.09	955.96	22.55	918.24	26.61	0.00
NZA-0206	19.90	918.24	26.61	915.20	26.93	0.00
NZA-0208	20.60	46.39	25.73	45.67	26.98	0.00
NZA-0209	20.39	710.63	25.85	709.36	26.09	0.00
NZA-021	30.77	207.25	16.85	181.91	16.98	0.00
NZA-0210	23.82	263.87	14.33	182.61	17.34	0.00
NZA-0211	22.65	151.17	19.13	135.77	19.89	0.00
NZA-0212	22.66	179.65	17.98	151.17	19.13	0.00
NZA-0213	23.94	349.64	14.75	297.82	15.58	0.00
NZA-0214	23.58	1396.44	27.38	1394.37	28.43	0.00
NZA-0215	35.01	289.22	15.65	288.28	15.93	0.00
NZA-0216	29.55	288.29	16.10	287.17	16.39	0.00
NZA-0217	24.76	346.77	15.44	320.56	16.86	0.00
NZA-0218	19.51	190.52	19.65	190.17	19.82	0.00
NZA-0219	20.12	192.99	19.68	190.52	19.65	20.94
NZA-022	32.75	305.52	14.42	207.90	16.69	32.67
NZA-0220	20.63	84.61	14.07	81.75	14.44	0.00
NZA-0221	19.10	191.42	19.74	191.25	19.95	0.00
NZA-0222	18.58	191.25	19.95	186.01	19.44	0.00
NZA-0223	18.53	186.01	19.44	176.45	19.46	17.73
NZA-0224	20.76	37.85	12.28	21.53	12.55	0.00
NZA-0226	19.98	94.11	15.24	68.19	18.74	0.00
NZA-0228	20.00	112.02	14.04	22.92	20.63	19.72

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0229	20.84	89.48	14.12	37.05	16.15	0.00
NZA-023	31.15	207.90	16.69	206.33	16.77	0.00
NZA-0230	20.18	167.45	21.16	169.85	20.65	19.47
NZA-0231	20.32	107.42	20.49	106.66	21.38	0.00
NZA-0232	14.24	378.26	18.01	378.10	18.25	0.00
NZA-0233	15.83	330.37	13.01	281.77	13.59	17.50
NZA-0234	15.18	397.45	16.41	384.90	17.29	0.00
NZA-0235	14.96	384.90	17.29	379.24	17.96	0.00
NZA-0236	16.13	281.11	16.83	277.45	17.23	19.00
NZA-0237	15.55	277.45	17.23	275.12	17.70	0.00
NZA-0238	15.28	371.03	15.94	344.62	17.44	0.00
NZA-0239	24.72	320.56	16.86	318.61	17.21	24.00
NZA-024	41.01	822.89	25.55	823.54	25.98	0.00
NZA-0240	22.86	318.61	17.21	286.40	18.19	0.00
NZA-0241	22.84	297.06	18.06	288.12	19.10	27.00
NZA-0242	22.25	288.12	19.10	273.68	19.51	0.00
NZA-0243	15.88	72.43	17.60	72.41	17.60	19.00
NZA-0244	15.83	99.25	16.25	93.16	15.27	0.00
NZA-0245	15.61	201.37	15.00	153.39	14.45	0.00
NZA-0246	15.76	93.16	15.27	85.92	14.90	0.00
NZA-0247	20.94	167.99	15.22	59.98	20.92	21.19
NZA-0248	20.74	48.80	20.68	48.74	20.90	0.00
NZA-0249	20.28	155.24	21.40	155.77	21.83	0.00
NZA-025	43.21	3006.10	17.01	822.89	25.55	42.41
NZA-0250	20.33	48.74	20.90	48.59	21.45	0.00
NZA-0251	23.37	48.10	18.00	47.25	19.04	0.00
NZA-0252	22.25	182.74	15.47	107.42	20.49	0.00
NZA-0253	22.74	47.25	19.04	46.55	21.00	0.00
NZA-0254	17.44	215.63	13.63	80.41	16.79	19.00
NZA-0255	16.11	33.60	16.80	36.26	17.22	0.00
NZA-0256	16.93	81.84	16.26	44.06	18.95	18.50
NZA-0258	15.96	79.82	13.90	73.73	15.56	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-026	45.93	1939.08	17.15	1938.59	17.21	0.00
NZA-0261	11.21	972.60	15.20	543.80	19.03	11.50
NZA-0261A	8.23	543.80	19.03	546.14	19.24	11.50
NZA-0262	7.73	546.14	19.24	500.54	19.98	0.00
NZA-0263	21.95	190.68	13.85	106.25	15.88	0.00
NZA-0265	19.01	59.09	32.08	58.41	36.75	0.00
NZA-0266	19.03	60.01	16.11	53.89	16.13	0.00
NZA-0267	19.08	892.21	27.74	840.35	30.71	0.00
NZA-0268	19.06	57.91	31.71	46.98	31.73	0.00
NZA-0269	21.33	97.74	14.86	47.96	20.09	0.00
NZA-027	47.18	1968.32	16.71	1939.08	17.15	51.60
NZA-0270	21.11	47.96	20.09	48.18	20.38	0.00
NZA-0271	20.95	197.84	13.70	197.47	13.74	0.00
NZA-0272	19.03	104.87	13.82	95.87	14.95	0.00
NZA-0273	19.89	300.79	15.02	45.02	25.93	21.50
NZA-0274	18.46	45.02	25.93	45.03	26.11	0.00
NZA-0275	18.14	45.03	26.11	45.17	26.27	0.00
NZA-0276	17.72	45.17	26.27	46.91	26.03	0.00
NZA-0277	17.71	101.27	15.03	72.87	17.60	0.00
NZA-0278	16.42	231.96	12.30	154.06	12.38	0.00
NZA-0279	16.22	124.60	12.43	105.38	12.83	0.00
NZA-028	58.05	259.29	14.86	94.61	22.76	61.83
NZA-0280	13.20	288.05	13.33	277.15	13.65	0.00
NZA-0281	13.07	81.96	13.31	73.26	14.04	0.00
NZA-0282	15.69	10.51	12.52	3.79	17.92	0.00
NZA-0283	12.84	347.80	13.66	320.73	13.62	0.00
NZA-0285	16.30	5.61	12.51	2.35	13.61	0.00
NZA-0286	30.89	461.42	16.57	458.84	16.89	0.00
NZA-0287	26.54	492.00	16.94	485.37	17.26	0.00
NZA-0288	12.67	1642.19	46.58	1639.28	48.48	0.00
NZA-0289	16.50	84.42	12.63	49.18	12.97	0.00
NZA-029	58.51	1420.73	14.40	1387.75	14.73	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0290	16.49	51.79	12.65	24.35	14.26	0.00
NZA-0291	17.61	92.16	12.63	70.96	13.11	0.00
NZA-0292	16.41	144.85	13.34	144.85	13.34	0.00
NZA-0293	16.33	75.88	13.60	75.44	13.66	0.00
NZA-0295	16.20	89.61	12.48	89.86	12.52	0.00
NZA-0296	18.50	25.63	13.59	5.91	31.59	21.50
NZA-0297	16.38	10.74	12.19	2.03	13.60	0.00
NZA-0298	20.00	116.07	14.08	114.88	14.03	21.50
NZA-0299	18.14	7.50	19.60	7.41	20.56	0.00
NZA-03	3.67	2225.75	26.25	2259.67	26.13	8.40
NZA-030	16.88	92.70	12.84	77.57	13.14	0.00
NZA-0300	17.73	12.14	27.27	12.32	28.36	0.00
NZA-0301	17.74	7.41	20.56	6.86	24.56	0.00
NZA-0302	17.69	12.32	28.36	12.61	28.72	0.00
NZA-0303	17.59	52.45	16.14	17.75	23.50	0.00
NZA-0304	17.59	87.28	16.12	51.47	16.22	0.00
NZA-0305	17.68	97.53	14.54	87.21	16.12	0.00
NZA-0306	17.74	404.15	15.03	394.09	15.45	0.00
NZA-0307	17.20	304.19	15.64	303.92	15.93	0.00
NZA-0308	16.63	303.92	15.93	294.66	16.22	0.00
NZA-0309	16.40	294.66	16.22	281.11	16.83	0.00
NZA-031	16.91	106.79	12.65	92.70	12.84	29.83
NZA-0310	21.61	69.34	12.28	15.09	12.92	0.00
NZA-0311	22.90	45.56	12.28	7.42	13.16	0.00
NZA-0312	22.46	48.59	12.48	13.87	13.62	0.00
NZA-0313	20.83	11.68	16.29	1.35	29.76	0.00
NZA-0314	21.26	68.63	12.50	30.69	13.54	0.00
NZA-0315	22.16	54.75	12.48	11.83	13.91	0.00
NZA-0316	21.24	115.45	12.37	30.53	13.54	0.00
NZA-0317	16.38	7.06	12.20	1.35	13.61	0.00
NZA-0318	20.51	35.91	12.28	15.41	12.63	0.00
NZA-0319	20.26	50.91	12.48	8.77	14.25	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-032	14.92	1607.95	40.40	1607.20	40.61	0.00
NZA-0320	20.00	57.06	12.47	10.09	12.79	0.00
NZA-0321	20.74	13.93	12.28	2.04	13.26	0.00
NZA-0322	20.82	25.34	12.28	5.01	13.00	0.00
NZA-0323	19.58	33.45	12.28	0.05	24.53	0.00
NZA-0324	21.15	116.34	12.48	31.18	13.66	0.00
NZA-0325	12.12	740.86	15.15	389.41	19.23	12.90
NZA-0326	11.70	143.67	12.67	85.61	13.43	10.39
NZA-0327	18.39	38.16	12.48	8.24	13.24	0.00
NZA-0328	23.50	380.72	13.28	48.10	18.00	0.00
NZA-0329	17.72	8.24	13.24	8.23	13.24	0.00
NZA-033	16.37	1468.98	40.73	1468.19	40.77	24.30
NZA-0331	25.71	87.61	12.63	17.30	14.63	0.00
NZA-0332	25.65	140.57	12.63	87.42	13.35	0.00
NZA-0333	3.60	2339.38	26.07	1061.28	12.00	0.00
NZA-0335	21.34	892.64	25.12	891.94	26.13	20.55
NZA-0336	16.38	5.62	12.51	5.61	12.51	0.00
NZA-0337	28.53	80.76	15.00	29.69	16.32	0.00
NZA-0338	16.40	10.79	12.19	10.74	12.19	16.04
NZA-0339	30.46	17.02	12.53	4.42	13.63	0.00
NZA-034	12.61	1648.99	49.62	1648.62	49.63	12.40
NZA-0340	29.92	51.42	13.10	50.87	13.25	0.00
NZA-0341	31.47	81.89	12.48	47.54	13.05	0.00
NZA-0342	28.73	99.76	12.63	84.60	13.00	0.00
NZA-0343	46.45	57.09	13.70	8.60	20.87	0.00
NZA-0344	65.99	37.35	12.75	35.87	12.93	0.00
NZA-0345	18.57	39.58	12.48	3.42	16.91	0.00
NZA-0346	17.36	7.78	12.52	2.64	13.56	0.00
NZA-0347	19.17	135.03	12.50	36.81	13.68	0.00
NZA-0348	26.06	212.37	12.63	132.06	13.36	0.00
NZA-0349	18.52	3.42	16.91	3.42	16.91	0.00
NZA-035	10.04	1648.62	49.63	1648.62	49.76	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0350	17.27	2.64	13.56	2.64	13.56	0.00
NZA-0351	17.75	19.44	13.36	19.42	13.36	0.00
NZA-0352	16.40	7.11	12.20	7.06	12.20	0.00
NZA-0353	16.40	10.52	12.51	10.51	12.52	0.00
NZA-0354	12.70	58.29	13.58	14.09	71.29	0.00
NZA-0355	13.69	0.00	34.65	0.00	55.13	0.00
NZA-0356	14.32	28.97	12.30	28.63	12.34	0.00
NZA-0357	14.63	162.56	12.48	89.90	13.08	0.00
NZA-0358	14.32	14.69	12.30	12.90	12.43	0.00
NZA-0359	16.03	182.79	12.47	7.27	16.55	0.00
NZA-036	14.98	316.91	12.63	20.34	18.67	19.54
NZA-0360	16.54	46.68	12.30	38.08	12.45	0.00
NZA-0361	17.33	20.55	12.30	13.14	12.55	0.00
NZA-0362	15.68	44.48	12.28	25.27	12.59	0.00
NZA-037	13.25	261.07	14.38	260.07	14.66	14.41
NZA-038	14.17	159.22	14.07	77.13	17.51	0.00
NZA-039	13.84	127.40	13.25	126.56	13.37	11.61
NZA-04	3.63	2259.67	26.13	2339.38	26.07	0.00
NZA-040	18.49	248.66	15.00	175.39	15.69	34.86
NZA-042	13.58	1612.80	42.55	1612.33	42.64	11.60
NZA-043	13.56	1612.33	42.64	1611.29	42.81	0.00
NZA-044	21.09	1595.12	25.09	1594.30	25.22	19.95
NZA-045	21.07	1594.30	25.22	1593.47	25.36	0.00
NZA-046	20.04	714.67	27.07	714.30	27.16	23.60
NZA-047	20.02	714.30	27.16	714.16	27.19	0.00
NZA-0470	56.79	35.87	12.93	35.87	12.94	53.88
NZA-048	19.00	1412.18	36.04	1411.88	36.54	26.30
NZA-049	17.69	1411.88	36.54	1411.58	36.59	0.00
NZA-05	6.37	1713.72	27.15	1712.37	27.36	16.40
NZA-050	5.53	1727.38	29.20	1750.40	29.01	0.00
NZA-051	5.89	1715.28	29.17	1727.38	29.20	0.00
NZA-052	6.10	1710.71	27.84	1715.28	29.17	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-053	6.24	1711.91	27.44	1710.69	27.84	0.00
NZA-054	4.04	2046.06	27.21	2129.73	26.80	0.00
NZA-055	3.90	2129.76	26.80	2185.38	26.45	0.00
NZA-056	3.75	2185.99	26.43	2225.75	26.25	0.00
NZA-057	6.43	1648.22	51.88	1648.81	52.64	0.00
NZA-058	6.60	1648.20	51.22	1648.22	51.88	0.00
NZA-059	7.10	1648.50	50.54	1648.20	51.22	0.00
NZA-06	6.30	1712.37	27.36	1711.91	27.44	0.00
NZA-060	7.92	1648.55	50.17	1648.50	50.54	0.00
NZA-061	8.44	1648.62	49.76	1648.55	50.17	0.00
NZA-062	12.64	1639.28	48.48	1639.21	49.62	0.00
NZA-063	12.70	1653.29	44.38	1644.66	45.99	0.00
NZA-064	12.77	1661.25	43.71	1653.29	44.38	0.00
NZA-065	12.84	1673.22	25.30	1661.25	43.71	0.00
NZA-066	12.97	1603.02	43.84	1600.47	43.99	0.00
NZA-067	13.11	1605.28	43.64	1603.02	43.84	0.00
NZA-068	13.25	1608.96	43.11	1605.47	43.51	0.00
NZA-069	13.39	1611.29	42.81	1608.95	43.12	0.00
NZA-07	7.58	500.54	19.98	417.65	22.29	8.89
NZA-070	13.70	1616.37	42.12	1615.24	42.34	0.00
NZA-071	13.84	1617.71	41.87	1616.67	42.07	0.00
NZA-072	14.05	1618.60	41.68	1617.71	41.87	0.00
NZA-073	14.19	1619.63	41.46	1618.60	41.68	0.00
NZA-074	14.32	1621.70	40.87	1618.86	41.40	0.00
NZA-075	14.49	1605.69	41.03	1605.08	41.19	0.00
NZA-076	14.69	1607.20	40.61	1605.69	41.03	0.00
NZA-077	16.40	1475.11	38.57	1468.98	40.73	0.00
NZA-078	15.95	172.41	12.48	17.80	15.59	0.00
NZA-079	15.46	59.43	12.50	2.01	22.76	0.00
NZA-08	17.30	187.56	12.63	44.42	14.43	19.57
NZA-082	17.09	1410.14	37.01	1406.99	37.74	0.00
NZA-083	17.47	1411.58	36.59	1410.06	37.03	0.00

4% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-084	19.05	1419.67	34.01	1412.18	36.04	0.00
NZA-085	19.07	643.33	32.82	638.16	35.25	0.00
NZA-086	19.10	663.87	29.85	643.33	32.82	0.00
NZA-087	20.11	938.20	25.13	931.31	26.00	19.71
NZA-088	19.87	714.16	27.19	713.45	27.18	0.00
NZA-089	20.47	1606.07	25.10	1601.20	25.45	0.00
NZA-09	16.08	44.42	14.43	44.29	14.75	0.00
NZA-090	20.75	1593.47	25.36	1591.37	25.63	0.00
NZA-091	21.17	1600.27	24.56	1595.12	25.09	0.00
NZA-092	21.26	788.23	22.38	767.55	23.38	0.00
NZA-093	21.53	798.59	21.79	788.23	22.38	0.00
NZA-094	21.73	752.55	21.79	746.71	22.32	0.00
NZA-095	21.89	760.93	21.21	752.55	21.79	0.00
NZA-096	57.90	1128.76	14.72	1042.25	15.57	0.00
NZA-097	57.02	1780.04	15.21	1740.86	15.86	0.00
NZA-098	54.31	1740.86	15.86	1725.88	16.18	0.00
NZA-099	52.19	1725.88	16.1779	1701.12	16.6719	0

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-00	1128.76	14.72
L-01	2225.75	26.25
L-010	1648.81	52.64
L-0100	1298.14	20.50
L-0101	1075.59	21.72
L-0102	1068.98	21.29
L-0103	1070.18	20.92
L-0104P1	30.44	16.47
L-0104P2	41.39	14.77
L-0104P3	30.68	16.48
L-0104P4	45.26	49.03
L-0104W	972.18	20.82
L-0105	1071.07	20.64
L-0106	1078.72	19.82
L-0107	942.63	20.64
L-0108	945.66	19.61
L-0109	2999.02	16.99
L-011	1710.69	27.84
L-0110	1935.40	17.30
L-0111P1	339.36	25.55
L-0111P2	362.61	25.55
L-0111P3	120.91	25.51
L-0111W	0.01	25.49
L-0112	823.54	25.98
L-0113	1968.32	16.71
L-0114P	1939.08	17.15
L-0114W	0.00	0.00
L-0115	1938.59	17.21
L-0116	1701.12	16.67
L-0117	1725.88	16.18
L-0118	1740.86	15.86
L-0119	1042.25	15.57
L-012	1711.91	27.44
L-0120P	42.35	15.77
L-0120W	166.24	16.70
L-0121	181.91	16.98
L-0122P	207.25	16.85
L-0122W	0.00	0.00
L-0123	206.33	16.77
L-0124P1	255.37	16.63
L-0124P2	169.37	16.54
L-0124W	0.00	0.00
L-0125	485.37	17.26
L-0126P	19.38	19.27
L-0126W	440.06	16.98

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0127	458.84	16.89
L-0128P	258.79	16.06
L-0128W	0.00	0.00
L-0129	273.68	19.51
L-0130B	288.12	19.10
L-0131	286.40	18.19
L-0132W	318.61	17.21
L-0133	320.56	16.86
L-0134	287.17	16.39
L-0135	288.29	16.10
L-0136P	24.51	13.52
L-0136W	269.53	16.01
L-0137	288.28	15.93
L-0138	258.70	16.17
L-013B	1712.37	27.36
L-014	1648.20	51.22
L-0140	297.82	15.58
L-0142	280.81	16.03
L-0143	332.38	14.75
L-0144P	61.36	13.57
L-0144W	330.05	14.37
L-0146	109.08	18.04
L-0147	182.61	17.34
L-0148	169.36	18.21
L-0149P	19.68	15.51
L-0149W	163.19	17.76
L-015	1648.22	51.88
L-0150	151.17	19.13
L-0151	66.50	20.20
L-0152	560.00	20.44
L-0153	520.07	22.42
L-0154	542.63	21.17
L-0155B	549.58	20.85
L-0156	291.08	19.13
L-0157W	291.89	18.97
L-0158	417.20	20.59
L-0159	591.47	19.61
L-016	1648.62	49.76
L-0160	853.60	22.74
L-0161	876.64	21.68
L-0162	862.22	22.43
L-0163B	870.79	22.19
L-0164	864.96	22.84
L-0165	829.01	23.09
L-0166	197.62	18.08

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0167	297.16	18.37
L-0168	290.25	19.47
L-0169	427.97	19.55
L-017	1648.55	50.17
L-0170P1	26.25	16.89
L-0170P2	45.49	16.68
L-0170W	366.25	19.41
L-0171	219.22	16.27
L-0172	220.70	16.58
L-0173B	221.90	16.41
L-0174P	417.65	22.29
L-0174W	0.00	0.00
L-0175P	20.34	18.67
L-0175W	0.00	0.00
L-0176P	44.42	14.43
L-0176W	0.00	0.00
L-0177	44.29	14.75
L-018	1648.50	50.54
L-0180P	12.24	31.02
L-0180W	2.84	28.87
L-0181P1	3.88	14.96
L-0181P2	3.97	14.95
L-0181P3	4.07	14.93
L-0181P4	3.94	14.96
L-0181P5	3.77	14.97
L-0181W	241.75	14.58
L-0182P1	32.78	14.01
L-0182P2	31.07	15.03
L-0182W	13.50	17.68
L-0183P1	2.40	13.37
L-0183P2	2.03	13.37
L-0183P3	2.05	13.37
L-0183P4	0.94	13.37
L-0183W	119.15	13.37
L-0184P	20.31	24.36
L-0184W	53.53	15.65
L-0187P	92.70	12.84
L-0187W	0.00	0.00
L-0188	77.57	13.14
L-0189P	17.35	29.76
L-0189W	0.00	0.00
L-019	1639.21	49.62
L-0192	15.06	49.37
L-0193	467.64	14.41
L-0194	145.81	31.86

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0195	453.74	14.73
L-0196	440.31	14.93
L-0197P1	6.59	13.20
L-0197P2	4.94	13.34
L-0197P3	8.77	13.04
L-0197P4	8.12	13.09
L-0197P5	7.55	13.13
L-0197P6	4.60	13.35
L-0197P7	7.87	13.11
L-0197W	418.00	14.87
L-0198	248.66	15.00
L-0199	513.06	14.36
L-02	2339.38	26.07
L-0200	398.77	15.05
L-0201	145.81	31.75
L-0202P1	98.69	15.65
L-0202P2	76.78	15.75
L-0202W	114.77	30.40
L-0204P	14.71	20.62
L-0204W	33.00	25.50
L-0205	915.20	26.93
L-0206	892.21	27.74
L-0207	782.96	33.22
L-0208	45.67	26.98
L-0209	46.39	25.73
L-020B	1648.62	49.63
L-021	1661.25	43.71
L-0210	371.51	24.78
L-0212	918.24	26.61
L-0214P	7.38	19.03
L-0214W	366.36	25.70
L-0215P	9.01	19.53
L-0215W	335.11	26.59
L-0216P1	16.63	17.55
L-0216P2	16.97	17.22
L-0216W	292.56	22.38
L-0218P1	189.13	18.01
L-0218P2	189.13	18.01
L-0218W	0.00	0.00
L-0219	378.10	18.25
L-022	1653.29	44.38
L-0220P	3.20	48.41
L-0220W	22.09	20.63
L-0222	67.92	19.94
L-0225W	21.53	12.55

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0226	186.01	19.44
L-0227	191.25	19.95
L-0228P	14.41	19.65
L-0228W	176.11	19.65
L-0229	190.17	19.82
L-023	1642.19	46.58
L-0230P	1.66	17.45
L-0230W	174.96	19.47
L-0231	155.77	21.83
L-0232	106.66	21.38
L-0233P1	1.46	21.52
L-0233P2	1.38	21.52
L-0233P3	1.45	21.52
L-0233P4	1.45	21.52
L-0233W	164.11	20.65
L-0234	47.25	19.04
L-0235	46.55	21.00
L-0236	107.42	20.49
L-0237P1	0.54	14.42
L-0237P2	8.66	13.45
L-0237W	0.00	0.00
L-0238	22.87	19.63
L-0239P	281.77	13.59
L-0239W	0.00	0.00
L-024	1605.28	43.64
L-0240	379.24	17.96
L-0241	344.62	17.44
L-0242	384.90	17.29
L-0243	275.12	17.70
L-0244P	277.45	17.23
L-0244W	0.00	0.00
L-0245P	72.41	17.60
L-0245W	0.00	0.00
L-0246	85.92	14.90
L-0247	153.39	14.45
L-0249P1	15.94	19.15
L-0249P2	15.94	19.15
L-0249W	17.11	20.78
L-025	1603.02	43.84
L-0250	48.59	21.45
L-0251	48.74	20.90
L-0252	73.73	15.56
L-0253P	33.60	16.80
L-0253W	0.00	0.00
L-0254	36.26	17.22

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0255P	44.06	18.95
L-0255W	0.00	0.00
L-0259P	94.61	22.76
L-0259W	0.00	0.00
L-026	1600.47	43.99
L-0260B	2259.67	26.13
L-0261	2017.85	27.26
L-0262	421.90	20.03
L-0263	135.77	19.89
L-0264	82.13	15.93
L-0266	47.96	20.09
L-0267	48.18	20.38
L-0268	104.87	13.82
L-0269	37.11	14.36
L-027	1608.95	43.12
L-0270W	0.00	0.00
L-0271	53.89	16.13
L-0272	30.10	16.20
L-0273P1	21.41	25.93
L-0273P2	23.61	25.93
L-0273W	0.00	0.00
L-0274	45.03	26.11
L-0275	46.91	26.03
L-0276	45.17	26.27
L-0277W	320.73	13.62
L-028	1611.29	42.81
L-0280P	124.60	12.43
L-0280W	0.00	0.00
L-0281	105.38	12.83
L-0282	81.96	13.31
L-0283	73.26	14.04
L-0285	422.93	16.83
L-0286	460.35	17.12
L-0287	546.14	19.24
L-0288	500.54	19.98
L-0289	1639.28	48.48
L-0290P	4.01	10.63
L-0290W	47.53	12.98
L-0291W1	2.20	10.01
L-0291W2	22.62	14.25
L-0292P	144.85	13.34
L-0293W1	10.83	13.04
L-0293W2	60.17	13.12
L-0294	75.44	13.66
L-0295	89.86	12.52

