



TOOKANY CREEK FLOOD RISK REDUCTION STUDY  
CHELTENHAM, PENNSYLVANIA

CONTINUING AUTHORITIES PROGRAM, SECTION 205

ECONOMIC APPENDIX

JUNE 2015

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## 1. INTRODUCTION

This appendix provides the results of the economic analysis of existing conditions flood damages, and flood risk reduction benefits for Cheltenham Township, Pennsylvania. The analysis described within this document was conducted as an element of the Tookany Creek Flood Risk Reduction Study. The economic analysis described in this appendix is consistent with Federal water resources policies and practice, including *Risk-Based Analysis for Flood Damage Reduction Studies* (EM 1110-2-1619), and the *Corps Planning Guidance Notebook* (ER-1105-2-100).

The purpose of this appendix is to evaluate plan alternatives against economic constraints for U.S. Army Corps of Engineers (Corps) participation in a flood damage reduction project. The economic constraints are:

- The need for flood damage reduction features to be efficient (*i.e.*, average annual NED benefits exceed average annual costs); and
- The requirement to select the flood damage reduction plan that maximizes net excess NED benefits (*i.e.*, the NED plan).

Contributions to NED include increases in the net value of the national output of goods and services expressed in monetary units. Direct benefits (e.g., prevented damages, reduction of emergency services costs) that accrue in the planning area from implementation of a flood risk reduction project are contributions to NED. A positive difference of project benefits minus project costs becomes a net contribution to NED. Similarly, if the result of project benefits divided by project costs exceeds 1.0. The project is said to have a positive benefit-to-cost ratio (BCR).

The Federal objective of water resources development is to identify a plan that maximizes net contributions to NED consistent with protecting the nation's environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements. This plan is referred to as the NED plan, and becomes the basis for Federal cost-sharing in any project for flood damage reduction.

### 1.1 Water Resources Problem

The Cheltenham flood plain is subject to significant flooding from both Tookany and Rock Creeks, amongst other things. Based on the hydrologic and hydraulic analyses, floods that cause widespread damage are likely to result from the occurrence of various events ranging from an annual probability of 0.500 to 0.002 (depending on the location within the flood plain). Cheltenham has experienced major flooding periodically throughout the city's history.

### 1.2 Opportunity Identification

Flood risk reduction opportunities include the potential to reduce property damage, injuries and deaths. Due to certain study limitations, non-physical losses including emergency and income losses were not evaluated.

### **1.3 Methodology Overview**

Flood damages are expressed in terms of expected annual damages, which defined as the monetary value of physical damages and non-physical losses that can occur in any given year based on the magnitude and probability of losses from all possible events. The basis for determining existing damages is an examination of losses sustained in historical floods, supplemented by appraisals, application of depth-damages curves, and an inventory of capital investment within the floodplain.

#### **1.3.1 Major Damage Categories**

Flood damages throughout the study area are classified as either physical or non-physical damages. Physical damages evaluated in this analysis account for a substantial proportion of flood damages, and include:

- Structural damages to buildings;
- Loss of contents of the buildings;

Potential additional Non-Physical damages were not included in the study results at the current study phase.

#### **1.3.2 Selected Planning Reaches**

The study area is located along Tookany and Rock Creeks through the city of Cheltenham and adjacent townships. Twelve separate reaches were delineated for Tookany Creek and one reach was delineated for Rock Creek. All reaches were analyzed using both left and right bank orientation along the creeks. The defined reaches are shown on Table 1.

**Table 1: Study Area Reaches**

<b>Risk Sub Area</b>	<b>Reach Station</b>		<b>Reach Description</b>	<b>Index Section No.</b>
TC-1	452.5	6255.87	Country club and Church	4730.68
TC-2	6255.87	9344.9	Cheltenham SEPTA Station	8871.58
TC-3	9344.9	13835	Cheltenham & Tennis Courts	12075.9
TC-4	13835	173952.1	Cheltenham High School	15556.5
TC-5	17392.1	19712.4	Harrison Ave Baseball Fields	18967.19
TC-6	19712.4	22682.5	Ogontz Field	21415.6
TC-7	22682.5	24098.1	Elkins Park Free Library	23274.8
TC-8	24098.1	29207.5	Wall Park & Beth Sholom Congregation	26368.19
TC-9	29207.5	31188.6	Glenside US Post Office	30700.3
TC-10	31188.6	35332.8	Wyncote & Parts of Abington Township	34003.5
TC-11	35332.8	37606.5	Harry Renninger Park	36540.6
TC-12	37606.5	40475.19	Easton Rd	39343.69
RC-1	17.85	3161.65	Cheltenham Hills	1525.29

As indicated on the table above, a single index location was selected within each reach. The index location was selected as a representative location within the reach based on hydrologic and hydraulic parameters. The index location is used to relate input data from each specific water surface profile for the categorical computation of stage, discharge, and damage within each subarea.

### 1.3.3 Land Use Database

Due to the large, urban residential make-up of the Cheltenham area, approximately 98% built-up, most land is zoned residential. As reflected in the economic structural inventory, few properties were zoned commercial, public, and industrial.

### 1.3.4 Period of Analysis

The starting period of analysis was set as current (2015), and the economic database for existing conditions is also used to characterize the base conditions. For purposes of this analysis, it is assumed that the existing level of development will remain the same for the period of analysis under future without-project conditions.

### 1.3.5 Risk and Uncertainty Analysis

The Hydrologic Engineering Center Flood Damage Analysis Version 1.2.5a risk analysis model, October 2010 (HEC-FDA) was used to compute expected annual damages for existing conditions and for all future with-project alternatives. Uncertainty parameters used in the HEC-FDA model for this analysis include:

- First floor elevations
- Structure values
- Content to structure ratios
- Percent depth-damage functions; and
- Stage-discharge functions

### 1.4 Other System of Accounts

The following table was used to examine the other system of accounts. They include the account for Other Social Effects (OSE), the account for Regional Economic Development (RED), and the system for Environmental Quality (EQ). It was deemed that the NED account would be most applicable system for analysis due to the minor impact of the other three. Table 2, shows the results of the analysis of the OSE, RED, and EQ:

**Table 2: Analysis of OSE, RED, & EQ System of Accounts**

<b>Other Social Effects (OSE)</b>		
<b>Resource Categories</b>	<b>No Action Plan</b>	<b>Alternative 4 (Tentatively Selected Plan)</b>
Aesthetics	No Impact	Temporary adverse impacts on sight and smell due to construction activities (equipment, earth moving) would disappear upon end of construction period.
Displacement effects	No Impact	No permanent displacement of people, businesses, or farms.
Educational, cultural, and recreational opportunities	No impact	Permanent increase in availability of transportation routes during and after severe storm events. Increased level of protection prevents disruption of community services such as schools, hospitals, and utilities.
Emergency Preparedness	No Impact	Permanent increase in access to flexible reserves of water supplies, critical power supplies, scarce fuels, evacuation routes and emergency transport to health facilities during and after storm events.
Long-term productivity	No Impact	Negligible impact on long-term productivity of resources.
Security of life, health, and safety	No Impact	Significant mitigation of related health risks, such as loss-of-life, trauma, hypothermia, water & air pollution, water-borne diseases, vector-borne diseases (through ephemeral water-bodies), and food & water supply disruption.

Social Vulnerability	No Impact	Permanent reduction in flood hazard exposure for highly vulnerable populations identified in the Social Vulnerability Index, including senior citizens, minorities, and persons living in poverty.
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\* Social Vulnerability Index (SVI) is developed by the Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency of the U.S. Department of Health and Human Services

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**Regional Economic Development (RED)**

<b>Resource Categories</b>	<b>No Action Plan</b>	<b>Alternative 4 (Tentatively Selected Plan)</b>
Employment distribution	No Impact	Temporary increase in construction-related jobs during construction. Permanent indirect positive impacts on employment opportunities for protected businesses, including opportunities for minority workers.
Fiscal condition of State and Local sponsor	No Impact	Permanent reduction in clean-up, emergency response, resource allocation, and other flood-related costs. Permanent increase in tax base of workers and businesses.
Population distribution and composition	No Impact	Minimal temporary impact on population distribution or composition.
Real income	Loss of business income and wages as businesses close during and/or after storm events	Permanent increase in real income for below-poverty and near-poverty workers from temporary construction work and permanent wage opportunities from open businesses.

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**Environmental Quality (EQ)**

<b>Resource Categories</b>	<b>No Action Plan</b>	<b>Alternative 4 (Tentatively Selected Plan)</b>
Water Resources	No Impact	There will be minor impacts to wetlands as a result of this proposed project. Approximately 0.25 acres of wetlands will be impacted by construction of the proposed West Waverly basin. Mitigation in the form of wetland restoration of approximately 1.0 acre of the West Waverly property will be completed to compensate for this loss. In addition, the project will comply with Title 25 Pa. Code Chapter 102, Erosion and Sediment Control and Stormwater Management.

Air Quality	No Impact	<p>The total estimated emissions that would result from construction of the Tookany Creek Flood Damage Reduction Project is 3.89 tons of NO<sub>x</sub>, 1.67 tons of VOC, and 0.34 tons of PM 2.5. These emissions are well below the General Conformity trigger levels of 100 tons of NO<sub>x</sub> and PM<sub>2.5</sub>; and 50 tons of VOC per year. General Conformity under the Clean Air Act, Section 176 has been evaluated for the project according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this project because the total direct and indirect emissions from the project are below the conformity threshold values established at 40 CFR 93.153 (b) for ozone (NO<sub>x</sub> and VOC) in a Moderate Nonattainment Area. The project is not considered regionally significant under 40 CFR 93.153 (i).</p>
Biological Resources	No Impact	<p>A Pennsylvania Natural Diversity Inventory (PNDI) search run on the Pennsylvania Natural Heritage Program website indicated that no Federally-listed species are found in the project area and, hence no impacts to Federally listed or proposed species would be anticipated from the proposed project. No long-term impacts to the fish and wildlife resources in the Tookany Creek watershed are anticipated as a result of this project. There will be noise and general disturbances in the stream area as a result of construction activities, but these will be temporary in nature and should not have a long term negative effect on wildlife in the area.</p>
Cultural Resources	No Impact	<p>Based on the results of the Phase IA investigation, additional subsurface archaeological investigations may be required at 8 of the 9 proposed dry detention basins for Alternative 4 to properly assess their potential to contain undocumented prehistoric or historic archaeological sites. The USACE, in consultation with the Pennsylvania State Historic Preservation Officer (SHPO), the Tribes, and other consulting parties will review the results of all investigations and determine any effects to historic properties eligible for or listed on the NRHP, and work to avoid, minimize, or mitigate those effects. In addition, further architectural assessments may be required in order to assess the proposed</p>

		impacts that Alternative 4 may have on above ground historic properties.
Land Use	No Impact	There will permanent change in the nature of the stream and land use in the proposed basin areas. For the areas proposed for detention basins, some of the basins will go from private property to public property. In addition, the land use will change from its existing use to detention basins which will hold water during storms. If the funding is available, rain gardens will be planted in the basin areas using native plants to enhance the area for wildlife resources. If this happens, the project will provide a long-term positive impact to the wildlife in the Tookany Creek watershed. Rain gardens would also make for an enhanced public space for passive recreation (i.e., walking).
HTRW	No Impact	Based on the best available information at this time in the Planning process, it does not appear that there are any HTRW concerns for the project; however, additional investigations on this issue will occur during the D&I phase of the project.
Noise	No Impact	There will be noise and general disturbances in the project area as a result of construction activities, but these will be temporary in nature and should not have a long term negative effect on the noise level of the neighborhoods.



## 2. SOCIAL AND ECONOMIC SETTING

The Township of Cheltenham borders North Philadelphia, Pennsylvania. According to the U.S. Census Bureau, Cheltenham Township covers 9 square miles, which is approximately 1.8% of the land area in Montgomery County. There are approximately 4,088 persons per square mile in Cheltenham, which is roughly 247% more urban than the average for the remainder of the county. Below, Table 2 provides a more relevant breakdown.

**Table 3: Land Area and Population Density**

	<b>Cheltenham Township</b>	<b>Montgomery County</b>	<b>Pennsylvania</b>	<b>United States</b>
Land area in square miles, 2010	9	483	44,817	3,531,905
Person per square mile, 2010	4,088	1656	283	87

Source: U.S. Census Bureau

### 2.1 Population & Demographics

In 2010, there were approximately 36,800 persons living in Cheltenham Township, representing 4.6% of the population of Montgomery County. The township population has remained relatively constant from 2000-2010 at approximately -0.2% change, falling behind Montgomery County at 6.8%, Pennsylvania at 3.4%, and the United States at 9.7%. Table 3 below shows the historic population growth across Cheltenham Township, Montgomery County, the state of Pennsylvania, and the United States.

**Table 4: Historic Population Growth (2000-2010)**

Category	Cheltenham Township	Montgomery County	Pennsylvania	United States
Population, 2010	36,793	799,874	12,702,379	308,745,538
Population (% change)	-0.2%	6.8%	3.4%	9.7%

Source: U.S. Census Bureau

Population projections for Cheltenham Township at 0.52% growth over the next ten years lag behind the statewide average at 1.33% and significantly lag behind the county projected growth rate at 3.04%. This pattern continues into the projection for year 2030. Table 4 shows the Projected Population Growth until 2030 in Cheltenham Township, Montgomery County, and Pennsylvania.

**Table 5: Projected Population Growth (2010–2030)**

Location	2010 Actual	2020 Projected	2030 Projected	2010-2020 Projected	2020-2030 Projected
Cheltenham Township	36,793	36,985	37,653	0.52%	1.81%
Montgomery County	799,874	824,165	875,214	3.04%	6.19%
Pennsylvania	12,702,379	12,871,823	13,190,400	1.33%	2.48%

Source: U.S. Census Bureau

Current population in Cheltenham Township is 56% Caucasian, with 32% African American, 8% Asian, and 5% Hispanic populations representing the rest of the township. Cheltenham is significantly more diverse in terms of Caucasian population than Montgomery County with 81.5%, Pennsylvania with 83.2%, and the United States with 77.7%. Table 5 shows the population demographics, separated by Race, of Cheltenham Township, Montgomery County, Pennsylvania, and the United States.

**Table 6: Population Demographics (2013)**

<b>Category</b>	<b>Cheltenham Township</b>	<b>Montgomery County</b>	<b>Pennsylvania</b>	<b>United States</b>
White persons	56.0%	81.5%	83.2%	77.7%
Black persons	31.9%	9.3%	11.5%	13.2%
American Indian	0.0%	0.2%	0.3%	1.2%
Asian persons	8.1%	7.1%	3.1%	5.3%
Hispanic persons	4.7%	4.7%	6.3%	17.1%
White persons not Hispanic	52.8%	77.7%	78.4%	62.6%

Source: U.S. Census Bureau

The level of High School educational attainment in Cheltenham Township at 95.3% is on par with Montgomery County at 93.5% and higher than the 88.7% rate in the rest of the state and the national average of 86.0%. Attainment of a Bachelor’s Degree or Higher shows a similar trend with Cheltenham Township showing 53.5% attainment, Montgomery County close at 45.5% and significantly ahead of Pennsylvania at 27.5% and the United States at 28.8%. Table 6 shows the educational attainment of High School and College Degrees in Cheltenham, Montgomery County, Pennsylvania, and the United States.

**Table 7: Educational Attainment (2009–2013)**

<b>Category</b>	<b>Cheltenham Township</b>	<b>Montgomery County</b>	<b>Pennsylvania</b>	<b>United States</b>
High School Grads, persons age 25+	95.3%	93.5%	88.7%	86.0%
Bachelor’s Deg or Higher, persons age 25+	53.5%	45.5%	27.5%	28.8%

Source: U.S. Census Bureau

Home ownership rate in Cheltenham Township is at 62.9%, lower than Montgomery County, 73.2%, and Pennsylvania, 69.8%, but mostly in line with the average US home ownership rate at 64.9%. Using rounded figures, Cheltenham Median Household Income is at \$76,300, similar to Montgomery County figures, \$80,000, but significantly higher than Pennsylvania at \$52,500, and the United States at \$53,000. Table 7 uses 2013 dollars and shows Homeownership Rate, Median Household Income, Per Capita Income, and Poverty level for Cheltenham, Montgomery, Pennsylvania, and the United States.

**Table 8: Income and Home Ownership (2009–2013)**

<b>Category</b>	<b>Cheltenham Township</b>	<b>Montgomery County</b>	<b>Pennsylvania</b>	<b>United States</b>
Homeownership rate	62.9%	73.2%	69.8%	64.9%
Median household income (2013 dollars)	\$76,280	\$79,183	\$52,548	\$53,046
Per capita income in past 12 months (2013 dollars)	\$39,879	\$41,472	\$28,502	\$28,155
Persons below poverty level	8.4%	6.1%	13.3%	15.4%

Source: U.S. Census Bureau

The percent of current Cheltenham population, 37%, that is traditionally considered to be non-earners (less than 18 years or over 65 years of age) is consistent with the remainder of the county at a 38.3% county average, with the state of Pennsylvania at 37.7%, and with the United States at 37.4%. Table 8 shows Persons under 18 years old, Persons over 65 years old, and the combined percentages to show Non - Potential Earners in the general population for Cheltenham, Montgomery, Pennsylvania, and the United States.

**Table 9: Non-Potential Earners in Population (2010)**

<b>Category</b>	<b>Cheltenham Township</b>	<b>Montgomery County</b>	<b>Pennsylvania</b>	<b>United States</b>
Persons under 18 years, percent	20.6%	22.2%	21.3%	23.3%
Persons 65 years and over, percent	16.4%	16.1%	16.4%	14.1%
Combined	37.0%	38.3%	37.7%	37.4%

Source: U.S. Census Bureau

## 2.2 Labor & Employment

The Labor Force in Cheltenham Township, -0.45%, fell at a rate comparable to the state of Pennsylvania, -0.82%, but less harshly than the Labor Force for Montgomery County, -1.25%. The Labor Force for the United States slightly increased over the same time span at 0.18%. Table 9 below shows the labor force for each year between Dec 2008 and Dec 2013, and the aggregate growth rate over that time span, for Cheltenham, Montgomery, Pennsylvania, and the United States. Note: Labor Force for Cheltenham township was estimated using total population, employment statistics, and unemployment rate.

**Table 10: Labor Force (2008–2013) (in hundreds)**

Location	Dec 2008	Dec 2009	Dec 2010	Dec 2011	Dec 2012	Dec 2013	Growth 2008 - 2013
Cheltenham Township	221	219	220	221	223	220	-0.45%
Montgomery County	4394	4194	4305	4312	4385	4339	-1.25%
Pennsylvania	64,773	63,648	63,979	64,206	64,943	64,239	-0.82%
United States	1,546,550	1,531,110	1,536,390	1,539,270	1,554,850	1,549,370	0.18%

Source: U.S. Census Bureau

Unemployment in Cheltenham Township has generally followed the rest of the country, increasing to 6.9% until slowly reverting back to approximately pre-recession levels of 5.0%. Cheltenham’s unemployment rate is similar to the rest of the county at 5.1%, and lower than Pennsylvania at 6.2% and the national average at 6.5%. Table 10 shows the unemployment rate at December of Years 2008 through 2013 for Cheltenham, Montgomery County, Pennsylvania, and the United States.

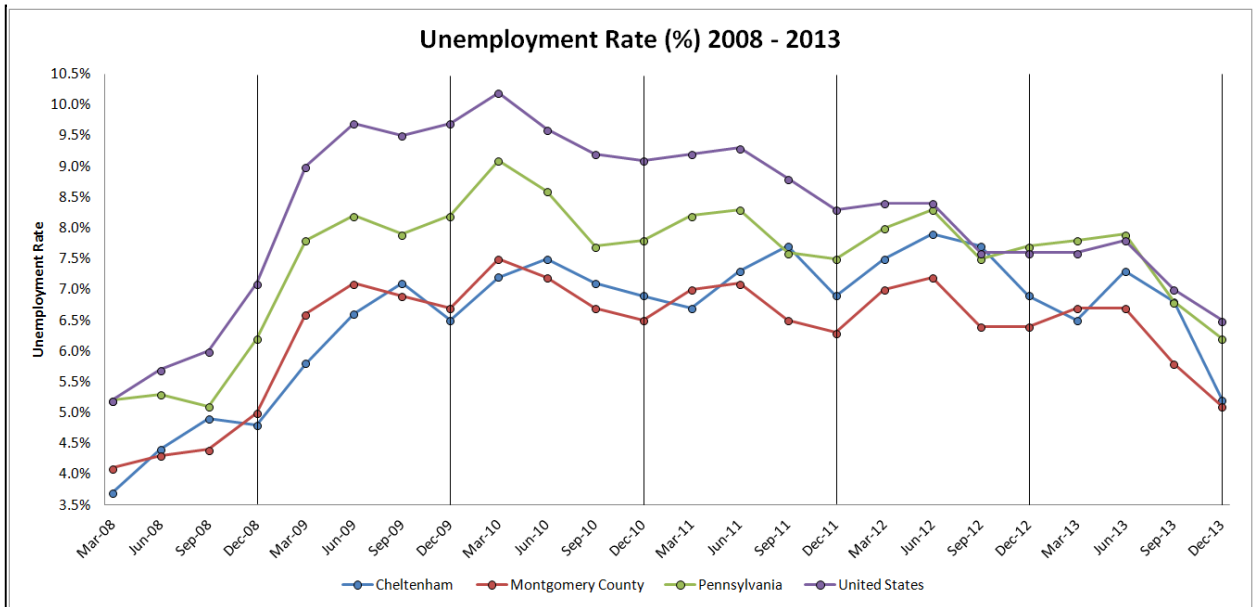
**Table 11: Unemployment Rate (2008–2013)**

Location	Dec 2008	Dec 2009	Dec 2010	Dec 2011	Dec 2012	Dec 2013
Cheltenham Township	4.8%	6.5%	6.9%	6.9%	6.9%	5.2%
Montgomery County	5.0%	6.7%	6.5%	6.3%	6.4%	5.1%
Pennsylvania	6.2%	8.2%	7.8%	7.5%	7.7%	6.2%
United States	7.1%	9.7%	9.1%	8.3%	7.6%	6.5%

Source: U.S. Census Bureau

Figure 1 below shows the continuous unemployment rate from Cheltenham, Montgomery County, the state of Pennsylvania, and the United States over the six year span from 2008 to 2013.

**Figure 1**



U.S. Bureau of Labor Statistics

The top five employment industries in Cheltenham are Professional, Scientific & Technical Services, Health Care & Social Assistance, Retail Trade, Construction, and Other Services (except Public Administration). These five industries employ over 85% of the labor force in Cheltenham, compared to 47% for Pennsylvania, and 45% for the United States. Table 11 shows the Employment by Industry, as identified by their NAICS codes, Cheltenham, Pennsylvania, and the United States. The categories are ordered by highest-to-lowest percentage employment by industry in Cheltenham Township.

**Table 12: Employment by Industry (2010)**

Industry (by NAICS Code)	Cheltenham Township		Pennsylvania		United States	
	Count	Percentage	Count	Percentage	Count	Percentage
Professional, Scientific & Technical Services	724	40.29%	330,674	6.39%	8,143,050	6.84%
Health Care & Social Assistance	394	21.93%	885,937	17.12%	16,833,731	14.14%
Retail Trade	220	12.24%	674,803	13.04%	15,702,752	13.19%
Construction	111	6.18%	264,953	5.12%	7,440,652	6.25%
Other Services (Except Public Administration)	95	5.29%	249,429	4.82%	5,547,750	4.66%
Finance & Insurance	83	4.62%	288,758	5.58%	6,678,729	5.61%
Arts, Entertainment & Recreation	47	2.62%	80,210	1.55%	2,083,383	1.75%
Wholesale Trade	41	2.28%	237,526	4.59%	5,976,332	5.02%
Admin, Support, Waste Mgt, & Remediation	27	1.50%	286,688	5.54%	8,143,050	6.84%
Manufacturing	17	0.95%	646,858	12.50%	13,381,269	11.24%
Educational Services	17	0.95%	186,813	3.61%	2,773,875	2.33%
Accommodation & Food Services	12	0.67%	424,339	8.20%	11,738,373	9.86%
Real Estate, Rental & Leasing	9	0.50%	74,001	1.43%	2,345,294	1.97%
Forestry, Fishing, Hunting & Agr. Support	0	0.00%	3,105	0.06%	178,576	0.15%
Mining	0	0.00%	21,734	0.42%	571,442	0.48%
Utilities	0	0.00%	31,049	0.60%	630,967	0.53%
Transportation & Warehousing	0	0.00%	203,890	3.94%	4,345,341	3.65%
Information	0	0.00%	136,099	2.63%	3,416,747	2.87%
Management of Companies & Enterprises	0	0.00%	149,036	2.88%	3,107,216	2.61%

U.S. Bureau of Labor Statistics, Industries identified by NAICS code

### 3. STRUCTURE INVENTORY DEVELOPMENT

Development of the structure inventory involved surveying existing floodplain structures to collect the data necessary to determine expected flood damages. The purpose for collecting this information is to determine what structures are located in the floodplain; the depreciated replacement value of the structures and their associated contents; and the zero-damage elevation at which they are initially

susceptible to flooding. This information is then used in the computation of existing and future conditions flood damages.

Structure inventory development began by establishing the geographic limits of the study area as defined by the study area reaches shown in Geographic Information System (GIS) shape-files. The reach shape-files are shown projected on aerial photography in Figures 1, and correspond to the reaches listed in Table 1 shown previously. Section 7 of this appendix shows all of the study area damage reaches.

Development of the structure inventory included the seven steps listed below

Step 1: Develop structure-based GIS data for the Cheltenham area, and select structures that fall within the study area reaches.

Step 2: Acquire structure characteristics and valuation data for the Cheltenham area.

Step 3: Assign structure types / occupancy classification codes.

Step 4: Derive structure ground elevations, and assign cross sections.

Step 5: Calculate structure depreciated replacement values.

### **3.1 Acquire Tax Assessor's Data & Select study Area Parcels**

Structure Geometry was created by photographic tracing through GIS. Descriptive parcel information was obtained through the Cheltenham Tax Office. Structure geometry was overlaid onto the Cheltenham study area reach maps, along with the 500-year floodplain parameters, using ARC-GIS, and those parcels within or near the 500-year flood plain were selected for further analysis. Figure 3 shows an example of structures selected within Reach TC-9. In the figure, the limits of reach TC-9 are designated by a solid yellow line, and the structures selected for further analysis are the many rectangular dark pink shapes. The Tookany Creek 500-year flood-plain is designated by a solid bright turquoise line while the Rock Creek 500-year flood-plain is designated by a solid bright green line. Tookany Creek is designated by a deep red solid line. The final dataset for all study area reaches included 204 structures for further analysis.

The data obtained from the Cheltenham tax office was based on the following categories:

<b>Street Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>	<b>Number of Stories</b>
<b>Year Built</b>	<b>Number of Units</b>	<b>Wall Material</b>	<b>Square Feet</b>	<b>Basement</b>
<b>Garage</b>	<b>Block</b>			



### 3.2 Structure Characteristics and Valuation Data

Tax assessment data that describe structure characteristics and valuation were collected from The Cheltenham Township and through professional opinion of a local realty. Structure values in the residential damage categories of R1S and RMS, as shown below in Table 13, were developed with the aid of a local realty company. Residential structures per neighborhood within the 500-year floodplain were identified. The land value was subtracted from each structure based on the amount accounted for from the tax data. Their structure improvement valuations were expressed as a minimum, most likely, and maximum values. Triangle distributions were fitted per structure to describe the error in opinion. The median value was then assigned per structure.

Commercial, industrial and public structure valuations were solely based on the tax assessed improvement value per structure.

### 3.3 Structure Occupancy Classification Codes

Structure occupancy classification codes were assigned through an examination and analysis of all available data obtained from the township and professional opinion. 37 of the 241 studied structures were deemed to be outside of the floodplain. Remaining structures were assigned to one of seven categories:

- Residential – Multiple Story House
- Residential – Single Story House
- Commercial – Multiple Story Building
- Commercial – Single Story Building
- Industrial – Single Story Building
- Public – Multiple Story Building
- Public – Single Story Building

Table 12 below shows the classification of occupancy types and their unique associated HEC-FDA model identifier.

**Table 13: HEC-FDA Structure Occupancy Types**

	Residential	Commercial	Industrial	Public
Single Story	R1S	C1S	I1S	P1S
Multiple Story	RMS	CMS		PMS

Depth-Percent Damage functions were then defined for each of the occupancy types relative to the totality of which a structure and its associated contents will be damaged. To capture any uncertainty in calculation outputs a stochastic distribution was chosen and defined with a generalized standard deviation at each inundated foot interval in accordance with Economic Guidance Memorandum (EGM) 04-01 and EGM 01-03. The most frequent structure occupancy type Depth-Percent Damage relationship is RMS shown below in Table 13. All the occupancy type depth-percent damage relationships are reported in section 8 entitled Structure Occupancy Type Depth-Percent Damage Functions.

**Table 14: RMS Occupancy Type Depth-Percent Damage Functions**

Structure			Content		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-8.00	0.0	0.000	-8.00	0.0	0.000
-7.00	1.7	1.400	-7.00	1.0	1.200
-6.00	1.7	1.410	-6.00	2.3	1.230
-5.00	1.9	1.420	-5.00	3.7	1.250
-4.00	2.9	1.430	-4.00	5.2	1.270
-3.00	4.7	1.440	-3.00	6.8	1.280
-2.00	7.2	1.450	-2.00	8.4	1.290
-1.00	10.2	1.460	-1.00	10.1	1.300
0.00	13.9	1.470	0.00	11.9	1.330
1.00	22.3	1.480	1.00	13.8	1.350
2.00	27.0	1.490	2.00	15.7	1.390
3.00	31.9	1.500	3.00	17.7	1.430
4.00	36.9	1.750	4.00	19.8	1.670
5.00	41.9	2.040	5.00	22.0	1.920
6.00	46.9	2.340	6.00	24.3	2.150
7.00	51.8	2.630	7.00	26.7	2.360
8.00	56.4	2.890	8.00	29.1	2.560
9.00	60.2	3.730	9.00	31.7	2.760
10.00	64.2	3.380	10.00	34.4	3.040
11.00	68.4	3.710	11.00	37.2	3.460
12.00	71.4	4.000	12.00	40.0	4.120
13.00	73.7	4.000	13.00	43.0	5.000
14.00	75.4	4.000	14.00	46.1	6.000
15.00	76.4	4.000	15.00	49.3	7.000
16.00	76.4	4.000	16.00	52.6	8.000

The content-to-structure value ratio used for assigning value to contents of occupancy types is defined in the study as a stochastic probability distribution. For purposes of this study, generic inputs were used in accordance with EM 1110-2-1619. The stochastic parameters were defined as follows:

$$\mu = 0.435$$

$$\sigma = 0.253$$

The tails of the distribution were limited with a minimum of 0.100 and a maximum of 2.500. Each ratio generated by the distribution model is assigned to a structure in the economic inventory. It becomes the generic percent of content damage each structure is expected to experience. Note that the input ratio

mean ( $\mu$ ) and standard deviation ( $\sigma$ ), above, are less than ratios commonly used by casualty insurance companies, but those reflect replacement costs rather than depreciated replacement costs.

Further uncertainty parameters were defined for the error associated with the first floor stage standard deviation set at 1.5 feet in accordance with EM 1110-2-1619; due to the approximate measurements of structures through the use of aerial/satellite photography. The first floor stage is the difference in elevation between the ground and the standing first floor of a structure. All residential structures were assumed to have basements and allocated beginning depth-percent damage depth at -8ft. below each structure's assigned first floor elevation. This applies to both structure and contents damage categories in accordance with the methodology described for aggregating damage relationships per USACE district in IWR Report 92-R-3. The other factors required to define uncertainty parameters were structure value error per occupancy type and the associated structure-to-content value ratio error. Each of these parameters was set to the HEC-FDA model default of 5.00% standard deviation. All three error parameters were chosen to be represented by stochastic probability distributions.

### **3.4 Stage-Damage Functions**

USACE defines a stage-damage function as the relationship of direct economic costs caused by flood inundation to a range of flood stages for a given river or damage reach. Through the aggregation of the depth-percent damage functions, first-floor stage elevations, and structure, content, and other category values with the hydrologic engineering relationships the model calculates the stage-damage functions. The information is used to calculate the relationship by damage category at each damage reach index location station. The HEC-FDA model requires a complete set of stage-damage functions for all categories, damage reaches and streams developed to analyze a specific plan for an analysis year. The uncertainty was defined by a stochastic probability density function. All tabular data and graphical displays of the study stage-damage functions for the existing conditions and tentatively selected plan can be found in sections 9 & 10 of this appendix.

### **3.5 Hypothesis Test of Structure Depreciated Replacement Value**

The population mean of depreciated structure value for the structure inventory is statistically less than the mean generated from the R/S Means software. The test findings support the efforts to use a conservative methodology to estimate structure depreciated replacement value for the Tookany Creek Flood Risk Management Economic Analysis. The study depreciated structure values were calculated using tax assessment data from Cheltenham Township, PA and included the description of uncertainty calculated using data input from professional opinion as described in EM 1110-2-1619, chapter 6.

A stratified sample of 20 structures from the economic structure inventory developed for the TCFRM study. The depreciated structure values were calculated using two different methodologies. First, the study depreciated structure values were calculated using the previously referenced methodology. Second, the same sample was used to calculate the depreciated structure value using the R/S Means processing software. Descriptive statistics were taken of the results for the sample and the population of the TCFRM structure inventory depreciated structure values, as shown in Table 1. The intent was to understand the statistical difference, if any, in depreciated structure valuation methodologies. The R/S Means sample resulted in a mean depreciated structure value of \$188,270 with a standard deviation of \$31,820. The R/S Means sample mean is higher than the other structure inventory population mean of \$122,880.

**Table 15: Descriptive Statistics For The Opposing Methodologies**

<i>R/S Means Depreciated Structure Value (in \$1,000's)</i>		<i>Depreciated Structure Value Using Tax Assessment Data and Professional Opinion (in \$1,000's)</i>	
Mean	188.27	Mean	122.88
Standard Error	7.12	Standard Error	2.87
Median	181.77	Median	113.95
Mode	203.18	Mode	91.03
Standard Deviation	31.82	Standard Deviation	40.98
Sample Variance	1,012.70	Sample Variance	1,679.64
Kurtosis	-1.07	Kurtosis	7.22
Skewness	0.26	Skewness	1.97
Range	111.13	Range	305.47
Minimum	139.77	Minimum	60.57
Maximum	250.90	Maximum	366.04
Sum	3,765.40	Sum	25,066.53
Count	20.00	Count	204.00
Confidence Level(95.0%)	14.89	Confidence Level(95.0%)	5.66

Based on these results, it was determined to understand if the R/S Means sample mean differs from the population mean of the structure inventory methodology employed for the study. A hypothesis test using the critical value approach was conducted. In particular, the competing hypotheses are:

$$H_0: \mu = \$122,880$$

$$H_A: \mu \neq \$122,880$$

The sample value of the test statistic is denoted as “Z.” The following equation was used to derive the test statistic because both the population mean ( $\mu$ ) and the population standard deviation ( $\sigma$ ) are known:

$$Z = (\bar{x} - \mu_0) / (\sigma / \sqrt{n})$$

$$Z = (\$188,270 - \$122,880) / (\$40,980 / \sqrt{20})$$

$$Z = 4.47$$

For a two-tailed test, the significance level is split in half to determine the two critical values, one on each tail of the distribution for the test statistic. Given a 5% level of significance,  $\alpha/2 = 0.05/2 = 0.025$  is used to derive:

$$Z_{\alpha/2} = Z_{0.025} \text{ as } 1.96$$

Thus, the critical values are -1.96 and 1.96. The decision rule is to reject the  $H_0$  if  $Z > 1.96$  and  $Z < -1.96$ , or alternatively, if  $|Z| > 1.96$ . Since  $Z = 4.47$  does fall in the rejection region ( $|4.47| > 1.96$ ),

the null hypothesis is rejected. At the 5% significance level, it is concluded that the population mean for depreciated replacement value of the structure inventory differs from the mean depreciated structure value calculated using the R/S Means software.

Also, for further specification, a two-tailed test using a 95% confidence interval, given the mean value of  $\mu_0 = \$122,880$ , was conducted. The decision rule is:

$$\text{Reject } H_0 \text{ if } \mu_0 < \bar{x} - Z_{\alpha/2} \frac{\sigma}{\sqrt{n}} \text{ or } \mu_0 > \bar{x} + Z_{\alpha/2} \frac{\sigma}{\sqrt{n}}$$

Following the rule above and using the previous calculated sample statistics the resulting confidence interval is approximately [\$216,929, \$159,613]. Since the population mean  $\mu_0 = \$122,880$  falls below the 95% confidence interval, we further reject the null hypothesis  $H_0$ .

A second critical value approach hypothesis test is proposed to determine whether the population mean of \$122,880 is significantly smaller in a statistical manner than the sample mean of \$188,270. The competing hypothesis is constructed as:

$$H_0: \mu \leq \$188,270$$

$$H_A: \mu > \$188,270$$

Note that in the right-tailed test, the null hypothesis is rejected on the right tail of the normal distribution of the test statistic. The right-tailed critical value is  $Z_{\alpha} = 1.645$  because the given level of significance is considered at 5%. The previous critical value approach formula was used to calculate the test statistic as  $Z = -7.14$ . Because  $-7.14 < 1.645$  the null hypothesis is not rejected.

#### 4. HYDROLOGIC ENGINEERING HEC-FDA MODEL INPUTS

Components for the Hydraulic and Hydrologic (H&H) requirements of the HEC-FDA model include: water surface profiles (WSP), exceedance probability functions, stage-discharge functions, and levee features. The WSPs are required when computing stage-damage uncertainty functions at damage reach locations. They also must be consistent with discharge-probability and stage-discharge functions required for each plan, analysis year, stream, and damage reach.

##### 4.1 Water Surface Profiles

The WSPs were developed in HEC-RAS and imported into the HEC-FDA model as .wsp file extensions. Each file contains eight flood scenarios, all discharge based, with exceedance probability flood events at 0.5, 0.2, 0.1, 0.04, 0.02, 0.01, 0.004, and 0.002 frequencies. Rock Creek and Tookany Creek each have separate WSPs modeled for existing conditions and each alternative plan under consideration. The stream stationing contained in each file is consistent with each damage reach and structure location stationing in the structure inventory. Various updates and modifications were made to some WSP files by H&H throughout the study process. File names specify which WSPs were modified. A list of WSPs generated for the study is exhibited in Table 14, below.

**Table 16: List of Water Surface Profiles**

Name	Description	Water Surface Profile Type	Number of Profiles	Stream Name
Existing Cnds.	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
DETEN 1 update	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D9 11_25_14	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
DETEN 16 Update	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D25_8_4_2014	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D27_9_22_2014	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D15_9_22_2014	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D12 11_18_2014	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D28_9_29_2014	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
D30_9_29_2014	Imported from HEC-RAS	Discharge-Probability	8	Tookany Creek
RC-Ex-Updated-1	Imported from HEC-RAS	Discharge-Probability	8	Rock Creek
RC-D15-Updated-1	Imported from HEC-RAS	Discharge-Probability	8	Rock Creek
RC-D27-Updated-1	Imported from HEC-RAS	Discharge-Probability	8	Rock Creek
RC-D30-Updated-1	Imported from HEC-RAS	Discharge-Probability	8	Rock Creek

## 4.2 Exceedance Probability Functions

An exceedance probability function is the relationship between flood magnitude and the probability of exceeding the magnitude. For this study, the relationship was defined through hydrologic analysis in terms of discharge of cubic feet per second (cfs). Functions are assigned to each plan, analysis year, stream, and damage reach. Uncertainty calculations in the functional relationship are aided through the equivalent record length data. For gauged areas, equivalent record length is the number of years of a systematic record of recorded peak discharges at the stream gauge. The ordered events method was used to determine standard errors of points (estimates) along the curve from the relationship of each of the estimates to adjacent points and the slope of the function. Ordered events are interpolated from the function based on the equivalent record length and error limit curves determined using order statistics. The final exceedance probability function is based on the mean or expected values defined by Weibull plotting positions along the curve. The flood magnitudes considered for the functions are the exceedance probability flood events derived from each unique WSP and listed below in Table 15. All tabular data and graphical displays of the study exceedance probability functions for the existing conditions and tentatively selected plan can be found in sections 9& 10 of this appendix.

**Table 17: Flood Magnitudes & Equivalent Record Length Input**

<b>Exceedance Probability Flood Events</b>
0.500
0.200
0.100
0.040
0.020
0.010
0.004
0.002
<b>Equivalent Record Length (N) = 27</b>

## 4.3 Stage-Discharge Functions

The stage-discharge function is used to transform the discharge into stage for each probability. It is the relationship between discharge (flow) at a river cross-section and the stage (depth) produced by that discharge. The relationship for the study was defined through gauge analysis. Functions are assigned to each plan, analysis year, stream, and damage reach. All tabular data and graphical displays of the study stage-discharge functions for the existing conditions and tentatively selected plan can be found in sections 9 & 10 of this appendix.

**5. EXISTING CONDITIONS EXPECTED ANNUAL DAMAGES**

Expected annual damages are based on fiscal year 2015 price levels, a FY16 discount rate of 3.125%, and a 50-year project life. Expected annual flood damages (EAD) under existing without project conditions are approximately \$2,092,000. The EAD summary is presented by reach on Table 18. Easton Rd. has over 51% of the total commercial damages, while TC-10 makes up all the industrial damages. TC-3 comprises over 82% of the total public damages. The majority of residential damages, at just over 37%, can be found in reach TC-7, all near the Elkins Park area. This reach also has the highest total damage amount on Tookany Creek at over 32% of total EAD. Reach RC-1 was modeled for Rock Creek in the Cheltenham Hills area. While it represents no commercial, industrial or public damages, it makes up over 10% of the total residential damages, and over 9% of total EAD.

EAD is calculated by summing all damage category damage-frequency relationships and then taking the mathematical integral of the total damage-frequency curve between the analysis year 2015 and 2065. All tabular data and graphical displays of the study damage-frequency functions for the existing conditions can be found in section 9 of this appendix.

**Table 18: Existing Conditions Expected Annual Damages by Damage Categories and Damage Reaches (Damage in \$1,000's)**

Damage Reach Name	Damage Reach Description	Damage categories				Total
		Commercial	Industrial	Public	Residential	
TC-1	Country Club	0.00	0.00	0.00	0.00	0.00
TC-2	Cheltenham SEPTA Station	0.00	0.00	0.00	32.81	32.81
TC-3	Cheltenham & Tennis Courts	0.00	0.00	58.60	180.75	239.53
TC-4	Cheltenham Highschool	0.00	0.00	0.00	206.03	206.03
TC-5	Harrison Ave Baseball Fields	0.00	0.00	0.00	32.10	32.10
TC-6	Ogontz Field	19.79	0.00	0.00	223.61	243.40
TC-7	Elkins Park Free Library	0.00	0.00	5.17	674.02	679.19
TC-8	Wall Park & Beth Sholom Congregation	6.19	0.00	0.00	0.00	6.19
TC-9	Glenside US Post Office	4.10	0.00	1.83	5.54	11.46
TC-10	Wyncote & Parts of Abington Township	27.32	85.34	5.20	7.65	125.51
TC-11	Harry Renninger Park	18.42	0.00	0.00	90.20	108.62
TC-12	Easton Rd	62.11	0.00	0.00	155.03	217.14
RC-1	Cheltenham Hills	0.00	0.00	0.00	190.65	190.65



## **6. EVALUATION OF PRELIMINARY ALTERNATIVES**

U.S. Army Corps of Engineers (USACE) procedures calculate benefits based on the difference between the expected annual damages with and without alternative flood damage reduction plans. The implicit assumption incorporated into this procedure is that the reduction in flood damages is directly translatable into increased net income to floodplain land uses. Benefits from flood damage reduction alternatives focus on inundation reduction benefits that would result from reduced physical damages to structures and contents. Due to certain limitations, reduced non-physical losses were not assessed for this study.

Nine alternative detention basin configurations were considered in the evaluation of alternatives:

1. D1 – 5 detention basins on the Upper Tookany
2. D9 – 3 detention basins on Baederwood Creek
3. D12 – 1 storage area on Baederwood Creek at West Highland Ave
4. D15 – 1 detention basin at Washington Land on Rock Creek
5. D16 – 3 detention basins on Rock Creek
6. D25 – The combined plans of D1, D9, & D16
7. D27 – 5 detention basins on the Upper Tookany, 3 on Baederwood, and 1 on Rock Creek
8. D28 – 3 detention basins on the Upper Tookany
9. D30 – The combined plans of D28, D12, & D15

### **6.1 Benefits of Alternative Plans**

With-project average annual flood damages (i.e., residual damages) for each of the nine alternatives are shown in Table 17. Expected annual damages under without-project conditions equal \$2,092,000. As shown in Table 17, average annual residual damages range from \$1,008,000 (D27) to \$2,147,000 (D28). It is important to note that average annual residual damages are average annual damages that remain after a project has been constructed. Average annual benefits of the alternatives - which are equal to the difference between residual damages under each alternative and damages under without-project conditions - are shown in Table 17, and range from \$43,000 (D28) to \$1084,000 (D27).

**Table 19: Evaluation of Alternative Basin Plans (FY 2013 Prices in \$1,000's Except BCRs)**

	<b>D1</b>	<b>D9</b>	<b>D12</b>	<b>D15</b>	<b>D16</b>	<b>D25</b>	<b>D27</b>	<b>D28</b>	<b>D30</b>
Construction Cost	3,018	1,381	484	764	3,095	7,119	4,850	2,894	2,546
Real Estate	387	48	15	54	97	484	759	242	759
Supervision & Administration	387	48	15	56	97	290	364	97	176
Engineering & Design	387	48	24	793	97	290	793	97	793
Contingencies	1,045	200	68	369	484	716	1,558	288	690
Financial First Cost	5,223	1,727	605	2,037	3,869	8,899	8,324	3,618	4,964
Interest During Construction	176	58	20	70	135	300	281	91	167
Total Present Worth Costs	5,400	1,786	626	2,108	4,005	9,200	8,606	3,709	5,132
Avg Annual Economic First Cost	218	72	25	85	165	370	347	151	207
Avg Annual IDC	8	3	1	3	6	13	12	4	7
Operations & Maintenance Costs	1	1	1	1	1	1	1	1	1
<b>Average Annual Cost</b>	<b>225</b>	<b>74</b>	<b>26</b>	<b>88</b>	<b>171</b>	<b>383</b>	<b>359</b>	<b>155</b>	<b>214</b>
Without Project Damages	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092
With-Project Damages	1,840	1,988	2,022	1,894	1,976	1,922	1,008	2,147	2,051
<b>Average Annual Benefits</b>	<b>252</b>	<b>104</b>	<b>70</b>	<b>198</b>	<b>116</b>	<b>170</b>	<b>1,084</b>	<b>43</b>	<b>200</b>
Net Benefits	27	30	44	110	-55	-213	725	-112	-14
<b>Benefit to Cost Ratio</b>	<b>1.12</b>	<b>1.41</b>	<b>2.69</b>	<b>2.25</b>	<b>0.68</b>	<b>0.44</b>	<b>3.02</b>	<b>0.28</b>	<b>0.93</b>

## 6.2 Costs of Alternative Plans

Preliminary cost estimates used to screen alternative plans were prepared using 2015 price levels, and are based on calculated quantities and unit prices for preliminary designs. The data was then indexed to 2013 price levels using EM 1110-2-1304. It is assumed that the construction area will be in vacant possession and has non-restrictive access. The productivity rates are based on normal job site conditions. The estimate does not include overtime wages and is based on a forty hour week during normal working hours. The phasing of work is not included. It is assumed that there will not be excessive general/supplemental conditions requirements and additional restrictive specifications during the bid process. RS Means, MII electronic cost book, and vendor price quotes were utilized in data processing. Labor rates are based on General Decision Number: PA140006 PA610. Financial First Costs of the alternative plans include construction costs, real estate acquisition costs, supervision & administration, engineering & design, and contingencies.

Interest during construction calculations are based on a 24-month construction schedule and a 3.375% discount rate. Interest incurred for real estate expenditures are accrued in the first month of construction, and carried through to the end of construction.

Average Annual Economic Costs were calculated based on the FY-15 Federal discount rate of 3.375% and an analysis period of 50 years. Operations and maintenance (O&M) costs are expected to be minimal, and a \$1,000 place holder is applied in the screening. Average Annual Costs of the alternatives shown above in Table 17 range from \$26,000 (D12) to \$383,000 (D25).

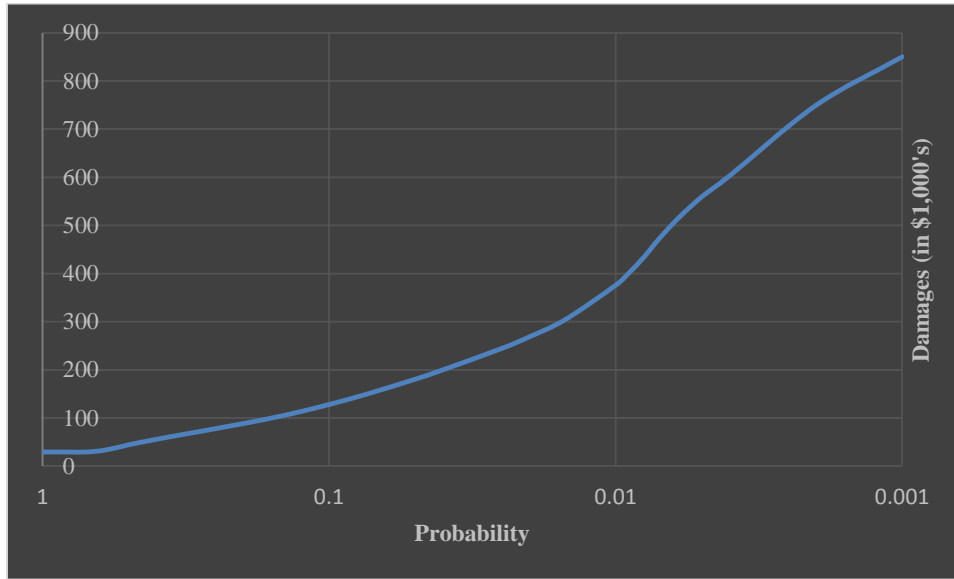
## 6.3 Floodplain Evacuation Consideration

The industrial structure at 1 North Avenue is owned by Mack Electric Devices, a certified service-disabled veteran owned small business. This structure was identified for a potential non-structural solution. Flood-plain evacuation analysis, commonly referred to as “buy-out” analysis, was conducted in accordance with CECW-PD, and dated 22 January, 2001. The purpose of which is to provide implementation guidance for the analysis. The structure is analyzed to understand the benefits of removing the structure from the floodplain relative to the costs incurred to do so.

### *Benefit Calculation*

Per the guidance, the flood damage reduction benefits for the floodplain evacuation analysis will be calculated as the flood damages reduced. The economic model was developed to calculate with uncertainty the damages the structure incurs due to its location within the floodplain. The depreciated replacement value was developed for the structure and its contents using the methodology annotated in this appendix. Content value information was provided directly from closed NFIP claims courtesy of Mack Electric Devices. Figure 1 shows the damage – frequency function, plotted on a logarithmic scale, derived for 1 North Ave. The damages are calculated as the mathematical integral of the damage – frequency relationship. Because the analysis is to remove the structure, this damage measurement would also be the benefit of removing the structure. The benefits totaled to approximately \$85,000.

**Figure 2: Damage - Frequency Curve for 1 North Ave.**



*Real Estate Costs*

The Real Estate appraisal section of the USACE Baltimore District (NAB) developed the real estate costs comparable for the analysis. In order to avoid double counting of any internalized portion of flood damages reduced adjustments were made to the real-estate costs as outlined in CECW-PD 22 January 2001. The economic analysis uses the flood-free land costs in the valuation of floodplain land. Flood-free land cost is the cost of comparable flood-free land and associated structures but without the flood-risk (defined as outside the FIA-designated 100-year floodplain.) The results of NAB’s appraisal are displayed in Table 1, below.

**Table 20: Summary of Flood-Free Land Cost**

	Low Range	High Range
Sales Comparison	\$180,000	\$220,000
Income Approach	\$192,900	\$289,000
Point Estimate of Flood-free Land Cost	\$230,000	
Contingency of 10%	\$23,000	
<b>Total</b>	<b>\$253,000</b>	

The total flood-free land cost is approximately \$253,000.

*Conclusion*

The floodplain evacuation analysis for 1 North Avenue yields a benefit-to-cost ratio of 0.34. The net benefits are calculated as the difference between the benefits and the flood-free land cost. Table 2 displays the pertinent data under scrutiny. Because the benefits do not exceed the costs, it is not recommended to consider the property for flood-plain evacuation.

**Table 21: Floodplain Evacuation Summary of Benefits and Costs**

Benefits	\$85,000
Flood-Free Land Cost	\$253,000
Net Benefits	-\$168,000
<b>BCR</b>	<b>0.34</b>

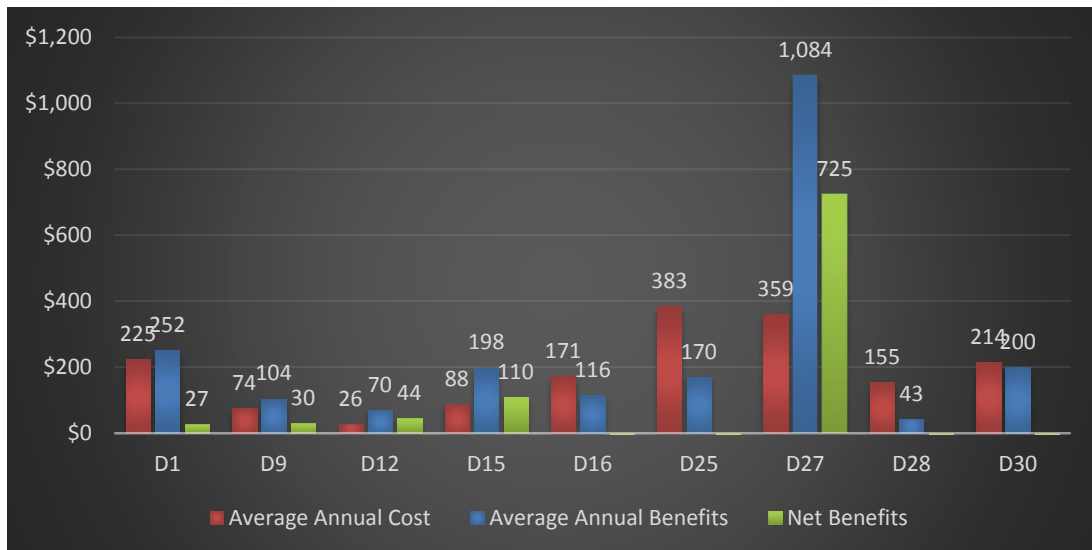
**6.4 Economic & Engineering Performance of Alternative Plans**

As shown on Table 17, benefit-to-cost ratios (BCRs) for the alternatives range from 0.28 (D28) to 3.02 (D27). Net benefits are calculated as Average Annual Benefits minus Average Annual Costs, and range from -\$112,000 (D28) to \$725,000 (D27). Figure 2 shows a graphic comparison of the economic performance across each of the nine alternatives. Any negative net benefits estimated by any of the alternative projects performance were excluded from the figure below.

Section 10 of this appendix contains all the tabular data and graphical displays for the Tentatively Selected Plan (TSP), alternative plan D27.

Tables 18 and 19 describe the EAD, EAD reduced, and costs, respectively. Tables 20 through 29 describe the engineering performance of the without project conditions and each alternative plan. Each economic reach per plan is displayed to show detailed information.

**Figure 3: Summary of Economic Performance of Alternatives (Numbers in \$1,000's)**



**Table 22: Expected Value and Probabilistic Values of EAD and EAD Reduced**

Plan	Expected Annual Damage (\$1,000's)		Damage Reduced (\$1,000's)	EAD Reduced that is Exceeded with Specified Probability (\$1,000's)		
	without plan	with plan	Mean	0.75	0.50	0.25
D1	2,092	1,840	252	163	224	300
D9	2,092	1,988	104	74	99	138
D12	2,092	2,022	70	323	463	603
D15	2,092	1,894	198	157	198	235
D16	2,092	1,976	116	165	214	257
D25	2,092	1,922	170	207	234	280
D27	2,092	1,008	1,084	883	1,040	1,239
D28	2,092	2,147	43	70	85	117
D30	2,092	2,051	200	159	199	250

**Table 23: Expected Value and Probabilistic Values of Costs**

Plan	Annual Cost (\$1,000's)	Cost that is Exceeded with Specified Probability (\$1,000's)		
	Mean	0.75	0.50	0.25
D1	225	213	224	236
D9	74	70	74	77
D12	26	25	26	27
D15	88	84	88	92
D16	171	162	170	179
D25	383	364	383	402
D27	359	341	358	377
D28	155	147	155	163
D30	214	203	213	225

**Table 24: Without Project Performance Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
Without Project	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.0156	0.0237	0.2130	0.5126	0.6981	0.9864	0.7946	0.5964	0.3905	0.2125	0.1221
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2683	0.2726	0.9585	0.9999	1	0.0211	0	0	0	0	0
	TC-9	197.4		0.999	0.999	1	1	1	0	0	0	0	0	0
	RC-1	185.5		0.999	0.999	1	1	1	0	0	0	0	0	0

**Table 25: Plan D1 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D1	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.4739	0.4928	0.9989	1	1	0	0	0	0	0	0
	TC-11	224		0.0037	0.0057	0.0552	0.1565	0.247	0.9998	0.9894	0.9753	0.8295	0.5264	0.341
	TC-12	243.6		0.0875	0.1031	0.6632	0.9618	0.9957	0.6765	0.0244	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2323	0.2315	0.9282	0.9996	1	0.0668	0.0132	0.0093	0.005	0.0028	0.0023
	TC-9	197.4		0.4812	0.5117	0.9992	1	1	0	0	0	0	0	0
RC-1	185.11	0.999	0.999	1	1	1	0	0	0	0	0	0		



**Table 26: Plan D9 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D9	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.0114	0.0194	0.178	0.4445	0.6246	0.9969	0.8107	0.7109	0.4581	0.2425	0.1527
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.999	0.9977	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.251	0.2506	0.9441	0.9998	1	0.0465	0.0083	0.0059	0.0033	0.0019	0.0015
	TC-9	197.4		0.999	0.999	1	1	1	0	0	0	0	0	0
RC-1	185.11	0.999	0.999	1	1	1	0	0	0	0	0	0		

**Table 27: Plan D12 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D12	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.0155	0.0261	0.232	0.5471	0.7329	0.9901	0.7109	0.6003	0.3563	0.1787	0.1107
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2622	0.2617	0.9519	0.9999	1	0.0354	0.0069	0.005	0.0029	0.0018	0.0015
	TC-9	197.4		0.999	0.999	1	1	1	0	0	0	0	0	0
RC-1	185.11	0.999	0.999	1	1	1	0	0	0	0	0	0		

**Table 28: Plan D15 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D15	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.0156	0.0262	0.2336	0.5498	0.7355	0.9898	0.7081	0.5973	0.3542	0.1774	0.1098
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.9911	0.985	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2683	0.2679	0.9558	0.9999	1	0.0307	0.0062	0.0047	0.0028	0.0018	0.0015
	TC-9	197.4		0.999	0.999	1	1	1	0	0	0	0	0	0
RC-1	185.5	0.3703	0.3667	0.9896	1	1	0	0	0	0	0	0		

**Table 29: Plan D16 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D16	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.0156	0.0262	0.2336	0.5498	0.7355	0.9898	0.7081	0.5973	0.3542	0.1774	0.1098
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.7862	0.8034	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2683	0.2675	0.9555	0.9999	1	0.0311	0.0061	0.0046	0.0026	0.0017	0.0014
	TC-9	197.4		0.999	0.999	1	1	1	0	0	0	0	0	0
RC-1	185.11	0.999	0.999	1	1	1	0	0	0	0	0	0		

**Table 30: Plan D25 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D25	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.0591	0.0612	0.4681	0.8495	0.9574	0.8857	0.269	0.2067	0.0787	0.0261	0.0136
	TC-12	243.6		0.0875	0.1031	0.6632	0.9618	0.9957	0.6765	0.0244	0	0	0	0
	TC-2	89.8		0.4972	0.6741	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.4529	0.4448	0.9972	1	1	0	0	0	0	0	0
	TC-5	128.8		0.4577	0.4519	0.9976	1	1	0	0	0	0	0	0
	TC-6	141		0.4645	0.4679	0.9982	1	1	0	0	0	0	0	0
	TC-7	149.5		0.4806	0.4958	0.9989	1	1	0	0	0	0	0	0
	TC-8	180.3		0.171	0.1747	0.8535	0.9969	0.9999	0.1784	0.0187	0.0112	0.0041	0.0015	0
	TC-9	197.4		0.435	0.4259	0.9961	1	1	0	0	0	0	0	0
	RC-1	185.11		0.999	0.999	1	1	1	0	0	0	0	0	0

**Table 31: Plan D27 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D27	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.4361	0.4189	0.9956	1	1	0	0	0	0	0	0
	TC-11	224		0.0034	0.0064	0.0626	0.1763	0.2762	1	1	0.9611	0.7321	0.5383	0.3921
	TC-12	243.6		0.0875	0.0904	0.6122	0.9417	0.9912	0.6100	0.02174	0.1117	0.0568	0.0188	0.0077
	TC-2	89.8		0.9253	0.9214	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.477	0.4493	0.9974	1	1	0	0	0	0	0	0
	TC-5	128.8		0.4882	0.4651	0.9981	1	1	0	0	0	0	0	0
	TC-6	141		0.4949	0.4835	0.9986	1	1	0	0	0	0	0	0
	TC-7	149.5		0.9951	0.9890	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.171	0.1751	0.8542	0.9969	0.9999	0.2072	0.0059	0	0	0	0
	TC-9	197.4		0.435	0.4184	0.9956	1	1	0	0	0	0	0	0
	RC-1	185.5		0.3703	0.3659	0.9895	1	1	0	0	0	0	0	0

**Table 32: Plan D28 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D28	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.01	0.0193	0.1766	0.4418	0.6216	0.9938	0.8084	0.7151	0.5004	0.3026	0.2129
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2583	0.2567	0.9485	0.9999	1	0.0456	0.0103	0.0074	0.0042	0.0027	0.0022
	TC-9	197.4		0.999	0.9989	1	1	1	0	0	0	0	0	0
RC-1	185.11	0.999	0.999	1	1	1	0	0	0	0	0	0		

**Table 33: Plan D30 Described by AEP, Long Term Risk, and Conditional Non-Exceedance Probability**

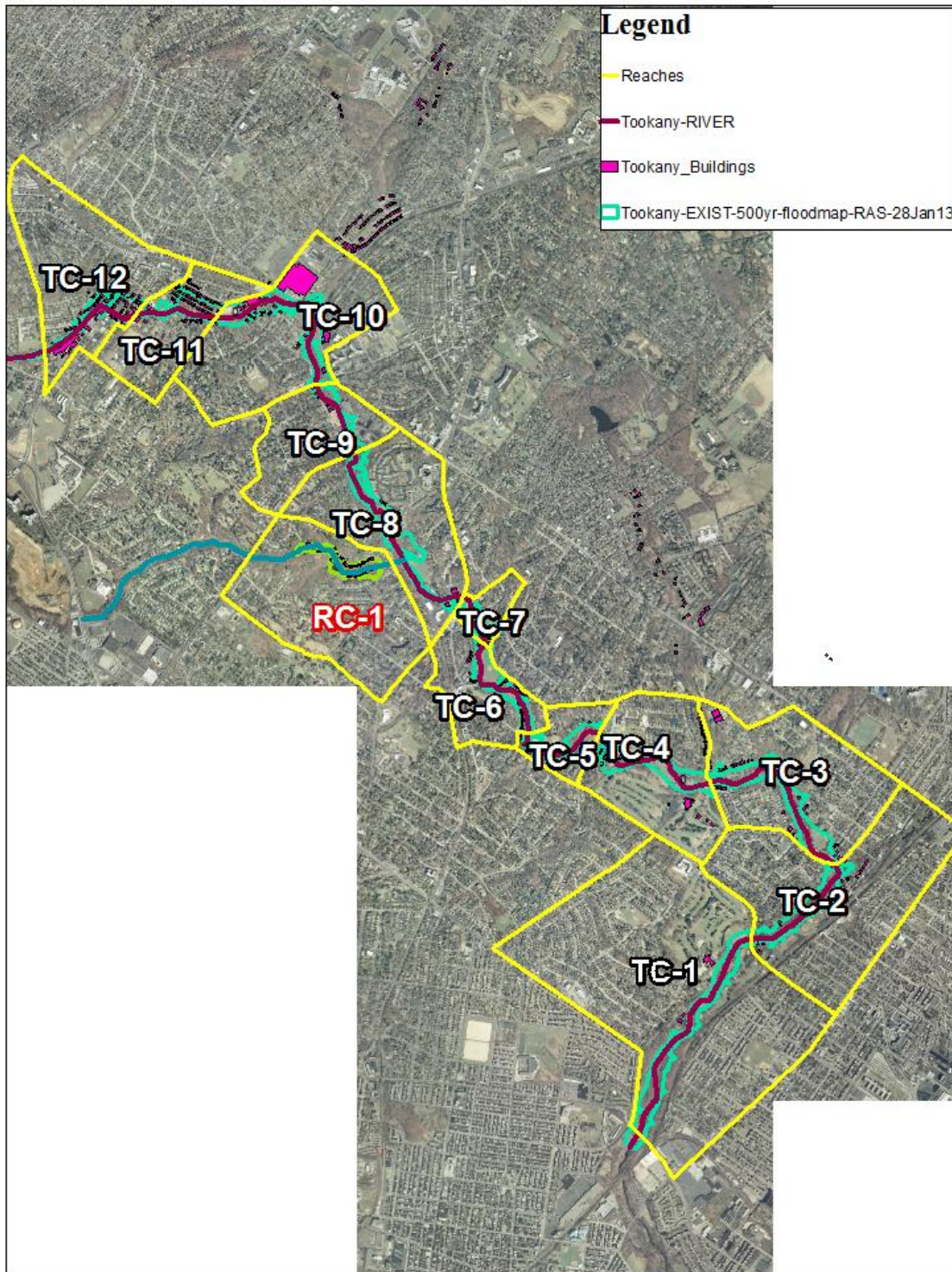
Plan Name	Reach Name	Target Stage	Geo Tech	Target Stage Annual Exceedance Probability		Long Term Risk (years)			Conditional Non-Exceedance Probability by Events					
				Median	Expected	10	30	50	10%	4%	2%	1%	0.40%	0.20%
D30	TC-1	75.6	L	0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-10	211.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-11	224		0.01	0.0192	0.1766	0.4417	0.6215	0.9938	0.8085	0.7151	0.5004	0.3026	0.2129
	TC-12	243.6		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-2	89.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-3	104		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-4	115		0.7862	0.8036	1	1	1	0	0	0	0	0	0
	TC-5	128.8		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-6	141		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-7	149.5		0.999	0.999	1	1	1	0	0	0	0	0	0
	TC-8	180.3		0.2484	0.2463	0.9408	0.9998	1	0.0559	0.0115	0.0081	0.0046	0.0025	0.002
	TC-9	197.4		0.9855	0.9794	1	1	1	0	0	0	0	0	0
RC-1	185.5	0.3703	0.3667	0.9896	1	1	0	0	0	0	0	0		



## **7. TOOKANY CREEK STUDY REACH DELINEATION MAPS**

### 7.1 Tookany Creek Study Area

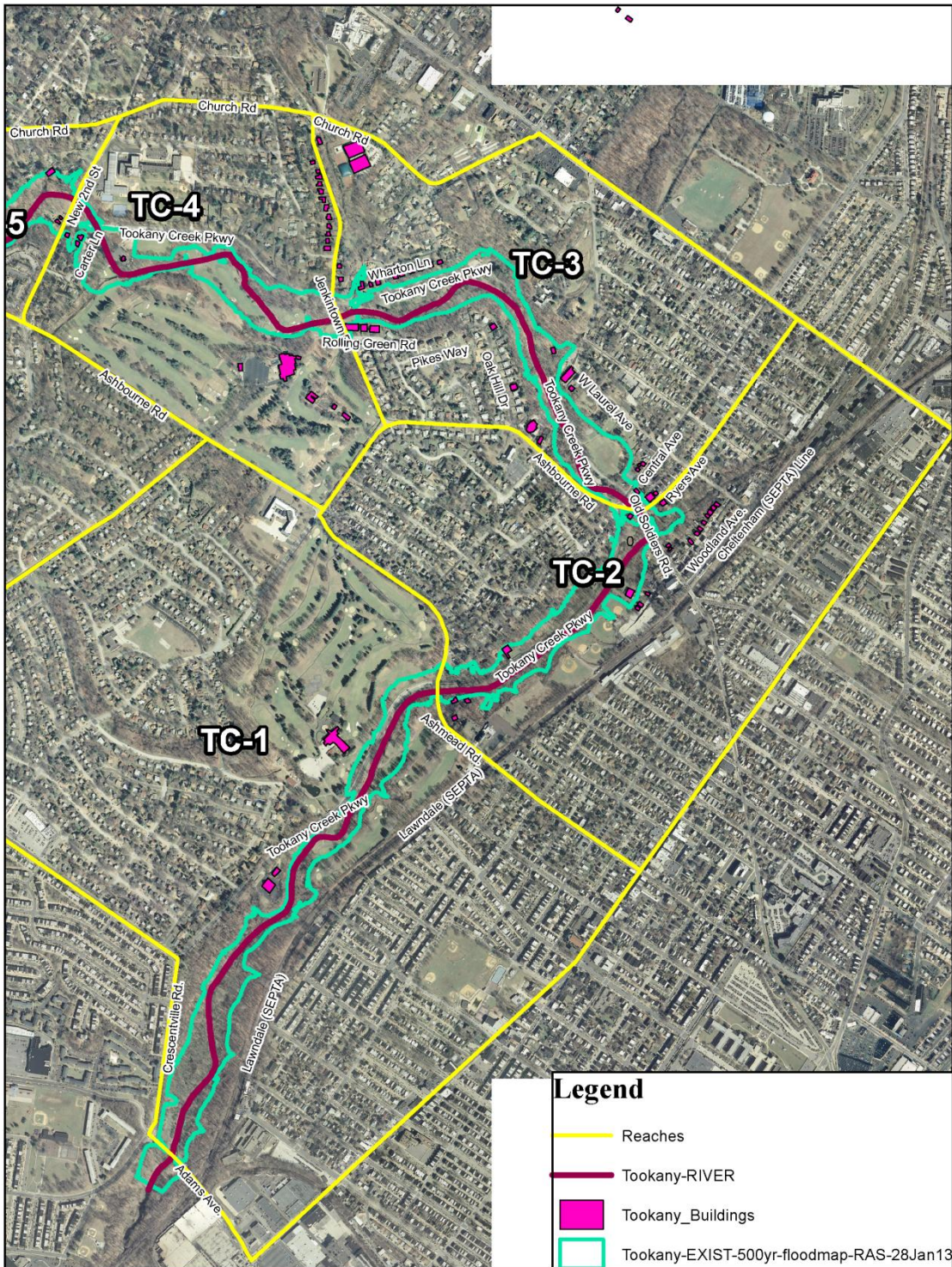
#### Tookany Creek Flood Risk Reduction Study Reaches





7.2 Reaches 1-4

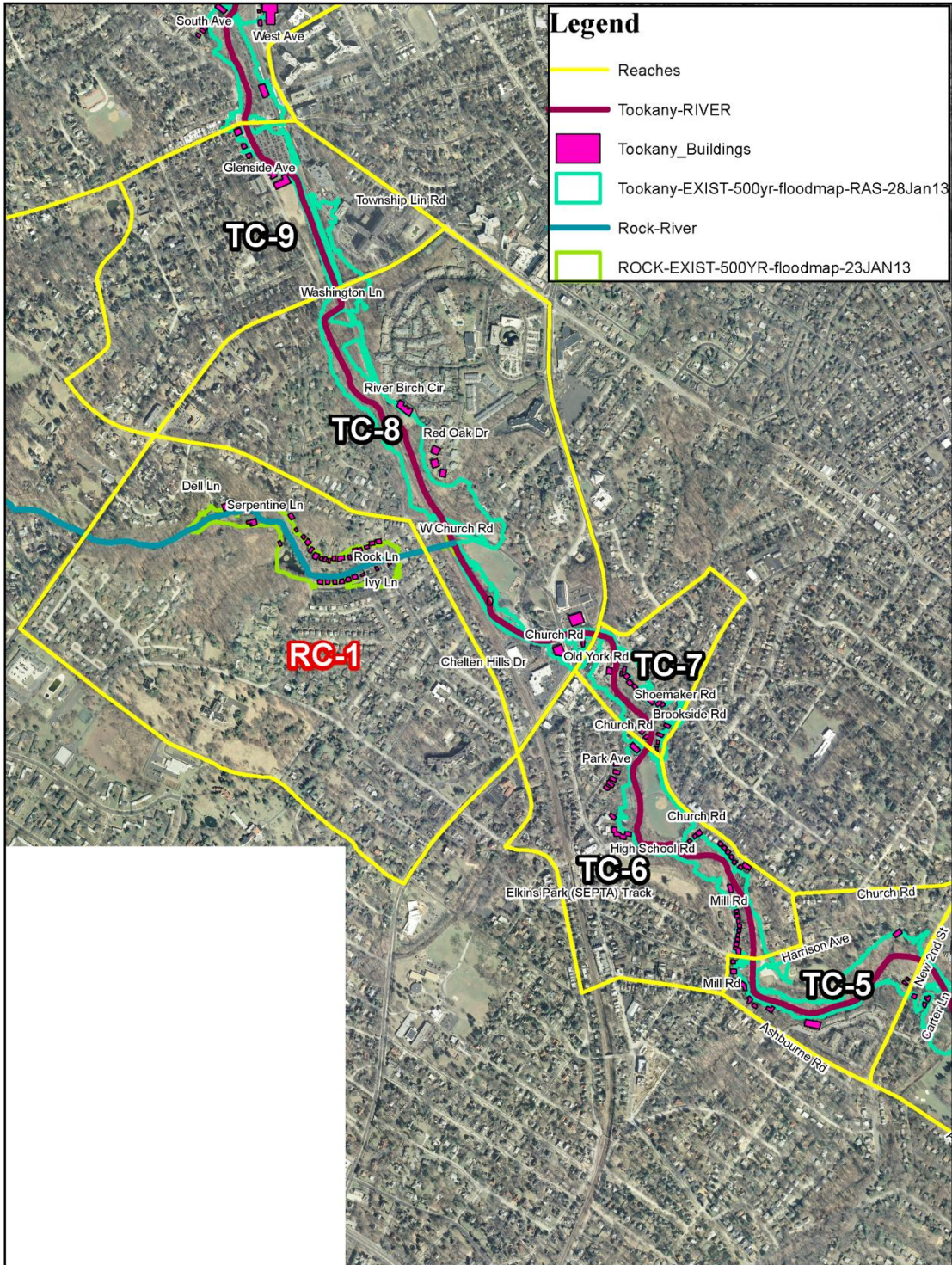
**Tookany Creek Flood Risk Reduction Study Reaches TC-1 Through TC-4**





7.3 Reaches 5-9

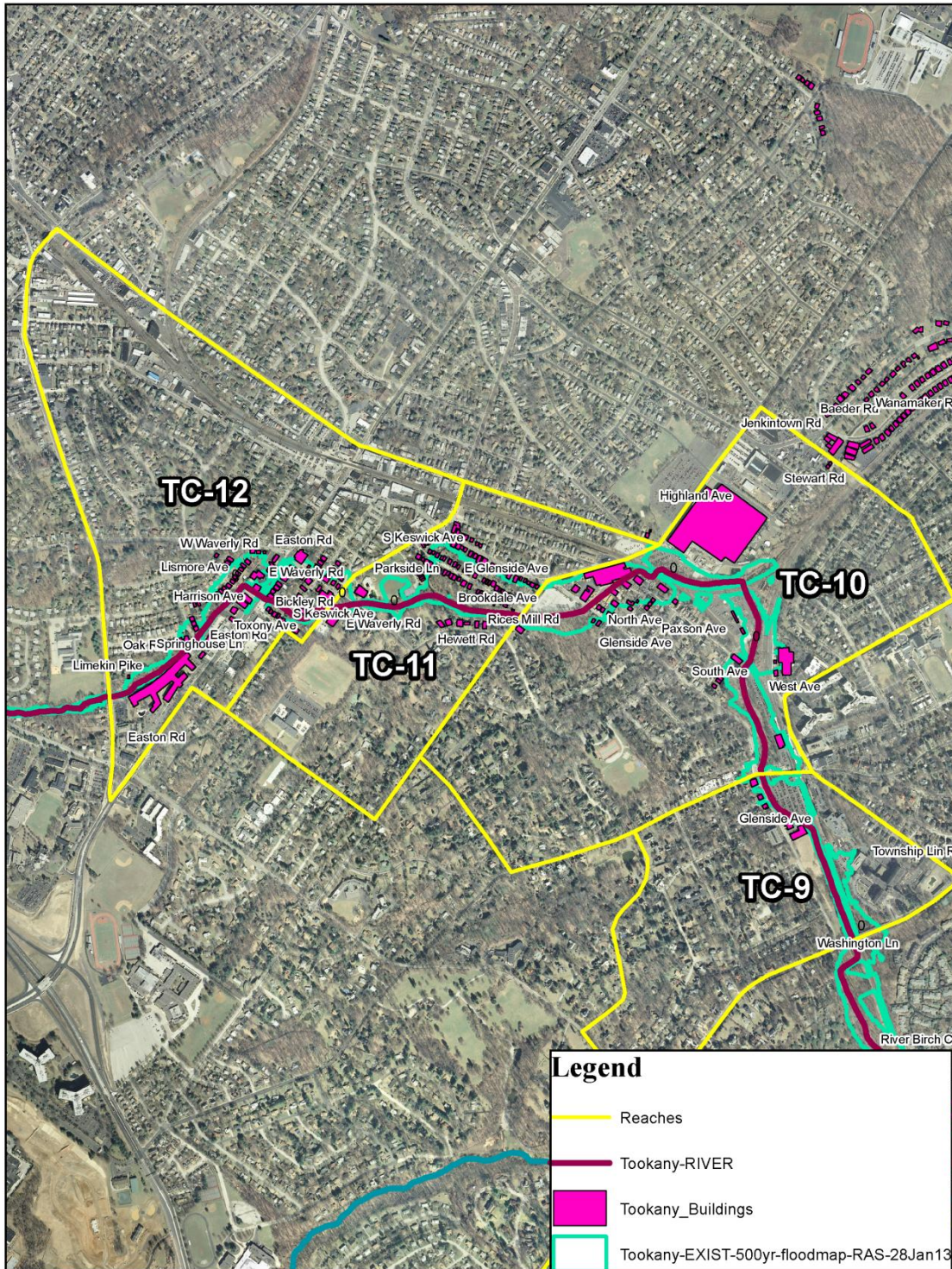
**Tookany Creek Flood Risk Reduction Study Reaches TC-5 Through TC-9, & RC-1**





7.4 Reaches 9-1

**Tookany Creek Flood Risk Reduction Study Reaches TC-9 Through TC-12**



**8. TOOKANY CREEK HEC-FDA STUDY STRUCTURE OCCUPANCY TYPE  
DEPTH-PERCENT DAMAGE FUNCTIONS**

**Residential, 1-Story (R1S)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-8.00	0.0	0.000	-8.00	0.0	0.000
-7.00	0.7	0.850	-7.00	0.1	0.740
-6.00	0.8	0.850	-6.00	0.8	0.740
-5.00	2.4	0.850	-5.00	2.1	0.740
-4.00	5.2	0.850	-4.00	3.7	0.740
-3.00	9.0	0.850	-3.00	5.7	0.740
-2.00	13.8	0.850	-2.00	8.0	0.740
-1.00	19.4	0.850	-1.00	10.5	0.750
0.00	25.5	0.850	0.00	13.2	0.760
1.00	32.0	0.960	1.00	16.0	0.830
2.00	38.7	1.140	2.00	18.9	0.980
3.00	45.5	1.370	3.00	21.8	1.170
4.00	52.2	1.630	4.00	24.7	1.390
5.00	58.6	1.890	5.00	27.4	1.600
6.00	64.5	2.140	6.00	30.0	1.810
7.00	69.8	2.350	7.00	32.4	1.990
8.00	74.2	2.520	8.00	34.5	2.130
9.00	77.7	2.660	9.00	36.3	2.250
10.00	80.1	2.770	10.00	37.7	2.350
11.00	81.1	2.880	11.00	38.6	2.450
12.00	81.5	2.880	12.00	39.1	2.450
13.00	81.9	2.880	13.00	39.6	2.450
14.00	82.3	2.880	14.00	40.1	2.450
15.00	82.7	2.880	15.00	40.5	2.450
16.00	83.1	2.880	16.00	41.1	2.450

**Residential, Multi-Story (RMS)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-8.00	0.0	0.000	-8.00	0.0	0.000
-7.00	1.7	1.400	-7.00	1.0	1.200
-6.00	1.7	1.410	-6.00	2.3	1.230
-5.00	1.9	1.420	-5.00	3.7	1.250
-4.00	2.9	1.430	-4.00	5.2	1.270
-3.00	4.7	1.440	-3.00	6.8	1.280
-2.00	7.2	1.450	-2.00	8.4	1.290
-1.00	10.2	1.460	-1.00	10.1	1.300
0.00	13.9	1.470	0.00	11.9	1.330
1.00	22.3	1.480	1.00	13.8	1.350
2.00	27.0	1.490	2.00	15.7	1.390
3.00	31.9	1.500	3.00	17.7	1.430
4.00	36.9	1.750	4.00	19.8	1.670
5.00	41.9	2.040	5.00	22.0	1.920
6.00	46.9	2.340	6.00	24.3	2.150
7.00	51.8	2.630	7.00	26.7	2.360
8.00	56.4	2.890	8.00	29.1	2.560
9.00	60.2	3.730	9.00	31.7	2.760
10.00	64.2	3.380	10.00	34.4	3.040
11.00	68.4	3.710	11.00	37.2	3.460
12.00	71.4	4.000	12.00	40.0	4.120
13.00	73.7	4.000	13.00	43.0	5.000
14.00	75.4	4.000	14.00	46.1	6.000
15.00	76.4	4.000	15.00	49.3	7.000
16.00	76.4	4.000	16.00	52.6	8.000

**Commercial, 1-Story (C1S)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-2.00	0.0	0.000	-2.00	0.0	0.000
-1.00	2.5	1.600	-1.00	2.4	1.200
0.00	13.4	1.600	0.00	8.1	1.200
1.00	23.3	1.600	1.00	13.3	1.200
2.00	32.1	1.600	2.00	17.9	1.200
3.00	40.1	1.800	3.00	22.0	1.400
4.00	47.1	1.900	4.00	25.7	1.500
5.00	53.2	2.000	5.00	28.8	1.600
6.00	58.6	2.100	6.00	31.5	1.600
7.00	63.2	2.200	7.00	33.8	1.700
8.00	67.2	2.300	8.00	35.7	1.800
9.00	70.5	2.400	9.00	37.2	1.900
10.00	73.2	2.700	10.00	38.4	2.100
11.00	75.4	3.000	11.00	39.0	2.200
12.00	77.2	3.300	12.00	39.5	2.300
13.00	78.5	3.700	13.00	39.7	2.350
14.00	79.5	4.100	14.00	39.9	2.380
15.00	80.2	4.200	15.00	40.3	2.450
16.00	80.7	4.300	16.00	40.5	2.500



**Commercial, Multi-Story (CMS)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-2.00	0.0	0.000	-2.00	0.0	0.000
-1.00	3.0	3.200	-1.00	1.0	2.500
0.00	9.3	3.200	0.00	5.0	2.500
1.00	15.2	3.200	1.00	8.7	2.500
2.00	20.9	3.200	2.00	12.2	2.500
3.00	26.3	3.200	3.00	15.5	2.500
4.00	31.4	3.200	4.00	18.5	2.700
5.00	36.2	3.400	5.00	21.3	3.000
6.00	40.7	3.700	6.00	23.9	3.200
7.00	44.9	3.900	7.00	26.3	3.300
8.00	48.8	4.000	8.00	28.4	3.400
9.00	52.4	4.100	9.00	30.3	3.500
10.00	55.7	4.200	10.00	32.0	3.500
11.00	58.7	4.200	11.00	33.4	3.500
12.00	61.4	4.200	12.00	34.7	3.500
13.00	63.8	4.100	13.00	35.6	3.500
14.00	65.9	4.300	14.00	36.4	3.600
15.00	67.7	4.600	15.00	36.9	3.600
16.00	69.2	5.000	16.00	37.2	3.600

**Industrial, 1-Story (IIS)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-2.00	0.0	0.000	-2.00	0.0	0.000
-1.00	2.5	1.400	-1.00	2.4	1.200
0.00	13.4	1.500	0.00	8.1	1.200
1.00	23.3	1.600	1.00	13.3	1.200
2.00	32.1	1.600	2.00	17.9	1.200
3.00	40.1	1.800	3.00	22.0	1.400
4.00	47.1	1.900	4.00	25.7	1.500
5.00	53.2	2.000	5.00	28.8	1.600
6.00	58.6	2.100	6.00	31.5	1.600
7.00	63.2	2.200	7.00	33.8	1.700
8.00	67.2	2.300	8.00	35.7	1.800
9.00	70.5	2.400	9.00	37.2	1.900
10.00	73.2	2.700	10.00	38.4	2.000
11.00	75.4	3.000	11.00	39.2	2.000
12.00	77.2	3.300	12.00	39.7	2.000
13.00	78.5	3.500	13.00	40.0	2.000
14.00	79.5	3.800	14.00	40.3	2.000
15.00	80.2	4.000	15.00	40.7	2.000
16.00	80.7	4.100	16.00	41.0	2.000

**Public, 1-Story (P1S)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-8.00	0.0	0.000	-8.00	0.0	0.000
-7.00	0.7	0.830	-7.00	0.1	0.720
-6.00	0.8	0.830	-6.00	0.8	0.720
-5.00	2.4	0.830	-5.00	2.1	0.720
-4.00	5.2	0.830	-4.00	3.7	0.720
-3.00	9.0	0.830	-3.00	5.7	0.720
-2.00	13.8	0.830	-2.00	8.0	0.720
-1.00	19.4	0.830	-1.00	10.5	0.720
0.00	25.5	0.850	0.00	13.2	0.740
1.00	32.0	0.960	1.00	16.0	0.830
2.00	38.7	1.140	2.00	18.9	0.980
3.00	45.5	1.370	3.00	21.8	1.170
4.00	52.2	1.630	4.00	24.7	1.390
5.00	58.6	1.890	5.00	27.4	1.600
6.00	64.5	2.000	6.00	30.0	1.810
7.00	69.8	2.000	7.00	32.4	1.990
8.00	74.2	2.000	8.00	34.5	2.130
9.00	77.4	2.000	9.00	36.3	2.250
10.00	80.1	2.000	10.00	37.7	2.350
11.00	80.5	2.000	11.00	38.6	2.450
12.00	81.0	2.000	12.00	39.1	2.450
13.00	81.3	2.000	13.00	39.6	2.450
14.00	81.7	2.000	14.00	40.2	2.450
15.00	82.0	2.000	15.00	40.7	2.450
16.00	82.3	2.000	16.00	41.2	2.450

**Public, Multi-Story (PMS)**

<b>Structure</b>			<b>Content</b>		
Depth (ft.)	Damage (Percent)	Standard Deviation of Error	Depth (ft.)	Damage (Percent)	Standard Deviation of Error
-2.00	0.0	0.000	-2.00	0.0	0.000
-1.00	3.0	2.800	-1.00	1.0	2.500
0.00	9.3	2.800	0.00	5.0	2.500
1.00	15.2	2.800	1.00	8.7	2.500
2.00	20.9	2.800	2.00	12.2	2.500
3.00	26.3	2.900	3.00	15.5	2.500
4.00	31.4	3.200	4.00	18.5	2.700
5.00	36.2	3.400	5.00	21.3	3.000
6.00	40.7	3.700	6.00	23.9	3.200
7.00	44.9	3.900	7.00	26.3	3.300
8.00	48.8	4.000	8.00	28.4	3.400
9.00	52.4	4.000	9.00	30.3	3.500
10.00	55.7	4.000	10.00	32.0	3.500
11.00	58.7	4.000	11.00	33.4	3.500
12.00	61.4	4.000	12.00	34.7	3.500
13.00	63.8	4.000	13.00	35.6	3.500
14.00	65.9	4.000	14.00	36.4	3.600
15.00	67.7	4.000	15.00	36.9	3.600
16.00	69.2	4.000	16.00	37.2	3.600

Existing Conditions

Rock Creek

Rock Creek Existing Conditions Water Surface Profile

## Discharge-Exceedance Probability Functions

Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

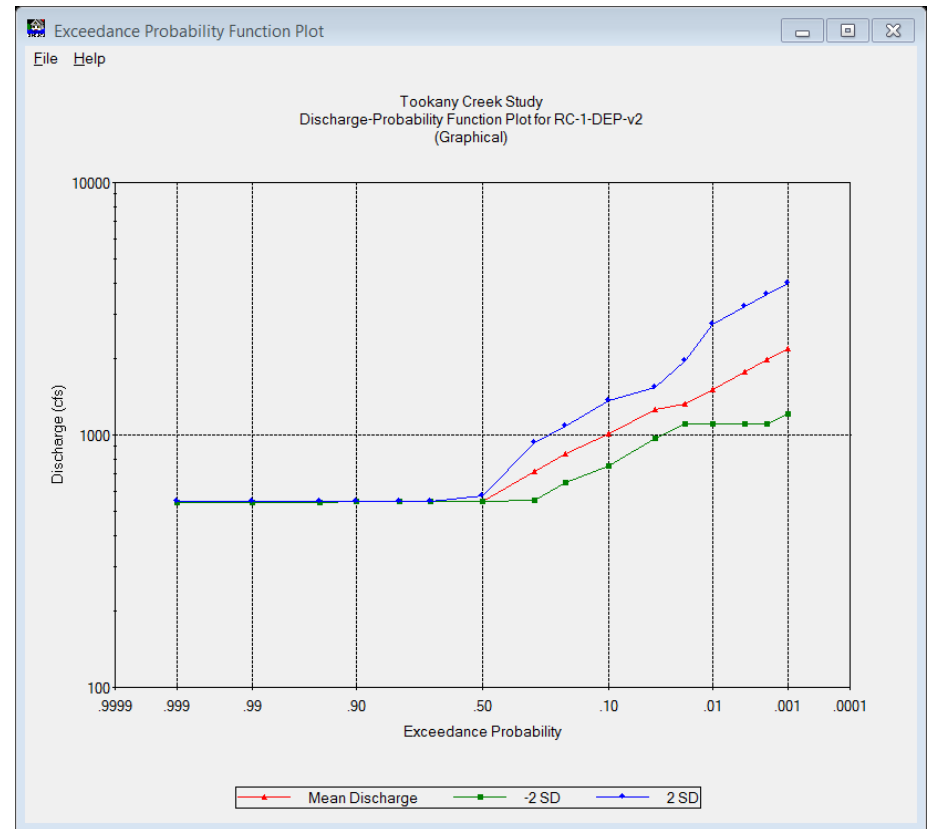
Function: RC-1-DEP-v2 Use An Existing Function Save

Description: updated 5/10/2015 Cancel

Type

Analytical...  Graphical... Function Statistics... Plot..

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	541.58	540.33	540.95	542.20	542.83
0.9900	542.42	541.17	541.80	543.05	543.67
0.9500	543.18	542.10	542.64	543.71	544.25
0.9000	543.58	542.89	543.24	543.92	544.26
0.8000	544.07	543.42	543.74	544.39	544.71
0.7000	544.42	543.84	544.13	544.71	544.99
0.5000	545.00	544.42	544.71	558.95	573.26
0.3000	714.14	549.63	626.51	814.03	927.89
0.2000	841.00	649.81	739.25	956.75	1,088.44
0.1000	1,013.00	752.07	872.84	1,175.67	1,364.47
0.0400	1,260.00	965.87	1,103.17	1,397.85	1,550.79
0.0200	1,333.00	1,106.55	1,214.51	1,622.28	1,974.34
0.0100	1,518.00	1,107.57	1,296.64	2,043.95	2,752.14
0.0040	1,773.00	1,110.63	1,403.26	2,387.31	3,214.46
0.0020	1,980.00	1,111.14	1,483.26	2,666.03	3,589.75
0.0010	2,196.08	1,211.29	1,630.98	2,956.98	3,981.51



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2063 Damage Reach: RC-1

Function: RC-1-DEP-v2 Use An Existing Function Save

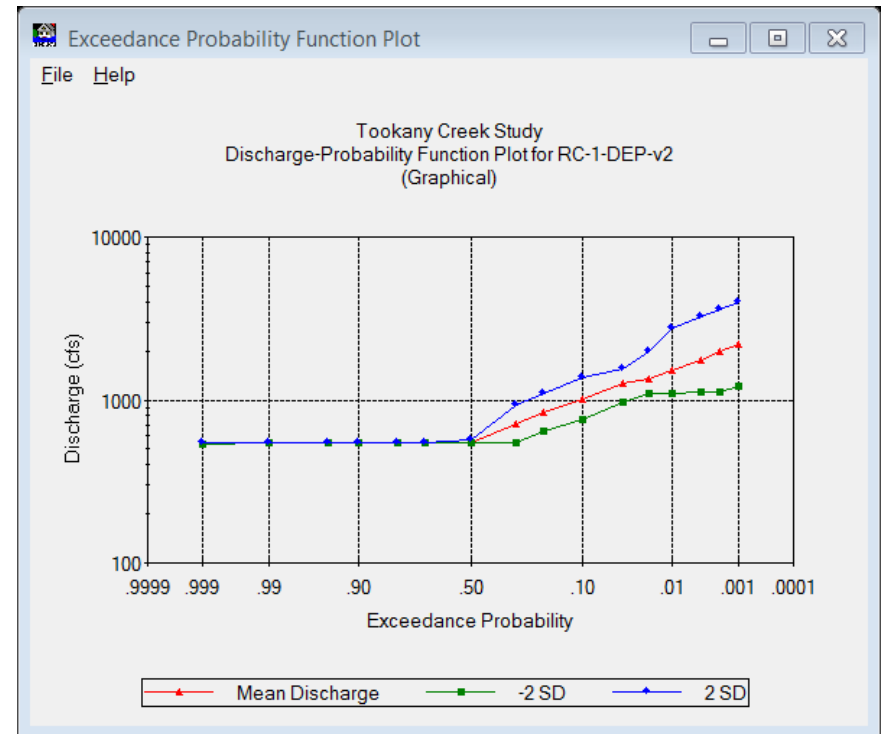
Description: updated 5/10/2015 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	541.58	540.33	540.95	542.20	542.83
0.9900	542.42	541.17	541.80	543.05	543.67
0.9500	543.18	542.10	542.64	543.71	544.25
0.9000	543.58	542.89	543.24	543.92	544.26
0.8000	544.07	543.42	543.74	544.39	544.71
0.7000	544.42	543.84	544.13	544.71	544.99
0.5000	545.00	544.42	544.71	558.95	573.26
0.3000	714.14	549.63	626.51	814.03	927.89
0.2000	841.00	649.81	739.25	956.75	1,088.44
0.1000	1,013.00	752.07	872.84	1,175.67	1,364.47
0.0400	1,260.00	965.87	1,103.17	1,397.85	1,550.79
0.0200	1,333.00	1,106.55	1,214.51	1,622.28	1,974.34
0.0100	1,518.00	1,107.57	1,296.64	2,043.95	2,752.14
0.0040	1,773.00	1,110.63	1,403.26	2,387.31	3,214.46
0.0020	1,980.00	1,111.14	1,483.26	2,666.03	3,589.75
0.0010	2,196.08	1,211.29	1,630.98	2,956.98	3,981.51



## Stage-Discharge Functions

Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Function: RC-1-SDis.-v2 Use An Existing Function Plot..

Description: updated 5/10/2015 Tabulate...

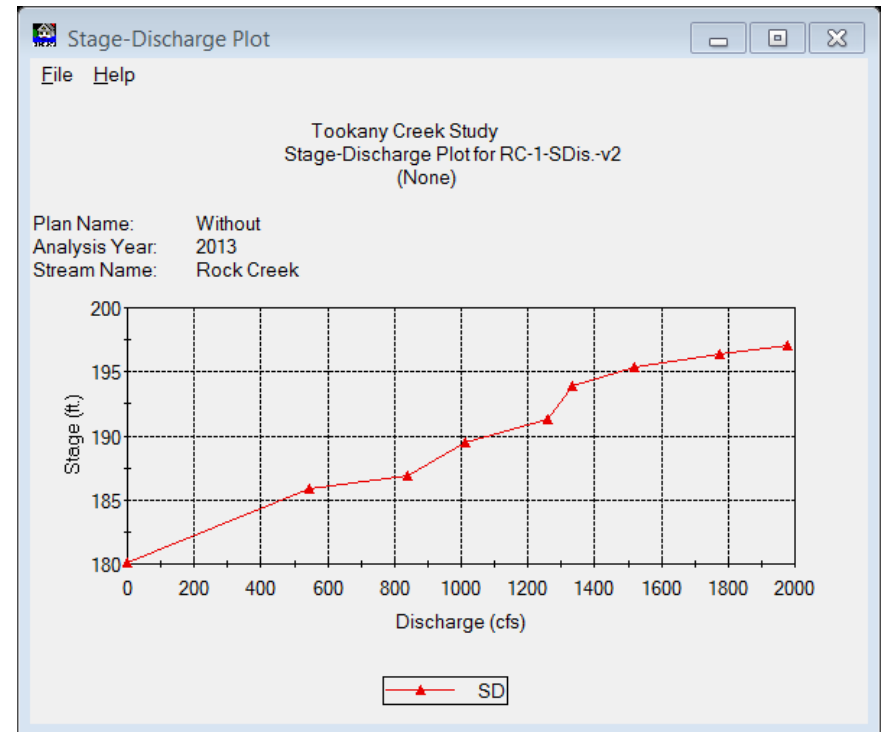
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	180.15
2	545.00	185.90
3	841.00	186.91
4	1013.00	189.45
5	1260.00	191.35
6	1333.00	193.86
7	1518.00	195.39
8	1773.00	196.34
9	1980.00	197.05





Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2063 Damage Reach: RC-1

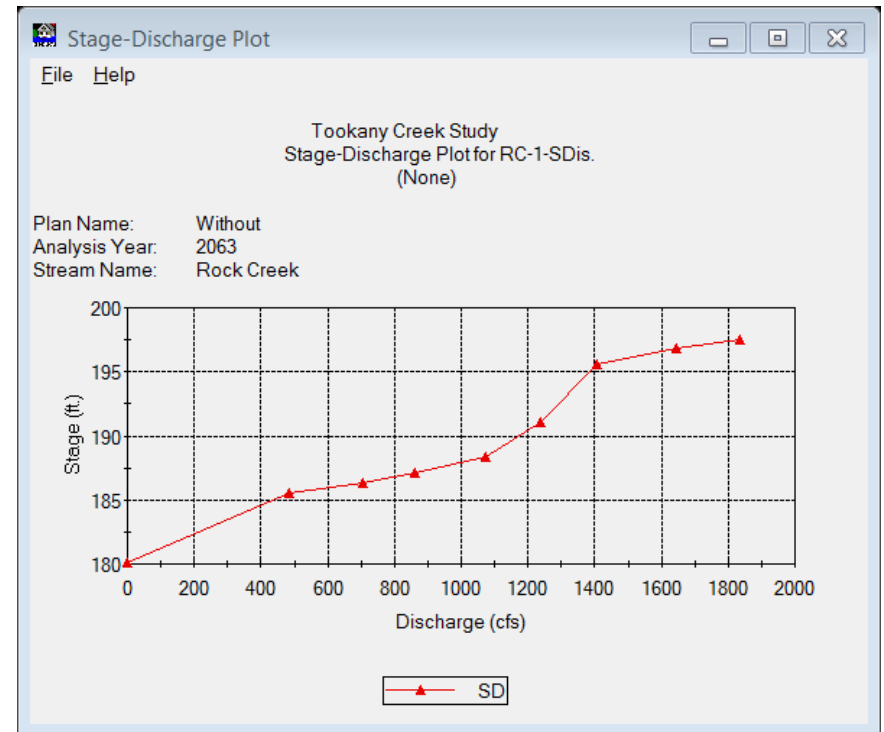
Function: RC-1-SDis. Use An Existing Function Plot...

Description: updated 9/30/2014 Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	180.06
2	487.00	185.49
3	707.00	186.31
4	863.00	187.07
5	1073.00	188.31
6	1237.00	191.02
7	1408.00	195.60
8	1645.00	196.78
9	1837.00	197.52



## Stage-Damage Functions

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Damage Category: Commercial

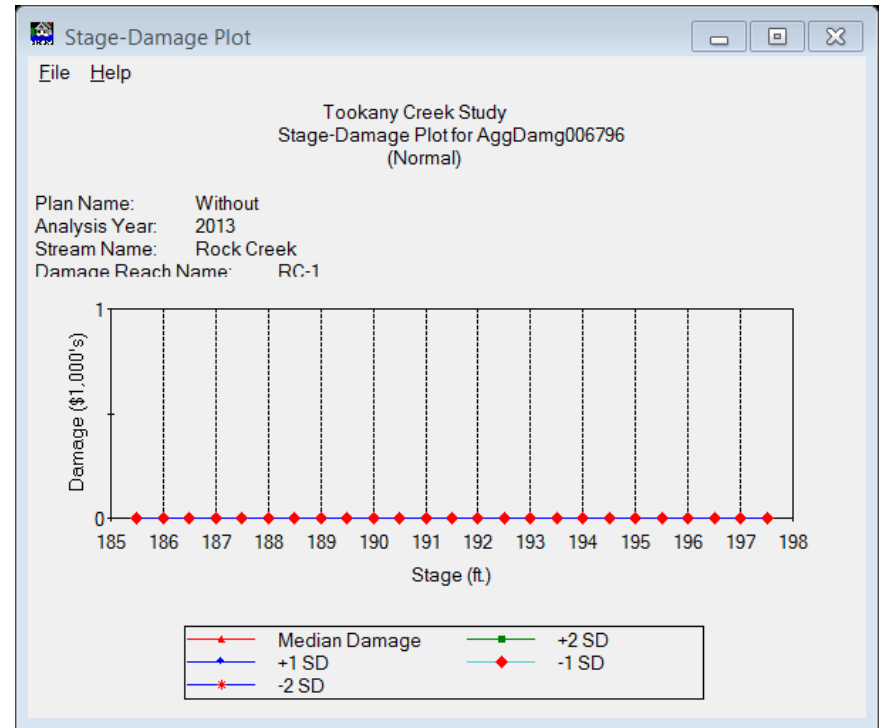
Function: AggDamg006796 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2063 Damage Reach: RC-1

Damage Category: Commercial

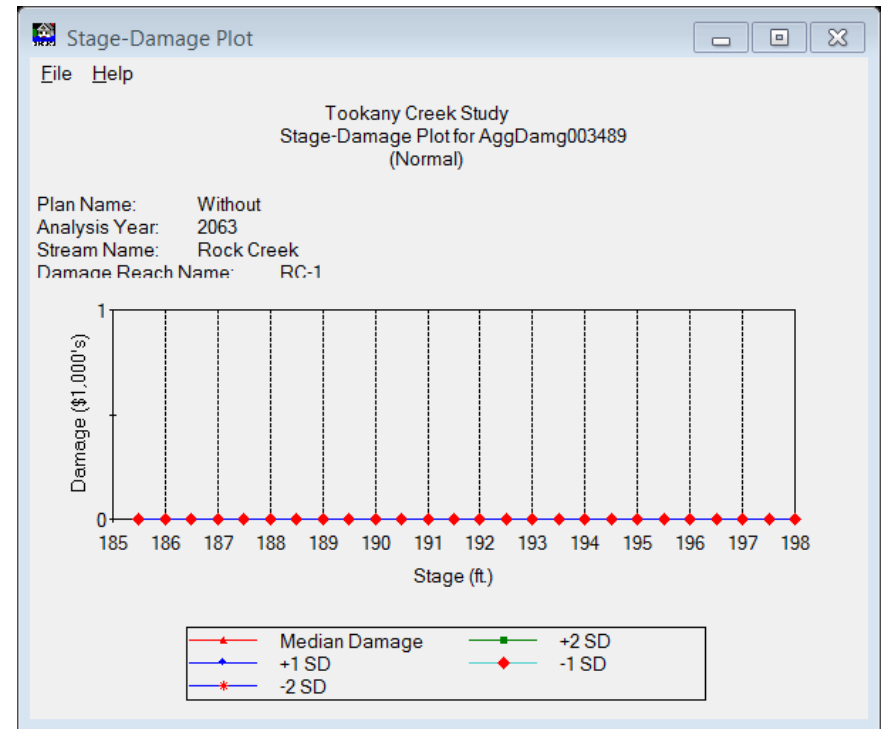
Function: AggDamg003489 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Damage Category: Industrial

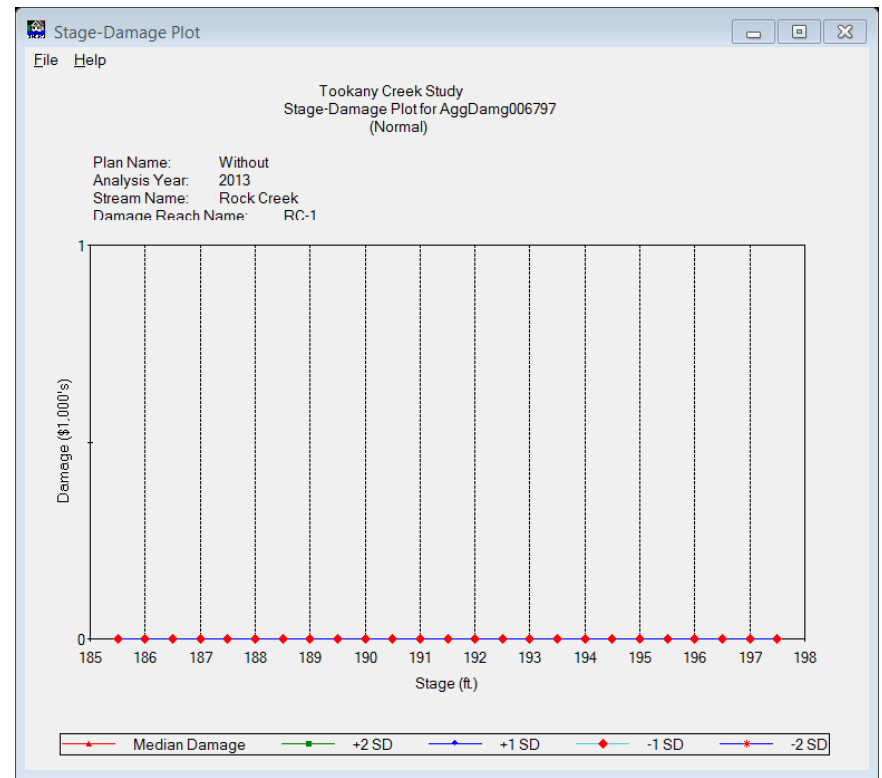
Function: AggDamg006797 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

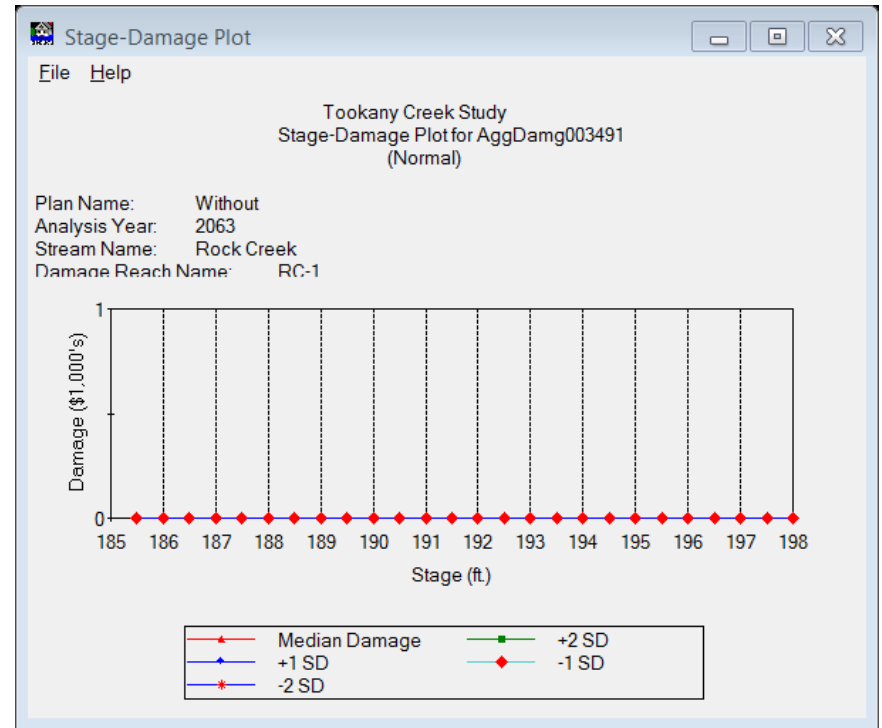
Plan: Without Stream: Rock Creek  
 Analysis Year: 2063 Damage Reach: RC-1  
 Damage Category: Industrial

Function: AggDamg003491 Use An Existing Function  
 Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Damage Category: Public

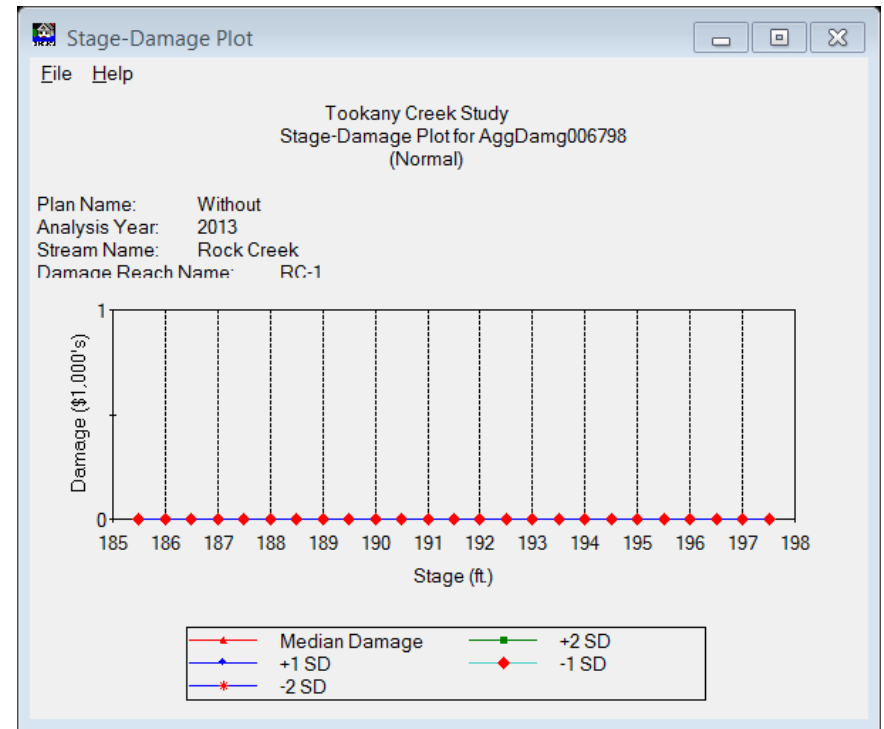
Function: AggDamg006798 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00
25	197.50	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

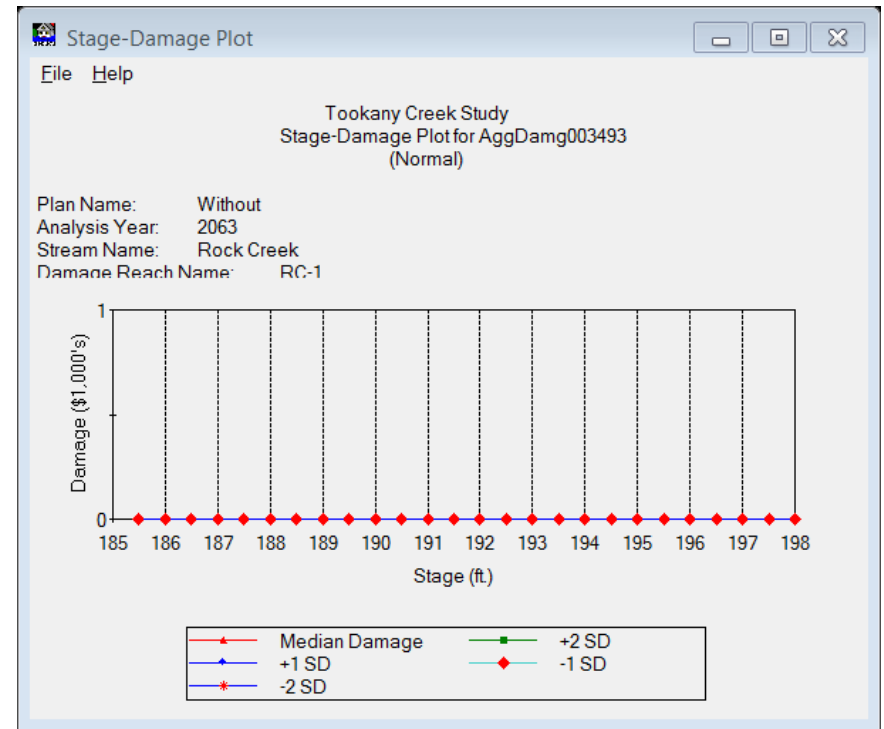
Plan: Without Stream: Rock Creek  
 Analysis Year: 2063 Damage Reach: RC-1  
 Damage Category: Public

Function: AggDamg003493 Use An Existing Function  
 Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Damage Category: Residential

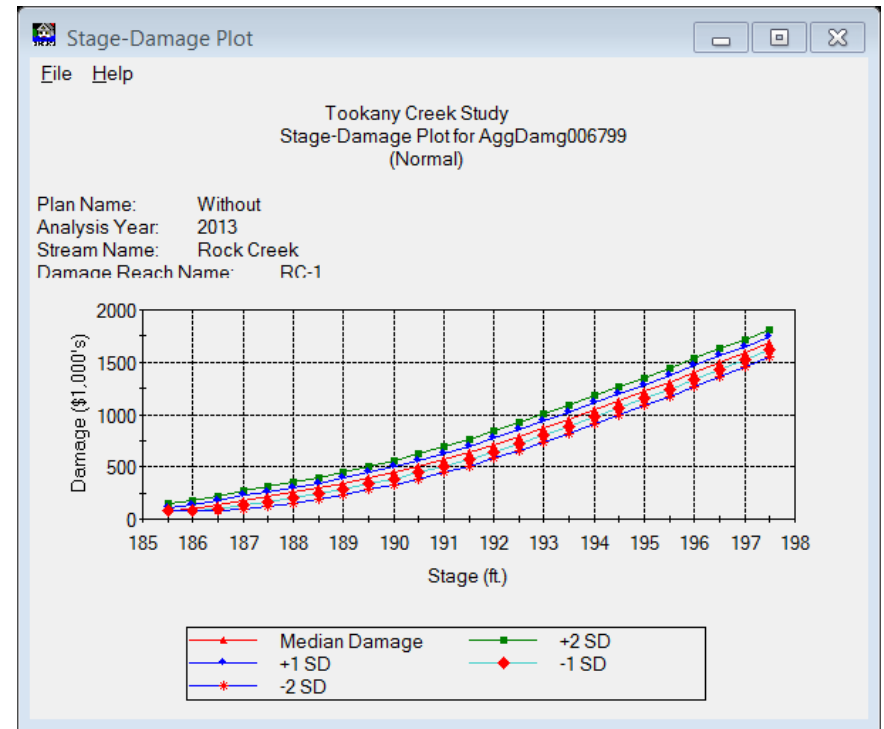
Function: AggDamg006799 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	76.21	36.08
2	186.00	96.87	38.68
3	186.50	132.44	41.38
4	187.00	183.52	45.36
5	187.50	215.98	47.45
6	188.00	252.14	49.70
7	188.50	293.08	51.75
8	189.00	340.66	53.11
9	189.50	389.90	54.75
10	190.00	442.32	56.70
11	190.50	501.87	58.66
12	191.00	566.59	60.56
13	191.50	634.46	63.06
14	192.00	708.75	65.08
15	192.50	787.95	66.73
16	193.00	870.80	67.77
17	193.50	955.33	68.59
18	194.00	1042.42	68.15
19	194.50	1131.16	67.03
20	195.00	1218.24	66.58
21	195.50	1306.84	66.19
22	196.00	1401.10	66.43
23	196.50	1494.50	66.80
24	197.00	1586.33	66.69
25	197.50	1682.22	65.63

Plot...  
 Tabulate...  
 Save  
 Cancel





Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Rock Creek

Analysis Year: 2063 Damage Reach: RC-1

Damage Category: Residential

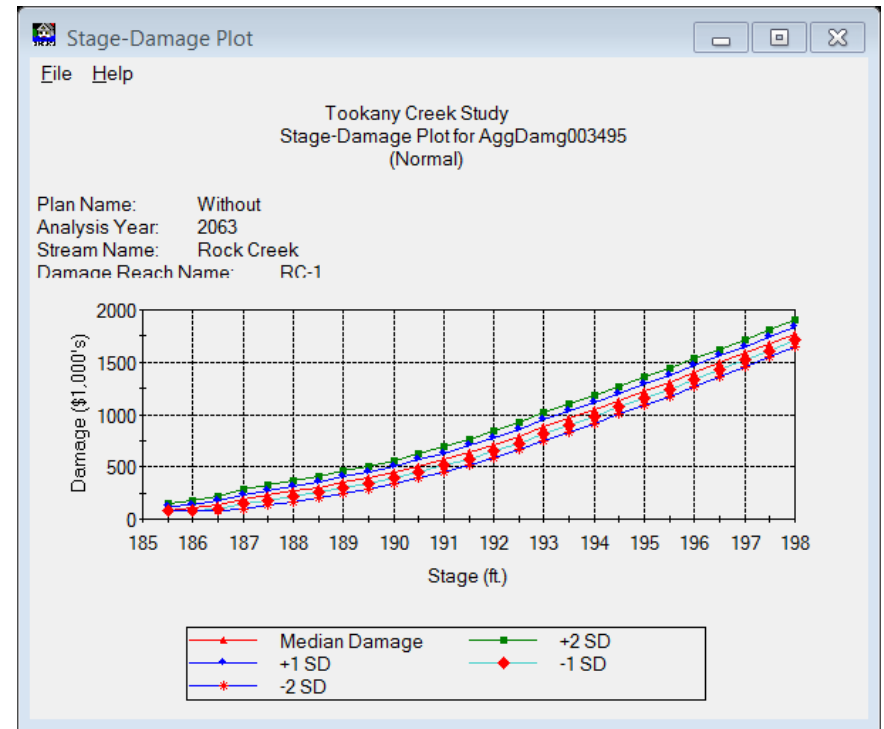
Function: AggDamg003495 Use An Existing Function

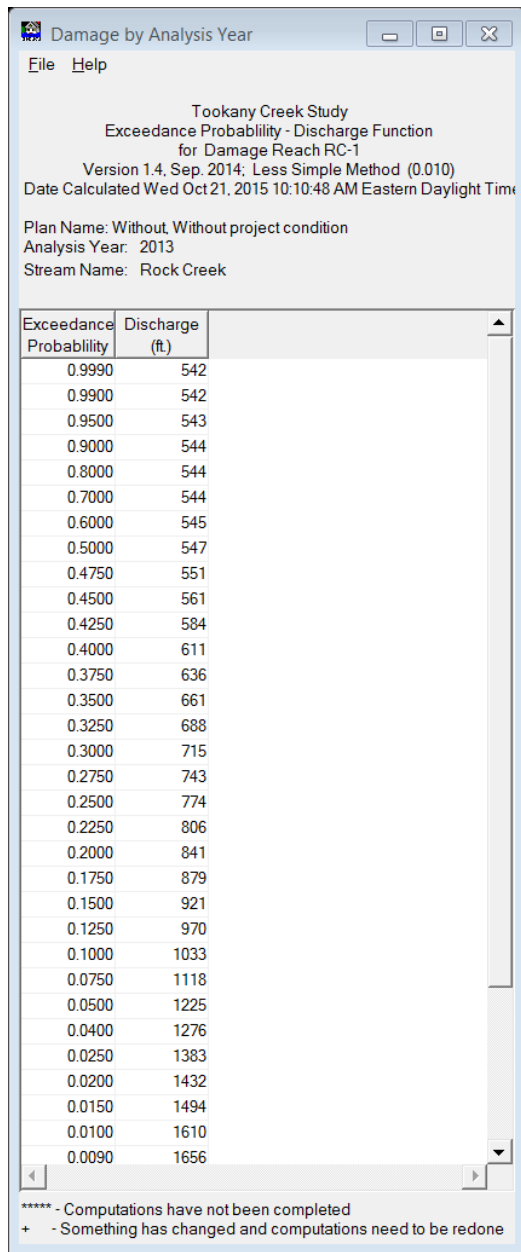
Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

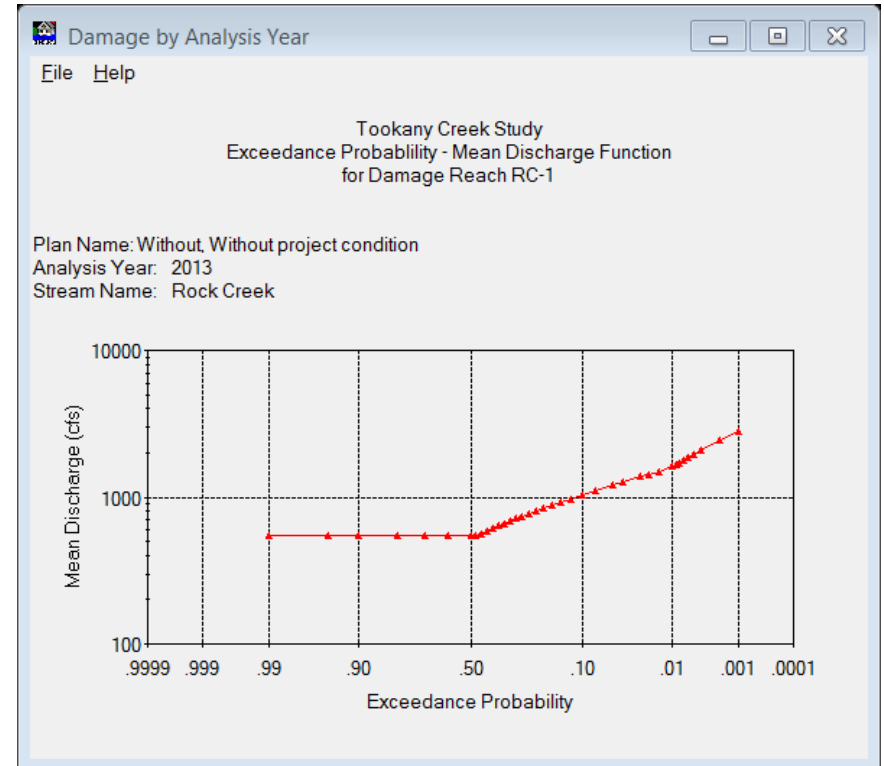
	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	80.14	35.92
2	186.00	102.96	39.63
3	186.50	138.64	42.36
4	187.00	190.00	45.70
5	187.50	228.31	48.04
6	188.00	265.77	50.03
7	188.50	306.10	51.84
8	189.00	350.12	53.28
9	189.50	396.02	54.88
10	190.00	447.97	56.77
11	190.50	507.37	58.65
12	191.00	571.00	60.74
13	191.50	639.07	63.37
14	192.00	714.05	65.33
15	192.50	794.06	66.93
16	193.00	877.83	68.00
17	193.50	962.46	68.64
18	194.00	1049.05	68.25
19	194.50	1136.02	67.24
20	195.00	1221.03	66.72
21	195.50	1307.19	66.50
22	196.00	1398.60	66.66
23	196.50	1491.36	67.14
24	197.00	1585.32	66.96

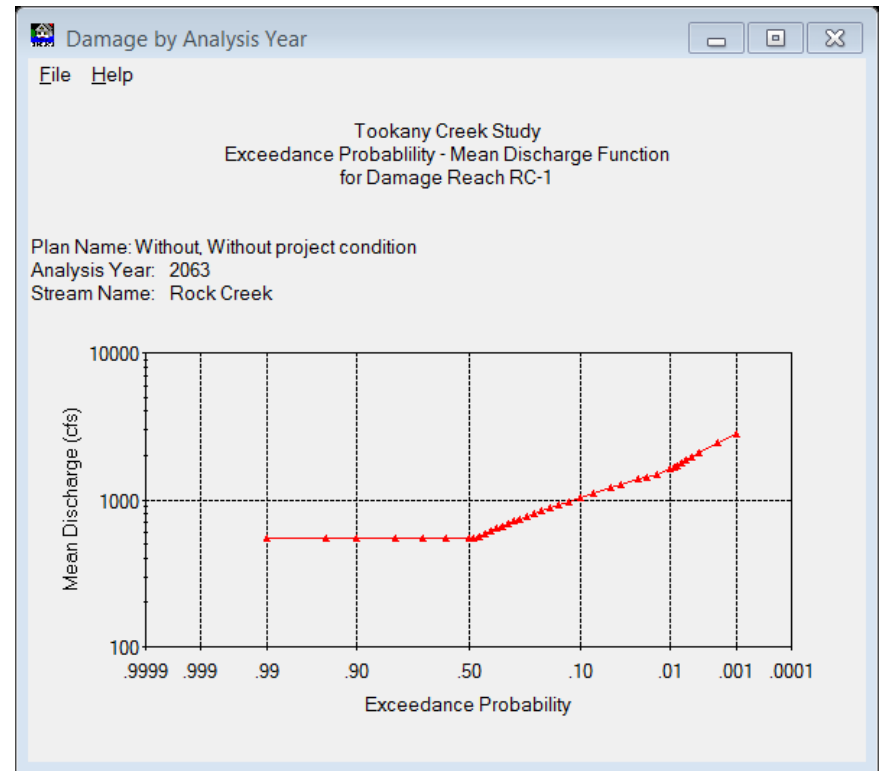
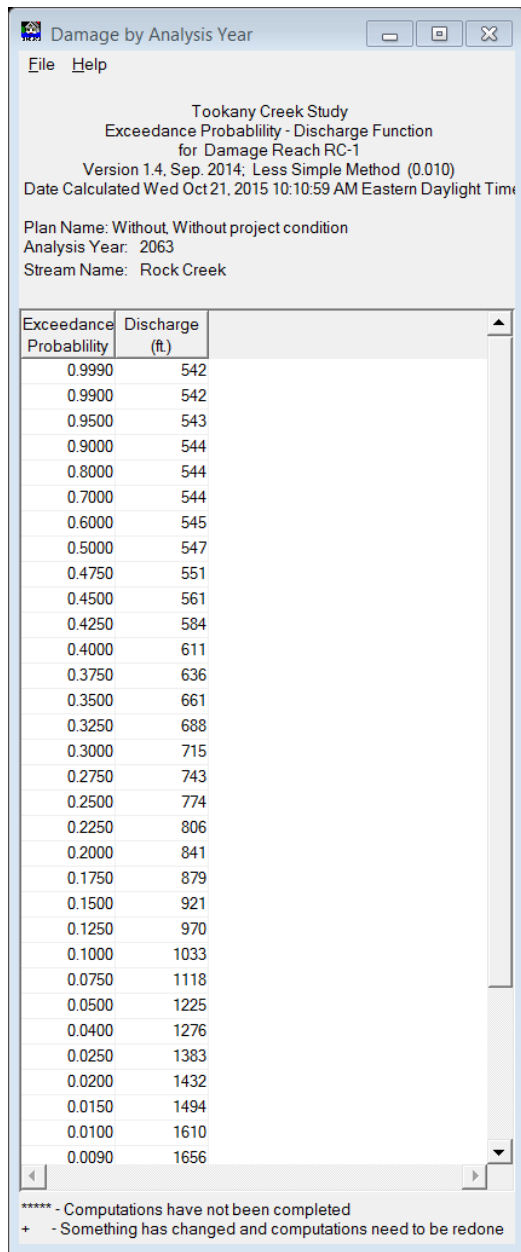
Plot...  
 Tabulate...  
 Save  
 Cancel

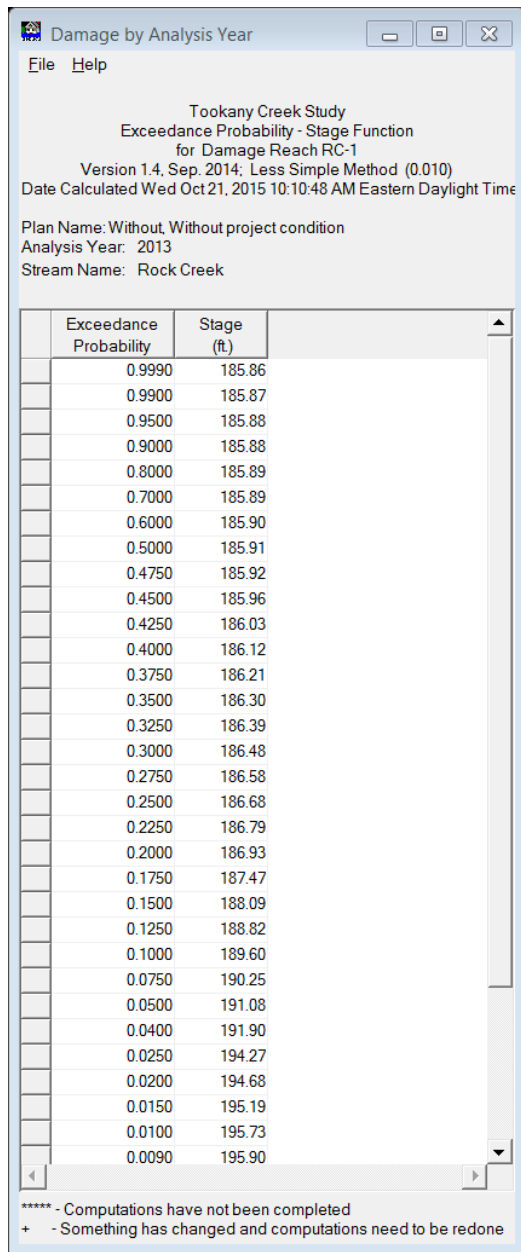




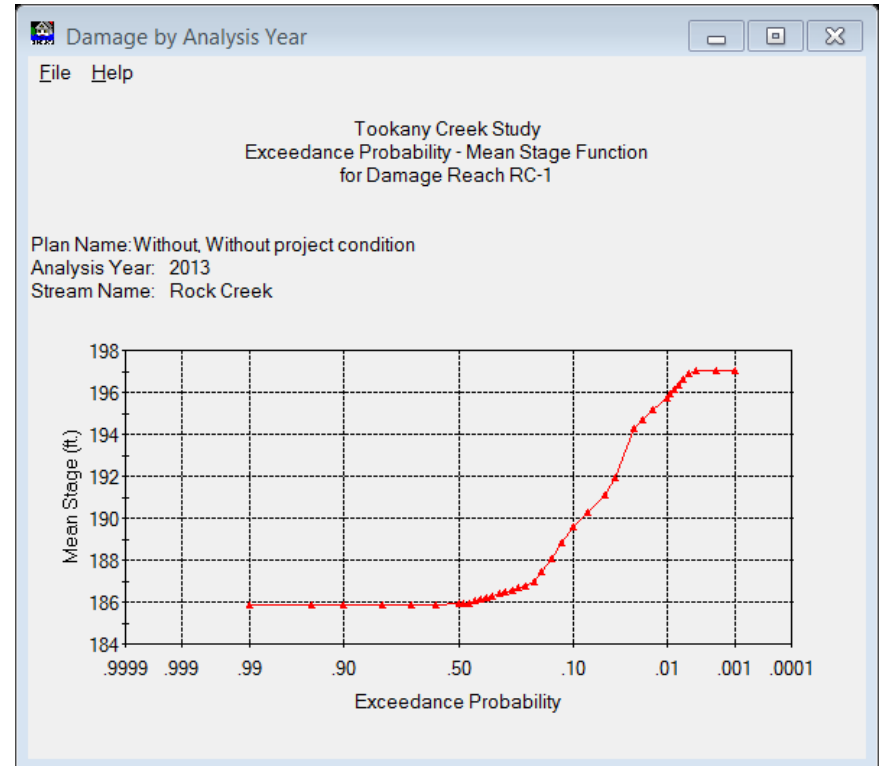
### Exceedance Probability-Mean Discharge Functions

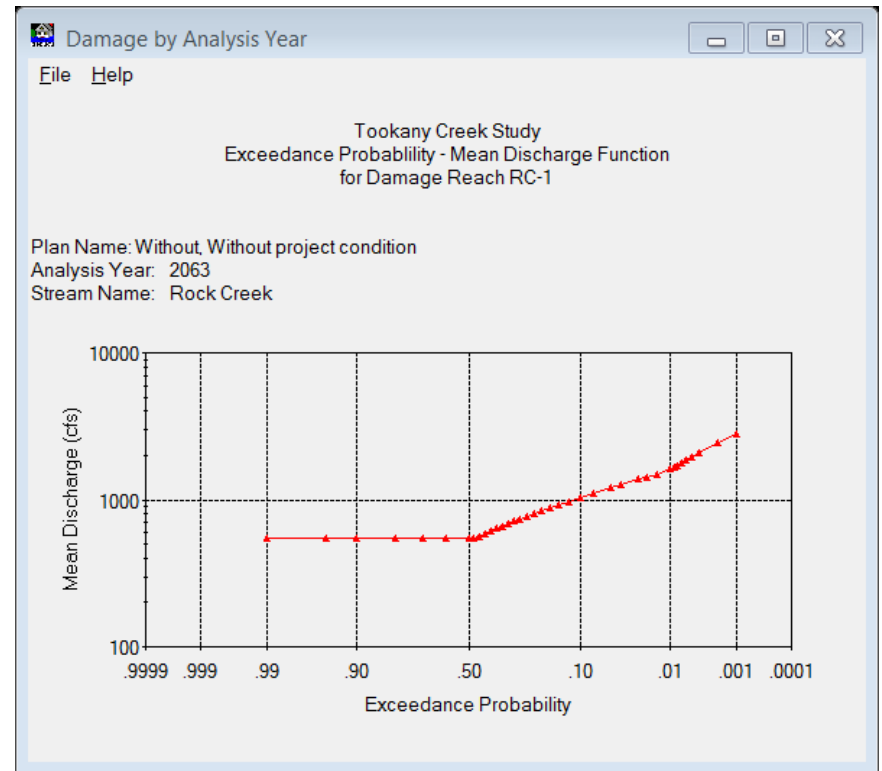
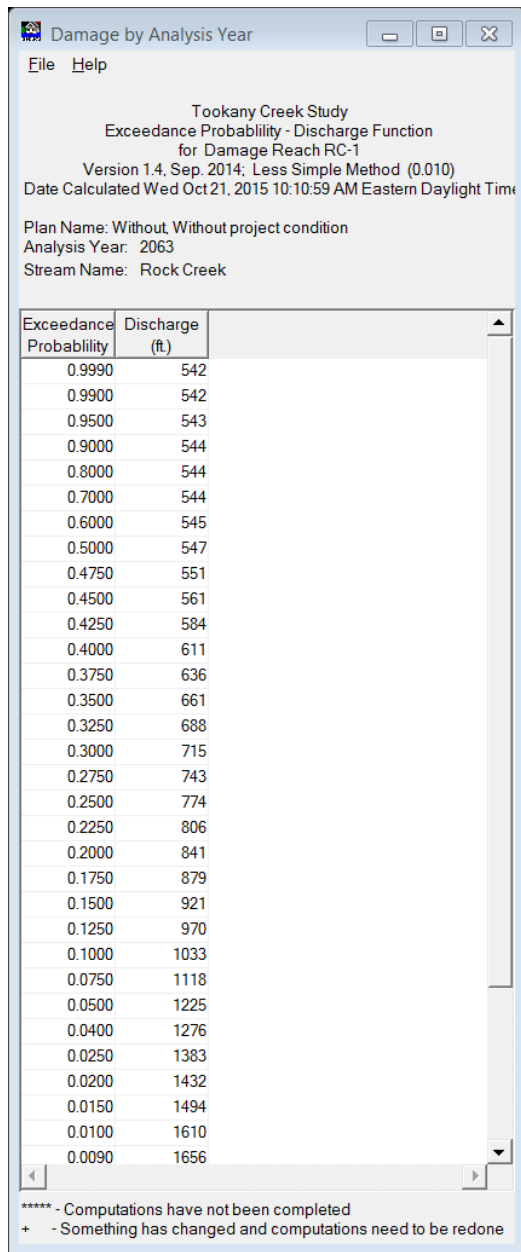






### Exceedance Probability-Mean Stage Functions





Damage by Analysis Year

File Help

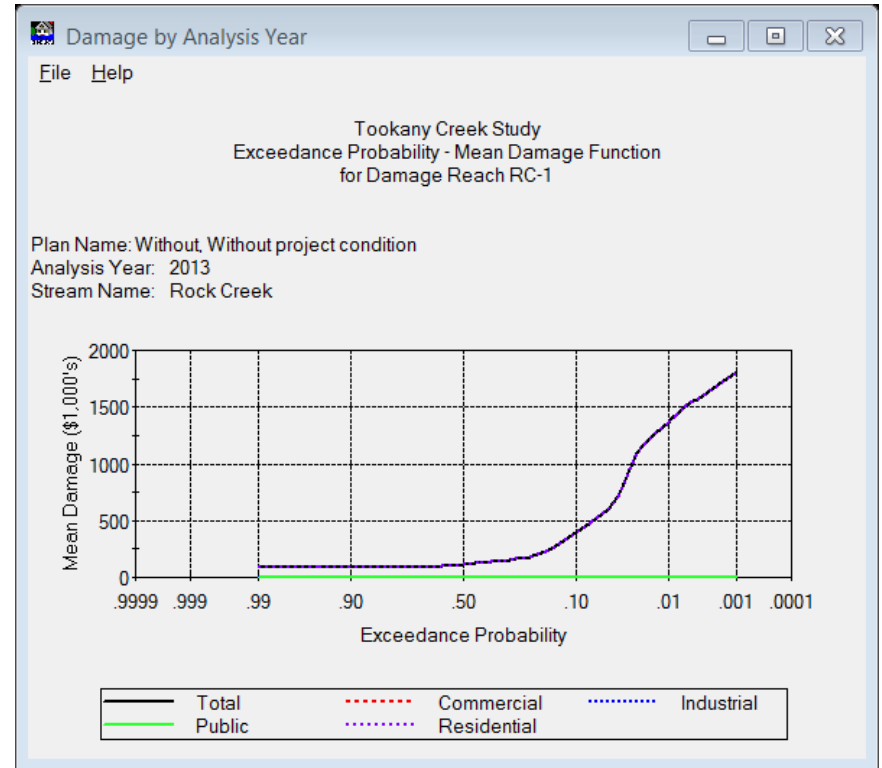
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach RC-1  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:48 AM Eastern Daylight Time

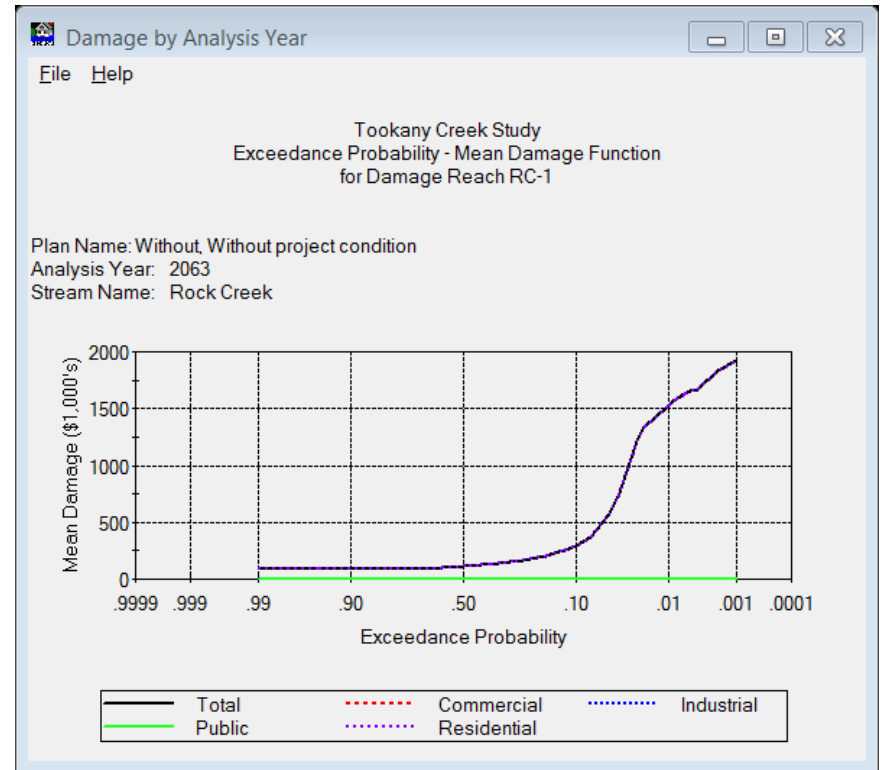
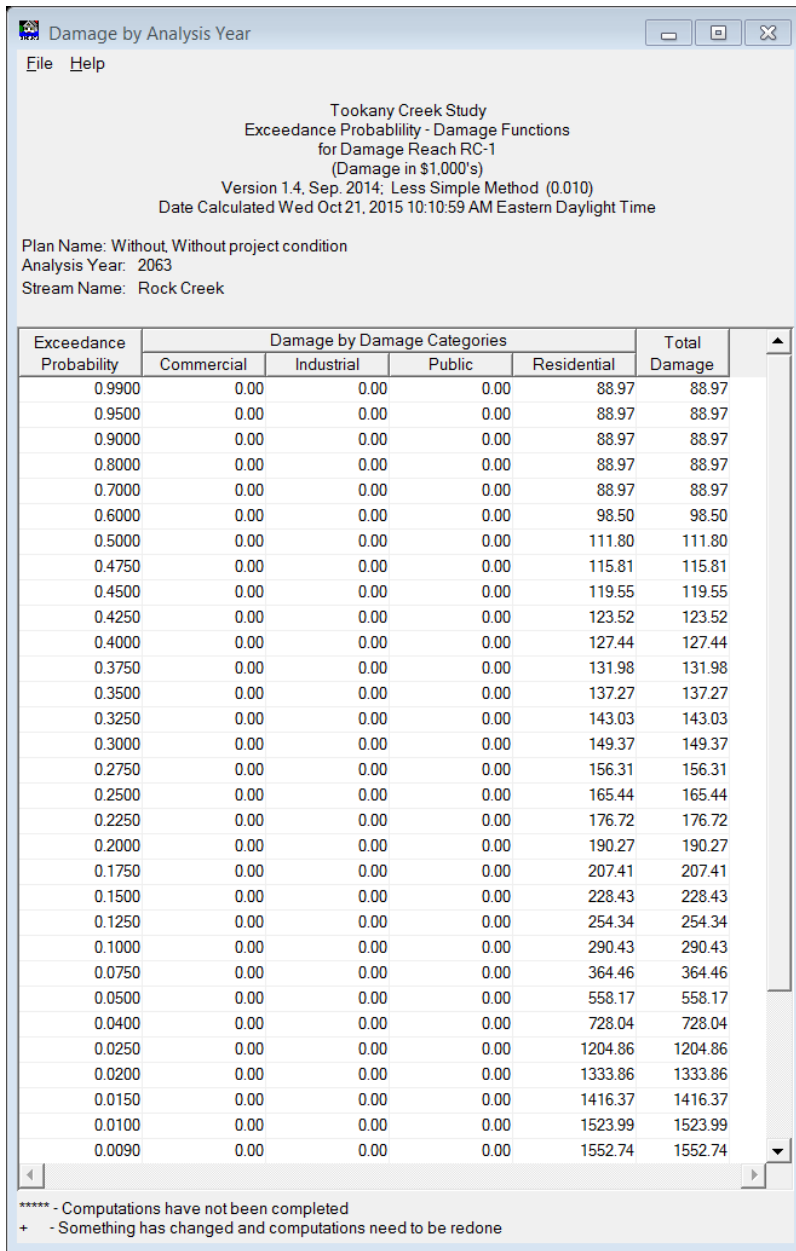
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Rock Creek

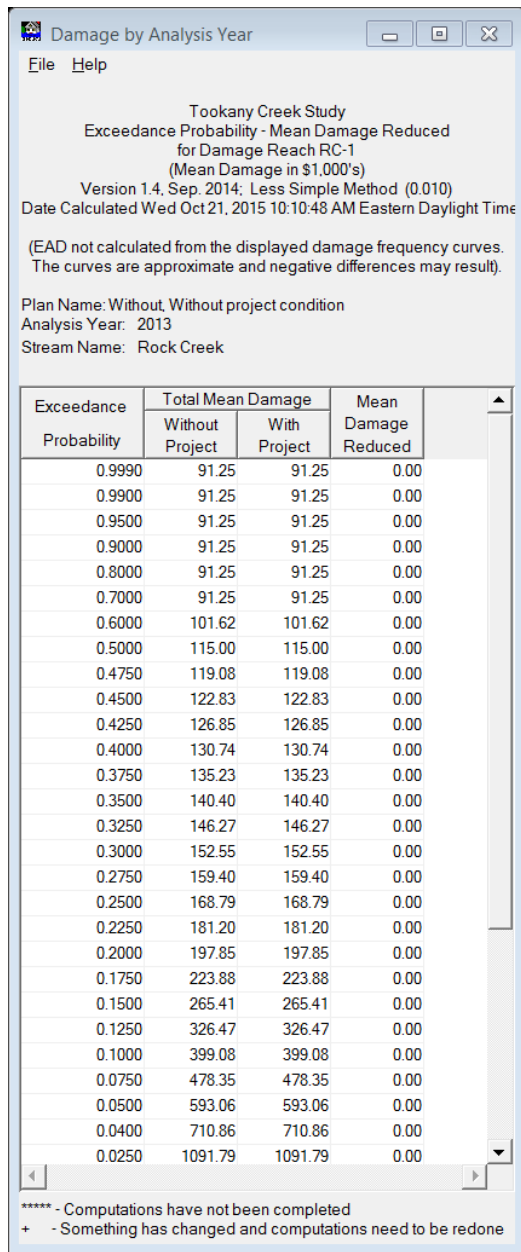
Exceedance Probability	Damage by Damage Category		
	Commercial	Industrial	Public
0.9900	0.00	0.00	(
0.9500	0.00	0.00	(
0.9000	0.00	0.00	(
0.8000	0.00	0.00	(
0.7000	0.00	0.00	(
0.6000	0.00	0.00	(
0.5000	0.00	0.00	(
0.4750	0.00	0.00	(
0.4500	0.00	0.00	(
0.4250	0.00	0.00	(
0.4000	0.00	0.00	(
0.3750	0.00	0.00	(
0.3500	0.00	0.00	(
0.3250	0.00	0.00	(
0.3000	0.00	0.00	(
0.2750	0.00	0.00	(
0.2500	0.00	0.00	(
0.2250	0.00	0.00	(
0.2000	0.00	0.00	(
0.1750	0.00	0.00	(
0.1500	0.00	0.00	(
0.1250	0.00	0.00	(
0.1000	0.00	0.00	(
0.0750	0.00	0.00	(
0.0500	0.00	0.00	(
0.0400	0.00	0.00	(
0.0250	0.00	0.00	(
0.0200	0.00	0.00	(
0.0150	0.00	0.00	(
0.0100	0.00	0.00	(
0.0090	0.00	0.00	(

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

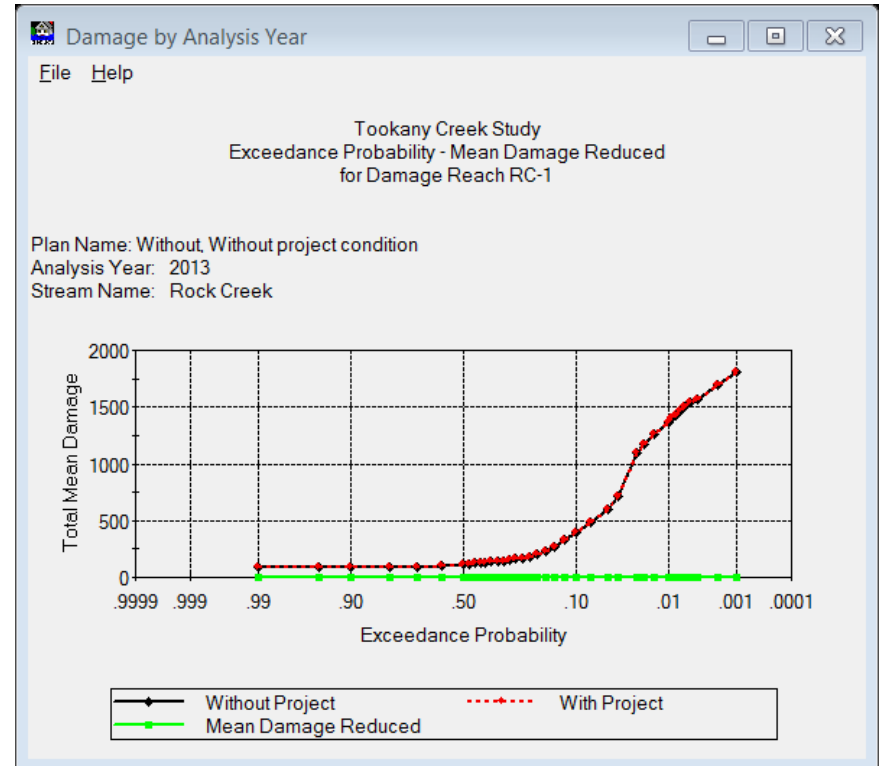
### Exceedance Probability-Mean Damage Functions



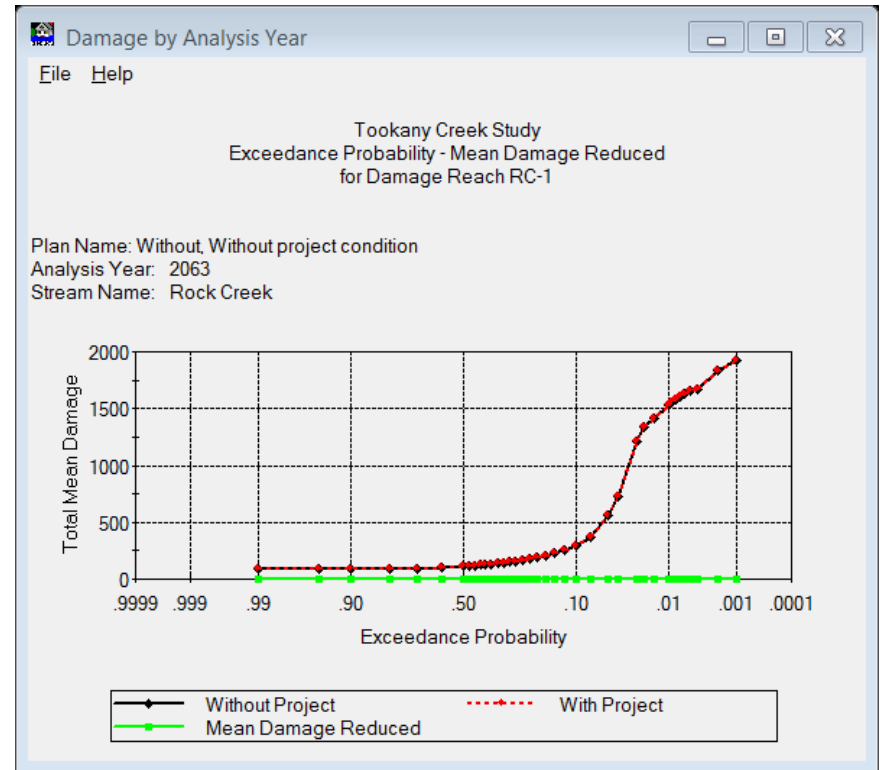
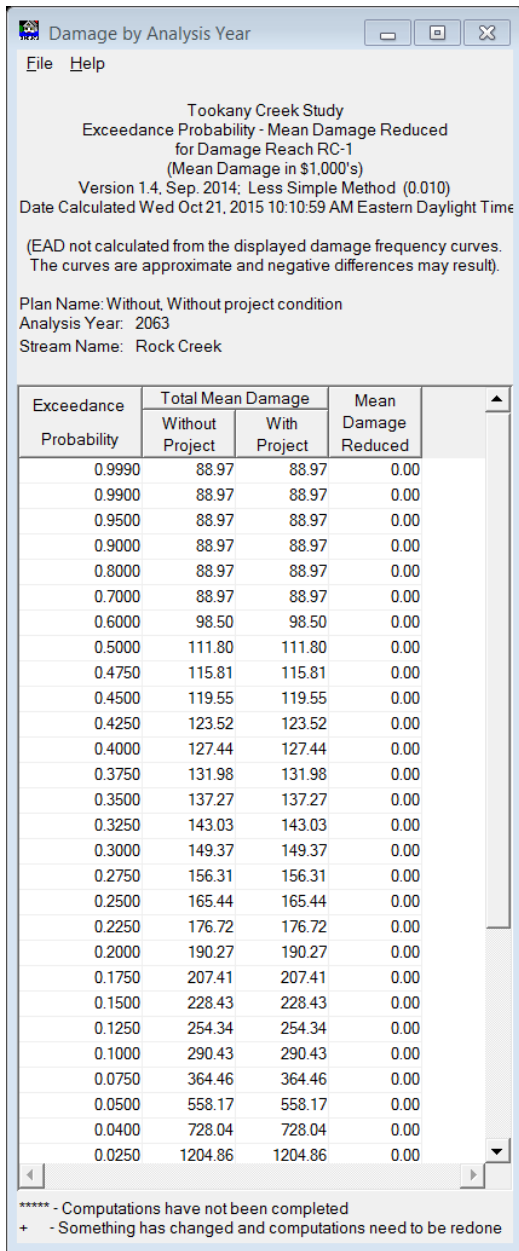




### Exceedance Probability-Mean Damage Reduced Functions







Tookany Creek

Existing Conditions Water Surface Profile Plot

## Discharge-Exceedance Probability Functions

Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

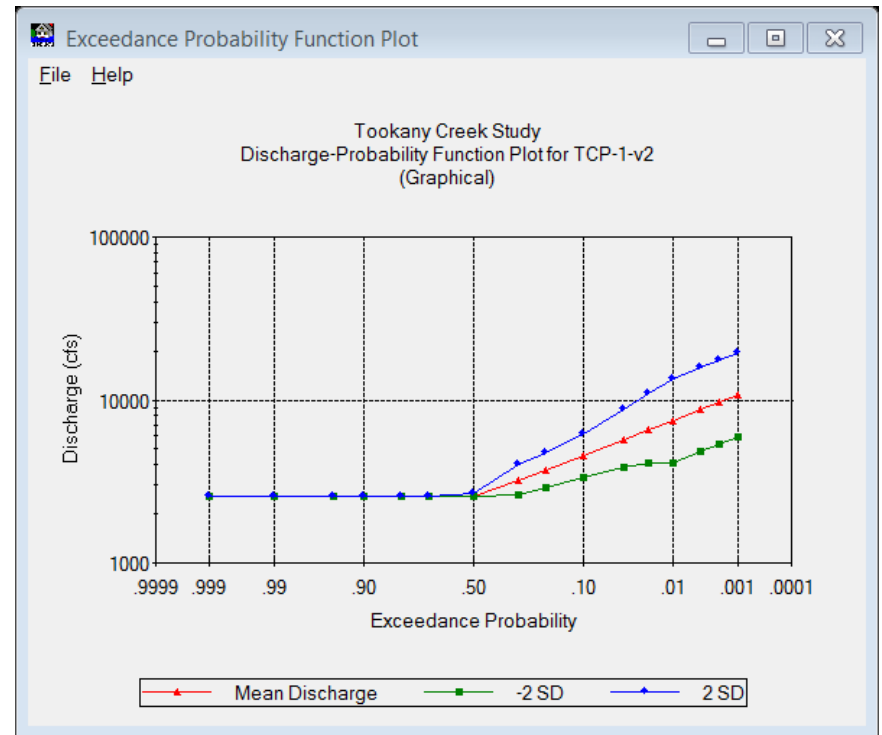
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,559.81	2,552.47	2,556.14	2,563.49	2,567.17
0.9900	2,564.79	2,557.43	2,561.11	2,568.47	2,572.16
0.9500	2,569.24	2,562.88	2,566.06	2,572.42	2,575.60
0.9000	2,571.61	2,567.57	2,569.59	2,573.63	2,575.65
0.8000	2,574.49	2,570.67	2,572.58	2,576.39	2,578.30
0.7000	2,576.56	2,573.17	2,574.86	2,578.26	2,579.96
0.5000	2,580.00	2,576.29	2,578.14	2,636.03	2,693.27
0.3000	3,240.73	2,598.49	2,901.90	3,619.12	4,041.69
0.2000	3,720.00	2,898.69	3,283.76	4,214.19	4,774.03
0.1000	4,571.00	3,346.65	3,911.21	5,342.10	6,243.27
0.0400	5,687.00	3,827.07	4,665.25	7,073.45	8,797.91
0.0200	6,529.00	4,133.55	5,194.99	8,502.26	11,071.91
0.0100	7,432.00	4,137.36	5,545.16	10,000.47	13,456.60
0.0040	8,683.00	4,795.57	6,452.90	11,683.82	15,721.71
0.0020	9,695.00	5,354.49	7,204.98	13,045.56	17,554.06
0.0010	10,751.21	5,937.83	7,989.92	14,466.79	19,466.46



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Function: TCP-2 Use An Existing Function Save

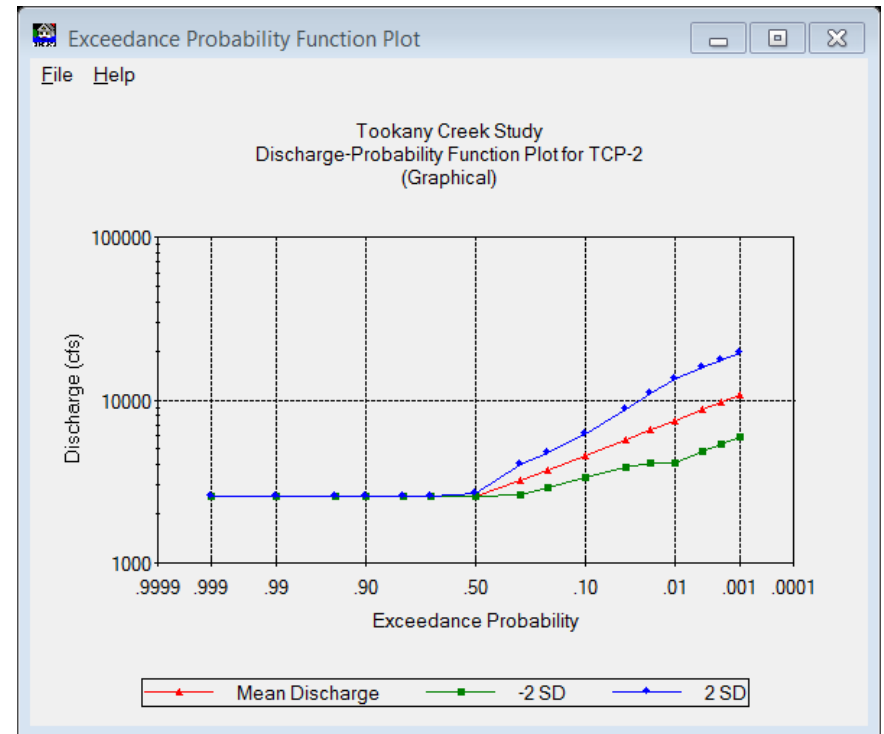
Description: Reach 2 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,559.81	2,552.47	2,556.14	2,563.49	2,567.17
0.9900	2,564.79	2,557.43	2,561.11	2,568.47	2,572.16
0.9500	2,569.24	2,562.88	2,566.06	2,572.42	2,575.60
0.9000	2,571.61	2,567.57	2,569.59	2,573.63	2,575.65
0.8000	2,574.49	2,570.67	2,572.58	2,576.39	2,578.30
0.7000	2,576.56	2,573.17	2,574.86	2,578.26	2,579.96
0.5000	2,580.00	2,576.29	2,578.14	2,636.03	2,693.27
0.3000	3,240.73	2,598.49	2,901.90	3,619.12	4,041.69
0.2000	3,720.00	2,898.69	3,283.76	4,214.19	4,774.03
0.1000	4,571.00	3,346.65	3,911.21	5,342.10	6,243.27
0.0400	5,687.00	3,827.07	4,665.25	7,073.45	8,797.91
0.0200	6,529.00	4,133.55	5,194.99	8,502.26	11,071.91
0.0100	7,432.00	4,137.36	5,545.16	10,000.47	13,456.60
0.0040	8,683.00	4,795.57	6,452.90	11,683.82	15,721.71
0.0020	9,695.00	5,354.49	7,204.98	13,045.56	17,554.06
0.0010	10,751.21	5,937.83	7,989.92	14,466.79	19,466.46