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0297P	7.50	19.60
L-0297W	0.00	0.00
L-0298P	5.91	31.59
L-0298W	0.00	0.00
L-0299	7.41	20.56
L-029W	1612.33	42.64
L-03	2046.06	27.21
L-030	1605.08	41.19
L-0300	6.86	24.56
L-0302	12.32	28.36
L-0303	12.61	28.72
L-0304	17.75	23.50
L-0305	27.83	22.37
L-0306	35.08	22.12
L-0307	304.19	15.64
L-0308	303.92	15.93
L-0309	294.66	16.22
L-031	1618.56	41.47
L-0310	281.11	16.83
L-0311W	15.09	12.92
L-0312W	13.87	13.62
L-0313W	7.42	13.16
L-0314W	1.35	29.76
L-0315	11.83	13.91
L-0317W	30.53	13.54
L-0318W	30.69	13.54
L-0319W	8.77	14.25
L-032	1618.60	41.68
L-0320W	15.41	12.63
L-0321W	10.09	12.79
L-0322W	31.18	13.66
L-0323P	2.04	13.26
L-0323W	0.00	0.00
L-0324P	5.01	13.00
L-0324W	0.00	0.00
L-0325P	0.05	24.53
L-0325W	0.00	0.00
L-0326P	389.41	19.23
L-0326W	0.00	0.00
L-0327P	85.61	13.43
L-0327W	0.00	0.00
L-0328P	8.24	13.24
L-0328W	8.23	13.24
L-0329	48.10	18.00
L-033	1617.71	41.87

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0330	0.89	72.00
L-0332	2.58	36.60
L-0334DS	13.01	13.35
L-0334P	11.01	13.35
L-0334W1	31.69	13.35
L-0334W2	31.69	13.35
L-0335DS	17.30	14.63
L-0335W	0.00	0.00
L-0336W	0.00	0.00
L-0337	3.54	15.51
L-0337W	72.43	17.60
L-0338	58.41	36.75
L-034	1616.37	42.12
L-0340P	13.11	36.05
L-0341P	29.69	16.32
L-0342P	47.54	13.05
L-0343P	4.42	13.63
L-0344W	84.60	13.00
L-0345	50.87	13.25
L-0345P	2.64	13.56
L-0345W1	1.88	13.54
L-0345W2	0.77	13.64
L-0345W3	0.00	0.00
L-0346W	8.60	20.87
L-0347P	35.87	12.94
L-0348P	19.44	13.36
L-0348W1	19.42	13.36
L-0348W2	17.72	13.73
L-035	1612.80	42.55
L-0350P	3.42	16.91
L-0350W1	3.42	16.91
L-0350W2	0.00	0.00
L-0351P1	44.83	12.88
L-0351P2	14.01	13.36
L-0351W1	74.74	13.36
L-0351W2	0.39	13.36
L-036DS	17.80	15.59
L-037	1468.98	40.73
L-038	1605.69	41.03
L-039	1607.20	40.61
L-04	2185.38	26.45
L-0400P	1.35	13.61
L-0400W	1.36	13.61
L-0401P	2.03	13.60
L-0401W	2.04	13.60

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0402P	2.35	13.61
L-0402W	2.35	13.61
L-0403P	3.79	17.92
L-0403W	3.79	17.91
L-040B	1468.19	40.77
L-041	1461.65	38.46
L-045	638.16	35.25
L-046	1412.18	36.04
L-047	1410.06	37.03
L-048	1406.99	37.74
L-049	1411.58	36.59
L-05	2129.73	26.80
L-050B	1411.88	36.54
L-050W	0.00	0.00
L-051	698.59	27.39
L-052	663.87	29.85
L-053	713.45	27.18
L-054	643.33	32.82
L-055	938.20	25.13
L-056	1591.37	25.63
L-057	946.14	24.41
L-058	1593.47	25.36
L-059P1	4.20	14.28
L-059P2	33.15	14.28
L-059P3	33.16	14.28
L-059P4	21.68	14.45
L-059W	1553.10	25.23
L-06	1715.28	29.17
L-060	714.67	27.07
L-061	714.16	27.19
L-062B	169.84	27.28
L-062W	544.48	27.09
L-064	1394.37	28.43
L-065	589.06	27.45
L-066	760.93	21.21
L-067	752.55	21.79
L-068	746.71	22.32
L-069	788.23	22.38
L-07	1727.38	29.20
L-070	767.55	23.38
L-071	1595.12	25.09
L-072	1350.68	28.23
L-074	1351.03	27.79
L-075	1351.19	27.64
L-076	1350.84	28.00

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-077B	1351.01	27.88
L-078W	1249.60	27.95
L-079	1249.82	28.03
L-08	1750.40	29.01
L-080	1249.31	27.83
L-081	1351.28	27.21
L-082	1353.13	26.77
L-083	1251.07	28.25
L-084P1	204.14	27.77
L-084P2	488.86	27.77
L-084P3	489.71	27.73
L-084P4	66.54	27.77
L-084W	0.00	0.00
L-085	1251.28	27.06
L-086	1262.04	26.07
L-087	1285.81	25.09
L-088	1304.84	24.68
L-089	1295.74	24.42
L-09	1994.82	27.11
L-090	1200.91	24.06
L-091W	1196.77	24.06
L-092	1196.81	24.00
L-093P1	875.50	23.98
L-093P2	321.36	23.94
L-093W	0.00	0.00
L-094	1197.58	23.64
L-095	1202.29	23.01
L-096	1236.08	22.98
L-097	1260.00	22.01
L-098	1291.84	21.21
L-099	1298.59	20.82
L-2320W	2.01	22.76
L-2410W	0.00	0.00
L-2420W	0.00	55.13
L-2430P	2.90	17.68
L-2430W	0.00	0.00
L-2440W	14.09	71.29
L-2480W	35.87	12.93
L-2520W	28.63	12.34
L-2530W	89.90	13.08
L-2540W	12.90	12.43
L-2550P	45.75	15.26
L-2560P	47.41	15.27
L-2570P	7.27	16.55
L-2580DS	10.85	12.45

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-2590W	26.76	12.45
L-2600W	0.48	12.45
L-2610DS	13.14	12.55
L-2620DS	7.01	12.59
L-2640W	18.27	12.59
L-2650W	55.35	23.82
L-2660W	0.00	0.00
L-2670W	883.97	26.48
L-2680W	0.00	0.00
L-2700W	660.11	26.02
L-2710W	340.09	26.49
L-2720W	0.00	0.00
L-2730W	60.01	16.11
L-2740W	75.99	15.37
L-2750W	46.81	16.79
L-2760W	0.00	0.00
L-2790P	29.29	19.04
L-2800W	514.51	19.03
L-2840W	0.00	0.00
~~D~L-0334DS~W0	3.51	12.71
~~D~L-0334DS~W1	9.52	13.35
~~D~L-0334DS~W2	0.00	0.00
~~D~L-0335DS~W0	14.38	14.63
~~D~L-0335DS~W1	2.91	14.63
~~D~L-0335DS~W2	0.00	0.00
~~D~L-036DS~W0	2.77	32.71
~~D~L-036DS~W1	15.88	15.59
~~D~L-2580DS~W0	3.11	12.05
~~D~L-2580DS~W1	9.05	12.69
~~D~L-2580DS~W2	2.39	12.45
~~D~L-2610DS~W0	3.24	12.05
~~D~L-2610DS~W1	11.86	12.55
~~D~L-2620DS~W0	1.30	18.03
~~D~L-2620DS~W1	6.51	12.59

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-00	5.77	2995.04	28.54	2995.18	28.77	0.00
NZA-01	5.44	2995.18	28.77	2996.63	28.90	0.00
NZA-010	25.12	1650.59	26.61	1650.56	26.73	29.20
NZA-0100	49.97	2621.75	16.31	2556.56	16.63	0.00
NZA-0101	44.65	2502.48	17.19	2496.00	17.27	0.00
NZA-0102	43.68	3915.58	17.05	3829.66	17.02	0.00
NZA-0103	40.86	1280.56	24.25	1270.50	24.86	0.00
NZA-0104	40.28	1270.50	24.86	1263.64	25.39	0.00
NZA-0105	39.67	1360.34	17.74	1316.78	18.92	0.00
NZA-0106	39.23	1316.78	18.92	1308.73	26.11	0.00
NZA-0107	38.66	1308.73	26.11	1308.33	26.24	40.94
NZA-0108	38.53	1308.33	26.24	1308.07	26.33	0.00
NZA-0109	37.99	1308.07	26.33	1307.44	26.59	0.00
NZA-011	24.27	1650.56	26.73	1650.64	26.78	0.00
NZA-0110	37.56	1307.49	26.58	1313.90	20.70	0.00
NZA-0111	37.28	1677.88	19.07	1670.74	19.48	0.00
NZA-0112	36.73	1670.74	19.48	1672.53	19.81	0.00
NZA-0113	35.29	1672.53	19.81	1656.37	20.23	0.00
NZA-0114	34.36	1656.37	20.23	1614.81	21.08	0.00
NZA-0115	34.03	1614.81	21.08	1597.83	21.68	0.00
NZA-0116	33.88	1635.58	21.59	1631.16	21.83	0.00
NZA-0117	33.71	1358.93	20.86	1348.53	21.77	0.00
NZA-0118	33.59	1348.53	21.77	1347.20	22.16	35.50
NZA-0119	32.11	1347.20	22.16	1346.98	22.21	0.00
NZA-012	38.97	407.61	14.55	309.71	16.48	41.04
NZA-0120	31.03	1671.60	23.10	1668.25	23.38	0.00
NZA-0121	29.84	1677.85	23.36	1686.41	23.61	0.00
NZA-0122	29.07	1686.41	23.61	1626.77	23.61	0.00
NZA-0123	28.90	1608.35	23.61	1531.56	25.12	0.00
NZA-0124	28.87	1560.07	24.47	1514.22	26.36	0.00
NZA-0125	28.85	1514.22	26.36	1511.08	27.41	30.00
NZA-0126	26.49	1511.08	27.41	1511.38	27.51	0.00

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0127	26.21	1512.11	27.63	1512.61	27.70	0.00
NZA-0128	26.28	1511.52	27.49	1512.11	27.63	20.80
NZA-0129	26.13	1512.73	27.67	1514.84	27.89	0.00
NZA-013	37.02	309.71	16.48	309.72	16.58	0.00
NZA-0130	25.17	1652.76	25.92	1650.79	26.46	0.00
NZA-0131	25.14	1650.79	26.46	1650.59	26.61	0.00
NZA-0134	22.42	1009.49	19.71	990.46	20.67	0.00
NZA-0135	22.78	1844.34	24.79	1846.17	25.09	0.00
NZA-0136	13.91	1117.72	21.06	1111.16	21.64	17.20
NZA-0137	13.17	1111.16	21.64	1102.43	21.92	0.00
NZA-0138	17.43	287.98	16.07	285.46	16.21	24.32
NZA-0139	17.40	285.46	16.21	283.31	16.36	0.00
NZA-014	34.93	346.97	15.85	346.93	15.93	35.55
NZA-0140	15.73	91.78	15.14	91.75	15.22	15.61
NZA-0142	14.78	483.14	17.65	482.10	17.80	18.90
NZA-0143	14.22	763.93	19.83	749.62	20.23	20.00
NZA-0144	14.06	749.62	20.23	739.30	20.52	0.00
NZA-0145	13.95	500.62	15.03	69.22	26.67	0.00
NZA-0146	15.74	590.47	18.60	589.38	18.76	15.75
NZA-0147	15.49	589.38	18.76	585.44	18.93	0.00
NZA-0148	16.22	400.05	17.98	394.42	18.43	16.00
NZA-0149	16.04	394.42	18.43	393.34	18.59	0.00
NZA-015	33.26	346.93	15.93	346.97	16.02	0.00
NZA-0150	24.63	647.29	13.28	533.28	14.05	24.17
NZA-0151	24.37	533.28	14.05	467.09	14.43	0.00
NZA-0152	23.88	277.91	16.73	276.09	17.07	23.66
NZA-0153	22.85	276.09	17.07	259.12	17.52	0.00
NZA-0154	12.78	1139.19	22.63	1107.73	23.02	0.00
NZA-0155	12.93	1104.53	22.07	1091.02	22.40	0.00
NZA-0156	13.95	1178.77	19.49	1117.72	21.06	0.00
NZA-0157	13.98	739.30	20.52	719.31	21.47	13.30
NZA-0158	14.46	871.17	18.37	813.72	18.95	0.00

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0159	14.74	576.95	19.33	563.44	19.91	0.00
NZA-016	29.41	601.06	16.69	600.87	16.77	26.19
NZA-0160	14.94	587.71	18.92	574.72	19.34	0.00
NZA-0161	15.84	393.34	18.59	392.30	18.90	0.00
NZA-0162	16.46	442.56	16.46	400.05	17.98	0.00
NZA-0163	16.61	283.31	16.36	256.72	17.87	0.00
NZA-0164	25.96	1654.14	25.14	1649.28	25.91	0.00
NZA-0165	24.12	1651.58	26.64	1651.73	26.88	0.00
NZA-0166	20.60	1118.03	22.54	1102.56	23.38	0.00
NZA-0167	19.62	917.01	26.18	862.55	27.44	0.00
NZA-0168	19.76	946.44	25.72	917.01	26.18	0.00
NZA-0169	19.01	650.70	14.05	624.61	14.34	0.00
NZA-017	28.56	600.87	16.77	602.98	16.88	0.00
NZA-0170	25.45	1656.23	25.18	1650.44	26.03	0.00
NZA-0171	14.29	813.72	18.95	763.93	19.83	0.00
NZA-0172	23.74	414.13	15.18	387.72	15.60	0.00
NZA-0173	24.09	513.63	13.48	164.46	17.34	0.00
NZA-0176	17.86	77.45	13.36	78.99	19.78	0.00
NZA-0177	31.62	790.65	14.43	554.34	16.52	35.80
NZA-0178	31.32	554.34	16.52	553.40	16.72	0.00
NZA-0179	17.83	286.85	15.67	282.44	16.08	0.00
NZA-018	31.97	1346.98	22.21	1346.75	22.25	31.49
NZA-0180	18.14	142.29	15.07	21.10	27.69	22.36
NZA-0181	16.66	21.10	27.69	18.40	41.58	0.00
NZA-0182	19.01	593.42	14.62	582.05	14.69	17.77
NZA-0183	19.01	582.05	14.69	567.79	14.72	0.00
NZA-0185	21.16	124.79	24.26	124.56	24.48	0.00
NZA-0186	20.55	629.69	25.27	629.30	25.37	19.89
NZA-0188	20.44	454.24	22.57	445.55	23.27	19.05
NZA-019	31.50	1353.10	22.18	1351.60	22.29	0.00
NZA-0192	12.99	1102.43	21.92	1084.28	22.41	0.00
NZA-0193	19.01	614.98	14.41	593.42	14.62	0.00

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0194	19.00	567.79	14.72	492.14	14.77	0.00
NZA-0195	19.00	838.74	14.32	624.76	14.17	0.00
NZA-0196	19.00	624.76	14.17	284.72	14.65	0.00
NZA-0197	17.12	1864.96	34.90	1861.46	35.28	0.00
NZA-0198	18.98	281.42	15.13	179.21	31.45	24.78
NZA-0199	18.77	179.21	31.45	179.21	31.60	17.92
NZA-02	5.12	2996.63	28.90	2999.06	28.96	0.00
NZA-020	31.58	327.29	22.91	325.46	23.21	36.34
NZA-0202	19.79	1183.66	25.18	1142.53	25.30	0.00
NZA-0205	20.42	1229.68	23.96	1191.92	24.95	0.00
NZA-0206	20.24	1191.92	24.95	1183.66	25.18	0.00
NZA-0208	20.89	124.56	24.48	123.43	25.16	0.00
NZA-0209	20.62	1071.32	24.78	1068.96	24.89	0.00
NZA-021	31.06	325.46	23.21	324.71	23.33	0.00
NZA-0210	23.94	352.33	14.29	277.91	16.73	0.00
NZA-0211	22.78	234.93	18.42	216.15	18.99	0.00
NZA-0212	22.80	274.46	17.35	234.93	18.42	0.00
NZA-0213	24.10	487.98	14.43	414.13	15.18	0.00
NZA-0214	23.74	1712.51	25.57	1710.66	26.67	0.00
NZA-0215	35.12	347.56	15.59	346.97	15.85	0.00
NZA-0216	29.66	346.97	16.02	346.38	16.30	0.00
NZA-0217	24.82	434.88	14.91	402.08	16.27	0.00
NZA-0218	19.65	256.92	20.06	256.52	20.12	0.00
NZA-0219	20.19	258.24	20.06	256.92	20.06	20.94
NZA-022	32.91	383.64	14.38	324.26	22.76	32.67
NZA-0220	20.69	112.95	13.83	109.71	14.17	0.00
NZA-0221	19.29	258.36	20.08	255.99	20.23	0.00
NZA-0222	19.04	255.99	20.23	240.11	20.34	0.00
NZA-0223	19.02	240.11	20.34	226.51	20.55	17.73
NZA-0224	20.89	48.41	12.28	28.33	12.54	0.00
NZA-0226	20.19	115.34	15.00	87.58	18.56	0.00
NZA-0228	20.20	147.39	14.01	30.30	20.17	19.72

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0229	20.98	110.06	14.05	48.46	15.85	0.00
NZA-023	31.82	324.26	22.76	322.41	22.92	0.00
NZA-0230	20.25	229.82	20.83	231.81	20.98	19.47
NZA-0231	20.44	141.89	20.25	140.87	21.12	0.00
NZA-0232	14.47	482.10	17.80	481.90	17.82	0.00
NZA-0233	16.29	394.51	12.99	319.66	13.55	17.50
NZA-0234	15.45	514.37	16.22	493.11	16.87	0.00
NZA-0235	15.26	493.11	16.87	483.14	17.65	0.00
NZA-0236	16.57	338.38	16.68	331.58	17.70	19.00
NZA-0237	15.73	331.58	17.70	332.89	18.37	0.00
NZA-0238	15.53	480.96	15.89	436.86	16.90	0.00
NZA-0239	24.77	402.08	16.27	400.53	16.58	24.00
NZA-024	41.19	1181.43	24.37	1179.19	24.70	0.00
NZA-0240	23.06	400.53	16.58	368.49	18.04	0.00
NZA-0241	23.04	381.76	17.87	376.96	18.69	27.00
NZA-0242	22.43	376.96	18.69	361.47	19.13	0.00
NZA-0243	16.08	95.74	17.27	95.75	17.28	19.00
NZA-0244	16.03	133.64	15.69	125.00	15.25	0.00
NZA-0245	15.76	260.47	14.98	204.00	17.87	0.00
NZA-0246	15.91	125.00	15.25	113.35	17.88	0.00
NZA-0247	21.07	222.02	15.12	88.24	20.20	21.19
NZA-0248	20.88	74.17	20.03	74.02	20.22	0.00
NZA-0249	20.40	214.02	20.95	214.42	21.38	0.00
NZA-025	43.66	3841.80	17.02	1181.43	24.37	42.41
NZA-0250	20.46	74.02	20.22	73.30	20.70	0.00
NZA-0251	23.56	64.70	17.49	63.11	18.10	0.00
NZA-0252	22.48	237.49	15.63	141.89	20.25	0.00
NZA-0253	22.97	63.11	18.10	61.93	20.69	0.00
NZA-0254	17.54	280.00	13.60	142.08	15.87	19.00
NZA-0255	16.17	34.26	15.87	37.35	16.61	0.00
NZA-0256	17.49	166.32	15.59	50.55	18.36	18.50
NZA-0258	16.04	97.10	14.69	91.78	15.14	0.00

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-026	46.24	2503.14	17.14	2502.48	17.19	0.00
NZA-0261	11.40	1221.86	15.13	782.54	18.35	11.50
NZA-0261A	8.46	782.54	18.35	781.93	18.45	11.50
NZA-0262	8.31	781.93	18.45	656.61	18.48	0.00
NZA-0263	22.17	246.63	13.82	129.63	15.91	0.00
NZA-0265	19.54	95.41	32.57	95.18	33.60	0.00
NZA-0266	19.54	114.85	25.05	83.05	32.56	0.00
NZA-0267	19.59	1142.53	25.30	1045.87	27.62	0.00
NZA-0268	19.57	144.62	25.05	92.36	25.03	0.00
NZA-0269	21.58	116.36	14.78	62.06	19.94	0.00
NZA-027	48.22	2556.56	16.63	2503.14	17.14	51.60
NZA-0270	21.33	62.06	19.94	62.20	20.18	0.00
NZA-0271	21.05	250.27	13.67	249.91	13.71	0.00
NZA-0272	19.55	115.77	13.77	108.38	14.72	0.00
NZA-0273	20.13	394.60	14.98	51.91	26.08	21.50
NZA-0274	18.49	51.91	26.08	51.92	26.23	0.00
NZA-0275	18.19	51.92	26.23	52.09	26.51	0.00
NZA-0276	17.87	52.09	26.51	55.65	21.87	0.00
NZA-0277	17.81	129.72	14.98	98.11	17.27	0.00
NZA-0278	16.59	276.05	12.30	173.65	12.39	0.00
NZA-0279	16.31	142.39	12.45	121.89	12.86	0.00
NZA-028	58.13	287.12	14.84	107.94	27.36	61.83
NZA-0280	13.27	365.66	13.35	355.45	13.61	0.00
NZA-0281	13.13	98.23	13.27	89.19	13.96	0.00
NZA-0282	15.81	10.73	12.54	4.04	18.65	0.00
NZA-0283	12.78	451.57	13.62	413.79	13.67	0.00
NZA-0285	16.42	6.77	12.49	2.94	13.91	0.00
NZA-0286	31.11	603.42	16.41	601.06	16.69	0.00
NZA-0287	26.70	645.86	16.64	636.66	16.95	0.00
NZA-0288	12.18	2394.26	32.76	2393.54	33.18	0.00
NZA-0289	16.96	100.95	12.63	53.97	12.99	0.00
NZA-029	58.73	1805.60	14.37	1763.39	14.66	0.00

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0290	16.96	62.45	12.63	31.85	15.75	0.00
NZA-0291	17.90	109.36	12.63	87.48	13.04	0.00
NZA-0292	16.89	164.96	12.99	156.14	13.17	0.00
NZA-0293	16.70	97.18	13.57	96.54	13.62	0.00
NZA-0295	16.30	113.35	12.48	115.01	12.52	0.00
NZA-0296	18.99	32.61	13.44	10.55	31.42	21.50
NZA-0297	16.54	10.94	12.16	2.14	13.58	0.00
NZA-0298	20.21	146.21	14.03	142.10	13.84	21.50
NZA-0299	18.20	9.09	18.88	8.98	20.74	0.00
NZA-03	3.97	3020.37	28.03	3029.28	27.53	8.40
NZA-030	17.14	112.91	12.85	95.38	13.14	0.00
NZA-0300	17.87	18.20	26.72	18.60	27.15	0.00
NZA-0301	17.88	8.98	20.74	8.78	23.13	0.00
NZA-0302	17.84	18.60	27.15	19.08	27.28	0.00
NZA-0303	17.77	74.32	15.91	27.10	22.89	0.00
NZA-0304	17.77	125.64	15.85	74.32	15.91	0.00
NZA-0305	17.81	129.27	14.66	124.62	15.82	0.00
NZA-0306	17.89	524.44	14.98	514.21	15.34	0.00
NZA-0307	17.36	387.66	15.43	382.72	15.74	0.00
NZA-0308	16.90	382.72	15.74	366.44	15.98	0.00
NZA-0309	16.74	366.44	15.98	338.38	16.68	0.00
NZA-031	17.18	130.25	12.65	112.91	12.85	29.83
NZA-0310	21.73	84.72	12.28	20.32	12.86	0.00
NZA-0311	23.05	56.04	12.28	10.51	13.01	0.00
NZA-0312	22.61	61.21	12.48	21.49	13.42	0.00
NZA-0313	20.98	14.70	15.88	1.56	29.08	0.00
NZA-0314	21.39	85.73	12.52	39.95	13.51	0.00
NZA-0315	22.31	67.90	12.47	16.08	13.78	0.00
NZA-0316	21.43	142.79	12.37	40.06	13.47	0.00
NZA-0317	16.54	7.16	12.18	1.42	13.58	0.00
NZA-0318	20.62	44.17	12.28	22.20	12.58	0.00
NZA-0319	20.38	63.62	12.48	11.80	14.08	0.00

2% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-032	15.19	2039.81	37.41	2038.39	37.59	0.00
NZA-0320	20.20	70.05	12.47	10.30	12.59	0.00
NZA-0321	20.87	17.13	12.28	2.76	13.13	0.00
NZA-0322	20.97	31.61	12.28	6.66	12.94	0.00
NZA-0323	19.86	42.78	12.28	0.55	24.11	0.00
NZA-0324	21.31	144.83	12.48	48.76	13.44	0.00
NZA-0325	12.56	917.80	15.12	414.93	19.75	12.90
NZA-0326	12.32	176.57	12.65	91.16	13.56	10.39
NZA-0327	19.04	47.68	12.48	9.70	13.39	0.00
NZA-0328	23.72	485.23	13.27	64.70	17.49	0.00
NZA-0329	17.88	9.70	13.39	9.68	13.39	0.00
NZA-033	16.63	1864.94	37.48	1864.29	37.55	24.30
NZA-0331	26.02	104.01	12.63	20.98	14.58	0.00
NZA-0332	25.83	167.79	12.63	122.19	13.19	0.00
NZA-0333	3.60	3051.15	27.33	962.92	12.00	0.00
NZA-0335	21.55	1168.43	23.14	1166.55	24.42	20.55
NZA-0336	16.55	6.78	12.49	6.77	12.49	0.00
NZA-0337	29.02	102.22	14.95	33.80	39.70	0.00
NZA-0338	16.56	11.00	12.16	10.94	12.16	16.04
NZA-0339	30.80	23.29	12.52	5.88	13.56	0.00
NZA-034	11.90	2413.94	33.34	2413.92	33.43	12.40
NZA-0340	30.02	63.92	13.07	63.30	13.19	0.00
NZA-0341	31.83	101.92	12.48	58.53	13.05	0.00
NZA-0342	28.78	117.86	12.63	103.26	12.96	0.00
NZA-0343	46.64	80.76	13.63	13.75	19.68	0.00
NZA-0344	66.20	52.04	12.73	49.83	12.92	0.00
NZA-0345	18.95	50.28	12.48	4.51	16.18	0.00
NZA-0346	17.67	10.53	12.52	4.14	13.36	0.00
NZA-0347	19.69	174.61	12.50	67.78	13.36	0.00
NZA-0348	26.28	254.22	12.63	173.08	13.26	0.00
NZA-0349	18.86	4.51	16.18	4.51	16.20	0.00
NZA-035	10.30	2413.92	33.43	2413.89	33.54	0.00

2% Annual Chance Event
Max Stage Results

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NZA-0350	17.46	4.14	13.36	4.14	13.36	0.00
NZA-0351	17.90	21.62	13.15	21.61	13.15	0.00
NZA-0352	16.57	7.22	12.17	7.16	12.18	0.00
NZA-0353	16.56	10.74	12.53	10.73	12.54	0.00
NZA-0354	12.28	76.45	13.44	8.84	70.06	0.00
NZA-0355	13.92	0.00	27.35	0.00	60.26	0.00
NZA-0356	14.61	36.21	12.30	35.84	12.33	0.00
NZA-0357	14.88	200.92	12.47	118.30	13.02	0.00
NZA-0358	14.61	18.44	12.30	16.48	12.41	0.00
NZA-0359	16.35	217.80	12.47	9.71	16.65	0.00
NZA-036	15.20	410.37	12.62	24.01	18.88	19.54
NZA-0360	16.66	55.40	12.28	49.71	12.40	0.00
NZA-0361	17.83	24.45	12.28	14.61	12.57	0.00
NZA-0362	15.84	52.69	12.28	33.73	12.55	0.00
NZA-037	13.35	321.51	14.35	320.81	14.52	14.41
NZA-038	14.39	193.90	14.05	105.91	17.14	0.00
NZA-039	14.09	155.85	13.23	153.48	13.43	11.61
NZA-04	3.91	3029.28	27.53	3051.15	27.33	0.00
NZA-040	18.99	284.72	14.65	198.49	15.43	34.86
NZA-042	13.78	2051.91	39.60	2051.76	39.67	11.60
NZA-043	13.76	2051.76	39.67	2051.54	39.83	0.00
NZA-044	21.32	2033.84	23.30	2031.93	23.41	19.95
NZA-045	21.30	2031.93	23.41	2029.72	23.56	0.00
NZA-046	20.36	951.20	25.49	949.65	25.59	23.60
NZA-047	20.34	949.65	25.59	949.14	25.62	0.00
NZA-0470	57.54	49.83	12.92	49.83	12.92	53.88
NZA-048	19.53	1785.71	33.30	1785.59	33.51	26.30
NZA-049	17.91	1785.59	33.51	1784.73	33.56	0.00
NZA-05	7.02	2682.67	29.73	2682.30	29.90	16.40
NZA-050	6.05	2705.62	31.67	2732.57	31.43	0.00
NZA-051	6.44	2692.87	31.72	2705.62	31.67	0.00
NZA-052	6.66	2683.22	31.64	2692.87	31.72	0.00

2% Annual Chance Event
Max Stage Results

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NZA-053	6.81	2682.25	30.00	2683.22	31.64	0.00
NZA-054	4.71	2999.06	28.96	3005.67	28.33	0.00
NZA-055	4.55	3005.67	28.33	3013.03	28.12	0.00
NZA-056	4.27	3013.05	28.12	3020.37	28.03	0.00
NZA-057	7.09	2429.78	34.82	2441.80	34.99	0.00
NZA-058	7.21	2420.35	34.57	2429.78	34.82	0.00
NZA-059	7.56	2414.02	34.16	2420.35	34.57	0.00
NZA-06	6.88	2682.30	29.90	2682.25	30.00	0.00
NZA-060	8.30	2413.73	33.90	2414.02	34.16	0.00
NZA-061	8.84	2413.89	33.54	2413.73	33.90	0.00
NZA-062	12.01	2394.64	33.08	2394.48	33.50	0.00
NZA-063	12.29	2398.27	31.58	2395.37	32.55	0.00
NZA-064	12.53	2402.00	30.71	2398.27	31.58	0.00
NZA-065	12.71	2406.81	30.53	2400.19	30.94	0.00
NZA-066	12.93	2056.98	40.80	2059.62	40.94	0.00
NZA-067	13.16	2055.20	40.60	2056.98	40.80	0.00
NZA-068	13.35	2053.74	40.23	2055.20	40.60	0.00
NZA-069	13.54	2051.54	39.83	2051.61	40.03	0.00
NZA-07	8.29	656.61	18.48	459.49	20.62	8.89
NZA-070	13.92	2055.77	39.03	2054.92	39.26	0.00
NZA-071	14.09	2057.09	38.82	2056.12	38.97	0.00
NZA-072	14.32	2057.89	38.68	2057.09	38.82	0.00
NZA-073	14.47	2058.92	38.46	2057.89	38.68	0.00
NZA-074	14.61	2061.49	37.83	2057.66	38.40	0.00
NZA-075	14.77	2035.95	38.02	2035.10	38.18	0.00
NZA-076	14.98	2038.39	37.59	2035.95	38.02	0.00
NZA-077	16.65	1876.63	35.44	1864.94	37.48	0.00
NZA-078	16.35	213.09	12.47	24.60	15.08	0.00
NZA-079	15.64	76.15	12.48	3.10	20.15	0.00
NZA-08	17.61	242.88	12.62	52.57	14.52	19.57
NZA-082	17.34	1781.43	33.94	1774.28	34.57	0.00
NZA-083	17.70	1784.73	33.56	1780.86	33.97	0.00

2% Annual Chance Event
Max Stage Results

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NZA-084	19.57	1789.98	32.42	1785.71	33.30	0.00
NZA-085	19.59	835.93	31.73	832.01	32.71	0.00
NZA-086	19.61	862.55	27.44	835.93	31.73	0.00
NZA-087	20.43	1102.56	23.38	1087.18	24.23	19.71
NZA-088	20.20	949.14	25.62	946.44	25.72	0.00
NZA-089	20.72	2050.85	23.70	2041.11	23.98	0.00
NZA-09	16.13	52.57	14.52	52.44	14.84	0.00
NZA-090	21.00	2029.72	23.56	2023.64	23.84	0.00
NZA-091	21.40	2044.39	22.73	2033.84	23.30	0.00
NZA-092	21.48	1031.86	21.57	1007.64	22.53	0.00
NZA-093	21.73	1046.31	20.94	1031.86	21.57	0.00
NZA-094	21.93	981.30	21.21	974.53	21.72	0.00
NZA-095	22.09	990.46	20.67	981.30	21.21	0.00
NZA-096	58.14	1476.86	14.65	1369.22	15.45	0.00
NZA-097	57.32	2343.24	15.12	2290.51	15.71	0.00
NZA-098	54.70	2290.51	15.71	2262.07	16.14	0.00
NZA-099	52.62	2262.07	16.1426	2246.68	16.4878	0

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-00	1476.86	14.65
L-01	2613.21	26.63
L-010	2070.55	47.75
L-0100	1670.74	19.48
L-0101	1313.90	20.70
L-0102	1307.44	26.59
L-0103	1308.07	26.33
L-0104P1	31.12	15.75
L-0104P2	41.52	14.43
L-0104P3	31.38	15.76
L-0104P4	45.26	54.32
L-0104W	1221.56	26.25
L-0105	1308.73	26.11
L-0106	1316.78	18.92
L-0107	1263.64	25.39
L-0108	1270.50	24.86
L-0109	3829.66	17.02
L-011	2161.52	31.88
L-0110	2496.00	17.27
L-0111P1	360.28	22.69
L-0111P2	384.97	22.69
L-0111P3	139.41	24.40
L-0111W	297.69	24.39
L-0112	1179.19	24.70
L-0113	2556.56	16.63
L-0114P	2503.14	17.14
L-0114W	0.00	0.00
L-0115	2502.48	17.19
L-0116	2246.68	16.49
L-0117	2262.07	16.14
L-0118	2290.51	15.71
L-0119	1369.22	15.45
L-012	2157.22	31.76
L-0120P	42.52	14.91
L-0120W	289.82	22.78
L-0121	324.71	23.33
L-0122P	325.46	23.21
L-0122W	0.00	0.00
L-0123	322.41	22.92
L-0124P1	341.39	16.54
L-0124P2	212.97	16.48
L-0124W	0.00	0.00
L-0125	636.66	16.95
L-0126P	19.54	14.46
L-0126W	582.52	16.77

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0127	601.06	16.69
L-0128P	309.71	16.48
L-0128W	0.00	0.00
L-0129	361.47	19.13
L-0130B	376.96	18.69
L-0131	368.49	18.04
L-0132W	400.53	16.58
L-0133	402.08	16.27
L-0134	346.38	16.30
L-0135	346.97	16.02
L-0136P	24.55	13.26
L-0136W	328.74	15.93
L-0137	346.97	15.85
L-0138	309.72	16.58
L-013B	2156.48	31.72
L-014	2070.98	48.05
L-0140	414.13	15.18
L-0142	387.72	15.60
L-0143	467.09	14.43
L-0144P	62.39	13.29
L-0144W	487.27	14.09
L-0146	164.46	17.34
L-0147	277.91	16.73
L-0148	259.12	17.52
L-0149P	19.84	14.80
L-0149W	258.69	17.08
L-015	2070.78	47.92
L-0150	234.93	18.42
L-0151	78.99	19.78
L-0152	763.86	19.83
L-0153	642.67	24.22
L-0154	739.01	20.51
L-0155B	749.46	20.22
L-0156	393.34	18.59
L-0157W	394.42	18.43
L-0158	563.43	19.91
L-0159	813.72	18.95
L-016	2071.19	47.18
L-0160	1031.99	21.65
L-0161	1115.77	20.99
L-0162	1092.01	21.73
L-0163B	1107.49	21.53
L-0164	1039.05	21.68
L-0165	988.92	22.24
L-0166	256.72	17.87

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0167	400.05	17.98
L-0168	392.30	18.90
L-0169	585.44	18.93
L-017	2071.13	47.49
L-0170P1	26.55	15.99
L-0170P2	45.94	15.84
L-0170W	535.23	18.83
L-0171	282.44	16.08
L-0172	283.31	16.36
L-0173B	285.46	16.21
L-0174P	482.17	21.24
L-0174W	0.00	0.00
L-0175P	24.01	18.88
L-0175W	0.00	0.00
L-0176P	52.57	14.52
L-0176W	0.00	0.00
L-0177	52.44	14.84
L-018	2071.09	47.90
L-0180P	14.70	32.34
L-0180W	59.95	26.18
L-0181P1	4.47	14.58
L-0181P2	4.56	14.57
L-0181P3	4.67	14.56
L-0181P4	4.53	14.58
L-0181P5	4.35	14.59
L-0181W	298.30	14.49
L-0182P1	33.40	13.63
L-0182P2	31.65	14.39
L-0182W	39.77	17.23
L-0183P1	3.29	13.43
L-0183P2	2.90	13.43
L-0183P3	2.96	13.43
L-0183P4	1.54	13.43
L-0183W	142.79	13.43
L-0184P	20.79	17.32
L-0184W	71.24	15.20
L-0187P	112.91	12.85
L-0187W	0.00	0.00
L-0188	95.38	13.14
L-0189P	21.10	27.69
L-0189W	0.00	0.00
L-019	2057.67	46.88
L-0192	18.46	41.59
L-0193	614.98	14.41
L-0194	179.26	31.89

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0195	593.42	14.62
L-0196	567.79	14.72
L-0197P1	6.65	13.01
L-0197P2	5.05	13.14
L-0197P3	8.75	12.86
L-0197P4	8.14	12.91
L-0197P5	7.58	12.94
L-0197P6	4.71	13.15
L-0197P7	7.89	12.92
L-0197W	554.27	14.71
L-0198	284.72	14.65
L-0199	624.76	14.17
L-02	2697.38	26.60
L-0200	492.14	14.77
L-0201	179.25	31.81
L-0202P1	110.69	15.38
L-0202P2	87.91	15.49
L-0202W	169.10	28.12
L-0204P	14.97	17.31
L-0204W	113.22	24.28
L-0205	1183.66	25.18
L-0206	1142.53	25.30
L-0207	957.68	32.19
L-0208	123.43	25.16
L-0209	124.56	24.48
L-020B	2071.20	47.04
L-021	2087.82	40.23
L-0210	454.24	22.57
L-0212	1191.92	24.95
L-0214P	7.38	16.97
L-0214W	444.12	23.28
L-0215P	9.10	17.39
L-0215W	625.45	25.38
L-0216P1	16.12	15.88
L-0216P2	16.32	15.61
L-0216W	343.24	19.49
L-0218P1	241.05	17.80
L-0218P2	241.05	17.80
L-0218W	0.00	0.00
L-0219	481.90	17.82
L-022	2075.96	41.00
L-0220P	3.16	51.80
L-0220W	29.48	20.17
L-0222	87.27	19.63
L-0225W	28.33	12.54

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0226	240.11	20.34
L-0227	255.99	20.23
L-0228P	14.97	19.58
L-0228W	241.95	20.06
L-0229	256.52	20.12
L-023	2060.96	43.87
L-0230P	1.53	16.45
L-0230W	225.30	20.56
L-0231	214.42	21.38
L-0232	140.87	21.12
L-0233P1	1.74	21.26
L-0233P2	1.70	21.26
L-0233P3	1.74	21.26
L-0233P4	1.73	21.26
L-0233W	224.90	20.98
L-0234	63.11	18.10
L-0235	61.93	20.69
L-0236	141.89	20.25
L-0237P1	0.68	14.07
L-0237P2	8.97	13.25
L-0237W	0.00	0.00
L-0238	30.90	19.33
L-0239P	319.66	13.55
L-0239W	0.00	0.00
L-024	2025.81	40.49
L-0240	483.14	17.65
L-0241	436.86	16.90
L-0242	493.11	16.87
L-0243	332.89	18.37
L-0244P	331.58	17.70
L-0244W	0.00	0.00
L-0245P	95.75	17.28
L-0245W	0.00	0.00
L-0246	113.35	17.88
L-0247	204.00	17.87
L-0249P1	16.36	17.10
L-0249P2	16.36	17.10
L-0249W	43.00	20.13
L-025	2021.81	40.70
L-0250	73.30	20.70
L-0251	74.02	20.22
L-0252	91.78	15.14
L-0253P	34.26	15.87
L-0253W	0.00	0.00
L-0254	37.35	16.61

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0255P	50.55	18.36
L-0255W	0.00	0.00
L-0259P	107.94	27.36
L-0259W	0.00	0.00
L-026	2017.68	40.88
L-0260B	2639.25	26.60
L-0261	2481.66	28.75
L-0262	574.72	19.34
L-0263	216.15	18.99
L-0264	105.04	16.00
L-0266	62.06	19.94
L-0267	62.20	20.18
L-0268	115.77	13.77
L-0269	38.32	14.19
L-027	2031.86	40.14
L-0270W	0.00	0.00
L-0271	59.55	15.29
L-0272	34.85	62.06
L-0273P1	25.25	26.07
L-0273P2	26.66	26.07
L-0273W	0.00	0.00
L-0274	51.92	26.23
L-0275	55.65	21.87
L-0276	52.09	26.51
L-0277W	413.79	13.67
L-028	2036.18	39.88
L-0280P	142.39	12.45
L-0280W	0.00	0.00
L-0281	121.89	12.86
L-0282	98.23	13.27
L-0283	89.19	13.96
L-0285	553.40	16.72
L-0286	602.98	16.88
L-0287	782.04	18.45
L-0288	657.65	18.49
L-0289	2057.77	45.93
L-0290P	4.01	10.02
L-0290W	52.39	12.99
L-0291W1	2.23	9.41
L-0291W2	29.84	15.75
L-0292P	156.14	13.17
L-0293W1	12.07	12.98
L-0293W2	75.47	13.06
L-0294	96.54	13.62
L-0295	115.01	12.52

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0297P	9.09	18.88
L-0297W	0.00	0.00
L-0298P	10.55	31.42
L-0298W	0.00	0.00
L-0299	8.98	20.74
L-029W	2038.28	39.74
L-03	2495.98	28.75
L-030	2033.82	38.16
L-0300	8.78	23.15
L-0302	18.60	27.15
L-0303	19.08	27.28
L-0304	27.10	22.89
L-0305	40.86	22.01
L-0306	50.68	21.82
L-0307	387.66	15.43
L-0308	382.72	15.74
L-0309	366.44	15.98
L-031	2053.46	38.43
L-0310	338.38	16.68
L-0311W	20.32	12.86
L-0312W	21.49	13.42
L-0313W	10.51	13.01
L-0314W	1.56	29.08
L-0315	16.08	13.78
L-0317W	40.06	13.47
L-0318W	39.95	13.51
L-0319W	11.80	14.08
L-032	2053.02	38.64
L-0320W	22.20	12.58
L-0321W	10.30	12.59
L-0322W	48.76	13.44
L-0323P	2.76	13.13
L-0323W	0.00	0.00
L-0324P	6.66	12.94
L-0324W	0.00	0.00
L-0325P	0.55	24.11
L-0325W	0.00	0.00
L-0326P	414.93	19.75
L-0326W	0.00	0.00
L-0327P	91.16	13.56
L-0327W	0.00	0.00
L-0328P	9.70	13.39
L-0328W	9.68	13.39
L-0329	64.70	17.49
L-033	2051.23	38.82

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0330	0.05	72.00
L-0332	2.78	37.92
L-0334DS	14.95	13.19
L-0334P	14.16	13.18
L-0334W1	46.54	13.19
L-0334W2	46.54	13.19
L-0335DS	20.98	14.58
L-0335W	0.00	0.00
L-0336W	0.01	20.55
L-0337	5.40	15.29
L-0337W	95.74	17.27
L-0338	95.18	33.60
L-034	2048.21	39.07
L-0340P	14.16	39.71
L-0341P	33.80	39.70
L-0342P	58.53	13.05
L-0343P	5.88	13.56
L-0344W	103.26	12.96
L-0345	63.30	13.19
L-0345P	4.14	13.36
L-0345W1	2.52	13.28
L-0345W2	1.65	13.52
L-0345W3	0.00	0.00
L-0346W	13.75	19.68
L-0347P	49.83	12.92
L-0348P	21.62	13.15
L-0348W1	21.61	13.15
L-0348W2	46.40	13.37
L-035	2039.20	39.68
L-0350P	4.51	16.18
L-0350W1	4.51	16.20
L-0350W2	0.00	0.00
L-0351P1	50.60	13.26
L-0351P2	15.92	13.26
L-0351W1	102.06	13.26
L-0351W2	4.50	13.26
L-036DS	24.60	15.08
L-037	1866.47	37.42
L-038	2035.16	38.01
L-039	2038.65	37.58
L-04	2580.78	26.93
L-0400P	1.42	13.58
L-0400W	1.43	13.58
L-0401P	2.14	13.58
L-0401W	2.15	13.58

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0402P	2.94	13.91
L-0402W	2.94	13.91
L-0403P	4.04	18.65
L-0403W	4.05	18.65
L-040B	1865.02	37.54
L-041	1861.76	35.27
L-045	832.01	32.71
L-046	1785.71	33.33
L-047	1780.89	33.98
L-048	1774.44	34.57
L-049	1784.74	33.57
L-05	2541.89	27.32
L-050B	1709.75	33.49
L-050W	75.84	33.49
L-051	917.01	26.18
L-052	862.55	27.43
L-053	946.44	25.72
L-054	835.93	31.73
L-055	1102.56	23.38
L-056	2023.64	23.84
L-057	1118.03	22.54
L-058	2029.72	23.56
L-059P1	3.94	13.91
L-059P2	31.14	13.92
L-059P3	31.15	13.91
L-059P4	20.59	14.07
L-059W	1991.38	23.42
L-06	2168.98	31.94
L-060	951.20	25.49
L-061	949.14	25.62
L-062B	249.46	25.90
L-062W	700.51	25.44
L-064	1710.66	26.67
L-065	708.47	26.06
L-066	990.46	20.67
L-067	981.30	21.21
L-068	974.53	21.72
L-069	1031.86	21.57
L-07	2179.16	31.85
L-070	1007.64	22.53
L-071	2033.84	23.30
L-072	1651.73	26.88
L-074	1650.99	26.69
L-075	1650.79	26.45
L-076	1650.62	26.79

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-077B	1650.57	26.73
L-078W	1512.11	27.61
L-079	1512.61	27.69
L-08	2201.90	31.51
L-080	1511.38	27.51
L-081	1650.44	26.03
L-082	1649.28	25.90
L-083	1514.84	27.89
L-084P1	259.46	27.39
L-084P2	576.41	27.39
L-084P3	589.44	27.44
L-084P4	85.76	27.36
L-084W	0.00	0.00
L-085	1514.22	26.36
L-086	1531.56	25.12
L-087	1603.40	23.61
L-088	1686.41	23.61
L-089	1668.25	23.38
L-09	2468.27	28.77
L-090	1351.60	22.29
L-091W	1346.75	22.25
L-092	1346.98	22.21
L-093P1	994.57	22.20
L-093P2	352.65	22.06
L-093W	0.00	0.00
L-094	1348.53	21.77
L-095	1358.93	20.86
L-096	1597.83	21.68
L-097	1614.81	21.08
L-098	1656.37	20.23
L-099	1672.53	19.81
L-2320W	3.10	20.15
L-2410W	0.00	0.00
L-2420W	0.00	69.02
L-2430P	3.84	17.23
L-2430W	0.00	0.00
L-2440W	16.27	71.67
L-2480W	49.83	12.92
L-2520W	35.84	12.33
L-2530W	118.30	13.02
L-2540W	16.48	12.41
L-2550P	61.40	15.25
L-2560P	63.61	15.26
L-2570P	9.71	16.65
L-2580DS	11.29	12.40

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-2590W	34.81	12.40
L-2600W	3.61	12.40
L-2610DS	14.61	12.57
L-2620DS	7.90	12.55
L-2640W	25.82	12.55
L-2650W	280.50	22.07
L-2660W	0.00	0.00
L-2670W	1141.37	24.39
L-2680W	0.00	0.00
L-2700W	936.38	24.90
L-2710W	628.61	25.44
L-2720W	0.25	25.69
L-2730W	71.10	14.85
L-2740W	104.72	14.95
L-2750W	107.83	15.87
L-2760W	0.00	0.00
L-2790P	30.35	18.35
L-2800W	752.19	18.35
L-2840W	0.00	0.00
~~D~L-0334DS~W0	3.53	13.19
~~D~L-0334DS~W1	11.42	13.19
~~D~L-0334DS~W2	0.00	0.00
~~D~L-0335DS~W0	16.84	14.58
~~D~L-0335DS~W1	4.14	14.58
~~D~L-0335DS~W2	0.00	0.00
~~D~L-036DS~W0	2.77	12.41
~~D~L-036DS~W1	22.56	15.08
~~D~L-2580DS~W0	3.11	11.93
~~D~L-2580DS~W1	9.05	12.77
~~D~L-2580DS~W2	3.99	12.40
~~D~L-2610DS~W0	3.24	11.97
~~D~L-2610DS~W1	13.44	12.57
~~D~L-2620DS~W0	1.30	11.90
~~D~L-2620DS~W1	7.41	12.55