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-3

Function: TCP-3 Use An Existing Function Save

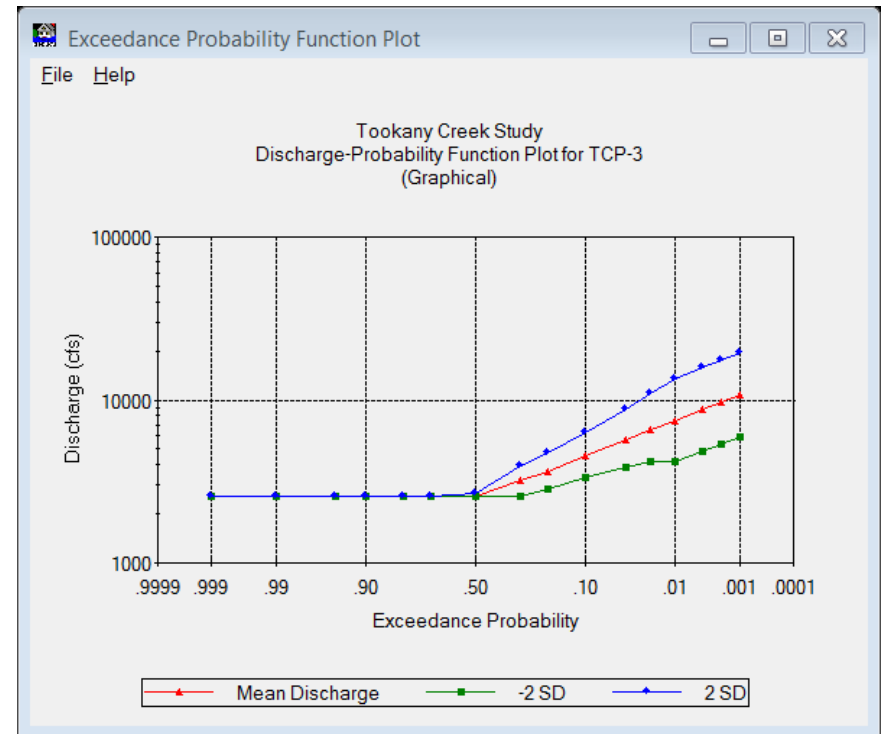
Description: Reach 3 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,547.92	2,540.62	2,544.26	2,551.58	2,555.24
0.9900	2,552.87	2,545.55	2,549.21	2,556.53	2,560.20
0.9500	2,557.29	2,550.97	2,554.13	2,560.46	2,563.63
0.9000	2,559.65	2,555.64	2,557.64	2,561.66	2,563.68
0.8000	2,562.51	2,558.72	2,560.62	2,564.41	2,566.31
0.7000	2,564.58	2,561.20	2,562.89	2,566.27	2,567.96
0.5000	2,568.00	2,564.31	2,566.15	2,622.27	2,677.68
0.3000	3,205.70	2,585.90	2,879.17	3,569.26	3,974.05
0.2000	3,666.00	2,831.21	3,221.68	4,171.60	4,746.93
0.1000	4,589.00	3,317.80	3,901.97	5,397.00	6,347.26
0.0400	5,708.00	3,842.91	4,683.51	7,083.05	8,789.35
0.0200	6,539.00	4,169.56	5,221.57	8,499.49	11,047.76
0.0100	7,443.00	4,173.41	5,573.39	10,013.95	13,472.98
0.0040	8,695.00	4,803.46	6,462.67	11,698.42	15,739.29
0.0020	9,709.00	5,363.63	7,216.33	13,062.67	17,574.79
0.0010	10,767.37	5,948.32	8,002.98	14,486.63	19,490.61



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Function: TCP-4 Use An Existing Function Save

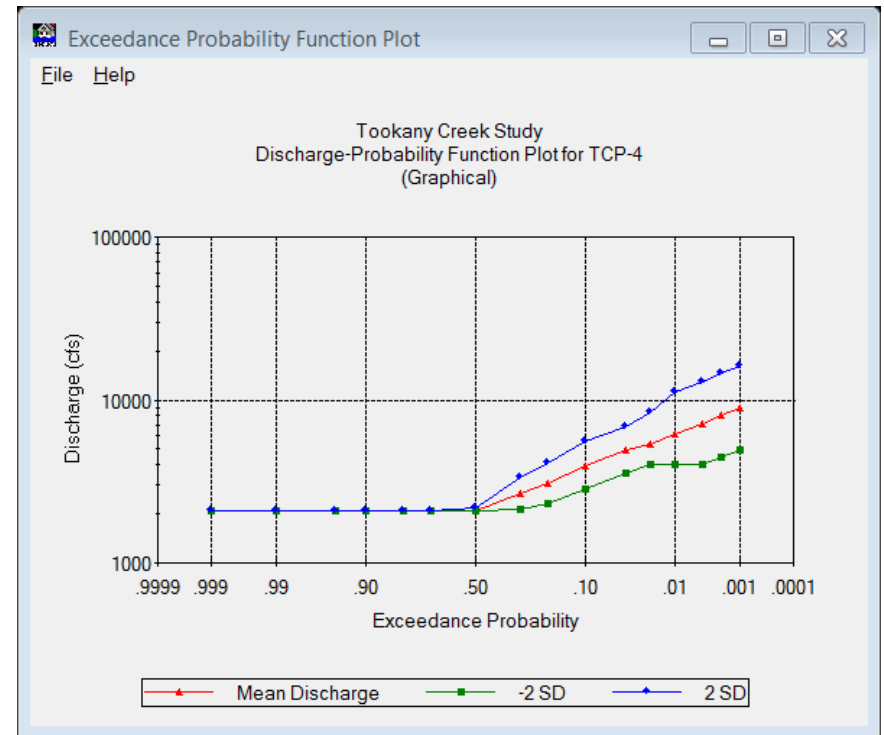
Description: Reach 4 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,081.02	2,075.21	2,078.12	2,083.93	2,086.85
0.9900	2,084.96	2,079.14	2,082.05	2,087.88	2,090.80
0.9500	2,088.48	2,083.45	2,085.97	2,091.00	2,093.52
0.9000	2,090.36	2,087.16	2,088.76	2,091.96	2,093.56
0.8000	2,092.64	2,089.62	2,091.13	2,094.15	2,095.66
0.7000	2,094.28	2,091.59	2,092.94	2,095.63	2,096.97
0.5000	2,097.00	2,094.09	2,095.54	2,145.02	2,194.15
0.3000	2,667.78	2,112.87	2,374.17	2,997.71	3,368.43
0.2000	3,086.00	2,322.36	2,677.09	3,557.37	4,100.74
0.1000	3,961.00	2,814.25	3,338.75	4,699.22	5,575.02
0.0400	4,928.00	3,523.90	4,167.23	5,814.00	6,859.30
0.0200	5,390.00	4,006.92	4,647.29	6,740.49	8,429.36
0.0100	6,135.00	4,010.61	4,960.35	8,253.78	11,104.29
0.0040	7,167.00	4,021.71	5,368.76	9,642.18	12,972.19
0.0020	8,002.00	4,421.02	5,947.86	10,765.55	14,483.53
0.0010	8,873.45	4,902.49	6,595.60	11,937.97	16,060.85



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-5

Function: TCP-5 Use An Existing Function Save

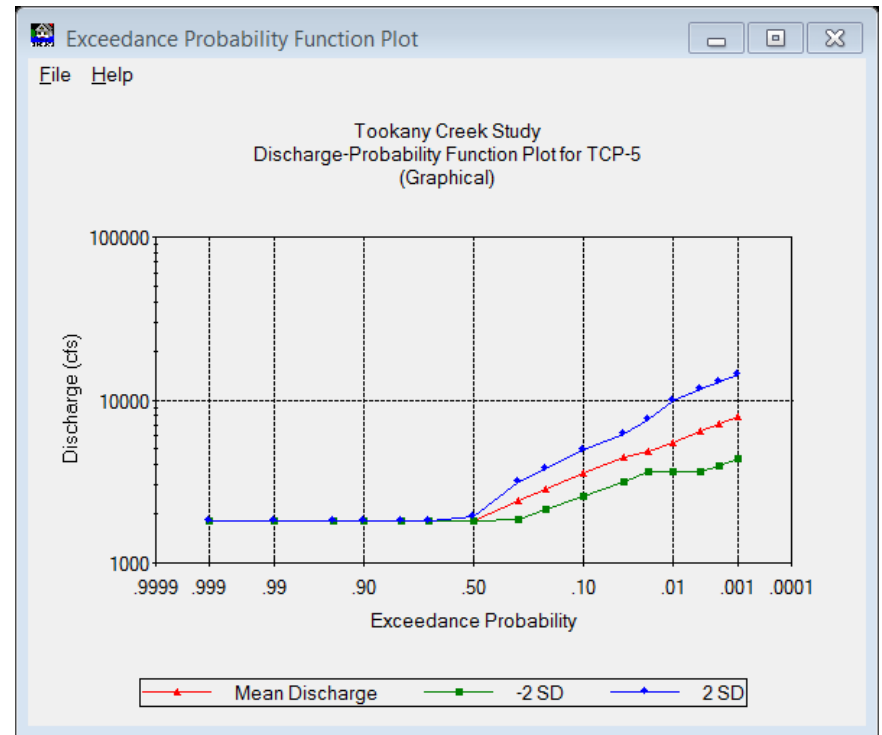
Description: Reach 5 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,812.34	1,807.37	1,809.85	1,814.83	1,817.32
0.9900	1,815.71	1,810.73	1,813.22	1,818.20	1,820.70
0.9500	1,818.72	1,814.42	1,816.56	1,820.87	1,823.02
0.9000	1,820.32	1,817.59	1,818.95	1,821.69	1,823.06
0.8000	1,822.27	1,819.69	1,820.98	1,823.56	1,824.85
0.7000	1,823.68	1,821.38	1,822.53	1,824.82	1,825.98
0.5000	1,826.00	1,823.52	1,824.76	1,873.05	1,921.32
0.3000	2,394.96	1,841.58	2,100.12	2,731.20	3,114.64
0.2000	2,822.00	2,114.84	2,442.96	3,259.84	3,765.63
0.1000	3,560.00	2,559.72	3,018.71	4,198.35	4,951.17
0.0400	4,429.00	3,176.99	3,751.12	5,210.91	6,130.85
0.0200	4,837.00	3,613.65	4,180.81	6,041.96	7,547.09
0.0100	5,506.00	3,616.98	4,462.63	7,408.53	9,968.46
0.0040	6,432.00	3,626.99	4,829.99	8,654.50	11,644.95
0.0020	7,182.00	3,966.92	5,337.65	9,663.65	13,002.82
0.0010	7,964.81	4,399.30	5,919.43	10,716.95	14,420.06



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Function: TCP-6 Use An Existing Function Save

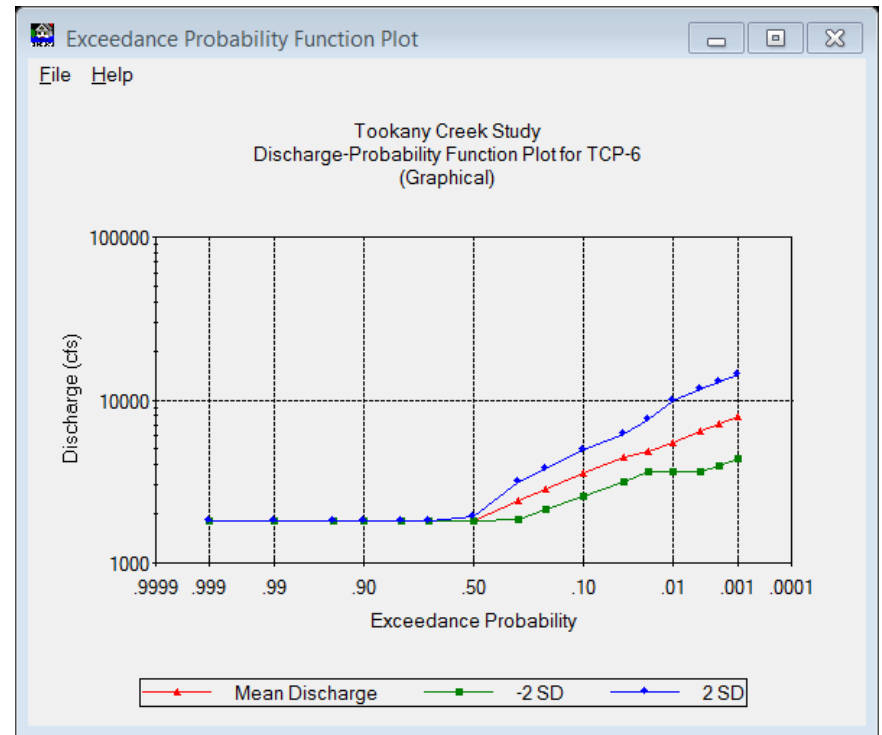
Description: Reach 6 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,812.34	1,807.37	1,809.85	1,814.83	1,817.32
0.9900	1,815.71	1,810.73	1,813.22	1,818.20	1,820.70
0.9500	1,818.72	1,814.42	1,816.56	1,820.87	1,823.02
0.9000	1,820.32	1,817.59	1,818.95	1,821.69	1,823.06
0.8000	1,822.27	1,819.69	1,820.98	1,823.56	1,824.85
0.7000	1,823.68	1,821.38	1,822.53	1,824.82	1,825.98
0.5000	1,826.00	1,823.52	1,824.76	1,873.05	1,921.32
0.3000	2,394.96	1,841.58	2,100.12	2,731.20	3,114.64
0.2000	2,822.00	2,114.84	2,442.96	3,259.84	3,765.63
0.1000	3,560.00	2,559.72	3,018.71	4,198.35	4,951.17
0.0400	4,429.00	3,176.99	3,751.12	5,210.91	6,130.85
0.0200	4,837.00	3,613.65	4,180.81	6,041.96	7,547.09
0.0100	5,506.00	3,616.98	4,462.63	7,408.53	9,968.46
0.0040	6,432.00	3,626.99	4,829.99	8,654.50	11,644.95
0.0020	7,182.00	3,966.92	5,337.65	9,663.65	13,002.82
0.0010	7,964.81	4,399.30	5,919.43	10,716.95	14,420.06





Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-7

Function: TCP-7 Use An Existing Function Save

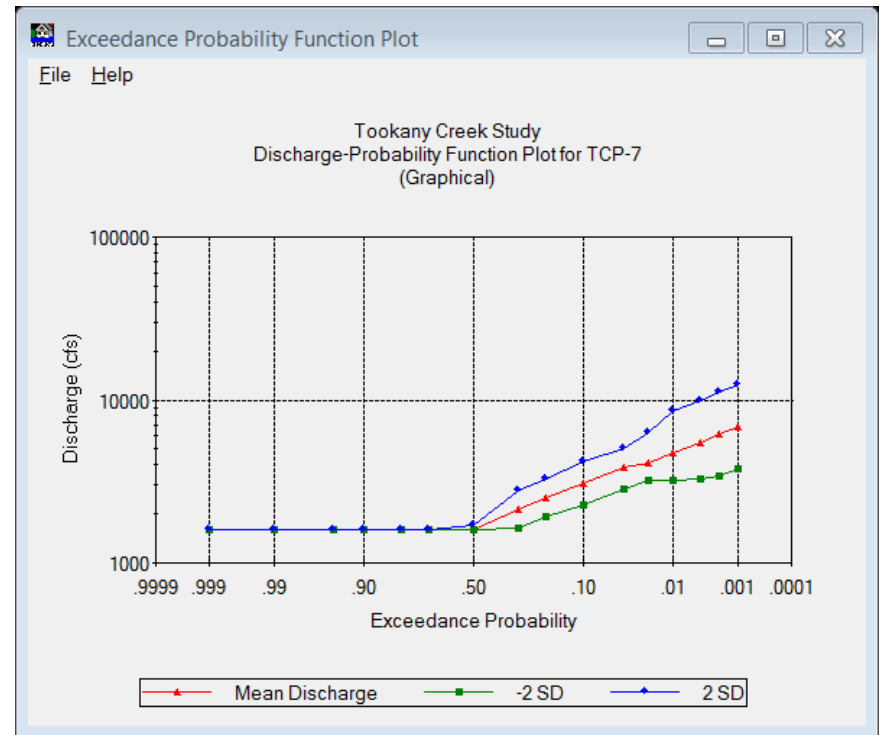
Description: Reach 7 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,603.11	1,598.79	1,600.95	1,605.28	1,607.45
0.9900	1,606.04	1,601.71	1,603.88	1,608.21	1,610.39
0.9500	1,608.66	1,604.92	1,606.79	1,610.54	1,612.41
0.9000	1,610.06	1,607.68	1,608.87	1,611.25	1,612.44
0.8000	1,611.75	1,609.51	1,610.63	1,612.88	1,614.00
0.7000	1,612.98	1,610.98	1,611.98	1,613.98	1,614.98
0.5000	1,615.00	1,612.86	1,613.93	1,657.36	1,700.84
0.3000	2,128.82	1,629.03	1,862.24	2,433.57	2,781.95
0.2000	2,516.00	1,914.67	2,194.83	2,884.16	3,306.19
0.1000	3,088.00	2,262.64	2,643.30	3,607.52	4,214.43
0.0400	3,842.00	2,839.66	3,303.02	4,401.72	5,042.99
0.0200	4,136.00	3,240.81	3,661.14	5,104.69	6,300.26
0.0100	4,708.00	3,243.79	3,907.91	6,334.77	8,523.64
0.0040	5,500.00	3,252.77	4,229.68	7,400.43	9,957.52
0.0020	6,141.00	3,391.96	4,563.99	8,262.92	11,118.03
0.0010	6,810.00	3,761.48	5,061.19	9,163.08	12,329.24



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-8

Function: TCP-8 Use An Existing Function Save

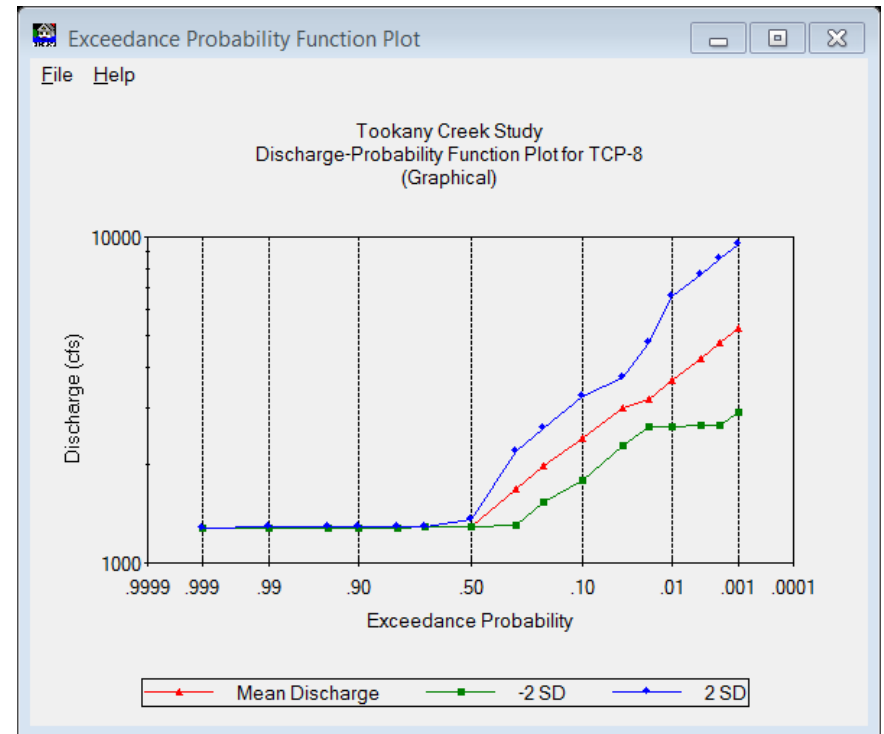
Description: Reach 8 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,279.80	1,276.46	1,278.13	1,281.48	1,283.16
0.9900	1,282.07	1,278.72	1,280.39	1,283.75	1,285.43
0.9500	1,284.10	1,281.20	1,282.65	1,285.54	1,287.00
0.9000	1,285.18	1,283.34	1,284.26	1,286.10	1,287.02
0.8000	1,286.49	1,284.75	1,285.62	1,287.36	1,288.23
0.7000	1,287.43	1,285.89	1,286.66	1,288.21	1,288.98
0.5000	1,289.00	1,287.36	1,288.18	1,322.30	1,356.45
0.3000	1,692.18	1,300.03	1,483.20	1,930.60	2,202.61
0.2000	1,995.00	1,535.88	1,750.45	2,273.71	2,591.37
0.1000	2,413.00	1,786.50	2,076.25	2,804.36	3,259.20
0.0400	3,001.00	2,294.42	2,624.03	3,337.34	3,711.38
0.0200	3,179.00	2,627.59	2,890.17	3,871.62	4,715.13
0.0100	3,619.00	2,630.01	3,085.13	4,870.00	6,553.43
0.0040	4,227.00	2,637.29	3,338.84	5,688.17	7,654.42
0.0020	4,720.00	2,638.50	3,528.99	6,351.59	8,547.16
0.0010	5,234.58	2,890.69	3,889.93	7,044.04	9,478.98



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-9

Function: TCP-9 Use An Existing Function Save

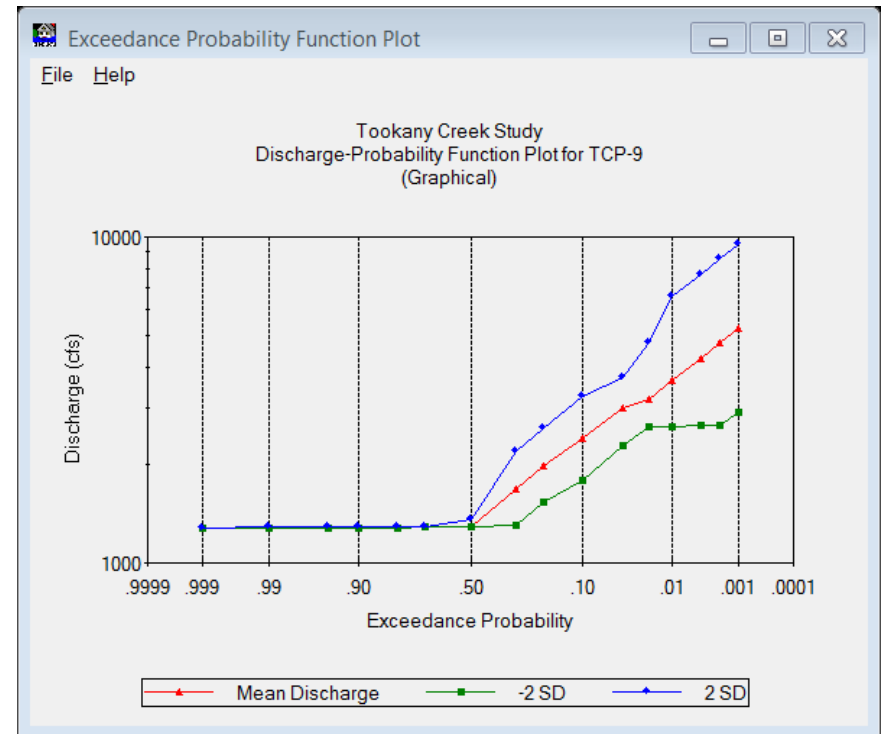
Description: Reach 9 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,279.80	1,276.46	1,278.13	1,281.48	1,283.16
0.9900	1,282.07	1,278.72	1,280.39	1,283.75	1,285.43
0.9500	1,284.10	1,281.20	1,282.65	1,285.54	1,287.00
0.9000	1,285.18	1,283.34	1,284.26	1,286.10	1,287.02
0.8000	1,286.49	1,284.75	1,285.62	1,287.36	1,288.23
0.7000	1,287.43	1,285.89	1,286.66	1,288.21	1,288.98
0.5000	1,289.00	1,287.36	1,288.18	1,322.30	1,356.45
0.3000	1,692.18	1,300.03	1,483.20	1,930.60	2,202.61
0.2000	1,995.00	1,535.88	1,750.45	2,273.71	2,591.37
0.1000	2,413.00	1,786.50	2,076.25	2,804.36	3,259.20
0.0400	3,001.00	2,294.42	2,624.03	3,337.34	3,711.38
0.0200	3,179.00	2,627.59	2,890.17	3,871.62	4,715.13
0.0100	3,619.00	2,630.01	3,085.13	4,870.00	6,553.43
0.0040	4,227.00	2,637.29	3,338.84	5,688.17	7,654.42
0.0020	4,720.00	2,638.50	3,528.99	6,351.59	8,547.16
0.0010	5,234.58	2,890.69	3,889.93	7,044.04	9,478.98



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-10

Function: TCP-10-v2 Use An Existing Function Save

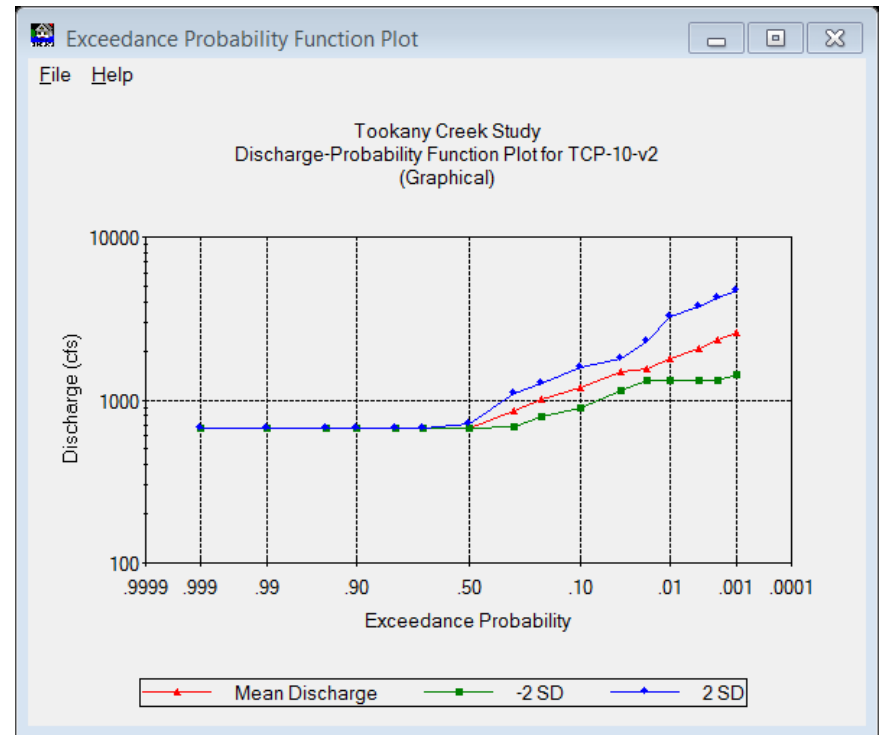
Description: Reach 10 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	670.62	669.02	669.82	671.42	672.22
0.9900	671.70	670.10	670.90	672.50	673.30
0.9500	672.66	671.28	671.97	673.35	674.05
0.9000	673.18	672.30	672.74	673.62	674.06
0.8000	673.80	672.98	673.39	674.22	674.63
0.7000	674.25	673.52	673.89	674.62	674.99
0.5000	675.00	674.25	674.62	690.83	707.03
0.3000	864.45	680.25	766.84	974.49	1,098.54
0.2000	1,004.00	792.22	891.84	1,130.26	1,272.40
0.1000	1,192.00	893.64	1,032.09	1,376.68	1,589.98
0.0400	1,483.00	1,147.14	1,304.30	1,631.87	1,795.68
0.0200	1,562.00	1,315.78	1,433.61	1,893.03	2,294.20
0.0100	1,778.00	1,316.99	1,530.23	2,392.26	3,218.74
0.0040	2,077.00	1,320.63	1,656.19	2,794.56	3,760.02
0.0020	2,319.00	1,321.24	1,750.42	3,120.17	4,198.12
0.0010	2,571.56	1,420.51	1,911.26	3,459.99	4,655.34



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-11

Function: TCP-11 Use An Existing Function Save

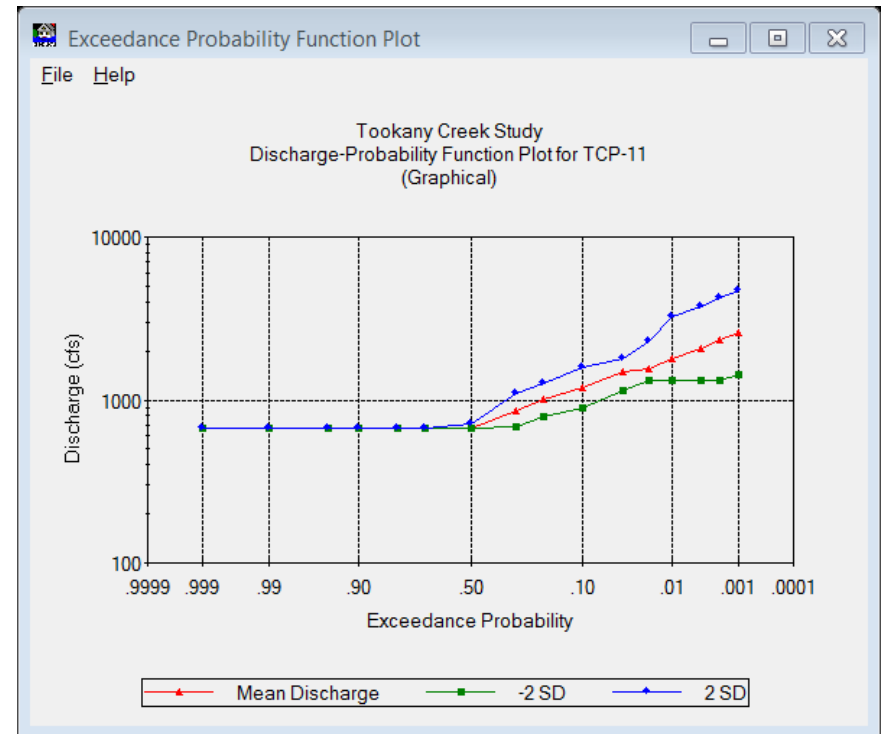
Description: Reach 11 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	670.62	669.02	669.82	671.42	672.22
0.9900	671.70	670.10	670.90	672.50	673.30
0.9500	672.66	671.28	671.97	673.35	674.05
0.9000	673.18	672.30	672.74	673.62	674.06
0.8000	673.80	672.98	673.39	674.22	674.63
0.7000	674.25	673.52	673.89	674.62	674.99
0.5000	675.00	674.25	674.62	690.83	707.03
0.3000	864.45	680.25	766.84	974.49	1,098.54
0.2000	1,004.00	792.22	891.84	1,130.26	1,272.40
0.1000	1,192.00	893.64	1,032.09	1,376.68	1,589.98
0.0400	1,483.00	1,147.14	1,304.30	1,631.87	1,795.68
0.0200	1,562.00	1,315.78	1,433.61	1,893.03	2,294.20
0.0100	1,778.00	1,316.99	1,530.23	2,392.26	3,218.74
0.0040	2,077.00	1,320.63	1,656.19	2,794.56	3,760.02
0.0020	2,319.00	1,321.24	1,750.42	3,120.17	4,198.12
0.0010	2,571.56	1,420.51	1,911.26	3,459.99	4,655.34



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Function: TCP-12 Use An Existing Function Save

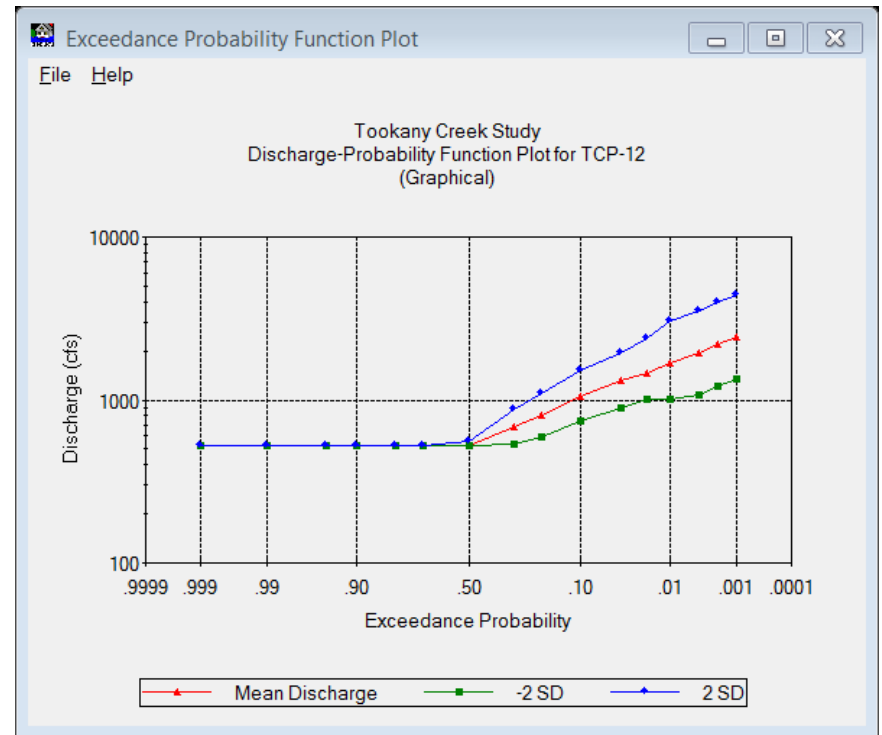
Description: Reach 12 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	526.51	525.30	525.90	527.11	527.72
0.9900	527.32	526.12	526.72	527.93	528.53
0.9500	528.05	527.01	527.53	528.58	529.10
0.9000	528.44	527.78	528.11	528.78	529.11
0.8000	528.92	528.29	528.60	529.23	529.54
0.7000	529.26	528.70	528.98	529.53	529.81
0.5000	529.82	529.26	529.54	542.85	556.19
0.3000	686.85	534.14	605.70	778.87	883.21
0.2000	803.63	590.51	688.88	938.58	1,096.19
0.1000	1,058.19	738.95	884.28	1,266.31	1,515.35
0.0400	1,316.00	894.62	1,085.04	1,596.12	1,935.86
0.0200	1,474.95	1,011.25	1,221.29	1,882.43	2,402.49
0.0100	1,678.81	1,012.18	1,303.56	2,258.76	3,039.05
0.0040	1,961.60	1,083.61	1,457.95	2,639.24	3,550.97
0.0020	2,190.44	1,210.03	1,628.03	2,947.13	3,965.23
0.0010	2,429.30	1,341.97	1,805.56	3,268.51	4,397.63



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Function: TCP-1 Use An Existing Function Save

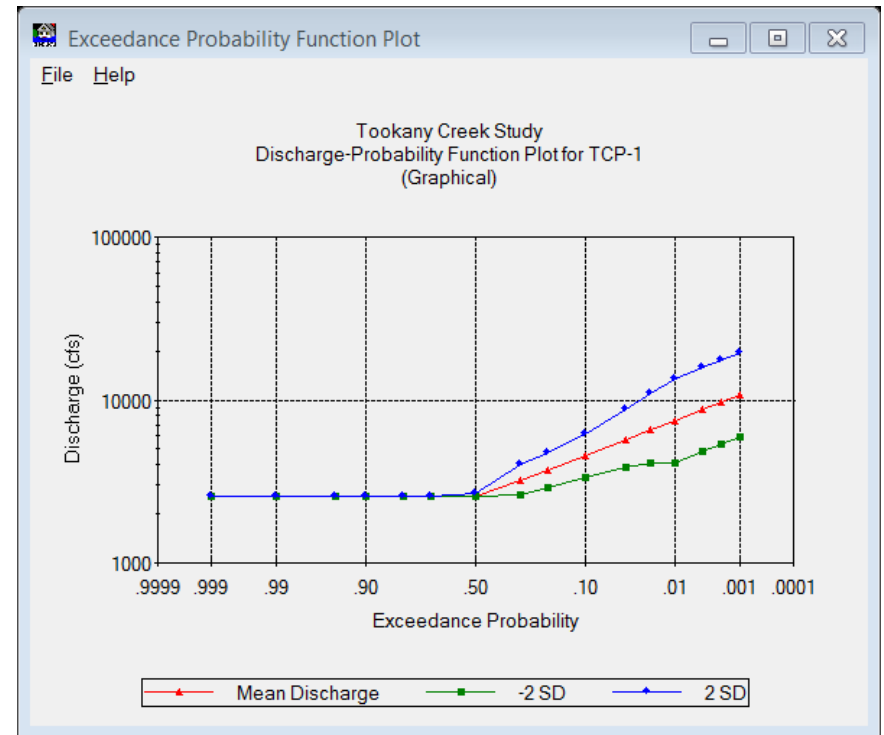
Description: Reach 1 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,559.81	2,552.47	2,556.14	2,563.49	2,567.17
0.9900	2,564.79	2,557.43	2,561.11	2,568.47	2,572.16
0.9500	2,569.24	2,562.88	2,566.06	2,572.42	2,575.60
0.9000	2,571.61	2,567.57	2,569.59	2,573.63	2,575.65
0.8000	2,574.49	2,570.67	2,572.58	2,576.39	2,578.30
0.7000	2,576.56	2,573.17	2,574.86	2,578.26	2,579.96
0.5000	2,580.00	2,576.29	2,578.14	2,636.03	2,693.27
0.3000	3,240.73	2,598.49	2,901.90	3,619.12	4,041.69
0.2000	3,720.00	2,898.69	3,283.76	4,214.19	4,774.03
0.1000	4,571.00	3,346.65	3,911.21	5,342.10	6,243.27
0.0400	5,687.00	3,827.07	4,665.25	7,073.45	8,797.91
0.0200	6,529.00	4,133.55	5,194.99	8,502.26	11,071.91
0.0100	7,432.00	4,137.36	5,545.16	10,000.47	13,456.60
0.0040	8,683.00	4,795.57	6,452.90	11,683.82	15,721.71
0.0020	9,695.00	5,354.49	7,204.98	13,045.56	17,554.06
0.0010	10,751.21	5,937.83	7,989.92	14,466.79	19,466.46



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Function: TCP-2 Use An Existing Function Save

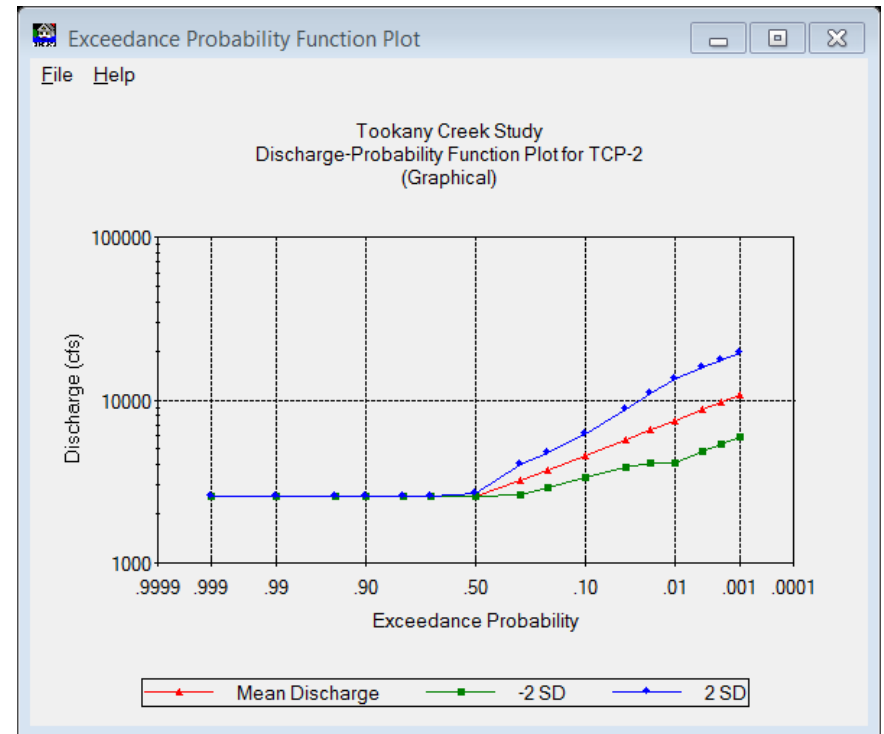
Description: Reach 2 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,559.81	2,552.47	2,556.14	2,563.49	2,567.17
0.9900	2,564.79	2,557.43	2,561.11	2,568.47	2,572.16
0.9500	2,569.24	2,562.88	2,566.06	2,572.42	2,575.60
0.9000	2,571.61	2,567.57	2,569.59	2,573.63	2,575.65
0.8000	2,574.49	2,570.67	2,572.58	2,576.39	2,578.30
0.7000	2,576.56	2,573.17	2,574.86	2,578.26	2,579.96
0.5000	2,580.00	2,576.29	2,578.14	2,636.03	2,693.27
0.3000	3,240.73	2,598.49	2,901.90	3,619.12	4,041.69
0.2000	3,720.00	2,898.69	3,283.76	4,214.19	4,774.03
0.1000	4,571.00	3,346.65	3,911.21	5,342.10	6,243.27
0.0400	5,687.00	3,827.07	4,665.25	7,073.45	8,797.91
0.0200	6,529.00	4,133.55	5,194.99	8,502.26	11,071.91
0.0100	7,432.00	4,137.36	5,545.16	10,000.47	13,456.60
0.0040	8,683.00	4,795.57	6,452.90	11,683.82	15,721.71
0.0020	9,695.00	5,354.49	7,204.98	13,045.56	17,554.06
0.0010	10,751.21	5,937.83	7,989.92	14,466.79	19,466.46





Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-3

Function: TCP-3 Use An Existing Function Save

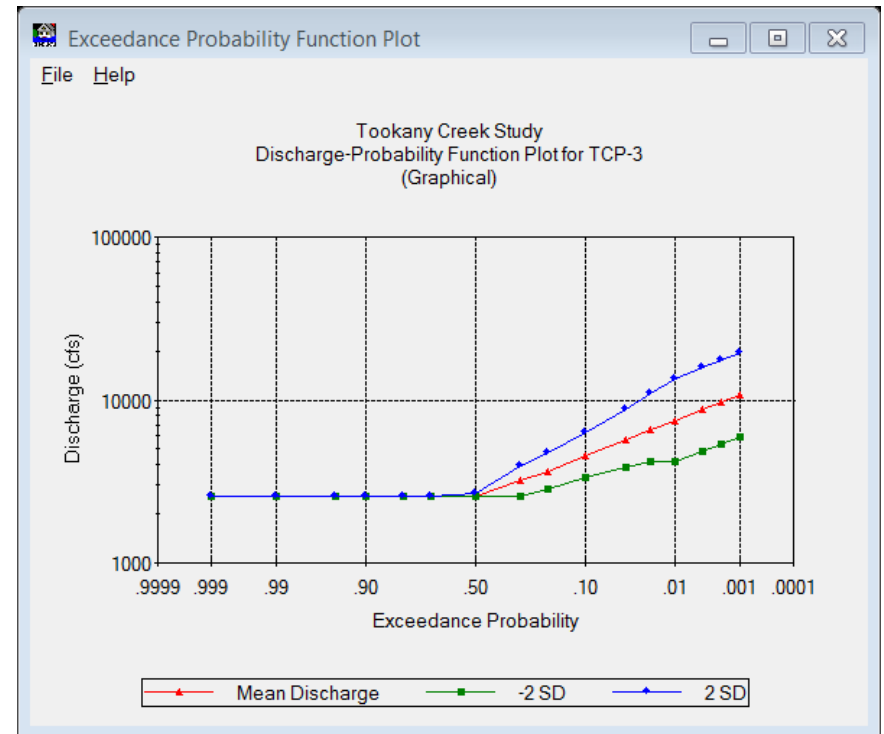
Description: Reach 3 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,547.92	2,540.62	2,544.26	2,551.58	2,555.24
0.9900	2,552.87	2,545.55	2,549.21	2,556.53	2,560.20
0.9500	2,557.29	2,550.97	2,554.13	2,560.46	2,563.63
0.9000	2,559.65	2,555.64	2,557.64	2,561.66	2,563.68
0.8000	2,562.51	2,558.72	2,560.62	2,564.41	2,566.31
0.7000	2,564.58	2,561.20	2,562.89	2,566.27	2,567.96
0.5000	2,568.00	2,564.31	2,566.15	2,622.27	2,677.68
0.3000	3,205.70	2,585.90	2,879.17	3,569.26	3,974.05
0.2000	3,666.00	2,831.21	3,221.68	4,171.60	4,746.93
0.1000	4,589.00	3,317.80	3,901.97	5,397.00	6,347.26
0.0400	5,708.00	3,842.91	4,683.51	7,083.05	8,789.35
0.0200	6,539.00	4,169.56	5,221.57	8,499.49	11,047.76
0.0100	7,443.00	4,173.41	5,573.39	10,013.95	13,472.98
0.0040	8,695.00	4,803.46	6,462.67	11,698.42	15,739.29
0.0020	9,709.00	5,363.63	7,216.33	13,062.67	17,574.79
0.0010	10,767.37	5,948.32	8,002.98	14,486.63	19,490.61



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-4

Function: TCP-4 Use An Existing Function Save

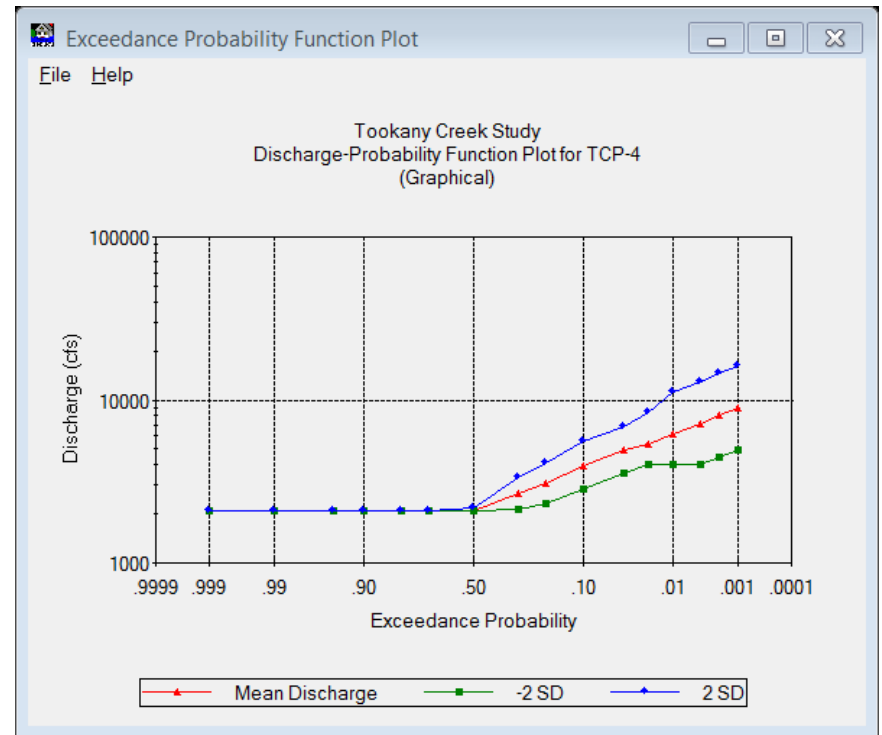
Description: Reach 4 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,081.02	2,075.21	2,078.12	2,083.93	2,086.85
0.9900	2,084.96	2,079.14	2,082.05	2,087.88	2,090.80
0.9500	2,088.48	2,083.45	2,085.97	2,091.00	2,093.52
0.9000	2,090.36	2,087.16	2,088.76	2,091.96	2,093.56
0.8000	2,092.64	2,089.62	2,091.13	2,094.15	2,095.66
0.7000	2,094.28	2,091.59	2,092.94	2,095.63	2,096.97
0.5000	2,097.00	2,094.09	2,095.54	2,145.02	2,194.15
0.3000	2,667.78	2,112.87	2,374.17	2,997.71	3,368.43
0.2000	3,086.00	2,322.36	2,677.09	3,557.37	4,100.74
0.1000	3,961.00	2,814.25	3,338.75	4,699.22	5,575.02
0.0400	4,928.00	3,523.90	4,167.23	5,814.00	6,859.30
0.0200	5,390.00	4,006.92	4,647.29	6,740.49	8,429.36
0.0100	6,135.00	4,010.61	4,960.35	8,253.78	11,104.29
0.0040	7,167.00	4,021.71	5,368.76	9,642.18	12,972.19
0.0020	8,002.00	4,421.02	5,947.86	10,765.55	14,483.53
0.0010	8,873.45	4,902.49	6,595.60	11,937.97	16,060.85



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-5

Function: TCP-5 Use An Existing Function Save

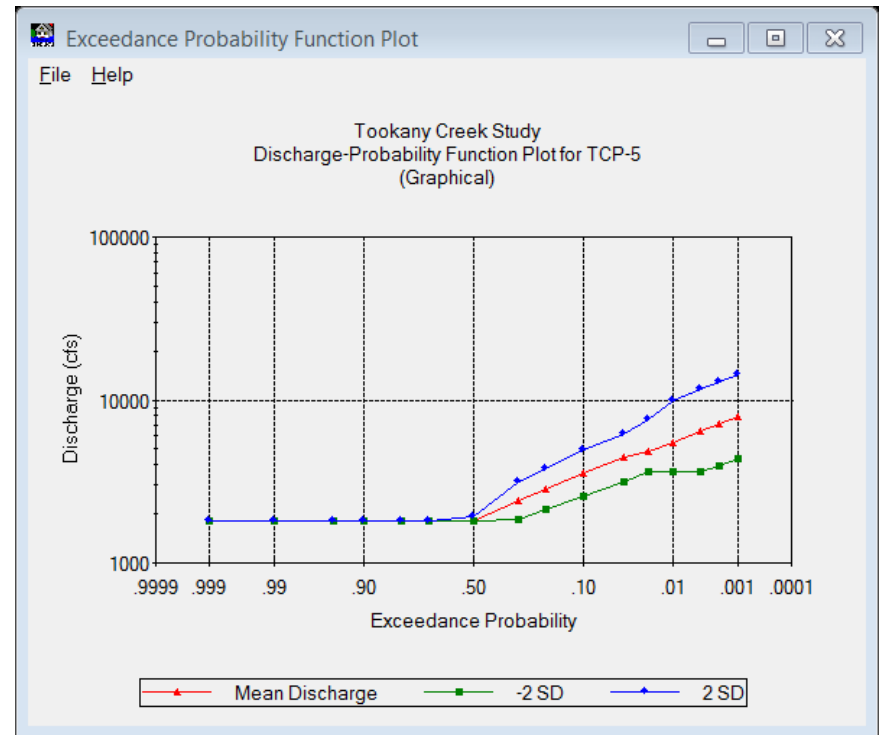
Description: Reach 5 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,812.34	1,807.37	1,809.85	1,814.83	1,817.32
0.9900	1,815.71	1,810.73	1,813.22	1,818.20	1,820.70
0.9500	1,818.72	1,814.42	1,816.56	1,820.87	1,823.02
0.9000	1,820.32	1,817.59	1,818.95	1,821.69	1,823.06
0.8000	1,822.27	1,819.69	1,820.98	1,823.56	1,824.85
0.7000	1,823.68	1,821.38	1,822.53	1,824.82	1,825.98
0.5000	1,826.00	1,823.52	1,824.76	1,873.05	1,921.32
0.3000	2,394.96	1,841.58	2,100.12	2,731.20	3,114.64
0.2000	2,822.00	2,114.84	2,442.96	3,259.84	3,765.63
0.1000	3,560.00	2,559.72	3,018.71	4,198.35	4,951.17
0.0400	4,429.00	3,176.99	3,751.12	5,210.91	6,130.85
0.0200	4,837.00	3,613.65	4,180.81	6,041.96	7,547.09
0.0100	5,506.00	3,616.98	4,462.63	7,408.53	9,968.46
0.0040	6,432.00	3,626.99	4,829.99	8,654.50	11,644.95
0.0020	7,182.00	3,966.92	5,337.65	9,663.65	13,002.82
0.0010	7,964.81	4,399.30	5,919.43	10,716.95	14,420.06



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-6

Function: TCP-6 Use An Existing Function Save

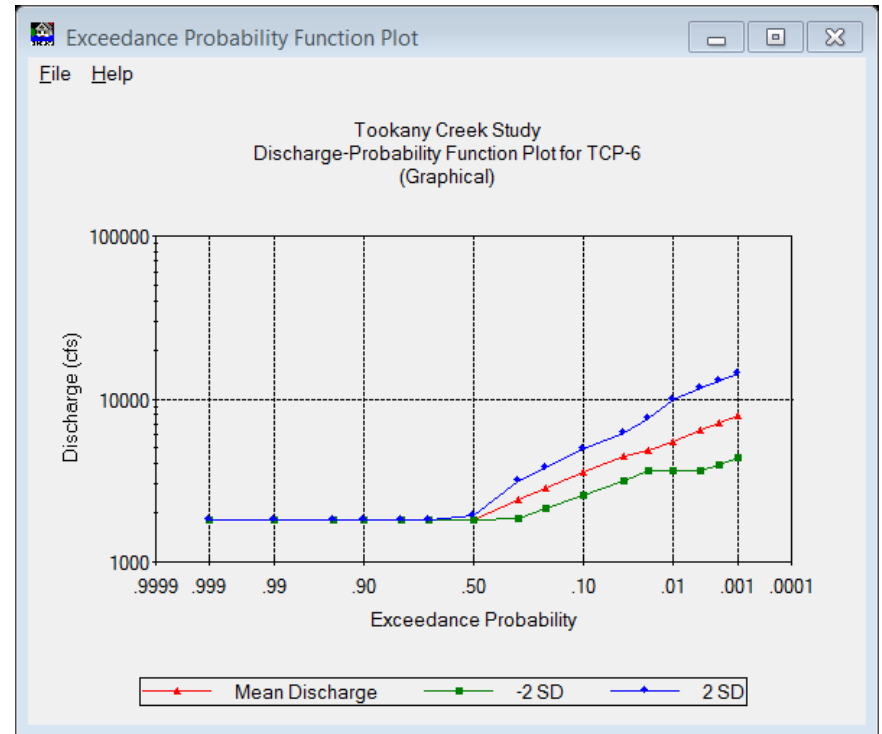
Description: Reach 6 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,812.34	1,807.37	1,809.85	1,814.83	1,817.32
0.9900	1,815.71	1,810.73	1,813.22	1,818.20	1,820.70
0.9500	1,818.72	1,814.42	1,816.56	1,820.87	1,823.02
0.9000	1,820.32	1,817.59	1,818.95	1,821.69	1,823.06
0.8000	1,822.27	1,819.69	1,820.98	1,823.56	1,824.85
0.7000	1,823.68	1,821.38	1,822.53	1,824.82	1,825.98
0.5000	1,826.00	1,823.52	1,824.76	1,873.05	1,921.32
0.3000	2,394.96	1,841.58	2,100.12	2,731.20	3,114.64
0.2000	2,822.00	2,114.84	2,442.96	3,259.84	3,765.63
0.1000	3,560.00	2,559.72	3,018.71	4,198.35	4,951.17
0.0400	4,429.00	3,176.99	3,751.12	5,210.91	6,130.85
0.0200	4,837.00	3,613.65	4,180.81	6,041.96	7,547.09
0.0100	5,506.00	3,616.98	4,462.63	7,408.53	9,968.46
0.0040	6,432.00	3,626.99	4,829.99	8,654.50	11,644.95
0.0020	7,182.00	3,966.92	5,337.65	9,663.65	13,002.82
0.0010	7,964.81	4,399.30	5,919.43	10,716.95	14,420.06



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-7

Function: TCP-7 Use An Existing Function Save

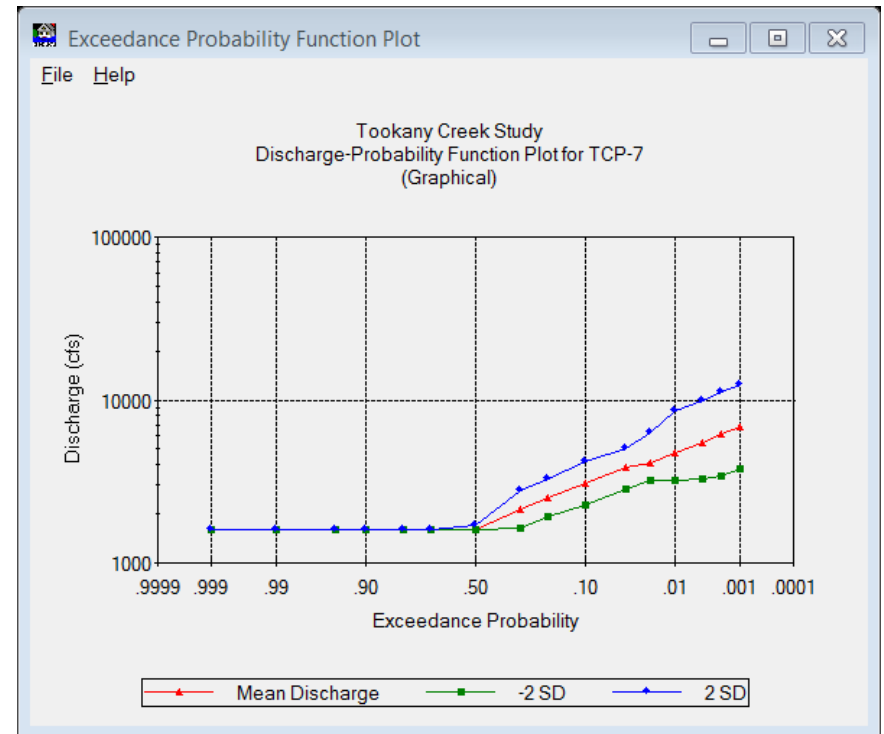
Description: Reach 7 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,603.11	1,598.79	1,600.95	1,605.28	1,607.45
0.9900	1,606.04	1,601.71	1,603.88	1,608.21	1,610.39
0.9500	1,608.66	1,604.92	1,606.79	1,610.54	1,612.41
0.9000	1,610.06	1,607.68	1,608.87	1,611.25	1,612.44
0.8000	1,611.75	1,609.51	1,610.63	1,612.88	1,614.00
0.7000	1,612.98	1,610.98	1,611.98	1,613.98	1,614.98
0.5000	1,615.00	1,612.86	1,613.93	1,657.36	1,700.84
0.3000	2,128.82	1,629.03	1,862.24	2,433.57	2,781.95
0.2000	2,516.00	1,914.67	2,194.83	2,884.16	3,306.19
0.1000	3,088.00	2,262.64	2,643.30	3,607.52	4,214.43
0.0400	3,842.00	2,839.66	3,303.02	4,401.72	5,042.99
0.0200	4,136.00	3,240.81	3,661.14	5,104.69	6,300.26
0.0100	4,708.00	3,243.79	3,907.91	6,334.77	8,523.64
0.0040	5,500.00	3,252.77	4,229.68	7,400.43	9,957.52
0.0020	6,141.00	3,391.96	4,563.99	8,262.92	11,118.03
0.0010	6,810.00	3,761.48	5,061.19	9,163.08	12,329.24



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Function: TCP-8 Use An Existing Function Save

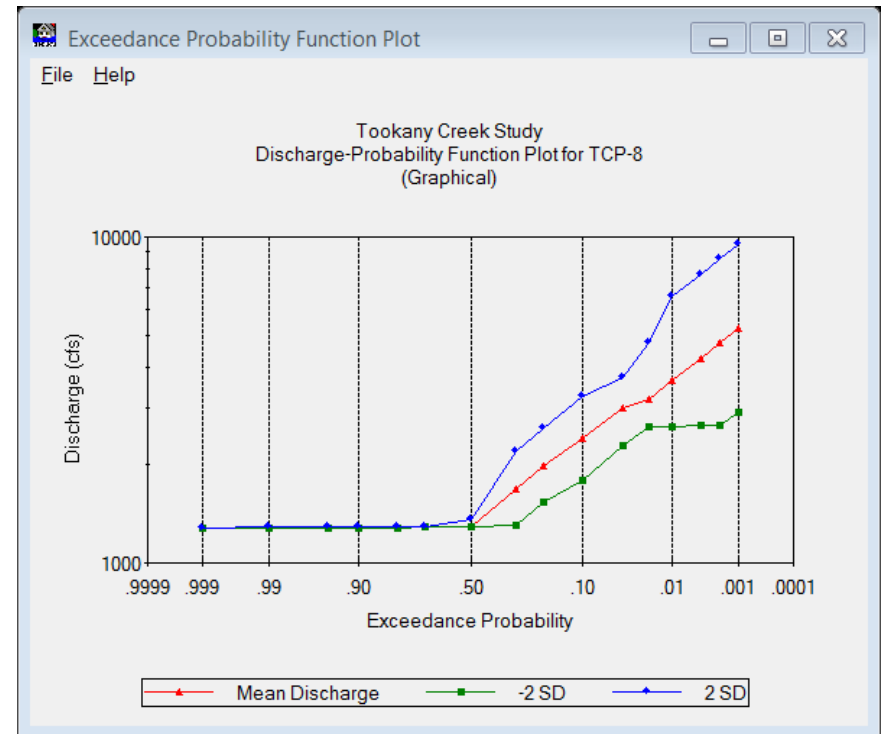
Description: Reach 8 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,279.80	1,276.46	1,278.13	1,281.48	1,283.16
0.9900	1,282.07	1,278.72	1,280.39	1,283.75	1,285.43
0.9500	1,284.10	1,281.20	1,282.65	1,285.54	1,287.00
0.9000	1,285.18	1,283.34	1,284.26	1,286.10	1,287.02
0.8000	1,286.49	1,284.75	1,285.62	1,287.36	1,288.23
0.7000	1,287.43	1,285.89	1,286.66	1,288.21	1,288.98
0.5000	1,289.00	1,287.36	1,288.18	1,322.30	1,356.45
0.3000	1,692.18	1,300.03	1,483.20	1,930.60	2,202.61
0.2000	1,995.00	1,535.88	1,750.45	2,273.71	2,591.37
0.1000	2,413.00	1,786.50	2,076.25	2,804.36	3,259.20
0.0400	3,001.00	2,294.42	2,624.03	3,337.34	3,711.38
0.0200	3,179.00	2,627.59	2,890.17	3,871.62	4,715.13
0.0100	3,619.00	2,630.01	3,085.13	4,870.00	6,553.43
0.0040	4,227.00	2,637.29	3,338.84	5,688.17	7,654.42
0.0020	4,720.00	2,638.50	3,528.99	6,351.59	8,547.16
0.0010	5,234.58	2,890.69	3,889.93	7,044.04	9,478.98



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-9

Function: TCP-9 Use An Existing Function Save

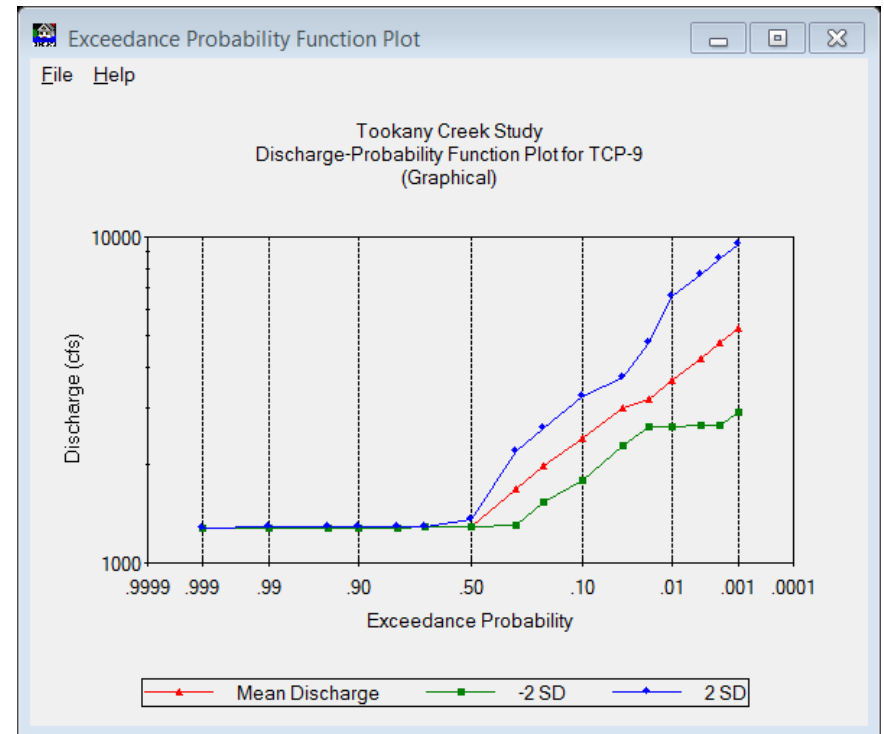
Description: Reach 9 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,279.80	1,276.46	1,278.13	1,281.48	1,283.16
0.9900	1,282.07	1,278.72	1,280.39	1,283.75	1,285.43
0.9500	1,284.10	1,281.20	1,282.65	1,285.54	1,287.00
0.9000	1,285.18	1,283.34	1,284.26	1,286.10	1,287.02
0.8000	1,286.49	1,284.75	1,285.62	1,287.36	1,288.23
0.7000	1,287.43	1,285.89	1,286.66	1,288.21	1,288.98
0.5000	1,289.00	1,287.36	1,288.18	1,322.30	1,356.45
0.3000	1,692.18	1,300.03	1,483.20	1,930.60	2,202.61
0.2000	1,995.00	1,535.88	1,750.45	2,273.71	2,591.37
0.1000	2,413.00	1,786.50	2,076.25	2,804.36	3,259.20
0.0400	3,001.00	2,294.42	2,624.03	3,337.34	3,711.38
0.0200	3,179.00	2,627.59	2,890.17	3,871.62	4,715.13
0.0100	3,619.00	2,630.01	3,085.13	4,870.00	6,553.43
0.0040	4,227.00	2,637.29	3,338.84	5,688.17	7,654.42
0.0020	4,720.00	2,638.50	3,528.99	6,351.59	8,547.16
0.0010	5,234.58	2,890.69	3,889.93	7,044.04	9,478.98



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-10

Function: TCP-10 Use An Existing Function Save

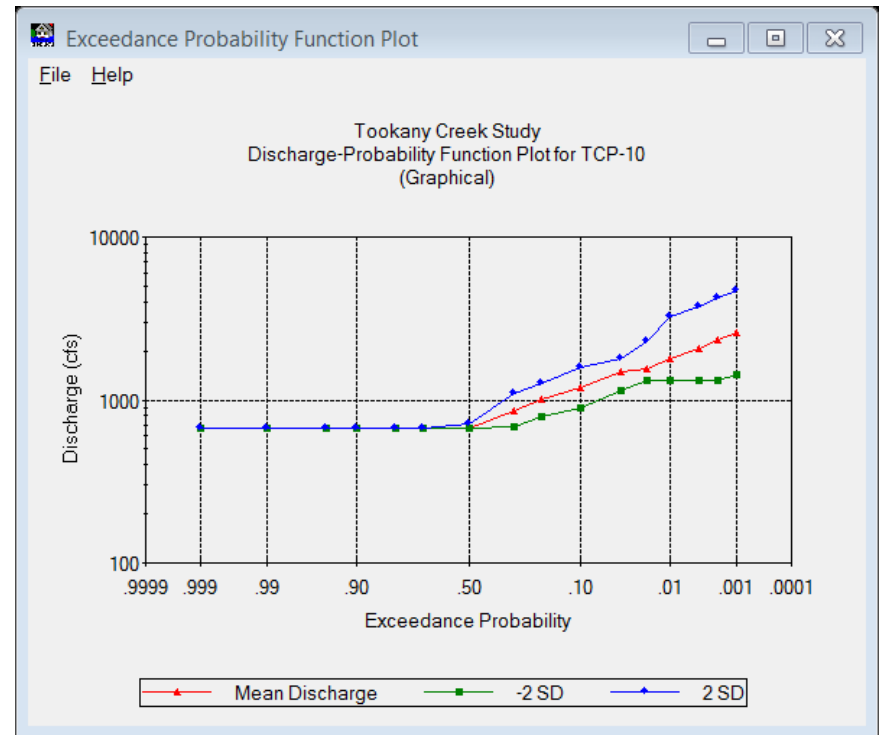
Description: Reach 10 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	670.62	669.02	669.82	671.42	672.22
0.9900	671.70	670.10	670.90	672.50	673.30
0.9500	672.66	671.28	671.97	673.35	674.05
0.9000	673.18	672.30	672.74	673.62	674.06
0.8000	673.80	672.98	673.39	674.22	674.63
0.7000	674.25	673.52	673.89	674.62	674.99
0.5000	675.00	674.25	674.62	690.83	707.03
0.3000	864.45	680.25	766.84	974.49	1,098.54
0.2000	1,004.00	792.22	891.84	1,130.26	1,272.40
0.1000	1,192.00	893.64	1,032.09	1,376.68	1,589.98
0.0400	1,483.00	1,147.14	1,304.30	1,631.87	1,795.68
0.0200	1,562.00	1,315.78	1,433.61	1,893.03	2,294.20
0.0100	1,778.00	1,316.99	1,530.23	2,392.26	3,218.74
0.0040	2,077.00	1,320.63	1,656.19	2,794.56	3,760.02
0.0020	2,319.00	1,321.24	1,750.42	3,120.17	4,198.12
0.0010	2,571.56	1,420.51	1,911.26	3,459.99	4,655.34





Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-11

Function: TCP-11 Use An Existing Function Save

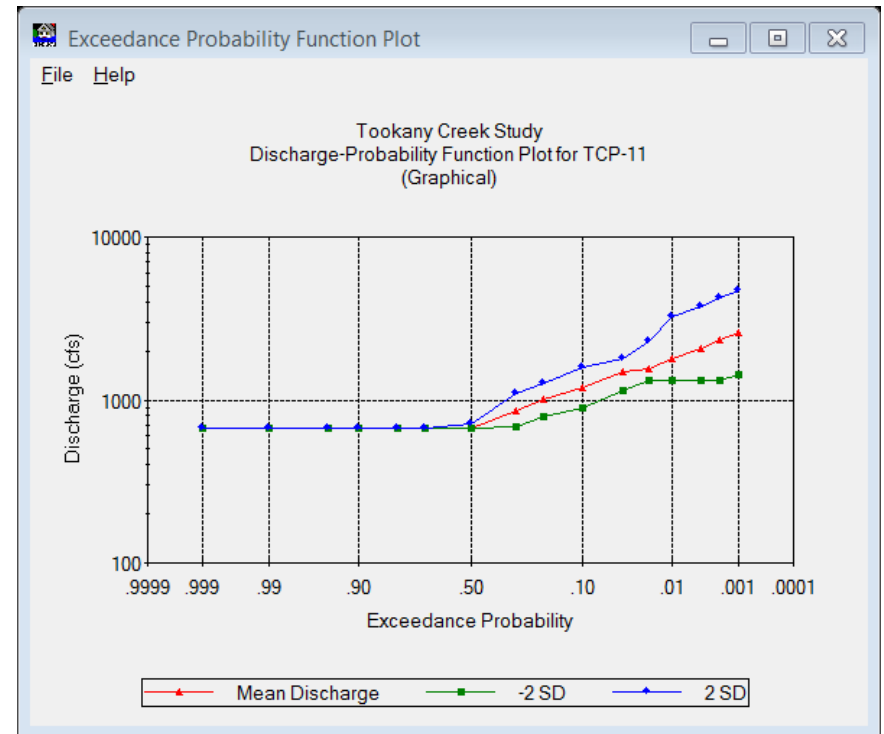
Description: Reach 11 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	670.62	669.02	669.82	671.42	672.22
0.9900	671.70	670.10	670.90	672.50	673.30
0.9500	672.66	671.28	671.97	673.35	674.05
0.9000	673.18	672.30	672.74	673.62	674.06
0.8000	673.80	672.98	673.39	674.22	674.63
0.7000	674.25	673.52	673.89	674.62	674.99
0.5000	675.00	674.25	674.62	690.83	707.03
0.3000	864.45	680.25	766.84	974.49	1,098.54
0.2000	1,004.00	792.22	891.84	1,130.26	1,272.40
0.1000	1,192.00	893.64	1,032.09	1,376.68	1,589.98
0.0400	1,483.00	1,147.14	1,304.30	1,631.87	1,795.68
0.0200	1,562.00	1,315.78	1,433.61	1,893.03	2,294.20
0.0100	1,778.00	1,316.99	1,530.23	2,392.26	3,218.74
0.0040	2,077.00	1,320.63	1,656.19	2,794.56	3,760.02
0.0020	2,319.00	1,321.24	1,750.42	3,120.17	4,198.12
0.0010	2,571.56	1,420.51	1,911.26	3,459.99	4,655.34



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Function: TCP-12 Use An Existing Function Save

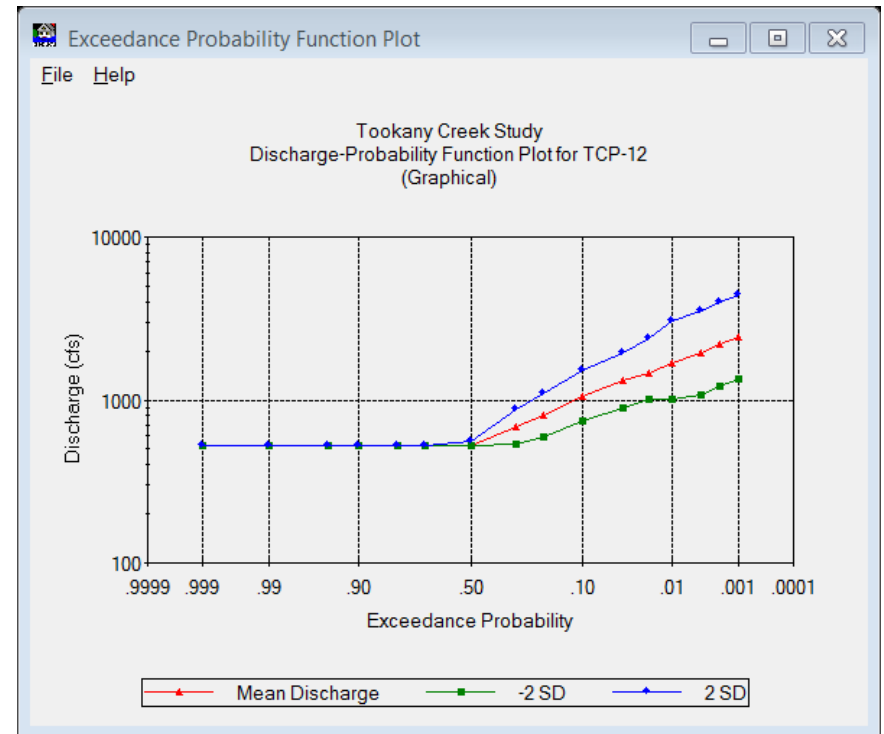
Description: Reach 12 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	526.51	525.30	525.90	527.11	527.72
0.9900	527.32	526.12	526.72	527.93	528.53
0.9500	528.05	527.01	527.53	528.58	529.10
0.9000	528.44	527.78	528.11	528.78	529.11
0.8000	528.92	528.29	528.60	529.23	529.54
0.7000	529.26	528.70	528.98	529.53	529.81
0.5000	529.82	529.26	529.54	542.85	556.19
0.3000	686.85	534.14	605.70	778.87	883.21
0.2000	803.63	590.51	688.88	938.58	1,096.19
0.1000	1,058.19	738.95	884.28	1,266.31	1,515.35
0.0400	1,316.00	894.62	1,085.04	1,596.12	1,935.86
0.0200	1,474.95	1,011.25	1,221.29	1,882.43	2,402.49
0.0100	1,678.81	1,012.18	1,303.56	2,258.76	3,039.05
0.0040	1,961.60	1,083.61	1,457.95	2,639.24	3,550.97
0.0020	2,190.44	1,210.03	1,628.03	2,947.13	3,965.23
0.0010	2,429.30	1,341.97	1,805.56	3,268.51	4,397.63



## Stage-Discharge Functions

Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-1

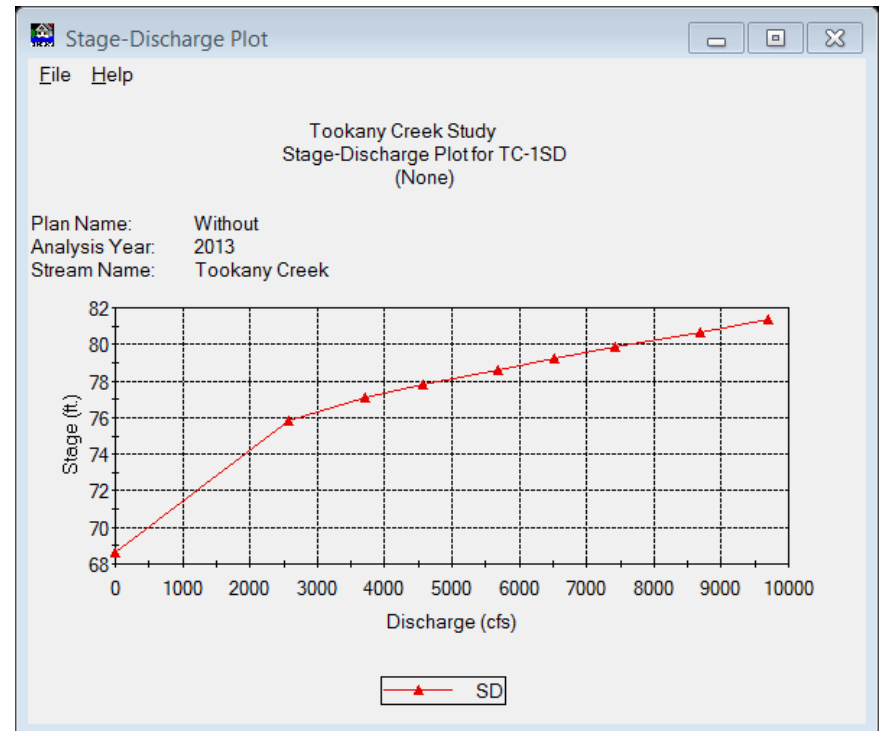
Function: TC-1SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	68.61
2	2580.00	75.86
3	3720.00	77.09
4	4571.00	77.81
5	5687.00	78.63
6	6529.00	79.24
7	7432.00	79.85
8	8683.00	80.69
9	9695.00	81.38



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Function: TC-2SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

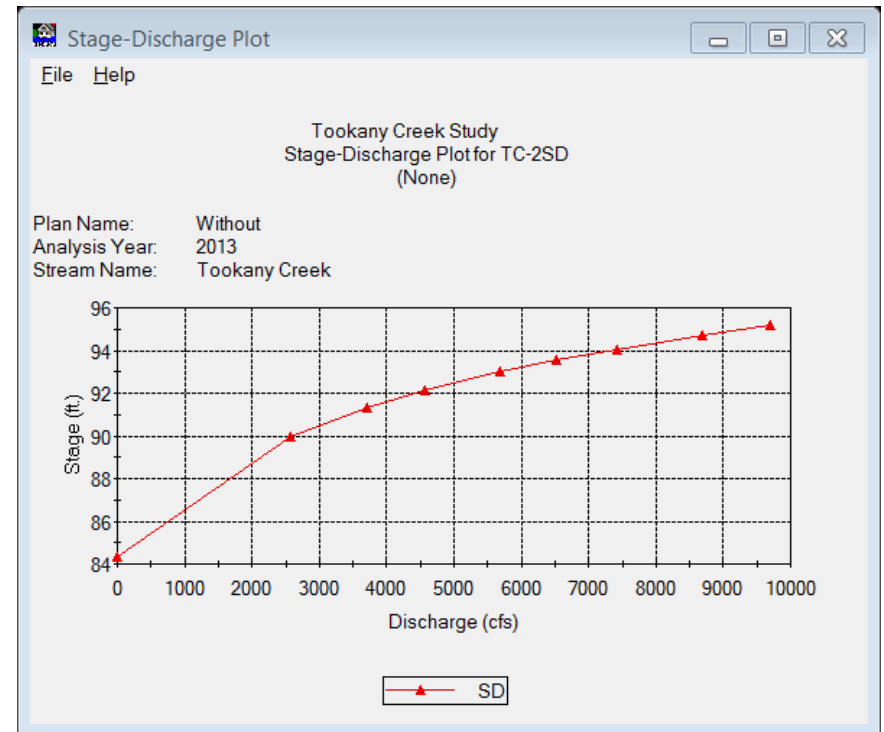
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	84.32
2	2580.00	89.98
3	3720.00	91.34
4	4571.00	92.16
5	5687.00	93.02
6	6529.00	93.57
7	7432.00	94.05
8	8683.00	94.71
9	9695.00	95.22



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-3

Function: TC-3SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

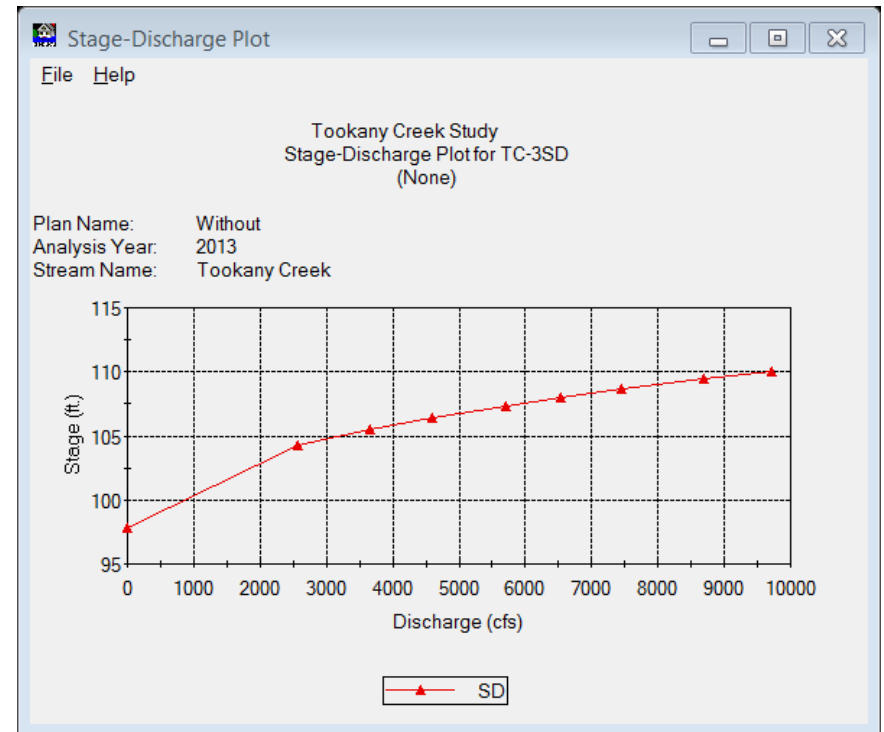
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	97.87
2	2568.00	104.29
3	3666.00	105.52
4	4589.00	106.39
5	5708.00	107.32
6	6539.00	107.98
7	7443.00	108.65
8	8695.00	109.45
9	9709.00	110.03



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Function: TC-4SD Use An Existing Function Plot..

Description: Existing Conditions Tabulate...

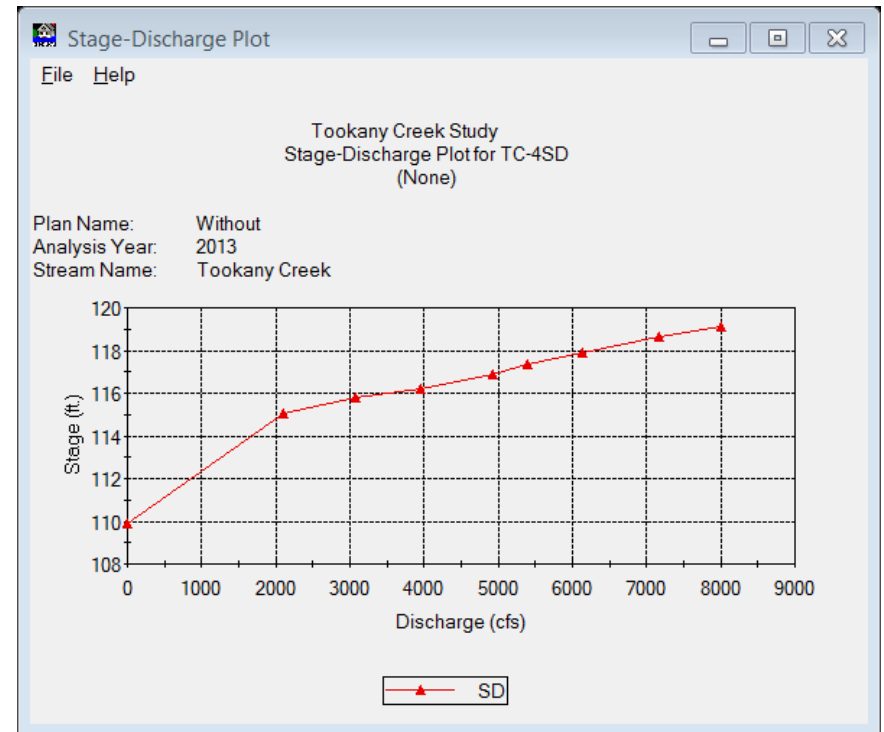
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	109.89
2	2097.00	115.06
3	3086.00	115.78
4	3961.00	116.20
5	4928.00	116.90
6	5390.00	117.36
7	6135.00	117.93
8	7167.00	118.62
9	8002.00	119.12



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-5

Function: TC-5SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

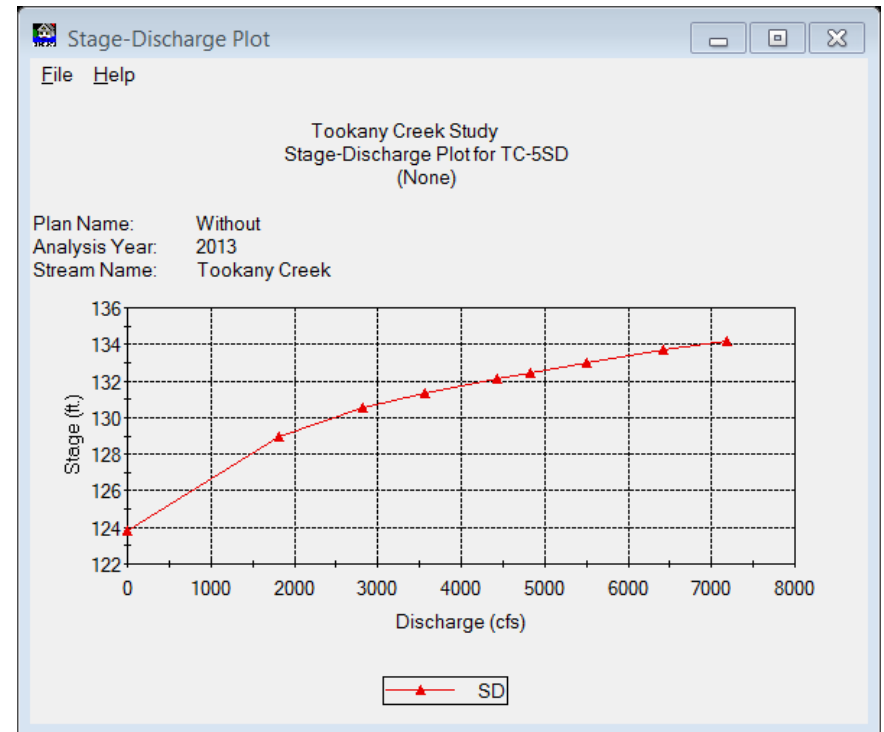
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	123.83
2	1826.00	128.93
3	2822.00	130.54
4	3560.00	131.31
5	4429.00	132.10
6	4837.00	132.44
7	5506.00	132.98
8	6432.00	133.69
9	7182.00	134.19



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Function: TC-6SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

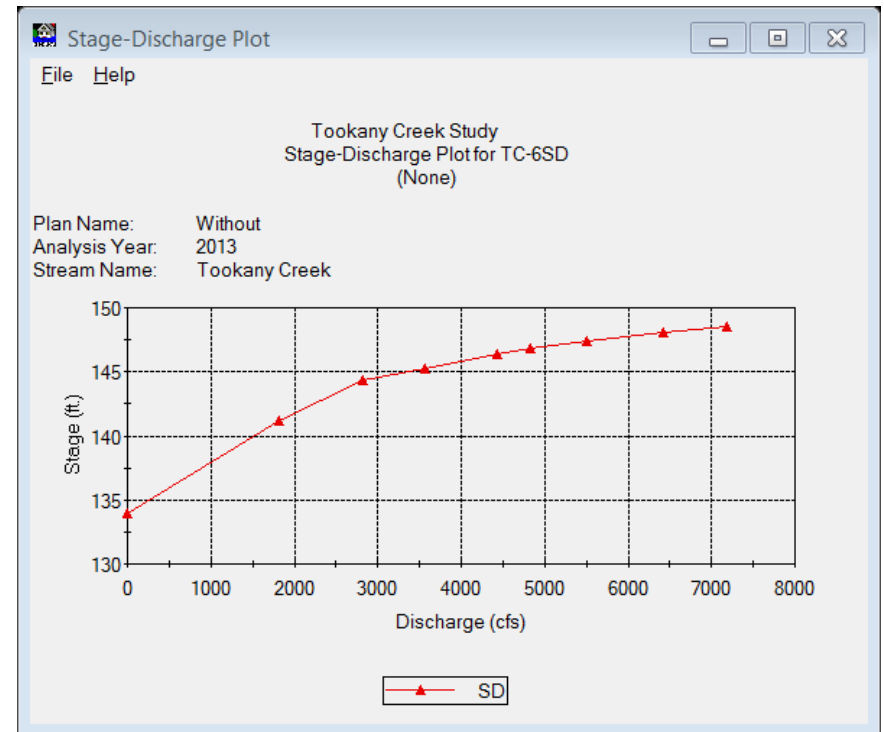
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	133.94
2	1826.00	141.18
3	2822.00	144.30
4	3560.00	145.25
5	4429.00	146.42
6	4837.00	146.78
7	5506.00	147.37
8	6432.00	148.05
9	7182.00	148.52





Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-7

Function: TC-7SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

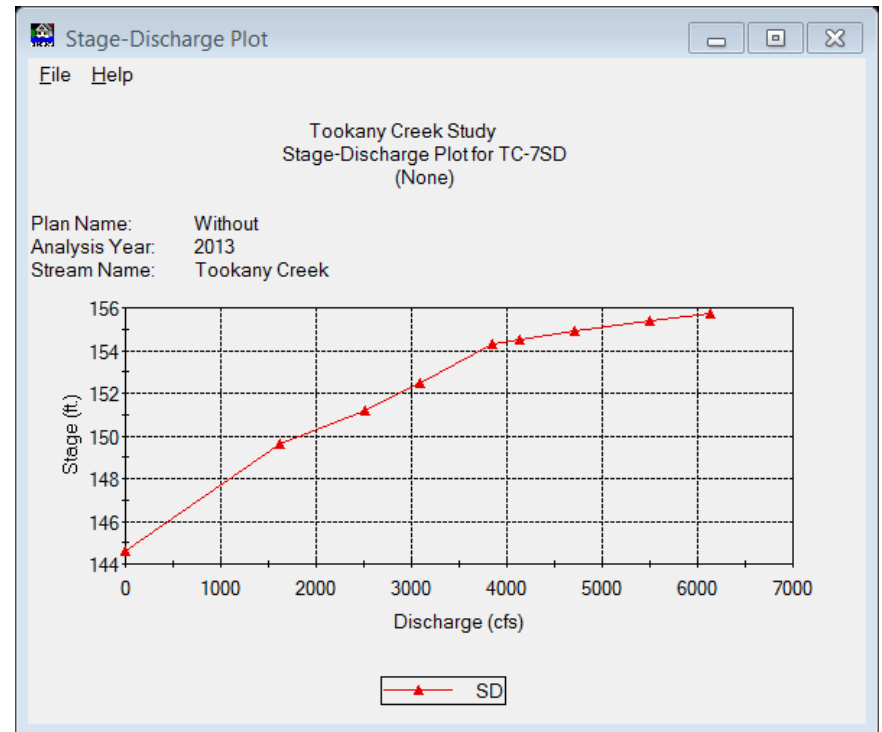
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	144.62
2	1615.00	149.66
3	2516.00	151.22
4	3088.00	152.46
5	3842.00	154.31
6	4136.00	154.52
7	4708.00	154.91
8	5500.00	155.39
9	6141.00	155.75



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-8

Function: TC-8SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

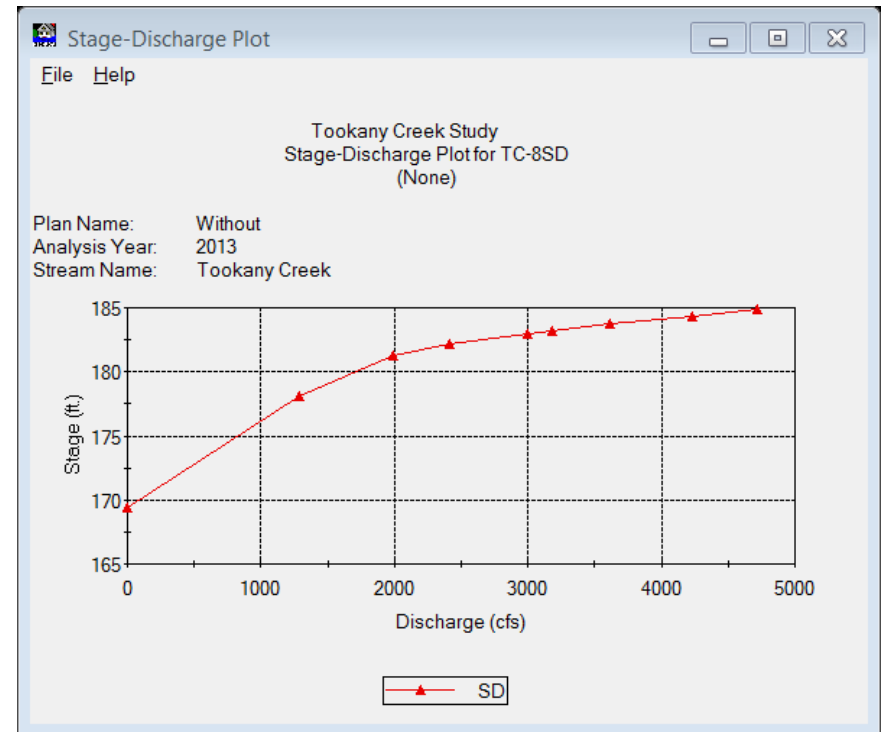
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	169.39
2	1289.00	178.12
3	1995.00	181.28
4	2413.00	182.18
5	3001.00	183.02
6	3179.00	183.23
7	3619.00	183.73
8	4227.00	184.37
9	4720.00	184.84



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-9

Function: TC-9SD Use An Existing Function Plot..

Description: Existing Conditions Tabulate...

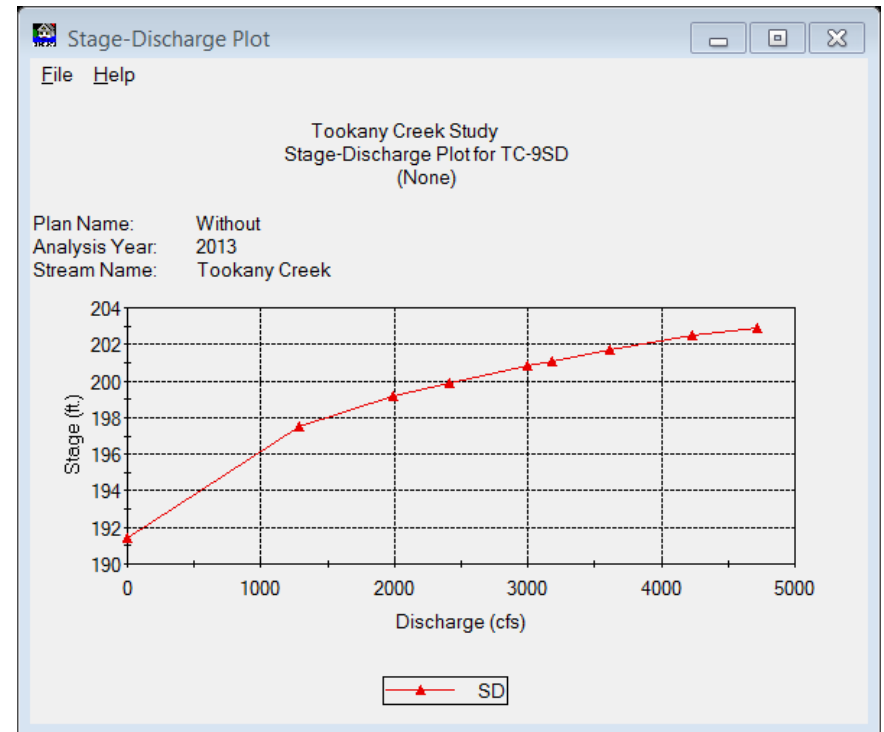
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	191.46
2	1289.00	197.51
3	1995.00	199.14
4	2413.00	199.87
5	3001.00	200.83
6	3179.00	201.09
7	3619.00	201.70
8	4227.00	202.48
9	4720.00	202.93



**Tookany Creek Study - Stage-Discharge Function with Uncer...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

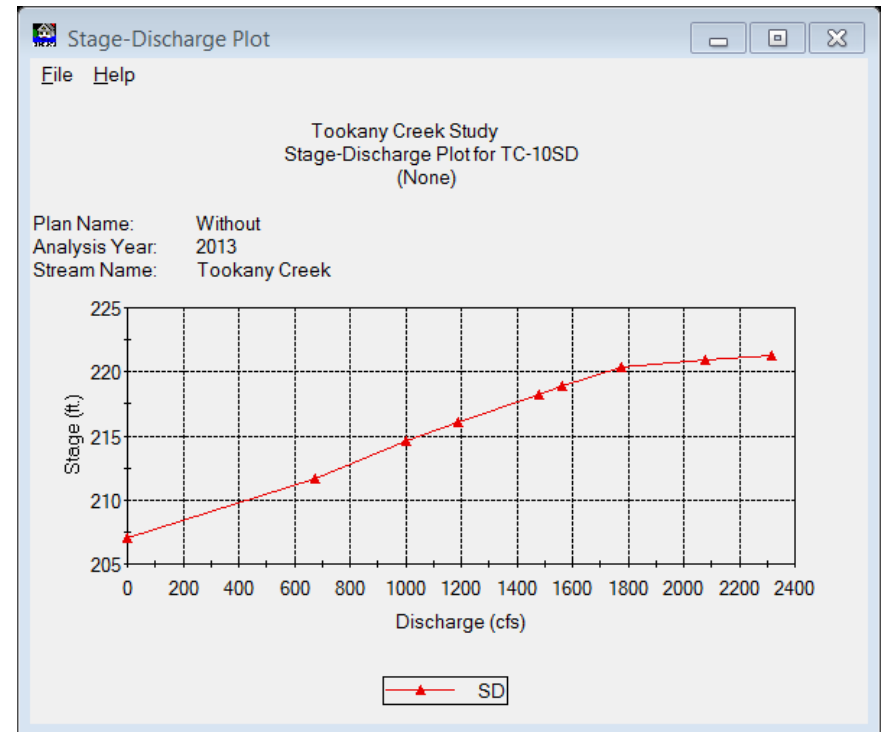
Function:

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft)
1	0.00	207.04
2	675.00	211.72
3	1004.00	214.56
4	1192.00	216.03
5	1483.00	218.19
6	1562.00	218.94
7	1778.00	220.32
8	2077.00	220.94
9	2319.00	221.30



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-11

Function: TC-11SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

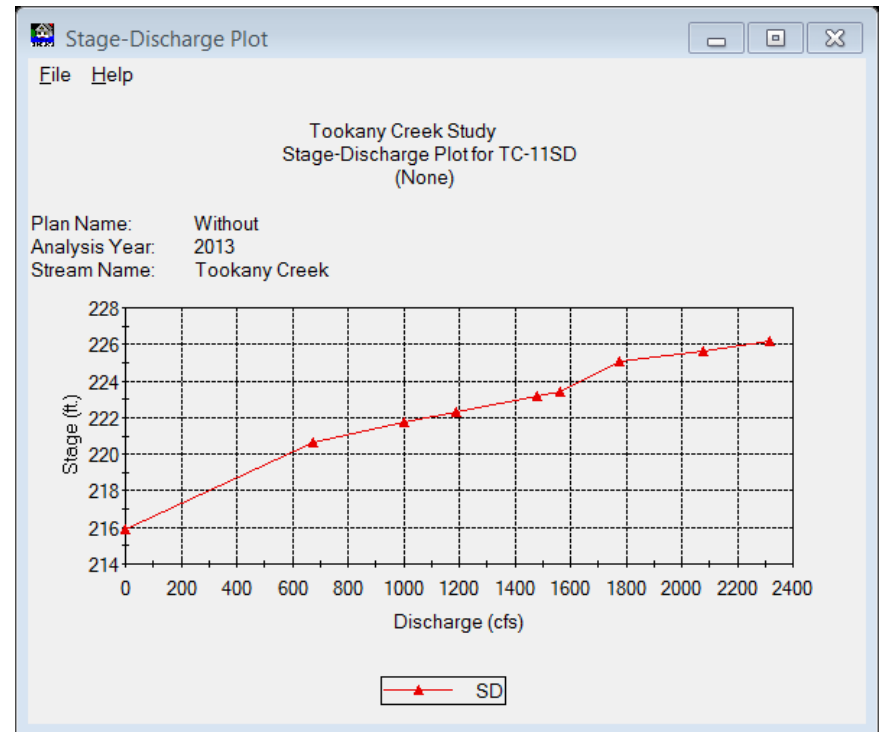
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	215.91
2	675.00	220.65
3	1004.00	221.75
4	1192.00	222.29
5	1483.00	223.14
6	1562.00	223.40
7	1778.00	225.09
8	2077.00	225.64
9	2319.00	226.17



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

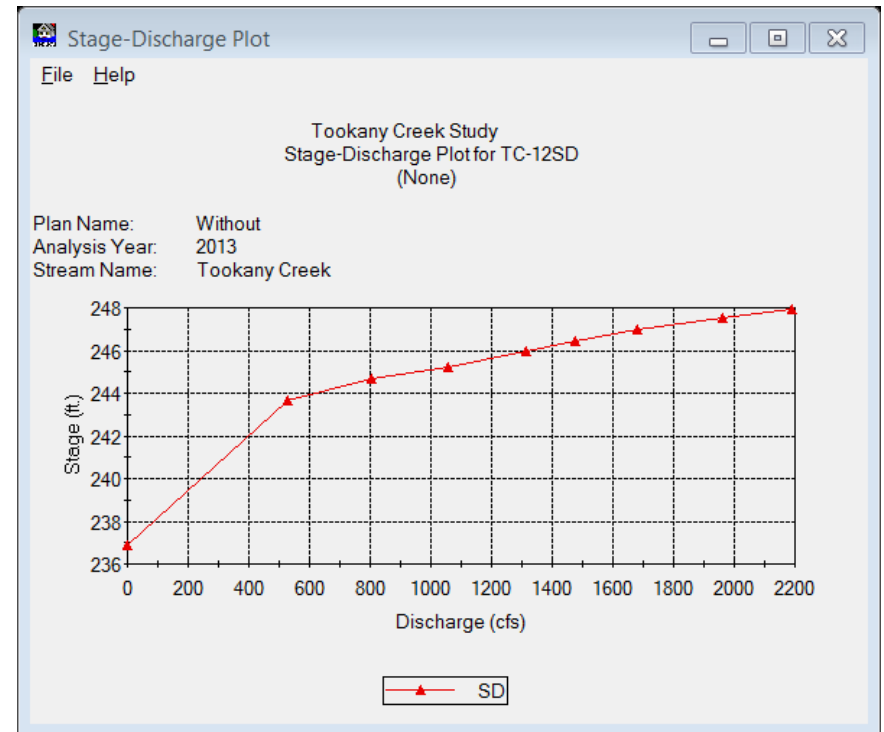
Function: TC-12SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	236.91
2	529.82	243.67
3	803.63	244.68
4	1058.19	245.25
5	1316.00	245.96
6	1474.95	246.43
7	1678.81	246.96
8	1961.60	247.52
9	2190.44	247.96



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Function: TC-1SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

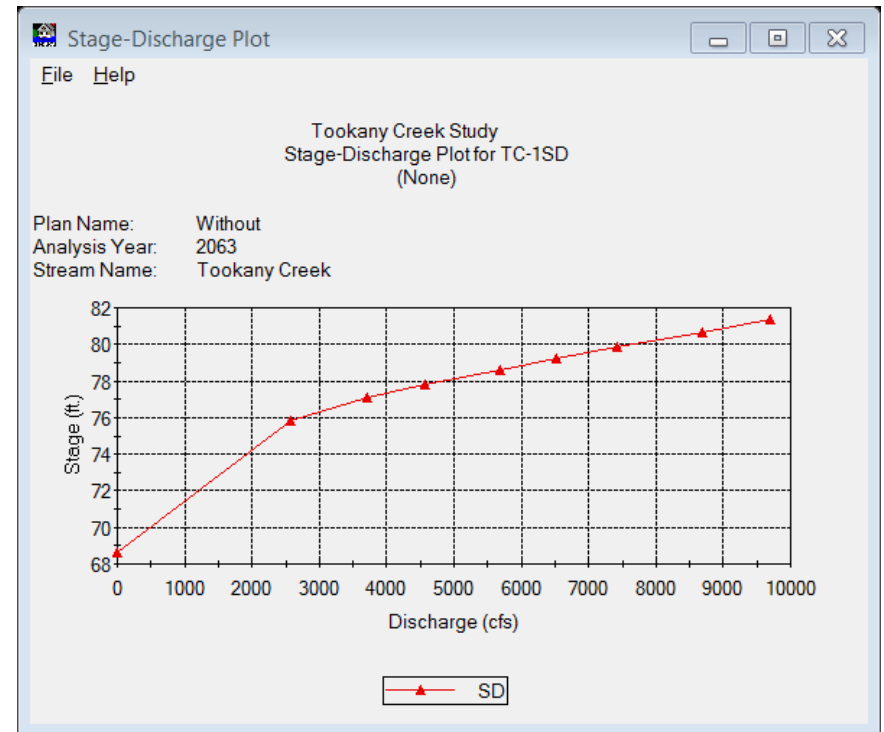
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	68.61
2	2580.00	75.86
3	3720.00	77.09
4	4571.00	77.81
5	5687.00	78.63
6	6529.00	79.24
7	7432.00	79.85
8	8683.00	80.69
9	9695.00	81.38



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

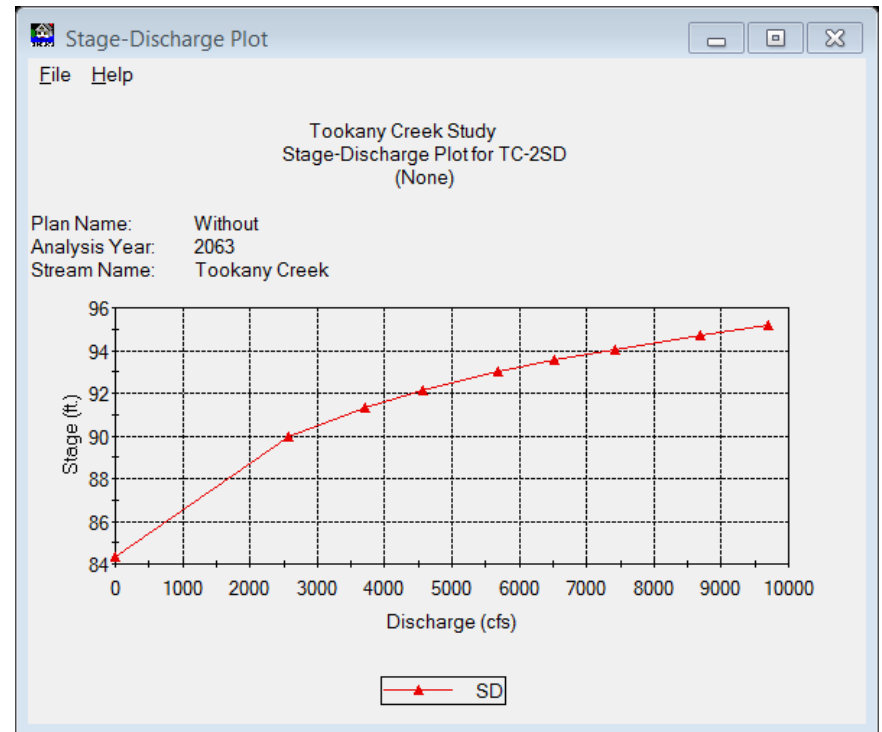
Function: TC-2SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	84.32
2	2580.00	89.98
3	3720.00	91.34
4	4571.00	92.16
5	5687.00	93.02
6	6529.00	93.57
7	7432.00	94.05
8	8683.00	94.71
9	9695.00	95.22





Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-3

Function: TC-3SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

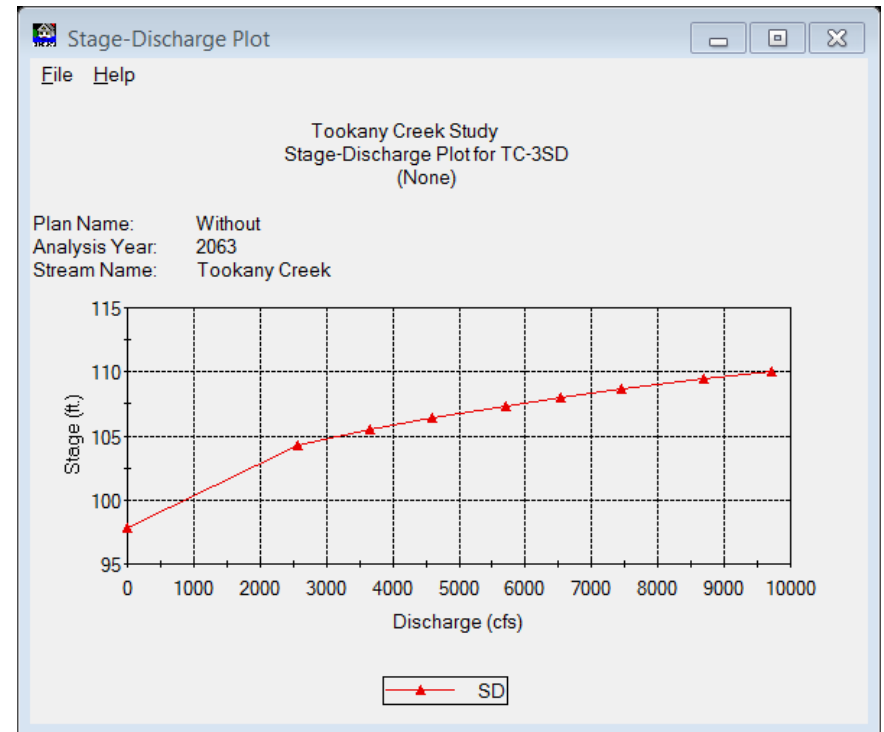
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	97.87
2	2568.00	104.29
3	3666.00	105.52
4	4589.00	106.39
5	5708.00	107.32
6	6539.00	107.98
7	7443.00	108.65
8	8695.00	109.45
9	9709.00	110.03



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-4

Function: TC-4SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

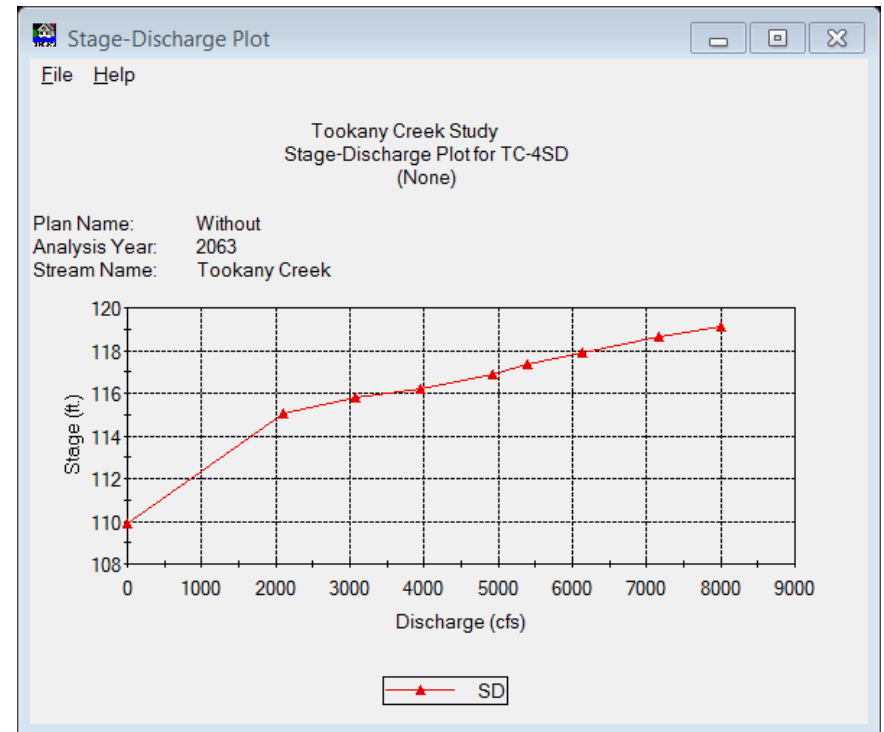
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	109.89
2	2097.00	115.06
3	3086.00	115.78
4	3961.00	116.20
5	4928.00	116.90
6	5390.00	117.36
7	6135.00	117.93
8	7167.00	118.62
9	8002.00	119.12



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-5

Function: TC-5SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

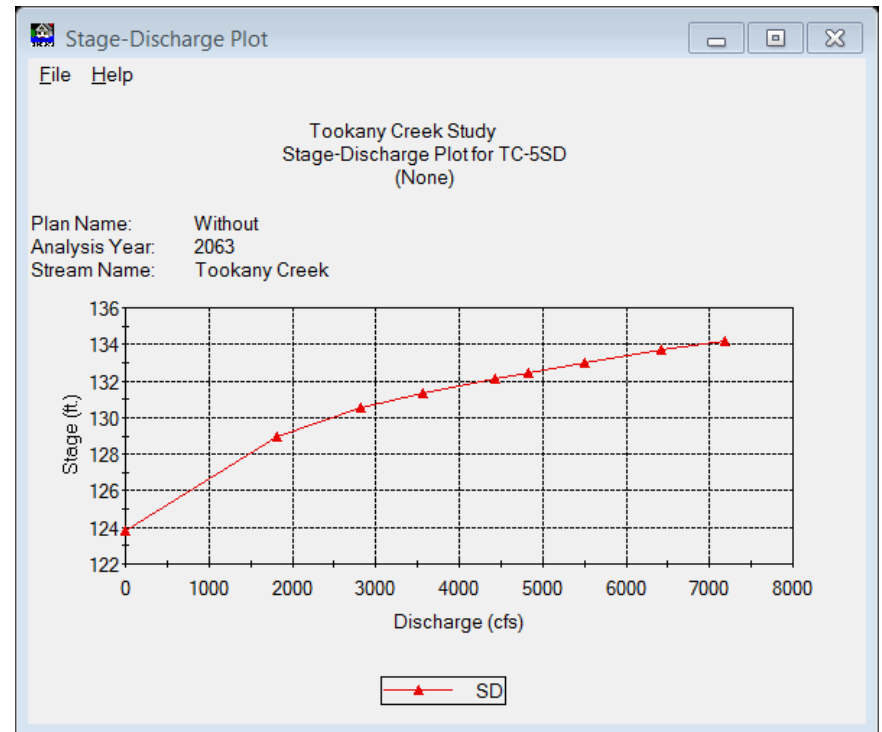
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	123.83
2	1826.00	128.93
3	2822.00	130.54
4	3560.00	131.31
5	4429.00	132.10
6	4837.00	132.44
7	5506.00	132.98
8	6432.00	133.69
9	7182.00	134.19



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-6

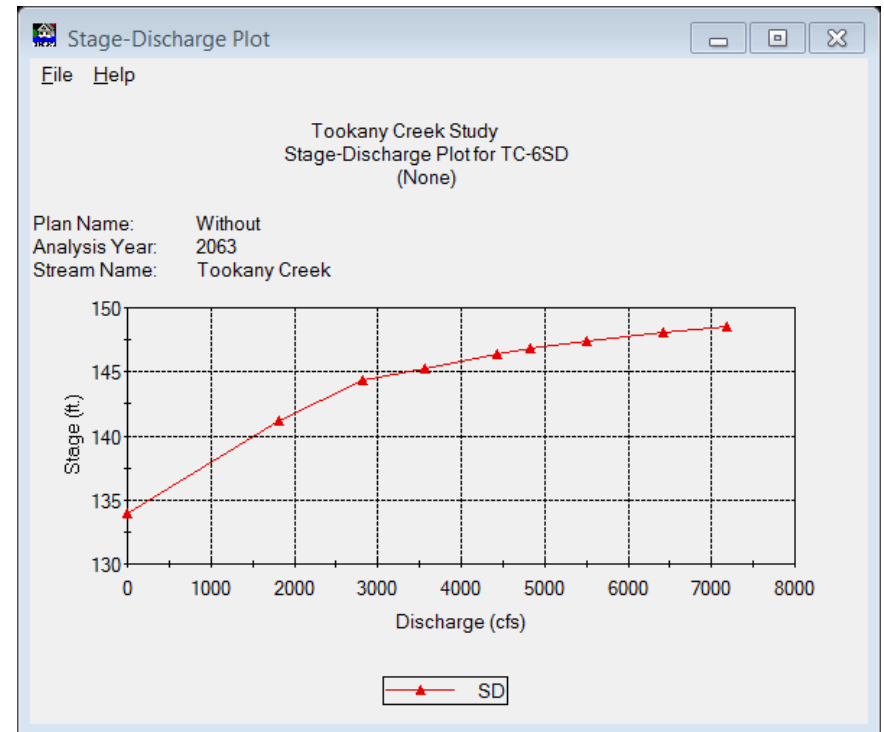
Function: TC-6SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	133.94
2	1826.00	141.18
3	2822.00	144.30
4	3560.00	145.25
5	4429.00	146.42
6	4837.00	146.78
7	5506.00	147.37
8	6432.00	148.05
9	7182.00	148.52



**Tookany Creek Study - Stage-Discharge Function with Uncer...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

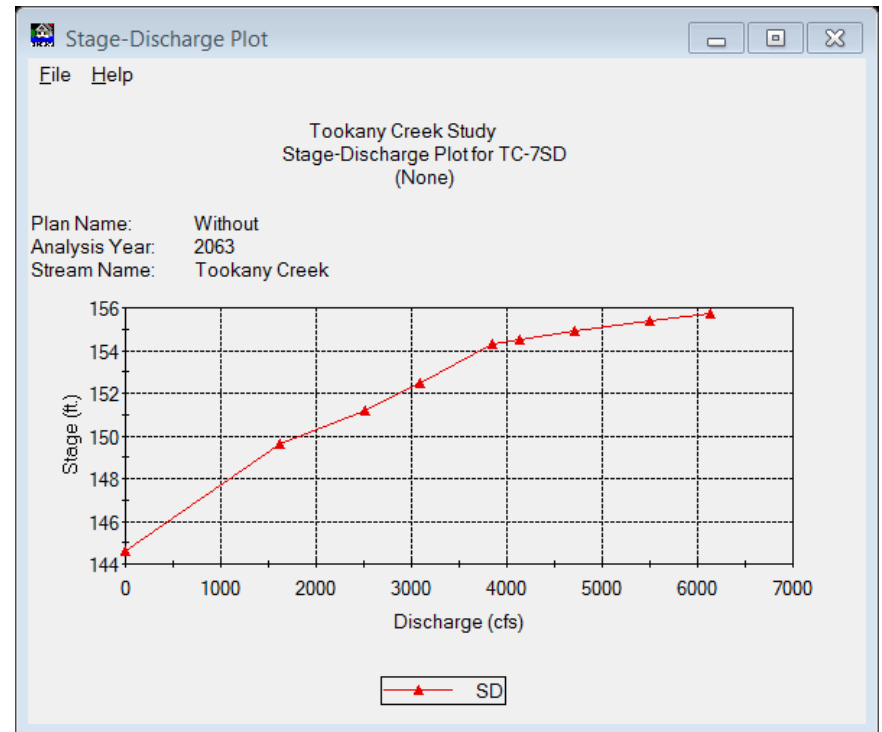
Function:

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft)
1	0.00	144.62
2	1615.00	149.66
3	2516.00	151.22
4	3088.00	152.46
5	3842.00	154.31
6	4136.00	154.52
7	4708.00	154.91
8	5500.00	155.39
9	6141.00	155.75



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Function: TC-8SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

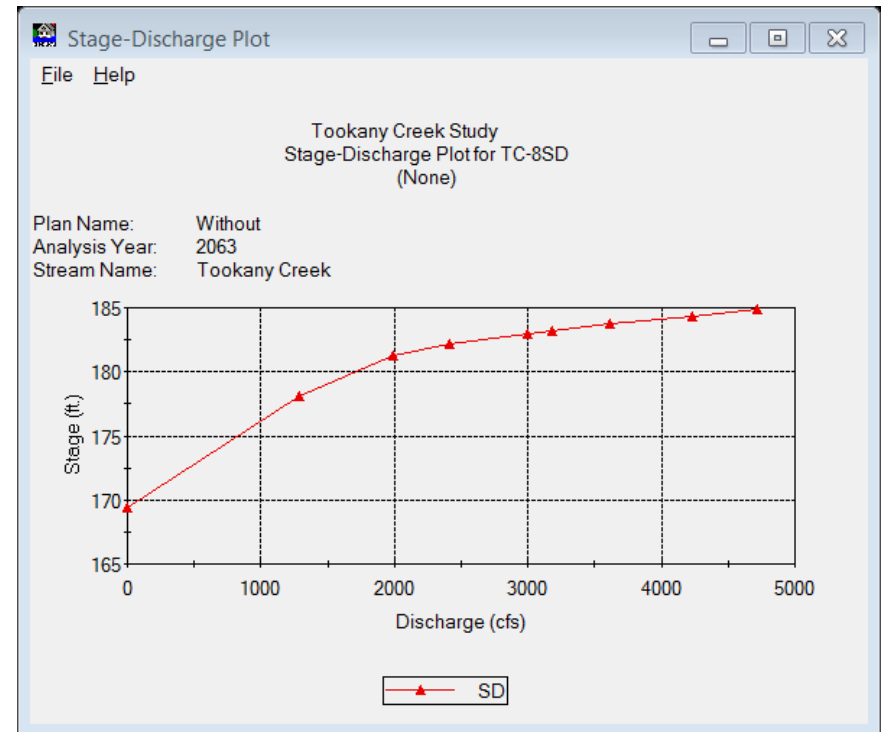
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	169.39
2	1289.00	178.12
3	1995.00	181.28
4	2413.00	182.18
5	3001.00	183.02
6	3179.00	183.23
7	3619.00	183.73
8	4227.00	184.37
9	4720.00	184.84



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-9

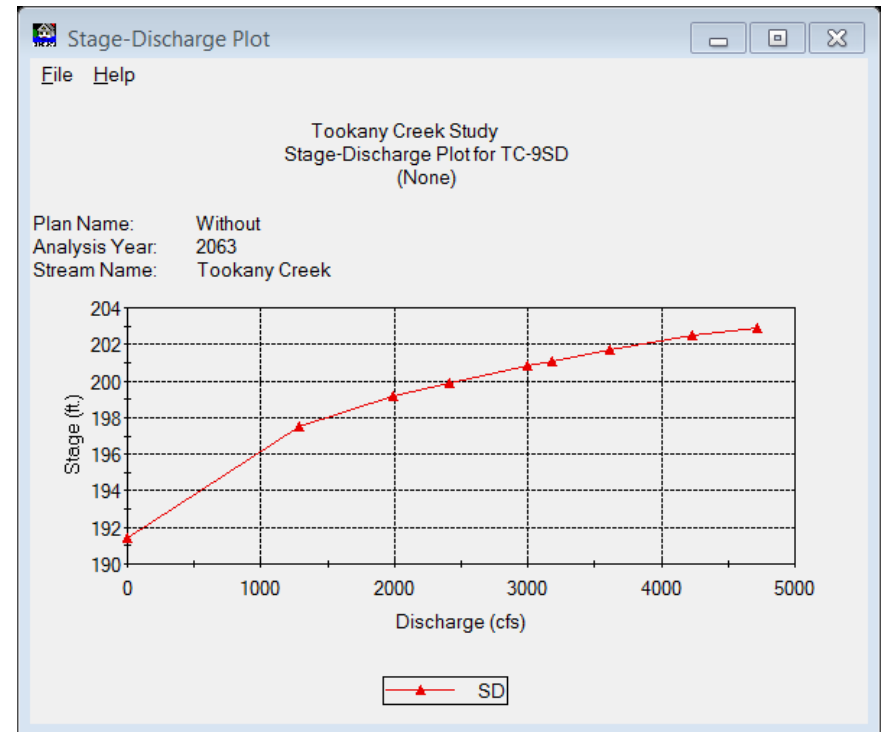
Function: TC-9SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	191.46
2	1289.00	197.51
3	1995.00	199.14
4	2413.00	199.87
5	3001.00	200.83
6	3179.00	201.09
7	3619.00	201.70
8	4227.00	202.48
9	4720.00	202.93



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-10

Function: TC-10SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

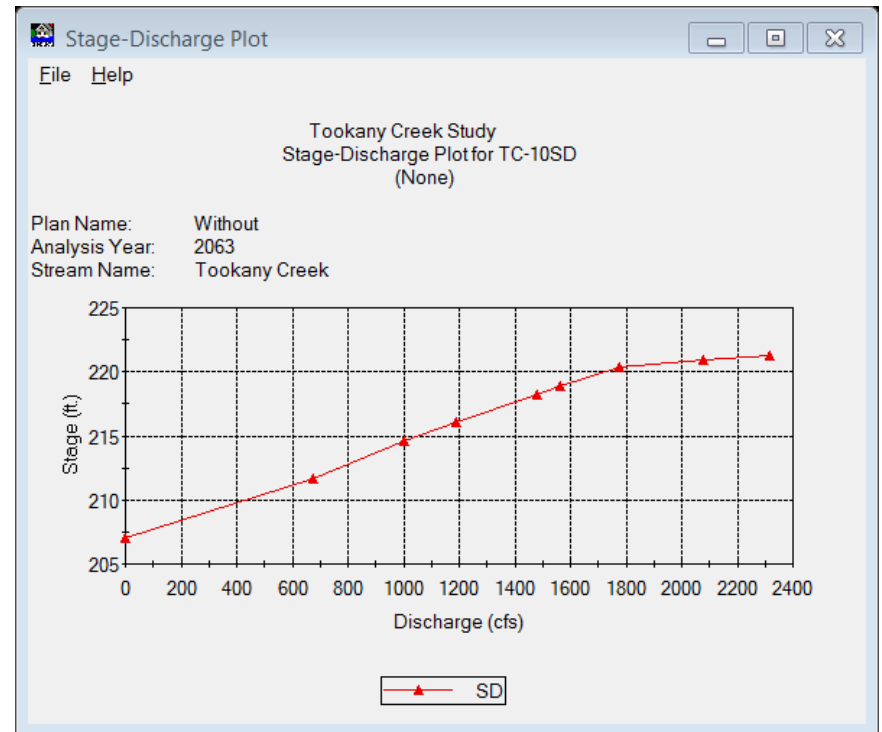
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	207.04
2	675.00	211.72
3	1004.00	214.56
4	1192.00	216.03
5	1483.00	218.19
6	1562.00	218.94
7	1778.00	220.32
8	2077.00	220.94
9	2319.00	221.30





Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-11

Function: TC-11SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

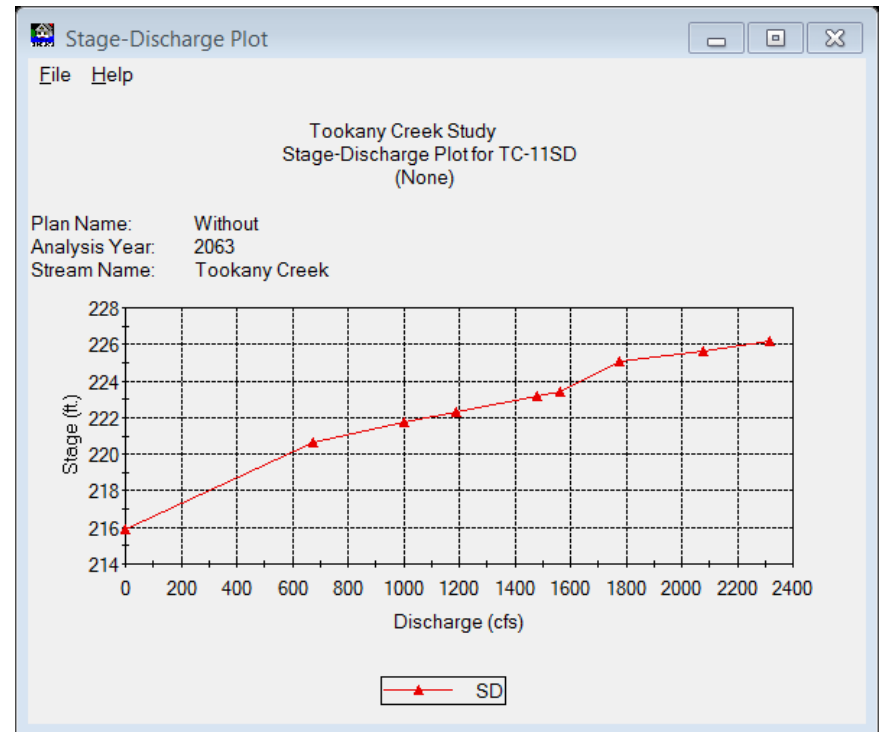
Distribution Type

None  Normal  Triangular  Log Normal

Define Uncertainty

Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	215.91
2	675.00	220.65
3	1004.00	221.75
4	1192.00	222.29
5	1483.00	223.14
6	1562.00	223.40
7	1778.00	225.09
8	2077.00	225.64
9	2319.00	226.17



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

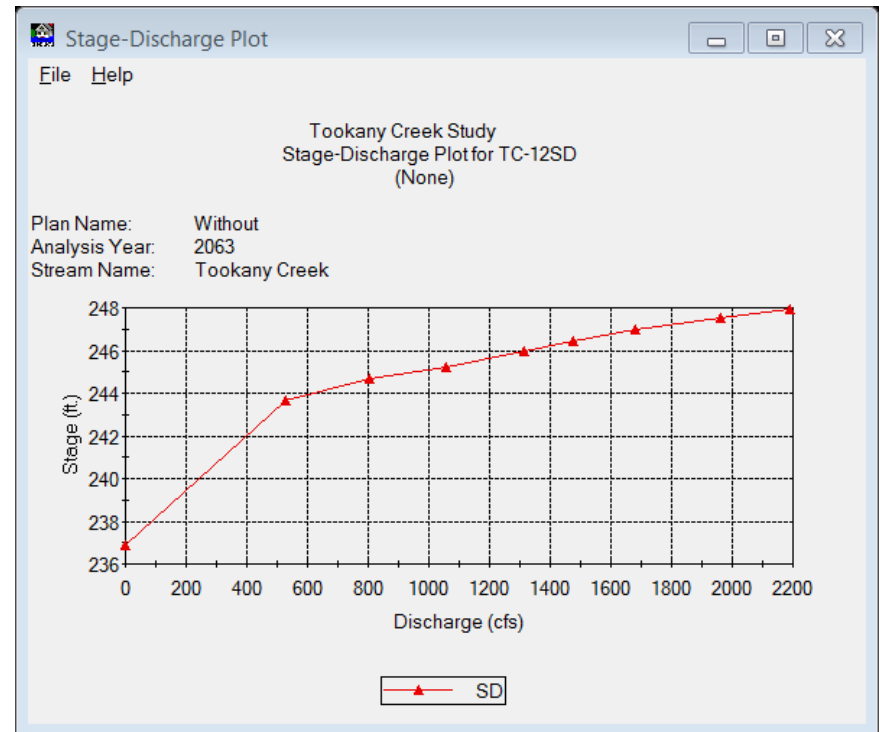
Function: TC-12SD Use An Existing Function Plot...

Description: Existing Conditions Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft)
1	0.00	236.91
2	529.82	243.67
3	803.63	244.68
4	1058.19	245.25
5	1316.00	245.96
6	1474.95	246.43
7	1678.81	246.96
8	1961.60	247.52
9	2190.44	247.96



## Stage-Damage Functions

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-1

Damage Category: Residential

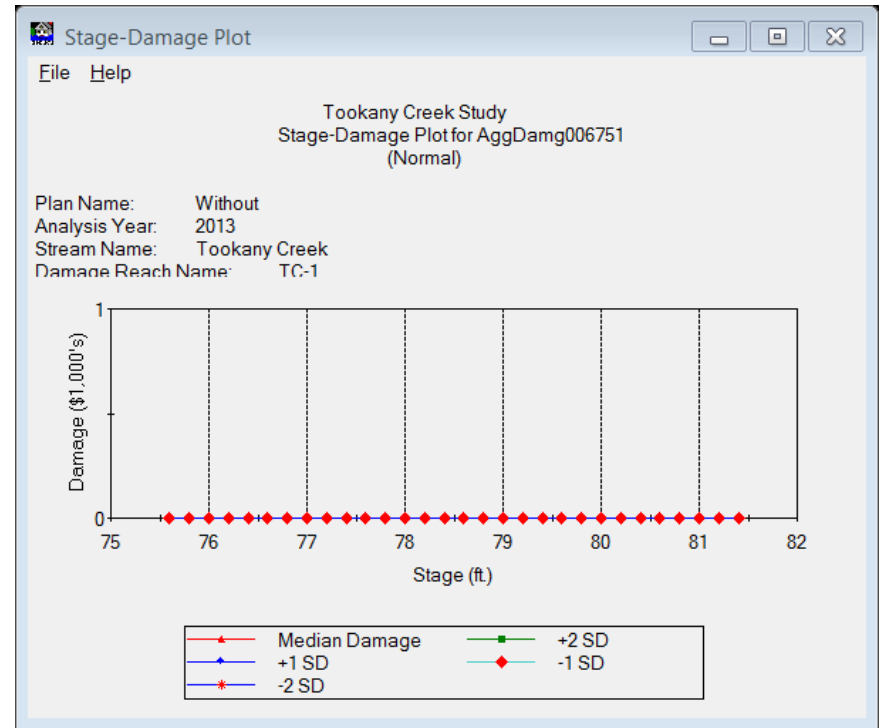
Function: AggDamg006751 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-1

Damage Category: Commercial

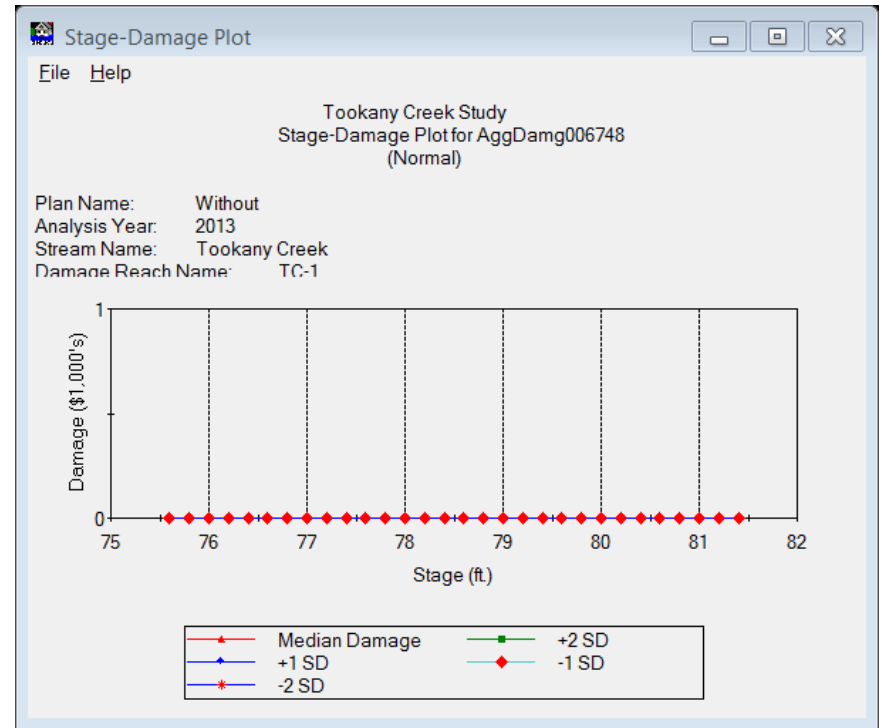
Function: AggDamg006748 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-1

Damage Category: Industrial

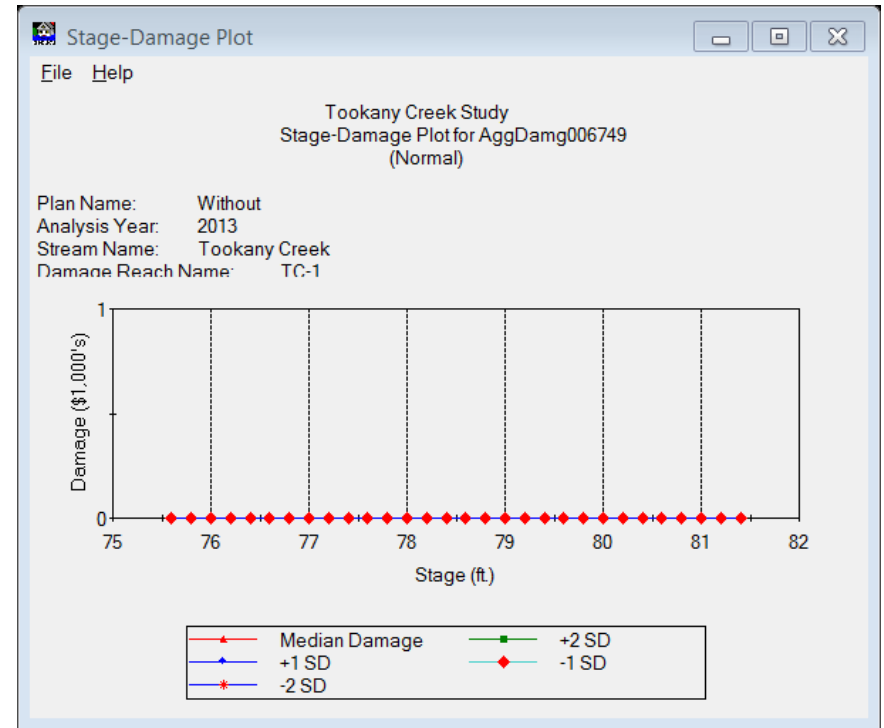
Function: AggDamg006749 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-1

Damage Category: Public

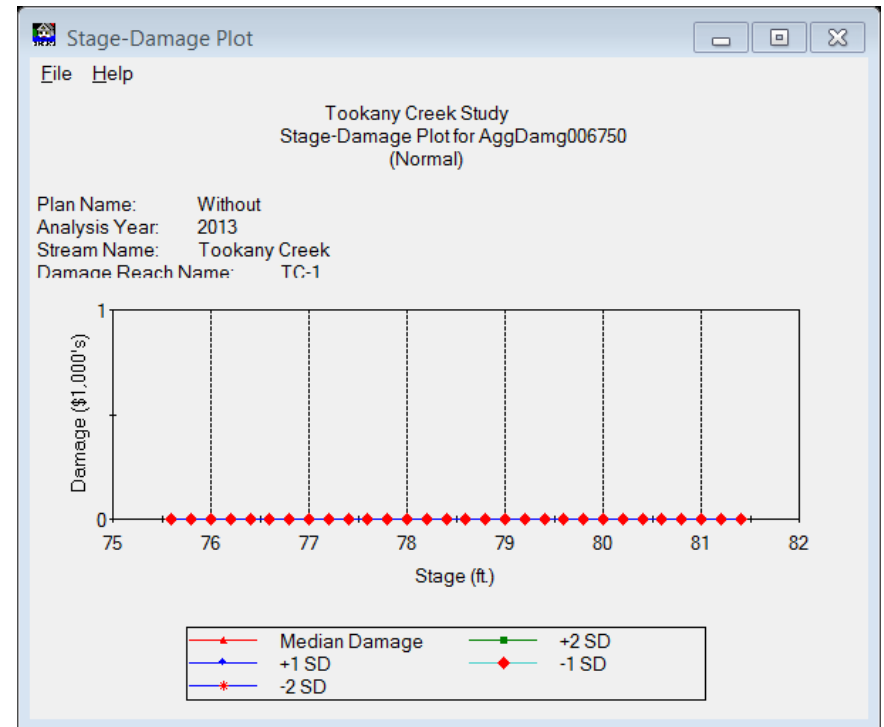
Function: AggDamg006750 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Damage Category: Commercial

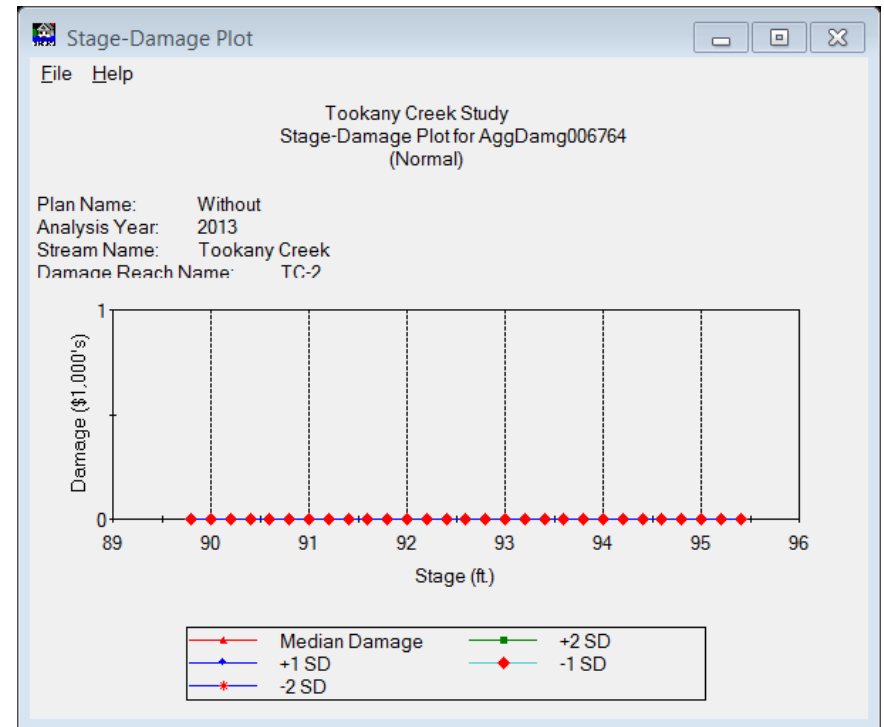
Function: AggDamg006764 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	0.00	0.00
2	90.00	0.00	0.00
3	90.20	0.00	0.00
4	90.40	0.00	0.00
5	90.60	0.00	0.00
6	90.80	0.00	0.00
7	91.00	0.00	0.00
8	91.20	0.00	0.00
9	91.40	0.00	0.00
10	91.60	0.00	0.00
11	91.80	0.00	0.00
12	92.00	0.00	0.00
13	92.20	0.00	0.00
14	92.40	0.00	0.00
15	92.60	0.00	0.00
16	92.80	0.00	0.00
17	93.00	0.00	0.00
18	93.20	0.00	0.00
19	93.40	0.00	0.00
20	93.60	0.00	0.00
21	93.80	0.00	0.00
22	94.00	0.00	0.00
23	94.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Damage Category: Industrial

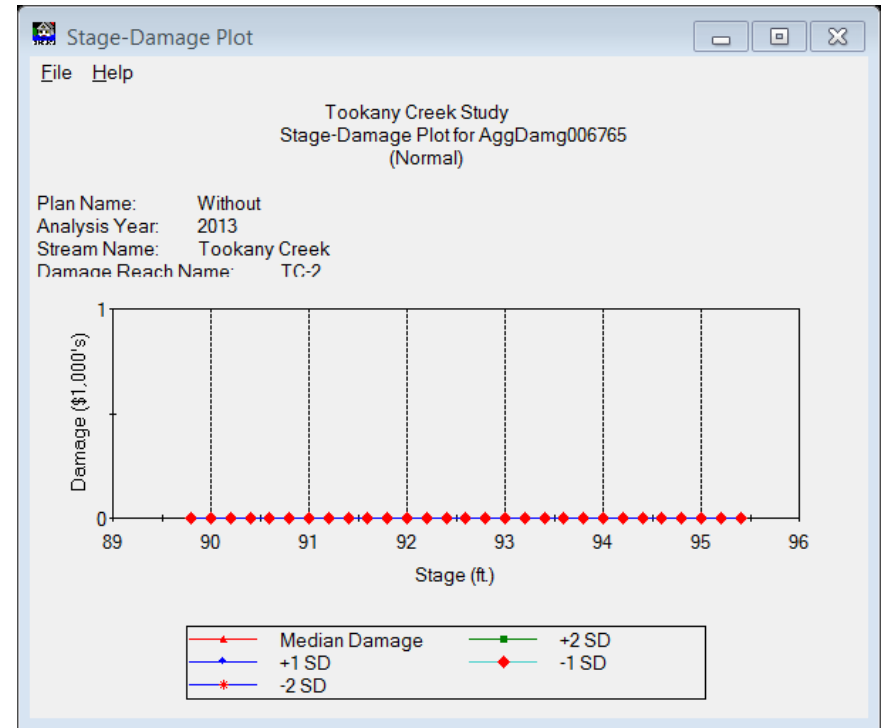
Function: AggDamg006765 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	0.00	0.00
2	90.00	0.00	0.00
3	90.20	0.00	0.00
4	90.40	0.00	0.00
5	90.60	0.00	0.00
6	90.80	0.00	0.00
7	91.00	0.00	0.00
8	91.20	0.00	0.00
9	91.40	0.00	0.00
10	91.60	0.00	0.00
11	91.80	0.00	0.00
12	92.00	0.00	0.00
13	92.20	0.00	0.00
14	92.40	0.00	0.00
15	92.60	0.00	0.00
16	92.80	0.00	0.00
17	93.00	0.00	0.00
18	93.20	0.00	0.00
19	93.40	0.00	0.00
20	93.60	0.00	0.00
21	93.80	0.00	0.00
22	94.00	0.00	0.00
23	94.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel





**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Damage Category: Public

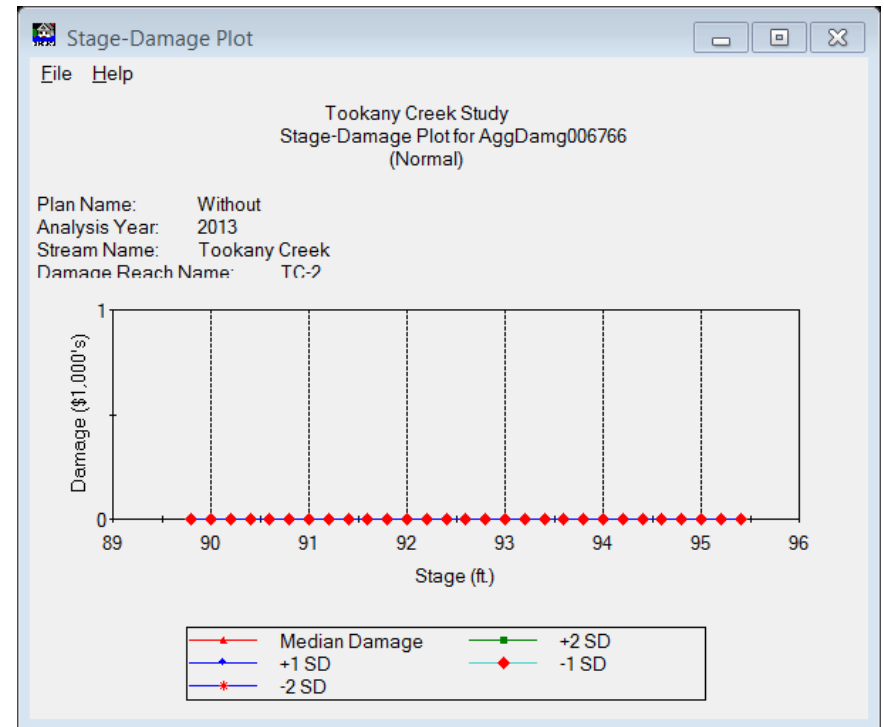
Function: AggDamg006766 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	0.00	0.00
2	90.00	0.00	0.00
3	90.20	0.00	0.00
4	90.40	0.00	0.00
5	90.60	0.00	0.00
6	90.80	0.00	0.00
7	91.00	0.00	0.00
8	91.20	0.00	0.00
9	91.40	0.00	0.00
10	91.60	0.00	0.00
11	91.80	0.00	0.00
12	92.00	0.00	0.00
13	92.20	0.00	0.00
14	92.40	0.00	0.00
15	92.60	0.00	0.00
16	92.80	0.00	0.00
17	93.00	0.00	0.00
18	93.20	0.00	0.00
19	93.40	0.00	0.00
20	93.60	0.00	0.00
21	93.80	0.00	0.00
22	94.00	0.00	0.00
23	94.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Damage Category: Residential

Function: AggDamg006767 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	7.58	16.20
2	90.00	9.34	17.89
3	90.20	11.97	20.15
4	90.40	15.69	22.88
5	90.60	20.28	25.63
6	90.80	25.87	28.34
7	91.00	32.67	30.98
8	91.20	39.79	33.20
9	91.40	48.07	34.94
10	91.60	53.67	35.91
11	91.80	59.54	36.66
12	92.00	65.84	37.14
13	92.20	73.15	37.37
14	92.40	82.26	37.39
15	92.60	91.30	37.04
16	92.80	100.07	36.49
17	93.00	108.20	36.03
18	93.20	117.10	34.67
19	93.40	125.55	33.36
20	93.60	133.78	31.76
21	93.80	141.70	30.48
22	94.00	149.61	29.05
23	94.20	156.57	27.80

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-3

Damage Category: Commercial

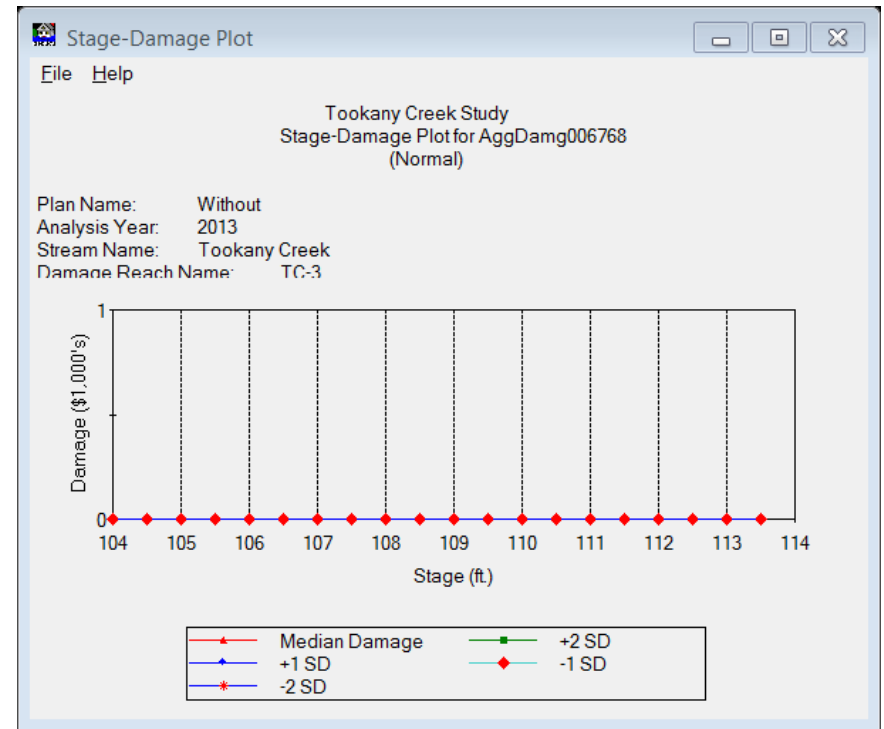
Function: AggDamg006768 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.50	0.00	0.00
3	105.00	0.00	0.00
4	105.50	0.00	0.00
5	106.00	0.00	0.00
6	106.50	0.00	0.00
7	107.00	0.00	0.00
8	107.50	0.00	0.00
9	108.00	0.00	0.00
10	108.50	0.00	0.00
11	109.00	0.00	0.00
12	109.50	0.00	0.00
13	110.00	0.00	0.00
14	110.50	0.00	0.00
15	111.00	0.00	0.00
16	111.50	0.00	0.00
17	112.00	0.00	0.00
18	112.50	0.00	0.00
19	113.00	0.00	0.00
20	113.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-3

Damage Category: Industrial

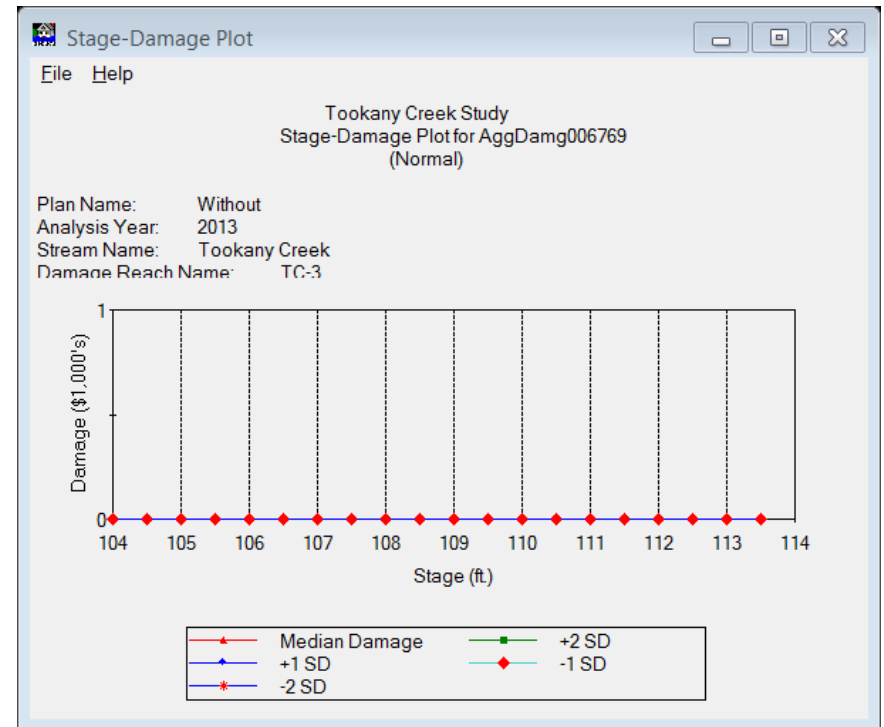
Function: AggDamg006769 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.50	0.00	0.00
3	105.00	0.00	0.00
4	105.50	0.00	0.00
5	106.00	0.00	0.00
6	106.50	0.00	0.00
7	107.00	0.00	0.00
8	107.50	0.00	0.00
9	108.00	0.00	0.00
10	108.50	0.00	0.00
11	109.00	0.00	0.00
12	109.50	0.00	0.00
13	110.00	0.00	0.00
14	110.50	0.00	0.00
15	111.00	0.00	0.00
16	111.50	0.00	0.00
17	112.00	0.00	0.00
18	112.50	0.00	0.00
19	113.00	0.00	0.00
20	113.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-3

Damage Category: Public

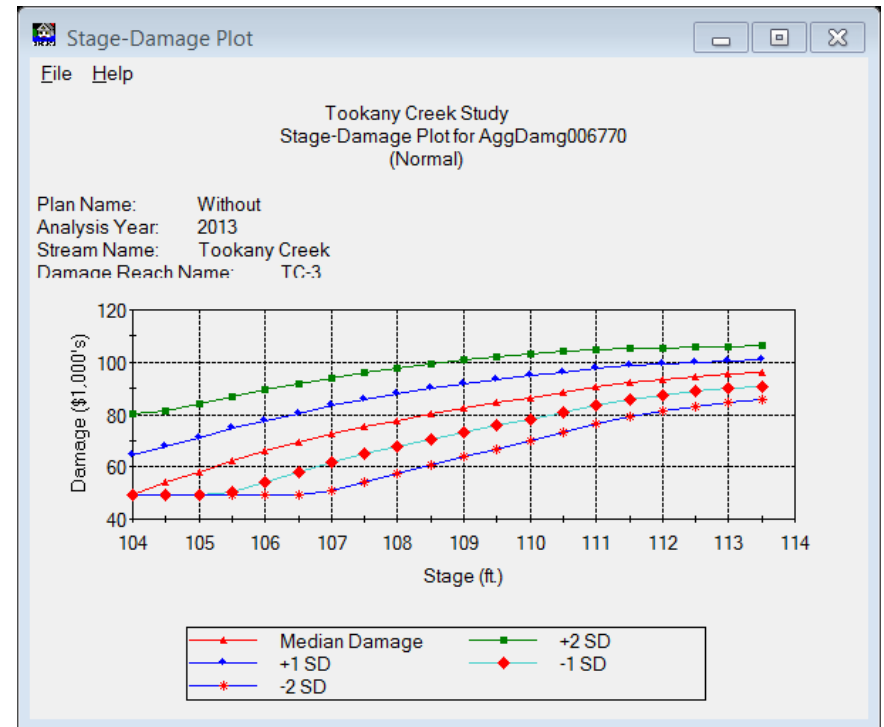
Function: AggDamg006770 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	49.34	15.38
2	104.50	53.95	13.82
3	105.00	58.20	13.03
4	105.50	62.32	12.25
5	106.00	65.89	11.70
6	106.50	69.30	11.15
7	107.00	72.45	10.82
8	107.50	75.30	10.46
9	108.00	77.75	10.10
10	108.50	80.10	9.70
11	109.00	82.34	9.26
12	109.50	84.45	8.79
13	110.00	86.46	8.30
14	110.50	88.59	7.70
15	111.00	90.47	7.12
16	111.50	92.06	6.55
17	112.00	93.38	6.06
18	112.50	94.44	5.65
19	113.00	95.27	5.34
20	113.50	95.91	5.11
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-3

Damage Category: Residential

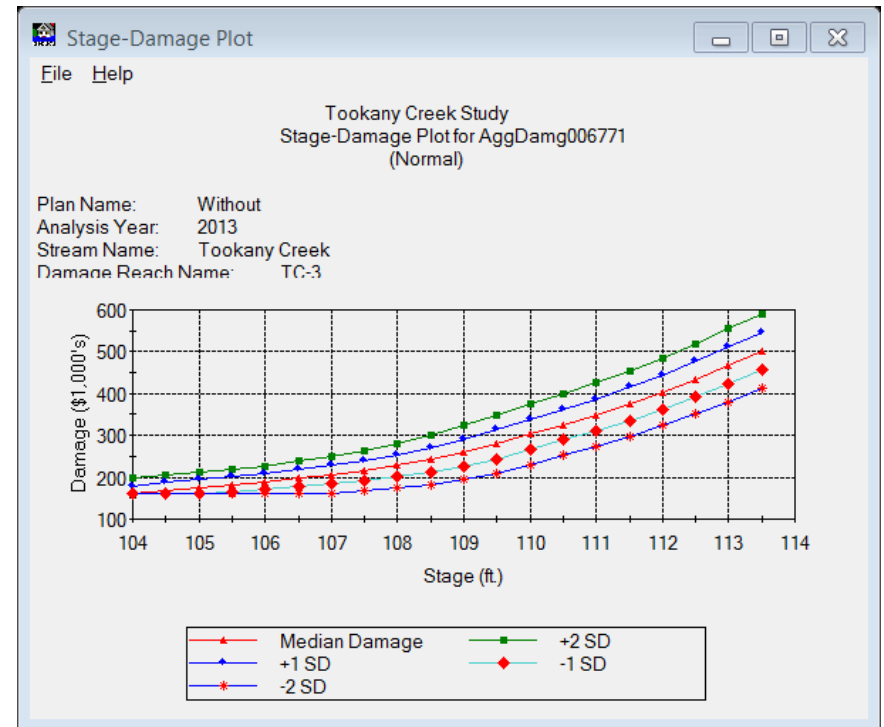
Function: AggDamg006771 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	161.10	18.37
2	104.50	168.63	18.32
3	105.00	175.65	18.23
4	105.50	182.55	18.11
5	106.00	189.83	18.57
6	106.50	198.79	20.48
7	107.00	206.89	22.03
8	107.50	215.67	23.90
9	108.00	227.73	26.87
10	108.50	241.42	29.72
11	109.00	259.23	32.80
12	109.50	279.65	35.12
13	110.00	302.97	36.29
14	110.50	326.05	36.78
15	111.00	349.07	38.08
16	111.50	375.39	39.31
17	112.00	404.13	40.67
18	112.50	434.79	42.39
19	113.00	466.73	43.89
20	113.50	502.04	44.69
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Damage Category: Public

Function: AggDamg006774 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	0.00	0.00
2	115.20	0.00	0.00
3	115.40	0.00	0.00
4	115.60	0.00	0.00
5	115.80	0.00	0.00
6	116.00	0.00	0.00
7	116.20	0.00	0.00
8	116.40	0.00	0.00
9	116.60	0.00	0.00
10	116.80	0.00	0.00
11	117.00	0.00	0.00
12	117.20	0.00	0.00
13	117.40	0.00	0.00
14	117.60	0.00	0.00
15	117.80	0.00	0.00
16	118.00	0.00	0.00
17	118.20	0.00	0.00
18	118.40	0.00	0.00
19	118.60	0.00	0.00
20	118.80	0.00	0.00
21	119.00	0.00	0.00
22	119.20	0.00	0.00
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Damage Category: Industrial

Function: AggDamg006773 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	0.00	0.00
2	115.20	0.00	0.00
3	115.40	0.00	0.00
4	115.60	0.00	0.00
5	115.80	0.00	0.00
6	116.00	0.00	0.00
7	116.20	0.00	0.00
8	116.40	0.00	0.00
9	116.60	0.00	0.00
10	116.80	0.00	0.00
11	117.00	0.00	0.00
12	117.20	0.00	0.00
13	117.40	0.00	0.00
14	117.60	0.00	0.00
15	117.80	0.00	0.00
16	118.00	0.00	0.00
17	118.20	0.00	0.00
18	118.40	0.00	0.00
19	118.60	0.00	0.00
20	118.80	0.00	0.00
21	119.00	0.00	0.00
22	119.20	0.00	0.00
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Damage Category: Public