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-00	5.76	3017.51	31.75	3011.96	32.04	0.00
NZA-01	5.49	3011.96	32.04	3007.92	32.30	0.00
NZA-010	25.62	2117.16	32.05	2116.81	32.12	29.20
NZA-0100	50.64	3316.53	16.16	3176.41	16.56	0.00
NZA-0101	44.91	3099.79	17.22	3089.28	17.29	0.00
NZA-0102	43.97	4863.48	17.02	4725.16	16.99	0.00
NZA-0103	41.17	2268.45	22.11	2218.59	22.73	0.00
NZA-0104	40.66	2218.59	22.73	2175.11	23.29	0.00
NZA-0105	40.13	2278.76	23.16	2223.85	23.91	0.00
NZA-0106	39.69	2223.85	23.91	2202.34	24.49	0.00
NZA-0107	39.04	2202.34	24.49	2198.95	24.63	40.94
NZA-0108	38.99	2198.95	24.63	2197.39	24.72	0.00
NZA-0109	38.43	2197.39	24.72	2190.55	24.99	0.00
NZA-011	24.50	2116.81	32.12	2116.43	32.20	0.00
NZA-0110	37.98	2191.92	24.96	2185.94	25.36	0.00
NZA-0111	37.62	2334.84	24.95	2327.65	25.29	0.00
NZA-0112	37.02	2327.65	25.29	2328.35	25.56	0.00
NZA-0113	35.62	2328.35	25.56	2316.19	25.93	0.00
NZA-0114	34.74	2316.19	25.93	2299.70	26.36	0.00
NZA-0115	34.38	2299.70	26.36	2293.11	26.66	0.00
NZA-0116	34.17	2303.83	26.56	2301.67	26.67	0.00
NZA-0117	34.04	1488.68	26.00	1483.00	26.54	0.00
NZA-0118	33.94	1483.00	26.54	1481.89	26.92	35.50
NZA-0119	32.24	1481.89	26.92	1481.65	26.96	0.00
NZA-012	39.48	523.28	14.50	345.95	16.98	41.04
NZA-0120	31.38	2154.31	27.80	2148.95	28.15	0.00
NZA-0121	30.50	2149.50	28.12	2136.81	28.68	0.00
NZA-0122	30.17	2136.81	28.68	2124.79	29.27	0.00
NZA-0123	30.12	2076.23	29.37	2071.03	29.75	0.00
NZA-0124	30.10	2070.85	29.76	2069.02	30.21	0.00
NZA-0125	30.09	2069.02	30.21	2068.41	30.20	30.00
NZA-0126	26.80	2068.41	30.20	2066.52	30.27	0.00

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0127	26.53	2063.90	30.36	2062.16	30.41	0.00
NZA-0128	26.60	2066.52	30.27	2063.90	30.36	20.80
NZA-0129	26.45	2062.16	30.41	2056.21	30.65	0.00
NZA-013	37.11	345.95	16.98	346.03	17.09	0.00
NZA-0130	25.65	2120.02	31.45	2117.15	31.91	0.00
NZA-0131	25.63	2117.15	31.91	2117.16	32.05	0.00
NZA-0134	22.57	1229.54	18.83	1203.80	19.99	0.00
NZA-0135	22.91	2243.90	20.31	2243.48	22.83	0.00
NZA-0136	14.30	1317.19	20.11	1305.28	20.73	17.20
NZA-0137	14.03	1305.28	20.73	1278.15	20.93	0.00
NZA-0138	17.62	360.20	15.89	395.06	16.79	24.32
NZA-0139	17.60	395.06	16.79	352.96	16.24	0.00
NZA-014	34.99	395.51	15.38	395.46	15.44	35.55
NZA-0140	15.77	111.90	14.93	111.85	15.00	15.61
NZA-0142	15.15	583.01	17.64	580.19	17.80	18.90
NZA-0143	14.58	1011.84	19.44	998.48	19.87	20.00
NZA-0144	14.41	998.48	19.87	988.43	20.15	0.00
NZA-0145	14.37	640.95	14.97	191.28	27.66	0.00
NZA-0146	15.90	770.42	18.15	766.34	18.31	15.75
NZA-0147	15.78	766.34	18.31	760.86	18.46	0.00
NZA-0148	16.40	523.01	17.63	516.44	17.98	16.00
NZA-0149	16.24	516.44	17.98	514.54	18.10	0.00
NZA-015	33.38	395.46	15.44	395.52	15.53	0.00
NZA-0150	24.69	790.53	13.27	696.68	13.85	24.17
NZA-0151	24.54	696.68	13.85	614.56	14.18	0.00
NZA-0152	23.99	392.65	16.32	390.12	16.61	23.66
NZA-0153	23.02	390.12	16.61	367.84	17.04	0.00
NZA-0154	14.02	1209.87	20.48	1082.16	21.13	0.00
NZA-0155	14.02	1198.53	20.44	1151.04	20.73	0.00
NZA-0156	14.33	1423.59	18.38	1317.19	20.11	0.00
NZA-0157	14.36	988.43	20.15	969.89	20.69	13.30
NZA-0158	14.83	1154.69	17.89	1071.49	18.50	0.00

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0159	15.08	748.04	18.89	728.98	19.62	0.00
NZA-016	29.53	749.09	16.58	748.93	16.65	26.19
NZA-0160	15.27	763.11	18.46	745.79	18.90	0.00
NZA-0161	16.02	514.54	18.10	509.91	18.37	0.00
NZA-0162	16.66	564.81	16.36	523.01	17.63	0.00
NZA-0163	16.80	352.96	16.24	326.41	17.70	0.00
NZA-0164	26.28	2153.05	29.68	2186.15	32.02	0.00
NZA-0165	24.34	2116.43	32.20	2115.46	32.40	0.00
NZA-0166	20.87	1280.97	21.60	1261.49	22.63	0.00
NZA-0167	19.89	1162.83	26.18	1143.89	27.51	0.00
NZA-0168	20.05	1200.77	24.19	1162.83	26.18	0.00
NZA-0169	19.53	834.97	14.05	800.67	14.26	0.00
NZA-017	28.69	748.93	16.65	751.63	16.78	0.00
NZA-0170	25.84	2186.15	32.02	2119.44	31.45	0.00
NZA-0171	14.66	1071.49	18.50	1011.84	19.44	0.00
NZA-0172	23.92	546.65	14.89	509.83	15.30	0.00
NZA-0173	24.24	631.31	13.43	231.99	16.80	0.00
NZA-0176	18.01	120.12	13.17	95.04	19.08	0.00
NZA-0177	31.97	983.42	14.40	689.60	16.51	35.80
NZA-0178	31.54	689.60	16.51	689.36	16.67	0.00
NZA-0179	17.99	359.44	15.53	352.89	15.91	0.00
NZA-018	32.10	1481.65	26.96	1481.38	26.99	31.49
NZA-0180	18.59	177.61	15.02	24.20	25.47	22.36
NZA-0181	16.98	30.39	26.77	22.70	36.29	0.00
NZA-0182	19.52	752.29	14.47	732.55	14.50	17.77
NZA-0183	19.52	732.55	14.50	709.24	14.53	0.00
NZA-0185	21.49	245.00	23.40	244.73	23.56	0.00
NZA-0186	20.79	946.96	23.98	943.70	24.02	19.89
NZA-0188	20.75	523.98	20.23	504.49	20.72	19.05
NZA-019	31.73	1481.39	26.99	1480.00	27.07	0.00
NZA-0192	14.03	1278.15	20.93	1216.00	21.19	0.00
NZA-0193	19.53	786.47	14.31	752.29	14.47	0.00

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0194	19.52	709.24	14.53	589.14	14.50	0.00
NZA-0195	19.52	1034.78	14.25	744.87	14.21	0.00
NZA-0196	19.51	744.87	14.21	319.13	14.37	0.00
NZA-0197	17.46	2500.12	30.20	2488.94	30.60	0.00
NZA-0198	19.50	330.48	14.87	220.69	30.69	24.78
NZA-0199	19.29	220.69	30.69	220.68	30.75	17.92
NZA-02	5.24	3007.92	32.30	3003.55	32.44	0.00
NZA-020	33.74	684.88	27.81	681.87	28.56	36.34
NZA-0202	20.08	1444.77	23.37	1378.52	23.75	0.00
NZA-0205	20.74	1516.76	22.05	1459.84	23.24	0.00
NZA-0206	20.55	1459.84	23.24	1444.77	23.37	0.00
NZA-0208	21.17	244.73	23.56	242.49	24.04	0.00
NZA-0209	20.86	1448.34	23.44	1441.26	23.56	0.00
NZA-021	31.45	681.87	28.56	681.73	28.79	0.00
NZA-0210	24.08	456.55	14.31	392.65	16.32	0.00
NZA-0211	22.92	340.28	17.87	320.28	18.36	0.00
NZA-0212	22.95	388.88	16.90	340.28	17.87	0.00
NZA-0213	24.26	639.20	14.18	546.65	14.89	0.00
NZA-0214	23.92	2118.12	32.43	2115.61	33.18	0.00
NZA-0215	35.21	396.55	15.06	395.51	15.38	0.00
NZA-0216	29.74	395.52	15.53	394.69	15.84	0.00
NZA-0217	24.87	527.36	14.55	483.45	15.59	0.00
NZA-0218	19.83	345.66	19.94	344.46	19.94	0.00
NZA-0219	20.27	349.57	20.01	345.66	19.94	20.94
NZA-022	33.81	839.75	26.69	744.05	28.16	32.67
NZA-0220	20.74	146.74	13.62	143.24	13.94	0.00
NZA-0221	19.63	347.44	19.91	340.53	20.08	0.00
NZA-0222	19.54	340.53	20.08	309.99	20.35	0.00
NZA-0223	19.54	309.99	20.35	288.96	20.44	17.73
NZA-0224	21.03	60.42	12.28	36.45	12.52	0.00
NZA-0226	20.40	140.79	14.85	111.62	18.39	0.00
NZA-0228	20.41	194.54	13.85	39.21	19.63	19.72

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0229	21.12	132.84	13.98	61.30	15.59	0.00
NZA-023	33.80	690.20	27.39	684.88	27.81	0.00
NZA-0230	20.34	312.05	20.40	317.25	20.38	19.47
NZA-0231	20.57	183.94	19.99	183.19	20.88	0.00
NZA-0232	14.73	580.19	17.80	579.55	17.82	0.00
NZA-0233	16.76	456.51	12.84	353.17	13.58	17.50
NZA-0234	15.72	619.58	16.17	595.97	17.03	0.00
NZA-0235	15.56	595.97	17.03	583.01	17.64	0.00
NZA-0236	17.08	389.80	18.44	389.39	19.30	19.00
NZA-0237	15.94	389.39	19.30	394.71	19.47	0.00
NZA-0238	15.79	569.35	16.06	528.38	17.25	0.00
NZA-0239	24.81	483.45	15.59	481.02	15.87	24.00
NZA-024	41.52	2101.16	22.03	2089.44	22.30	0.00
NZA-0240	23.21	481.02	15.87	437.70	17.44	0.00
NZA-0241	23.20	456.99	17.19	451.31	18.01	27.00
NZA-0242	22.59	451.31	18.01	432.99	18.58	0.00
NZA-0243	16.30	123.68	17.52	124.76	17.47	19.00
NZA-0244	16.25	176.39	15.45	160.54	15.15	0.00
NZA-0245	15.92	328.19	15.12	267.69	17.17	0.00
NZA-0246	16.05	160.54	15.15	146.40	18.19	0.00
NZA-0247	21.19	285.10	15.05	126.95	19.54	21.19
NZA-0248	21.04	110.97	19.44	110.68	19.59	0.00
NZA-0249	20.53	291.02	20.40	291.24	20.84	0.00
NZA-025	43.93	4744.22	16.99	2101.16	22.03	42.41
NZA-0250	20.60	110.68	19.59	109.10	19.97	0.00
NZA-0251	23.76	83.91	17.04	81.59	18.11	0.00
NZA-0252	22.71	305.75	15.75	183.94	19.99	0.00
NZA-0253	23.19	81.59	18.11	79.94	19.82	0.00
NZA-0254	17.77	354.22	13.57	218.96	15.32	19.00
NZA-0255	16.24	35.69	18.79	39.68	16.62	0.00
NZA-0256	17.77	271.09	15.12	52.96	18.80	18.50
NZA-0258	16.12	116.86	14.21	111.90	14.93	0.00

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-026	46.53	3100.68	17.17	3099.79	17.22	0.00
NZA-0261	11.58	1505.00	15.10	1066.96	17.81	11.50
NZA-0261A	9.03	1066.96	17.81	1049.49	17.71	11.50
NZA-0262	8.98	1049.49	17.71	785.26	17.43	0.00
NZA-0263	22.37	308.92	13.78	154.52	15.96	0.00
NZA-0265	19.81	118.75	27.86	118.27	28.95	0.00
NZA-0266	19.81	159.30	22.16	103.53	27.84	0.00
NZA-0267	19.85	1378.52	23.75	1345.95	27.94	0.00
NZA-0268	19.84	221.81	22.19	136.86	22.16	0.00
NZA-0269	21.82	136.79	14.59	77.83	19.85	0.00
NZA-027	49.32	3176.41	16.56	3100.68	17.17	51.60
NZA-0270	21.54	77.83	19.85	77.92	20.07	0.00
NZA-0271	21.15	307.90	13.65	307.48	13.69	0.00
NZA-0272	19.82	126.33	13.74	120.27	14.51	0.00
NZA-0273	20.38	500.60	14.80	58.98	26.16	21.50
NZA-0274	18.52	58.98	26.16	59.00	26.34	0.00
NZA-0275	18.25	59.00	26.34	59.27	26.36	0.00
NZA-0276	18.02	59.27	26.36	64.09	21.32	0.00
NZA-0277	17.90	162.39	14.93	127.72	16.71	0.00
NZA-0278	16.76	324.93	12.30	192.96	12.42	0.00
NZA-0279	16.40	159.84	12.47	139.41	12.90	0.00
NZA-028	58.21	315.27	14.84	121.84	27.42	61.83
NZA-0280	14.02	454.81	13.35	445.15	13.57	0.00
NZA-0281	14.02	116.36	13.24	106.83	13.89	0.00
NZA-0282	15.93	10.98	12.56	4.27	18.65	0.00
NZA-0283	14.02	570.82	13.58	523.41	13.66	0.00
NZA-0285	16.56	7.76	12.49	3.45	14.23	0.00
NZA-0286	31.31	751.20	16.33	749.09	16.58	0.00
NZA-0287	26.85	805.98	16.45	794.00	16.77	0.00
NZA-0288	13.91	2679.17	37.97	2675.55	41.09	0.00
NZA-0289	17.48	119.28	12.63	53.93	12.73	0.00
NZA-029	58.94	2230.35	14.33	2174.74	14.60	0.00

1% Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0290	17.48	74.29	12.63	37.90	16.29	0.00
NZA-0291	18.21	128.43	12.63	103.19	13.00	0.00
NZA-0292	17.42	159.41	12.73	158.09	12.88	0.00
NZA-0293	17.08	121.56	13.55	120.48	13.60	0.00
NZA-0295	16.77	140.23	12.48	143.55	12.47	0.00
NZA-0296	19.51	39.98	13.37	15.77	30.75	21.50
NZA-0297	16.71	11.10	12.19	2.33	13.63	0.00
NZA-0298	20.42	181.07	13.90	173.42	13.79	21.50
NZA-0299	18.26	10.75	19.28	10.67	20.85	0.00
NZA-03	4.04	3116.92	38.42	3155.58	38.36	8.40
NZA-030	17.48	134.48	12.88	119.08	34.38	0.00
NZA-0300	18.02	25.23	25.99	26.07	25.77	0.00
NZA-0301	18.03	13.29	17.22	11.19	22.45	0.00
NZA-0302	17.99	29.11	16.35	27.06	25.26	0.00
NZA-0303	17.95	101.60	15.71	38.54	22.29	0.00
NZA-0304	17.95	172.92	15.71	101.60	15.71	0.00
NZA-0305	17.95	172.33	15.04	169.01	15.66	0.00
NZA-0306	18.04	663.65	14.92	652.00	15.22	0.00
NZA-0307	17.53	480.43	15.29	469.41	15.57	0.00
NZA-0308	17.27	469.41	15.57	441.92	15.74	0.00
NZA-0309	17.17	441.92	15.74	389.80	18.44	0.00
NZA-031	17.52	155.99	12.65	134.48	12.88	29.83
NZA-0310	21.85	101.87	12.28	29.10	12.78	0.00
NZA-0311	23.20	67.74	12.28	14.17	12.93	0.00
NZA-0312	22.75	75.47	12.48	32.66	13.25	0.00
NZA-0313	21.12	17.93	15.54	1.78	28.51	0.00
NZA-0314	21.53	105.39	12.50	50.81	13.47	0.00
NZA-0315	22.46	82.69	12.47	21.04	13.68	0.00
NZA-0316	21.61	173.46	12.37	54.07	13.37	0.00
NZA-0317	16.71	7.27	12.20	1.53	13.63	0.00
NZA-0318	20.72	53.39	12.28	30.40	12.53	0.00
NZA-0319	20.52	77.93	12.47	15.41	13.96	0.00

1% Annual Chance Event
Max Stage Results

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NZA-032	15.63	2687.46	32.95	2681.17	33.24	0.00
NZA-0320	20.41	84.56	12.47	7.07	12.44	0.00
NZA-0321	21.02	20.70	12.28	3.59	13.06	0.00
NZA-0322	21.12	38.67	12.28	8.45	12.90	0.00
NZA-0323	20.06	53.39	12.28	1.23	21.99	0.00
NZA-0324	21.47	176.89	12.47	69.62	13.31	0.00
NZA-0325	12.98	1117.27	15.08	439.99	20.28	12.90
NZA-0326	12.74	213.35	12.65	94.68	13.70	10.39
NZA-0327	19.77	58.41	12.47	11.25	13.54	0.00
NZA-0328	23.93	604.37	13.25	83.91	17.04	0.00
NZA-0329	18.03	11.25	13.54	11.24	13.54	0.00
NZA-033	16.95	2468.78	32.92	2467.79	33.01	24.30
NZA-0331	26.35	121.58	12.63	24.77	14.56	0.00
NZA-0332	26.00	196.96	12.63	156.64	13.08	0.00
NZA-0333	3.60	3229.13	38.36	842.85	12.00	0.00
NZA-0335	21.74	1494.65	19.98	1471.68	21.99	20.55
NZA-0336	16.72	7.78	12.49	7.76	12.49	0.00
NZA-0337	29.92	125.88	14.90	63.00	44.78	0.00
NZA-0338	16.73	11.15	12.18	11.10	12.19	16.04
NZA-0339	31.13	30.44	12.50	7.43	13.55	0.00
NZA-034	13.87	2695.20	42.00	2694.29	42.05	12.40
NZA-0340	30.12	75.56	13.12	74.91	13.23	0.00
NZA-0341	32.17	123.70	12.47	68.55	13.06	0.00
NZA-0342	28.83	137.26	12.63	123.34	12.92	0.00
NZA-0343	46.84	108.47	13.60	20.67	18.91	0.00
NZA-0344	66.42	68.96	12.72	65.94	12.90	0.00
NZA-0345	19.37	62.42	12.48	5.91	15.86	0.00
NZA-0346	18.05	13.77	12.50	5.74	13.28	0.00
NZA-0347	20.18	220.07	12.48	109.10	13.16	0.00
NZA-0348	26.49	299.08	12.63	216.75	13.19	0.00
NZA-0349	19.22	5.91	15.86	5.91	15.86	0.00
NZA-035	10.39	2694.29	42.05	2694.30	42.24	0.00

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Max Stage Results

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NZA-0350	17.66	5.74	13.28	5.73	13.28	0.00
NZA-0351	18.05	23.39	13.00	23.37	13.00	0.00
NZA-0352	16.74	7.32	12.20	7.27	12.20	0.00
NZA-0353	16.73	10.99	12.55	10.98	12.56	0.00
NZA-0354	13.93	120.27	17.73	16.96	71.14	0.00
NZA-0355	14.63	0.00	21.25	0.00	71.30	0.00
NZA-0356	15.17	44.36	12.30	43.95	12.33	0.00
NZA-0357	15.17	243.94	12.47	151.46	12.98	0.00
NZA-0358	15.17	22.66	12.30	20.55	12.40	0.00
NZA-0359	16.71	256.64	12.45	11.89	16.23	0.00
NZA-036	15.43	517.65	12.62	28.19	19.16	19.54
NZA-0360	16.78	65.08	12.28	58.94	12.39	0.00
NZA-0361	18.41	28.77	12.28	16.18	12.59	0.00
NZA-0362	15.99	61.78	12.28	42.65	12.52	0.00
NZA-037	14.28	389.34	14.33	386.80	14.44	14.41
NZA-038	14.63	232.66	14.03	147.01	16.61	0.00
NZA-039	14.75	187.63	13.23	183.02	13.48	11.61
NZA-04	3.98	3155.58	38.36	3229.13	38.36	0.00
NZA-040	19.50	319.13	14.37	224.22	27.08	34.86
NZA-042	14.53	2689.39	35.42	2686.96	35.49	11.60
NZA-043	14.51	2686.96	35.49	2681.94	35.97	0.00
NZA-044	21.53	2459.70	21.92	2456.04	21.97	19.95
NZA-045	21.51	2456.04	21.97	2451.13	21.97	0.00
NZA-046	20.67	1213.22	24.09	1209.13	24.13	23.60
NZA-047	20.65	1209.13	24.13	1207.80	24.15	0.00
NZA-0470	58.81	65.94	12.90	65.94	12.91	53.88
NZA-048	19.77	2429.09	28.79	2429.01	28.90	26.30
NZA-049	18.24	2429.01	28.90	2426.03	28.95	0.00
NZA-05	7.08	2815.69	34.95	2815.48	35.06	16.40
NZA-050	6.07	2817.36	35.17	2821.09	34.60	0.00
NZA-051	6.47	2816.45	35.21	2817.36	35.17	0.00
NZA-052	6.70	2815.81	35.13	2816.45	35.21	0.00

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Max Stage Results

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NZA-053	6.85	2815.52	35.05	2815.81	35.13	0.00
NZA-054	4.87	3003.55	32.44	3003.31	38.74	0.00
NZA-055	4.70	3003.31	38.74	3060.40	38.69	0.00
NZA-056	4.39	3060.40	38.69	3116.92	38.42	0.00
NZA-057	7.16	2700.84	41.56	2706.17	41.09	0.00
NZA-058	7.29	2697.01	42.47	2700.84	41.56	0.00
NZA-059	7.66	2694.53	42.72	2697.01	42.47	0.00
NZA-06	6.92	2815.48	35.06	2815.52	35.05	0.00
NZA-060	8.43	2694.34	42.47	2694.53	42.72	0.00
NZA-061	8.97	2694.30	42.24	2694.34	42.47	0.00
NZA-062	13.88	2675.56	41.09	2676.07	42.00	0.00
NZA-063	13.93	2698.17	36.84	2683.87	37.47	0.00
NZA-064	13.98	2717.78	33.28	2698.17	36.84	0.00
NZA-065	14.02	2777.07	32.98	2717.37	33.30	0.00
NZA-066	14.10	2661.56	37.03	2656.80	37.14	0.00
NZA-067	14.19	2666.24	36.91	2661.56	37.03	0.00
NZA-068	14.28	2674.25	36.54	2666.25	36.90	0.00
NZA-069	14.38	2681.94	35.97	2674.03	36.55	0.00
NZA-07	8.97	785.26	17.43	538.62	21.47	8.89
NZA-070	14.63	2695.35	34.97	2689.80	35.20	0.00
NZA-071	14.76	2715.03	34.72	2709.43	34.93	0.00
NZA-072	14.94	2719.37	34.55	2715.03	34.72	0.00
NZA-073	15.06	2724.29	34.34	2719.37	34.55	0.00
NZA-074	15.17	2739.71	33.59	2723.17	34.31	0.00
NZA-075	15.29	2669.86	33.75	2665.94	33.94	0.00
NZA-076	15.47	2681.17	33.24	2669.86	33.75	0.00
NZA-077	16.97	2502.27	30.77	2468.78	32.92	0.00
NZA-078	16.81	258.72	12.47	32.77	14.76	0.00
NZA-079	15.84	95.23	12.48	4.62	18.49	0.00
NZA-08	17.92	306.36	12.62	61.21	14.61	19.57
NZA-082	17.68	2420.23	29.22	2396.16	29.83	0.00
NZA-083	18.03	2426.03	28.95	2412.83	29.34	0.00

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Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-084	19.82	2432.00	28.42	2429.09	28.79	0.00
NZA-085	19.85	1135.90	28.33	1134.21	28.68	0.00
NZA-086	19.87	1143.89	27.51	1135.90	28.33	0.00
NZA-087	20.74	1261.49	22.63	1245.93	23.28	19.71
NZA-088	20.51	1207.80	24.15	1200.77	24.19	0.00
NZA-089	20.97	2477.33	22.43	2462.36	22.88	0.00
NZA-09	16.19	61.21	14.61	61.08	14.91	0.00
NZA-090	21.24	2451.13	21.97	2440.66	22.70	0.00
NZA-091	21.61	2477.77	21.30	2459.70	21.92	0.00
NZA-092	21.68	1269.39	20.67	1242.18	21.71	0.00
NZA-093	21.91	1289.42	19.98	1269.39	20.67	0.00
NZA-094	22.11	1193.83	20.64	1187.05	21.19	0.00
NZA-095	22.26	1203.80	19.99	1193.83	20.64	0.00
NZA-096	58.38	1860.68	14.58	1728.37	15.37	0.00
NZA-097	57.62	2968.99	15.02	2898.89	15.60	0.00
NZA-098	55.09	2898.89	15.60	2860.17	15.98	0.00
NZA-099	53.03	2860.17	15.9841	2833.68	16.3399	0

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-00	1860.68	14.58
L-01	3116.92	38.42
L-010	2706.17	41.09
L-0100	2327.65	25.29
L-0101	2185.94	25.36
L-0102	2190.55	24.99
L-0103	2197.39	24.72
L-0104P1	31.98	15.22
L-0104P2	41.69	14.13
L-0104P3	32.27	15.22
L-0104P4	45.25	55.91
L-0104W	2142.01	24.65
L-0105	2202.34	24.49
L-0106	2223.85	23.91
L-0107	2175.11	23.29
L-0108	2218.59	22.73
L-0109	4725.16	16.99
L-011	2815.81	35.13
L-0110	3089.28	17.29
L-0111P1	363.16	19.64
L-0111P2	388.05	19.64
L-0111P3	155.22	22.26
L-0111W	1211.30	22.05
L-0112	2089.44	22.30
L-0113	3176.41	16.56
L-0114P	3100.68	17.17
L-0114W	0.00	0.00
L-0115	3099.79	17.22
L-0116	2833.68	16.34
L-0117	2860.17	15.98
L-0118	2898.89	15.60
L-0119	1728.37	15.37
L-012	2815.52	35.05
L-0120P	42.69	14.41
L-0120W	687.18	27.43
L-0121	681.73	28.79
L-0122P	681.87	28.56
L-0122W	0.00	0.00
L-0123	684.88	27.81
L-0124P1	432.72	16.52
L-0124P2	256.89	16.49
L-0124W	0.00	0.00
L-0125	794.00	16.77
L-0126P	19.85	14.11
L-0126W	730.68	16.65