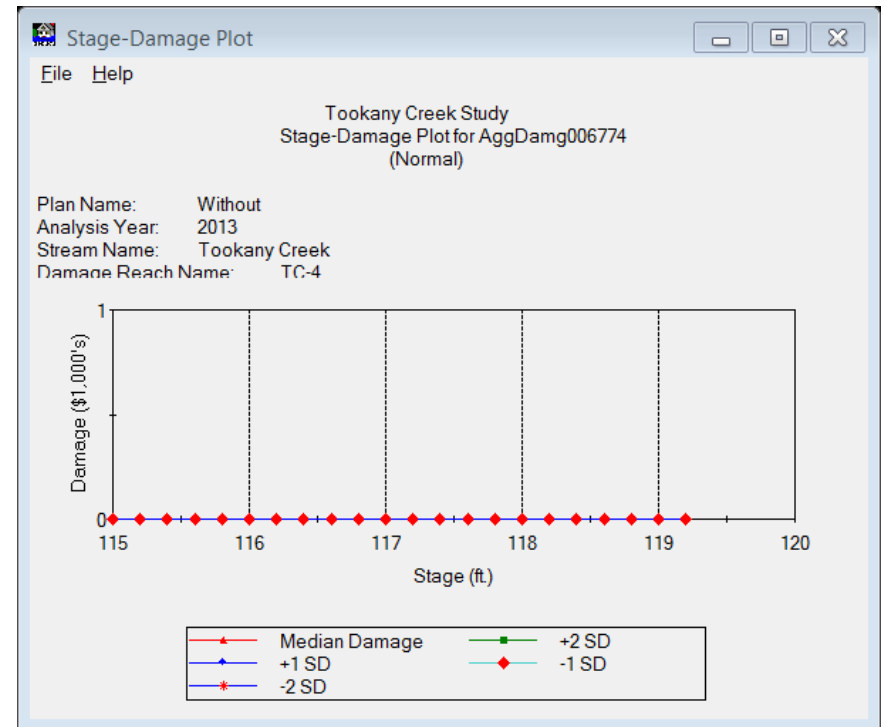
Function: AggDamg006774 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	0.00	0.00
2	115.20	0.00	0.00
3	115.40	0.00	0.00
4	115.60	0.00	0.00
5	115.80	0.00	0.00
6	116.00	0.00	0.00
7	116.20	0.00	0.00
8	116.40	0.00	0.00
9	116.60	0.00	0.00
10	116.80	0.00	0.00
11	117.00	0.00	0.00
12	117.20	0.00	0.00
13	117.40	0.00	0.00
14	117.60	0.00	0.00
15	117.80	0.00	0.00
16	118.00	0.00	0.00
17	118.20	0.00	0.00
18	118.40	0.00	0.00
19	118.60	0.00	0.00
20	118.80	0.00	0.00
21	119.00	0.00	0.00
22	119.20	0.00	0.00
23			

Plot...  
 Tabulate...  
 Save  
 Cancel





**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Damage Category: Residential

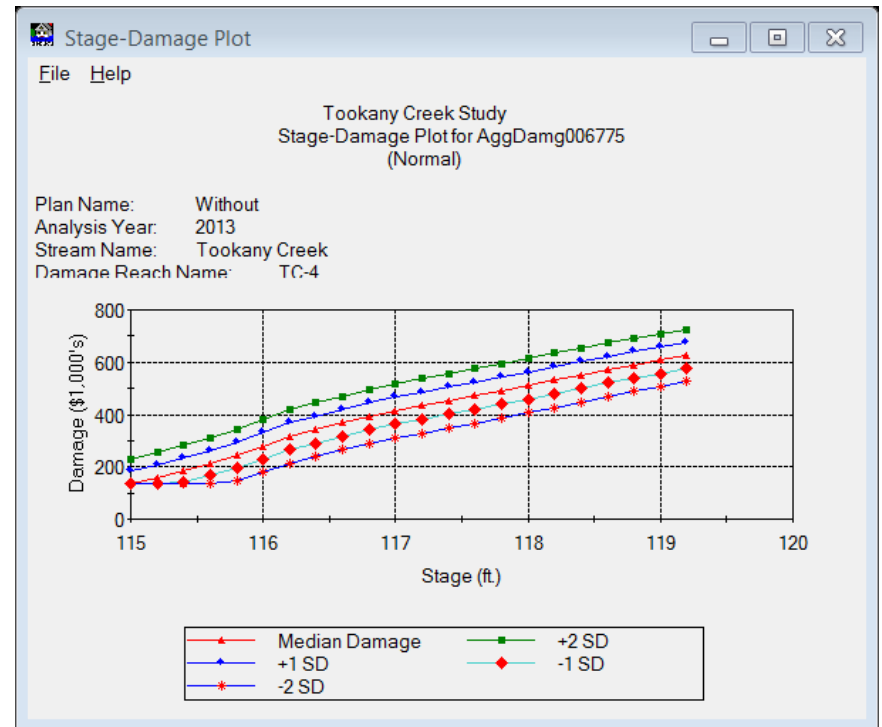
Function: AggDamg006775 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	138.58	45.28
2	115.20	160.07	46.61
3	115.40	186.48	47.20
4	115.60	214.77	48.06
5	115.80	243.44	49.22
6	116.00	278.80	50.71
7	116.20	317.06	51.23
8	116.40	342.07	51.44
9	116.60	368.14	51.26
10	116.80	393.61	51.33
11	117.00	414.62	51.83
12	117.20	433.38	52.29
13	117.40	452.50	52.28
14	117.60	471.14	52.40
15	117.80	490.38	52.12
16	118.00	510.01	52.00
17	118.20	530.71	51.94
18	118.40	551.20	51.50
19	118.60	571.32	51.19
20	118.80	589.38	50.83
21	119.00	607.56	49.91
22	119.20	625.18	49.09
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-5

Damage Category: Commercial

Function: AggDamg006776 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	0.00	0.00
2	129.00	0.00	0.00
3	129.20	0.00	0.00
4	129.40	0.00	0.00
5	129.60	0.00	0.00
6	129.80	0.00	0.00
7	130.00	0.00	0.00
8	130.20	0.00	0.00
9	130.40	0.00	0.00
10	130.60	0.00	0.00
11	130.80	0.00	0.00
12	131.00	0.00	0.00
13	131.20	0.00	0.00
14	131.40	0.00	0.00
15	131.60	0.00	0.00
16	131.80	0.00	0.00
17	132.00	0.00	0.00
18	132.20	0.00	0.00
19	132.40	0.00	0.00
20	132.60	0.00	0.00
21	132.80	0.00	0.00
22	133.00	0.00	0.00
23	133.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-5

Damage Category: Industrial

Function: AggDamg006777 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	0.00	0.00
2	129.00	0.00	0.00
3	129.20	0.00	0.00
4	129.40	0.00	0.00
5	129.60	0.00	0.00
6	129.80	0.00	0.00
7	130.00	0.00	0.00
8	130.20	0.00	0.00
9	130.40	0.00	0.00
10	130.60	0.00	0.00
11	130.80	0.00	0.00
12	131.00	0.00	0.00
13	131.20	0.00	0.00
14	131.40	0.00	0.00
15	131.60	0.00	0.00
16	131.80	0.00	0.00
17	132.00	0.00	0.00
18	132.20	0.00	0.00
19	132.40	0.00	0.00
20	132.60	0.00	0.00
21	132.80	0.00	0.00
22	133.00	0.00	0.00
23	133.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-5

Damage Category: Public

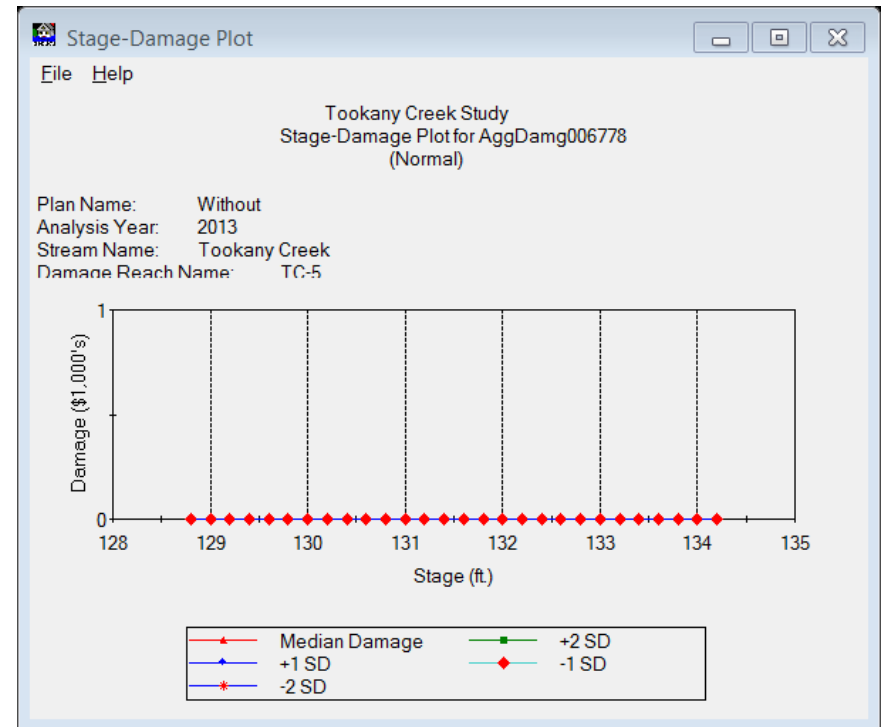
Function: AggDamg006778 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	0.00	0.00
2	129.00	0.00	0.00
3	129.20	0.00	0.00
4	129.40	0.00	0.00
5	129.60	0.00	0.00
6	129.80	0.00	0.00
7	130.00	0.00	0.00
8	130.20	0.00	0.00
9	130.40	0.00	0.00
10	130.60	0.00	0.00
11	130.80	0.00	0.00
12	131.00	0.00	0.00
13	131.20	0.00	0.00
14	131.40	0.00	0.00
15	131.60	0.00	0.00
16	131.80	0.00	0.00
17	132.00	0.00	0.00
18	132.20	0.00	0.00
19	132.40	0.00	0.00
20	132.60	0.00	0.00
21	132.80	0.00	0.00
22	133.00	0.00	0.00
23	133.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-5

Damage Category: Residential

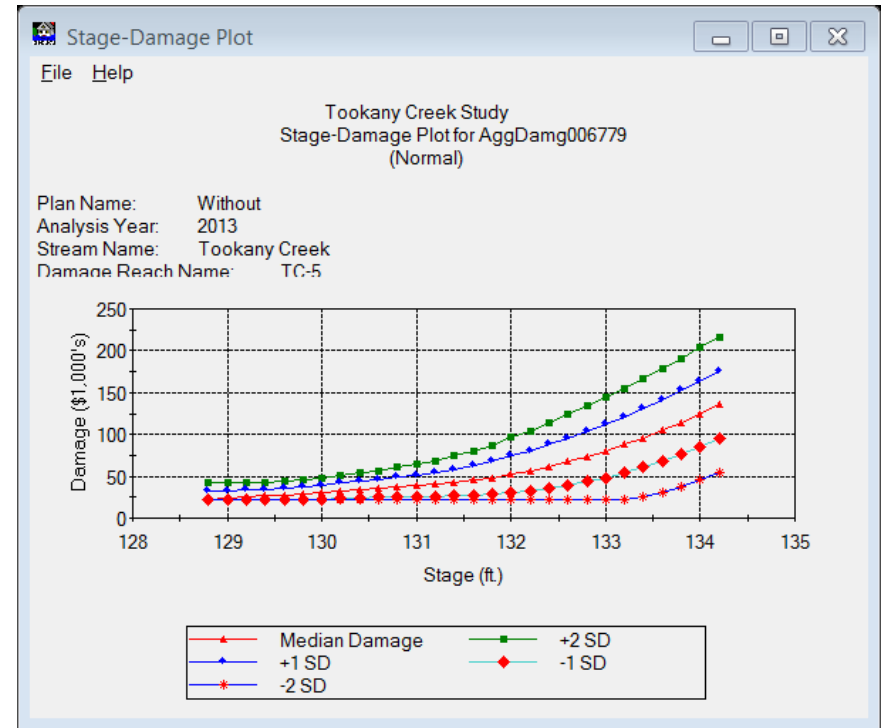
Function: AggDamg006779 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	21.97	10.07
2	129.00	23.31	9.62
3	129.20	24.95	8.89
4	129.40	26.45	8.30
5	129.60	27.80	7.90
6	129.80	29.55	8.29
7	130.00	30.92	8.54
8	130.20	32.61	9.18
9	130.40	34.22	9.68
10	130.60	35.66	10.46
11	130.80	37.15	11.68
12	131.00	38.58	12.87
13	131.20	40.28	14.19
14	131.40	42.49	15.77
15	131.60	45.26	17.45
16	131.80	48.34	19.17
17	132.00	52.54	21.83
18	132.20	56.74	23.90
19	132.40	62.07	26.09
20	132.60	67.64	28.10
21	132.80	73.79	30.01
22	133.00	80.18	31.80
23	133.20	87.77	33.47

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Damage Category: Commercial

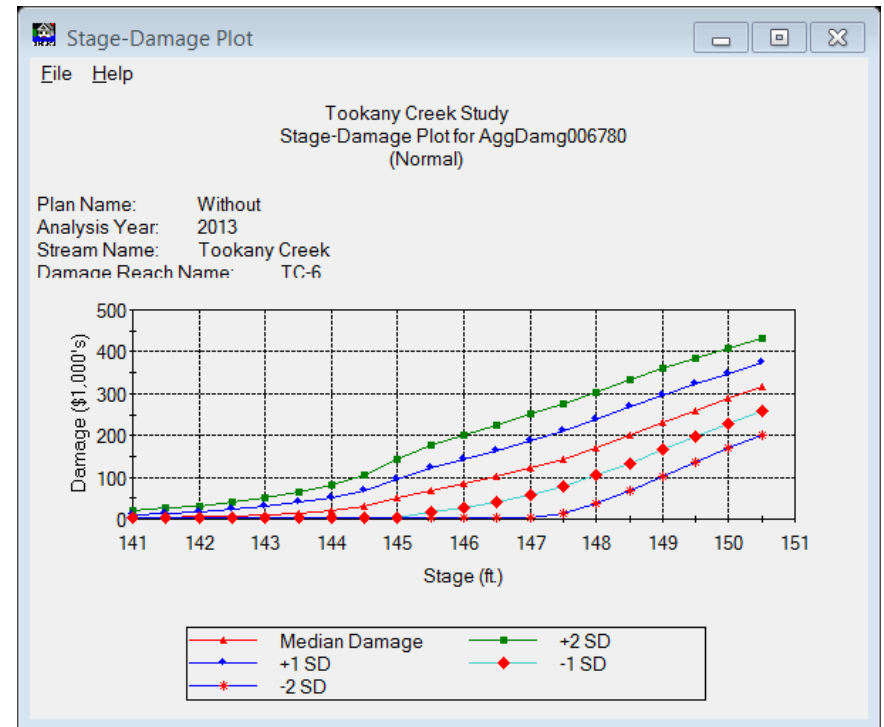
Function: AggDamg006780 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	2.52	9.19
2	141.50	3.89	11.30
3	142.00	5.12	12.90
4	142.50	7.55	17.26
5	143.00	10.56	20.87
6	143.50	14.70	25.57
7	144.00	19.78	30.64
8	144.50	29.86	37.86
9	145.00	50.12	46.61
10	145.50	69.08	53.17
11	146.00	84.08	58.01
12	146.50	100.81	61.50
13	147.00	121.94	64.18
14	147.50	144.36	65.73
15	148.00	171.26	66.48
16	148.50	200.45	66.77
17	149.00	230.33	64.74
18	149.50	260.08	61.62
19	150.00	288.31	59.51
20	150.50	315.08	57.81
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Damage Category: Industrial

Function: AggDamg006781 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	0.00	0.00
2	141.50	0.00	0.00
3	142.00	0.00	0.00
4	142.50	0.00	0.00
5	143.00	0.00	0.00
6	143.50	0.00	0.00
7	144.00	0.00	0.00
8	144.50	0.00	0.00
9	145.00	0.00	0.00
10	145.50	0.00	0.00
11	146.00	0.00	0.00
12	146.50	0.00	0.00
13	147.00	0.00	0.00
14	147.50	0.00	0.00
15	148.00	0.00	0.00
16	148.50	0.00	0.00
17	149.00	0.00	0.00
18	149.50	0.00	0.00
19	150.00	0.00	0.00
20	150.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Damage Category: Public

Function: AggDamg006782 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	0.00	0.00
2	141.50	0.00	0.00
3	142.00	0.00	0.00
4	142.50	0.00	0.00
5	143.00	0.00	0.00
6	143.50	0.00	0.00
7	144.00	0.00	0.00
8	144.50	0.00	0.00
9	145.00	0.00	0.00
10	145.50	0.00	0.00
11	146.00	0.00	0.00
12	146.50	0.00	0.00
13	147.00	0.00	0.00
14	147.50	0.00	0.00
15	148.00	0.00	0.00
16	148.50	0.00	0.00
17	149.00	0.00	0.00
18	149.50	0.00	0.00
19	150.00	0.00	0.00
20	150.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Damage Category: Residential

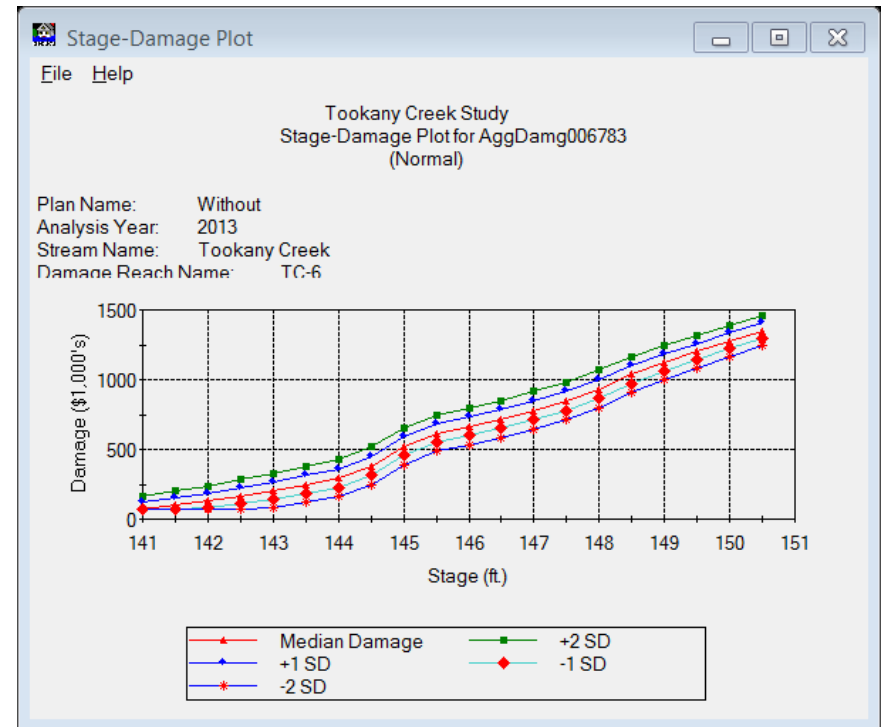
Function: AggDamg006783 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	75.78	42.71
2	141.50	105.20	48.59
3	142.00	133.58	52.93
4	142.50	168.13	57.30
5	143.00	206.97	61.22
6	143.50	248.09	64.45
7	144.00	294.55	67.04
8	144.50	380.53	68.95
9	145.00	524.05	66.89
10	145.50	616.04	65.56
11	146.00	665.58	65.96
12	146.50	716.88	66.32
13	147.00	779.74	67.23
14	147.50	847.04	67.93
15	148.00	933.52	67.57
16	148.50	1037.62	64.69
17	149.00	1120.67	61.76
18	149.50	1200.28	59.20
19	150.00	1277.13	57.12
20	150.50	1351.52	55.55
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-7

Damage Category: Commercial

Function: AggDamg006784 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	0.00	0.00
2	150.00	0.00	0.00
3	150.50	0.00	0.00
4	151.00	0.00	0.00
5	151.50	0.00	0.00
6	152.00	0.00	0.00
7	152.50	0.00	0.00
8	153.00	0.00	0.00
9	153.50	0.00	0.00
10	154.00	0.00	0.00
11	154.50	0.00	0.00
12	155.00	0.00	0.00
13	155.50	0.00	0.00
14	156.00	0.00	0.00
15	156.50	0.00	0.00
16	157.00	0.00	0.00
17	157.50	0.00	0.00
18	158.00	0.00	0.00
19	158.50	0.00	0.00
20	159.00	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-7

Damage Category: Industrial

Function: AggDamg006785 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	0.00	0.00
2	150.00	0.00	0.00
3	150.50	0.00	0.00
4	151.00	0.00	0.00
5	151.50	0.00	0.00
6	152.00	0.00	0.00
7	152.50	0.00	0.00
8	153.00	0.00	0.00
9	153.50	0.00	0.00
10	154.00	0.00	0.00
11	154.50	0.00	0.00
12	155.00	0.00	0.00
13	155.50	0.00	0.00
14	156.00	0.00	0.00
15	156.50	0.00	0.00
16	157.00	0.00	0.00
17	157.50	0.00	0.00
18	158.00	0.00	0.00
19	158.50	0.00	0.00
20	159.00	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-7

Damage Category: Public

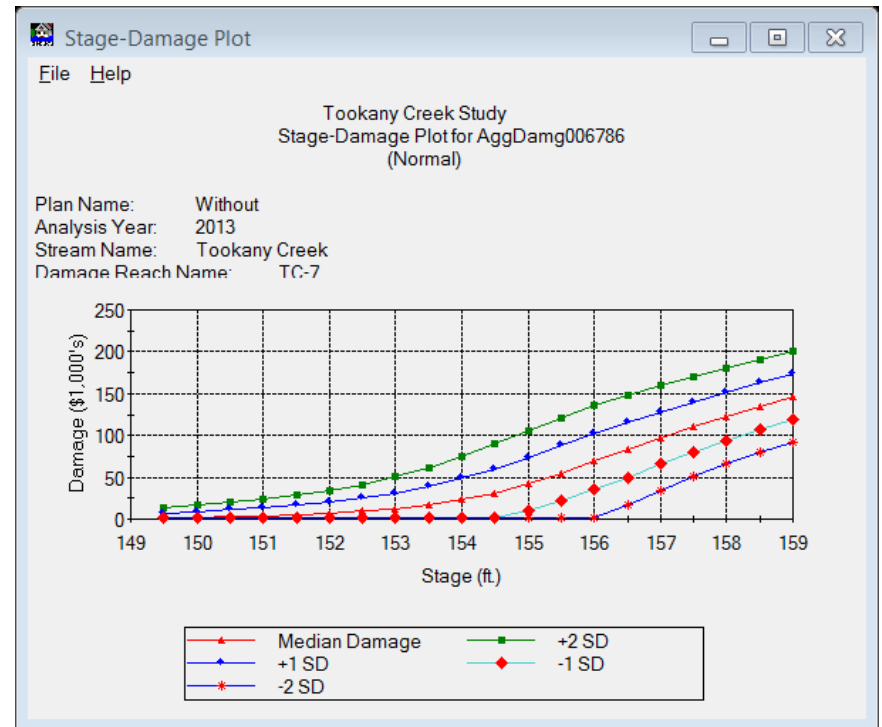
Function: AggDamg006786 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	1.37	5.76
2	150.00	2.11	7.15
3	150.50	2.99	8.43
4	151.00	3.96	9.66
5	151.50	5.60	11.84
6	152.00	7.22	13.73
7	152.50	9.36	16.02
8	153.00	12.49	18.94
9	153.50	16.68	22.16
10	154.00	23.09	25.74
11	154.50	31.28	29.03
12	155.00	41.82	31.66
13	155.50	54.71	32.95
14	156.00	69.04	33.32
15	156.50	82.83	32.97
16	157.00	97.03	31.34
17	157.50	110.44	29.85
18	158.00	123.05	28.70
19	158.50	135.02	27.85
20	159.00	146.60	27.07
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-7

Damage Category: Residential

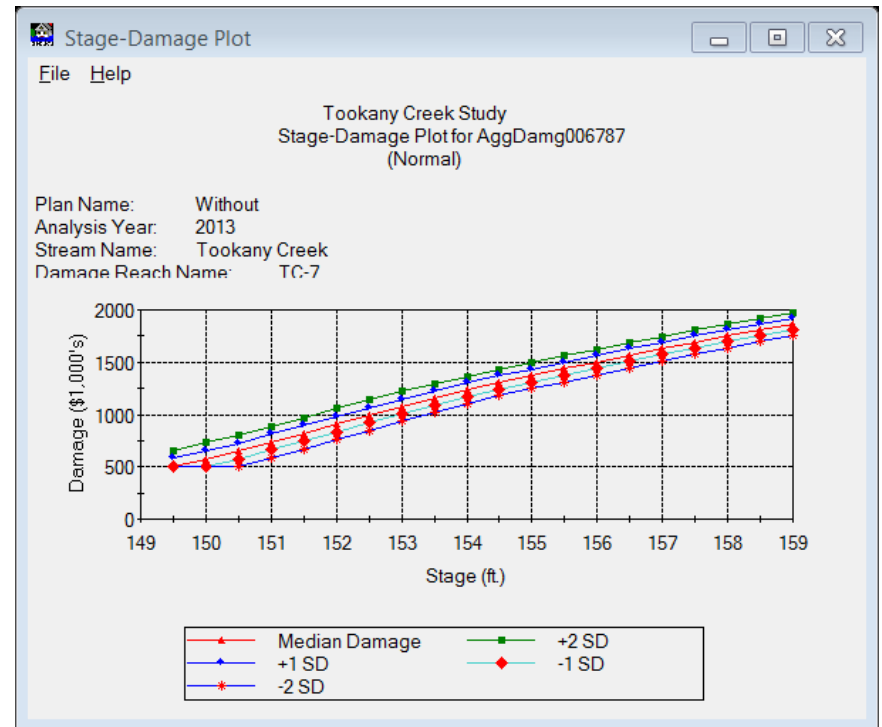
Function: AggDamg006787 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	497.20	81.06
2	150.00	572.98	77.71
3	150.50	651.26	75.70
4	151.00	735.24	75.26
5	151.50	821.29	74.96
6	152.00	906.77	74.41
7	152.50	992.27	73.00
8	153.00	1075.83	71.01
9	153.50	1157.45	68.38
10	154.00	1234.11	66.29
11	154.50	1306.48	64.16
12	155.00	1371.84	62.64
13	155.50	1435.69	61.44
14	156.00	1500.78	60.40
15	156.50	1566.45	59.53
16	157.00	1630.34	58.77
17	157.50	1692.55	58.03
18	158.00	1753.00	57.19
19	158.50	1811.35	56.35
20	159.00	1867.53	55.47
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-8

Damage Category: Commercial

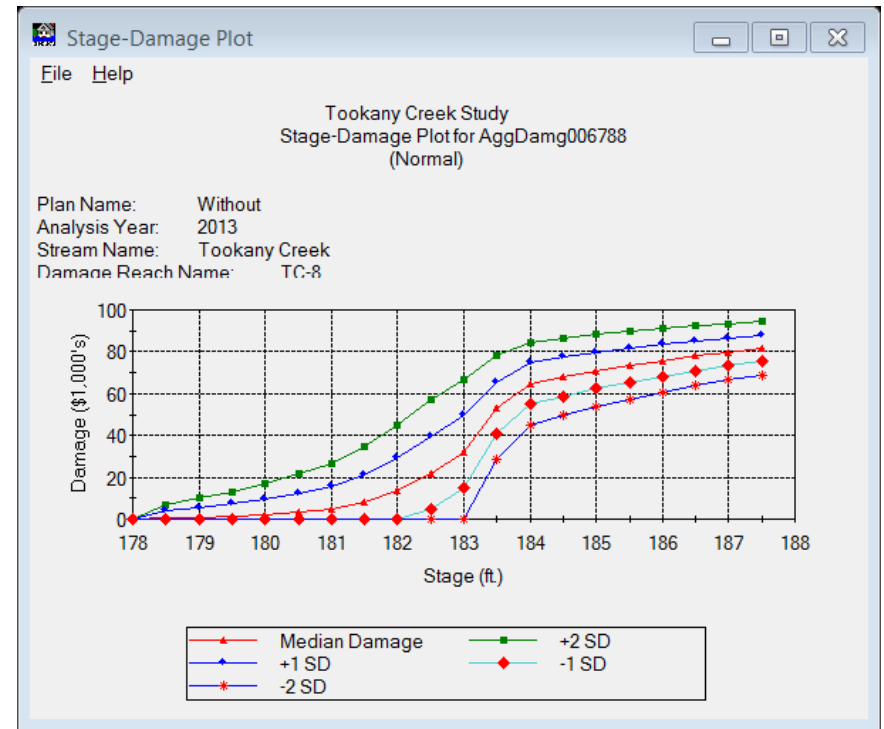
Function: AggDamg006788 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.48	3.29
3	179.00	0.90	4.56
4	179.50	1.39	5.82
5	180.00	2.22	7.35
6	180.50	3.39	9.06
7	181.00	4.98	10.83
8	181.50	7.97	13.25
9	182.00	13.35	15.91
10	182.50	22.00	17.48
11	183.00	32.07	17.29
12	183.50	53.25	12.34
13	184.00	64.71	9.93
14	184.50	68.04	9.26
15	185.00	71.03	8.64
16	185.50	73.54	8.11
17	186.00	75.85	7.61
18	186.50	77.96	7.14
19	187.00	79.87	6.71
20	187.50	81.59	6.32
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-8

Damage Category: Industrial

Function: AggDamg006789 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.00	0.00
3	179.00	0.00	0.00
4	179.50	0.00	0.00
5	180.00	0.00	0.00
6	180.50	0.00	0.00
7	181.00	0.00	0.00
8	181.50	0.00	0.00
9	182.00	0.00	0.00
10	182.50	0.00	0.00
11	183.00	0.00	0.00
12	183.50	0.00	0.00
13	184.00	0.00	0.00
14	184.50	0.00	0.00
15	185.00	0.00	0.00
16	185.50	0.00	0.00
17	186.00	0.00	0.00
18	186.50	0.00	0.00
19	187.00	0.00	0.00
20	187.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-8

Damage Category: Public

Function: AggDamg006790 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.00	0.00
3	179.00	0.00	0.00
4	179.50	0.00	0.00
5	180.00	0.00	0.00
6	180.50	0.00	0.00
7	181.00	0.00	0.00
8	181.50	0.00	0.00
9	182.00	0.00	0.00
10	182.50	0.00	0.00
11	183.00	0.00	0.00
12	183.50	0.00	0.00
13	184.00	0.00	0.00
14	184.50	0.00	0.00
15	185.00	0.00	0.00
16	185.50	0.00	0.00
17	186.00	0.00	0.00
18	186.50	0.00	0.00
19	187.00	0.00	0.00
20	187.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-8

Damage Category: Residential

Function: AggDamg006791 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.00	0.00
3	179.00	0.00	0.00
4	179.50	0.00	0.00
5	180.00	0.00	0.00
6	180.50	0.00	0.00
7	181.00	0.00	0.00
8	181.50	0.00	0.00
9	182.00	0.00	0.00
10	182.50	0.00	0.00
11	183.00	0.00	0.00
12	183.50	0.00	0.00
13	184.00	0.00	0.00
14	184.50	0.00	0.00
15	185.00	0.00	0.00
16	185.50	0.00	0.00
17	186.00	0.00	0.00
18	186.50	0.00	0.00
19	187.00	0.00	0.00
20	187.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-9

Damage Category: Commercial

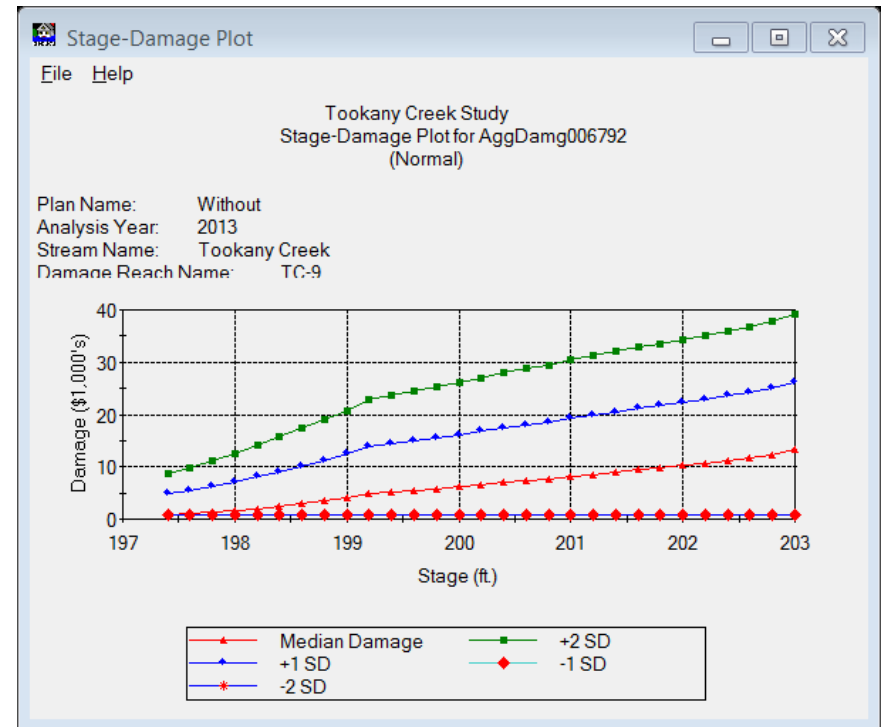
Function: AggDamg006792 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	0.88	3.96
2	197.60	1.06	4.42
3	197.80	1.31	4.93
4	198.00	1.61	5.45
5	198.20	2.01	6.05
6	198.40	2.43	6.63
7	198.60	2.90	7.19
8	198.80	3.41	7.78
9	199.00	4.01	8.39
10	199.20	4.79	9.02
11	199.40	5.08	9.27
12	199.60	5.45	9.53
13	199.80	5.80	9.79
14	200.00	6.16	10.03
15	200.20	6.53	10.26
16	200.40	6.94	10.49
17	200.60	7.27	10.72
18	200.80	7.59	10.94
19	201.00	8.07	11.19
20	201.20	8.54	11.38
21	201.40	8.95	11.55
22	201.60	9.40	11.70
23	201.80	9.79	11.89

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-9

Damage Category: Industrial

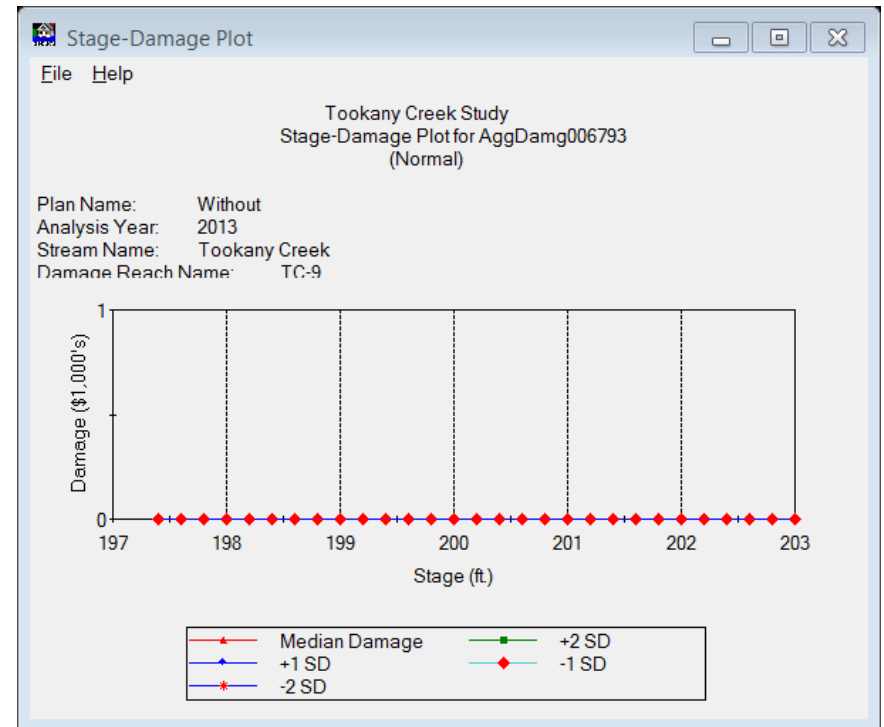
Function: AggDamg006793 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	0.00	0.00
2	197.60	0.00	0.00
3	197.80	0.00	0.00
4	198.00	0.00	0.00
5	198.20	0.00	0.00
6	198.40	0.00	0.00
7	198.60	0.00	0.00
8	198.80	0.00	0.00
9	199.00	0.00	0.00
10	199.20	0.00	0.00
11	199.40	0.00	0.00
12	199.60	0.00	0.00
13	199.80	0.00	0.00
14	200.00	0.00	0.00
15	200.20	0.00	0.00
16	200.40	0.00	0.00
17	200.60	0.00	0.00
18	200.80	0.00	0.00
19	201.00	0.00	0.00
20	201.20	0.00	0.00
21	201.40	0.00	0.00
22	201.60	0.00	0.00
23	201.80	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-9

Damage Category: Public

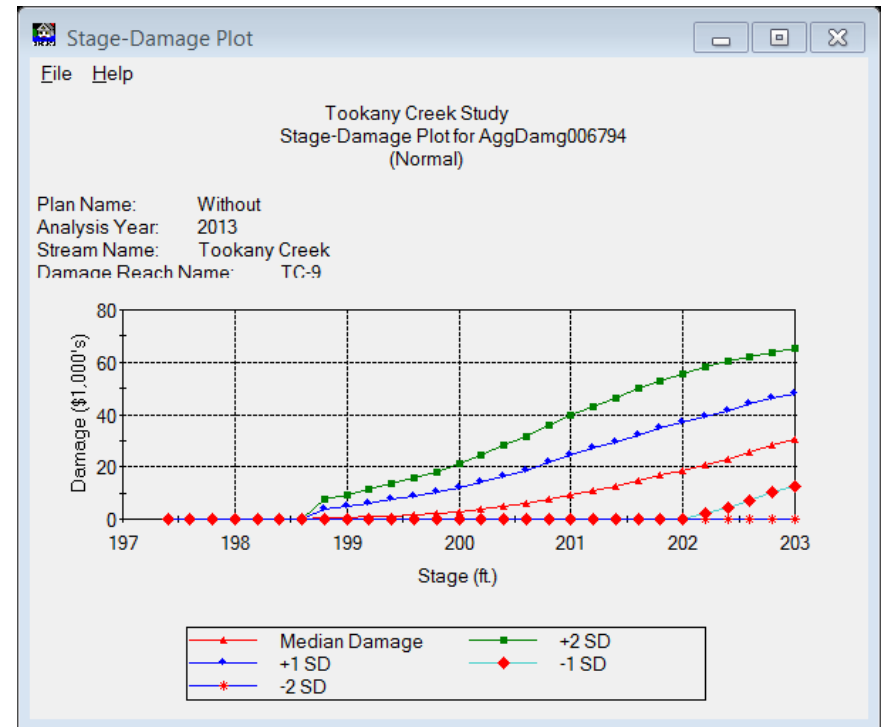
Function: AggDamg006794 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	0.00	0.00
2	197.60	0.00	0.00
3	197.80	0.00	0.00
4	198.00	0.00	0.00
5	198.20	0.00	0.00
6	198.40	0.00	0.00
7	198.60	0.00	0.00
8	198.80	0.44	3.63
9	199.00	0.63	4.35
10	199.20	0.90	5.19
11	199.40	1.26	6.14
12	199.60	1.68	7.11
13	199.80	2.10	7.97
14	200.00	2.86	9.20
15	200.20	3.70	10.40
16	200.40	4.80	11.65
17	200.60	5.95	12.81
18	200.80	7.51	14.09
19	201.00	9.15	15.19
20	201.20	10.92	16.13
21	201.40	12.49	16.92
22	201.60	14.66	17.59
23	201.80	16.77	18.07

Plot...  
 Tabulate...  
 Save  
 Cancel





Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-9

Damage Category: Residential

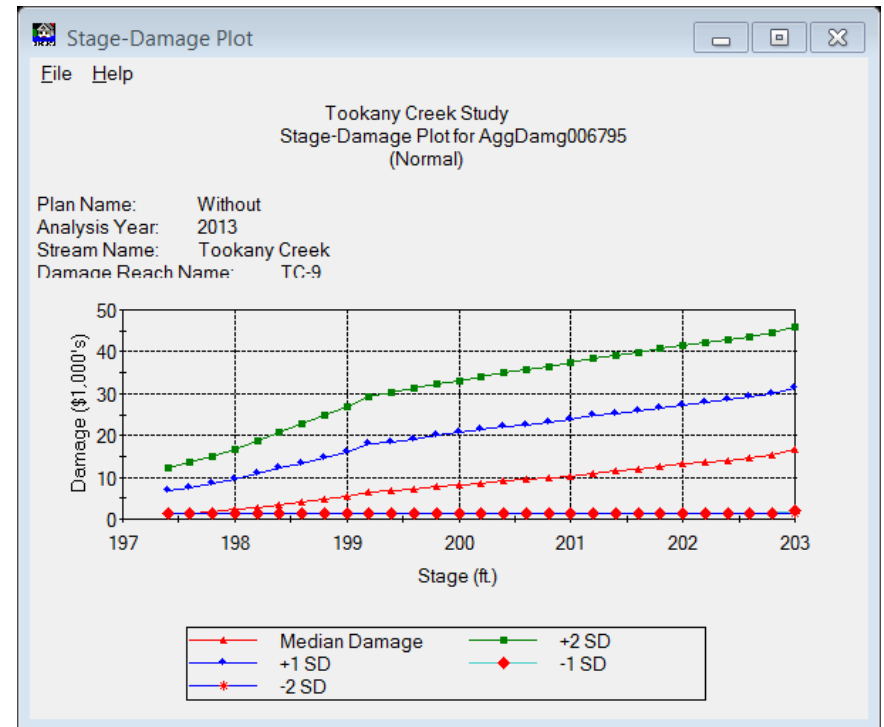
Function: AggDamg006795 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	1.27	5.48
2	197.60	1.50	5.98
3	197.80	1.83	6.60
4	198.00	2.26	7.28
5	198.20	2.78	8.01
6	198.40	3.36	8.72
7	198.60	4.00	9.41
8	198.80	4.68	10.08
9	199.00	5.37	10.71
10	199.20	6.41	11.45
11	199.40	6.74	11.69
12	199.60	7.23	11.98
13	199.80	7.68	12.25
14	200.00	8.13	12.49
15	200.20	8.62	12.72
16	200.40	9.03	12.92
17	200.60	9.48	13.13
18	200.80	9.82	13.31
19	201.00	10.36	13.52
20	201.20	10.99	13.70
21	201.40	11.48	13.84
22	201.60	11.97	13.97
23	201.80	12.53	14.09

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-10

Damage Category: Commercial

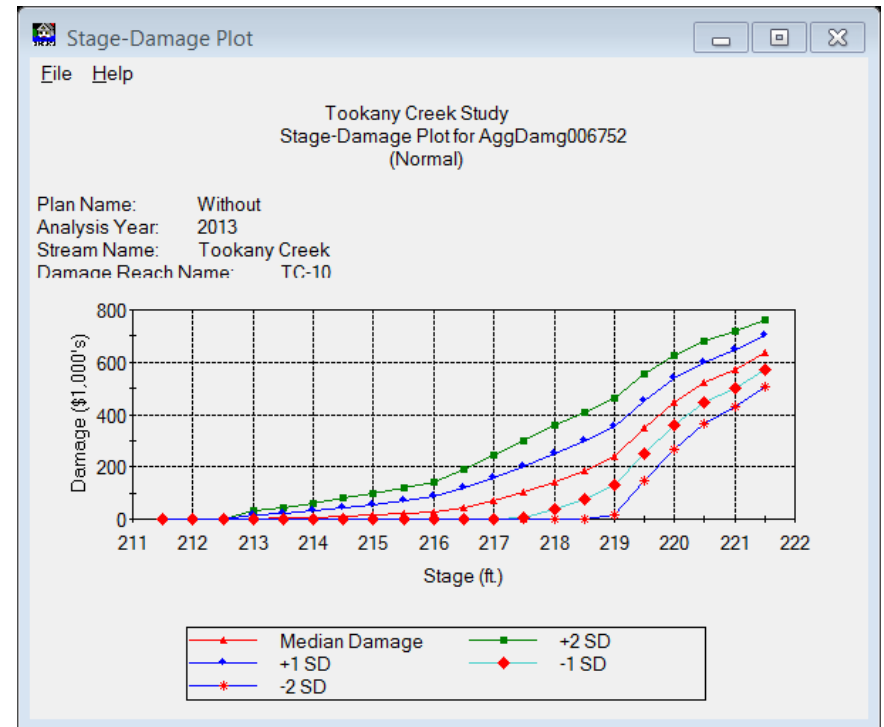
Function: AggDamg006752 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	0.00	0.00
2	212.00	0.00	0.00
3	212.50	0.00	0.00
4	213.00	1.82	15.26
5	213.50	3.05	20.13
6	214.00	5.45	27.20
7	214.50	9.51	35.11
8	215.00	14.26	42.24
9	215.50	20.55	49.96
10	216.00	27.92	57.78
11	216.50	45.86	72.29
12	217.00	71.12	86.54
13	217.50	103.37	98.58
14	218.00	143.51	107.04
15	218.50	187.74	110.71
16	219.00	240.53	112.03
17	219.50	349.49	101.83
18	220.00	448.02	89.44
19	220.50	522.63	78.56
20	221.00	574.03	71.81
21	221.50	636.20	63.91
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-10

Damage Category: Industrial

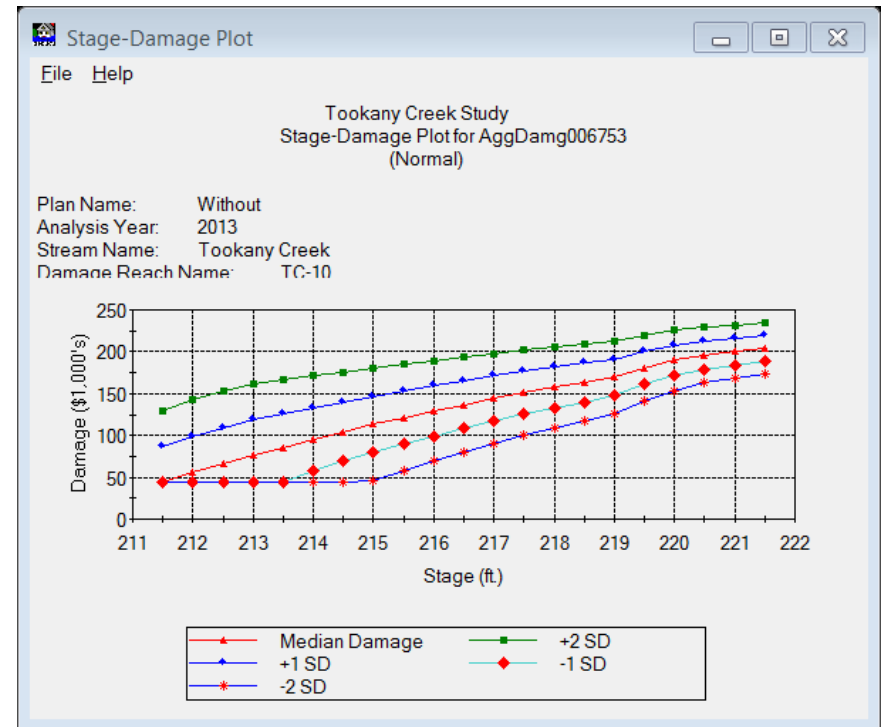
Function: AggDamg006753 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	44.74	42.29
2	212.00	56.38	43.10
3	212.50	66.36	42.98
4	213.00	75.96	42.45
5	213.50	85.71	40.85
6	214.00	95.50	37.97
7	214.50	104.44	35.54
8	215.00	113.22	33.26
9	215.50	121.27	31.88
10	216.00	129.06	29.98
11	216.50	136.89	28.30
12	217.00	144.29	26.66
13	217.50	151.16	25.37
14	218.00	157.59	24.15
15	218.50	163.26	23.07
16	219.00	169.28	21.92
17	219.50	180.54	19.75
18	220.00	189.73	17.97
19	220.50	196.03	16.76
20	221.00	200.04	16.01
21	221.50	204.31	15.25
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati... 
 [ ] [ ] [X]

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

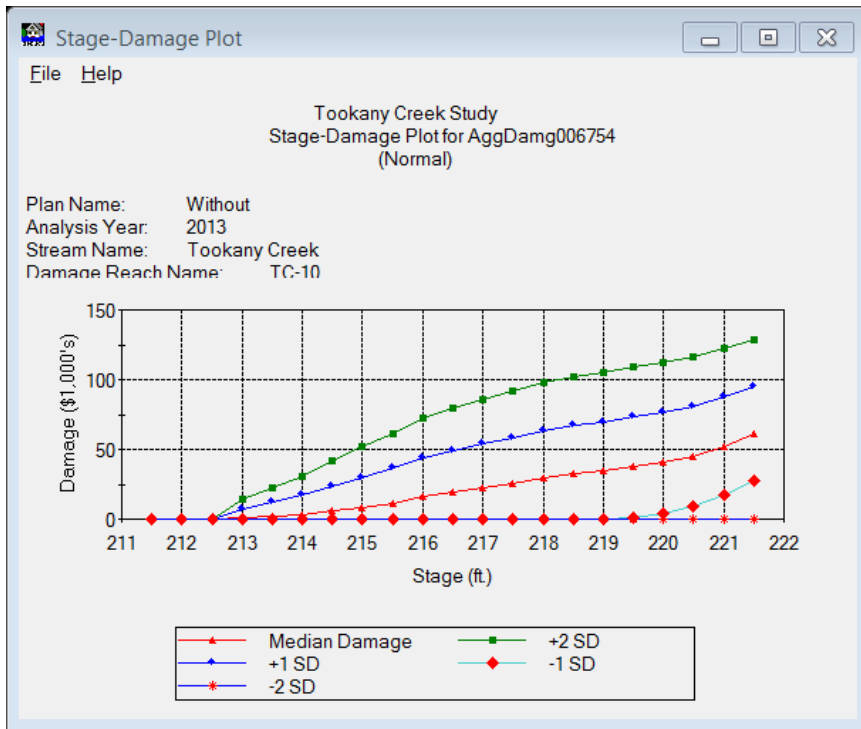
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	0.00	0.00
2	212.00	0.00	0.00
3	212.50	0.00	0.00
4	213.00	0.76	6.64
5	213.50	1.92	10.50
6	214.00	3.28	13.86
7	214.50	5.73	18.11
8	215.00	8.43	21.64
9	215.50	11.53	24.85
10	216.00	15.90	28.27
11	216.50	18.91	30.12
12	217.00	22.22	31.76
13	217.50	25.36	33.16
14	218.00	29.36	34.32
15	218.50	32.42	34.95
16	219.00	34.32	35.46
17	219.50	37.27	35.83
18	220.00	40.44	35.97
19	220.50	44.99	35.89
20	221.00	52.21	35.06
21	221.50	60.87	33.61
22			
23			



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-10

Damage Category: Residential

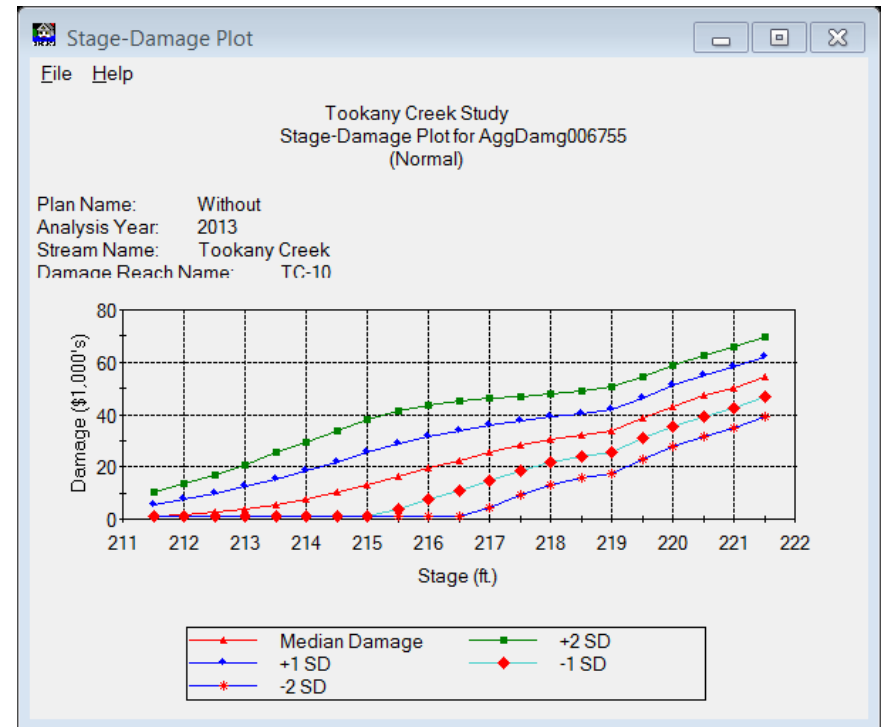
Function: AggDamg006755 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	1.07	4.61
2	212.00	1.72	5.84
3	212.50	2.57	7.08
4	213.00	3.88	8.45
5	213.50	5.64	9.85
6	214.00	7.67	10.97
7	214.50	10.08	11.84
8	215.00	13.06	12.39
9	215.50	16.31	12.42
10	216.00	19.66	11.92
11	216.50	22.48	11.40
12	217.00	25.35	10.46
13	217.50	28.09	9.33
14	218.00	30.48	8.65
15	218.50	32.22	8.26
16	219.00	33.93	8.21
17	219.50	38.62	7.85
18	220.00	43.19	7.79
19	220.50	47.11	7.79
20	221.00	50.28	7.76
21	221.50	54.45	7.64
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-11

Damage Category: Commercial

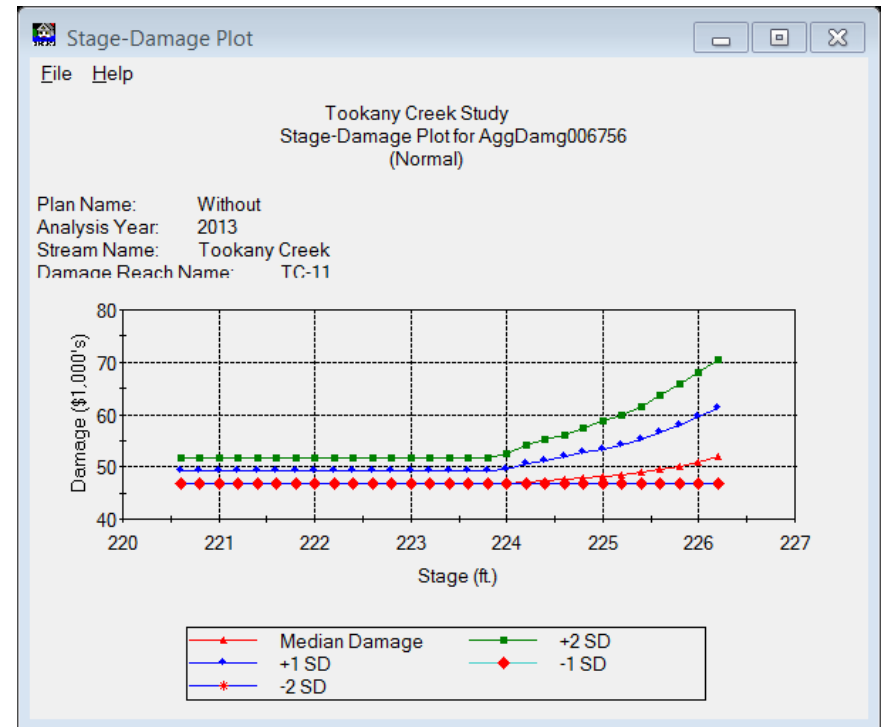
Function: AggDamg006756 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	46.77	2.52
2	220.80	46.77	2.52
3	221.00	46.77	2.52
4	221.20	46.77	2.52
5	221.40	46.77	2.52
6	221.60	46.77	2.52
7	221.80	46.77	2.52
8	222.00	46.77	2.52
9	222.20	46.77	2.52
10	222.40	46.77	2.52
11	222.60	46.77	2.52
12	222.80	46.77	2.52
13	223.00	46.77	2.52
14	223.20	46.77	2.52
15	223.40	46.77	2.52
16	223.60	46.77	2.52
17	223.80	46.77	2.52
18	224.00	46.88	2.76
19	224.20	47.18	3.53
20	224.40	47.36	3.88
21	224.60	47.58	4.28
22	224.80	47.88	4.80
23	225.00	48.16	5.26

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-11

Damage Category: Industrial

Function: AggDamg006757 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	0.00	0.00
2	220.80	0.00	0.00
3	221.00	0.00	0.00
4	221.20	0.00	0.00
5	221.40	0.00	0.00
6	221.60	0.00	0.00
7	221.80	0.00	0.00
8	222.00	0.00	0.00
9	222.20	0.00	0.00
10	222.40	0.00	0.00
11	222.60	0.00	0.00
12	222.80	0.00	0.00
13	223.00	0.00	0.00
14	223.20	0.00	0.00
15	223.40	0.00	0.00
16	223.60	0.00	0.00
17	223.80	0.00	0.00
18	224.00	0.00	0.00
19	224.20	0.00	0.00
20	224.40	0.00	0.00
21	224.60	0.00	0.00
22	224.80	0.00	0.00
23	225.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-11

Damage Category: Public

Function: AggDamg006758 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	0.00	0.00
2	220.80	0.00	0.00
3	221.00	0.00	0.00
4	221.20	0.00	0.00
5	221.40	0.00	0.00
6	221.60	0.00	0.00
7	221.80	0.00	0.00
8	222.00	0.00	0.00
9	222.20	0.00	0.00
10	222.40	0.00	0.00
11	222.60	0.00	0.00
12	222.80	0.00	0.00
13	223.00	0.00	0.00
14	223.20	0.00	0.00
15	223.40	0.00	0.00
16	223.60	0.00	0.00
17	223.80	0.00	0.00
18	224.00	0.00	0.00
19	224.20	0.00	0.00
20	224.40	0.00	0.00
21	224.60	0.00	0.00
22	224.80	0.00	0.00
23	225.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-11

Damage Category: Residential

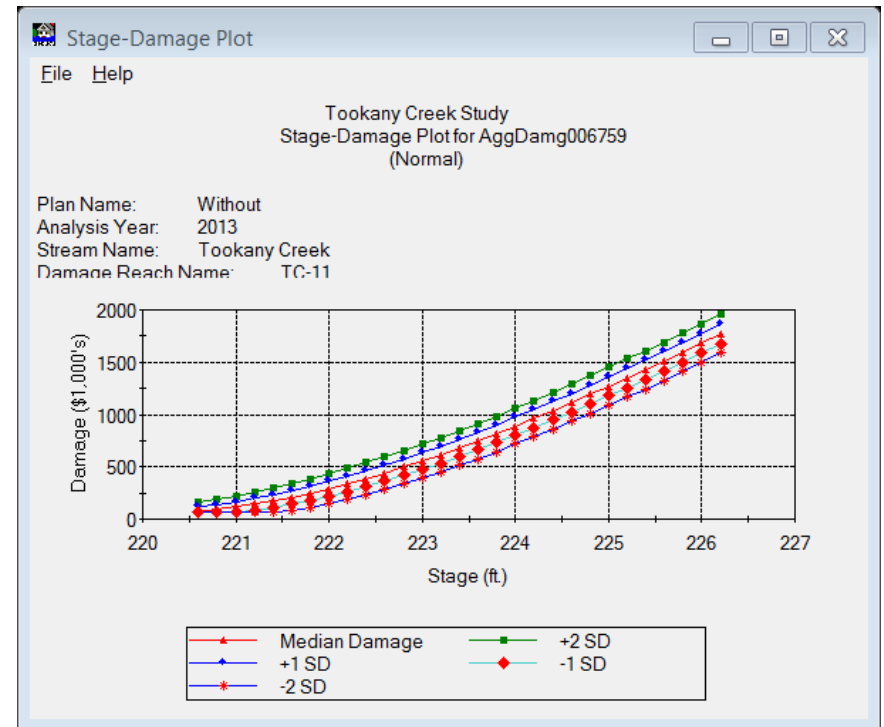
Function: AggDamg006759 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	73.96	42.81
2	220.80	93.44	47.40
3	221.00	116.40	51.91
4	221.20	144.05	56.54
5	221.40	174.81	60.61
6	221.60	208.58	64.49
7	221.80	248.49	68.11
8	222.00	290.99	71.34
9	222.20	337.27	74.22
10	222.40	387.12	76.74
11	222.60	441.73	79.18
12	222.80	496.69	80.85
13	223.00	555.09	82.14
14	223.20	614.65	83.05
15	223.40	679.01	83.87
16	223.60	745.73	84.84
17	223.80	814.04	85.58
18	224.00	886.79	86.25
19	224.20	959.64	87.04
20	224.40	1036.09	87.80
21	224.60	1112.68	88.75
22	224.80	1190.71	89.79
23	225.00	1269.73	90.91

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Damage Category: Commercial

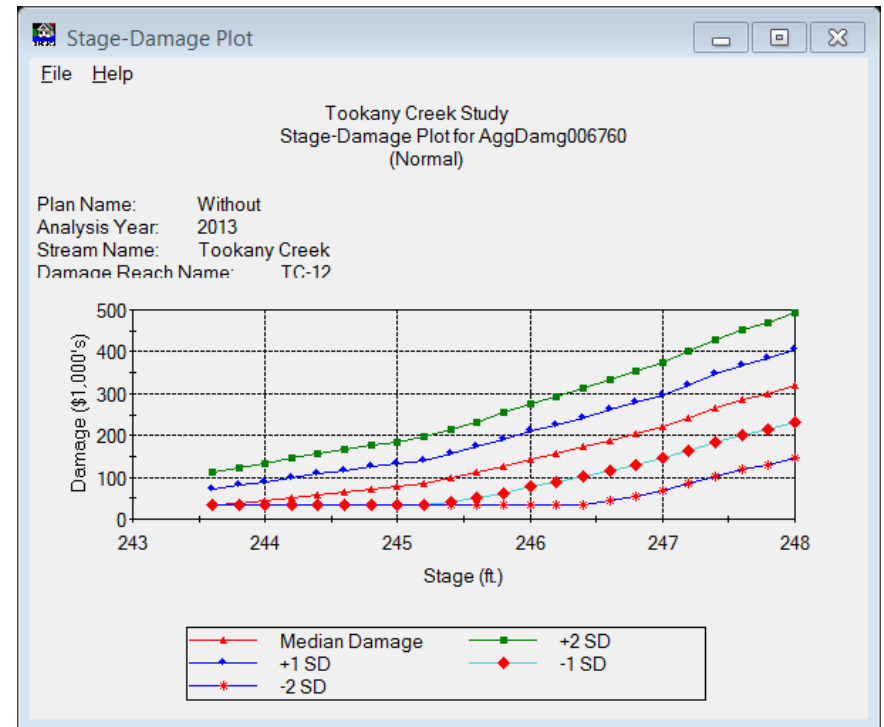
Function: AggDamg006760 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	32.68	39.82
2	243.80	38.45	42.18
3	244.00	44.31	44.42
4	244.20	51.23	47.06
5	244.40	58.38	49.19
6	244.60	65.66	51.08
7	244.80	72.16	52.55
8	245.00	78.07	53.53
9	245.20	85.24	55.39
10	245.40	97.11	57.75
11	245.60	111.22	60.59
12	245.80	126.39	63.65
13	246.00	142.86	66.34
14	246.20	156.62	68.49
15	246.40	171.83	70.60
16	246.60	187.97	72.60
17	246.80	203.62	74.38
18	247.00	221.22	76.35
19	247.20	242.44	78.81
20	247.40	264.85	81.34
21	247.60	285.05	83.25
22	247.80	300.30	84.92
23	248.00	318.93	86.95

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Damage Category: Industrial

Function: AggDamg006761 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	0.00	0.00
2	243.80	0.00	0.00
3	244.00	0.00	0.00
4	244.20	0.00	0.00
5	244.40	0.00	0.00
6	244.60	0.00	0.00
7	244.80	0.00	0.00
8	245.00	0.00	0.00
9	245.20	0.00	0.00
10	245.40	0.00	0.00
11	245.60	0.00	0.00
12	245.80	0.00	0.00
13	246.00	0.00	0.00
14	246.20	0.00	0.00
15	246.40	0.00	0.00
16	246.60	0.00	0.00
17	246.80	0.00	0.00
18	247.00	0.00	0.00
19	247.20	0.00	0.00
20	247.40	0.00	0.00
21	247.60	0.00	0.00
22	247.80	0.00	0.00
23	248.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Damage Category: Public

Function: AggDamg006762 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	0.00	0.00
2	243.80	0.00	0.00
3	244.00	0.00	0.00
4	244.20	0.00	0.00
5	244.40	0.00	0.00
6	244.60	0.00	0.00
7	244.80	0.00	0.00
8	245.00	0.00	0.00
9	245.20	0.00	0.00
10	245.40	0.00	0.00
11	245.60	0.00	0.00
12	245.80	0.00	0.00
13	246.00	0.00	0.00
14	246.20	0.00	0.00
15	246.40	0.00	0.00
16	246.60	0.00	0.00
17	246.80	0.00	0.00
18	247.00	0.00	0.00
19	247.20	0.00	0.00
20	247.40	0.00	0.00
21	247.60	0.00	0.00
22	247.80	0.00	0.00
23	248.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Damage Category: Residential

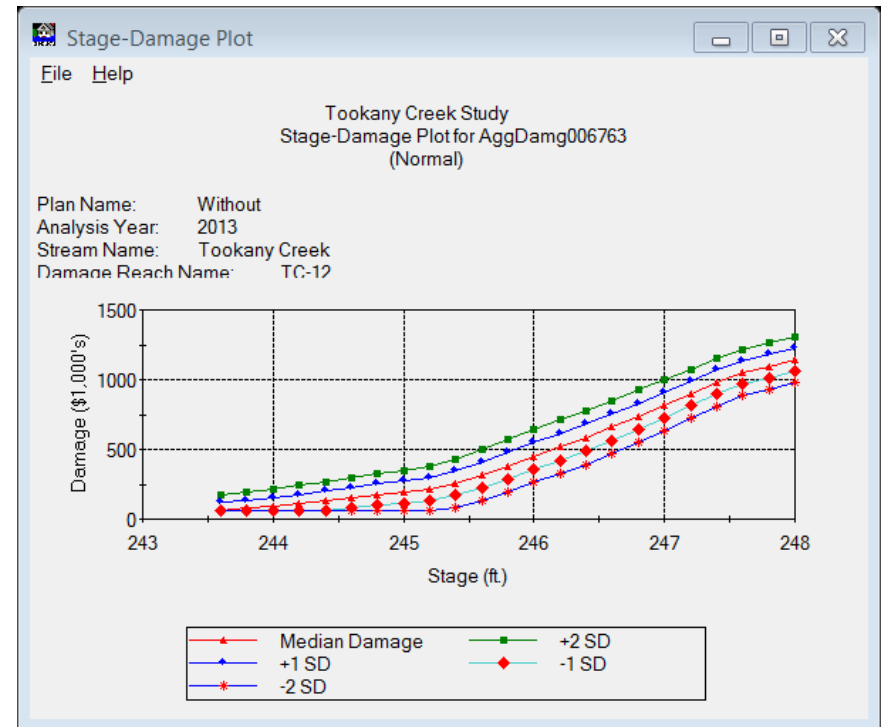
Function: AggDamg006763 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	66.17	51.97
2	243.80	80.19	56.58
3	244.00	95.27	60.53
4	244.20	113.27	64.83
5	244.40	132.79	68.73
6	244.60	155.47	72.71
7	244.80	174.72	75.58
8	245.00	193.69	78.08
9	245.20	212.68	80.48
10	245.40	257.00	85.35
11	245.60	316.74	90.09
12	245.80	381.82	93.43
13	246.00	452.09	95.45
14	246.20	516.54	96.44
15	246.40	583.53	96.69
16	246.60	659.38	96.12
17	246.80	736.94	94.04
18	247.00	816.45	91.09
19	247.20	900.07	87.92
20	247.40	981.03	85.54
21	247.60	1049.61	83.43
22	247.80	1096.69	82.07
23	248.00	1142.66	80.77

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Damage Category: Commercial

Function: AggDamg003393 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Damage Category: Industrial

Function: AggDamg003395 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Damage Category: Public

Function: AggDamg003397 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Damage Category: Residential

Function: AggDamg003399 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Damage Category: Commercial

Function: AggDamg003425 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	0.00	0.00
2	90.00	0.00	0.00
3	90.20	0.00	0.00
4	90.40	0.00	0.00
5	90.60	0.00	0.00
6	90.80	0.00	0.00
7	91.00	0.00	0.00
8	91.20	0.00	0.00
9	91.40	0.00	0.00
10	91.60	0.00	0.00
11	91.80	0.00	0.00
12	92.00	0.00	0.00
13	92.20	0.00	0.00
14	92.40	0.00	0.00
15	92.60	0.00	0.00
16	92.80	0.00	0.00
17	93.00	0.00	0.00
18	93.20	0.00	0.00
19	93.40	0.00	0.00
20	93.60	0.00	0.00
21	93.80	0.00	0.00
22	94.00	0.00	0.00
23	94.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Damage Category: Industrial

Function: AggDamg003427 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	0.00	0.00
2	90.00	0.00	0.00
3	90.20	0.00	0.00
4	90.40	0.00	0.00
5	90.60	0.00	0.00
6	90.80	0.00	0.00
7	91.00	0.00	0.00
8	91.20	0.00	0.00
9	91.40	0.00	0.00
10	91.60	0.00	0.00
11	91.80	0.00	0.00
12	92.00	0.00	0.00
13	92.20	0.00	0.00
14	92.40	0.00	0.00
15	92.60	0.00	0.00
16	92.80	0.00	0.00
17	93.00	0.00	0.00
18	93.20	0.00	0.00
19	93.40	0.00	0.00
20	93.60	0.00	0.00
21	93.80	0.00	0.00
22	94.00	0.00	0.00
23	94.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Damage Category: Public

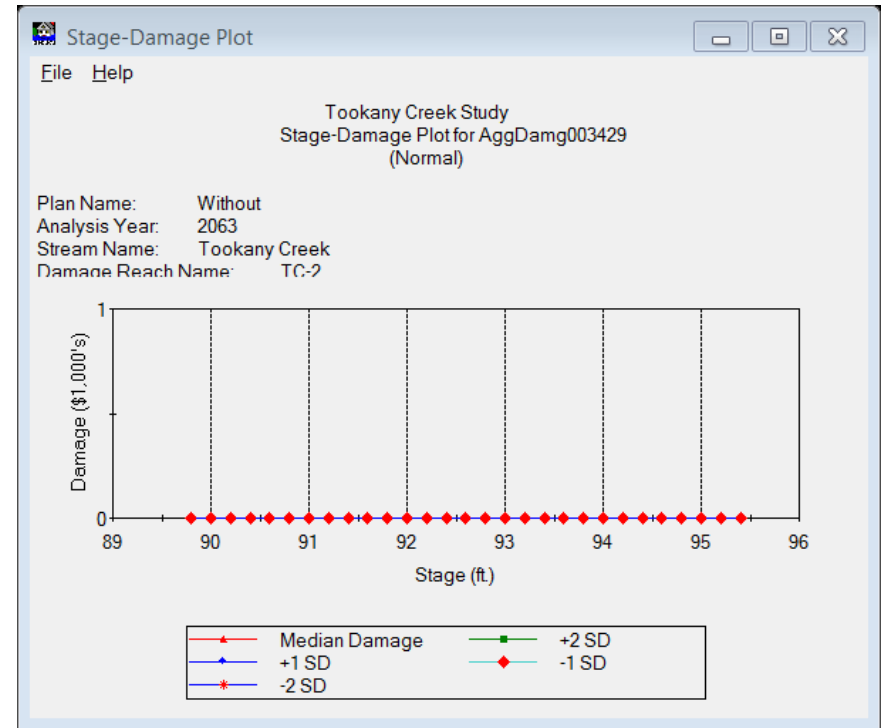
Function: AggDamg003429 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	0.00	0.00
2	90.00	0.00	0.00
3	90.20	0.00	0.00
4	90.40	0.00	0.00
5	90.60	0.00	0.00
6	90.80	0.00	0.00
7	91.00	0.00	0.00
8	91.20	0.00	0.00
9	91.40	0.00	0.00
10	91.60	0.00	0.00
11	91.80	0.00	0.00
12	92.00	0.00	0.00
13	92.20	0.00	0.00
14	92.40	0.00	0.00
15	92.60	0.00	0.00
16	92.80	0.00	0.00
17	93.00	0.00	0.00
18	93.20	0.00	0.00
19	93.40	0.00	0.00
20	93.60	0.00	0.00
21	93.80	0.00	0.00
22	94.00	0.00	0.00
23	94.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel





Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Damage Category: Residential

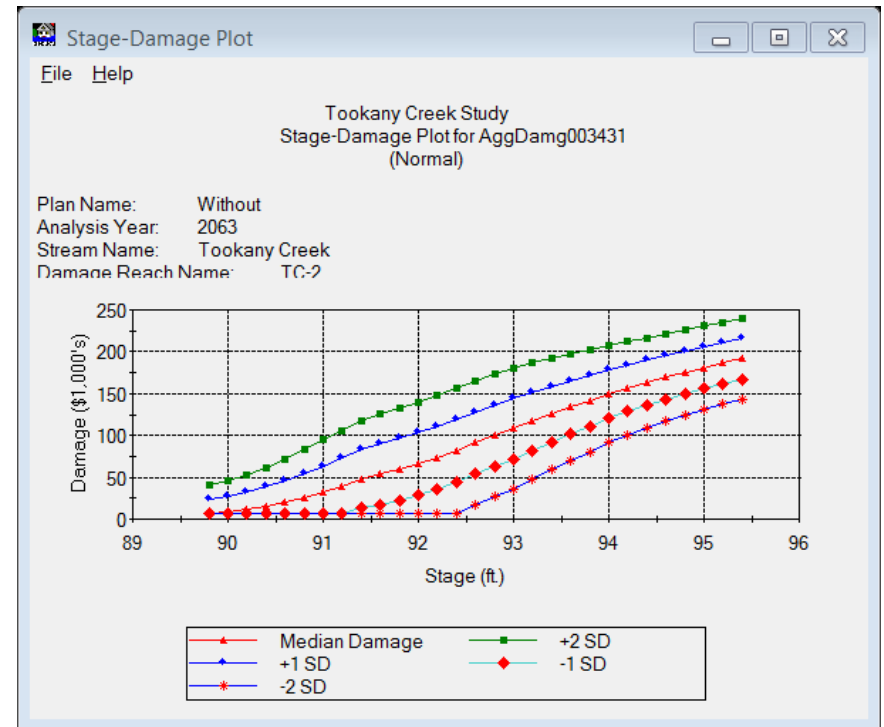
Function: AggDamg003431 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	89.80	7.58	16.20
2	90.00	9.34	17.89
3	90.20	11.97	20.15
4	90.40	15.69	22.88
5	90.60	20.28	25.63
6	90.80	25.87	28.34
7	91.00	32.67	30.98
8	91.20	39.79	33.20
9	91.40	48.07	34.94
10	91.60	53.67	35.91
11	91.80	59.54	36.66
12	92.00	65.84	37.14
13	92.20	73.15	37.37
14	92.40	82.26	37.39
15	92.60	91.30	37.04
16	92.80	100.07	36.49
17	93.00	108.20	36.03
18	93.20	117.10	34.67
19	93.40	125.55	33.36
20	93.60	133.78	31.76
21	93.80	141.70	30.48
22	94.00	149.61	29.05
23	94.20	156.57	27.80

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-3

Damage Category: Commercial

Function: AggDamg003433 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.50	0.00	0.00
3	105.00	0.00	0.00
4	105.50	0.00	0.00
5	106.00	0.00	0.00
6	106.50	0.00	0.00
7	107.00	0.00	0.00
8	107.50	0.00	0.00
9	108.00	0.00	0.00
10	108.50	0.00	0.00
11	109.00	0.00	0.00
12	109.50	0.00	0.00
13	110.00	0.00	0.00
14	110.50	0.00	0.00
15	111.00	0.00	0.00
16	111.50	0.00	0.00
17	112.00	0.00	0.00
18	112.50	0.00	0.00
19	113.00	0.00	0.00
20	113.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-3

Damage Category: Industrial

Function: AggDamg003435 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.50	0.00	0.00
3	105.00	0.00	0.00
4	105.50	0.00	0.00
5	106.00	0.00	0.00
6	106.50	0.00	0.00
7	107.00	0.00	0.00
8	107.50	0.00	0.00
9	108.00	0.00	0.00
10	108.50	0.00	0.00
11	109.00	0.00	0.00
12	109.50	0.00	0.00
13	110.00	0.00	0.00
14	110.50	0.00	0.00
15	111.00	0.00	0.00
16	111.50	0.00	0.00
17	112.00	0.00	0.00
18	112.50	0.00	0.00
19	113.00	0.00	0.00
20	113.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-3

Damage Category: Public

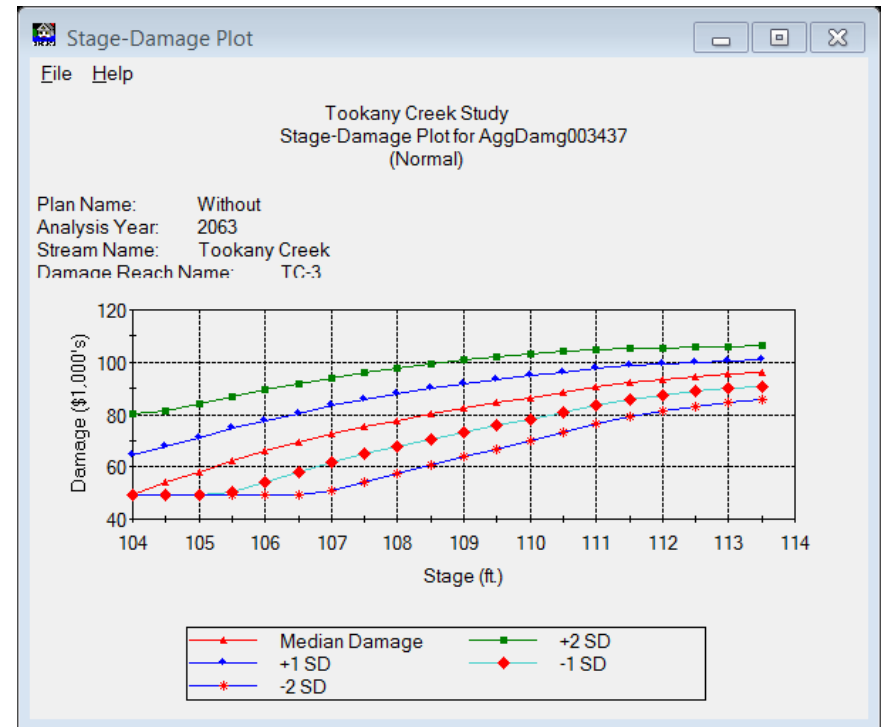
Function: AggDamg003437 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	49.34	15.38
2	104.50	53.95	13.82
3	105.00	58.20	13.03
4	105.50	62.32	12.25
5	106.00	65.89	11.70
6	106.50	69.30	11.15
7	107.00	72.45	10.82
8	107.50	75.30	10.46
9	108.00	77.75	10.10
10	108.50	80.10	9.70
11	109.00	82.34	9.26
12	109.50	84.45	8.79
13	110.00	86.46	8.30
14	110.50	88.59	7.70
15	111.00	90.47	7.12
16	111.50	92.06	6.55
17	112.00	93.38	6.06
18	112.50	94.44	5.65
19	113.00	95.27	5.34
20	113.50	95.91	5.11
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-3

Damage Category: Residential

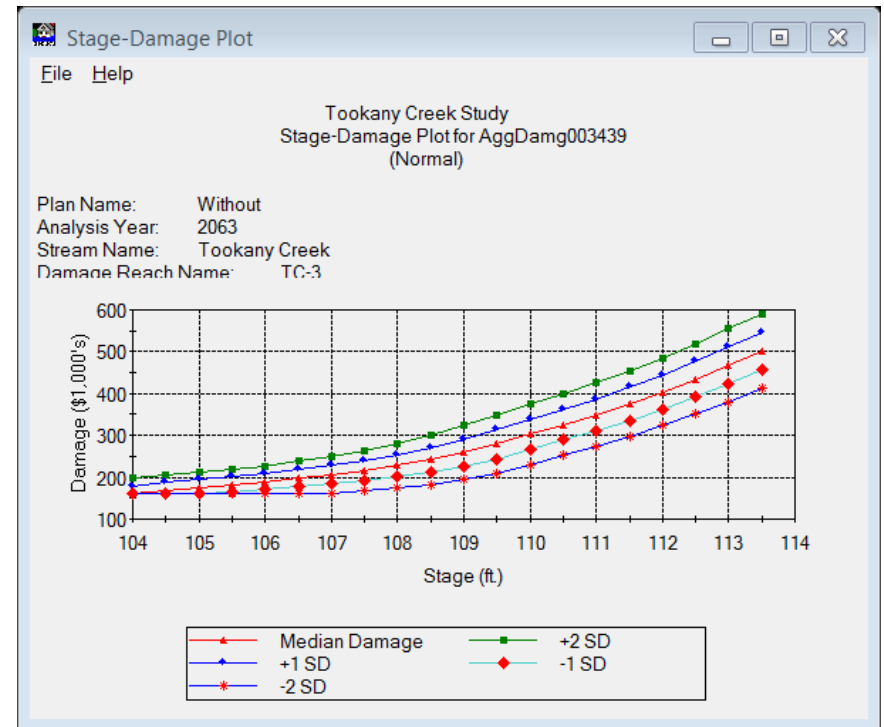
Function: AggDamg003439 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	161.10	18.37
2	104.50	168.63	18.32
3	105.00	175.65	18.23
4	105.50	182.55	18.11
5	106.00	189.83	18.57
6	106.50	198.79	20.48
7	107.00	206.89	22.03
8	107.50	215.67	23.90
9	108.00	227.73	26.87
10	108.50	241.42	29.72
11	109.00	259.23	32.80
12	109.50	279.65	35.12
13	110.00	302.97	36.29
14	110.50	326.05	36.78
15	111.00	349.07	38.08
16	111.50	375.39	39.31
17	112.00	404.13	40.67
18	112.50	434.79	42.39
19	113.00	466.73	43.89
20	113.50	502.04	44.69
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-4