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0127	749.09	16.58
L-0128P	345.95	16.98
L-0128W	0.00	0.00
L-0129	432.99	18.58
L-0130B	451.31	18.01
L-0131	437.70	17.44
L-0132W	481.02	15.87
L-0133	483.45	15.59
L-0134	394.69	15.84
L-0135	395.52	15.53
L-0136P	24.56	13.03
L-0136W	377.67	15.44
L-0137	395.51	15.38
L-0138	346.03	17.09
L-013B	2815.48	35.06
L-014	2697.01	42.47
L-0140	546.65	14.89
L-0142	509.83	15.30
L-0143	614.56	14.18
L-0144P	63.07	13.08
L-0144W	657.29	13.89
L-0146	231.99	16.80
L-0147	392.65	16.32
L-0148	367.84	17.04
L-0149P	19.92	14.30
L-0149W	373.24	16.63
L-015	2700.84	41.56
L-0150	340.28	17.87
L-0151	95.04	19.08
L-0152	1011.84	19.44
L-0153	805.55	23.35
L-0154	988.43	20.15
L-0155B	998.48	19.87
L-0156	514.54	18.10
L-0157W	516.44	17.98
L-0158	728.98	19.62
L-0159	1071.49	18.50
L-016	2694.30	42.24
L-0160	1147.19	20.81
L-0161	1317.19	20.11
L-0162	1278.15	20.93
L-0163B	1305.28	20.73
L-0164	1151.04	20.73
L-0165	1082.16	21.13
L-0166	326.41	17.70

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0167	523.01	17.63
L-0168	509.91	18.37
L-0169	760.86	18.46
L-017	2694.34	42.47
L-0170P1	26.80	15.35
L-0170P2	46.32	15.24
L-0170W	726.56	18.37
L-0171	352.89	15.91
L-0172	352.96	16.24
L-0173B	395.06	16.79
L-0174P	538.62	21.47
L-0174W	0.00	0.00
L-0175P	28.19	19.16
L-0175W	0.00	0.00
L-0176P	61.21	14.61
L-0176W	0.00	0.00
L-0177	61.08	14.91
L-018	2694.53	42.72
L-0180P	11.70	72.00
L-0180W	184.60	27.57
L-0181P1	5.01	14.26
L-0181P2	5.11	14.25
L-0181P3	5.22	14.25
L-0181P4	5.07	14.26
L-0181P5	4.89	14.27
L-0181W	362.99	14.50
L-0182P1	33.89	13.33
L-0182P2	32.17	13.94
L-0182W	77.60	16.69
L-0183P1	4.30	13.48
L-0183P2	3.89	13.48
L-0183P3	3.96	13.48
L-0183P4	2.28	13.48
L-0183W	168.58	13.48
L-0184P	21.34	15.50
L-0184W	90.58	14.99
L-0187P	134.48	12.88
L-0187W	0.00	0.00
L-0188	119.08	34.38
L-0189P	24.20	25.47
L-0189W	0.00	0.00
L-019	2676.07	42.00
L-0192	22.70	36.29
L-0193	786.47	14.31
L-0194	220.68	30.75

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0195	752.29	14.47
L-0196	709.24	14.53
L-0197P1	6.60	12.84
L-0197P2	5.07	12.96
L-0197P3	8.56	12.68
L-0197P4	7.99	12.73
L-0197P5	7.47	12.77
L-0197P6	4.74	12.97
L-0197P7	7.76	12.75
L-0197W	705.63	14.51
L-0198	319.13	14.37
L-0199	744.87	14.21
L-02	3229.13	38.36
L-0200	589.14	14.50
L-0201	220.69	30.69
L-0202P1	122.41	15.15
L-0202P2	98.90	15.24
L-0202W	216.72	27.29
L-0204P	15.18	15.91
L-0204W	235.69	23.42
L-0205	1444.77	23.37
L-0206	1378.52	23.75
L-0207	1288.10	28.53
L-0208	242.49	24.04
L-0209	244.73	23.56
L-020B	2694.29	42.05
L-021	2717.37	33.30
L-0210	523.98	20.23
L-0212	1459.84	23.24
L-0214P	7.39	15.62
L-0214W	503.24	21.98
L-0215P	9.17	15.95
L-0215W	939.65	23.68
L-0216P1	15.58	14.92
L-0216P2	15.59	14.78
L-0216W	358.78	17.69
L-0218P1	290.09	17.80
L-0218P2	290.09	17.80
L-0218W	0.00	0.00
L-0219	579.55	17.82
L-022	2698.17	36.84
L-0220P	2.83	60.57
L-0220W	38.50	19.63
L-0222	111.38	19.35
L-0225W	36.45	12.52

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0226	309.99	20.35
L-0227	340.53	20.08
L-0228P	15.27	17.78
L-0228W	330.53	19.94
L-0229	344.46	19.94
L-023	2679.17	37.97
L-0230P	1.40	15.72
L-0230W	287.81	20.47
L-0231	291.24	20.84
L-0232	183.19	20.88
L-0233P1	2.09	20.65
L-0233P2	2.08	20.65
L-0233P3	2.08	20.65
L-0233P4	2.08	20.65
L-0233W	308.92	20.38
L-0234	81.59	18.11
L-0235	79.94	19.82
L-0236	183.94	19.99
L-0237P1	0.83	13.80
L-0237P2	9.26	13.09
L-0237W	0.00	0.00
L-0238	40.44	18.96
L-0239P	353.17	13.58
L-0239W	0.00	0.00
L-024	2666.24	36.91
L-0240	583.01	17.64
L-0241	528.38	17.25
L-0242	595.97	17.03
L-0243	394.71	19.47
L-0244P	389.39	19.30
L-0244W	0.00	0.00
L-0245P	124.76	17.47
L-0245W	0.00	0.00
L-0246	146.40	18.19
L-0247	267.69	17.17
L-0249P1	16.62	15.96
L-0249P2	16.62	15.96
L-0249W	82.93	19.52
L-025	2661.56	37.03
L-0250	109.10	19.97
L-0251	110.68	19.59
L-0252	111.90	14.93
L-0253P	35.69	18.79
L-0253W	0.00	0.00
L-0254	39.68	16.62

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0255P	52.96	18.80
L-0255W	0.00	0.00
L-0259P	121.84	27.42
L-0259W	0.00	0.00
L-026	2656.80	37.14
L-0260B	3155.58	38.36
L-0261	3007.92	32.30
L-0262	745.79	18.90
L-0263	320.28	18.36
L-0264	129.95	16.03
L-0266	77.83	19.85
L-0267	77.92	20.07
L-0268	126.33	13.74
L-0269	39.25	13.98
L-027	2674.03	36.55
L-0270W	0.00	0.00
L-0271	66.99	14.80
L-0272	41.71	67.51
L-0273P1	29.18	26.16
L-0273P2	29.80	26.16
L-0273W	0.00	0.00
L-0274	59.00	26.34
L-0275	64.09	21.32
L-0276	59.27	26.36
L-0277W	523.41	13.66
L-028	2681.94	35.97
L-0280P	159.84	12.47
L-0280W	0.00	0.00
L-0281	139.41	12.90
L-0282	116.36	13.24
L-0283	106.83	13.89
L-0285	689.36	16.67
L-0286	751.63	16.78
L-0287	1049.49	17.71
L-0288	785.26	17.43
L-0289	2675.55	41.09
L-0290P	4.00	9.42
L-0290W	52.35	12.73
L-0291W1	2.39	16.29
L-0291W2	35.51	16.29
L-0292P	158.09	12.88
L-0293W1	13.30	12.95
L-0293W2	89.92	13.00
L-0294	120.48	13.60
L-0295	143.55	12.47

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0297P	10.75	19.28
L-0297W	0.00	0.00
L-0298P	15.77	30.75
L-0298W	0.00	0.00
L-0299	10.67	20.85
L-029W	2686.96	35.49
L-03	3003.55	32.44
L-030	2665.94	33.94
L-0300	11.19	22.45
L-0302	26.07	25.77
L-0303	27.06	25.26
L-0304	38.54	22.29
L-0305	55.08	22.07
L-0306	67.27	21.80
L-0307	480.43	15.29
L-0308	469.41	15.57
L-0309	441.92	15.74
L-031	2721.79	34.35
L-0310	389.80	18.44
L-0311W	29.10	12.78
L-0312W	32.66	13.25
L-0313W	14.17	12.93
L-0314W	1.78	28.51
L-0315	21.04	13.68
L-0317W	54.07	13.37
L-0318W	50.81	13.47
L-0319W	15.41	13.96
L-032	2719.37	34.55
L-0320W	30.40	12.53
L-0321W	7.07	12.44
L-0322W	69.62	13.31
L-0323P	3.59	13.06
L-0323W	0.00	0.00
L-0324P	8.45	12.90
L-0324W	0.00	0.00
L-0325P	1.23	21.99
L-0325W	0.00	0.00
L-0326P	439.79	20.24
L-0326W	0.21	20.28
L-0327P	94.68	13.70
L-0327W	0.00	0.00
L-0328P	11.25	13.54
L-0328W	11.24	13.54
L-0329	83.91	17.04
L-033	2715.03	34.72

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0330	0.00	0.00
L-0332	3.18	35.11
L-0334DS	16.82	13.08
L-0334P	17.00	13.22
L-0334W1	62.60	13.08
L-0334W2	62.60	13.08
L-0335DS	24.77	14.56
L-0335W	0.00	0.00
L-0336W	10.76	18.09
L-0337	7.68	15.10
L-0337W	123.68	17.52
L-0338	118.27	28.95
L-034	2695.35	34.97
L-0340P	15.76	40.98
L-0341P	63.00	44.78
L-0342P	68.55	13.06
L-0343P	7.43	13.55
L-0344W	123.34	12.92
L-0345	74.91	13.23
L-0345P	5.74	13.28
L-0345W1	3.12	13.14
L-0345W2	2.71	13.53
L-0345W3	0.00	0.00
L-0346W	20.67	18.91
L-0347P	65.94	12.91
L-0348P	23.39	13.00
L-0348W1	23.37	13.00
L-0348W2	85.92	13.17
L-035	2689.39	35.42
L-0350P	5.91	15.86
L-0350W1	5.81	15.41
L-0350W2	0.12	16.10
L-0351P1	57.48	13.19
L-0351P2	18.31	13.40
L-0351W1	130.73	13.19
L-0351W2	10.85	13.19
L-036DS	32.77	14.76
L-037	2468.78	32.92
L-038	2669.86	33.75
L-039	2681.17	33.24
L-04	3060.40	38.69
L-0400P	1.53	13.63
L-0400W	1.54	13.63
L-0401P	2.33	13.63
L-0401W	2.34	13.63

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0402P	3.45	14.23
L-0402W	3.46	14.23
L-0403P	4.27	18.65
L-0403W	4.27	18.65
L-040B	2467.79	33.01
L-041	2488.94	30.60
L-045	1134.21	28.68
L-046	2429.09	28.79
L-047	2412.83	29.34
L-048	2396.16	29.83
L-049	2426.03	28.95
L-05	3003.31	38.74
L-050B	1854.30	28.85
L-050W	574.72	28.90
L-051	1162.83	26.18
L-052	1143.89	27.51
L-053	1200.77	24.19
L-054	1135.90	28.33
L-055	1261.49	22.63
L-056	2440.66	22.70
L-057	1280.97	21.60
L-058	2451.13	21.97
L-059P1	3.68	13.58
L-059P2	29.11	13.58
L-059P3	29.12	13.58
L-059P4	19.29	13.72
L-059W	2415.70	21.97
L-06	2816.45	35.21
L-060	1213.22	24.09
L-061	1207.80	24.15
L-062B	345.71	25.01
L-062W	865.68	23.76
L-064	2115.61	33.18
L-065	828.93	33.48
L-066	1203.80	19.99
L-067	1193.83	20.64
L-068	1187.05	21.19
L-069	1269.39	20.67
L-07	2817.36	35.17
L-070	1242.18	21.71
L-071	2459.70	21.92
L-072	2115.46	32.40
L-074	2117.16	32.05
L-075	2117.15	31.91
L-076	2116.43	32.20

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-077B	2116.81	32.12
L-078W	2063.90	30.36
L-079	2062.16	30.41
L-08	2821.09	34.60
L-080	2066.52	30.27
L-081	2119.44	31.45
L-082	2186.15	32.02
L-083	2056.21	30.65
L-084P1	320.45	30.22
L-084P2	678.87	30.22
L-084P3	697.47	28.75
L-084P4	111.58	30.55
L-084W	260.88	30.22
L-085	2069.02	30.21
L-086	2070.69	29.78
L-087	2076.23	29.37
L-088	2136.81	28.68
L-089	2148.95	28.15
L-09	3011.96	32.04
L-090	1480.00	27.07
L-091W	1481.38	26.99
L-092	1481.65	26.96
L-093P1	1104.19	26.95
L-093P2	377.73	26.78
L-093W	0.00	0.00
L-094	1483.00	26.54
L-095	1488.68	26.00
L-096	2293.11	26.66
L-097	2299.70	26.36
L-098	2316.19	25.93
L-099	2328.35	25.56
L-2320W	4.62	18.49
L-2410W	12.37	36.93
L-2420W	0.00	71.30
L-2430P	4.62	36.06
L-2430W	0.00	0.00
L-2440W	16.96	71.14
L-2480W	65.94	12.90
L-2520W	43.95	12.33
L-2530W	151.46	12.98
L-2540W	20.55	12.40
L-2550P	78.75	15.15
L-2560P	81.79	15.61
L-2570P	11.89	16.23
L-2580DS	11.72	12.39

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-2590W	38.62	12.39
L-2600W	8.60	12.39
L-2610DS	16.18	12.59
L-2620DS	8.62	12.51
L-2640W	34.03	12.52
L-2650W	817.62	26.85
L-2660W	59.41	28.57
L-2670W	1444.27	20.97
L-2680W	0.00	0.00
L-2700W	1189.13	23.37
L-2710W	938.93	24.11
L-2720W	17.66	26.28
L-2730W	82.10	14.63
L-2740W	138.36	14.57
L-2750W	184.16	15.32
L-2760W	0.00	0.00
L-2790P	31.36	17.66
L-2800W	1035.61	17.81
L-2840W	0.00	0.00
~~D~L-0334DS~W0	3.55	13.09
~~D~L-0334DS~W1	13.26	13.08
~~D~L-0334DS~W2	0.00	0.00
~~D~L-0335DS~W0	19.46	14.56
~~D~L-0335DS~W1	5.31	14.56
~~D~L-0335DS~W2	0.00	0.00
~~D~L-036DS~W0	2.77	12.27
~~D~L-036DS~W1	30.59	14.76
~~D~L-2580DS~W0	3.11	15.02
~~D~L-2580DS~W1	9.05	12.83
~~D~L-2580DS~W2	5.05	12.40
~~D~L-2610DS~W0	3.24	11.89
~~D~L-2610DS~W1	15.23	12.59
~~D~L-2620DS~W0	1.30	11.62
~~D~L-2620DS~W1	8.14	12.52

1% + 1.41 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-00	5.95	3047.86	31.60	3057.87	31.59	0.00
NZA-01	5.77	3057.87	31.59	3072.65	29.71	0.00
NZA-010	25.62	2117.53	32.04	2116.81	32.15	29.20
NZA-0100	50.64	3316.53	16.16	3176.41	16.56	0.00
NZA-0101	44.91	3099.79	17.22	3089.28	17.29	0.00
NZA-0102	43.97	4863.48	17.02	4725.16	16.99	0.00
NZA-0103	41.17	2268.45	22.12	2218.59	22.73	0.00
NZA-0104	40.66	2218.59	22.73	2175.11	23.29	0.00
NZA-0105	40.13	2278.76	23.16	2223.85	23.91	0.00
NZA-0106	39.69	2223.85	23.91	2202.34	24.49	0.00
NZA-0107	39.04	2202.34	24.49	2198.95	24.63	40.94
NZA-0108	38.99	2198.95	24.63	2197.39	24.72	0.00
NZA-0109	38.43	2197.39	24.72	2190.55	24.99	0.00
NZA-011	24.50	2116.81	32.15	2116.44	32.20	0.00
NZA-0110	37.98	2191.92	24.96	2185.94	25.36	0.00
NZA-0111	37.62	2334.84	24.95	2327.65	25.29	0.00
NZA-0112	37.02	2327.65	25.29	2328.35	25.56	0.00
NZA-0113	35.62	2328.35	25.56	2316.19	25.93	0.00
NZA-0114	34.74	2316.19	25.93	2299.71	26.36	0.00
NZA-0115	34.38	2299.71	26.36	2293.11	26.66	0.00
NZA-0116	34.17	2303.83	26.56	2301.69	26.69	0.00
NZA-0117	34.04	1488.68	26.00	1483.00	26.54	0.00
NZA-0118	33.94	1483.00	26.54	1481.89	26.92	35.50
NZA-0119	32.24	1481.89	26.92	1481.65	26.96	0.00
NZA-012	39.48	523.28	14.50	345.95	16.98	41.04
NZA-0120	31.38	2154.31	27.78	2148.95	28.15	0.00
NZA-0121	30.50	2149.50	28.12	2136.81	28.68	0.00
NZA-0122	30.17	2136.81	28.68	2124.79	29.28	0.00
NZA-0123	30.12	2076.23	29.37	2071.03	29.75	0.00
NZA-0124	30.10	2070.85	29.77	2069.13	30.23	0.00
NZA-0125	30.09	2069.13	30.23	2068.41	30.21	30.00
NZA-0126	26.80	2068.41	30.21	2066.52	30.28	0.00

1% + 1.41 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0127	26.53	2063.90	30.36	2062.16	30.43	0.00
NZA-0128	26.60	2066.52	30.28	2063.90	30.36	20.80
NZA-0129	26.45	2062.16	30.43	2056.21	30.64	0.00
NZA-013	37.11	345.95	16.98	346.03	17.09	0.00
NZA-0130	25.65	2120.02	31.50	2117.31	32.11	0.00
NZA-0131	25.63	2117.31	32.11	2117.53	32.04	0.00
NZA-0134	22.57	1229.54	18.83	1203.80	19.99	0.00
NZA-0135	22.91	2243.75	20.37	2243.48	22.82	0.00
NZA-0136	14.30	1317.19	20.11	1305.28	20.72	17.20
NZA-0137	14.03	1305.28	20.72	1278.15	20.93	0.00
NZA-0138	17.62	360.20	15.89	394.96	16.78	24.32
NZA-0139	17.60	394.96	16.78	352.96	16.24	0.00
NZA-014	34.99	395.51	15.38	395.46	15.44	35.55
NZA-0140	15.77	111.90	14.93	111.85	15.01	15.61
NZA-0142	15.15	583.01	17.64	580.19	17.80	18.90
NZA-0143	14.58	1011.84	19.44	998.48	19.87	20.00
NZA-0144	14.41	998.48	19.87	988.43	20.15	0.00
NZA-0145	14.37	640.95	14.97	191.28	27.66	0.00
NZA-0146	15.90	770.42	18.15	766.34	18.31	15.75
NZA-0147	15.78	766.34	18.31	760.86	18.46	0.00
NZA-0148	16.40	523.01	17.63	516.44	17.98	16.00
NZA-0149	16.24	516.44	17.98	514.54	18.10	0.00
NZA-015	33.38	395.46	15.44	395.52	15.53	0.00
NZA-0150	24.69	790.53	13.27	696.68	13.85	24.17
NZA-0151	24.54	696.68	13.85	614.56	14.18	0.00
NZA-0152	23.99	392.65	16.32	390.12	16.62	23.66
NZA-0153	23.02	390.12	16.62	367.84	17.04	0.00
NZA-0154	14.02	1209.87	20.48	1082.16	21.13	0.00
NZA-0155	14.02	1198.53	20.44	1151.04	20.73	0.00
NZA-0156	14.33	1423.59	18.38	1317.19	20.11	0.00
NZA-0157	14.36	988.43	20.15	969.89	20.69	13.30
NZA-0158	14.83	1154.69	17.89	1071.49	18.50	0.00

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NZA-0159	15.08	748.04	18.89	728.98	19.62	0.00
NZA-016	29.53	749.09	16.58	748.94	16.65	26.19
NZA-0160	15.27	763.11	18.46	745.79	18.90	0.00
NZA-0161	16.02	514.54	18.10	509.91	18.37	0.00
NZA-0162	16.66	564.81	16.36	523.01	17.63	0.00
NZA-0163	16.80	352.96	16.24	326.41	17.70	0.00
NZA-0164	26.28	2153.05	29.68	2184.41	31.66	0.00
NZA-0165	24.34	2116.44	32.20	2115.46	32.40	0.00
NZA-0166	20.87	1280.97	21.60	1261.49	22.63	0.00
NZA-0167	19.89	1162.83	26.18	1143.89	27.50	0.00
NZA-0168	20.05	1200.77	24.19	1162.83	26.18	0.00
NZA-0169	19.53	834.97	14.05	800.67	14.26	0.00
NZA-017	28.69	748.94	16.65	751.63	16.78	0.00
NZA-0170	25.84	2184.41	31.66	2119.45	31.50	0.00
NZA-0171	14.66	1071.49	18.50	1011.84	19.44	0.00
NZA-0172	23.92	546.64	14.89	509.83	15.30	0.00
NZA-0173	24.24	631.31	13.43	231.99	16.80	0.00
NZA-0176	18.01	120.12	13.17	95.04	19.08	0.00
NZA-0177	31.97	983.42	14.40	689.60	16.51	35.80
NZA-0178	31.54	689.60	16.51	689.36	16.67	0.00
NZA-0179	17.99	359.44	15.52	352.89	15.91	0.00
NZA-018	32.10	1481.65	26.96	1481.38	26.99	31.49
NZA-0180	18.59	177.61	15.02	24.20	25.47	22.36
NZA-0181	16.98	30.39	26.77	22.70	36.29	0.00
NZA-0182	19.52	752.29	14.47	732.55	14.50	17.77
NZA-0183	19.52	732.55	14.50	709.24	14.53	0.00
NZA-0185	21.49	245.00	23.40	244.73	23.56	0.00
NZA-0186	20.79	946.96	23.98	943.70	24.02	19.89
NZA-0188	20.75	523.98	20.23	504.49	20.72	19.05
NZA-019	31.73	1481.39	26.99	1480.00	27.07	0.00
NZA-0192	14.03	1278.15	20.93	1216.00	21.19	0.00
NZA-0193	19.53	786.47	14.31	752.29	14.47	0.00

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NZA-0194	19.52	709.24	14.53	589.14	14.50	0.00
NZA-0195	19.52	1034.78	14.25	744.87	14.21	0.00
NZA-0196	19.51	744.87	14.21	319.12	14.37	0.00
NZA-0197	17.46	2500.12	30.19	2488.94	30.59	0.00
NZA-0198	19.50	330.48	14.87	220.69	30.66	24.78
NZA-0199	19.29	220.69	30.66	220.68	30.75	17.92
NZA-02	5.63	3072.65	29.71	3127.27	29.13	0.00
NZA-020	33.74	684.88	27.81	681.87	28.56	36.34
NZA-0202	20.08	1444.77	23.37	1378.52	23.75	0.00
NZA-0205	20.74	1516.76	22.05	1459.84	23.24	0.00
NZA-0206	20.55	1459.84	23.24	1444.77	23.37	0.00
NZA-0208	21.17	244.73	23.56	242.49	24.04	0.00
NZA-0209	20.86	1448.34	23.44	1441.25	23.57	0.00
NZA-021	31.45	681.87	28.56	681.73	28.79	0.00
NZA-0210	24.08	456.55	14.31	392.65	16.32	0.00
NZA-0211	22.92	340.28	17.87	320.28	18.36	0.00
NZA-0212	22.95	388.88	16.90	340.28	17.87	0.00
NZA-0213	24.26	639.20	14.18	546.64	14.89	0.00
NZA-0214	23.92	2118.12	32.44	2115.61	33.18	0.00
NZA-0215	35.21	396.55	15.06	395.51	15.38	0.00
NZA-0216	29.74	395.52	15.53	394.69	15.84	0.00
NZA-0217	24.87	527.36	14.55	483.45	15.59	0.00
NZA-0218	19.83	345.69	19.81	344.46	19.94	0.00
NZA-0219	20.27	349.74	20.00	345.69	19.81	20.94
NZA-022	33.81	839.75	26.69	744.05	28.16	32.67
NZA-0220	20.74	146.74	13.62	143.24	13.94	0.00
NZA-0221	19.63	347.44	19.91	340.53	20.08	0.00
NZA-0222	19.54	340.53	20.08	309.99	20.35	0.00
NZA-0223	19.54	309.99	20.35	288.96	20.44	17.73
NZA-0224	21.03	60.42	12.28	36.45	12.52	0.00
NZA-0226	20.40	140.79	14.85	111.62	18.39	0.00
NZA-0228	20.41	194.54	13.85	39.21	19.63	19.72