Damage Category: Commercial

Function: AggDamg003441 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	0.00	0.00
2	115.20	0.00	0.00
3	115.40	0.00	0.00
4	115.60	0.00	0.00
5	115.80	0.00	0.00
6	116.00	0.00	0.00
7	116.20	0.00	0.00
8	116.40	0.00	0.00
9	116.60	0.00	0.00
10	116.80	0.00	0.00
11	117.00	0.00	0.00
12	117.20	0.00	0.00
13	117.40	0.00	0.00
14	117.60	0.00	0.00
15	117.80	0.00	0.00
16	118.00	0.00	0.00
17	118.20	0.00	0.00
18	118.40	0.00	0.00
19	118.60	0.00	0.00
20	118.80	0.00	0.00
21	119.00	0.00	0.00
22	119.20	0.00	0.00
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-4

Damage Category: Industrial

Function: AggDamg003443 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	0.00	0.00
2	115.20	0.00	0.00
3	115.40	0.00	0.00
4	115.60	0.00	0.00
5	115.80	0.00	0.00
6	116.00	0.00	0.00
7	116.20	0.00	0.00
8	116.40	0.00	0.00
9	116.60	0.00	0.00
10	116.80	0.00	0.00
11	117.00	0.00	0.00
12	117.20	0.00	0.00
13	117.40	0.00	0.00
14	117.60	0.00	0.00
15	117.80	0.00	0.00
16	118.00	0.00	0.00
17	118.20	0.00	0.00
18	118.40	0.00	0.00
19	118.60	0.00	0.00
20	118.80	0.00	0.00
21	119.00	0.00	0.00
22	119.20	0.00	0.00
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-4

Damage Category: Public

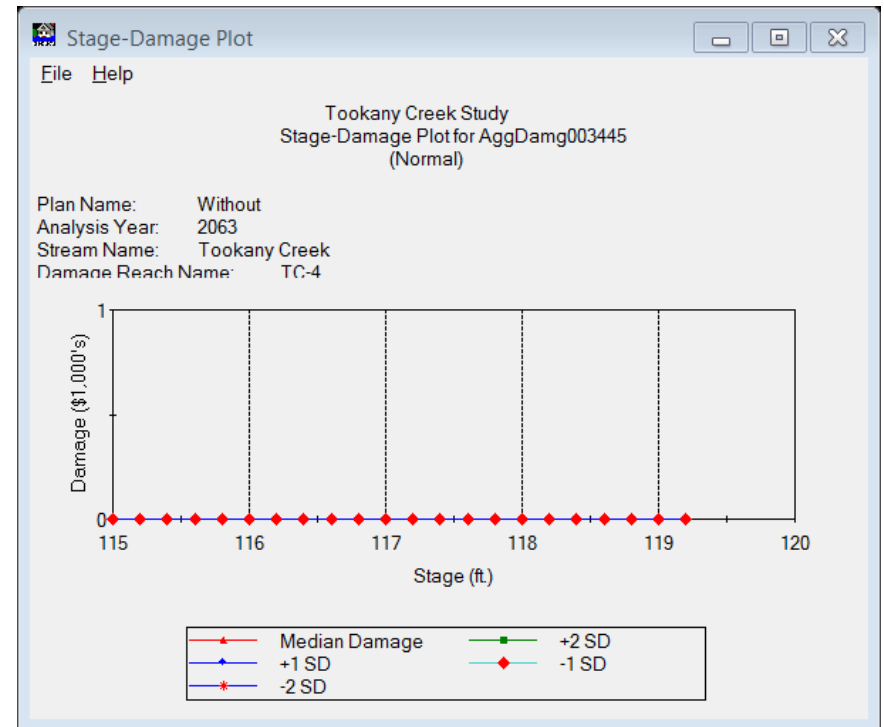
Function: AggDamg003445 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	0.00	0.00
2	115.20	0.00	0.00
3	115.40	0.00	0.00
4	115.60	0.00	0.00
5	115.80	0.00	0.00
6	116.00	0.00	0.00
7	116.20	0.00	0.00
8	116.40	0.00	0.00
9	116.60	0.00	0.00
10	116.80	0.00	0.00
11	117.00	0.00	0.00
12	117.20	0.00	0.00
13	117.40	0.00	0.00
14	117.60	0.00	0.00
15	117.80	0.00	0.00
16	118.00	0.00	0.00
17	118.20	0.00	0.00
18	118.40	0.00	0.00
19	118.60	0.00	0.00
20	118.80	0.00	0.00
21	119.00	0.00	0.00
22	119.20	0.00	0.00
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-4

Damage Category: Residential

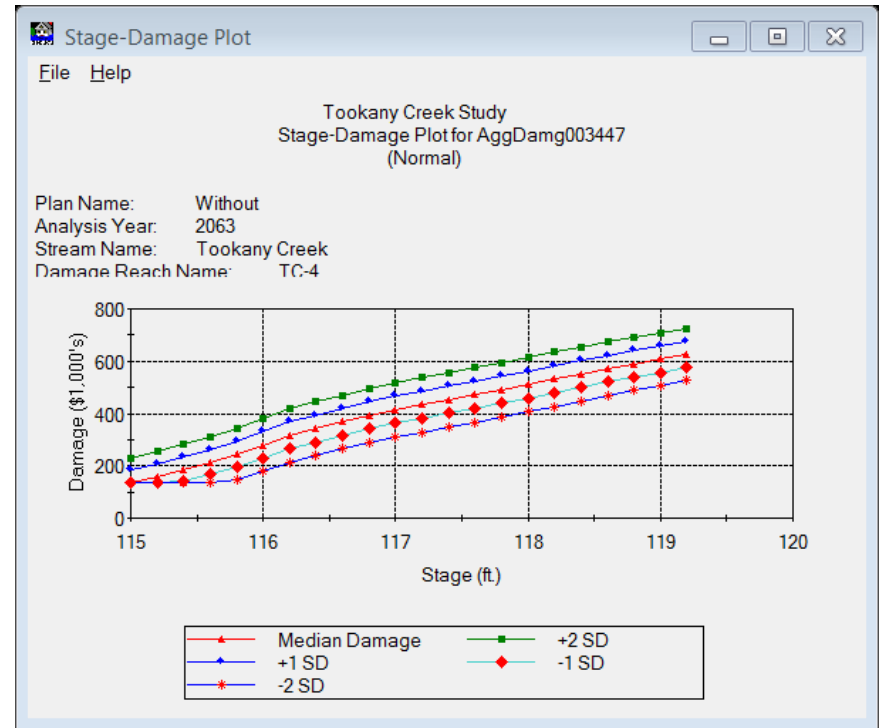
Function: AggDamg003447 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	115.00	138.58	45.28
2	115.20	160.07	46.61
3	115.40	186.48	47.20
4	115.60	214.77	48.06
5	115.80	243.44	49.22
6	116.00	278.80	50.71
7	116.20	317.06	51.23
8	116.40	342.07	51.44
9	116.60	368.14	51.26
10	116.80	393.61	51.33
11	117.00	414.62	51.83
12	117.20	433.38	52.29
13	117.40	452.50	52.28
14	117.60	471.14	52.40
15	117.80	490.38	52.12
16	118.00	510.01	52.00
17	118.20	530.71	51.94
18	118.40	551.20	51.50
19	118.60	571.32	51.19
20	118.80	589.38	50.83
21	119.00	607.56	49.91
22	119.20	625.18	49.09
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-5

Damage Category: Commercial

Function: AggDamg003449 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	0.00	0.00
2	129.00	0.00	0.00
3	129.20	0.00	0.00
4	129.40	0.00	0.00
5	129.60	0.00	0.00
6	129.80	0.00	0.00
7	130.00	0.00	0.00
8	130.20	0.00	0.00
9	130.40	0.00	0.00
10	130.60	0.00	0.00
11	130.80	0.00	0.00
12	131.00	0.00	0.00
13	131.20	0.00	0.00
14	131.40	0.00	0.00
15	131.60	0.00	0.00
16	131.80	0.00	0.00
17	132.00	0.00	0.00
18	132.20	0.00	0.00
19	132.40	0.00	0.00
20	132.60	0.00	0.00
21	132.80	0.00	0.00
22	133.00	0.00	0.00
23	133.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-5

Damage Category: Industrial

Function: AggDamg003451 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	0.00	0.00
2	129.00	0.00	0.00
3	129.20	0.00	0.00
4	129.40	0.00	0.00
5	129.60	0.00	0.00
6	129.80	0.00	0.00
7	130.00	0.00	0.00
8	130.20	0.00	0.00
9	130.40	0.00	0.00
10	130.60	0.00	0.00
11	130.80	0.00	0.00
12	131.00	0.00	0.00
13	131.20	0.00	0.00
14	131.40	0.00	0.00
15	131.60	0.00	0.00
16	131.80	0.00	0.00
17	132.00	0.00	0.00
18	132.20	0.00	0.00
19	132.40	0.00	0.00
20	132.60	0.00	0.00
21	132.80	0.00	0.00
22	133.00	0.00	0.00
23	133.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-5

Damage Category: Public

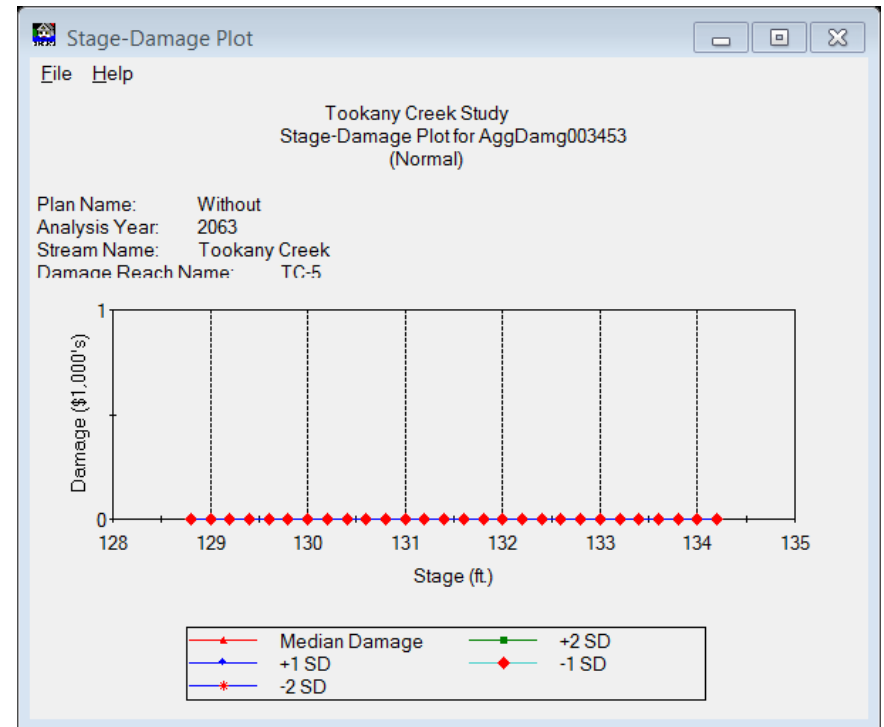
Function: AggDamg003453 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	0.00	0.00
2	129.00	0.00	0.00
3	129.20	0.00	0.00
4	129.40	0.00	0.00
5	129.60	0.00	0.00
6	129.80	0.00	0.00
7	130.00	0.00	0.00
8	130.20	0.00	0.00
9	130.40	0.00	0.00
10	130.60	0.00	0.00
11	130.80	0.00	0.00
12	131.00	0.00	0.00
13	131.20	0.00	0.00
14	131.40	0.00	0.00
15	131.60	0.00	0.00
16	131.80	0.00	0.00
17	132.00	0.00	0.00
18	132.20	0.00	0.00
19	132.40	0.00	0.00
20	132.60	0.00	0.00
21	132.80	0.00	0.00
22	133.00	0.00	0.00
23	133.20	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-5

Damage Category: Residential

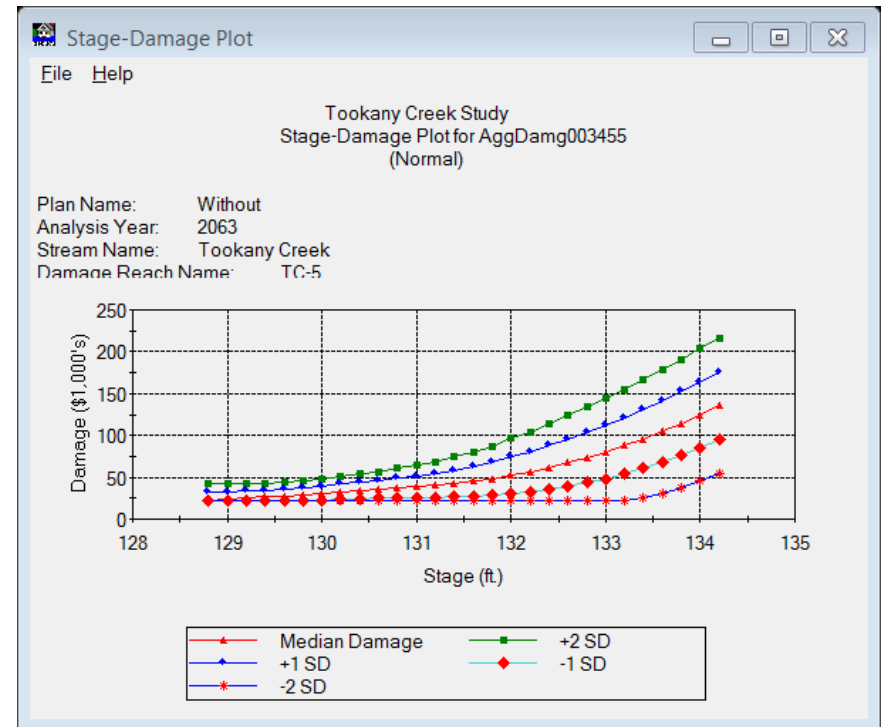
Function: AggDamg003455 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.80	21.97	10.07
2	129.00	23.31	9.62
3	129.20	24.95	8.89
4	129.40	26.45	8.30
5	129.60	27.80	7.90
6	129.80	29.55	8.29
7	130.00	30.92	8.54
8	130.20	32.61	9.18
9	130.40	34.22	9.68
10	130.60	35.66	10.46
11	130.80	37.15	11.68
12	131.00	38.58	12.87
13	131.20	40.28	14.19
14	131.40	42.49	15.77
15	131.60	45.26	17.45
16	131.80	48.34	19.17
17	132.00	52.54	21.83
18	132.20	56.74	23.90
19	132.40	62.07	26.09
20	132.60	67.64	28.10
21	132.80	73.79	30.01
22	133.00	80.18	31.80
23	133.20	87.77	33.47

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-6

Damage Category: Commercial

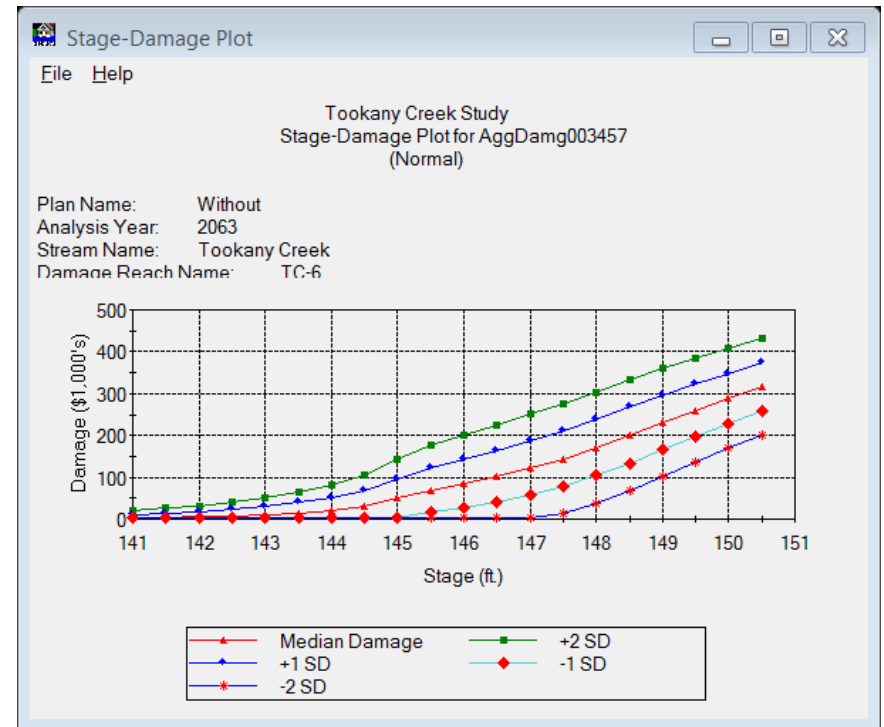
Function: AggDamg003457 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	2.52	9.19
2	141.50	3.89	11.30
3	142.00	5.12	12.90
4	142.50	7.55	17.26
5	143.00	10.56	20.87
6	143.50	14.70	25.57
7	144.00	19.78	30.64
8	144.50	29.86	37.86
9	145.00	50.12	46.61
10	145.50	69.08	53.17
11	146.00	84.08	58.01
12	146.50	100.81	61.50
13	147.00	121.94	64.18
14	147.50	144.36	65.73
15	148.00	171.26	66.48
16	148.50	200.45	66.77
17	149.00	230.33	64.74
18	149.50	260.08	61.62
19	150.00	288.31	59.51
20	150.50	315.08	57.81
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-6

Damage Category: Industrial

Function: AggDamg003459 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	0.00	0.00
2	141.50	0.00	0.00
3	142.00	0.00	0.00
4	142.50	0.00	0.00
5	143.00	0.00	0.00
6	143.50	0.00	0.00
7	144.00	0.00	0.00
8	144.50	0.00	0.00
9	145.00	0.00	0.00
10	145.50	0.00	0.00
11	146.00	0.00	0.00
12	146.50	0.00	0.00
13	147.00	0.00	0.00
14	147.50	0.00	0.00
15	148.00	0.00	0.00
16	148.50	0.00	0.00
17	149.00	0.00	0.00
18	149.50	0.00	0.00
19	150.00	0.00	0.00
20	150.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-6

Damage Category: Public

Function: AggDamg003461 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	0.00	0.00
2	141.50	0.00	0.00
3	142.00	0.00	0.00
4	142.50	0.00	0.00
5	143.00	0.00	0.00
6	143.50	0.00	0.00
7	144.00	0.00	0.00
8	144.50	0.00	0.00
9	145.00	0.00	0.00
10	145.50	0.00	0.00
11	146.00	0.00	0.00
12	146.50	0.00	0.00
13	147.00	0.00	0.00
14	147.50	0.00	0.00
15	148.00	0.00	0.00
16	148.50	0.00	0.00
17	149.00	0.00	0.00
18	149.50	0.00	0.00
19	150.00	0.00	0.00
20	150.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-6

Damage Category: Residential

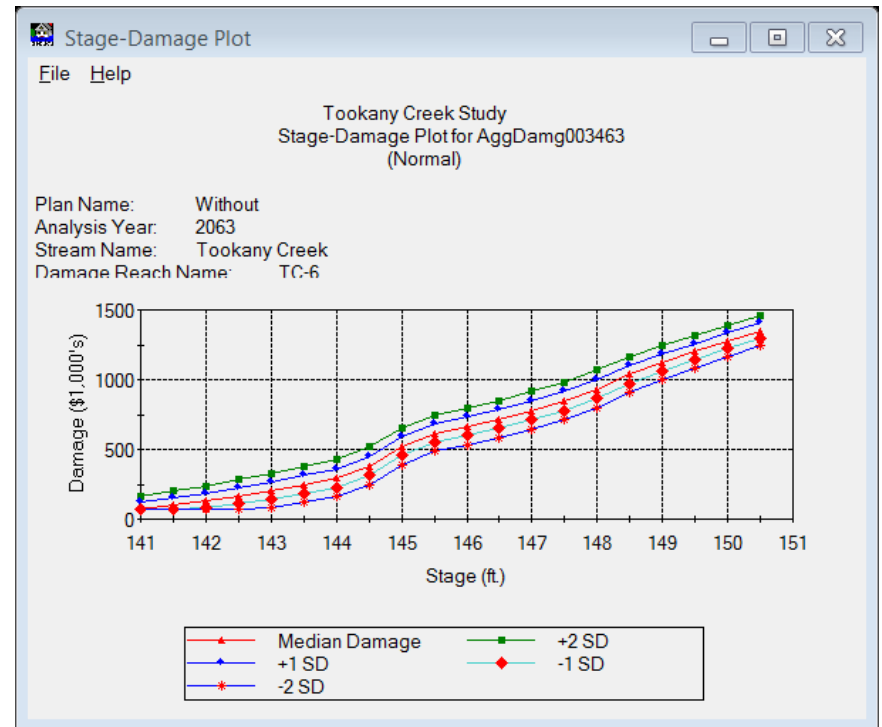
Function: AggDamg003463 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	141.00	75.78	42.71
2	141.50	105.20	48.59
3	142.00	133.58	52.93
4	142.50	168.13	57.30
5	143.00	206.97	61.22
6	143.50	248.09	64.45
7	144.00	294.55	67.04
8	144.50	380.53	68.95
9	145.00	524.05	66.89
10	145.50	616.04	65.56
11	146.00	665.58	65.96
12	146.50	716.88	66.32
13	147.00	779.74	67.23
14	147.50	847.04	67.93
15	148.00	933.52	67.57
16	148.50	1037.62	64.69
17	149.00	1120.67	61.76
18	149.50	1200.28	59.20
19	150.00	1277.13	57.12
20	150.50	1351.52	55.55
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-7

Damage Category: Commercial

Function: AggDamg003465 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	0.00	0.00
2	150.00	0.00	0.00
3	150.50	0.00	0.00
4	151.00	0.00	0.00
5	151.50	0.00	0.00
6	152.00	0.00	0.00
7	152.50	0.00	0.00
8	153.00	0.00	0.00
9	153.50	0.00	0.00
10	154.00	0.00	0.00
11	154.50	0.00	0.00
12	155.00	0.00	0.00
13	155.50	0.00	0.00
14	156.00	0.00	0.00
15	156.50	0.00	0.00
16	157.00	0.00	0.00
17	157.50	0.00	0.00
18	158.00	0.00	0.00
19	158.50	0.00	0.00
20	159.00	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-7

Damage Category: Industrial

Function: AggDamg003467 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	0.00	0.00
2	150.00	0.00	0.00
3	150.50	0.00	0.00
4	151.00	0.00	0.00
5	151.50	0.00	0.00
6	152.00	0.00	0.00
7	152.50	0.00	0.00
8	153.00	0.00	0.00
9	153.50	0.00	0.00
10	154.00	0.00	0.00
11	154.50	0.00	0.00
12	155.00	0.00	0.00
13	155.50	0.00	0.00
14	156.00	0.00	0.00
15	156.50	0.00	0.00
16	157.00	0.00	0.00
17	157.50	0.00	0.00
18	158.00	0.00	0.00
19	158.50	0.00	0.00
20	159.00	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-7

Damage Category: Public

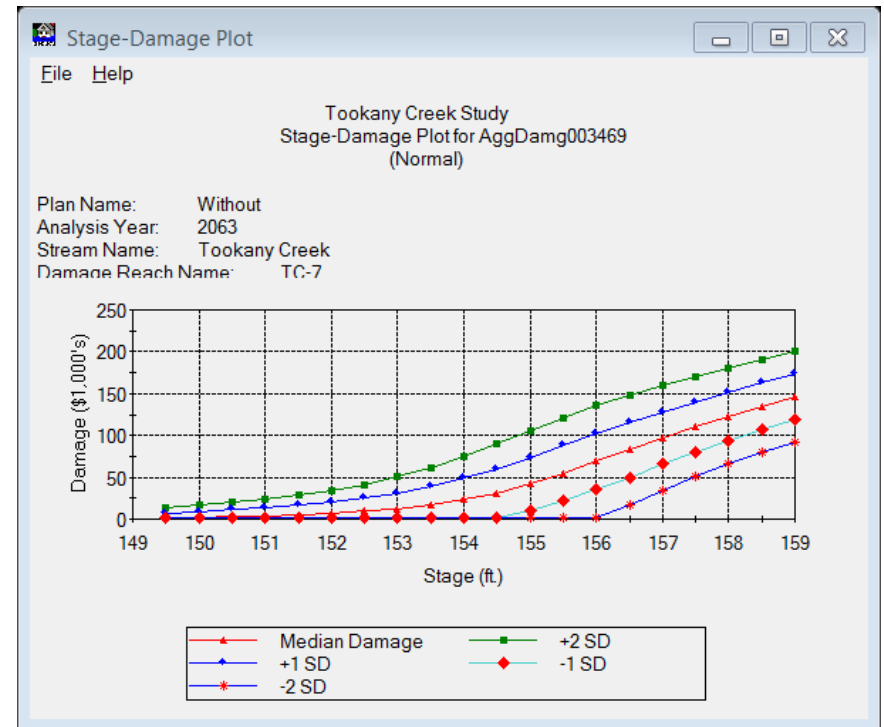
Function: AggDamg003469 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	1.37	5.76
2	150.00	2.11	7.15
3	150.50	2.99	8.43
4	151.00	3.96	9.66
5	151.50	5.60	11.84
6	152.00	7.22	13.73
7	152.50	9.36	16.02
8	153.00	12.49	18.94
9	153.50	16.68	22.16
10	154.00	23.09	25.74
11	154.50	31.28	29.03
12	155.00	41.82	31.66
13	155.50	54.71	32.95
14	156.00	69.04	33.32
15	156.50	82.83	32.97
16	157.00	97.03	31.34
17	157.50	110.44	29.85
18	158.00	123.05	28.70
19	158.50	135.02	27.85
20	159.00	146.60	27.07
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-7

Damage Category: Residential

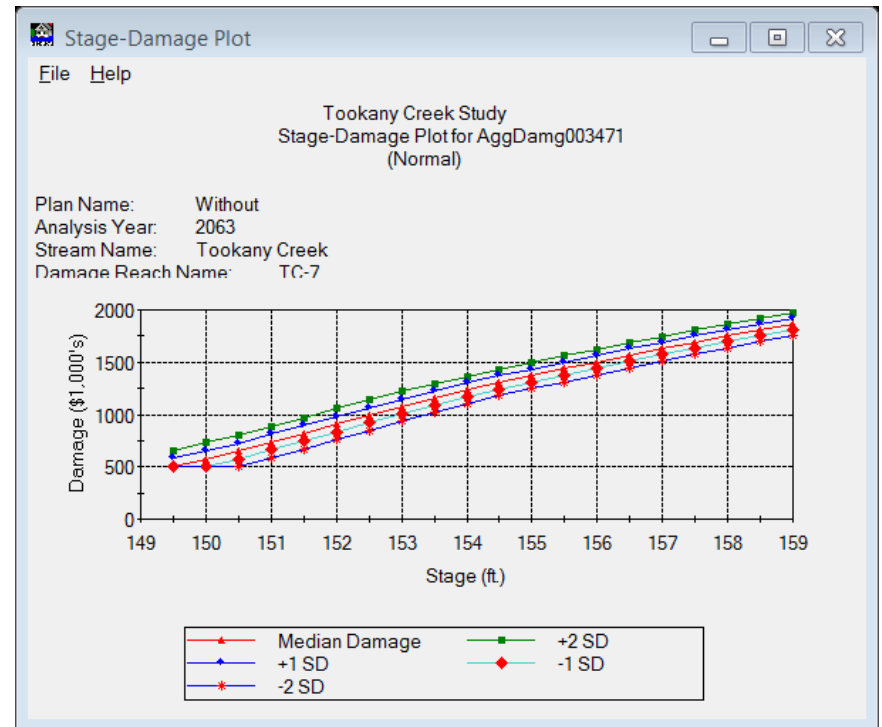
Function: AggDamg003471 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.50	497.20	81.06
2	150.00	572.98	77.71
3	150.50	651.26	75.70
4	151.00	735.24	75.26
5	151.50	821.29	74.96
6	152.00	906.77	74.41
7	152.50	992.27	73.00
8	153.00	1075.83	71.01
9	153.50	1157.45	68.38
10	154.00	1234.11	66.29
11	154.50	1306.48	64.16
12	155.00	1371.84	62.64
13	155.50	1435.69	61.44
14	156.00	1500.78	60.40
15	156.50	1566.45	59.53
16	157.00	1630.34	58.77
17	157.50	1692.55	58.03
18	158.00	1753.00	57.19
19	158.50	1811.35	56.35
20	159.00	1867.53	55.47
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel





Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Commercial

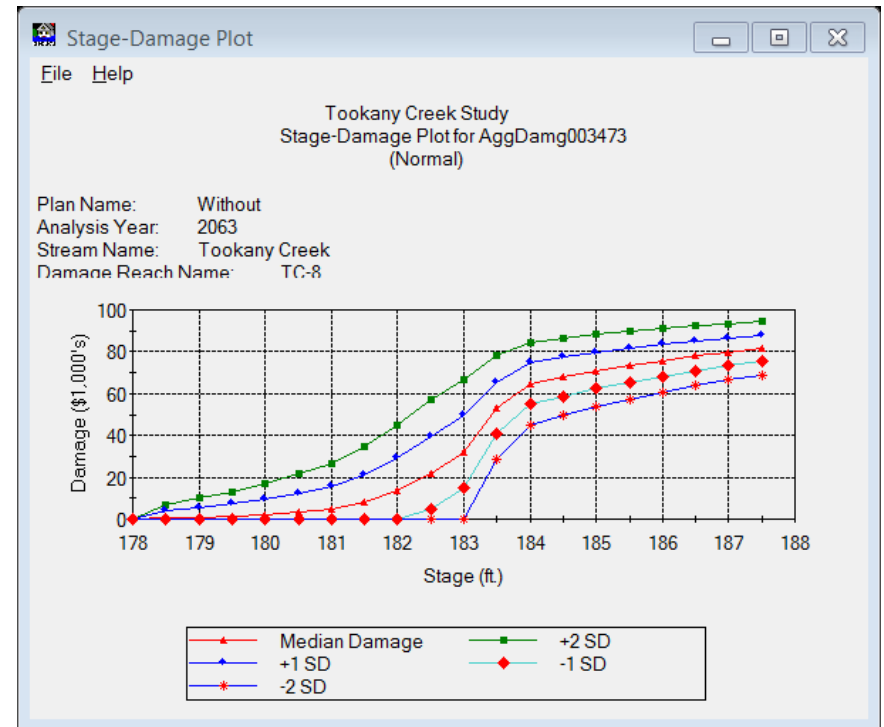
Function: AggDamg003473 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.48	3.29
3	179.00	0.90	4.56
4	179.50	1.39	5.82
5	180.00	2.22	7.35
6	180.50	3.39	9.06
7	181.00	4.98	10.83
8	181.50	7.97	13.25
9	182.00	13.35	15.91
10	182.50	22.00	17.48
11	183.00	32.07	17.29
12	183.50	53.25	12.34
13	184.00	64.71	9.93
14	184.50	68.04	9.26
15	185.00	71.03	8.64
16	185.50	73.54	8.11
17	186.00	75.85	7.61
18	186.50	77.96	7.14
19	187.00	79.87	6.71
20	187.50	81.59	6.32
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Industrial

Function: AggDamg003475 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.00	0.00
3	179.00	0.00	0.00
4	179.50	0.00	0.00
5	180.00	0.00	0.00
6	180.50	0.00	0.00
7	181.00	0.00	0.00
8	181.50	0.00	0.00
9	182.00	0.00	0.00
10	182.50	0.00	0.00
11	183.00	0.00	0.00
12	183.50	0.00	0.00
13	184.00	0.00	0.00
14	184.50	0.00	0.00
15	185.00	0.00	0.00
16	185.50	0.00	0.00
17	186.00	0.00	0.00
18	186.50	0.00	0.00
19	187.00	0.00	0.00
20	187.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Public

Function: AggDamg003477 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.00	0.00
3	179.00	0.00	0.00
4	179.50	0.00	0.00
5	180.00	0.00	0.00
6	180.50	0.00	0.00
7	181.00	0.00	0.00
8	181.50	0.00	0.00
9	182.00	0.00	0.00
10	182.50	0.00	0.00
11	183.00	0.00	0.00
12	183.50	0.00	0.00
13	184.00	0.00	0.00
14	184.50	0.00	0.00
15	185.00	0.00	0.00
16	185.50	0.00	0.00
17	186.00	0.00	0.00
18	186.50	0.00	0.00
19	187.00	0.00	0.00
20	187.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Residential

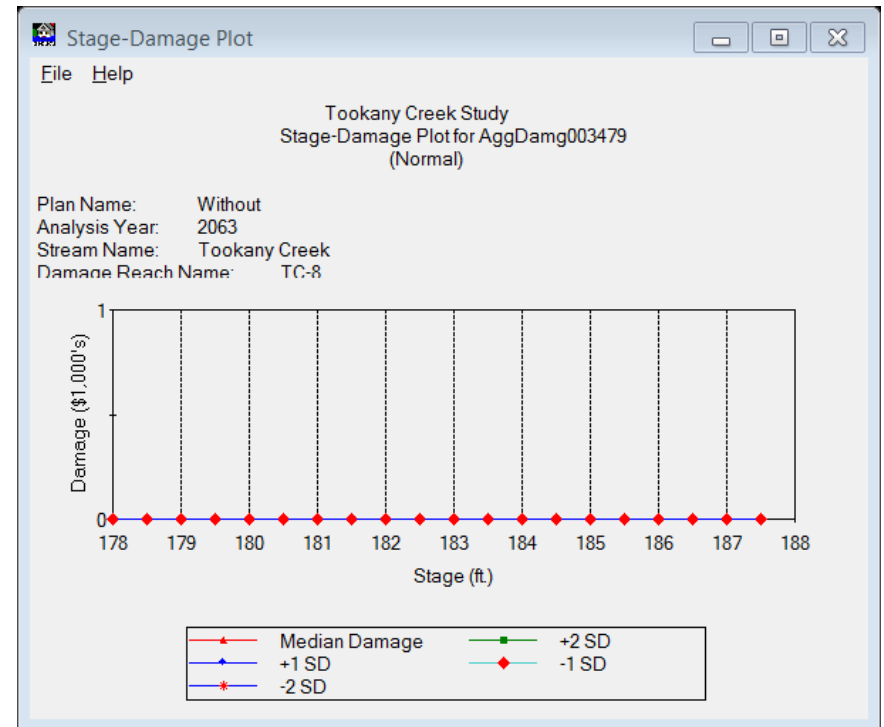
Function: AggDamg003479 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	178.00	0.00	0.00
2	178.50	0.00	0.00
3	179.00	0.00	0.00
4	179.50	0.00	0.00
5	180.00	0.00	0.00
6	180.50	0.00	0.00
7	181.00	0.00	0.00
8	181.50	0.00	0.00
9	182.00	0.00	0.00
10	182.50	0.00	0.00
11	183.00	0.00	0.00
12	183.50	0.00	0.00
13	184.00	0.00	0.00
14	184.50	0.00	0.00
15	185.00	0.00	0.00
16	185.50	0.00	0.00
17	186.00	0.00	0.00
18	186.50	0.00	0.00
19	187.00	0.00	0.00
20	187.50	0.00	0.00
21			
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-9

Damage Category: Commercial

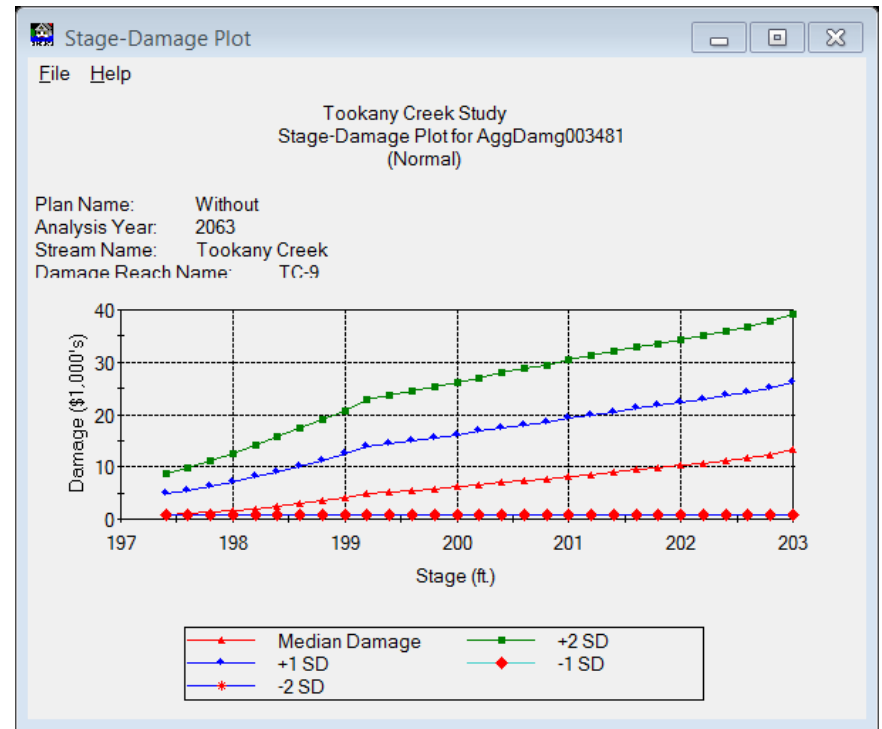
Function: AggDamg003481 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	0.88	3.96
2	197.60	1.06	4.42
3	197.80	1.31	4.93
4	198.00	1.61	5.45
5	198.20	2.01	6.05
6	198.40	2.43	6.63
7	198.60	2.90	7.19
8	198.80	3.41	7.78
9	199.00	4.01	8.39
10	199.20	4.79	9.02
11	199.40	5.08	9.27
12	199.60	5.45	9.53
13	199.80	5.80	9.79
14	200.00	6.16	10.03
15	200.20	6.53	10.26
16	200.40	6.94	10.49
17	200.60	7.27	10.72
18	200.80	7.59	10.94
19	201.00	8.07	11.19
20	201.20	8.54	11.38
21	201.40	8.95	11.55
22	201.60	9.40	11.70
23	201.80	9.79	11.89

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

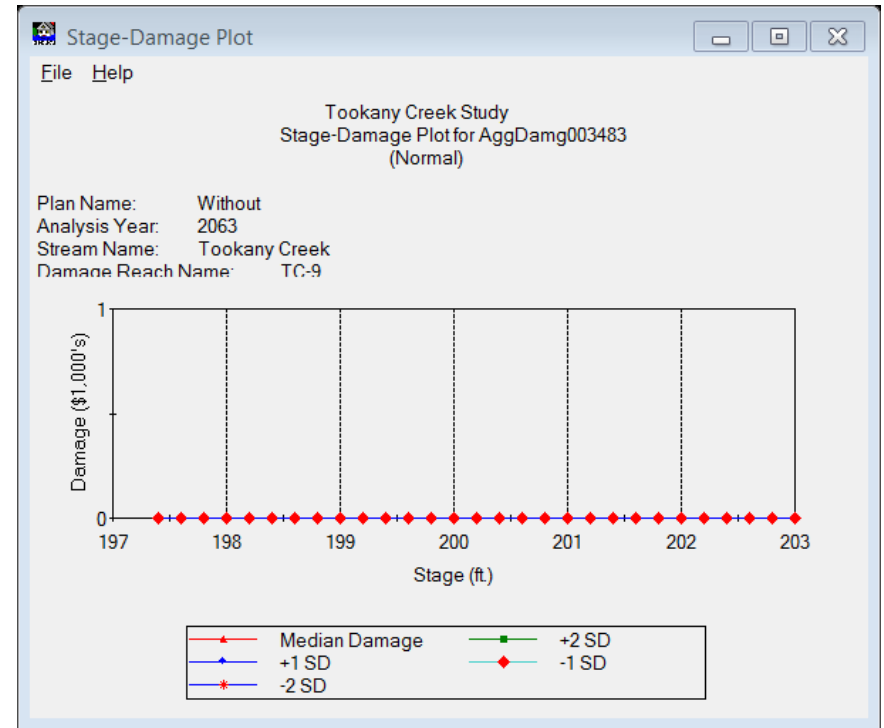
Plan: Without Stream: Tookany Creek  
 Analysis Year: 2063 Damage Reach: TC-9  
 Damage Category: Industrial

Function: AggDamg003483 Use An Existing Function  
 Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	0.00	0.00
2	197.60	0.00	0.00
3	197.80	0.00	0.00
4	198.00	0.00	0.00
5	198.20	0.00	0.00
6	198.40	0.00	0.00
7	198.60	0.00	0.00
8	198.80	0.00	0.00
9	199.00	0.00	0.00
10	199.20	0.00	0.00
11	199.40	0.00	0.00
12	199.60	0.00	0.00
13	199.80	0.00	0.00
14	200.00	0.00	0.00
15	200.20	0.00	0.00
16	200.40	0.00	0.00
17	200.60	0.00	0.00
18	200.80	0.00	0.00
19	201.00	0.00	0.00
20	201.20	0.00	0.00
21	201.40	0.00	0.00
22	201.60	0.00	0.00
23	201.80	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-9

Damage Category: Public

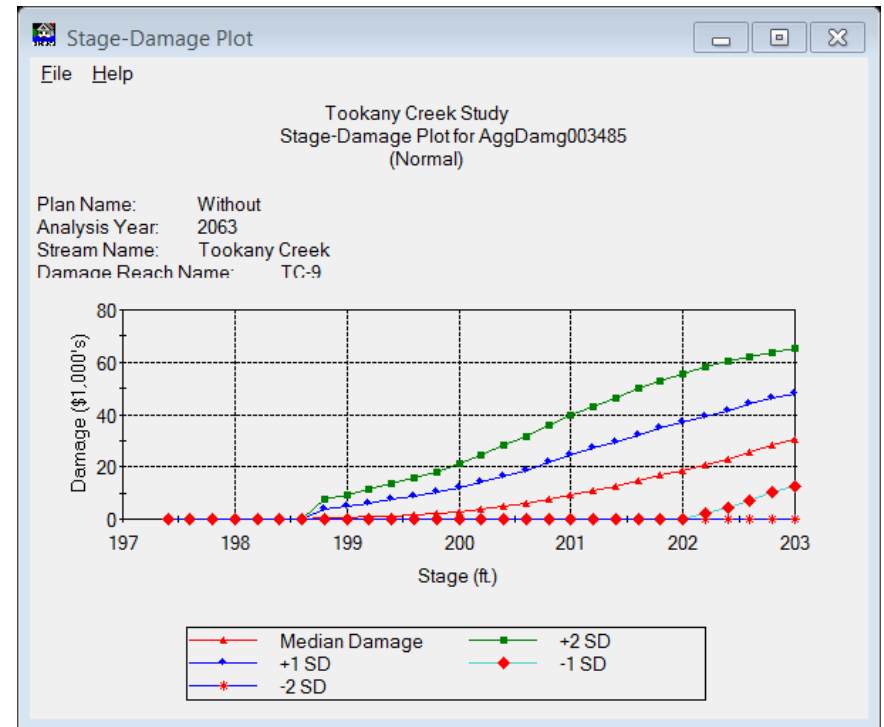
Function: AggDamg003485 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	0.00	0.00
2	197.60	0.00	0.00
3	197.80	0.00	0.00
4	198.00	0.00	0.00
5	198.20	0.00	0.00
6	198.40	0.00	0.00
7	198.60	0.00	0.00
8	198.80	0.44	3.63
9	199.00	0.63	4.35
10	199.20	0.90	5.19
11	199.40	1.26	6.14
12	199.60	1.68	7.11
13	199.80	2.10	7.97
14	200.00	2.86	9.20
15	200.20	3.70	10.40
16	200.40	4.80	11.65
17	200.60	5.95	12.81
18	200.80	7.51	14.09
19	201.00	9.15	15.19
20	201.20	10.92	16.13
21	201.40	12.49	16.92
22	201.60	14.66	17.59
23	201.80	16.77	18.07

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

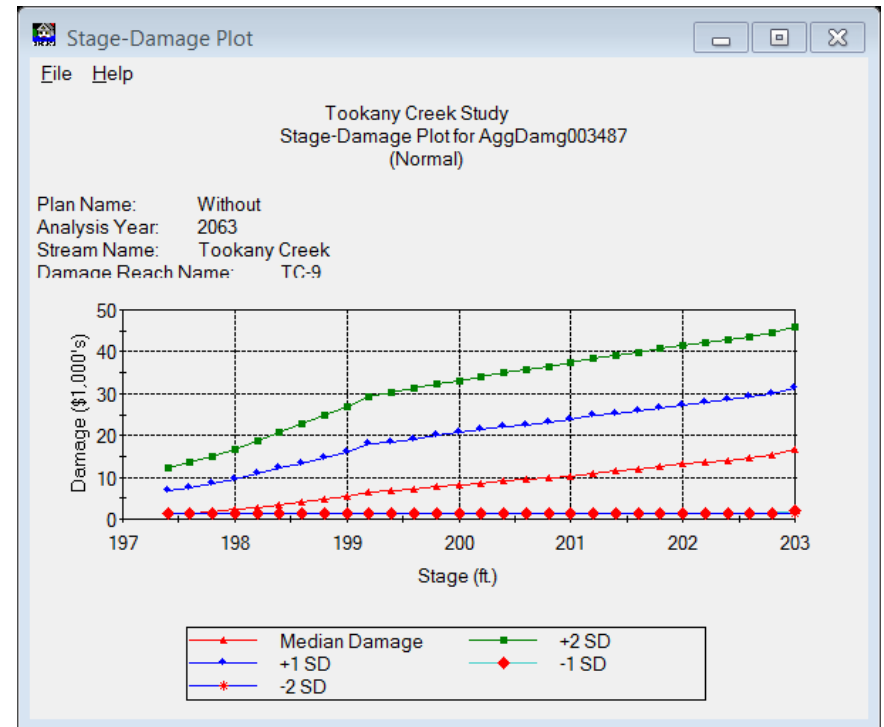
Plan: Without Stream: Tookany Creek  
 Analysis Year: 2063 Damage Reach: TC-9  
 Damage Category: Residential

Function: AggDamg003487 Use An Existing Function  
 Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.40	1.27	5.48
2	197.60	1.50	5.98
3	197.80	1.83	6.60
4	198.00	2.26	7.28
5	198.20	2.78	8.01
6	198.40	3.36	8.72
7	198.60	4.00	9.41
8	198.80	4.68	10.08
9	199.00	5.37	10.71
10	199.20	6.41	11.45
11	199.40	6.74	11.69
12	199.60	7.23	11.98
13	199.80	7.68	12.25
14	200.00	8.13	12.49
15	200.20	8.62	12.72
16	200.40	9.03	12.92
17	200.60	9.48	13.13
18	200.80	9.82	13.31
19	201.00	10.36	13.52
20	201.20	10.99	13.70
21	201.40	11.48	13.84
22	201.60	11.97	13.97
23	201.80	12.53	14.09

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-10

Damage Category: Commercial

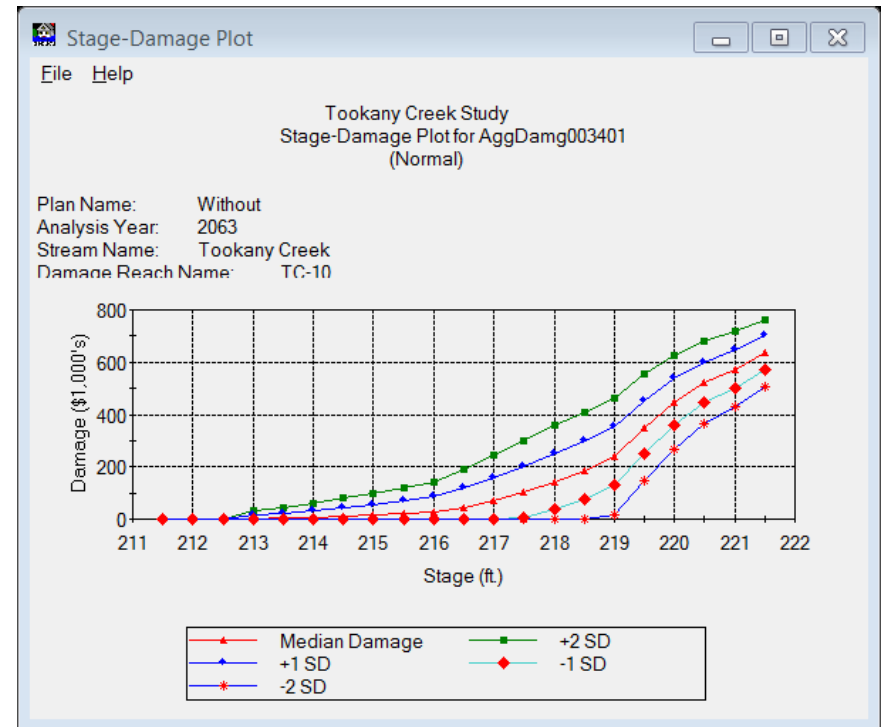
Function: AggDamg003401 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	0.00	0.00
2	212.00	0.00	0.00
3	212.50	0.00	0.00
4	213.00	1.82	15.26
5	213.50	3.05	20.13
6	214.00	5.45	27.20
7	214.50	9.51	35.11
8	215.00	14.26	42.24
9	215.50	20.55	49.96
10	216.00	27.92	57.78
11	216.50	45.86	72.29
12	217.00	71.12	86.54
13	217.50	103.37	98.58
14	218.00	143.51	107.04
15	218.50	187.74	110.71
16	219.00	240.53	112.03
17	219.50	349.49	101.83
18	220.00	448.02	89.44
19	220.50	522.63	78.56
20	221.00	574.03	71.81
21	221.50	636.20	63.91
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel





**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-10

Damage Category: Industrial

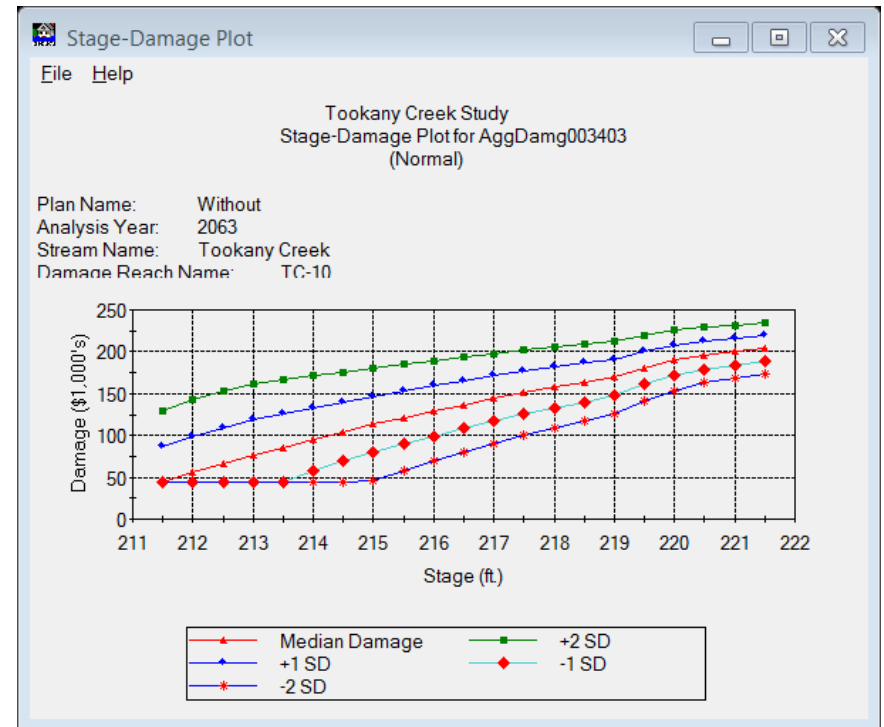
Function: AggDamg003403 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	44.74	42.29
2	212.00	56.38	43.10
3	212.50	66.36	42.98
4	213.00	75.96	42.45
5	213.50	85.71	40.85
6	214.00	95.50	37.97
7	214.50	104.44	35.54
8	215.00	113.22	33.26
9	215.50	121.27	31.88
10	216.00	129.06	29.98
11	216.50	136.89	28.30
12	217.00	144.29	26.66
13	217.50	151.16	25.37
14	218.00	157.59	24.15
15	218.50	163.26	23.07
16	219.00	169.28	21.92
17	219.50	180.54	19.75
18	220.00	189.73	17.97
19	220.50	196.03	16.76
20	221.00	200.04	16.01
21	221.50	204.31	15.25
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-10

Damage Category: Public

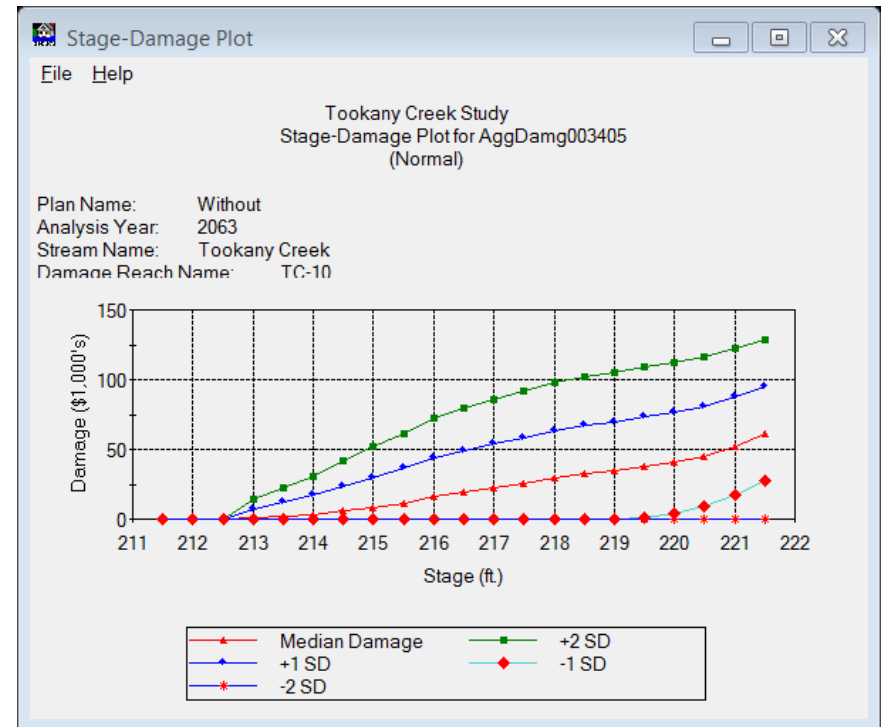
Function: AggDamg003405 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	0.00	0.00
2	212.00	0.00	0.00
3	212.50	0.00	0.00
4	213.00	0.76	6.64
5	213.50	1.92	10.50
6	214.00	3.28	13.86
7	214.50	5.73	18.11
8	215.00	8.43	21.64
9	215.50	11.53	24.85
10	216.00	15.90	28.27
11	216.50	18.91	30.12
12	217.00	22.22	31.76
13	217.50	25.36	33.16
14	218.00	29.36	34.32
15	218.50	32.42	34.95
16	219.00	34.32	35.46
17	219.50	37.27	35.83
18	220.00	40.44	35.97
19	220.50	44.99	35.89
20	221.00	52.21	35.06
21	221.50	60.87	33.61
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-10

Damage Category: Residential

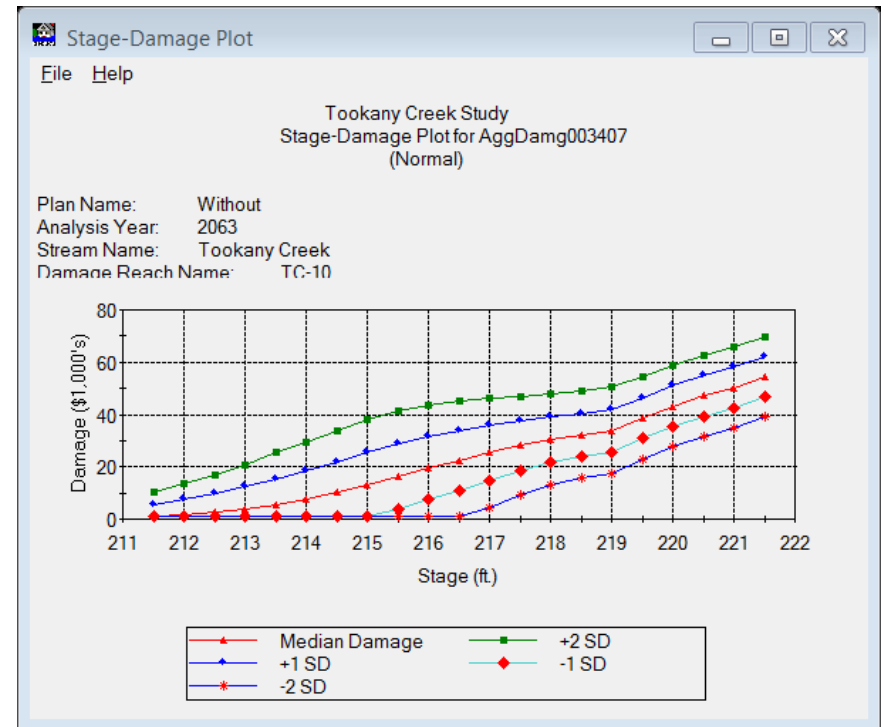
Function: AggDamg003407 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.50	1.07	4.61
2	212.00	1.72	5.84
3	212.50	2.57	7.08
4	213.00	3.88	8.45
5	213.50	5.64	9.85
6	214.00	7.67	10.97
7	214.50	10.08	11.84
8	215.00	13.06	12.39
9	215.50	16.31	12.42
10	216.00	19.66	11.92
11	216.50	22.48	11.40
12	217.00	25.35	10.46
13	217.50	28.09	9.33
14	218.00	30.48	8.65
15	218.50	32.22	8.26
16	219.00	33.93	8.21
17	219.50	38.62	7.85
18	220.00	43.19	7.79
19	220.50	47.11	7.79
20	221.00	50.28	7.76
21	221.50	54.45	7.64
22			
23			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-11

Damage Category: Commercial

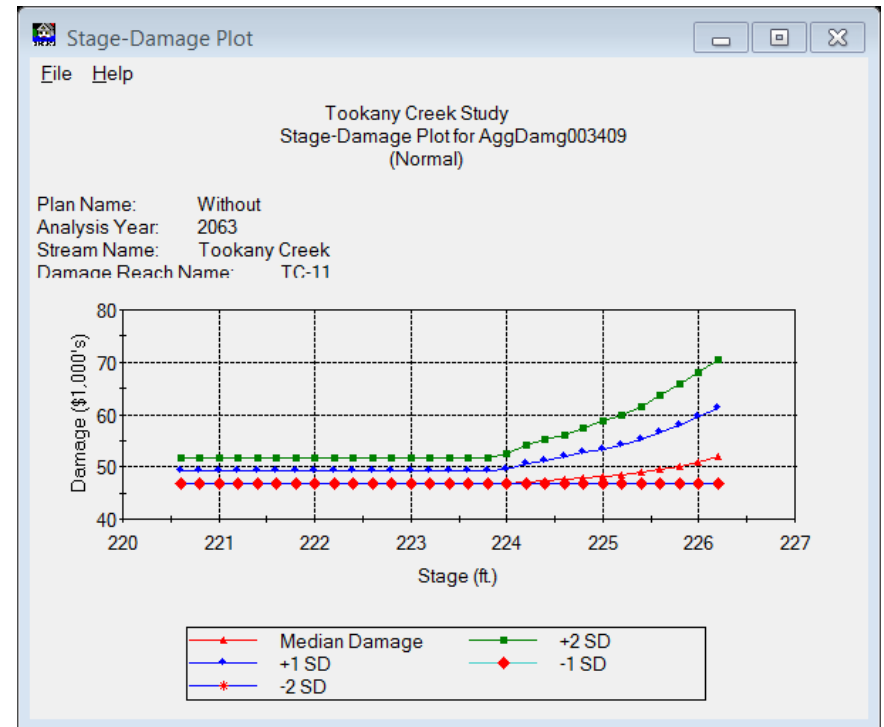
Function: AggDamg003409 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	46.77	2.52
2	220.80	46.77	2.52
3	221.00	46.77	2.52
4	221.20	46.77	2.52
5	221.40	46.77	2.52
6	221.60	46.77	2.52
7	221.80	46.77	2.52
8	222.00	46.77	2.52
9	222.20	46.77	2.52
10	222.40	46.77	2.52
11	222.60	46.77	2.52
12	222.80	46.77	2.52
13	223.00	46.77	2.52
14	223.20	46.77	2.52
15	223.40	46.77	2.52
16	223.60	46.77	2.52
17	223.80	46.77	2.52
18	224.00	46.88	2.76
19	224.20	47.18	3.53
20	224.40	47.36	3.88
21	224.60	47.58	4.28
22	224.80	47.88	4.80
23	225.00	48.16	5.26

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-11

Damage Category: Industrial

Function: AggDamg003411 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	0.00	0.00
2	220.80	0.00	0.00
3	221.00	0.00	0.00
4	221.20	0.00	0.00
5	221.40	0.00	0.00
6	221.60	0.00	0.00
7	221.80	0.00	0.00
8	222.00	0.00	0.00
9	222.20	0.00	0.00
10	222.40	0.00	0.00
11	222.60	0.00	0.00
12	222.80	0.00	0.00
13	223.00	0.00	0.00
14	223.20	0.00	0.00
15	223.40	0.00	0.00
16	223.60	0.00	0.00
17	223.80	0.00	0.00
18	224.00	0.00	0.00
19	224.20	0.00	0.00
20	224.40	0.00	0.00
21	224.60	0.00	0.00
22	224.80	0.00	0.00
23	225.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-11

Damage Category: Public

Function: AggDamg003413 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	0.00	0.00
2	220.80	0.00	0.00
3	221.00	0.00	0.00
4	221.20	0.00	0.00
5	221.40	0.00	0.00
6	221.60	0.00	0.00
7	221.80	0.00	0.00
8	222.00	0.00	0.00
9	222.20	0.00	0.00
10	222.40	0.00	0.00
11	222.60	0.00	0.00
12	222.80	0.00	0.00
13	223.00	0.00	0.00
14	223.20	0.00	0.00
15	223.40	0.00	0.00
16	223.60	0.00	0.00
17	223.80	0.00	0.00
18	224.00	0.00	0.00
19	224.20	0.00	0.00
20	224.40	0.00	0.00
21	224.60	0.00	0.00
22	224.80	0.00	0.00
23	225.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-11

Damage Category: Residential

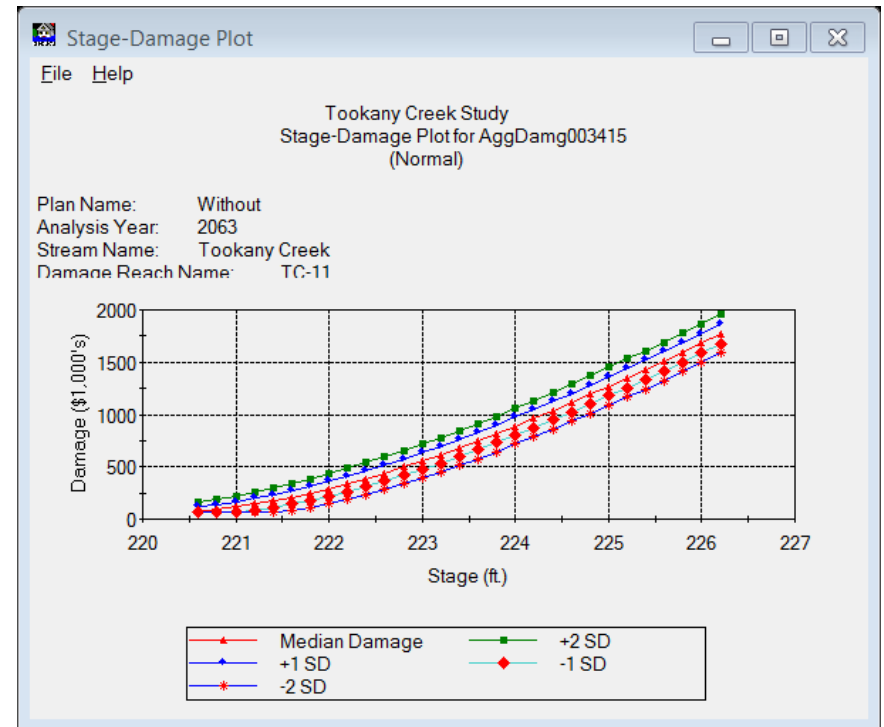
Function: AggDamg003415 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.60	73.96	42.81
2	220.80	93.44	47.40
3	221.00	116.40	51.91
4	221.20	144.05	56.54
5	221.40	174.81	60.61
6	221.60	208.58	64.49
7	221.80	248.49	68.11
8	222.00	290.99	71.34
9	222.20	337.27	74.22
10	222.40	387.12	76.74
11	222.60	441.73	79.18
12	222.80	496.69	80.85
13	223.00	555.09	82.14
14	223.20	614.65	83.05
15	223.40	679.01	83.87
16	223.60	745.73	84.84
17	223.80	814.04	85.58
18	224.00	886.79	86.25
19	224.20	959.64	87.04
20	224.40	1036.09	87.80
21	224.60	1112.68	88.75
22	224.80	1190.71	89.79
23	225.00	1269.73	90.91

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Damage Category: Commercial

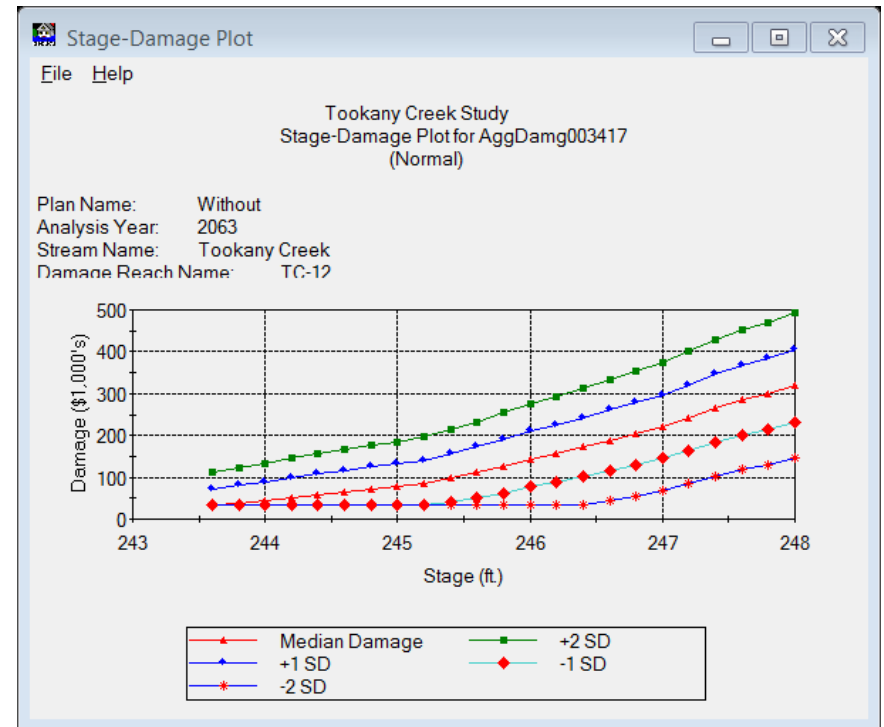
Function: AggDamg003417 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	32.68	39.82
2	243.80	38.45	42.18
3	244.00	44.31	44.42
4	244.20	51.23	47.06
5	244.40	58.38	49.19
6	244.60	65.66	51.08
7	244.80	72.16	52.55
8	245.00	78.07	53.53
9	245.20	85.24	55.39
10	245.40	97.11	57.75
11	245.60	111.22	60.59
12	245.80	126.39	63.65
13	246.00	142.86	66.34
14	246.20	156.62	68.49
15	246.40	171.83	70.60
16	246.60	187.97	72.60
17	246.80	203.62	74.38
18	247.00	221.22	76.35
19	247.20	242.44	78.81
20	247.40	264.85	81.34
21	247.60	285.05	83.25
22	247.80	300.30	84.92
23	248.00	318.93	86.95

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Damage Category: Industrial

Function: AggDamg003419 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	0.00	0.00
2	243.80	0.00	0.00
3	244.00	0.00	0.00
4	244.20	0.00	0.00
5	244.40	0.00	0.00
6	244.60	0.00	0.00
7	244.80	0.00	0.00
8	245.00	0.00	0.00
9	245.20	0.00	0.00
10	245.40	0.00	0.00
11	245.60	0.00	0.00
12	245.80	0.00	0.00
13	246.00	0.00	0.00
14	246.20	0.00	0.00
15	246.40	0.00	0.00
16	246.60	0.00	0.00
17	246.80	0.00	0.00
18	247.00	0.00	0.00
19	247.20	0.00	0.00
20	247.40	0.00	0.00
21	247.60	0.00	0.00
22	247.80	0.00	0.00
23	248.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Damage Category: Public

Function: AggDamg003421 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	0.00	0.00
2	243.80	0.00	0.00
3	244.00	0.00	0.00
4	244.20	0.00	0.00
5	244.40	0.00	0.00
6	244.60	0.00	0.00
7	244.80	0.00	0.00
8	245.00	0.00	0.00
9	245.20	0.00	0.00
10	245.40	0.00	0.00
11	245.60	0.00	0.00
12	245.80	0.00	0.00
13	246.00	0.00	0.00
14	246.20	0.00	0.00
15	246.40	0.00	0.00
16	246.60	0.00	0.00
17	246.80	0.00	0.00
18	247.00	0.00	0.00
19	247.20	0.00	0.00
20	247.40	0.00	0.00
21	247.60	0.00	0.00
22	247.80	0.00	0.00
23	248.00	0.00	0.00

Plot...  
 Tabulate...  
 Save  
 Cancel



**Tookany Creek Study - Stage-Damage Function at Index Locati...**

File Edit View Help

Plan: Without Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Damage Category: Residential

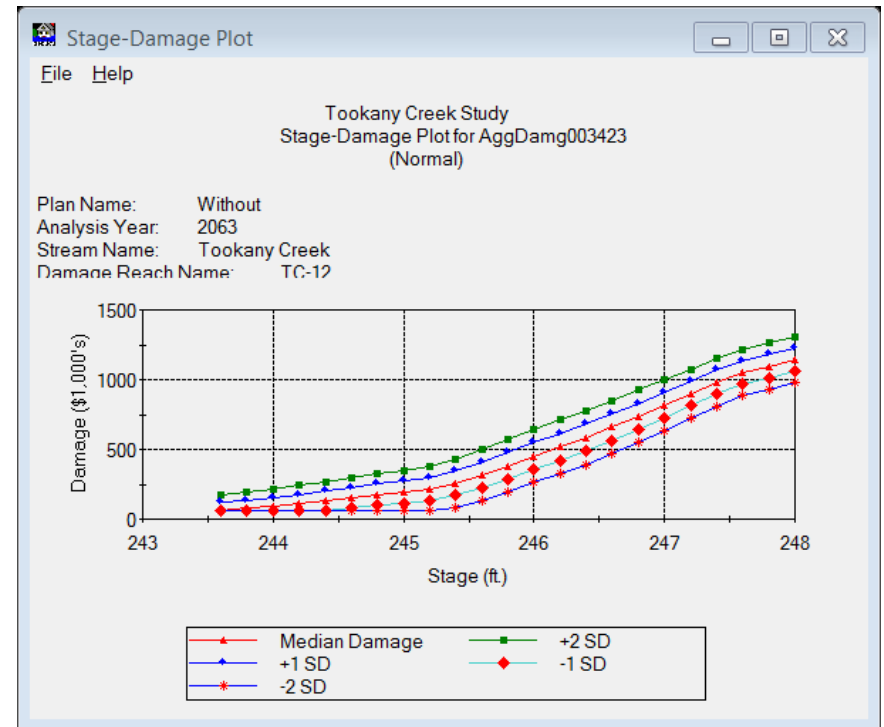
Function: AggDamg003423 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	243.60	66.17	51.97
2	243.80	80.19	56.58
3	244.00	95.27	60.53
4	244.20	113.27	64.83
5	244.40	132.79	68.73
6	244.60	155.47	72.71
7	244.80	174.72	75.58
8	245.00	193.69	78.08
9	245.20	212.68	80.48
10	245.40	257.00	85.35
11	245.60	316.74	90.09
12	245.80	381.82	93.43
13	246.00	452.09	95.45
14	246.20	516.54	96.44
15	246.40	583.53	96.69
16	246.60	659.38	96.12
17	246.80	736.94	94.04
18	247.00	816.45	91.09
19	247.20	900.07	87.92
20	247.40	981.03	85.54
21	247.60	1049.61	83.43
22	247.80	1096.69	82.07
23	248.00	1142.66	80.77

Plot...  
 Tabulate...  
 Save  
 Cancel



Damage by Analysis Year

File Help

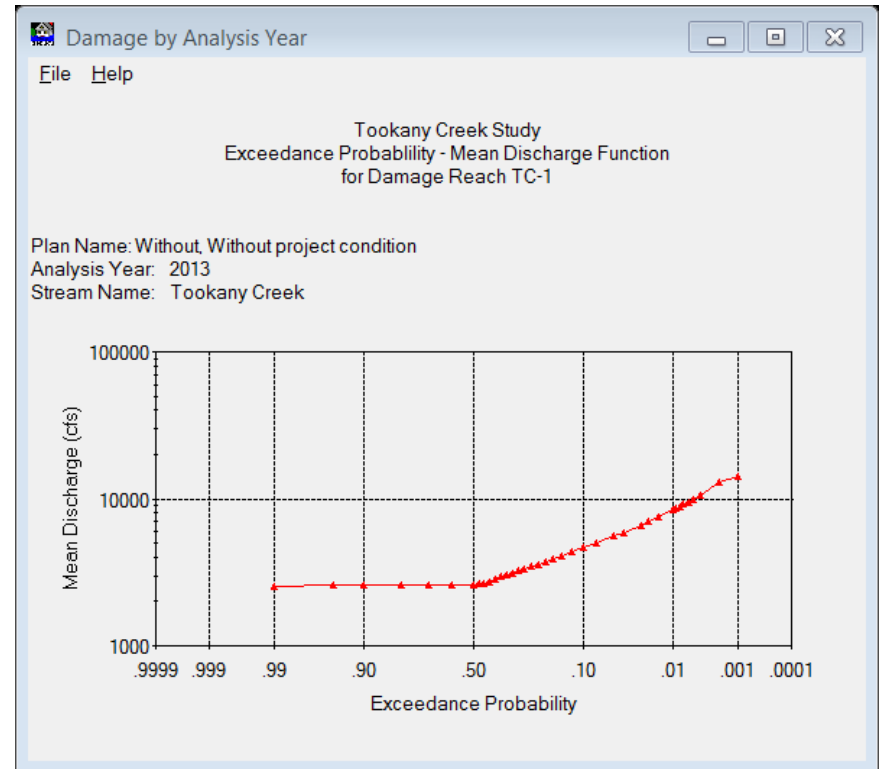
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-1  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:49 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	2560
0.9900	2562
0.9500	2568
0.9000	2571
0.8000	2574
0.7000	2576
0.6000	2578
0.5000	2600
0.4750	2625
0.4500	2649
0.4250	2739
0.4000	2841
0.3750	2940
0.3500	3037
0.3250	3136
0.3000	3238
0.2750	3346
0.2500	3462
0.2250	3590
0.2000	3734
0.1750	3899
0.1500	4094
0.1250	4330
0.1000	4625
0.0750	5019
0.0500	5574
0.0400	5923
0.0250	6641
0.0200	7031
0.0150	7544
0.0100	8363
0.0090	8592

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

### Exceedance Probability-Mean Discharge Function



Damage by Analysis Year

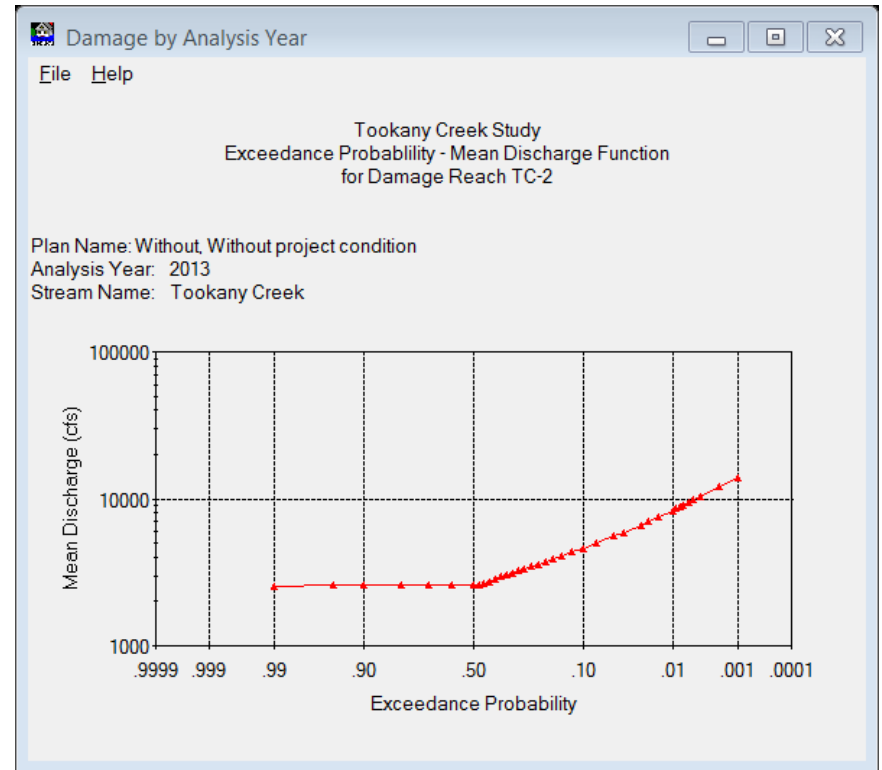
File Help

Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-2  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:49 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	2560
0.9900	2563
0.9500	2569
0.9000	2571
0.8000	2574
0.7000	2576
0.6000	2578
0.5000	2592
0.4750	2609
0.4500	2647
0.4250	2739
0.4000	2841
0.3750	2940
0.3500	3037
0.3250	3136
0.3000	3238
0.2750	3345
0.2500	3462
0.2250	3589
0.2000	3733
0.1750	3897
0.1500	4091
0.1250	4325
0.1000	4617
0.0750	5003
0.0500	5557
0.0400	5887
0.0250	6619
0.0200	7002
0.0150	7525
0.0100	8340
0.0090	8561

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

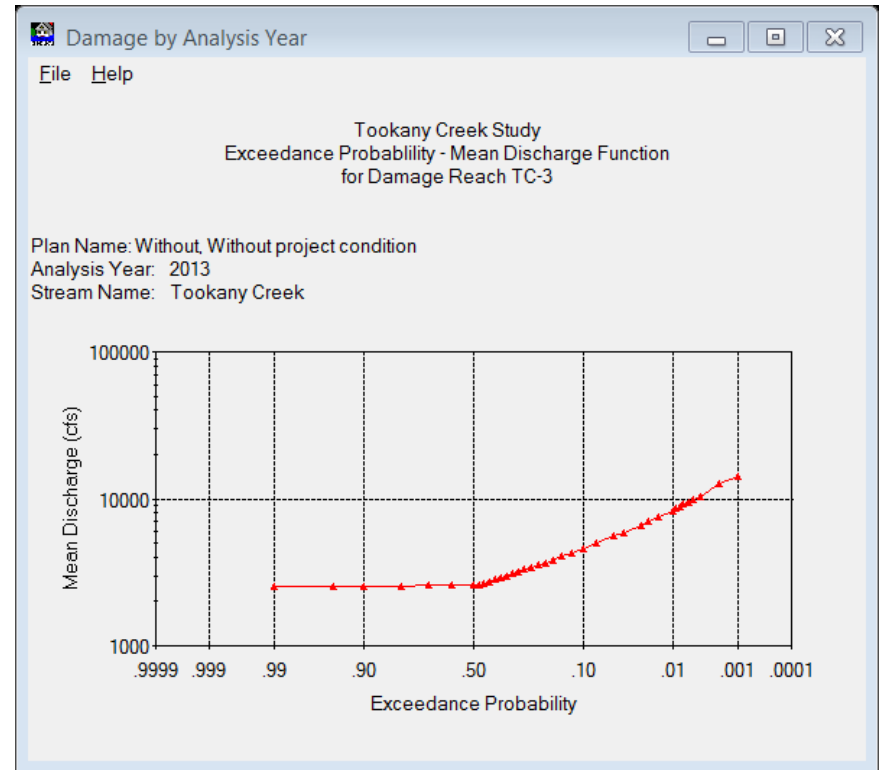
File Help

Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-3  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:50 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.5000	2586
0.4750	2610
0.4500	2634
0.4250	2717
0.4000	2814
0.3750	2908
0.3500	3001
0.3250	3095
0.3000	3192
0.2750	3295
0.2500	3407
0.2250	3532
0.2000	3676
0.1750	3845
0.1500	4051
0.1250	4306
0.1000	4621
0.0750	5031
0.0500	5588
0.0400	5930
0.0250	6628
0.0200	7004
0.0150	7508
0.0100	8312
0.0090	8536
0.0080	8805
0.0070	9138
0.0060	9472
0.0050	9870
0.0040	10428
0.0020	12793
0.0010	14249