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NZA-0229	21.12	132.84	13.98	61.30	15.59	0.00
NZA-023	33.80	690.20	27.39	684.88	27.81	0.00
NZA-0230	20.34	312.05	20.41	317.26	20.37	19.47
NZA-0231	20.57	183.94	19.99	183.19	20.88	0.00
NZA-0232	14.73	580.19	17.80	579.55	17.82	0.00
NZA-0233	16.76	456.51	12.84	353.17	13.58	17.50
NZA-0234	15.72	619.58	16.17	595.97	17.03	0.00
NZA-0235	15.56	595.97	17.03	583.01	17.64	0.00
NZA-0236	17.08	389.80	18.44	389.39	19.30	19.00
NZA-0237	15.94	389.39	19.30	394.71	19.47	0.00
NZA-0238	15.79	569.35	16.06	528.38	17.25	0.00
NZA-0239	24.81	483.45	15.59	481.02	15.87	24.00
NZA-024	41.52	2101.16	22.03	2089.44	22.30	0.00
NZA-0240	23.21	481.02	15.87	437.70	17.44	0.00
NZA-0241	23.20	456.99	17.20	451.31	18.01	27.00
NZA-0242	22.59	451.31	18.01	432.99	18.58	0.00
NZA-0243	16.30	123.68	17.52	124.70	17.51	19.00
NZA-0244	16.25	176.40	15.39	160.54	15.15	0.00
NZA-0245	15.92	328.19	15.12	267.69	17.17	0.00
NZA-0246	16.05	160.54	15.15	146.40	18.19	0.00
NZA-0247	21.19	285.10	15.05	126.95	19.54	21.19
NZA-0248	21.04	110.97	19.43	110.68	19.59	0.00
NZA-0249	20.53	291.02	20.41	291.24	20.84	0.00
NZA-025	43.93	4744.22	16.99	2101.16	22.03	42.41
NZA-0250	20.60	110.68	19.59	109.10	19.97	0.00
NZA-0251	23.76	83.91	17.04	81.59	18.11	0.00
NZA-0252	22.71	305.75	15.75	183.94	19.99	0.00
NZA-0253	23.19	81.59	18.11	79.94	19.83	0.00
NZA-0254	17.77	354.22	13.57	218.96	15.32	19.00
NZA-0255	16.24	35.69	18.79	39.68	16.62	0.00
NZA-0256	17.77	271.09	15.12	52.96	18.80	18.50
NZA-0258	16.12	116.86	14.21	111.90	14.93	0.00

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NZA-026	46.53	3100.68	17.17	3099.79	17.22	0.00
NZA-0261	11.58	1505.00	15.10	1066.96	17.81	11.50
NZA-0261A	9.04	1066.96	17.81	1047.84	17.70	11.50
NZA-0262	8.99	1047.84	17.70	776.91	17.40	0.00
NZA-0263	22.37	308.92	13.78	154.52	15.96	0.00
NZA-0265	19.81	118.75	27.86	118.27	28.95	0.00
NZA-0266	19.81	159.30	22.16	103.53	27.83	0.00
NZA-0267	19.85	1378.52	23.75	1345.94	27.96	0.00
NZA-0268	19.84	221.81	22.19	136.86	22.16	0.00
NZA-0269	21.82	136.79	14.59	77.83	19.85	0.00
NZA-027	49.32	3176.41	16.56	3100.68	17.17	51.60
NZA-0270	21.54	77.83	19.85	77.92	20.07	0.00
NZA-0271	21.15	307.90	13.65	307.48	13.69	0.00
NZA-0272	19.82	126.33	13.74	120.27	14.51	0.00
NZA-0273	20.38	500.60	14.80	58.98	26.16	21.50
NZA-0274	18.52	58.98	26.16	59.00	26.34	0.00
NZA-0275	18.25	59.00	26.34	59.27	26.36	0.00
NZA-0276	18.02	59.27	26.36	64.09	21.32	0.00
NZA-0277	17.90	162.39	14.93	127.72	16.71	0.00
NZA-0278	16.76	324.93	12.30	192.96	12.42	0.00
NZA-0279	16.40	159.84	12.47	139.41	12.90	0.00
NZA-028	58.21	315.27	14.85	121.84	27.42	61.83
NZA-0280	14.02	454.81	13.35	445.15	13.57	0.00
NZA-0281	14.02	116.36	13.24	106.83	13.89	0.00
NZA-0282	15.93	10.98	12.56	4.27	18.65	0.00
NZA-0283	14.02	570.82	13.58	523.41	13.66	0.00
NZA-0285	16.56	7.76	12.49	3.45	14.23	0.00
NZA-0286	31.31	751.20	16.33	749.09	16.58	0.00
NZA-0287	26.85	805.98	16.45	794.00	16.77	0.00
NZA-0288	13.91	2679.17	37.99	2675.54	41.09	0.00
NZA-0289	17.48	119.28	12.63	53.93	12.73	0.00
NZA-029	58.94	2230.35	14.33	2174.74	14.60	0.00

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NZA-0290	17.48	74.29	12.63	37.90	16.28	0.00
NZA-0291	18.21	128.43	12.63	103.19	13.00	0.00
NZA-0292	17.42	159.41	12.73	158.09	12.88	0.00
NZA-0293	17.08	121.56	13.55	120.48	13.60	0.00
NZA-0295	16.77	140.23	12.48	143.55	12.47	0.00
NZA-0296	19.51	39.98	13.37	15.77	30.60	21.50
NZA-0297	16.71	11.10	12.19	2.33	13.63	0.00
NZA-0298	20.42	181.07	13.90	173.42	13.79	21.50
NZA-0299	18.26	10.75	19.28	10.67	20.84	0.00
NZA-03	5.10	3497.85	39.05	3585.39	38.99	8.40
NZA-030	17.48	134.48	12.88	119.08	34.34	0.00
NZA-0300	18.02	25.23	25.98	26.07	25.77	0.00
NZA-0301	18.03	13.29	17.22	11.19	22.44	0.00
NZA-0302	17.99	29.11	16.35	27.06	25.26	0.00
NZA-0303	17.95	101.60	15.71	38.54	22.29	0.00
NZA-0304	17.95	172.92	15.71	101.60	15.71	0.00
NZA-0305	17.95	172.33	15.04	169.01	15.66	0.00
NZA-0306	18.04	663.65	14.92	652.00	15.23	0.00
NZA-0307	17.53	480.43	15.29	469.41	15.57	0.00
NZA-0308	17.27	469.41	15.57	441.92	15.74	0.00
NZA-0309	17.17	441.92	15.74	389.80	18.44	0.00
NZA-031	17.52	155.99	12.65	134.48	12.88	29.83
NZA-0310	21.85	101.87	12.28	29.10	12.78	0.00
NZA-0311	23.20	67.74	12.28	14.17	12.93	0.00
NZA-0312	22.75	75.47	12.48	32.66	13.25	0.00
NZA-0313	21.12	17.93	15.54	1.78	28.51	0.00
NZA-0314	21.53	105.39	12.50	50.81	13.47	0.00
NZA-0315	22.46	82.69	12.47	21.04	13.68	0.00
NZA-0316	21.61	173.46	12.37	54.07	13.37	0.00
NZA-0317	16.71	7.27	12.20	1.53	13.63	0.00
NZA-0318	20.72	53.39	12.28	30.40	12.53	0.00
NZA-0319	20.52	77.93	12.47	15.41	13.96	0.00

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NZA-032	15.63	2687.44	32.96	2681.17	33.24	0.00
NZA-0320	20.41	84.56	12.47	7.07	12.44	0.00
NZA-0321	21.02	20.70	12.28	3.59	13.05	0.00
NZA-0322	21.12	38.67	12.28	8.45	12.91	0.00
NZA-0323	20.06	53.39	12.28	1.23	21.99	0.00
NZA-0324	21.47	176.89	12.47	69.62	13.31	0.00
NZA-0325	12.98	1117.27	15.08	440.00	20.28	12.90
NZA-0326	12.74	213.35	12.65	94.68	13.70	10.39
NZA-0327	19.77	58.41	12.47	11.25	13.54	0.00
NZA-0328	23.93	604.37	13.25	83.91	17.04	0.00
NZA-0329	18.03	11.25	13.54	11.24	13.54	0.00
NZA-033	16.95	2468.11	32.68	2467.79	33.03	24.30
NZA-0331	26.35	121.58	12.63	24.77	14.56	0.00
NZA-0332	26.00	196.96	12.63	156.64	13.08	0.00
NZA-0333	5.01	3692.42	38.94	3631.57	0.00	0.00
NZA-0335	21.74	1494.65	19.97	1471.68	21.99	20.55
NZA-0336	16.72	7.78	12.49	7.76	12.49	0.00
NZA-0337	29.92	125.88	14.90	63.00	44.78	0.00
NZA-0338	16.73	11.15	12.18	11.10	12.19	16.04
NZA-0339	31.13	30.44	12.50	7.43	13.55	0.00
NZA-034	13.87	2695.42	41.82	2694.29	42.04	12.40
NZA-0340	30.12	75.56	13.12	74.91	13.23	0.00
NZA-0341	32.17	123.70	12.47	68.55	13.06	0.00
NZA-0342	28.83	137.26	12.63	123.34	12.92	0.00
NZA-0343	46.84	108.47	13.60	20.67	18.91	0.00
NZA-0344	66.42	68.96	12.72	65.94	12.90	0.00
NZA-0345	19.37	62.42	12.48	5.91	15.86	0.00
NZA-0346	18.05	13.77	12.50	5.74	13.28	0.00
NZA-0347	20.18	220.07	12.48	109.10	13.16	0.00
NZA-0348	26.49	299.08	12.63	216.75	13.19	0.00
NZA-0349	19.22	5.91	15.86	5.91	15.86	0.00
NZA-035	10.39	2694.29	42.04	2694.31	42.26	0.00

1% + 1.41 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0350	17.66	5.74	13.28	5.73	13.28	0.00
NZA-0351	18.05	23.39	13.00	23.37	13.00	0.00
NZA-0352	16.74	7.32	12.20	7.27	12.20	0.00
NZA-0353	16.73	10.99	12.55	10.98	12.56	0.00
NZA-0354	13.93	120.27	17.73	16.96	71.14	0.00
NZA-0355	14.63	0.00	21.25	0.00	71.30	0.00
NZA-0356	15.17	44.36	12.30	43.95	12.33	0.00
NZA-0357	15.17	243.94	12.47	151.46	12.98	0.00
NZA-0358	15.17	22.66	12.30	20.55	12.40	0.00
NZA-0359	16.71	256.64	12.45	11.89	16.23	0.00
NZA-036	15.43	517.65	12.62	28.19	19.16	19.54
NZA-0360	16.78	65.08	12.28	58.94	12.39	0.00
NZA-0361	18.41	28.77	12.28	16.18	12.59	0.00
NZA-0362	15.99	61.78	12.28	42.65	12.52	0.00
NZA-037	14.28	389.34	14.33	386.80	14.44	14.41
NZA-038	14.63	232.66	14.03	147.01	16.61	0.00
NZA-039	14.75	187.63	13.23	183.02	13.48	11.61
NZA-04	5.01	3631.57	0.00	3692.42	38.94	0.00
NZA-040	19.50	319.12	14.37	224.22	27.06	34.86
NZA-042	14.53	2689.39	35.41	2686.96	35.48	11.60
NZA-043	14.51	2686.96	35.48	2681.93	35.97	0.00
NZA-044	21.53	2459.70	21.92	2456.04	21.97	19.95
NZA-045	21.51	2456.04	21.97	2451.13	21.97	0.00
NZA-046	20.67	1213.22	24.09	1209.13	24.13	23.60
NZA-047	20.65	1209.13	24.13	1207.80	24.15	0.00
NZA-0470	58.81	65.94	12.90	65.94	12.91	53.88
NZA-048	19.77	2429.09	28.81	2429.01	28.90	26.30
NZA-049	18.24	2429.01	28.90	2426.03	28.95	0.00
NZA-05	7.11	2820.20	34.88	2819.92	34.90	16.40
NZA-050	6.19	2818.64	34.74	2834.06	40.56	0.00
NZA-051	6.54	2819.00	34.91	2818.64	34.74	0.00
NZA-052	6.75	2819.54	34.94	2819.00	34.91	0.00

1% + 1.41 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-053	6.89	2819.86	34.93	2819.54	34.94	0.00
NZA-054	5.44	3127.27	29.13	3257.90	28.52	0.00
NZA-055	5.36	3257.90	28.52	3360.88	39.48	0.00
NZA-056	5.22	3360.88	39.48	3497.85	39.05	0.00
NZA-057	7.19	2705.06	42.20	2712.59	41.97	0.00
NZA-058	7.32	2699.09	42.52	2705.06	42.20	0.00
NZA-059	7.67	2694.79	42.72	2699.09	42.52	0.00
NZA-06	6.96	2819.92	34.90	2819.86	34.93	0.00
NZA-060	8.43	2694.41	42.43	2694.79	42.72	0.00
NZA-061	8.97	2694.31	42.26	2694.41	42.43	0.00
NZA-062	13.88	2675.55	41.09	2676.22	41.82	0.00
NZA-063	13.93	2698.17	36.84	2683.87	37.46	0.00
NZA-064	13.98	2717.78	33.29	2698.17	36.84	0.00
NZA-065	14.02	2777.05	32.99	2717.37	33.30	0.00
NZA-066	14.10	2661.56	37.03	2656.80	37.14	0.00
NZA-067	14.19	2666.24	36.91	2661.56	37.03	0.00
NZA-068	14.28	2674.25	36.55	2666.25	36.90	0.00
NZA-069	14.38	2681.93	35.97	2674.03	36.55	0.00
NZA-07	8.98	776.91	17.40	538.79	21.50	8.89
NZA-070	14.63	2695.35	34.97	2689.80	35.19	0.00
NZA-071	14.76	2715.03	34.72	2709.43	34.93	0.00
NZA-072	14.94	2719.37	34.55	2715.03	34.72	0.00
NZA-073	15.06	2724.29	34.34	2719.37	34.55	0.00
NZA-074	15.17	2739.71	33.60	2723.17	34.31	0.00
NZA-075	15.29	2669.86	33.75	2665.94	33.94	0.00
NZA-076	15.47	2681.17	33.24	2669.86	33.75	0.00
NZA-077	16.97	2502.27	30.77	2468.11	32.68	0.00
NZA-078	16.81	258.72	12.47	32.77	14.76	0.00
NZA-079	15.84	95.23	12.48	4.62	18.49	0.00
NZA-08	17.92	306.36	12.62	61.21	14.61	19.57
NZA-082	17.68	2420.23	29.22	2396.16	29.83	0.00
NZA-083	18.03	2426.03	28.95	2412.83	29.34	0.00

1% + 1.41 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-084	19.82	2432.00	28.41	2429.09	28.81	0.00
NZA-085	19.85	1135.90	28.33	1134.20	28.71	0.00
NZA-086	19.87	1143.89	27.50	1135.90	28.33	0.00
NZA-087	20.74	1261.49	22.63	1245.93	23.28	19.71
NZA-088	20.51	1207.80	24.15	1200.77	24.19	0.00
NZA-089	20.97	2477.33	22.43	2462.36	22.87	0.00
NZA-09	16.19	61.21	14.61	61.08	14.91	0.00
NZA-090	21.24	2451.13	21.97	2440.66	22.70	0.00
NZA-091	21.61	2477.77	21.30	2459.70	21.92	0.00
NZA-092	21.68	1269.39	20.67	1242.18	21.71	0.00
NZA-093	21.91	1289.42	19.98	1269.39	20.67	0.00
NZA-094	22.11	1193.83	20.64	1187.05	21.19	0.00
NZA-095	22.26	1203.80	19.99	1193.83	20.64	0.00
NZA-096	58.38	1860.68	14.58	1728.37	15.37	0.00
NZA-097	57.62	2968.99	15.02	2898.89	15.60	0.00
NZA-098	55.09	2898.89	15.60	2860.17	15.98	0.00
NZA-099	53.03	2860.17	15.9841	2833.68	16.34	0

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-00	1860.68	14.58
L-01	3497.85	39.05
L-010	2712.59	41.97
L-0100	2327.65	25.29
L-0101	2185.94	25.36
L-0102	2190.55	24.99
L-0103	2197.39	24.72
L-0104P1	31.98	15.22
L-0104P2	41.69	14.13
L-0104P3	32.27	15.22
L-0104P4	45.26	55.90
L-0104W	2142.01	24.65
L-0105	2202.34	24.49
L-0106	2223.85	23.91
L-0107	2175.11	23.29
L-0108	2218.59	22.73
L-0109	4725.16	16.99
L-011	2819.54	34.94
L-0110	3089.28	17.29
L-0111P1	363.16	19.64
L-0111P2	388.05	19.64
L-0111P3	155.22	22.26
L-0111W	1211.30	22.05
L-0112	2089.44	22.30
L-0113	3176.41	16.56
L-0114P	3100.68	17.17
L-0114W	0.00	0.00
L-0115	3099.79	17.22
L-0116	2833.68	16.34
L-0117	2860.17	15.98
L-0118	2898.89	15.60
L-0119	1728.37	15.37
L-012	2819.86	34.93
L-0120P	42.69	14.41
L-0120W	687.18	27.43
L-0121	681.73	28.79
L-0122P	681.87	28.56
L-0122W	0.00	0.00
L-0123	684.88	27.81
L-0124P1	432.72	16.52
L-0124P2	256.89	16.49
L-0124W	0.00	0.00
L-0125	794.00	16.77
L-0126P	19.85	14.11
L-0126W	730.68	16.65

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0127	749.09	16.58
L-0128P	345.95	16.98
L-0128W	0.00	0.00
L-0129	432.99	18.58
L-0130B	451.31	18.01
L-0131	437.70	17.44
L-0132W	481.02	15.87
L-0133	483.45	15.59
L-0134	394.69	15.84
L-0135	395.52	15.53
L-0136P	24.56	13.03
L-0136W	377.67	15.44
L-0137	395.51	15.38
L-0138	346.03	17.09
L-013B	2819.92	34.90
L-014	2699.09	42.52
L-0140	546.64	14.89
L-0142	509.83	15.30
L-0143	614.56	14.18
L-0144P	63.07	13.08
L-0144W	657.29	13.89
L-0146	231.99	16.80
L-0147	392.65	16.32
L-0148	367.84	17.04
L-0149P	19.92	14.30
L-0149W	373.24	16.63
L-015	2705.06	42.20
L-0150	340.28	17.87
L-0151	95.04	19.08
L-0152	1011.84	19.44
L-0153	805.54	23.36
L-0154	988.43	20.15
L-0155B	998.48	19.87
L-0156	514.54	18.10
L-0157W	516.44	17.98
L-0158	728.98	19.62
L-0159	1071.49	18.50
L-016	2694.31	42.26
L-0160	1147.19	20.81
L-0161	1317.19	20.11
L-0162	1278.15	20.93
L-0163B	1305.28	20.72
L-0164	1151.04	20.73
L-0165	1082.16	21.13
L-0166	326.41	17.70

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0167	523.01	17.63
L-0168	509.91	18.37
L-0169	760.86	18.46
L-017	2694.41	42.43
L-0170P1	26.80	15.35
L-0170P2	46.32	15.24
L-0170W	726.56	18.37
L-0171	352.89	15.91
L-0172	352.96	16.24
L-0173B	394.96	16.78
L-0174P	538.79	21.50
L-0174W	0.00	0.00
L-0175P	28.19	19.16
L-0175W	0.00	0.00
L-0176P	61.21	14.61
L-0176W	0.00	0.00
L-0177	61.08	14.91
L-018	2694.79	42.72
L-0180P	11.70	72.00
L-0180W	184.60	27.57
L-0181P1	5.01	14.26
L-0181P2	5.11	14.25
L-0181P3	5.22	14.25
L-0181P4	5.07	14.26
L-0181P5	4.89	14.27
L-0181W	362.99	14.50
L-0182P1	33.89	13.33
L-0182P2	32.17	13.94
L-0182W	77.60	16.69
L-0183P1	4.30	13.48
L-0183P2	3.89	13.48
L-0183P3	3.96	13.48
L-0183P4	2.28	13.48
L-0183W	168.58	13.48
L-0184P	21.34	15.50
L-0184W	90.58	14.99
L-0187P	134.48	12.88
L-0187W	0.00	0.00
L-0188	119.08	34.34
L-0189P	24.20	25.47
L-0189W	0.00	0.00
L-019	2676.22	41.82
L-0192	22.70	36.29
L-0193	786.47	14.31
L-0194	220.68	30.75

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0195	752.29	14.47
L-0196	709.24	14.53
L-0197P1	6.60	12.84
L-0197P2	5.07	12.96
L-0197P3	8.56	12.68
L-0197P4	7.99	12.73
L-0197P5	7.47	12.77
L-0197P6	4.74	12.97
L-0197P7	7.76	12.75
L-0197W	705.63	14.51
L-0198	319.12	14.37
L-0199	744.87	14.21
L-02	3692.42	38.94
L-0200	589.14	14.50
L-0201	220.69	30.66
L-0202P1	122.41	15.15
L-0202P2	98.90	15.24
L-0202W	216.72	27.30
L-0204P	15.18	15.91
L-0204W	235.69	23.41
L-0205	1444.77	23.37
L-0206	1378.52	23.75
L-0207	1288.10	28.53
L-0208	242.49	24.04
L-0209	244.73	23.56
L-020B	2694.29	42.04
L-021	2717.37	33.30
L-0210	523.98	20.23
L-0212	1459.84	23.24
L-0214P	7.39	15.62
L-0214W	503.24	21.98
L-0215P	9.17	15.95
L-0215W	939.65	23.68
L-0216P1	15.58	14.92
L-0216P2	15.59	14.78
L-0216W	358.78	17.69
L-0218P1	290.09	17.80
L-0218P2	290.09	17.80
L-0218W	0.00	0.00
L-0219	579.55	17.82
L-022	2698.17	36.84
L-0220P	2.83	60.57
L-0220W	38.50	19.63
L-0222	111.38	19.35
L-0225W	36.45	12.52

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0226	309.99	20.35
L-0227	340.53	20.08
L-0228P	15.27	17.71
L-0228W	330.54	19.81
L-0229	344.46	19.94
L-023	2679.17	37.99
L-0230P	1.40	15.72
L-0230W	287.81	20.47
L-0231	291.24	20.84
L-0232	183.19	20.88
L-0233P1	2.09	20.75
L-0233P2	2.09	20.75
L-0233P3	2.09	20.75
L-0233P4	2.08	20.75
L-0233W	308.93	20.37
L-0234	81.59	18.11
L-0235	79.94	19.83
L-0236	183.94	19.99
L-0237P1	0.83	13.80
L-0237P2	9.26	13.09
L-0237W	0.00	0.00
L-0238	40.44	18.96
L-0239P	353.17	13.58
L-0239W	0.00	0.00
L-024	2666.24	36.91
L-0240	583.01	17.64
L-0241	528.38	17.25
L-0242	595.97	17.03
L-0243	394.71	19.47
L-0244P	389.39	19.30
L-0244W	0.00	0.00
L-0245P	124.70	17.51
L-0245W	0.00	0.00
L-0246	146.40	18.19
L-0247	267.69	17.17
L-0249P1	16.62	15.96
L-0249P2	16.62	15.96
L-0249W	82.93	19.52
L-025	2661.56	37.03
L-0250	109.10	19.97
L-0251	110.68	19.59
L-0252	111.90	14.93
L-0253P	35.69	18.79
L-0253W	0.00	0.00
L-0254	39.68	16.62

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0255P	52.96	18.80
L-0255W	0.00	0.00
L-0259P	121.84	27.42
L-0259W	0.00	0.00
L-026	2656.80	37.14
L-0260B	3585.39	38.99
L-0261	3072.65	29.71
L-0262	745.79	18.90
L-0263	320.28	18.36
L-0264	129.95	16.03
L-0266	77.83	19.85
L-0267	77.92	20.07
L-0268	126.33	13.74
L-0269	39.25	13.98
L-027	2674.03	36.55
L-0270W	0.00	0.00
L-0271	66.99	14.80
L-0272	41.71	67.51
L-0273P1	29.18	26.16
L-0273P2	29.80	26.16
L-0273W	0.00	0.00
L-0274	59.00	26.34
L-0275	64.09	21.32
L-0276	59.27	26.36
L-0277W	523.41	13.66
L-028	2681.93	35.97
L-0280P	159.84	12.47
L-0280W	0.00	0.00
L-0281	139.41	12.90
L-0282	116.36	13.24
L-0283	106.83	13.89
L-0285	689.36	16.67
L-0286	751.63	16.78
L-0287	1047.84	17.70
L-0288	776.91	17.40
L-0289	2675.54	41.09
L-0290P	4.00	9.42
L-0290W	52.35	12.73
L-0291W1	2.39	16.28
L-0291W2	35.51	16.28
L-0292P	158.09	12.88
L-0293W1	13.30	12.95
L-0293W2	89.92	13.00
L-0294	120.48	13.60
L-0295	143.55	12.47

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0297P	10.75	19.28
L-0297W	0.00	0.00
L-0298P	15.77	30.60
L-0298W	0.00	0.00
L-0299	10.67	20.84
L-029W	2686.96	35.48
L-03	3127.27	29.13
L-030	2665.94	33.94
L-0300	11.19	22.44
L-0302	26.07	25.77
L-0303	27.06	25.26
L-0304	38.54	22.29
L-0305	55.08	22.07
L-0306	67.27	21.80
L-0307	480.43	15.29
L-0308	469.41	15.57
L-0309	441.92	15.74
L-031	2721.79	34.35
L-0310	389.80	18.44
L-0311W	29.10	12.78
L-0312W	32.66	13.25
L-0313W	14.17	12.93
L-0314W	1.78	28.51
L-0315	21.04	13.68
L-0317W	54.07	13.37
L-0318W	50.81	13.47
L-0319W	15.41	13.96
L-032	2719.37	34.55
L-0320W	30.40	12.53
L-0321W	7.07	12.44
L-0322W	69.62	13.31
L-0323P	3.59	13.05
L-0323W	0.00	0.00
L-0324P	8.45	12.91
L-0324W	0.00	0.00
L-0325P	1.23	21.99
L-0325W	0.00	0.00
L-0326P	439.79	20.27
L-0326W	0.21	20.28
L-0327P	94.68	13.70
L-0327W	0.00	0.00
L-0328P	11.25	13.54
L-0328W	11.24	13.54
L-0329	83.91	17.04
L-033	2715.03	34.72

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0330	0.00	0.00
L-0332	3.18	35.11
L-0334DS	16.82	13.08
L-0334P	17.00	13.22
L-0334W1	62.60	13.08
L-0334W2	62.60	13.08
L-0335DS	24.77	14.56
L-0335W	0.00	0.00
L-0336W	10.76	18.09
L-0337	7.68	15.10
L-0337W	123.68	17.52
L-0338	118.27	28.95
L-034	2695.35	34.97
L-0340P	15.76	40.98
L-0341P	63.00	44.78
L-0342P	68.55	13.06
L-0343P	7.43	13.55
L-0344W	123.34	12.92
L-0345	74.91	13.23
L-0345P	5.74	13.28
L-0345W1	3.12	13.14
L-0345W2	2.71	13.53
L-0345W3	0.00	0.00
L-0346W	20.67	18.91
L-0347P	65.94	12.91
L-0348P	23.39	13.00
L-0348W1	23.37	13.00
L-0348W2	85.92	13.17
L-035	2689.39	35.41
L-0350P	5.91	15.86
L-0350W1	5.81	15.42
L-0350W2	0.12	16.10
L-0351P1	57.48	13.19
L-0351P2	18.31	13.40
L-0351W1	130.73	13.19
L-0351W2	10.85	13.19
L-036DS	32.77	14.76
L-037	2468.11	32.68
L-038	2669.86	33.75
L-039	2681.17	33.24
L-04	3360.88	39.48
L-0400P	1.53	13.63
L-0400W	1.54	13.63
L-0401P	2.33	13.63
L-0401W	2.34	13.63

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0402P	3.45	14.23
L-0402W	3.46	14.23
L-0403P	4.27	18.65
L-0403W	4.27	18.65
L-040B	2467.79	33.03
L-041	2488.94	30.59
L-045	1134.20	28.71
L-046	2429.09	28.81
L-047	2412.83	29.34
L-048	2396.16	29.83
L-049	2426.03	28.95
L-05	3257.90	28.52
L-050B	1854.30	28.85
L-050W	574.72	28.90
L-051	1162.83	26.18
L-052	1143.89	27.50
L-053	1200.77	24.19
L-054	1135.90	28.33
L-055	1261.49	22.63
L-056	2440.66	22.70
L-057	1280.97	21.60
L-058	2451.13	21.97
L-059P1	3.68	13.58
L-059P2	29.11	13.58
L-059P3	29.12	13.58
L-059P4	19.29	13.72
L-059W	2415.70	21.97
L-06	2819.00	34.91
L-060	1213.22	24.09
L-061	1207.80	24.15
L-062B	345.71	25.01
L-062W	865.68	23.75
L-064	2115.61	33.18
L-065	828.93	33.47
L-066	1203.80	19.99
L-067	1193.83	20.64
L-068	1187.05	21.19
L-069	1269.39	20.67
L-07	2818.64	34.74
L-070	1242.18	21.71
L-071	2459.70	21.92
L-072	2115.46	32.40
L-074	2117.53	32.04
L-075	2117.31	32.11
L-076	2116.44	32.20

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-077B	2116.81	32.15
L-078W	2063.90	30.36
L-079	2062.16	30.43
L-08	2834.06	40.56
L-080	2066.52	30.28
L-081	2119.45	31.50
L-082	2184.41	31.66
L-083	2056.21	30.64
L-084P1	320.45	30.24
L-084P2	678.87	30.24
L-084P3	697.47	28.75
L-084P4	111.58	30.55
L-084W	260.89	30.24
L-085	2069.13	30.23
L-086	2070.69	29.77
L-087	2076.23	29.37
L-088	2136.81	28.68
L-089	2148.95	28.15
L-09	3057.87	31.59
L-090	1480.00	27.07
L-091W	1481.38	26.99
L-092	1481.65	26.96
L-093P1	1104.19	26.95
L-093P2	377.74	26.78
L-093W	0.00	0.00
L-094	1483.00	26.54
L-095	1488.68	26.00
L-096	2293.11	26.66
L-097	2299.71	26.36
L-098	2316.19	25.93
L-099	2328.35	25.56
L-2320W	4.62	18.49
L-2410W	12.37	36.94
L-2420W	0.00	71.30
L-2430P	4.62	36.06
L-2430W	0.00	0.00
L-2440W	16.96	71.14
L-2480W	65.94	12.90
L-2520W	43.95	12.33
L-2530W	151.46	12.98
L-2540W	20.55	12.40
L-2550P	78.75	15.15
L-2560P	81.79	15.61
L-2570P	11.89	16.23
L-2580DS	11.72	12.39

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-2590W	38.62	12.39
L-2600W	8.60	12.39
L-2610DS	16.18	12.59
L-2620DS	8.62	12.51
L-2640W	34.03	12.52
L-2650W	817.63	26.85
L-2660W	59.42	28.57
L-2670W	1444.27	20.96
L-2680W	0.00	0.00
L-2700W	1189.13	23.36
L-2710W	938.94	24.11
L-2720W	17.66	26.28
L-2730W	82.10	14.63
L-2740W	138.36	14.57
L-2750W	184.16	15.32
L-2760W	0.00	0.00
L-2790P	31.36	17.65
L-2800W	1035.61	17.81
L-2840W	0.00	0.00
~~D~L-0334DS~W0	3.55	13.09
~~D~L-0334DS~W1	13.26	13.08
~~D~L-0334DS~W2	0.00	0.00
~~D~L-0335DS~W0	19.46	14.56
~~D~L-0335DS~W1	5.31	14.56
~~D~L-0335DS~W2	0.00	0.00
~~D~L-036DS~W0	2.77	12.27
~~D~L-036DS~W1	30.59	14.76
~~D~L-2580DS~W0	3.11	15.01
~~D~L-2580DS~W1	9.05	12.83
~~D~L-2580DS~W2	5.05	12.39
~~D~L-2610DS~W0	3.24	11.89
~~D~L-2610DS~W1	15.23	12.59
~~D~L-2620DS~W0	1.30	11.62
~~D~L-2620DS~W1	8.14	12.51

1% + 1.64 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-00	6.01	3059.03	31.52	3075.77	31.34	0.00
NZA-01	5.85	3075.77	31.34	3104.67	29.71	0.00
NZA-010	25.62	2117.59	32.13	2116.81	32.14	29.20
NZA-0100	50.64	3316.53	16.16	3176.41	16.56	0.00
NZA-0101	44.91	3099.79	17.22	3089.28	17.29	0.00
NZA-0102	43.97	4863.48	17.02	4725.16	16.99	0.00
NZA-0103	41.17	2268.45	22.12	2218.59	22.73	0.00
NZA-0104	40.66	2218.59	22.73	2175.11	23.29	0.00
NZA-0105	40.13	2278.76	23.16	2223.85	23.91	0.00
NZA-0106	39.69	2223.85	23.91	2202.34	24.49	0.00
NZA-0107	39.04	2202.34	24.49	2198.95	24.63	40.94
NZA-0108	38.99	2198.95	24.63	2197.39	24.72	0.00
NZA-0109	38.43	2197.39	24.72	2190.55	24.99	0.00
NZA-011	24.50	2116.81	32.14	2116.43	32.20	0.00
NZA-0110	37.98	2191.92	24.96	2185.94	25.36	0.00
NZA-0111	37.62	2334.84	24.95	2327.65	25.29	0.00
NZA-0112	37.02	2327.65	25.29	2328.35	25.56	0.00
NZA-0113	35.62	2328.35	25.56	2316.19	25.93	0.00
NZA-0114	34.74	2316.19	25.93	2299.71	26.36	0.00
NZA-0115	34.38	2299.71	26.36	2293.11	26.66	0.00
NZA-0116	34.17	2303.83	26.56	2301.68	26.68	0.00
NZA-0117	34.04	1488.68	26.00	1483.00	26.54	0.00
NZA-0118	33.94	1483.00	26.54	1481.89	26.92	35.50
NZA-0119	32.24	1481.89	26.92	1481.65	26.95	0.00
NZA-012	39.48	523.28	14.50	345.95	16.96	41.04
NZA-0120	31.38	2154.32	27.78	2148.95	28.15	0.00
NZA-0121	30.50	2149.50	28.12	2136.81	28.68	0.00
NZA-0122	30.17	2136.81	28.68	2124.79	29.28	0.00
NZA-0123	30.12	2076.23	29.37	2071.03	29.75	0.00
NZA-0124	30.10	2070.85	29.77	2069.03	30.23	0.00
NZA-0125	30.09	2069.03	30.23	2068.41	30.24	30.00
NZA-0126	26.80	2068.41	30.24	2066.52	30.28	0.00

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Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0127	26.53	2063.90	30.36	2062.16	30.42	0.00
NZA-0128	26.60	2066.52	30.28	2063.90	30.36	20.80
NZA-0129	26.45	2062.16	30.42	2056.21	30.61	0.00
NZA-013	37.11	345.95	16.96	346.03	17.09	0.00
NZA-0130	25.65	2120.02	31.46	2117.32	32.13	0.00
NZA-0131	25.63	2117.32	32.13	2117.59	32.13	0.00
NZA-0134	22.57	1229.54	18.83	1203.80	19.99	0.00
NZA-0135	22.91	2243.73	20.19	2243.48	22.82	0.00
NZA-0136	14.30	1317.19	20.11	1305.28	20.72	17.20
NZA-0137	14.03	1305.28	20.72	1278.15	20.93	0.00
NZA-0138	17.62	360.20	15.89	394.82	16.80	24.32
NZA-0139	17.60	394.82	16.80	352.96	16.24	0.00
NZA-014	34.99	395.51	15.38	395.46	15.45	35.55
NZA-0140	15.77	111.90	14.93	111.85	15.01	15.61
NZA-0142	15.15	583.01	17.64	580.19	17.80	18.90
NZA-0143	14.58	1011.84	19.44	998.48	19.87	20.00
NZA-0144	14.41	998.48	19.87	988.43	20.15	0.00
NZA-0145	14.37	640.95	14.97	191.28	27.66	0.00
NZA-0146	15.90	770.42	18.15	766.34	18.31	15.75
NZA-0147	15.78	766.34	18.31	760.86	18.46	0.00
NZA-0148	16.40	523.01	17.63	516.44	17.98	16.00
NZA-0149	16.24	516.44	17.98	514.54	18.10	0.00
NZA-015	33.38	395.46	15.45	395.52	15.53	0.00
NZA-0150	24.69	790.53	13.27	696.68	13.85	24.17
NZA-0151	24.54	696.68	13.85	614.56	14.18	0.00
NZA-0152	23.99	392.65	16.32	390.12	16.62	23.66
NZA-0153	23.02	390.12	16.62	367.84	17.04	0.00
NZA-0154	14.02	1209.87	20.48	1082.16	21.13	0.00
NZA-0155	14.02	1198.53	20.44	1151.04	20.73	0.00
NZA-0156	14.33	1423.59	18.38	1317.19	20.11	0.00
NZA-0157	14.36	988.43	20.15	969.89	20.69	13.30
NZA-0158	14.83	1154.69	17.89	1071.49	18.50	0.00

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Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0159	15.08	748.04	18.89	728.98	19.62	0.00
NZA-016	29.53	749.09	16.58	748.94	16.65	26.19
NZA-0160	15.27	763.11	18.46	745.79	18.90	0.00
NZA-0161	16.02	514.54	18.10	509.91	18.37	0.00
NZA-0162	16.66	564.81	16.36	523.01	17.63	0.00
NZA-0163	16.80	352.96	16.24	326.41	17.70	0.00
NZA-0164	26.28	2153.04	29.68	2186.35	31.92	0.00
NZA-0165	24.34	2116.43	32.20	2115.46	32.40	0.00
NZA-0166	20.87	1280.97	21.60	1261.49	22.62	0.00
NZA-0167	19.89	1162.83	26.19	1143.89	27.50	0.00
NZA-0168	20.05	1200.77	24.19	1162.83	26.19	0.00
NZA-0169	19.53	834.97	14.05	800.67	14.26	0.00
NZA-017	28.69	748.94	16.65	751.63	16.78	0.00
NZA-0170	25.84	2186.35	31.92	2119.44	31.49	0.00
NZA-0171	14.66	1071.49	18.50	1011.84	19.44	0.00
NZA-0172	23.92	546.64	14.89	509.83	15.30	0.00
NZA-0173	24.24	631.31	13.43	231.99	16.80	0.00
NZA-0176	18.01	120.12	13.17	95.04	19.08	0.00
NZA-0177	31.97	983.42	14.40	689.60	16.51	35.80
NZA-0178	31.54	689.60	16.51	689.36	16.67	0.00
NZA-0179	17.99	359.44	15.53	352.89	15.91	0.00
NZA-018	32.10	1481.65	26.95	1481.38	26.99	31.49
NZA-0180	18.59	177.61	15.02	24.20	25.47	22.36
NZA-0181	16.98	30.39	26.77	22.70	36.29	0.00
NZA-0182	19.52	752.29	14.47	732.55	14.50	17.77
NZA-0183	19.52	732.55	14.50	709.24	14.53	0.00
NZA-0185	21.49	245.00	23.40	244.73	23.56	0.00
NZA-0186	20.79	946.96	23.98	943.70	24.02	19.89
NZA-0188	20.75	523.98	20.23	504.49	20.72	19.05
NZA-019	31.73	1481.39	26.99	1480.00	27.07	0.00
NZA-0192	14.03	1278.15	20.93	1216.00	21.19	0.00
NZA-0193	19.53	786.47	14.31	752.29	14.47	0.00

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NZA-0194	19.52	709.24	14.53	589.14	14.50	0.00
NZA-0195	19.52	1034.78	14.25	744.87	14.21	0.00
NZA-0196	19.51	744.87	14.21	319.12	14.37	0.00
NZA-0197	17.46	2500.12	30.20	2488.94	30.60	0.00
NZA-0198	19.50	330.48	14.87	220.69	30.70	24.78
NZA-0199	19.29	220.69	30.70	220.68	30.77	17.92
NZA-02	5.73	3104.67	29.71	3168.93	29.35	0.00
NZA-020	33.74	684.88	27.81	681.87	28.56	36.34
NZA-0202	20.08	1444.77	23.37	1378.52	23.75	0.00
NZA-0205	20.74	1516.76	22.05	1459.84	23.24	0.00
NZA-0206	20.55	1459.84	23.24	1444.77	23.37	0.00
NZA-0208	21.17	244.73	23.56	242.49	24.04	0.00
NZA-0209	20.86	1448.34	23.44	1441.26	23.56	0.00
NZA-021	31.45	681.87	28.56	681.73	28.79	0.00
NZA-0210	24.08	456.55	14.31	392.65	16.32	0.00
NZA-0211	22.92	340.28	17.87	320.28	18.36	0.00
NZA-0212	22.95	388.88	16.90	340.28	17.87	0.00
NZA-0213	24.26	639.20	14.18	546.64	14.89	0.00
NZA-0214	23.92	2118.12	32.42	2115.61	33.20	0.00
NZA-0215	35.21	396.55	15.06	395.51	15.38	0.00
NZA-0216	29.74	395.52	15.53	394.69	15.84	0.00
NZA-0217	24.87	527.36	14.56	483.45	15.59	0.00
NZA-0218	19.83	345.70	19.81	344.46	19.94	0.00
NZA-0219	20.27	349.67	19.98	345.70	19.81	20.94
NZA-022	33.81	839.75	26.68	744.05	28.16	32.67
NZA-0220	20.74	146.74	13.62	143.24	13.94	0.00
NZA-0221	19.63	347.44	19.92	340.53	20.08	0.00
NZA-0222	19.54	340.53	20.08	309.99	20.35	0.00
NZA-0223	19.54	309.99	20.35	288.96	20.44	17.73
NZA-0224	21.03	60.42	12.28	36.45	12.52	0.00
NZA-0226	20.40	140.79	14.85	111.62	18.39	0.00
NZA-0228	20.41	194.54	13.85	39.21	19.63	19.72

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NZA-0229	21.12	132.84	13.98	61.30	15.59	0.00
NZA-023	33.80	690.20	27.39	684.88	27.81	0.00
NZA-0230	20.34	312.05	20.36	316.80	20.64	19.47
NZA-0231	20.57	183.94	19.99	183.19	20.88	0.00
NZA-0232	14.73	580.19	17.80	579.55	17.82	0.00
NZA-0233	16.76	456.51	12.84	353.17	13.58	17.50
NZA-0234	15.72	619.58	16.17	595.97	17.03	0.00
NZA-0235	15.56	595.97	17.03	583.01	17.64	0.00
NZA-0236	17.08	389.80	18.44	389.39	19.30	19.00
NZA-0237	15.94	389.39	19.30	394.71	19.47	0.00
NZA-0238	15.79	569.35	16.05	528.38	17.25	0.00
NZA-0239	24.81	483.45	15.59	481.02	15.87	24.00
NZA-024	41.52	2101.16	22.03	2089.43	22.30	0.00
NZA-0240	23.21	481.02	15.87	437.70	17.44	0.00
NZA-0241	23.20	456.99	17.19	451.31	18.01	27.00
NZA-0242	22.59	451.31	18.01	432.99	18.58	0.00
NZA-0243	16.30	123.68	17.52	124.76	17.46	19.00
NZA-0244	16.25	176.38	15.40	160.54	15.15	0.00
NZA-0245	15.92	328.19	15.12	267.69	17.17	0.00
NZA-0246	16.05	160.54	15.15	146.40	18.19	0.00
NZA-0247	21.19	285.10	15.05	126.95	19.55	21.19
NZA-0248	21.04	110.97	19.44	110.68	19.59	0.00
NZA-0249	20.53	291.03	20.38	291.24	20.84	0.00
NZA-025	43.93	4744.22	16.99	2101.16	22.03	42.41
NZA-0250	20.60	110.68	19.59	109.10	19.97	0.00
NZA-0251	23.76	83.91	17.04	81.59	18.11	0.00
NZA-0252	22.71	305.75	15.75	183.94	19.99	0.00
NZA-0253	23.19	81.59	18.11	79.94	19.82	0.00
NZA-0254	17.77	354.22	13.57	218.96	15.32	19.00
NZA-0255	16.24	35.69	18.79	39.68	16.62	0.00
NZA-0256	17.77	271.09	15.12	52.96	18.80	18.50
NZA-0258	16.12	116.86	14.21	111.90	14.93	0.00

1% + 1.64 Sea Level Rise Annual Chance Event
Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-026	46.53	3100.68	17.17	3099.79	17.22	0.00
NZA-0261	11.58	1505.00	15.10	1066.96	17.81	11.50
NZA-0261A	9.04	1066.96	17.81	1047.31	17.69	11.50
NZA-0262	8.99	1047.31	17.69	774.07	17.40	0.00
NZA-0263	22.37	308.92	13.78	154.52	15.96	0.00
NZA-0265	19.81	118.75	27.85	118.27	28.95	0.00
NZA-0266	19.81	159.30	22.16	103.53	27.83	0.00
NZA-0267	19.85	1378.52	23.75	1345.95	27.92	0.00
NZA-0268	19.84	221.81	22.19	136.86	22.16	0.00
NZA-0269	21.82	136.79	14.59	77.83	19.85	0.00
NZA-027	49.32	3176.41	16.56	3100.68	17.17	51.60
NZA-0270	21.54	77.83	19.85	77.92	20.07	0.00
NZA-0271	21.15	307.90	13.65	307.48	13.68	0.00
NZA-0272	19.82	126.33	13.74	120.27	14.51	0.00
NZA-0273	20.38	500.60	14.80	58.98	26.16	21.50
NZA-0274	18.52	58.98	26.16	59.00	26.34	0.00
NZA-0275	18.25	59.00	26.34	59.27	26.36	0.00
NZA-0276	18.02	59.27	26.36	64.09	21.32	0.00
NZA-0277	17.90	162.39	14.93	127.72	16.71	0.00
NZA-0278	16.76	324.93	12.30	192.96	12.42	0.00
NZA-0279	16.40	159.84	12.47	139.41	12.90	0.00
NZA-028	58.21	315.27	14.85	121.84	27.42	61.83
NZA-0280	14.02	454.81	13.35	445.15	13.58	0.00
NZA-0281	14.02	116.36	13.24	106.83	13.89	0.00
NZA-0282	15.93	10.98	12.56	4.27	18.65	0.00
NZA-0283	14.02	570.82	13.58	523.41	13.66	0.00
NZA-0285	16.56	7.76	12.49	3.45	14.23	0.00
NZA-0286	31.31	751.20	16.33	749.09	16.58	0.00
NZA-0287	26.85	805.98	16.45	794.00	16.77	0.00
NZA-0288	13.91	2679.17	37.99	2675.54	41.11	0.00
NZA-0289	17.48	119.28	12.63	53.93	12.73	0.00
NZA-029	58.94	2230.35	14.33	2174.74	14.60	0.00

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Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-0290	17.48	74.29	12.63	37.90	16.28	0.00
NZA-0291	18.21	128.43	12.63	103.19	13.00	0.00
NZA-0292	17.42	159.41	12.73	158.09	12.88	0.00
NZA-0293	17.08	121.56	13.55	120.48	13.60	0.00
NZA-0295	16.77	140.23	12.48	143.55	12.47	0.00
NZA-0296	19.51	39.98	13.37	15.77	30.64	21.50
NZA-0297	16.71	11.10	12.19	2.33	13.63	0.00
NZA-0298	20.42	181.07	13.90	173.42	13.79	21.50
NZA-0299	18.26	10.75	19.28	10.67	20.84	0.00
NZA-03	5.27	3593.17	39.52	3684.08	39.40	8.40
NZA-030	17.48	134.48	12.88	119.08	34.34	0.00
NZA-0300	18.02	25.23	25.95	26.07	25.77	0.00
NZA-0301	18.03	13.29	17.22	11.19	22.45	0.00
NZA-0302	17.99	29.11	16.35	27.06	25.26	0.00
NZA-0303	17.95	101.60	15.71	38.54	22.29	0.00
NZA-0304	17.95	172.92	15.71	101.60	15.71	0.00
NZA-0305	17.95	172.33	15.04	169.01	15.66	0.00
NZA-0306	18.04	663.65	14.92	652.00	15.22	0.00
NZA-0307	17.53	480.43	15.29	469.41	15.57	0.00
NZA-0308	17.27	469.41	15.57	441.92	15.74	0.00
NZA-0309	17.17	441.92	15.74	389.80	18.44	0.00
NZA-031	17.52	155.99	12.65	134.48	12.88	29.83
NZA-0310	21.85	101.87	12.28	29.10	12.78	0.00
NZA-0311	23.20	67.74	12.28	14.17	12.93	0.00
NZA-0312	22.75	75.47	12.48	32.66	13.25	0.00
NZA-0313	21.12	17.93	15.54	1.78	28.51	0.00
NZA-0314	21.53	105.39	12.50	50.81	13.47	0.00
NZA-0315	22.46	82.69	12.47	21.04	13.68	0.00
NZA-0316	21.61	173.46	12.37	54.07	13.37	0.00
NZA-0317	16.71	7.27	12.20	1.53	13.63	0.00
NZA-0318	20.72	53.39	12.28	30.40	12.53	0.00
NZA-0319	20.52	77.93	12.47	15.41	13.96	0.00

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Max Stage Results

Node Name	Max. Stage [ft]	Max. Total Inflow Rate [cfs]	Time to Max. Total Inflow Rate [hrs]	Max. Total Outflow Rate [cfs]	Time to Max. Total Outflow Rate [hrs]	Warning Stage [ft]
NZA-032	15.63	2687.46	32.96	2681.17	33.24	0.00
NZA-0320	20.41	84.56	12.47	7.07	12.44	0.00
NZA-0321	21.02	20.70	12.28	3.59	13.06	0.00
NZA-0322	21.12	38.67	12.28	8.45	12.91	0.00
NZA-0323	20.06	53.39	12.28	1.23	22.02	0.00
NZA-0324	21.47	176.89	12.47	69.62	13.31	0.00
NZA-0325	12.98	1117.27	15.08	439.99	20.28	12.90
NZA-0326	12.74	213.35	12.65	94.68	13.70	10.39
NZA-0327	19.77	58.41	12.47	11.25	13.54	0.00
NZA-0328	23.93	604.37	13.25	83.91	17.04	0.00
NZA-0329	18.03	11.25	13.54	11.24	13.54	0.00
NZA-033	16.95	2468.77	32.97	2467.80	33.02	24.30
NZA-0331	26.35	121.58	12.63	24.77	14.56	0.00
NZA-0332	26.00	196.96	12.63	156.64	13.08	0.00
NZA-0333	5.24	3822.03	38.71	4147.16	0.00	0.00
NZA-0335	21.74	1494.65	19.97	1471.68	21.99	20.55
NZA-0336	16.72	7.78	12.49	7.76	12.49	0.00
NZA-0337	29.92	125.88	14.90	63.00	44.78	0.00
NZA-0338	16.73	11.15	12.18	11.10	12.19	16.04
NZA-0339	31.13	30.44	12.50	7.43	13.55	0.00
NZA-034	13.87	2695.20	41.87	2694.29	42.04	12.40
NZA-0340	30.12	75.56	13.12	74.91	13.23	0.00
NZA-0341	32.17	123.70	12.47	68.55	13.06	0.00
NZA-0342	28.83	137.26	12.63	123.34	12.92	0.00
NZA-0343	46.84	108.47	13.60	20.67	18.91	0.00
NZA-0344	66.42	68.96	12.72	65.94	12.90	0.00
NZA-0345	19.37	62.42	12.48	5.91	15.85	0.00
NZA-0346	18.05	13.77	12.50	5.74	13.28	0.00
NZA-0347	20.18	220.07	12.48	109.10	13.16	0.00
NZA-0348	26.49	299.08	12.63	216.75	13.19	0.00
NZA-0349	19.22	5.91	15.85	5.91	15.86	0.00
NZA-035	10.39	2694.29	42.04	2694.31	42.13	0.00