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

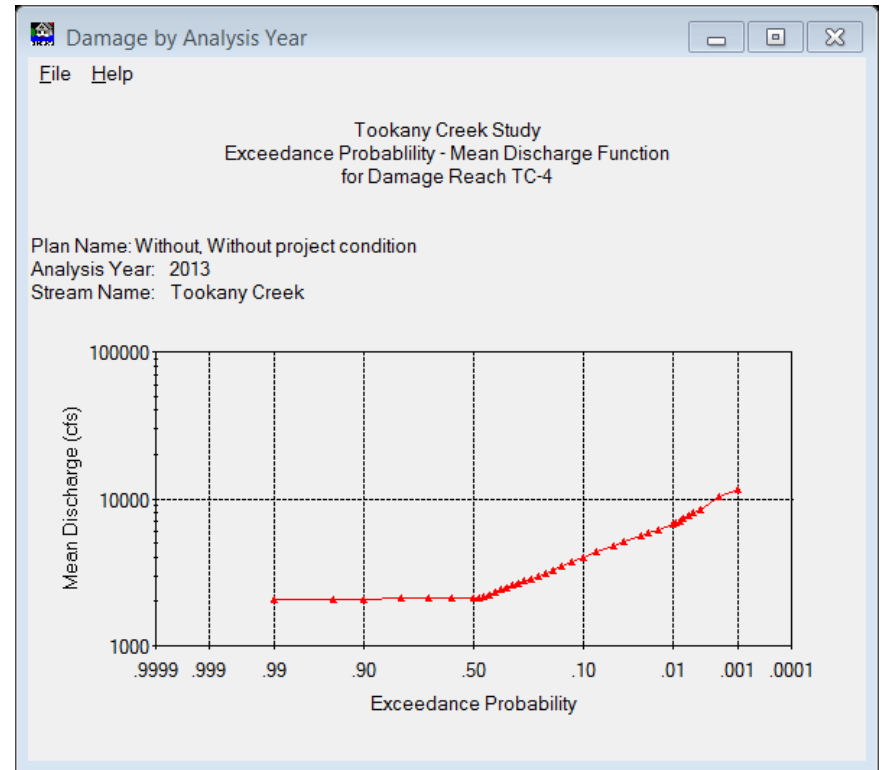
File Help

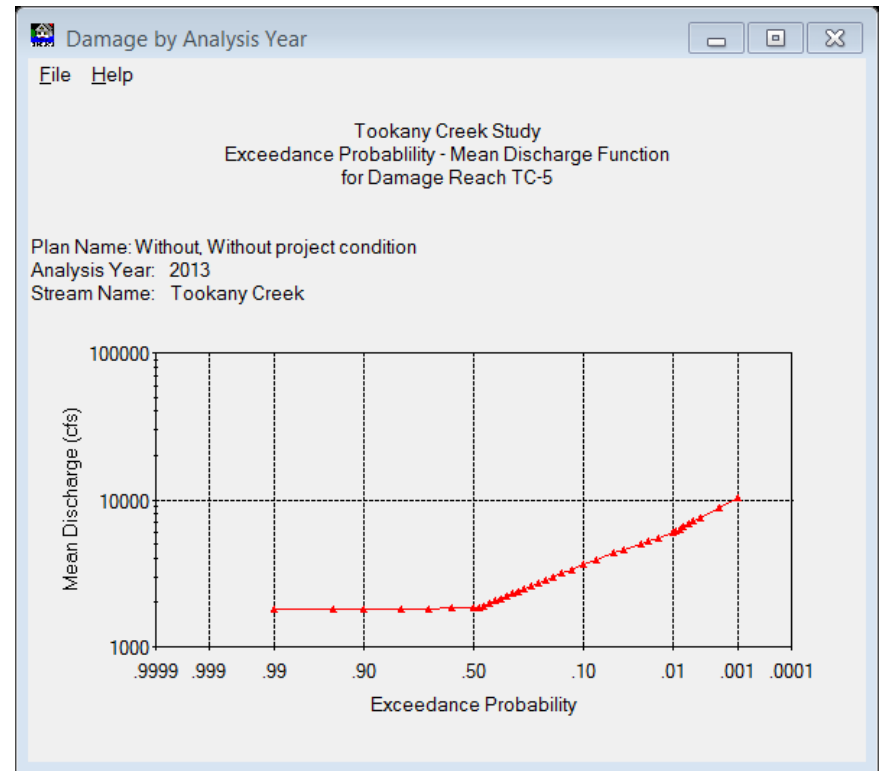
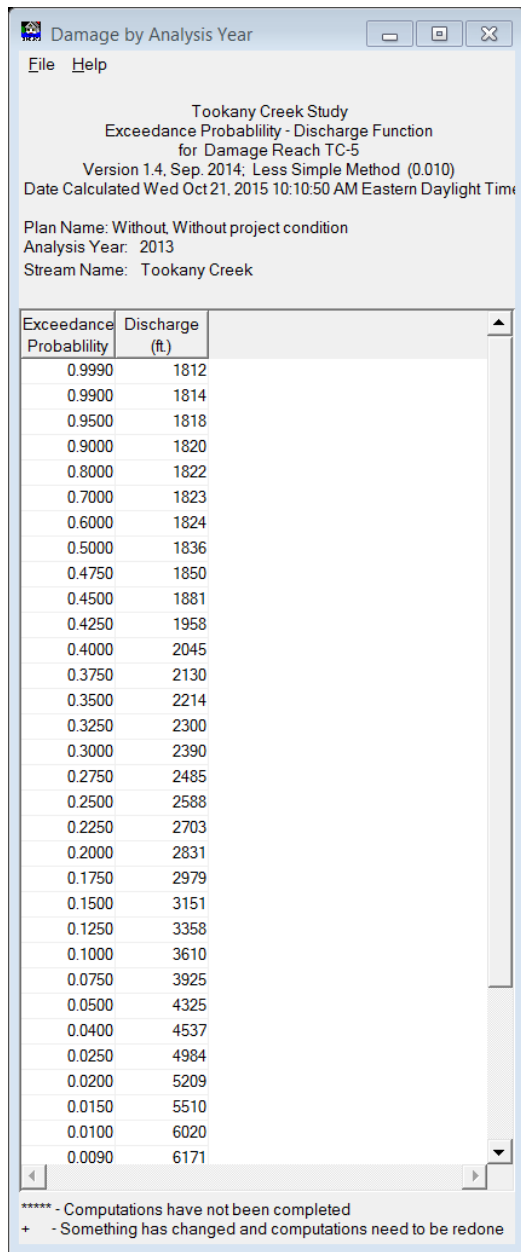
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-4  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:50 AM Eastern Daylight Time

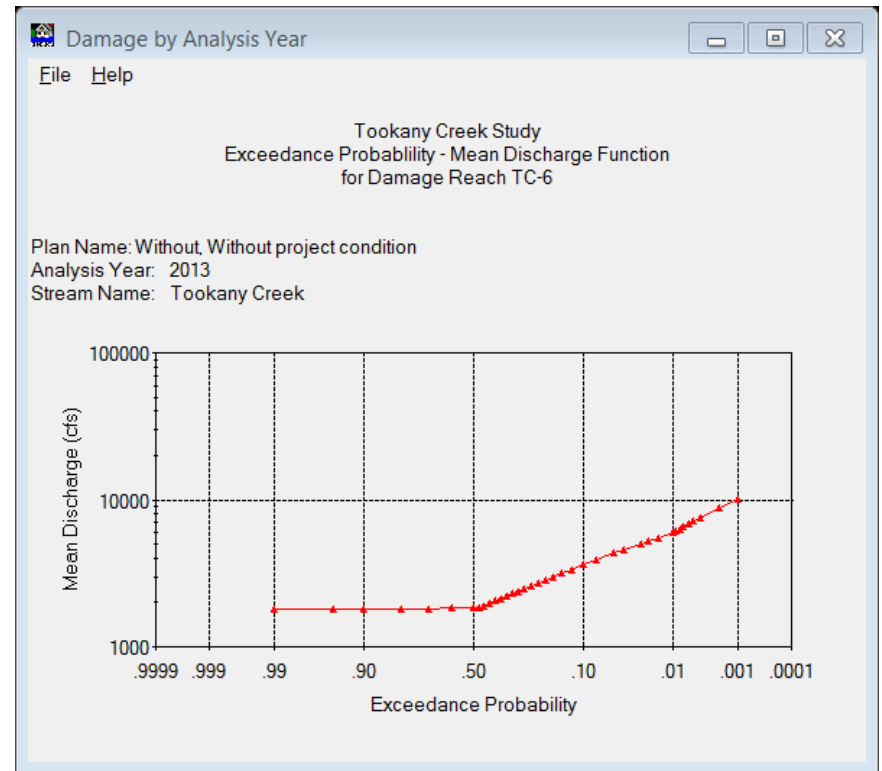
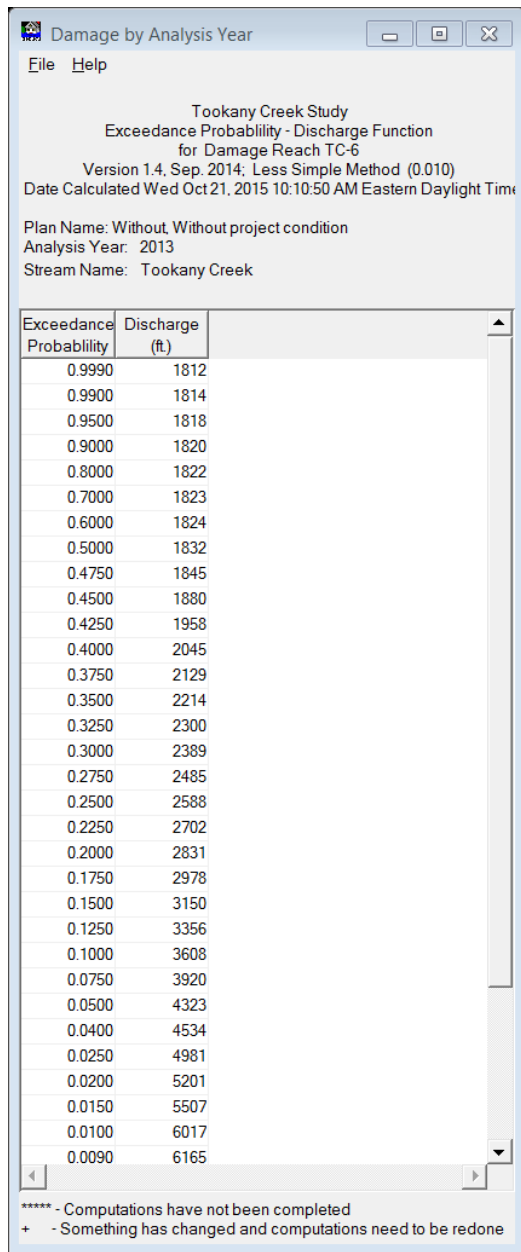
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	2081
0.9900	2082
0.9500	2088
0.9000	2090
0.8000	2092
0.7000	2094
0.6000	2095
0.5000	2113
0.4750	2134
0.4500	2156
0.4250	2229
0.4000	2316
0.3750	2400
0.3500	2483
0.3250	2567
0.3000	2655
0.2750	2749
0.2500	2851
0.2250	2966
0.2000	3101
0.1750	3262
0.1500	3462
0.1250	3711
0.1000	4014
0.0750	4385
0.0500	4836
0.0400	5078
0.0250	5578
0.0200	5833
0.0150	6156
0.0100	6730
0.0090	6897

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone







Damage by Analysis Year

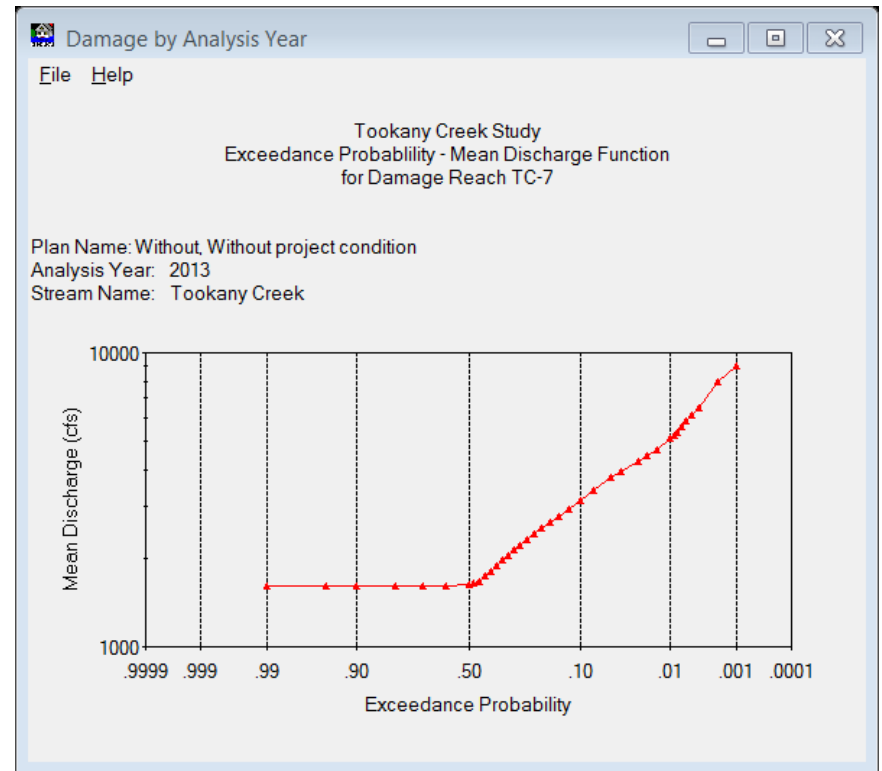
File Help

Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-7  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:51 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	1603
0.9900	1604
0.9500	1608
0.9000	1610
0.8000	1612
0.7000	1613
0.6000	1614
0.5000	1630
0.4750	1649
0.4500	1667
0.4250	1735
0.4000	1814
0.3750	1891
0.3500	1968
0.3250	2047
0.3000	2129
0.2750	2217
0.2500	2310
0.2250	2411
0.2000	2521
0.1750	2643
0.1500	2782
0.1250	2946
0.1000	3151
0.0750	3416
0.0500	3749
0.0400	3924
0.0250	4288
0.0200	4473
0.0150	4703
0.0100	5102
0.0090	5230

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





Damage by Analysis Year

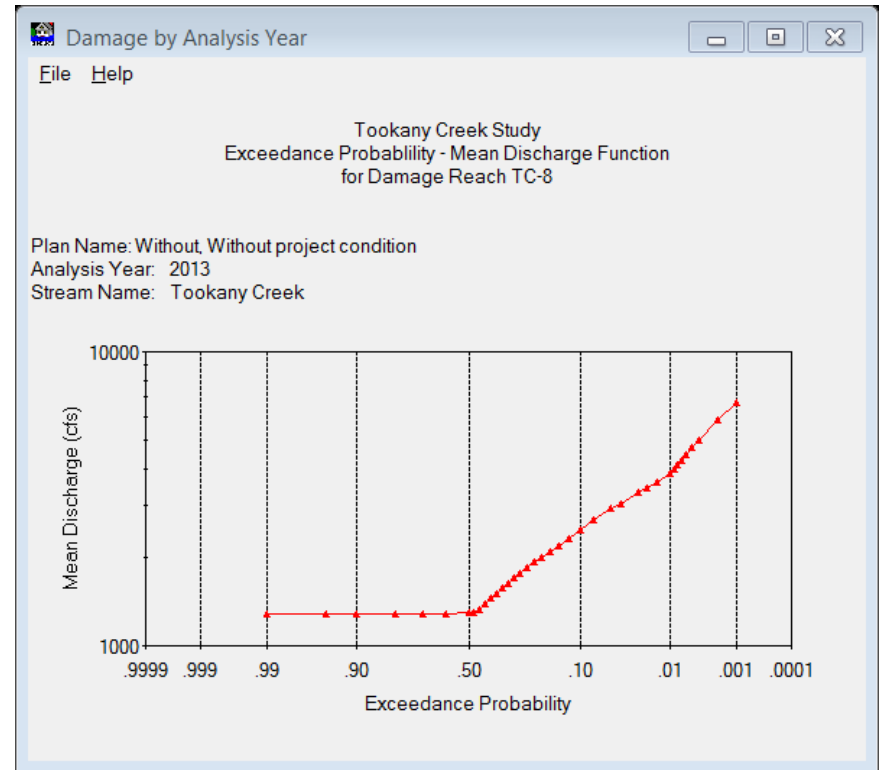
File Help

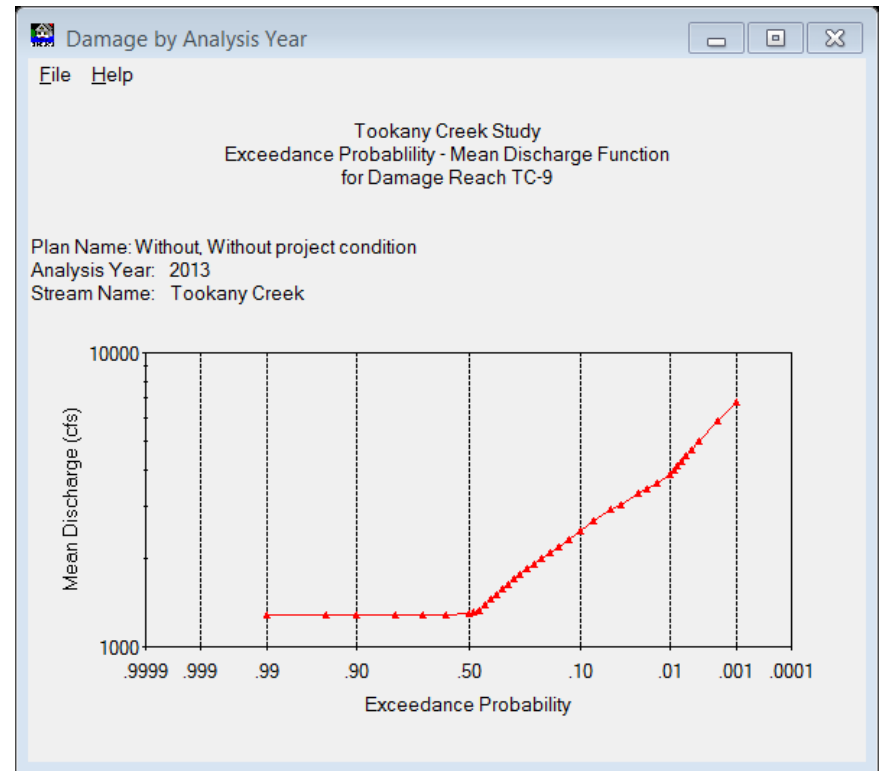
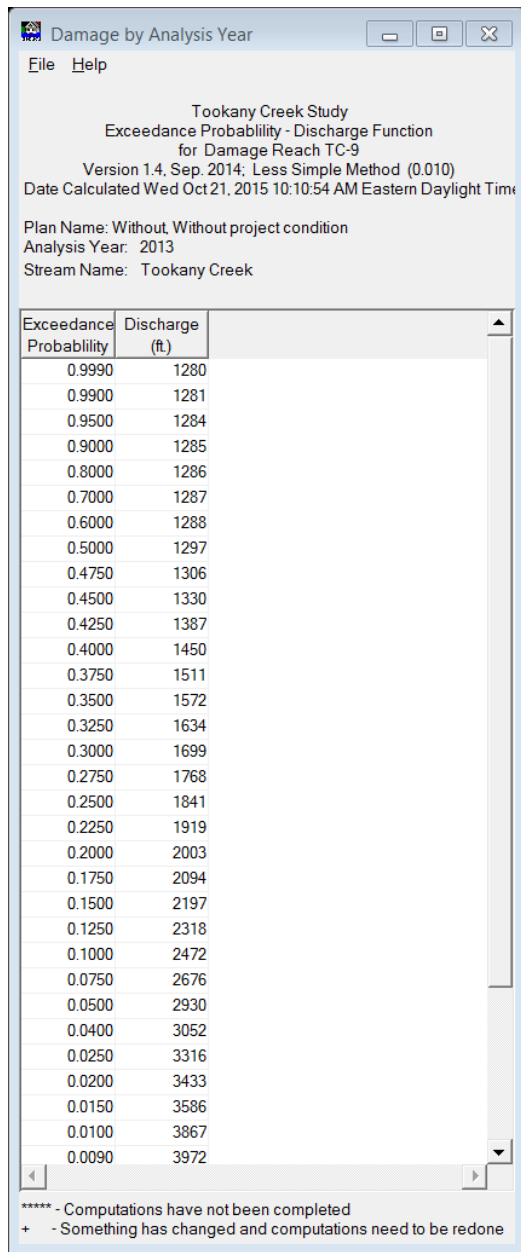
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-8  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:52 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	1280
0.9900	1281
0.9500	1284
0.9000	1285
0.8000	1286
0.7000	1287
0.6000	1288
0.5000	1294
0.4750	1304
0.4500	1330
0.4250	1388
0.4000	1451
0.3750	1512
0.3500	1573
0.3250	1636
0.3000	1701
0.2750	1770
0.2500	1843
0.2250	1920
0.2000	2004
0.1750	2096
0.1500	2199
0.1250	2320
0.1000	2473
0.0750	2677
0.0500	2933
0.0400	3055
0.0250	3318
0.0200	3436
0.0150	3589
0.0100	3875
0.0090	3981

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





Damage by Analysis Year

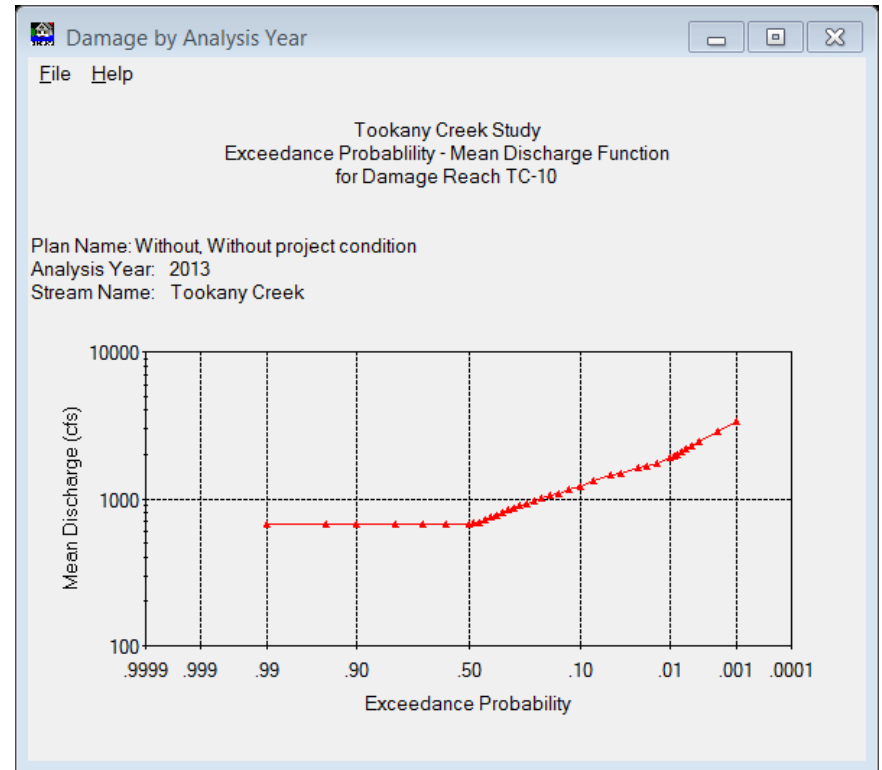
File Help

Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-10  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:55 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	671
0.9900	671
0.9500	673
0.9000	673
0.8000	674
0.7000	674
0.6000	674
0.5000	679
0.4750	683
0.4500	694
0.4250	720
0.4000	750
0.3750	779
0.3500	807
0.3250	836
0.3000	867
0.2750	898
0.2500	932
0.2250	967
0.2000	1005
0.1750	1047
0.1500	1093
0.1250	1148
0.1000	1219
0.0750	1318
0.0500	1444
0.0400	1503
0.0250	1627
0.0200	1681
0.0150	1750
0.0100	1888
0.0090	1941

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

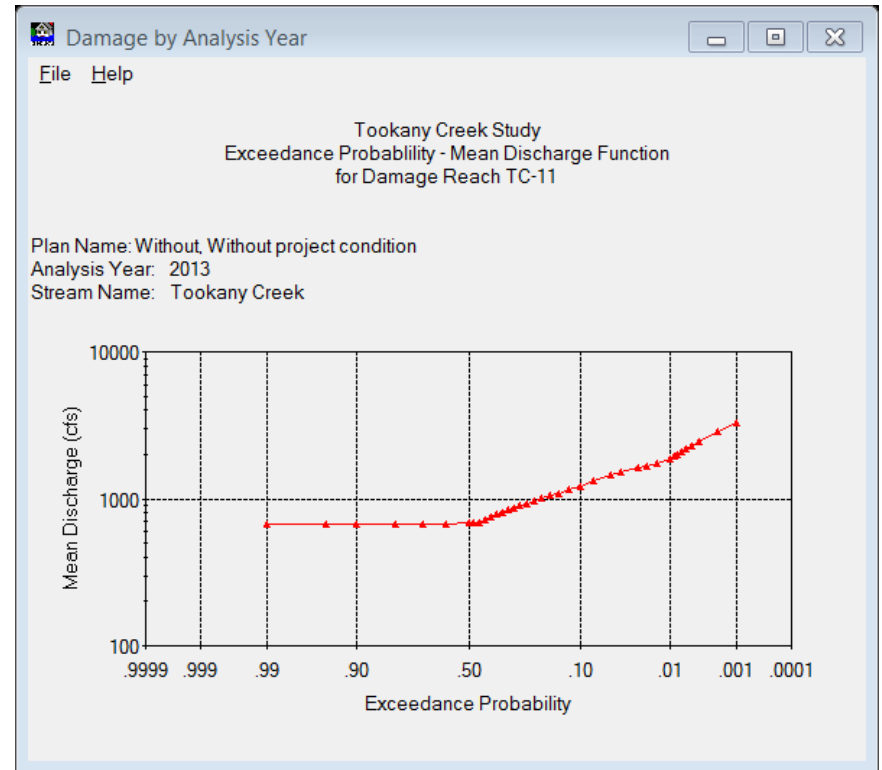
File Help

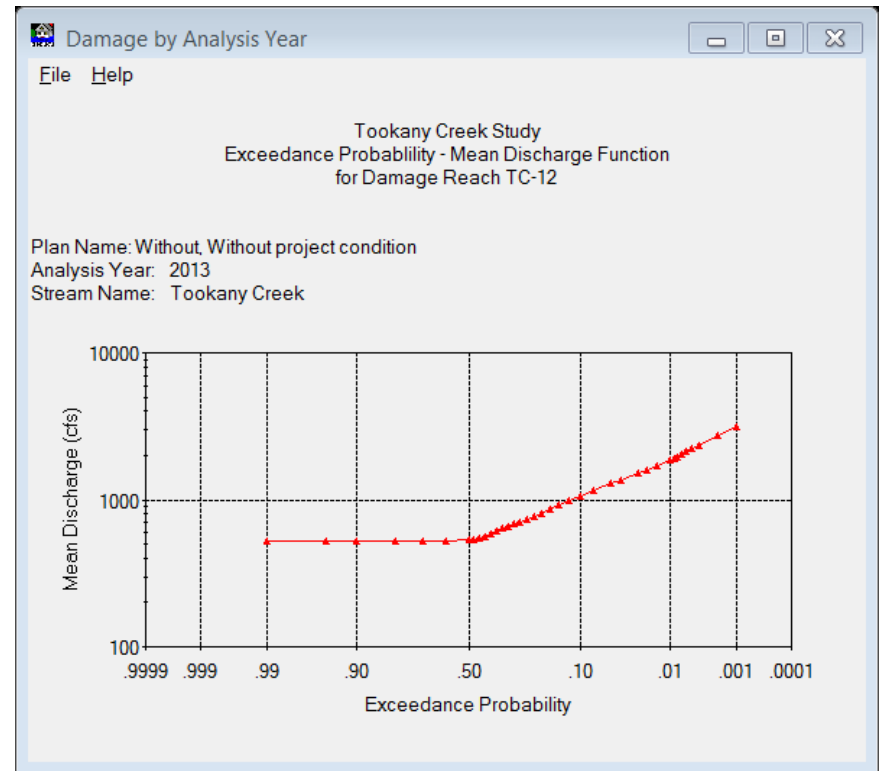
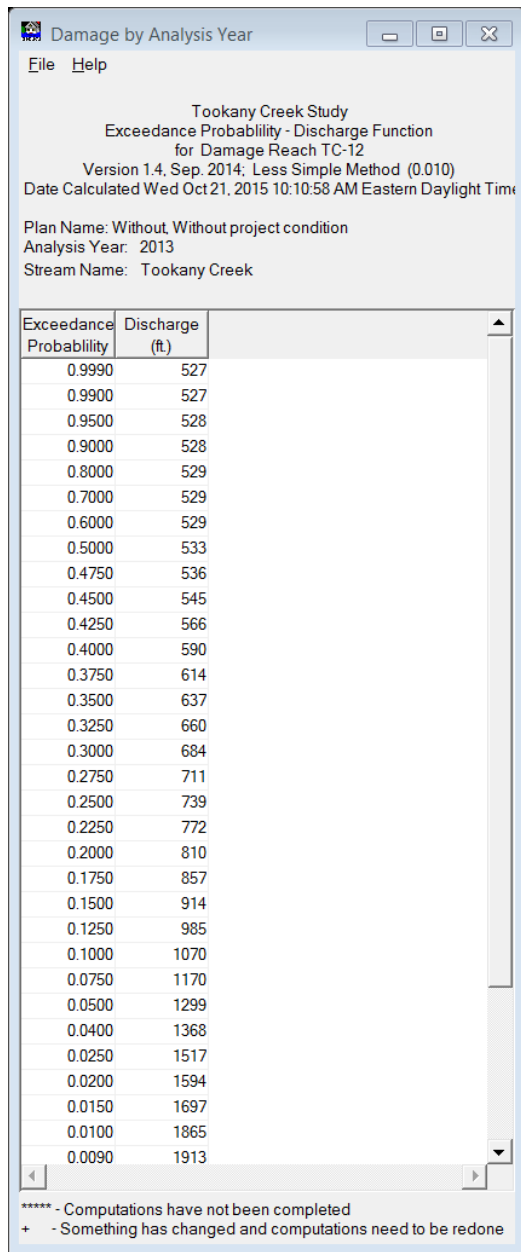
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-11  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:58 AM Eastern Daylight Time

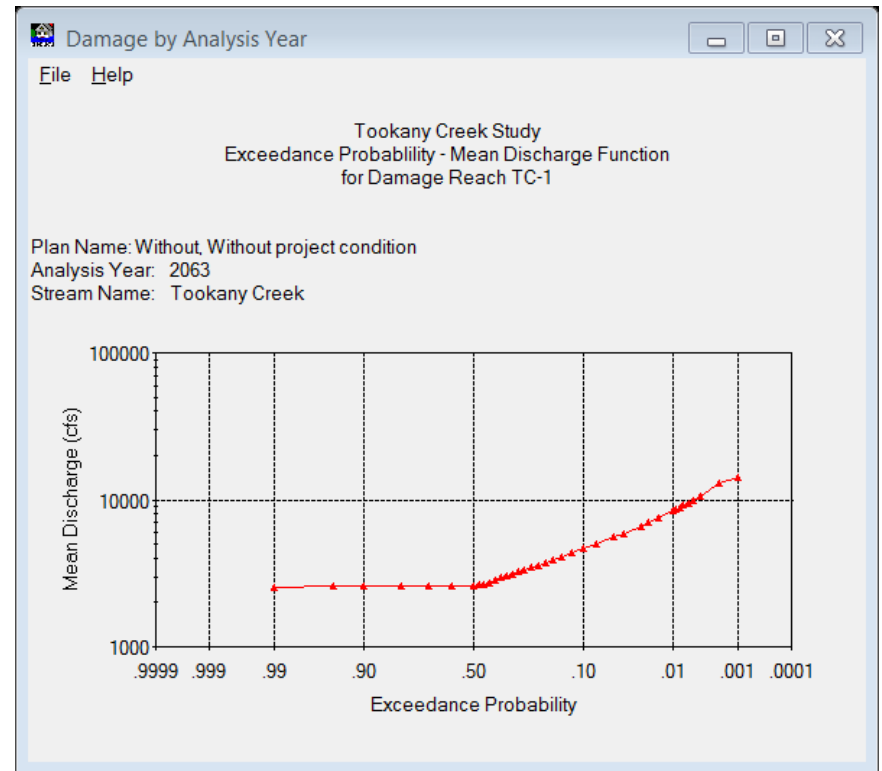
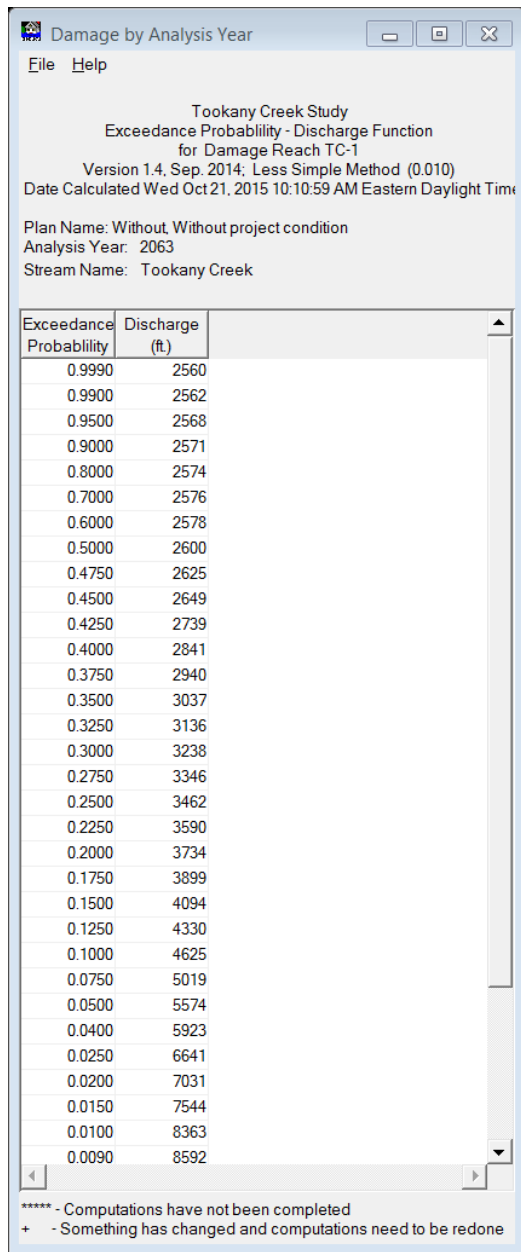
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

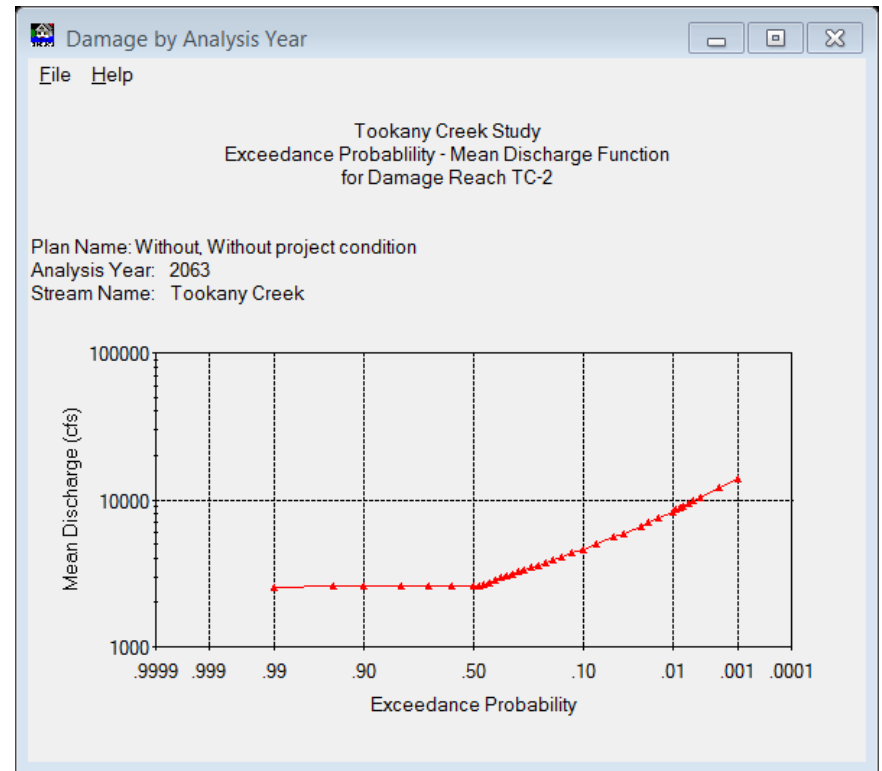
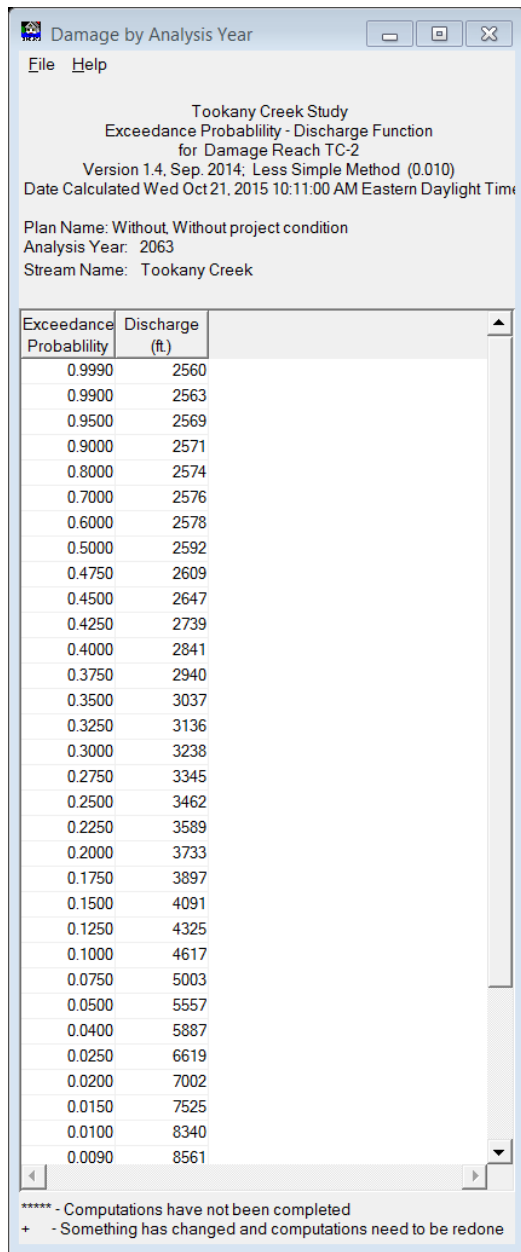
Exceedance Probability	Discharge (ft.)
0.9990	671
0.9900	671
0.9500	672
0.9000	673
0.8000	674
0.7000	674
0.6000	674
0.5000	681
0.4750	688
0.4500	695
0.4250	721
0.4000	751
0.3750	779
0.3500	808
0.3250	837
0.3000	867
0.2750	899
0.2500	932
0.2250	968
0.2000	1006
0.1750	1048
0.1500	1094
0.1250	1150
0.1000	1223
0.0750	1322
0.0500	1447
0.0400	1506
0.0250	1626
0.0200	1674
0.0150	1742
0.0100	1883
0.0090	1938

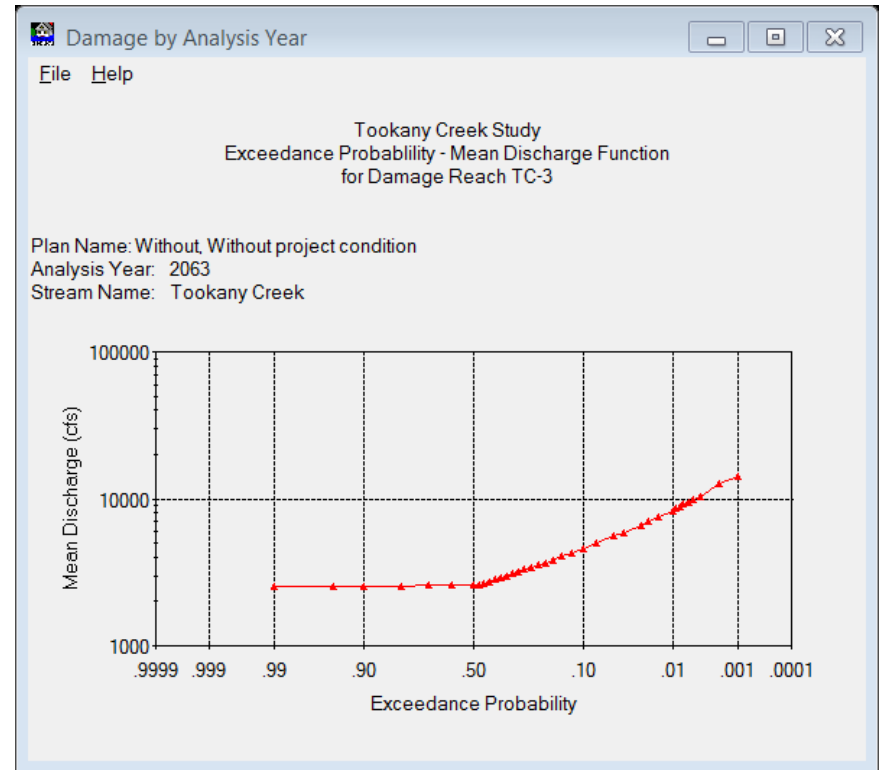
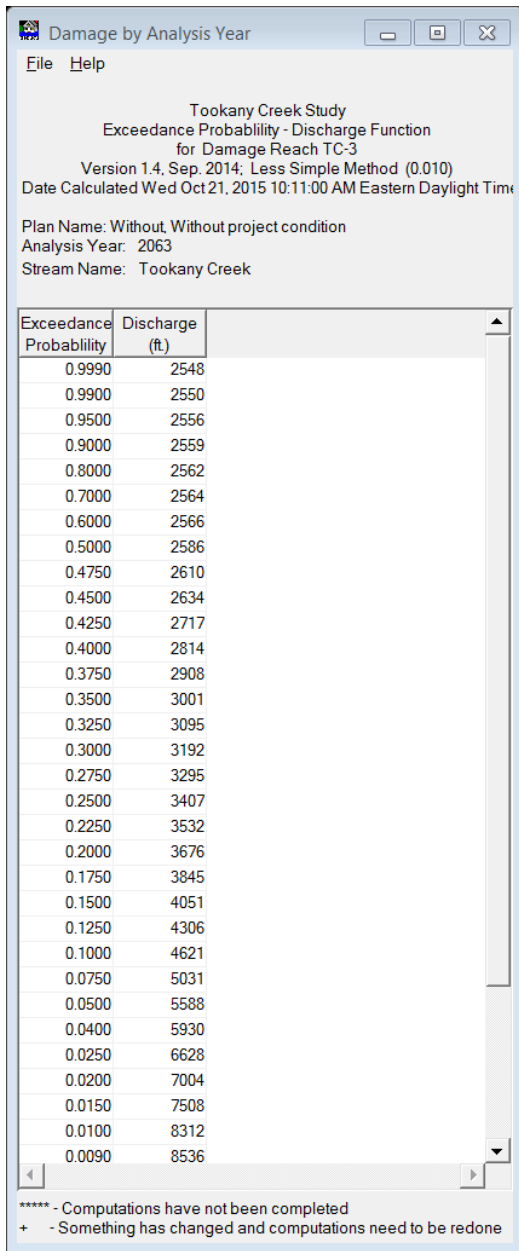
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



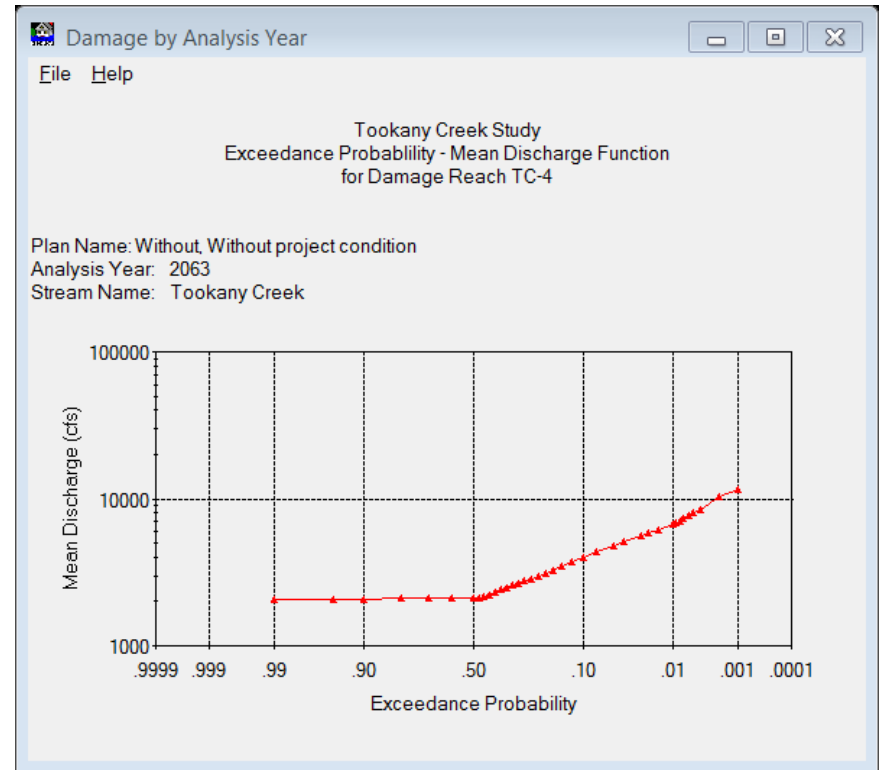
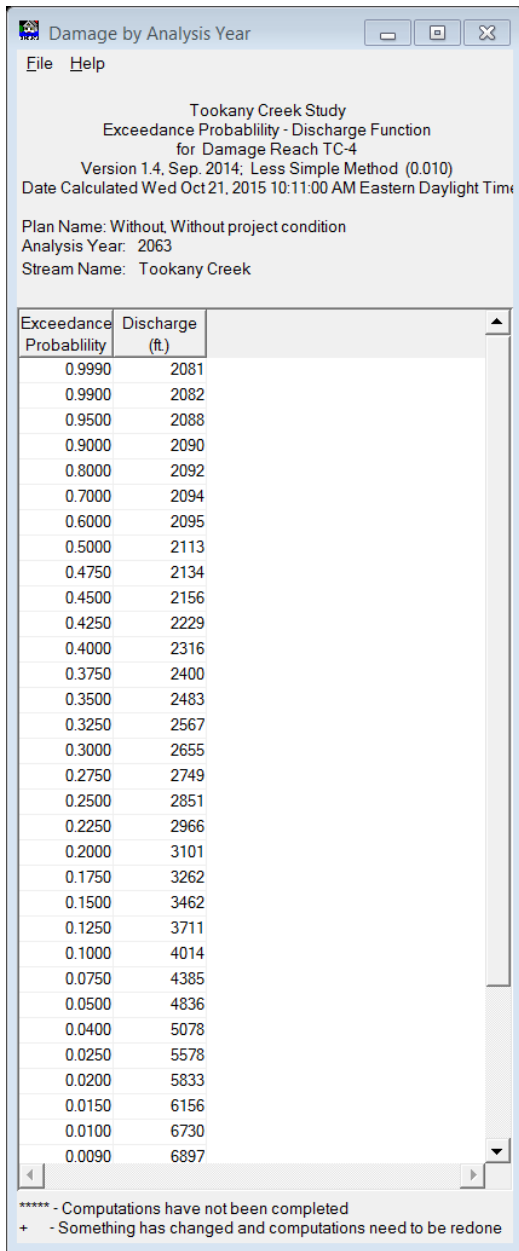


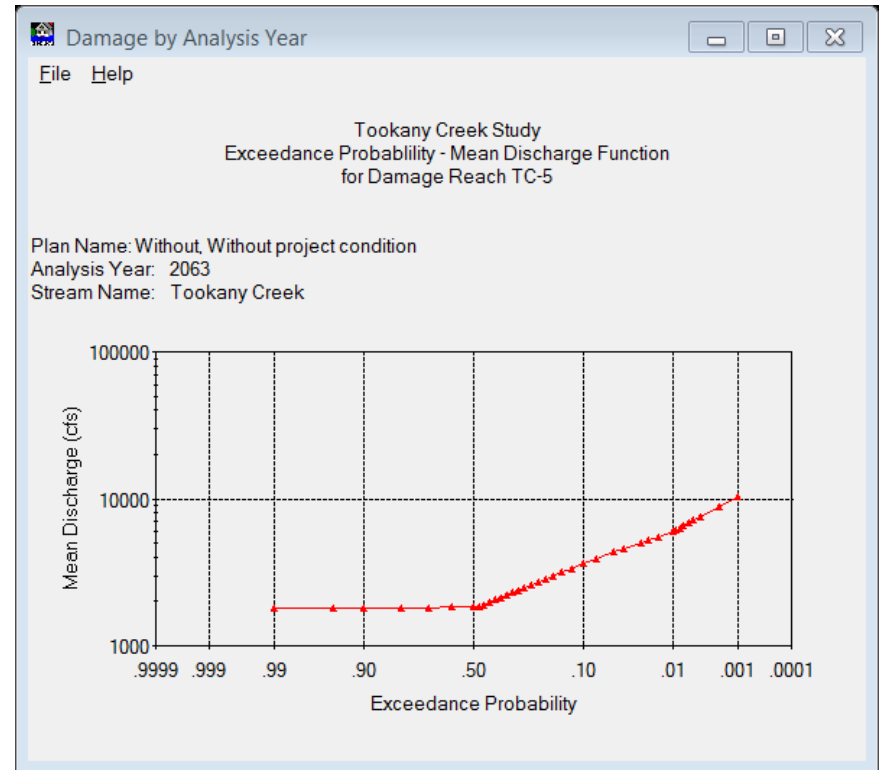
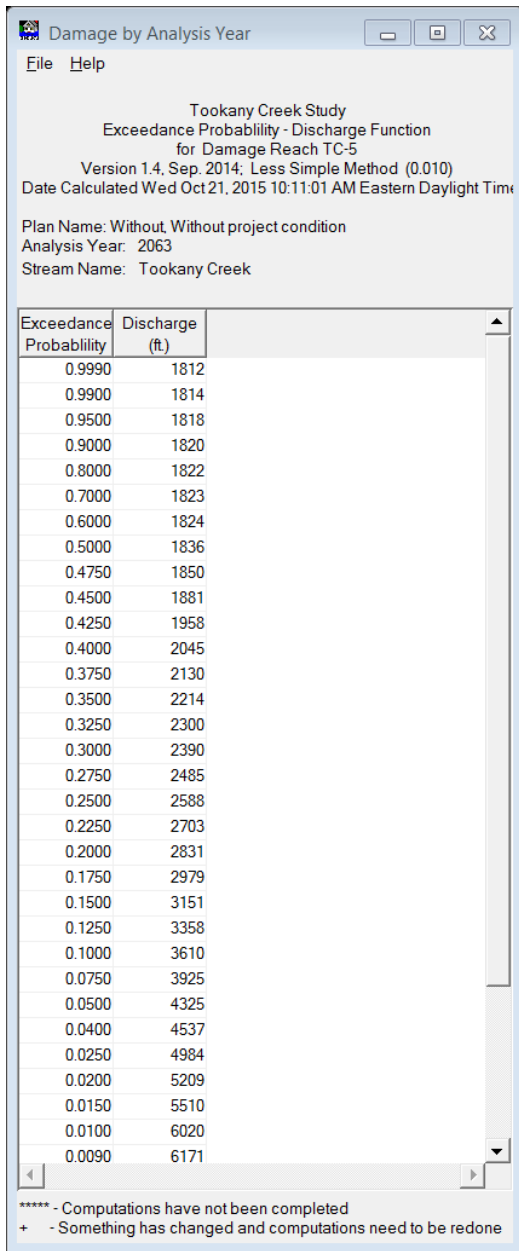


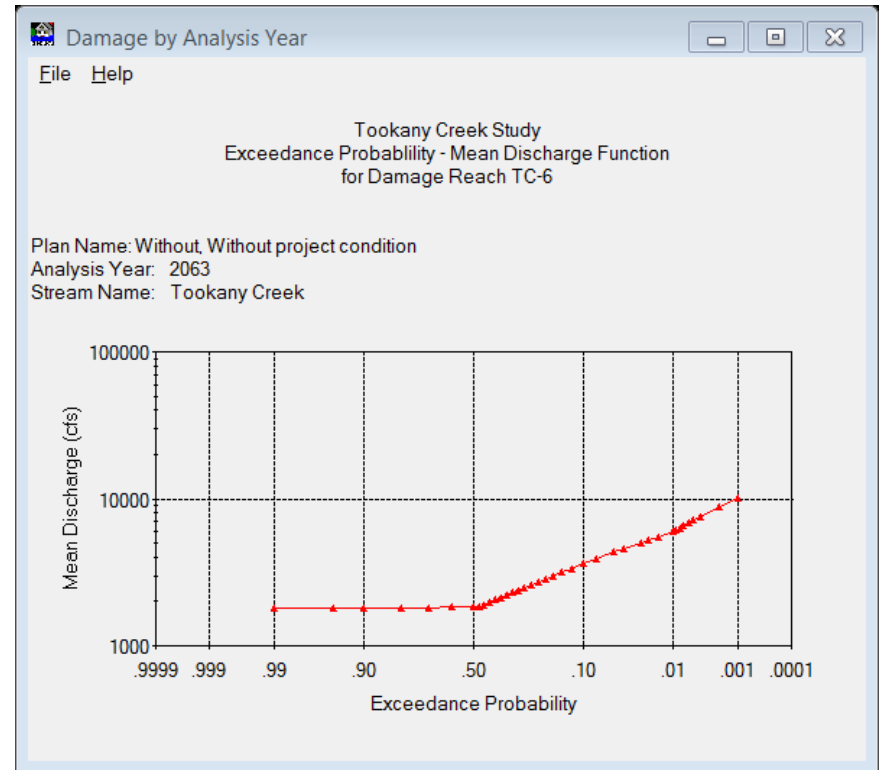
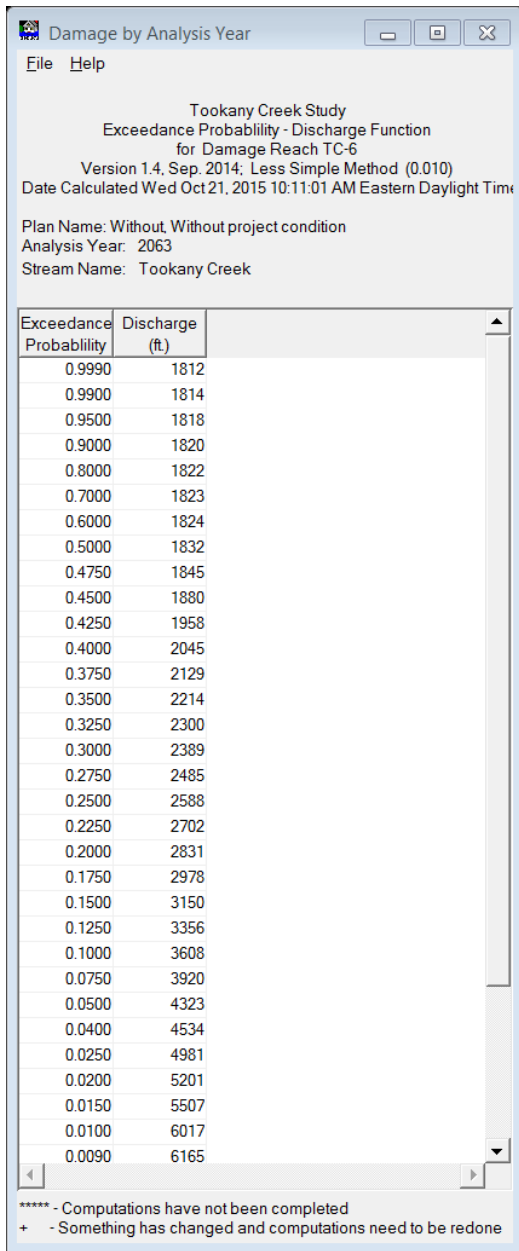












Damage by Analysis Year

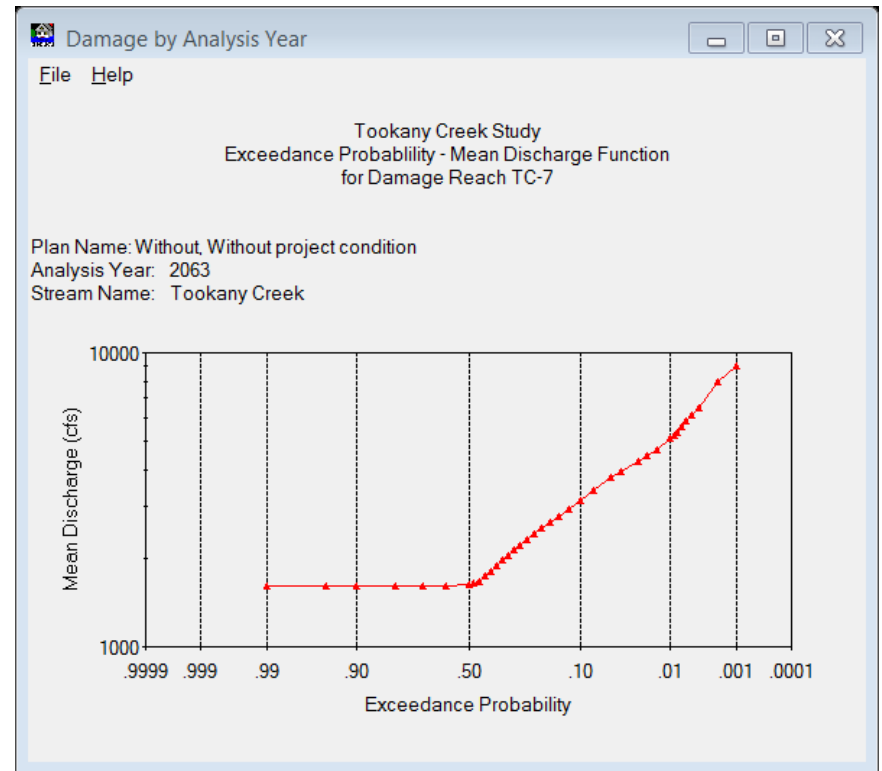
File Help

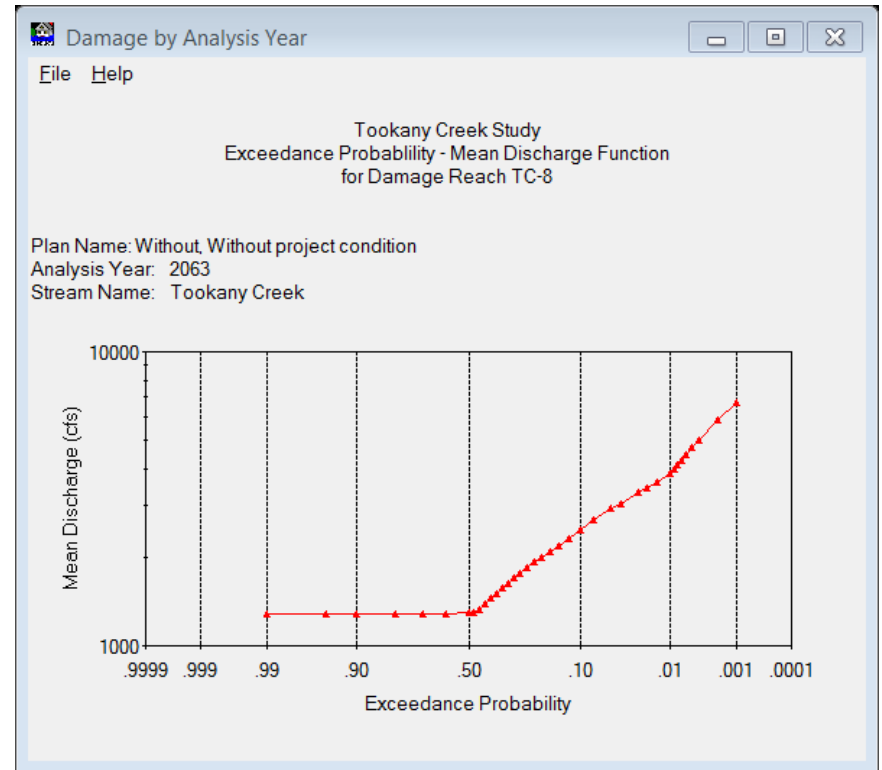
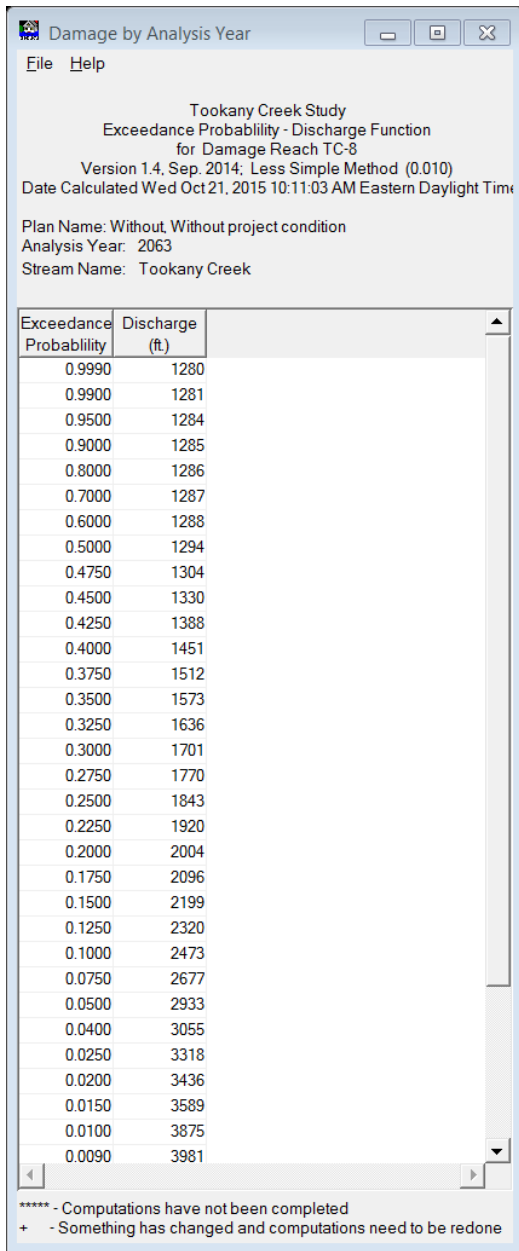
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-7  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:01 AM Eastern Daylight Time

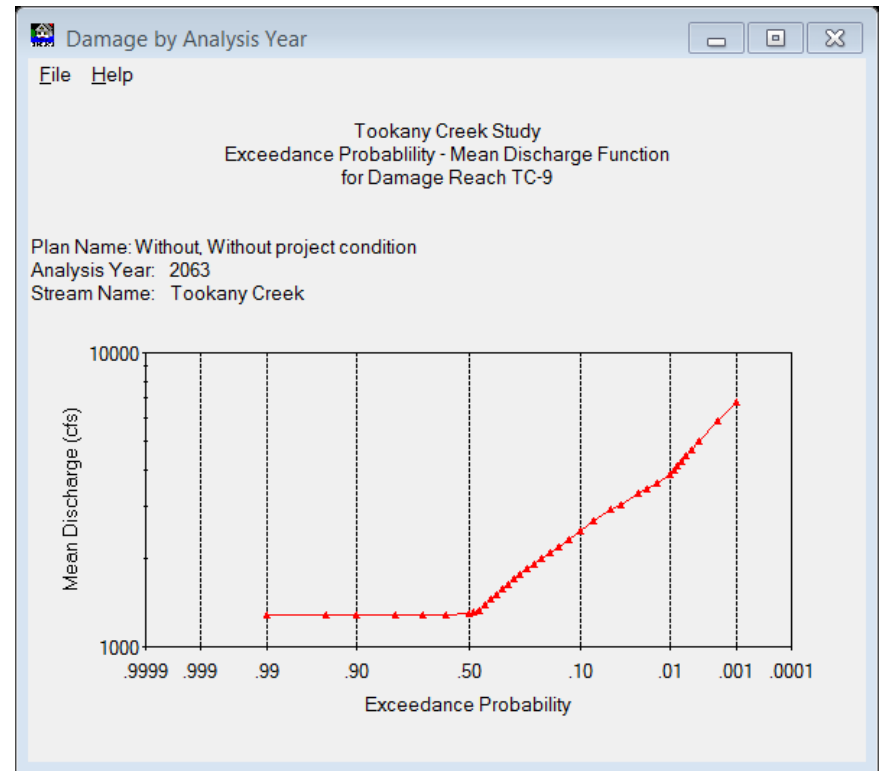
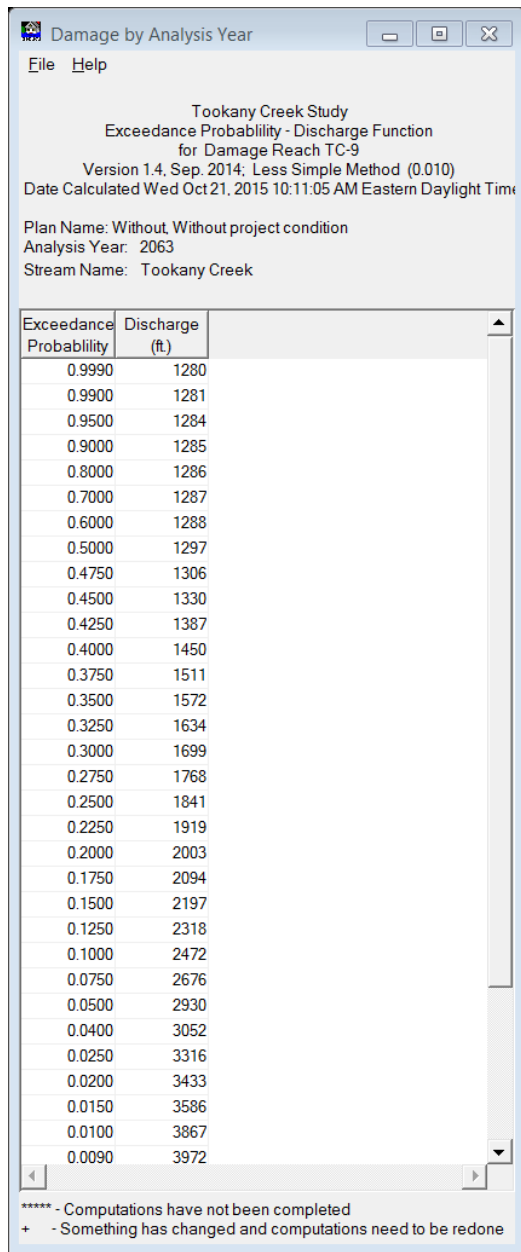
Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	1603
0.9900	1604
0.9500	1608
0.9000	1610
0.8000	1612
0.7000	1613
0.6000	1614
0.5000	1630
0.4750	1649
0.4500	1667
0.4250	1735
0.4000	1814
0.3750	1891
0.3500	1968
0.3250	2047
0.3000	2129
0.2750	2217
0.2500	2310
0.2250	2411
0.2000	2521
0.1750	2643
0.1500	2782
0.1250	2946
0.1000	3151
0.0750	3416
0.0500	3749
0.0400	3924
0.0250	4288
0.0200	4473
0.0150	4703
0.0100	5102
0.0090	5230

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone







Damage by Analysis Year

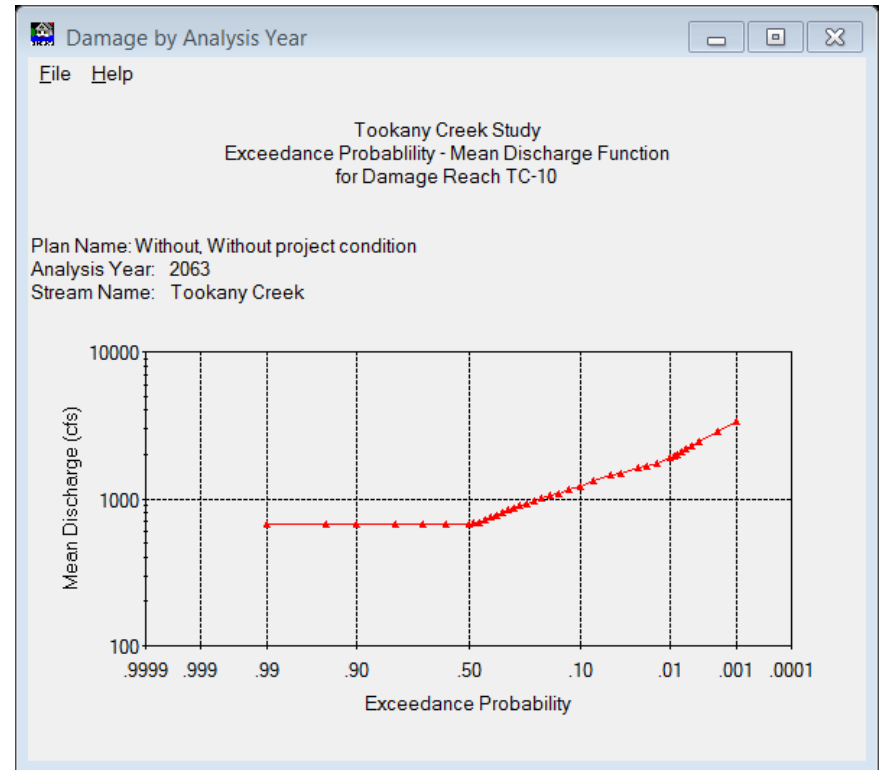
File Help

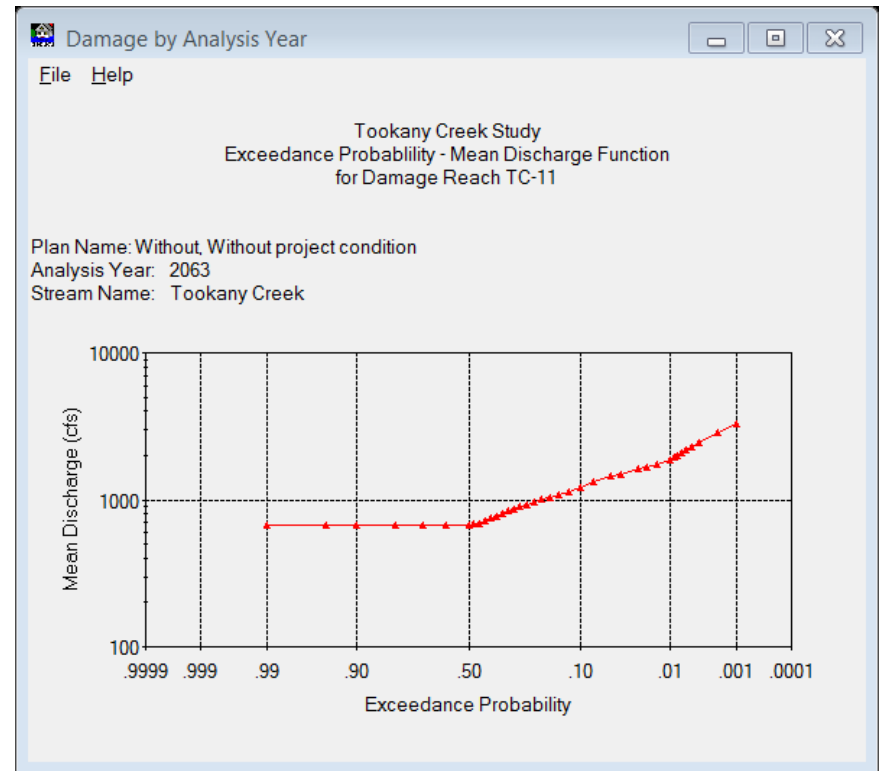
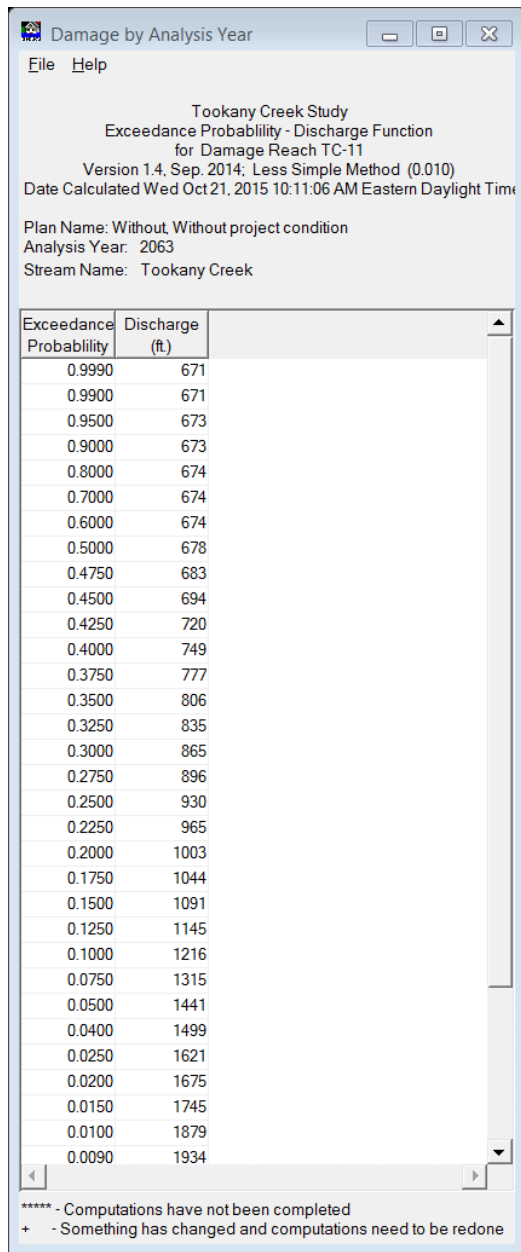
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-10  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:05 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

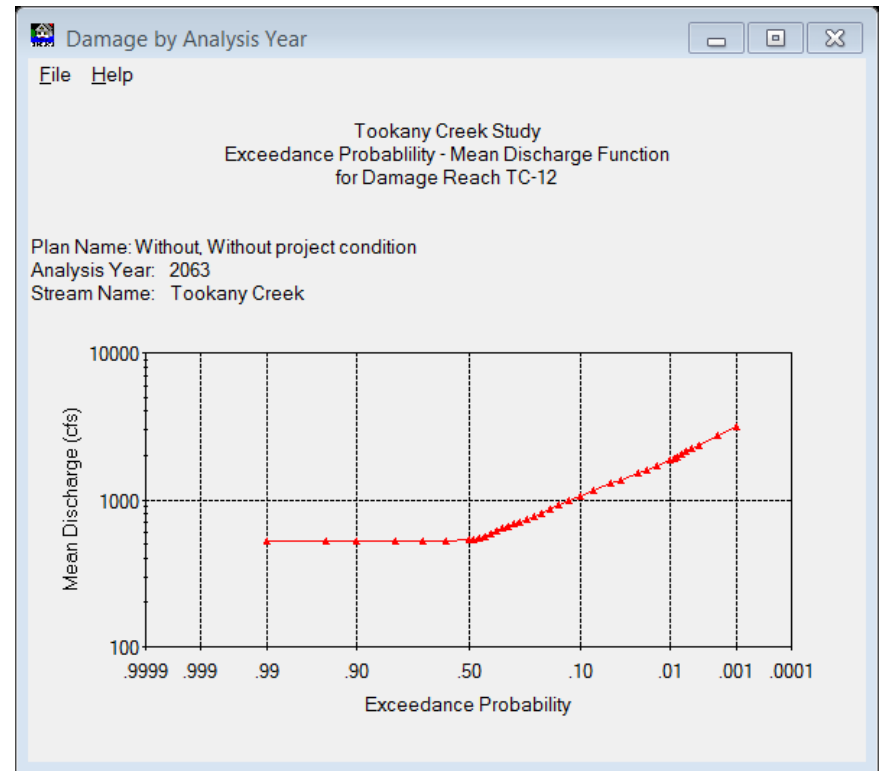
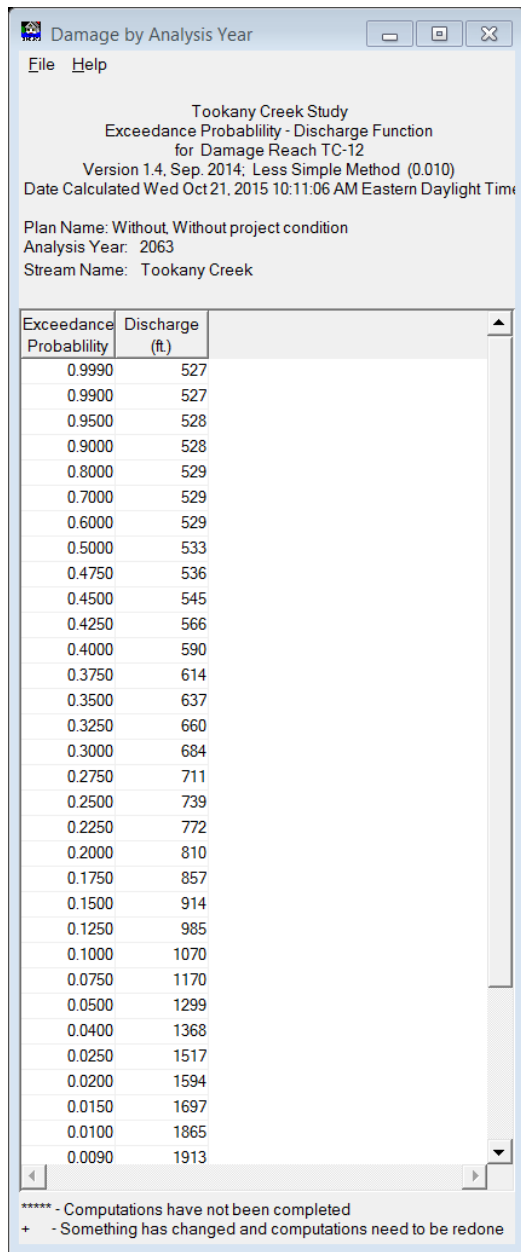
Exceedance Probability	Discharge (ft.)
0.9990	671
0.9900	671
0.9500	673
0.9000	673
0.8000	674
0.7000	674
0.6000	674
0.5000	679
0.4750	683
0.4500	694
0.4250	720
0.4000	750
0.3750	779
0.3500	807
0.3250	836
0.3000	867
0.2750	898
0.2500	932
0.2250	967
0.2000	1005
0.1750	1047
0.1500	1093
0.1250	1148
0.1000	1219
0.0750	1318
0.0500	1444
0.0400	1503
0.0250	1627
0.0200	1681
0.0150	1750
0.0100	1888
0.0090	1941

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone









Damage by Analysis Year

File Help

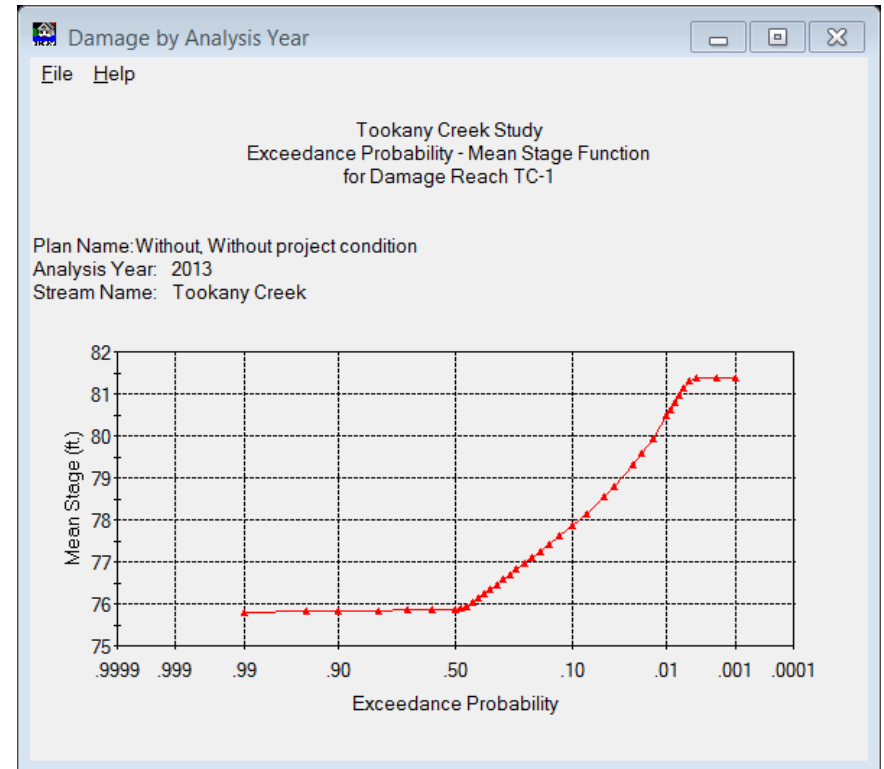
Tookany Creek Study  
 Exceedance Probability - Stage Function  
 for Damage Reach TC-1  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:49 AM Eastern Daylight Time