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NZA-0350	17.66	5.74	13.28	5.73	13.28	0.00
NZA-0351	18.05	23.39	13.00	23.37	13.00	0.00
NZA-0352	16.74	7.32	12.20	7.27	12.20	0.00
NZA-0353	16.73	10.99	12.55	10.98	12.56	0.00
NZA-0354	13.93	120.27	17.73	16.96	71.14	0.00
NZA-0355	14.63	0.00	21.25	0.00	71.31	0.00
NZA-0356	15.17	44.36	12.30	43.95	12.33	0.00
NZA-0357	15.17	243.94	12.47	151.46	12.98	0.00
NZA-0358	15.17	22.66	12.30	20.55	12.40	0.00
NZA-0359	16.71	256.64	12.45	11.89	16.23	0.00
NZA-036	15.43	517.65	12.62	28.19	19.16	19.54
NZA-0360	16.78	65.08	12.28	58.94	12.39	0.00
NZA-0361	18.41	28.77	12.28	16.18	12.59	0.00
NZA-0362	15.99	61.78	12.28	42.65	12.52	0.00
NZA-037	14.28	389.34	14.33	386.80	14.44	14.41
NZA-038	14.63	232.66	14.03	147.01	16.61	0.00
NZA-039	14.75	187.63	13.23	183.02	13.48	11.61
NZA-04	5.19	4147.16	0.00	3822.03	38.71	0.00
NZA-040	19.50	319.12	14.37	224.22	27.07	34.86
NZA-042	14.53	2689.39	35.42	2686.96	35.48	11.60
NZA-043	14.51	2686.96	35.48	2681.93	35.97	0.00
NZA-044	21.53	2459.70	21.92	2456.04	21.97	19.95
NZA-045	21.51	2456.04	21.97	2451.13	21.97	0.00
NZA-046	20.67	1213.22	24.09	1209.13	24.13	23.60
NZA-047	20.65	1209.13	24.13	1207.80	24.15	0.00
NZA-0470	58.81	65.94	12.90	65.94	12.91	53.88
NZA-048	19.77	2429.08	28.79	2429.01	28.90	26.30
NZA-049	18.24	2429.01	28.90	2426.03	28.95	0.00
NZA-05	7.12	2821.99	34.84	2821.68	34.85	16.40
NZA-050	6.23	2820.55	34.68	2844.99	40.68	0.00
NZA-051	6.56	2820.74	34.82	2820.55	34.68	0.00
NZA-052	6.77	2821.28	34.88	2820.74	34.82	0.00

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NZA-053	6.91	2821.62	34.88	2821.28	34.88	0.00
NZA-054	5.57	3168.93	29.35	3311.91	28.18	0.00
NZA-055	5.50	3311.91	28.18	3436.09	39.60	0.00
NZA-056	5.37	3436.09	39.60	3593.17	39.52	0.00
NZA-057	7.20	2706.50	42.35	2714.89	42.15	0.00
NZA-058	7.32	2699.79	42.59	2706.50	42.35	0.00
NZA-059	7.68	2694.88	42.75	2699.79	42.59	0.00
NZA-06	6.97	2821.68	34.85	2821.62	34.88	0.00
NZA-060	8.43	2694.42	42.41	2694.88	42.75	0.00
NZA-061	8.97	2694.31	42.13	2694.42	42.41	0.00
NZA-062	13.88	2675.55	41.11	2676.01	41.87	0.00
NZA-063	13.93	2698.17	36.84	2683.87	37.46	0.00
NZA-064	13.98	2717.78	33.29	2698.17	36.84	0.00
NZA-065	14.02	2777.06	33.01	2717.37	33.30	0.00
NZA-066	14.10	2661.56	37.03	2656.80	37.14	0.00
NZA-067	14.19	2666.24	36.91	2661.56	37.03	0.00
NZA-068	14.28	2674.25	36.55	2666.25	36.90	0.00
NZA-069	14.38	2681.93	35.97	2674.03	36.55	0.00
NZA-07	8.98	774.07	17.40	538.82	21.52	8.89
NZA-070	14.63	2695.35	34.97	2689.80	35.21	0.00
NZA-071	14.76	2715.04	34.72	2709.43	34.93	0.00
NZA-072	14.94	2719.37	34.54	2715.03	34.72	0.00
NZA-073	15.06	2724.29	34.34	2719.37	34.54	0.00
NZA-074	15.17	2739.71	33.59	2723.18	34.31	0.00
NZA-075	15.29	2669.86	33.75	2665.94	33.94	0.00
NZA-076	15.47	2681.17	33.24	2669.86	33.75	0.00
NZA-077	16.97	2502.27	30.76	2468.77	32.97	0.00
NZA-078	16.81	258.72	12.47	32.77	14.76	0.00
NZA-079	15.84	95.23	12.48	4.62	18.49	0.00
NZA-08	17.92	306.36	12.62	61.21	14.61	19.57
NZA-082	17.68	2420.23	29.23	2396.16	29.83	0.00
NZA-083	18.03	2426.03	28.95	2412.83	29.34	0.00

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NZA-084	19.82	2432.01	28.42	2429.08	28.79	0.00
NZA-085	19.85	1135.90	28.32	1134.20	28.70	0.00
NZA-086	19.87	1143.89	27.50	1135.90	28.32	0.00
NZA-087	20.74	1261.49	22.62	1245.93	23.27	19.71
NZA-088	20.51	1207.80	24.15	1200.77	24.19	0.00
NZA-089	20.97	2477.33	22.43	2462.36	22.88	0.00
NZA-09	16.19	61.21	14.61	61.08	14.91	0.00
NZA-090	21.24	2451.13	21.97	2440.66	22.70	0.00
NZA-091	21.61	2477.77	21.30	2459.70	21.92	0.00
NZA-092	21.68	1269.39	20.67	1242.18	21.71	0.00
NZA-093	21.91	1289.42	19.97	1269.39	20.67	0.00
NZA-094	22.11	1193.83	20.65	1187.05	21.19	0.00
NZA-095	22.26	1203.80	19.99	1193.83	20.65	0.00
NZA-096	58.38	1860.68	14.58	1728.37	15.37	0.00
NZA-097	57.62	2968.99	15.02	2898.89	15.60	0.00
NZA-098	55.09	2898.89	15.60	2860.17	15.98	0.00
NZA-099	53.03	2860.17	15.9842	2833.68	16.3399	0

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-00	1860.68	14.58
L-01	3593.17	39.52
L-010	2714.89	42.15
L-0100	2327.65	25.29
L-0101	2185.94	25.36
L-0102	2190.55	24.99
L-0103	2197.39	24.72
L-0104P1	31.98	15.22
L-0104P2	41.69	14.13
L-0104P3	32.27	15.22
L-0104P4	45.25	55.90
L-0104W	2142.01	24.65
L-0105	2202.34	24.49
L-0106	2223.85	23.91
L-0107	2175.11	23.29
L-0108	2218.59	22.73
L-0109	4725.16	16.99
L-011	2821.28	34.88
L-0110	3089.28	17.29
L-0111P1	363.16	19.64
L-0111P2	388.05	19.64
L-0111P3	155.22	22.26
L-0111W	1211.30	22.05
L-0112	2089.43	22.30
L-0113	3176.41	16.56
L-0114P	3100.68	17.17
L-0114W	0.00	0.00
L-0115	3099.79	17.22
L-0116	2833.68	16.34
L-0117	2860.17	15.98
L-0118	2898.89	15.60
L-0119	1728.37	15.37
L-012	2821.62	34.88
L-0120P	42.69	14.41
L-0120W	687.18	27.43
L-0121	681.73	28.79
L-0122P	681.87	28.56
L-0122W	0.00	0.00
L-0123	684.88	27.81
L-0124P1	432.72	16.52
L-0124P2	256.89	16.49
L-0124W	0.00	0.00
L-0125	794.00	16.77
L-0126P	19.85	14.11
L-0126W	730.68	16.65

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0127	749.09	16.58
L-0128P	345.95	16.96
L-0128W	0.00	0.00
L-0129	432.99	18.58
L-0130B	451.31	18.01
L-0131	437.70	17.44
L-0132W	481.02	15.87
L-0133	483.45	15.59
L-0134	394.69	15.84
L-0135	395.52	15.53
L-0136P	24.56	13.03
L-0136W	377.67	15.45
L-0137	395.51	15.38
L-0138	346.03	17.09
L-013B	2821.68	34.85
L-014	2699.79	42.59
L-0140	546.64	14.89
L-0142	509.83	15.30
L-0143	614.56	14.18
L-0144P	63.07	13.08
L-0144W	657.29	13.89
L-0146	231.99	16.80
L-0147	392.65	16.32
L-0148	367.84	17.04
L-0149P	19.92	14.30
L-0149W	373.24	16.63
L-015	2706.50	42.35
L-0150	340.28	17.87
L-0151	95.04	19.08
L-0152	1011.84	19.44
L-0153	805.55	23.36
L-0154	988.43	20.15
L-0155B	998.48	19.87
L-0156	514.54	18.10
L-0157W	516.44	17.98
L-0158	728.98	19.62
L-0159	1071.49	18.50
L-016	2694.31	42.13
L-0160	1147.19	20.81
L-0161	1317.19	20.11
L-0162	1278.15	20.93
L-0163B	1305.28	20.72
L-0164	1151.04	20.73
L-0165	1082.16	21.13
L-0166	326.41	17.70

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0167	523.01	17.63
L-0168	509.91	18.37
L-0169	760.86	18.46
L-017	2694.42	42.41
L-0170P1	26.80	15.35
L-0170P2	46.32	15.24
L-0170W	726.56	18.37
L-0171	352.89	15.91
L-0172	352.96	16.24
L-0173B	394.82	16.80
L-0174P	538.82	21.52
L-0174W	0.00	0.00
L-0175P	28.19	19.16
L-0175W	0.00	0.00
L-0176P	61.21	14.61
L-0176W	0.00	0.00
L-0177	61.08	14.91
L-018	2694.88	42.75
L-0180P	11.70	72.00
L-0180W	184.60	27.57
L-0181P1	5.01	14.26
L-0181P2	5.11	14.25
L-0181P3	5.22	14.25
L-0181P4	5.07	14.26
L-0181P5	4.89	14.27
L-0181W	362.99	14.50
L-0182P1	33.89	13.33
L-0182P2	32.17	13.94
L-0182W	77.60	16.69
L-0183P1	4.30	13.48
L-0183P2	3.89	13.48
L-0183P3	3.96	13.48
L-0183P4	2.28	13.48
L-0183W	168.58	13.48
L-0184P	21.34	15.50
L-0184W	90.58	14.99
L-0187P	134.48	12.88
L-0187W	0.00	0.00
L-0188	119.08	34.34
L-0189P	24.20	25.47
L-0189W	0.00	0.00
L-019	2676.01	41.87
L-0192	22.70	36.29
L-0193	786.47	14.31
L-0194	220.68	30.77

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0195	752.29	14.47
L-0196	709.24	14.53
L-0197P1	6.60	12.84
L-0197P2	5.07	12.96
L-0197P3	8.56	12.68
L-0197P4	7.99	12.73
L-0197P5	7.47	12.77
L-0197P6	4.74	12.97
L-0197P7	7.76	12.75
L-0197W	705.63	14.51
L-0198	319.12	14.37
L-0199	744.87	14.21
L-02	3822.03	38.71
L-0200	589.14	14.50
L-0201	220.69	30.70
L-0202P1	122.41	15.15
L-0202P2	98.90	15.24
L-0202W	216.72	27.27
L-0204P	15.18	15.91
L-0204W	235.69	23.41
L-0205	1444.77	23.37
L-0206	1378.52	23.75
L-0207	1288.10	28.53
L-0208	242.49	24.04
L-0209	244.73	23.56
L-020B	2694.29	42.04
L-021	2717.37	33.30
L-0210	523.98	20.23
L-0212	1459.84	23.24
L-0214P	7.39	15.62
L-0214W	503.24	21.98
L-0215P	9.17	15.95
L-0215W	939.65	23.68
L-0216P1	15.58	14.92
L-0216P2	15.59	14.78
L-0216W	358.78	17.69
L-0218P1	290.09	17.80
L-0218P2	290.09	17.80
L-0218W	0.00	0.00
L-0219	579.55	17.82
L-022	2698.17	36.84
L-0220P	2.83	60.57
L-0220W	38.50	19.63
L-0222	111.38	19.35
L-0225W	36.45	12.52

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0226	309.99	20.35
L-0227	340.53	20.08
L-0228P	15.27	17.88
L-0228W	330.55	19.81
L-0229	344.46	19.94
L-023	2679.17	37.99
L-0230P	1.40	15.72
L-0230W	287.81	20.47
L-0231	291.24	20.84
L-0232	183.19	20.88
L-0233P1	2.09	20.77
L-0233P2	2.08	20.77
L-0233P3	2.08	20.77
L-0233P4	2.08	20.77
L-0233W	308.47	20.64
L-0234	81.59	18.11
L-0235	79.94	19.82
L-0236	183.94	19.99
L-0237P1	0.83	13.80
L-0237P2	9.26	13.09
L-0237W	0.00	0.00
L-0238	40.44	18.96
L-0239P	353.17	13.58
L-0239W	0.00	0.00
L-024	2666.24	36.91
L-0240	583.01	17.64
L-0241	528.38	17.25
L-0242	595.97	17.03
L-0243	394.71	19.47
L-0244P	389.39	19.30
L-0244W	0.00	0.00
L-0245P	124.76	17.46
L-0245W	0.00	0.00
L-0246	146.40	18.19
L-0247	267.69	17.17
L-0249P1	16.62	15.96
L-0249P2	16.62	15.96
L-0249W	82.93	19.52
L-025	2661.56	37.03
L-0250	109.10	19.97
L-0251	110.68	19.59
L-0252	111.90	14.93
L-0253P	35.69	18.79
L-0253W	0.00	0.00
L-0254	39.68	16.62

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0255P	52.96	18.80
L-0255W	0.00	0.00
L-0259P	121.84	27.42
L-0259W	0.00	0.00
L-026	2656.80	37.14
L-0260B	3684.08	39.40
L-0261	3104.67	29.71
L-0262	745.79	18.90
L-0263	320.28	18.36
L-0264	129.95	16.03
L-0266	77.83	19.85
L-0267	77.92	20.07
L-0268	126.33	13.74
L-0269	39.25	13.98
L-027	2674.03	36.55
L-0270W	0.00	0.00
L-0271	66.99	14.80
L-0272	41.71	67.51
L-0273P1	29.18	26.16
L-0273P2	29.80	26.16
L-0273W	0.00	0.00
L-0274	59.00	26.34
L-0275	64.09	21.32
L-0276	59.27	26.36
L-0277W	523.41	13.66
L-028	2681.93	35.97
L-0280P	159.84	12.47
L-0280W	0.00	0.00
L-0281	139.41	12.90
L-0282	116.36	13.24
L-0283	106.83	13.89
L-0285	689.36	16.67
L-0286	751.63	16.78
L-0287	1047.31	17.69
L-0288	774.07	17.40
L-0289	2675.54	41.11
L-0290P	4.00	9.42
L-0290W	52.35	12.73
L-0291W1	2.39	16.28
L-0291W2	35.51	16.28
L-0292P	158.09	12.88
L-0293W1	13.30	12.95
L-0293W2	89.92	13.00
L-0294	120.48	13.60
L-0295	143.55	12.47

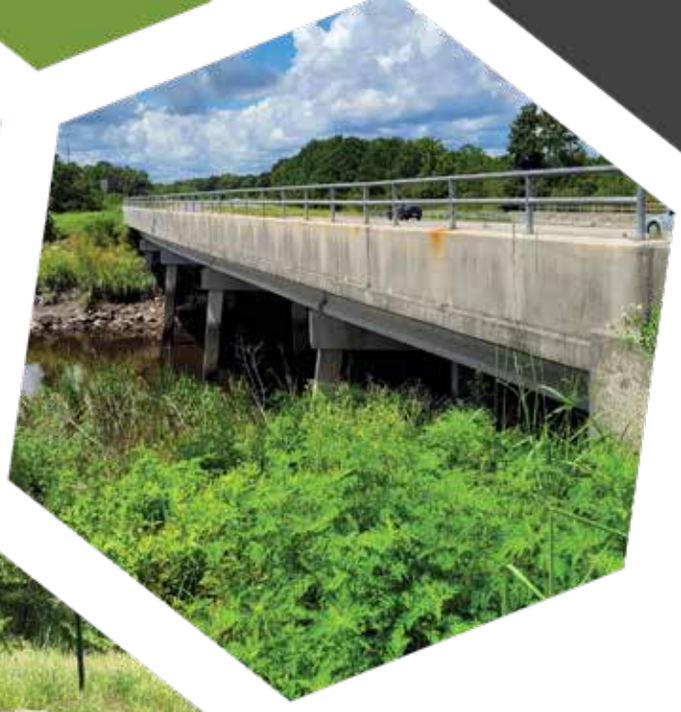
Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0297P	10.75	19.28
L-0297W	0.00	0.00
L-0298P	15.77	30.64
L-0298W	0.00	0.00
L-0299	10.67	20.84
L-029W	2686.96	35.48
L-03	3168.93	29.35
L-030	2665.94	33.94
L-0300	11.19	22.45
L-0302	26.07	25.77
L-0303	27.06	25.26
L-0304	38.54	22.29
L-0305	55.08	22.07
L-0306	67.27	21.80
L-0307	480.43	15.29
L-0308	469.41	15.57
L-0309	441.92	15.74
L-031	2721.79	34.35
L-0310	389.80	18.44
L-0311W	29.10	12.78
L-0312W	32.66	13.25
L-0313W	14.17	12.93
L-0314W	1.78	28.51
L-0315	21.04	13.68
L-0317W	54.07	13.37
L-0318W	50.81	13.47
L-0319W	15.41	13.96
L-032	2719.37	34.54
L-0320W	30.40	12.53
L-0321W	7.07	12.44
L-0322W	69.62	13.31
L-0323P	3.59	13.06
L-0323W	0.00	0.00
L-0324P	8.45	12.91
L-0324W	0.00	0.00
L-0325P	1.23	22.02
L-0325W	0.00	0.00
L-0326P	439.79	20.24
L-0326W	0.21	20.28
L-0327P	94.68	13.70
L-0327W	0.00	0.00
L-0328P	11.25	13.54
L-0328W	11.24	13.54
L-0329	83.91	17.04
L-033	2715.03	34.72

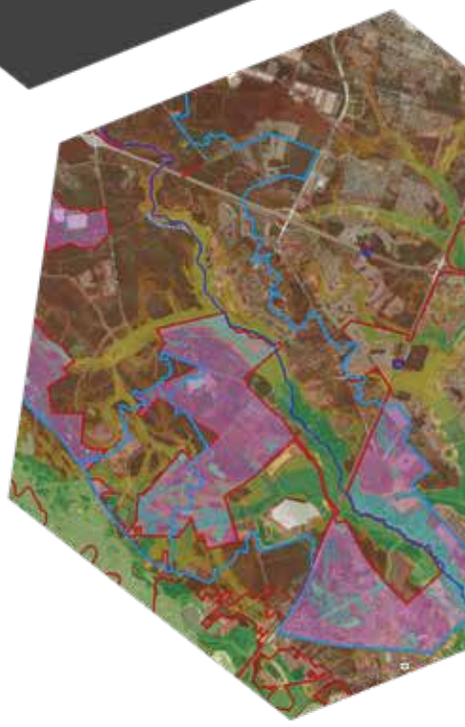
Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0330	0.00	0.00
L-0332	3.18	35.11
L-0334DS	16.82	13.08
L-0334P	17.00	12.96
L-0334W1	62.60	13.08
L-0334W2	62.60	13.08
L-0335DS	24.77	14.56
L-0335W	0.00	0.00
L-0336W	10.76	18.09
L-0337	7.68	15.10
L-0337W	123.68	17.52
L-0338	118.27	28.95
L-034	2695.35	34.97
L-0340P	15.76	40.98
L-0341P	63.00	44.78
L-0342P	68.55	13.06
L-0343P	7.43	13.55
L-0344W	123.34	12.92
L-0345	74.91	13.23
L-0345P	5.74	13.28
L-0345W1	3.12	13.14
L-0345W2	2.71	13.52
L-0345W3	0.00	0.00
L-0346W	20.67	18.91
L-0347P	65.94	12.91
L-0348P	23.39	13.00
L-0348W1	23.37	13.00
L-0348W2	85.92	13.17
L-035	2689.39	35.42
L-0350P	5.91	15.85
L-0350W1	5.81	15.42
L-0350W2	0.12	16.09
L-0351P1	57.48	13.19
L-0351P2	18.31	13.40
L-0351W1	130.73	13.19
L-0351W2	10.85	13.19
L-036DS	32.77	14.76
L-037	2468.77	32.97
L-038	2669.86	33.75
L-039	2681.17	33.24
L-04	3436.09	39.60
L-0400P	1.53	13.63
L-0400W	1.54	13.63
L-0401P	2.33	13.63
L-0401W	2.34	13.63

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-0402P	3.45	14.23
L-0402W	3.46	14.23
L-0403P	4.27	18.65
L-0403W	4.27	18.65
L-040B	2467.80	33.02
L-041	2488.94	30.60
L-045	1134.20	28.70
L-046	2429.08	28.79
L-047	2412.83	29.34
L-048	2396.16	29.83
L-049	2426.03	28.95
L-05	3311.91	28.18
L-050B	1854.30	28.85
L-050W	574.71	28.90
L-051	1162.83	26.19
L-052	1143.89	27.50
L-053	1200.77	24.19
L-054	1135.90	28.32
L-055	1261.49	22.62
L-056	2440.66	22.70
L-057	1280.97	21.60
L-058	2451.13	21.97
L-059P1	3.68	13.58
L-059P2	29.11	13.58
L-059P3	29.12	13.58
L-059P4	19.29	13.72
L-059W	2415.70	21.97
L-06	2820.74	34.82
L-060	1213.22	24.09
L-061	1207.80	24.15
L-062B	345.71	24.99
L-062W	865.68	23.77
L-064	2115.61	33.20
L-065	828.93	33.47
L-066	1203.80	19.99
L-067	1193.83	20.65
L-068	1187.05	21.19
L-069	1269.39	20.67
L-07	2820.55	34.68
L-070	1242.18	21.71
L-071	2459.70	21.92
L-072	2115.46	32.40
L-074	2117.59	32.13
L-075	2117.32	32.13
L-076	2116.43	32.20

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-077B	2116.81	32.14
L-078W	2063.90	30.36
L-079	2062.16	30.42
L-08	2844.99	40.68
L-080	2066.52	30.28
L-081	2119.44	31.49
L-082	2186.35	31.92
L-083	2056.21	30.61
L-084P1	320.45	30.24
L-084P2	678.87	30.24
L-084P3	697.47	28.75
L-084P4	111.58	30.55
L-084W	260.89	30.24
L-085	2069.03	30.23
L-086	2070.69	29.78
L-087	2076.23	29.37
L-088	2136.81	28.68
L-089	2148.95	28.15
L-09	3075.77	31.34
L-090	1480.00	27.07
L-091W	1481.38	26.99
L-092	1481.65	26.95
L-093P1	1104.19	26.95
L-093P2	377.74	26.78
L-093W	0.00	0.00
L-094	1483.00	26.54
L-095	1488.68	26.00
L-096	2293.11	26.66
L-097	2299.71	26.36
L-098	2316.19	25.93
L-099	2328.35	25.56
L-2320W	4.62	18.49
L-2410W	12.37	36.94
L-2420W	0.00	71.31
L-2430P	4.62	36.06
L-2430W	0.00	0.00
L-2440W	16.96	71.14
L-2480W	65.94	12.90
L-2520W	43.95	12.33
L-2530W	151.46	12.98
L-2540W	20.55	12.40
L-2550P	78.75	15.15
L-2560P	81.79	15.61
L-2570P	11.89	16.23
L-2580DS	11.72	12.39

Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
L-2590W	38.62	12.39
L-2600W	8.60	12.39
L-2610DS	16.18	12.59
L-2620DS	8.62	12.51
L-2640W	34.03	12.52
L-2650W	817.63	26.85
L-2660W	59.42	28.57
L-2670W	1444.27	20.97
L-2680W	0.00	0.00
L-2700W	1189.13	23.36
L-2710W	938.93	24.11
L-2720W	17.66	26.28
L-2730W	82.10	14.63
L-2740W	138.36	14.57
L-2750W	184.16	15.32
L-2760W	0.00	0.00
L-2790P	31.36	17.64
L-2800W	1035.61	17.81
L-2840W	0.00	0.00
~~D~L-0334DS~W0	3.55	13.08
~~D~L-0334DS~W1	13.26	13.08
~~D~L-0334DS~W2	0.00	0.00
~~D~L-0335DS~W0	19.46	14.56
~~D~L-0335DS~W1	5.31	14.56
~~D~L-0335DS~W2	0.00	0.00
~~D~L-036DS~W0	2.77	12.27
~~D~L-036DS~W1	30.59	14.76
~~D~L-2580DS~W0	3.11	15.01
~~D~L-2580DS~W1	9.05	12.10
~~D~L-2580DS~W2	5.05	12.40
~~D~L-2610DS~W0	3.24	11.89
~~D~L-2610DS~W1	15.23	12.59
~~D~L-2620DS~W0	1.30	11.62
~~D~L-2620DS~W1	8.14	12.52





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