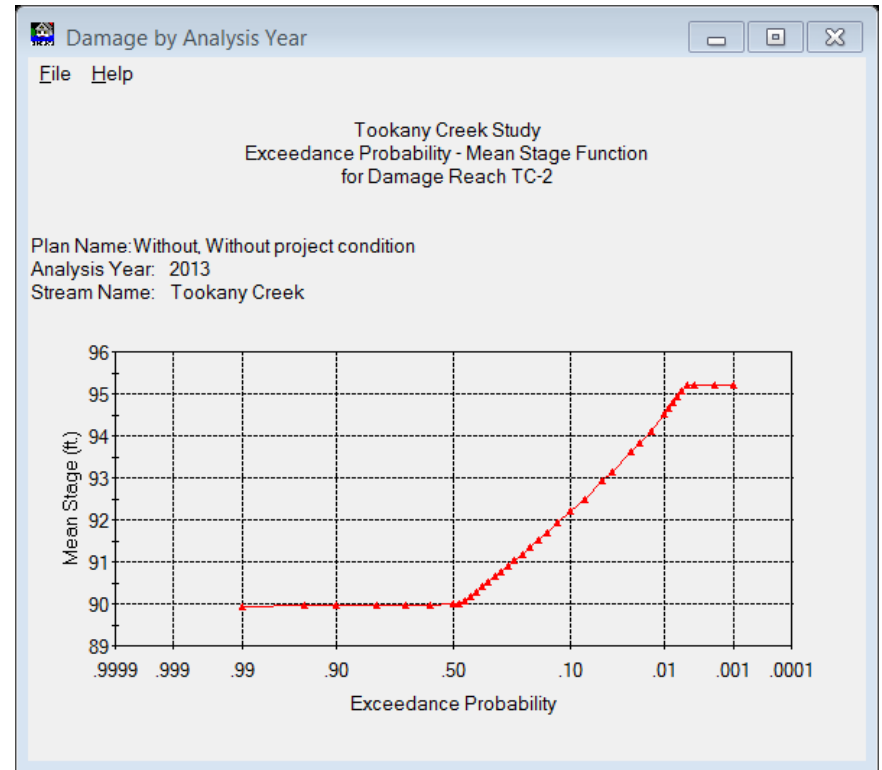
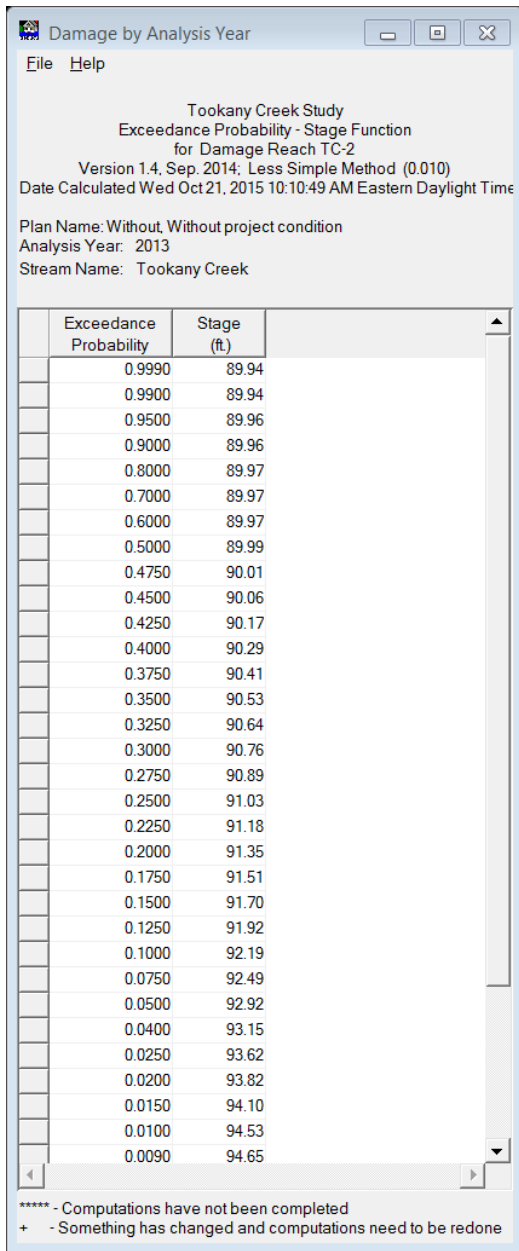
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

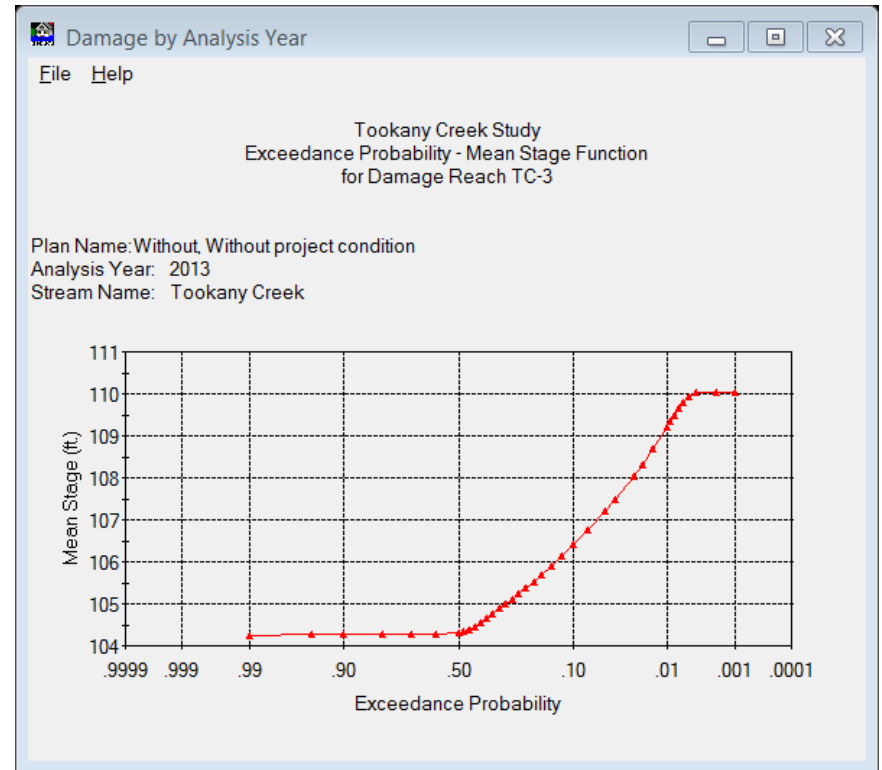
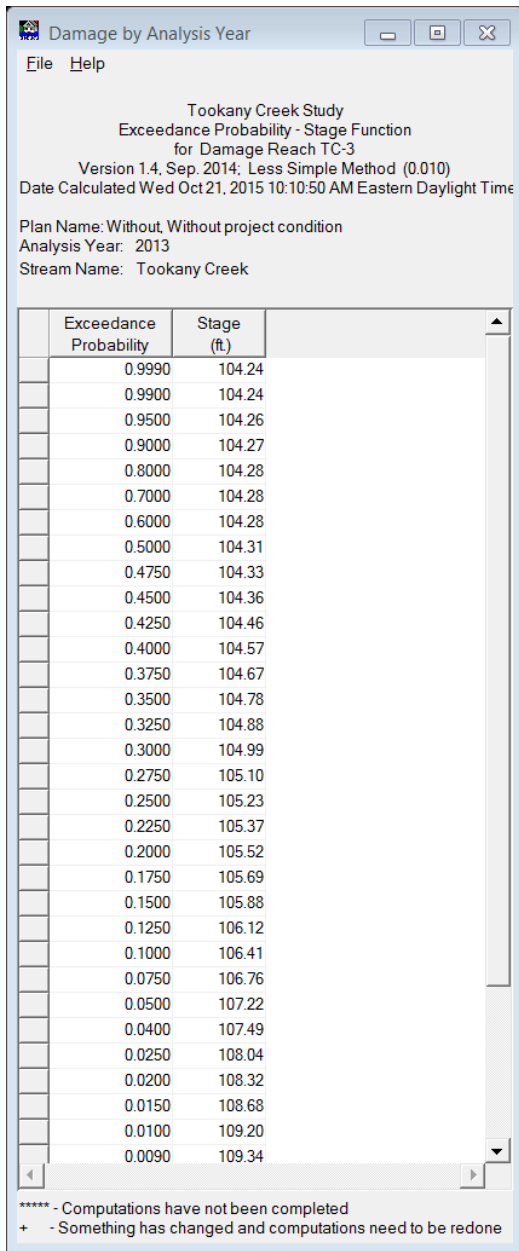
Exceedance Probability	Stage (ft.)
0.9990	75.80
0.9900	75.81
0.9500	75.83
0.9000	75.84
0.8000	75.84
0.7000	75.85
0.6000	75.85
0.5000	75.88
0.4750	75.91
0.4500	75.93
0.4250	76.03
0.4000	76.14
0.3750	76.25
0.3500	76.35
0.3250	76.46
0.3000	76.57
0.2750	76.69
0.2500	76.81
0.2250	76.95
0.2000	77.10
0.1750	77.24
0.1500	77.41
0.1250	77.61
0.1000	77.84
0.0750	78.14
0.0500	78.55
0.0400	78.80
0.0250	79.31
0.0200	79.58
0.0150	79.93
0.0100	80.47
0.0090	80.63

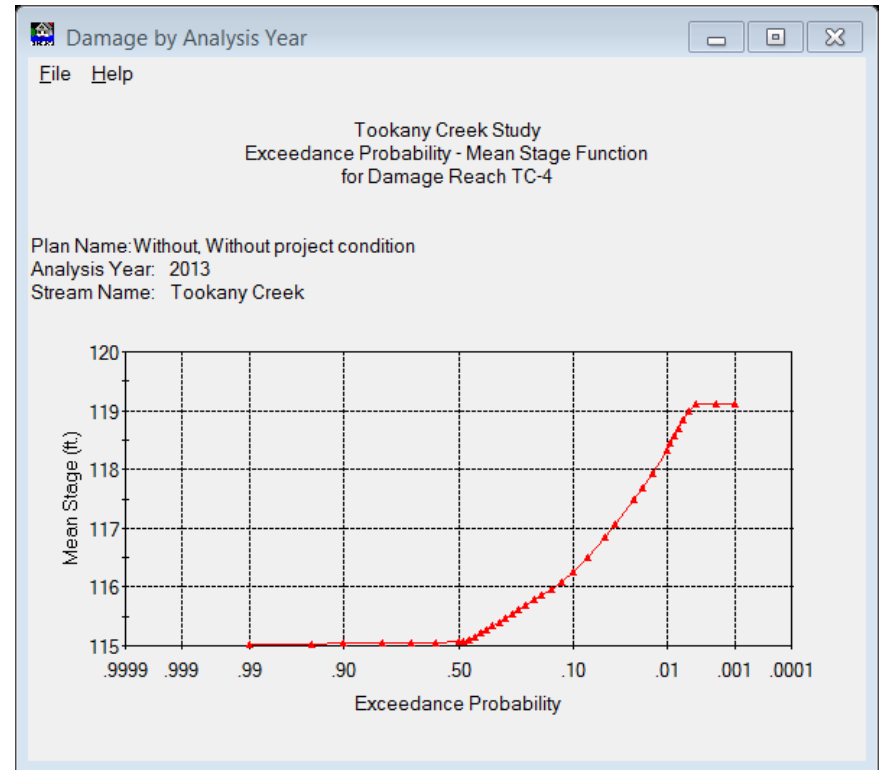
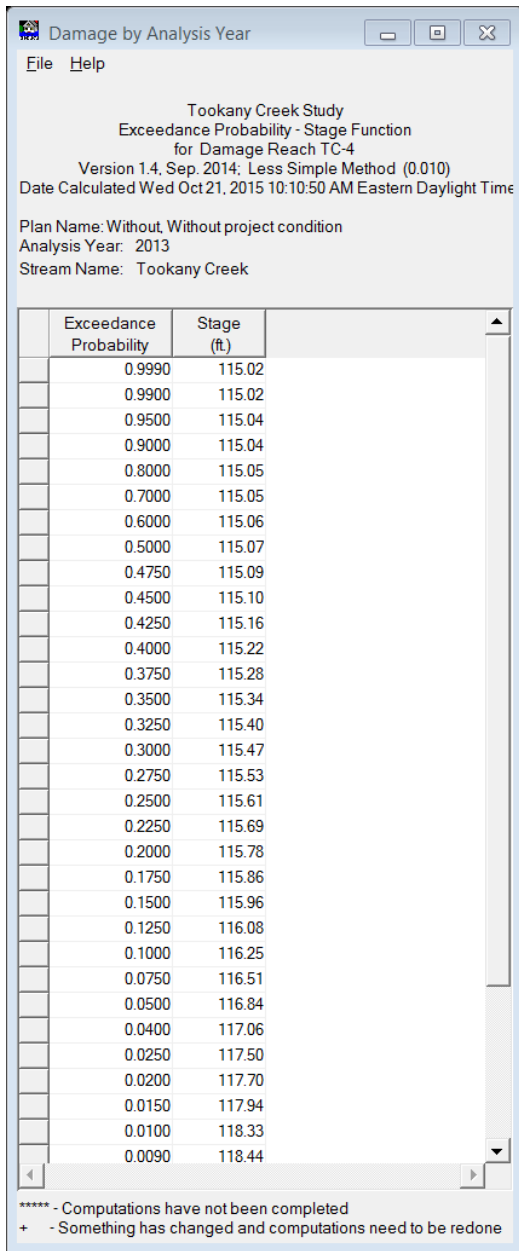
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

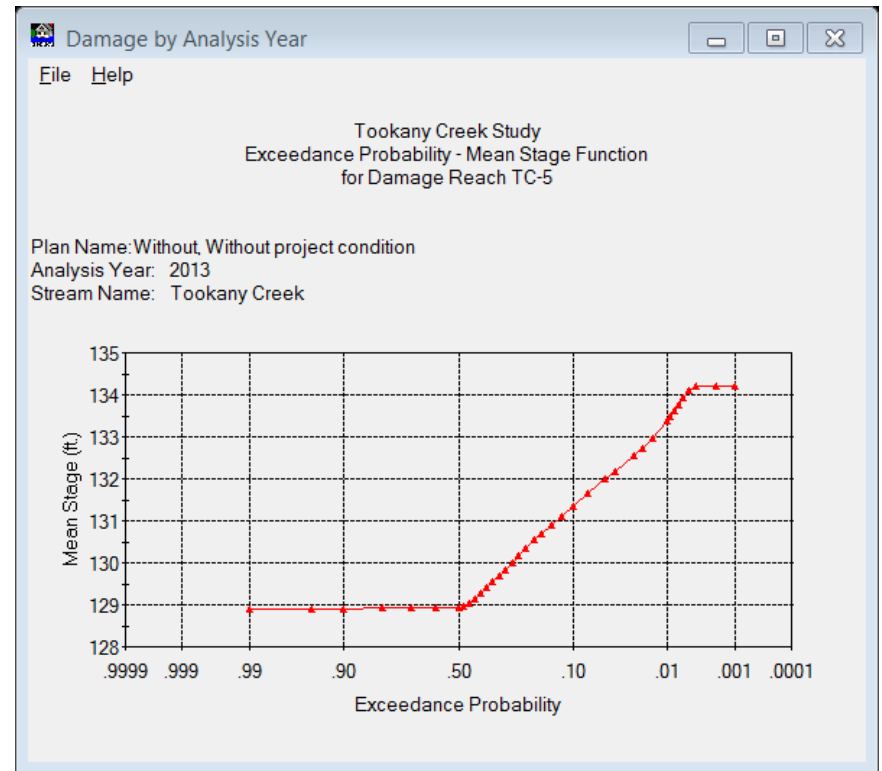
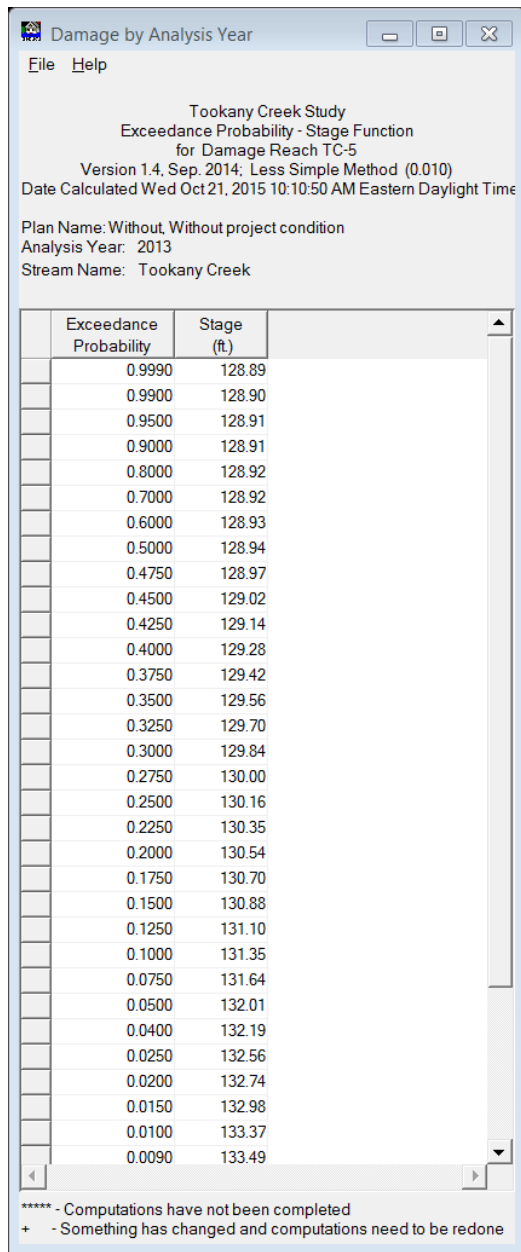
### Exceedance Probability – Mean Stage Function

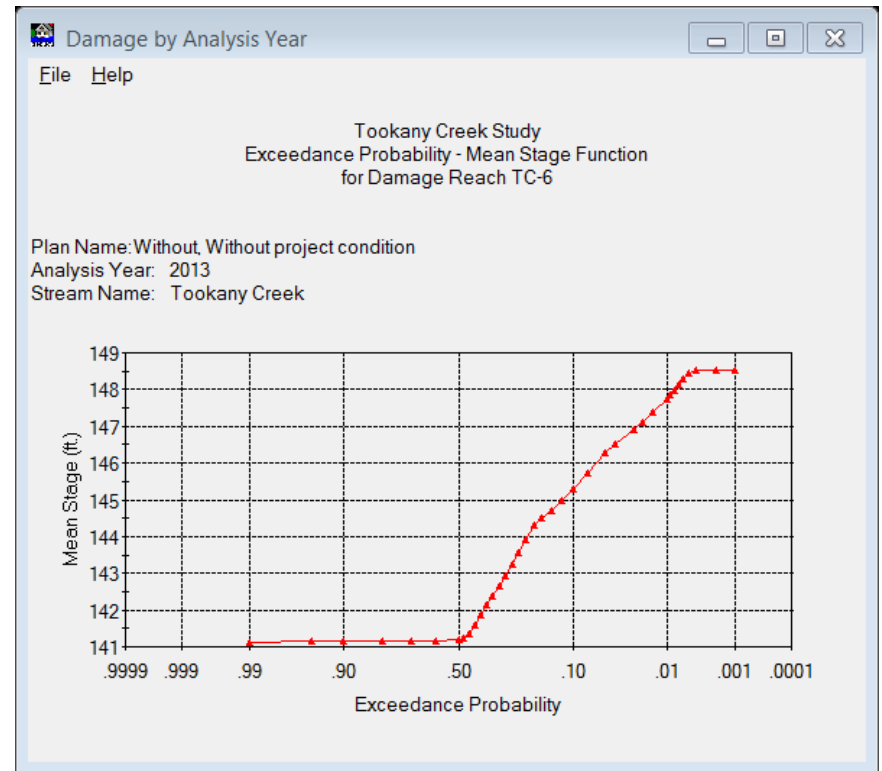
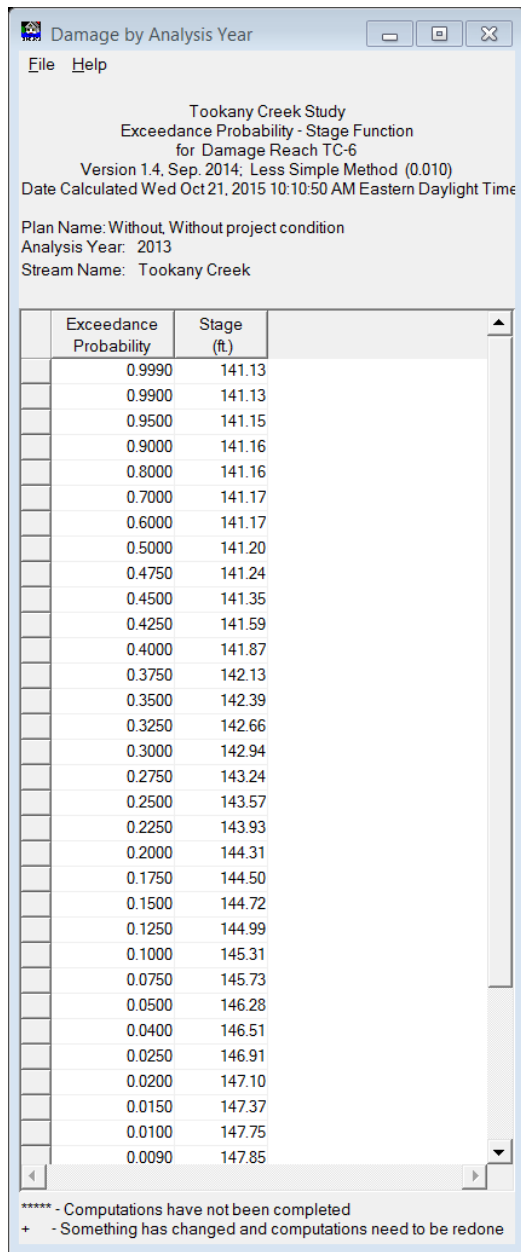


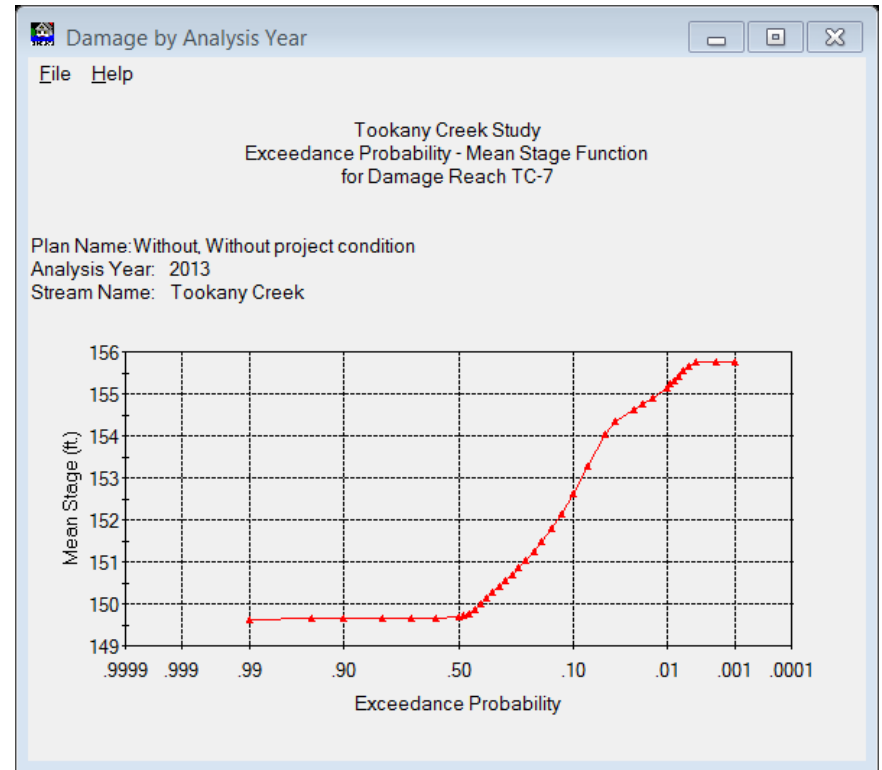
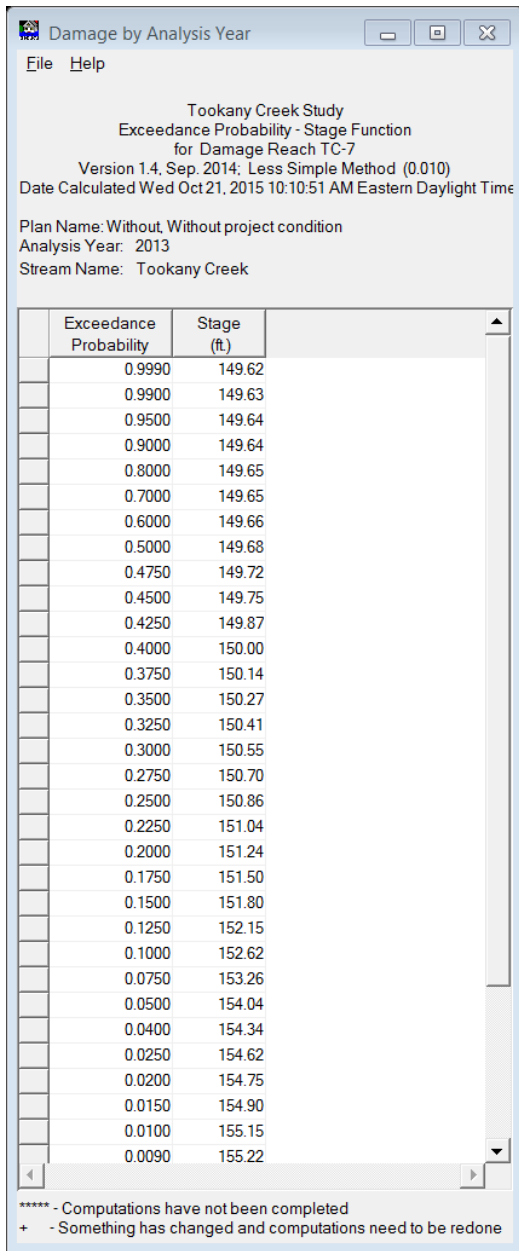




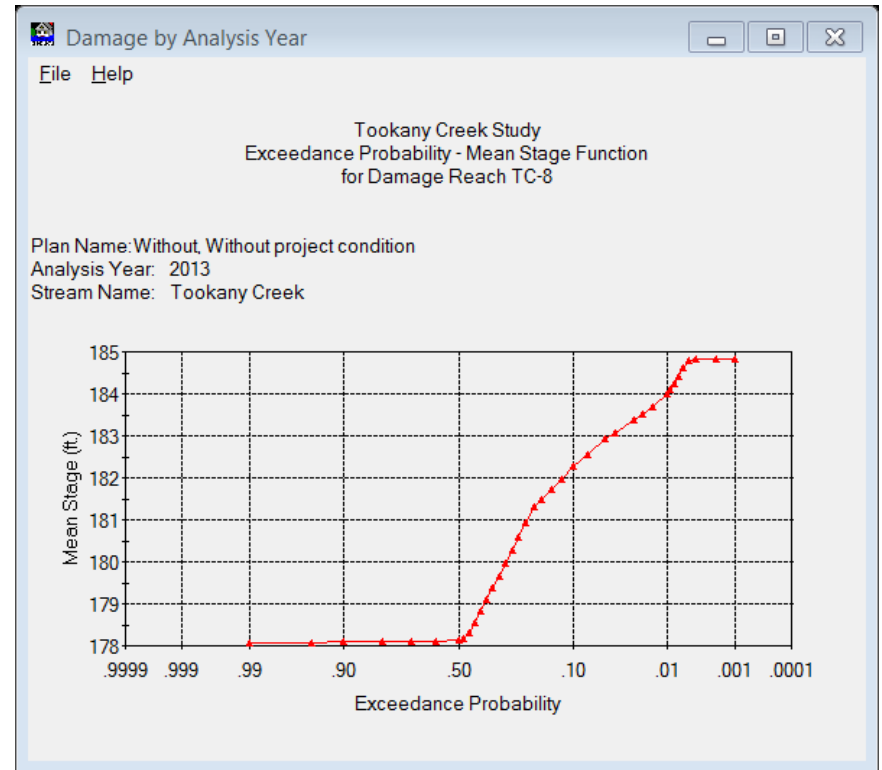
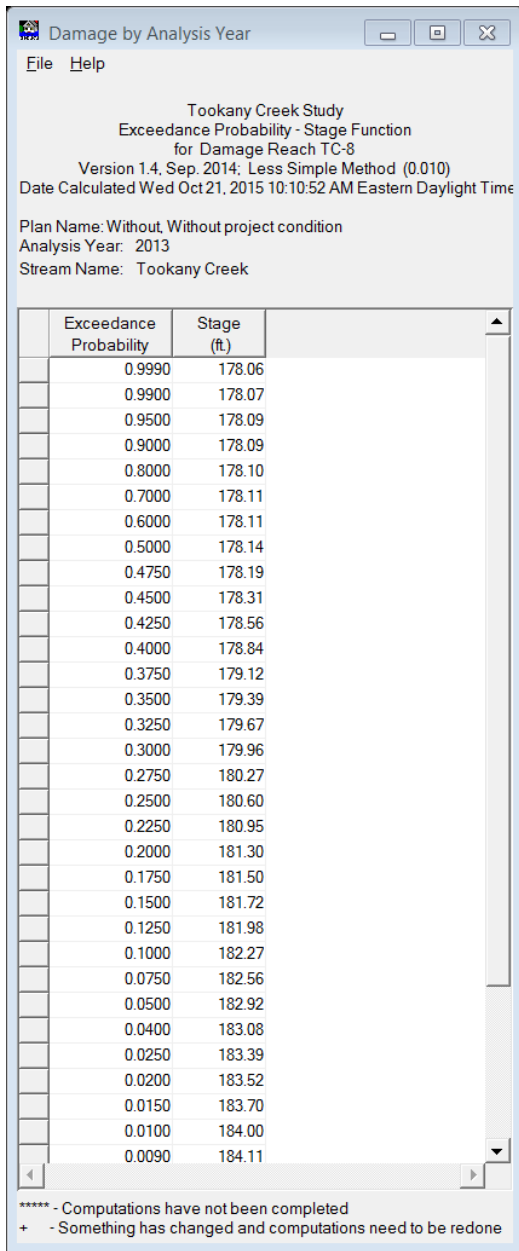


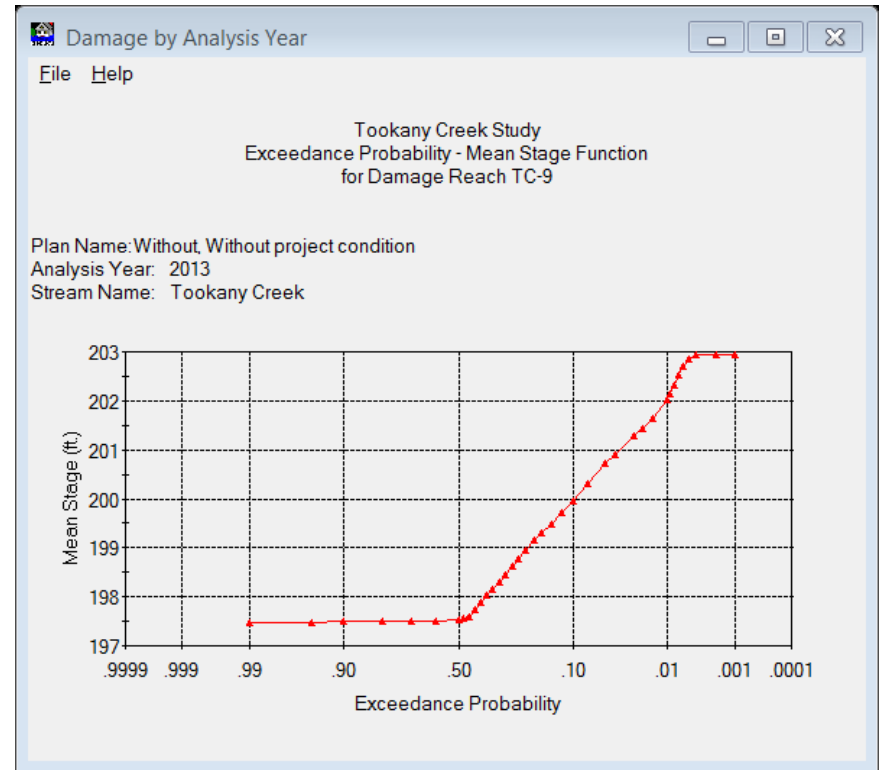
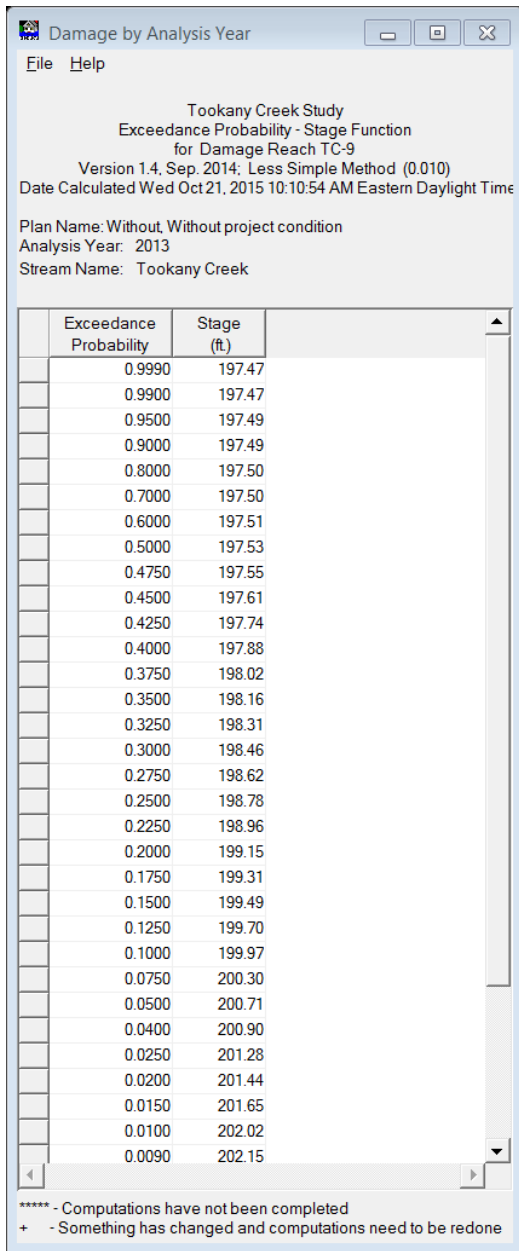


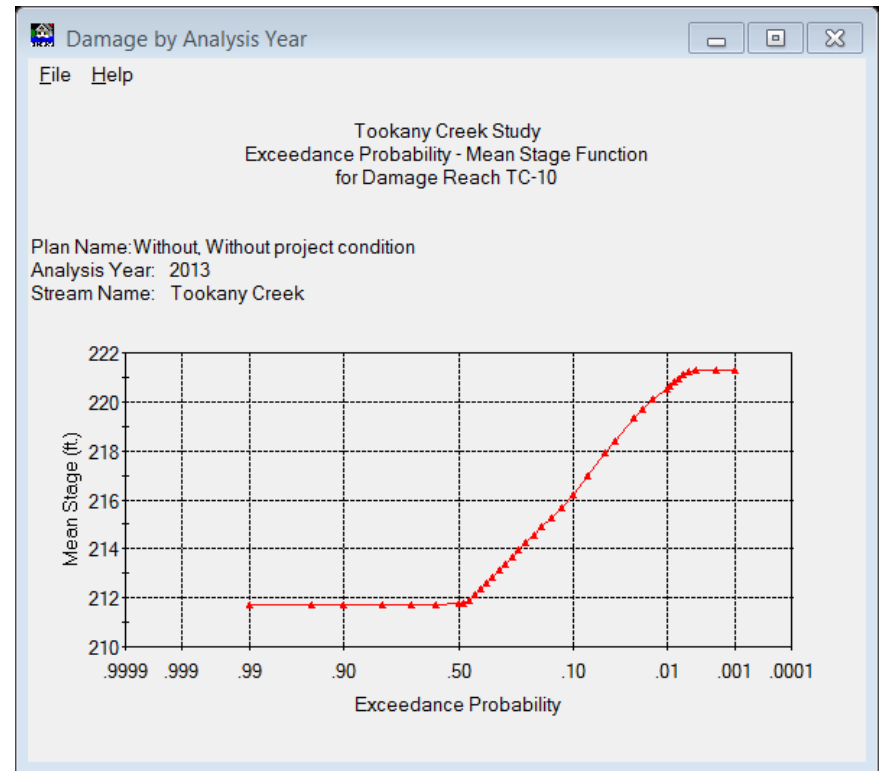
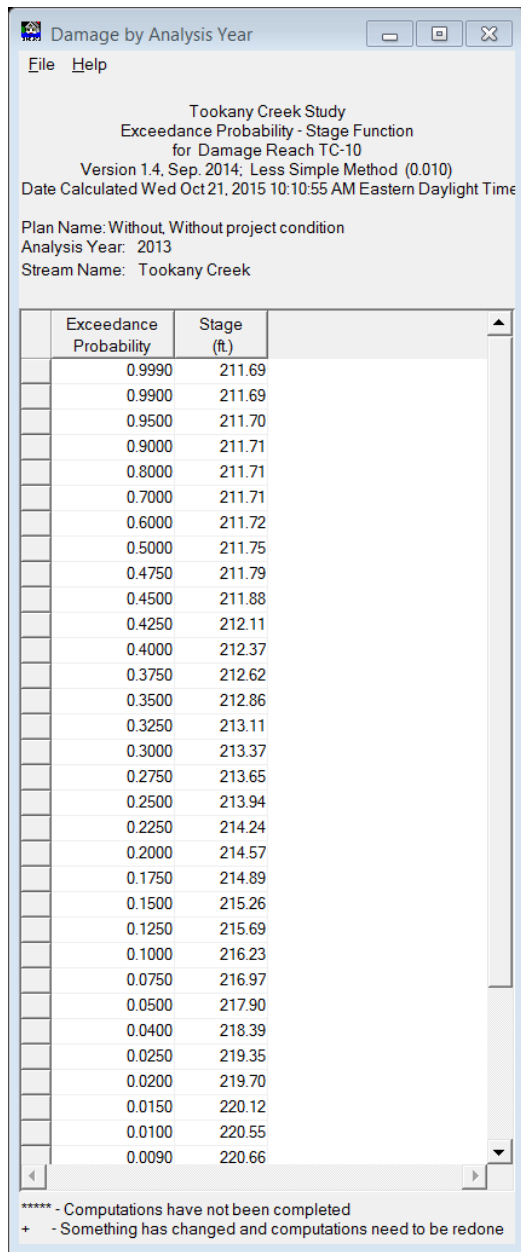


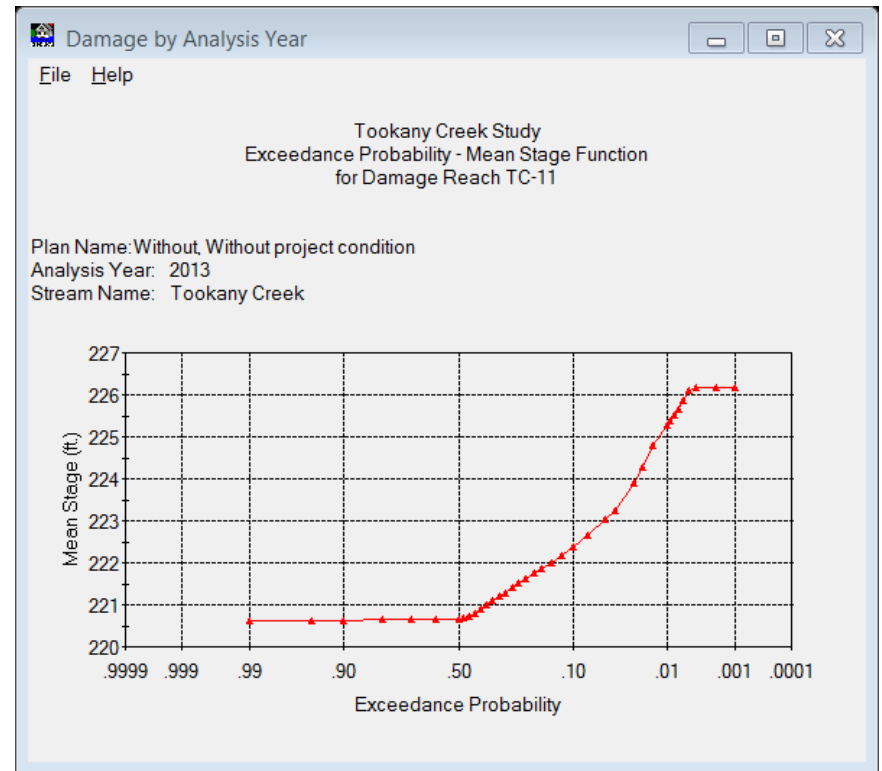
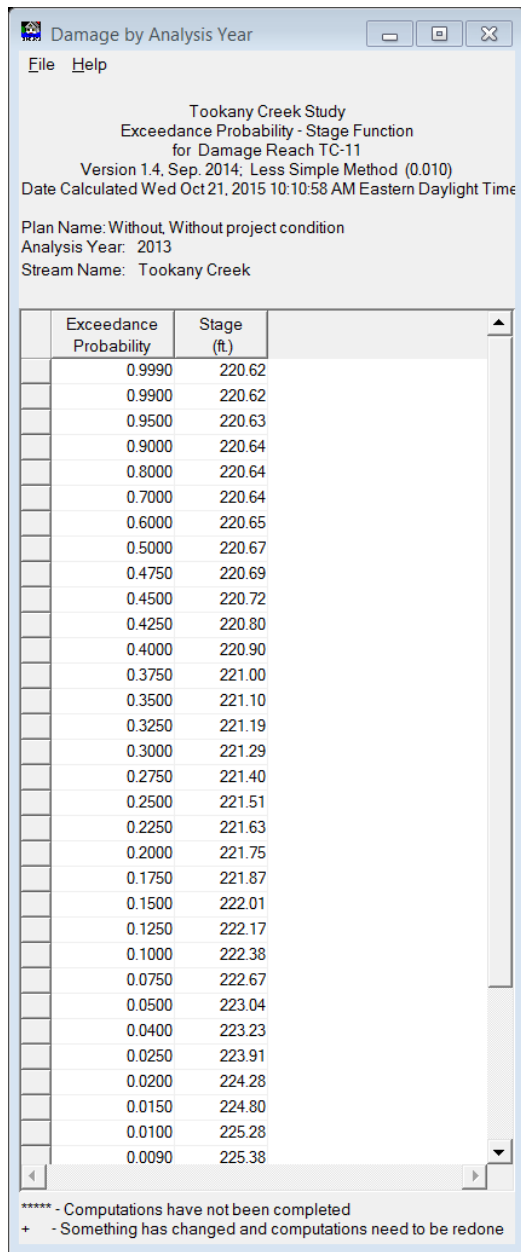












Damage by Analysis Year

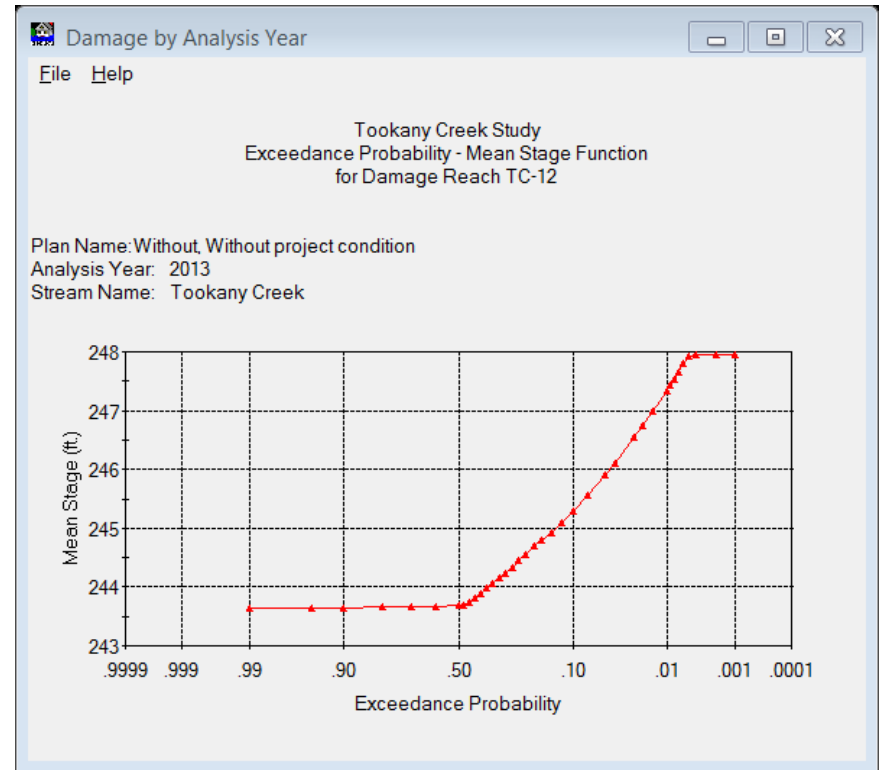
File Help

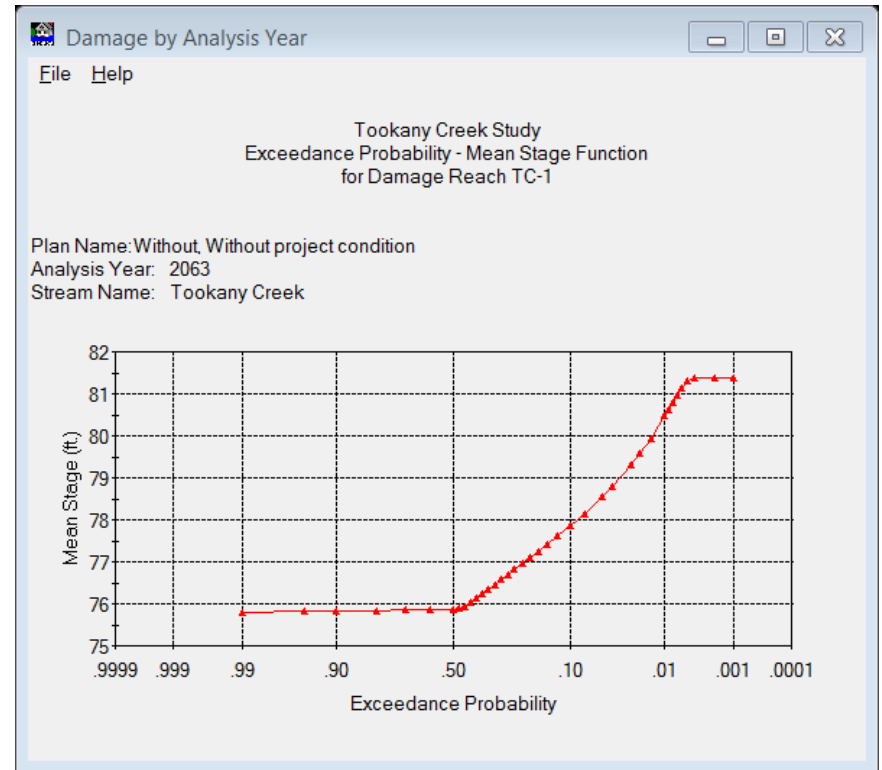
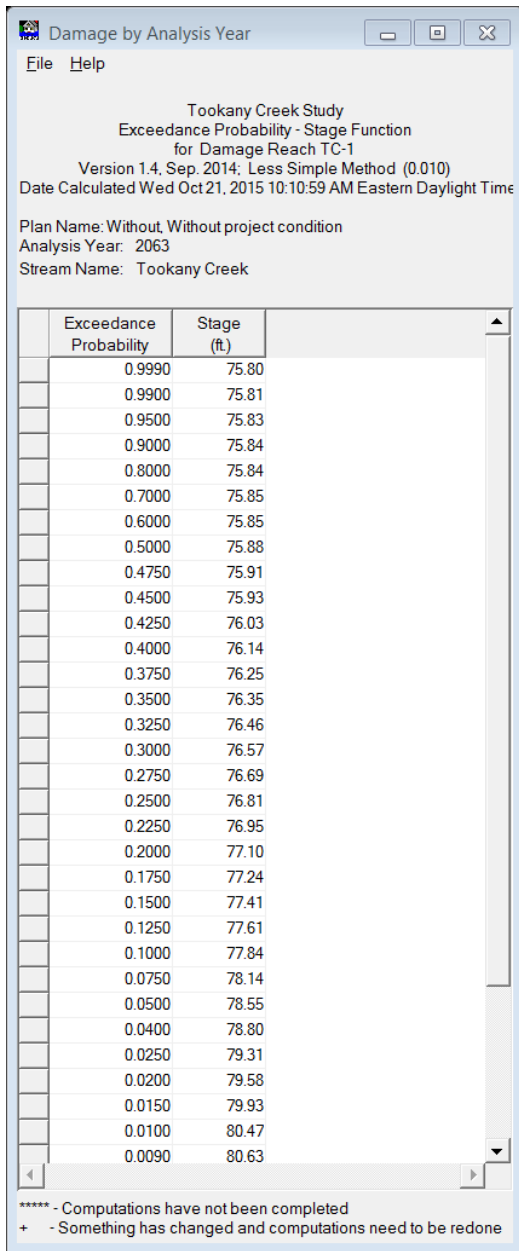
Tookany Creek Study  
 Exceedance Probability - Stage Function  
 for Damage Reach TC-12  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:58 AM Eastern Daylight Time

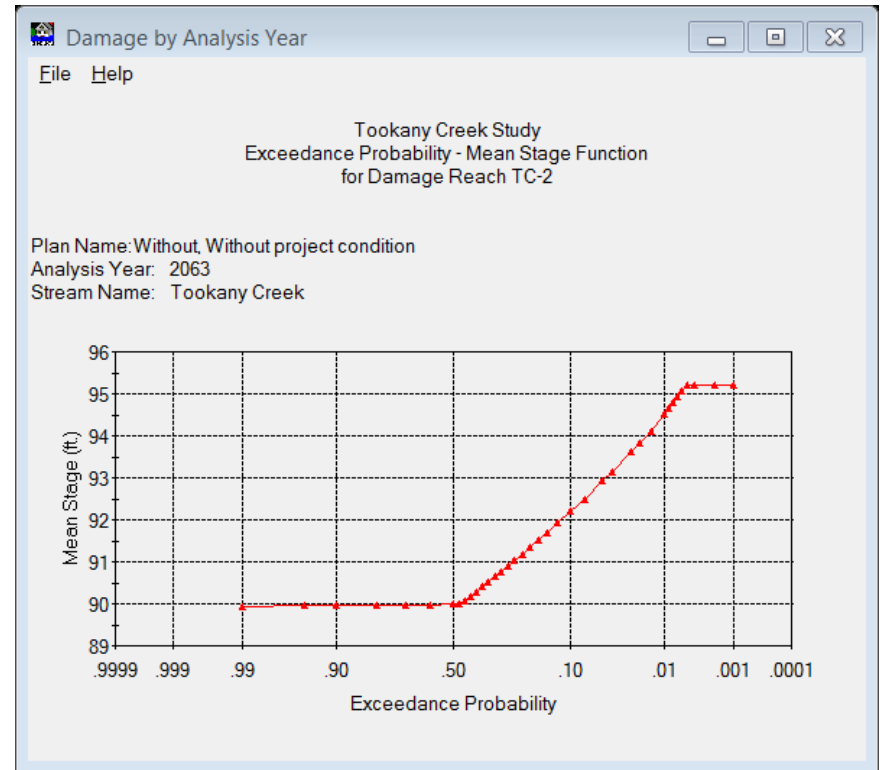
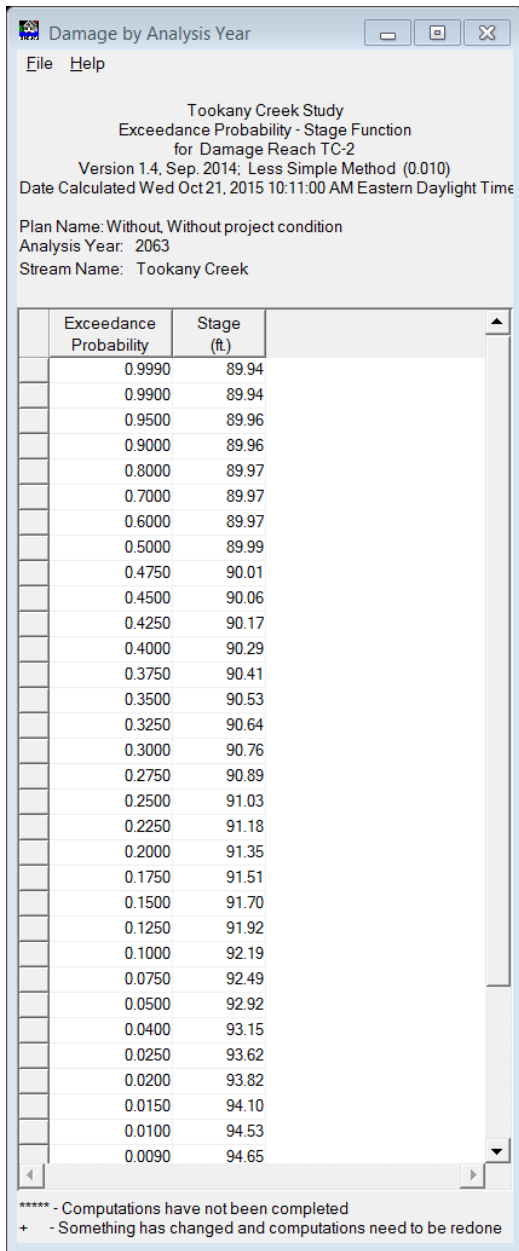
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

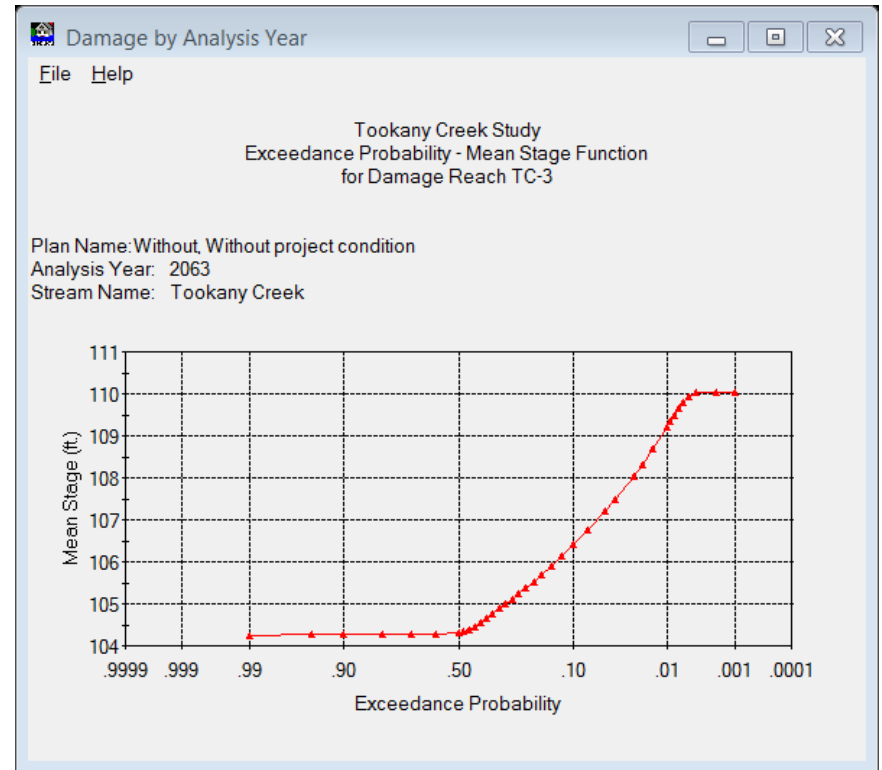
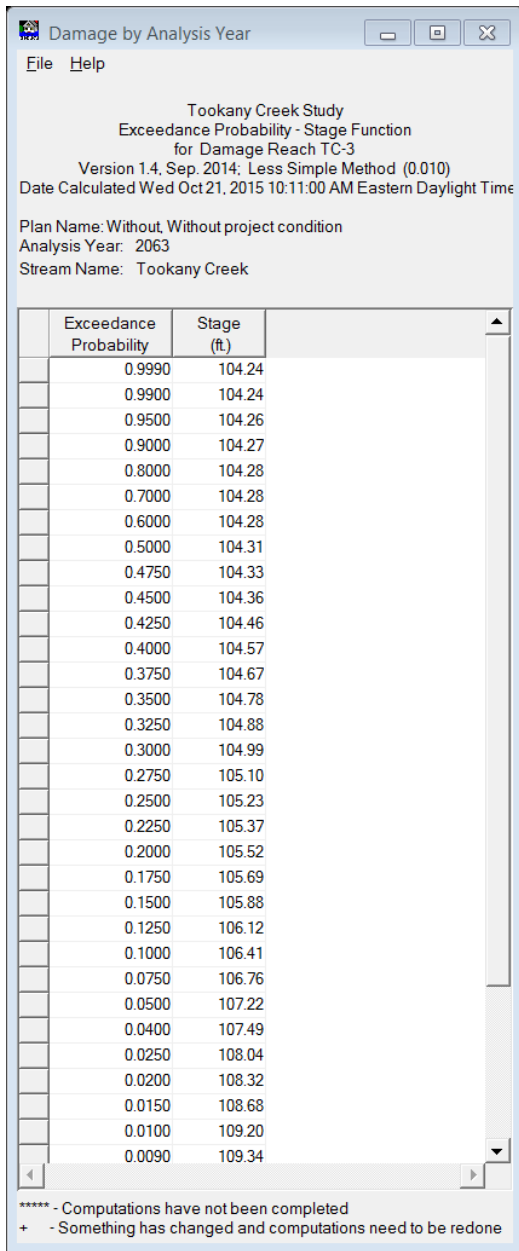
Exceedance Probability	Stage (ft.)
0.9990	243.63
0.9900	243.63
0.9500	243.65
0.9000	243.65
0.8000	243.66
0.7000	243.66
0.6000	243.67
0.5000	243.68
0.4750	243.69
0.4500	243.73
0.4250	243.81
0.4000	243.89
0.3750	243.98
0.3500	244.06
0.3250	244.15
0.3000	244.24
0.2750	244.34
0.2500	244.44
0.2250	244.56
0.2000	244.69
0.1750	244.80
0.1500	244.93
0.1250	245.09
0.1000	245.28
0.0750	245.56
0.0500	245.91
0.0400	246.11
0.0250	246.54
0.0200	246.74
0.0150	246.99
0.0100	247.33
0.0090	247.42

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

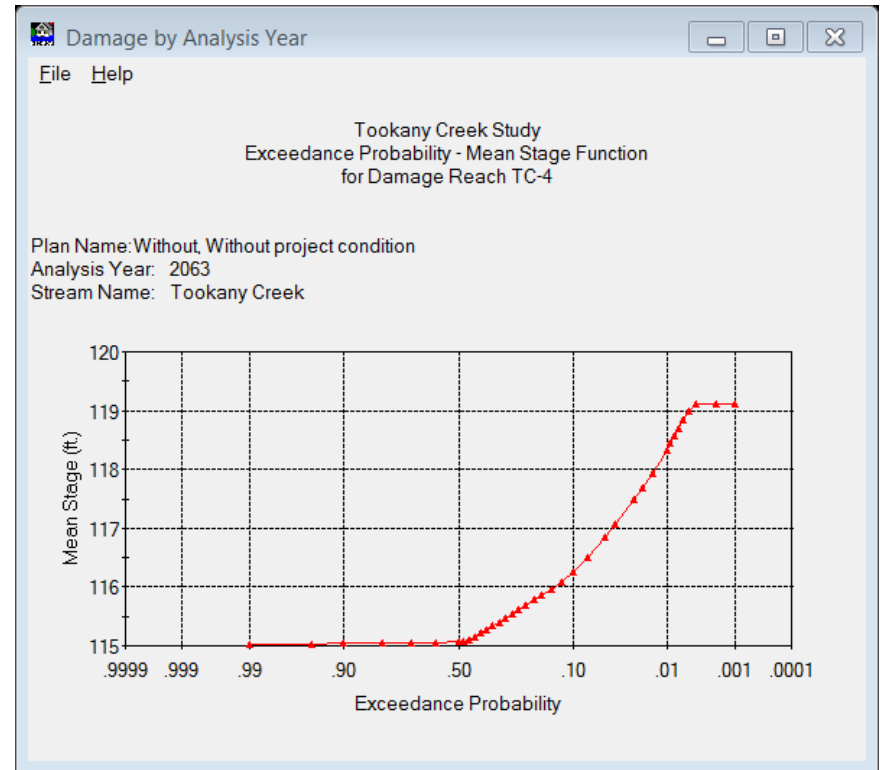
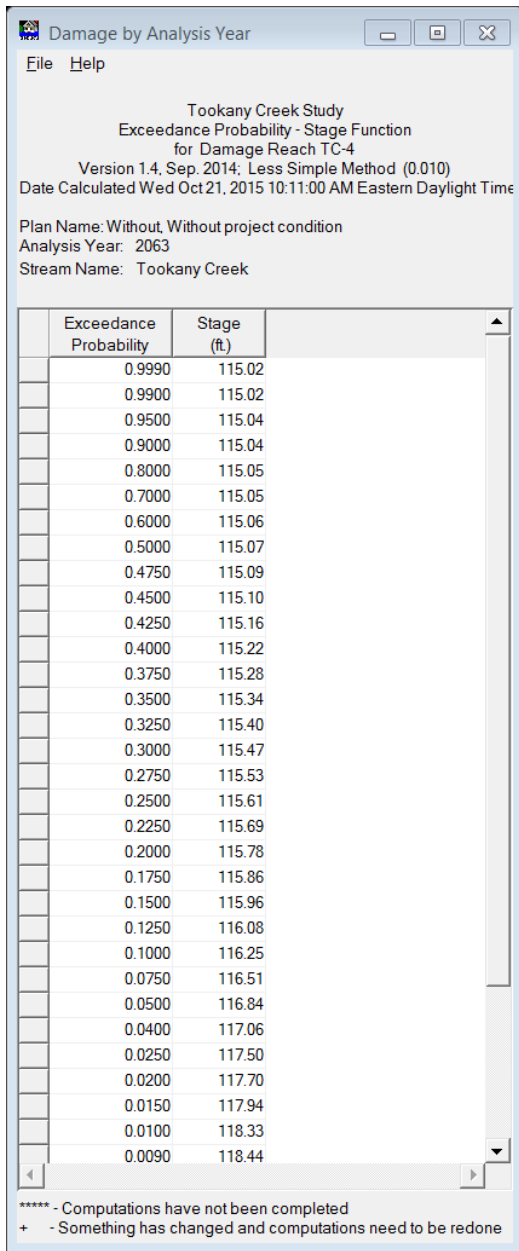


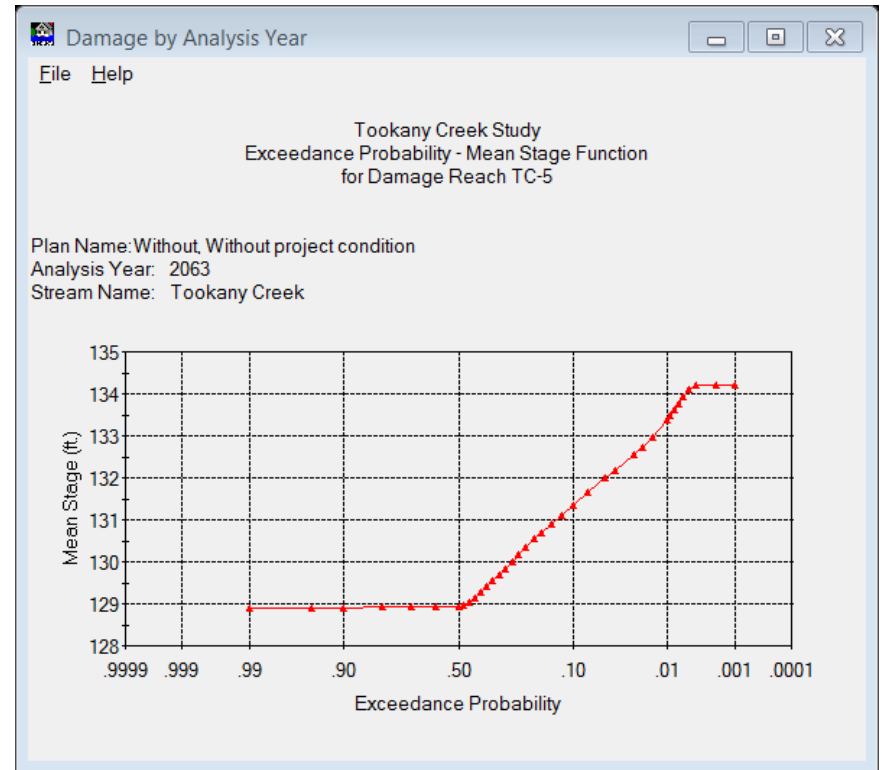
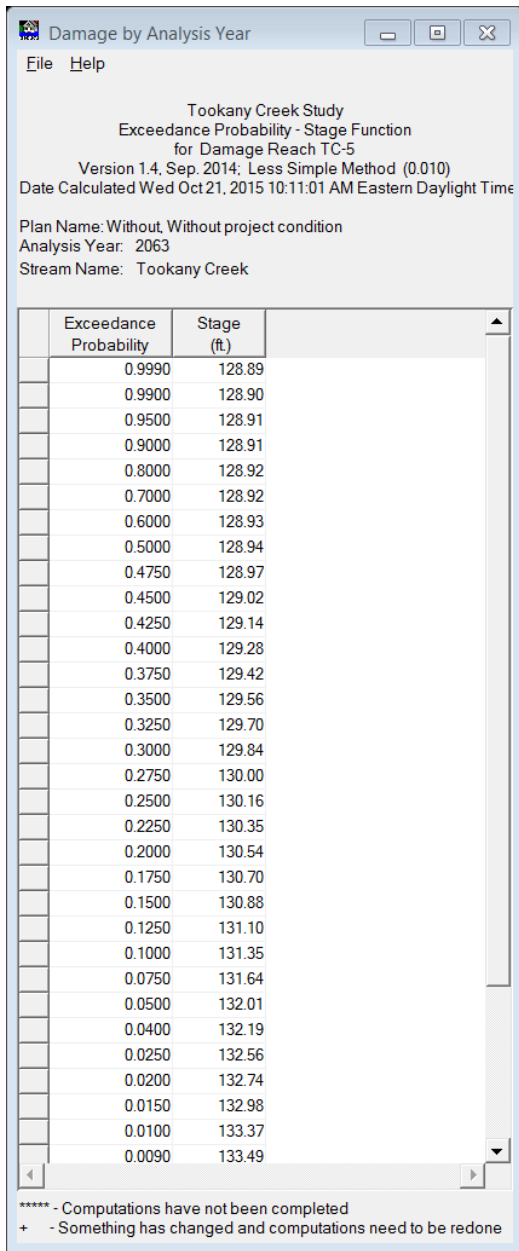


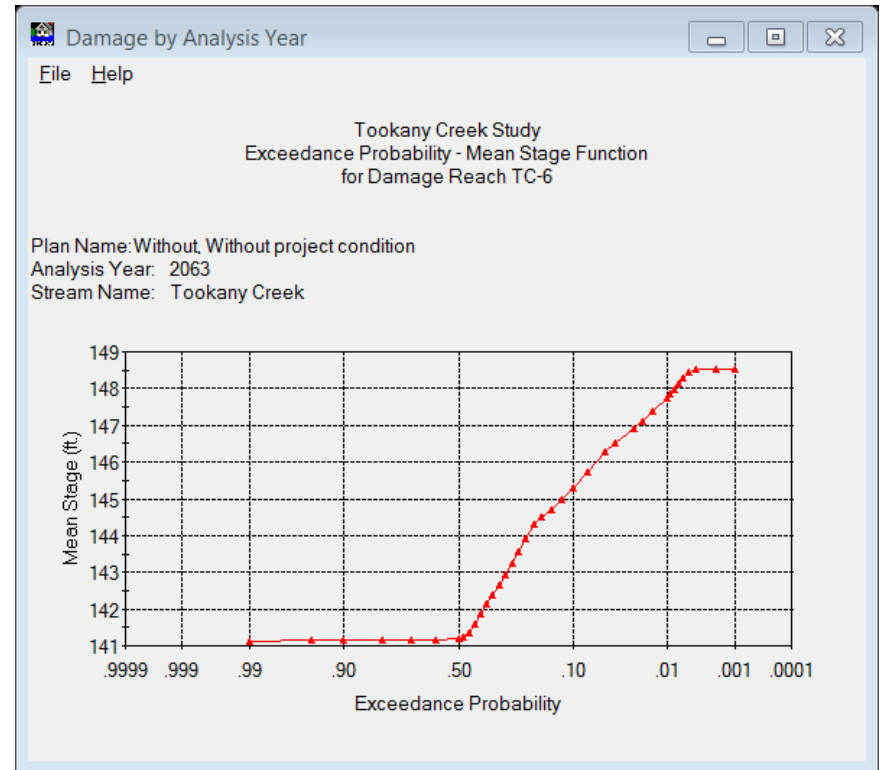
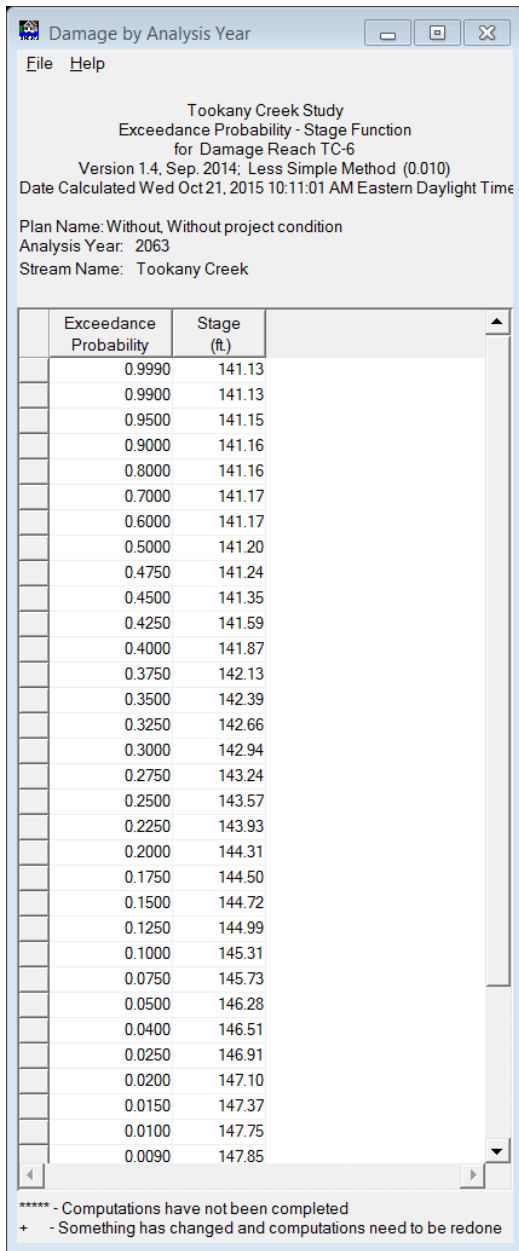












Damage by Analysis Year

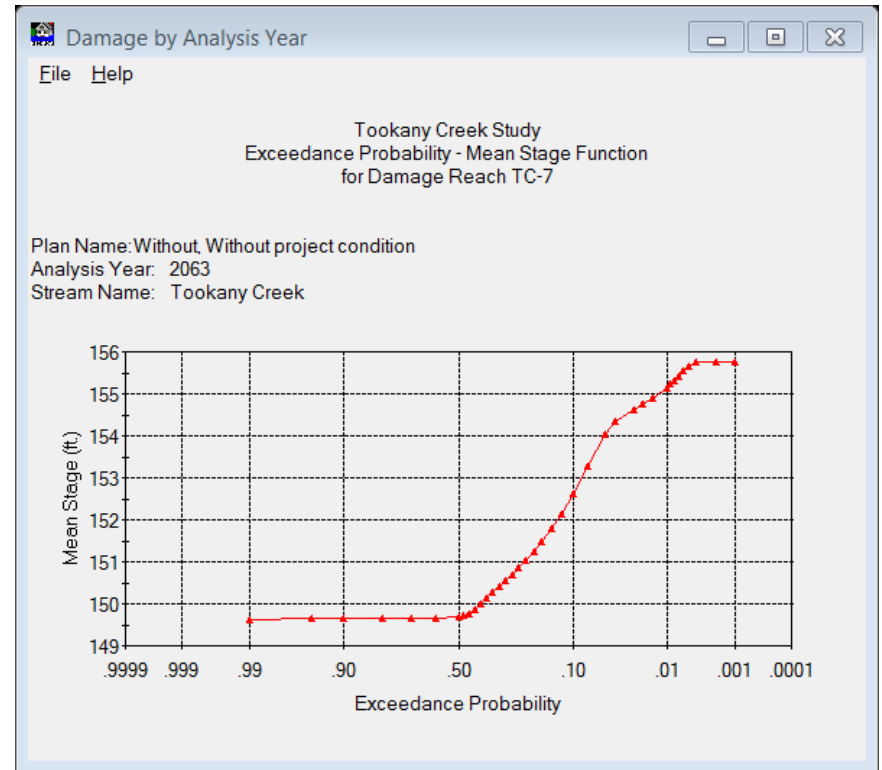
File Help

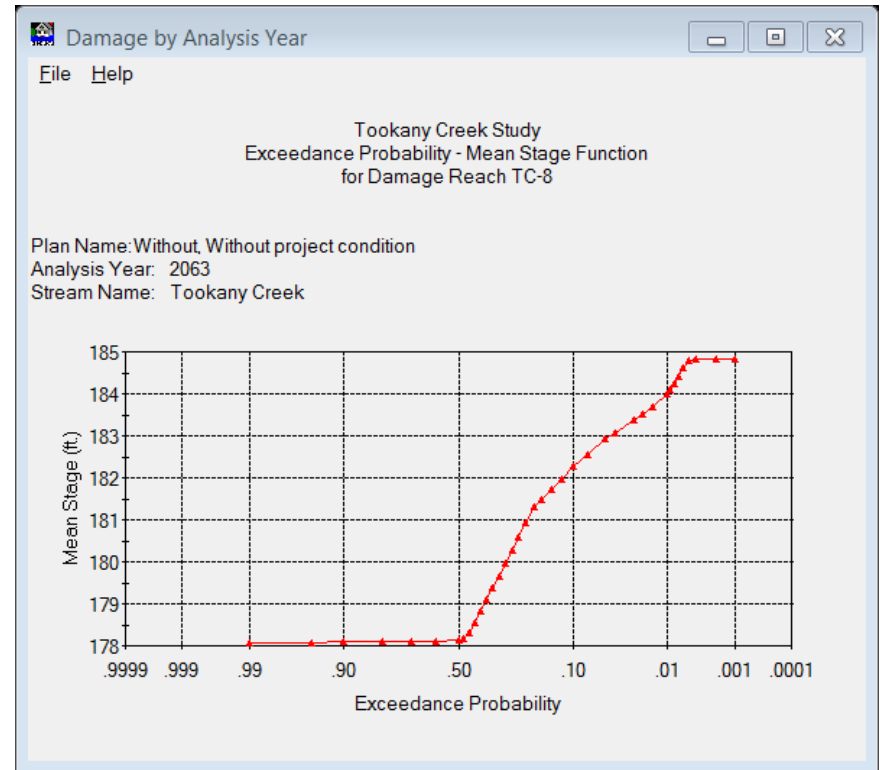
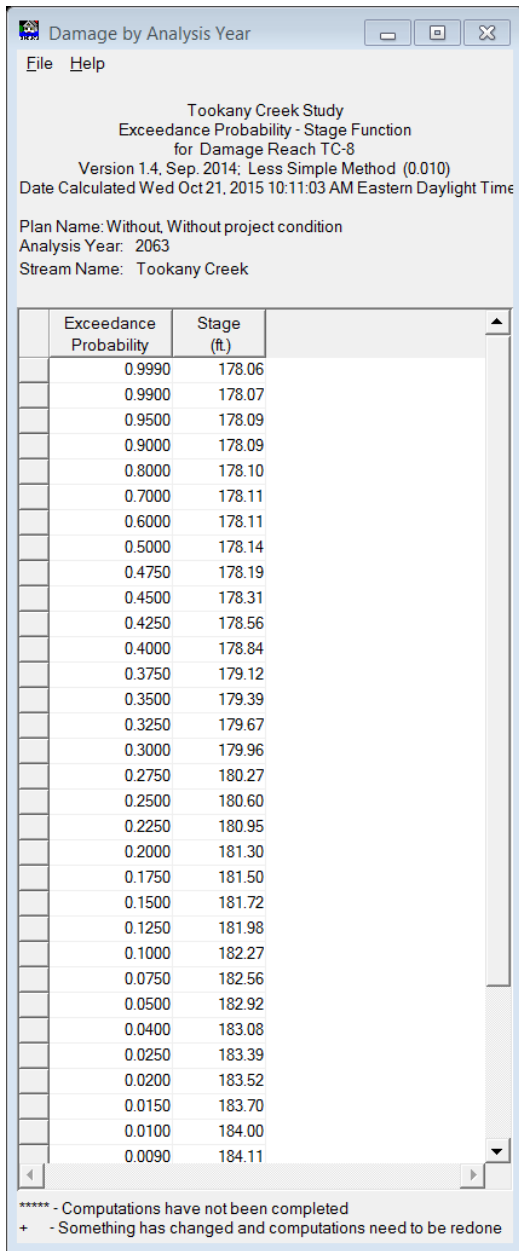
Tookany Creek Study  
 Exceedance Probability - Stage Function  
 for Damage Reach TC-7  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:01 AM Eastern Daylight Time

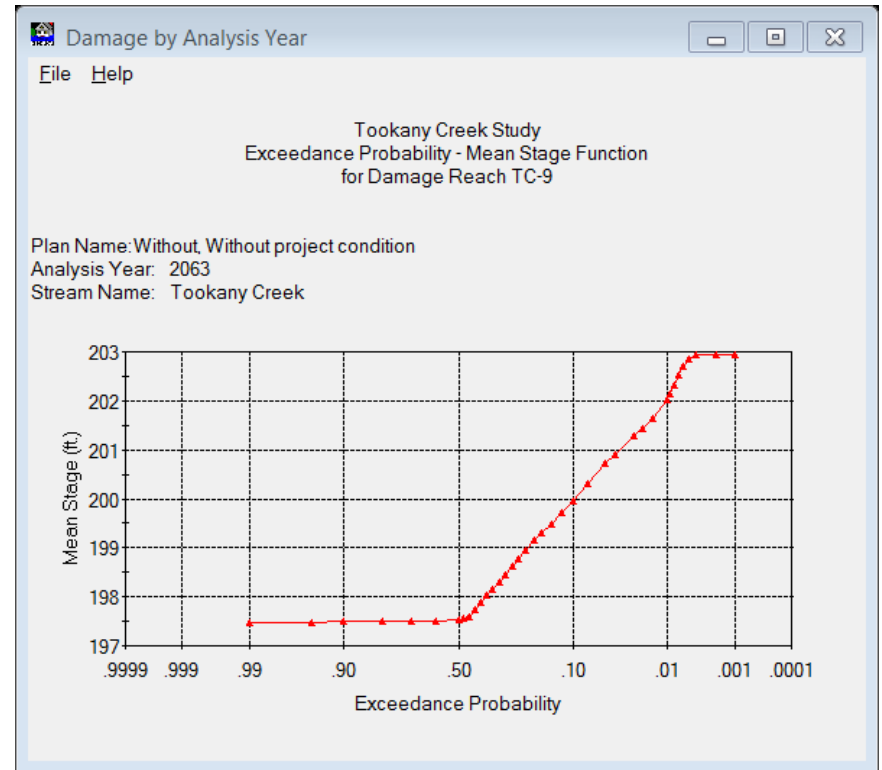
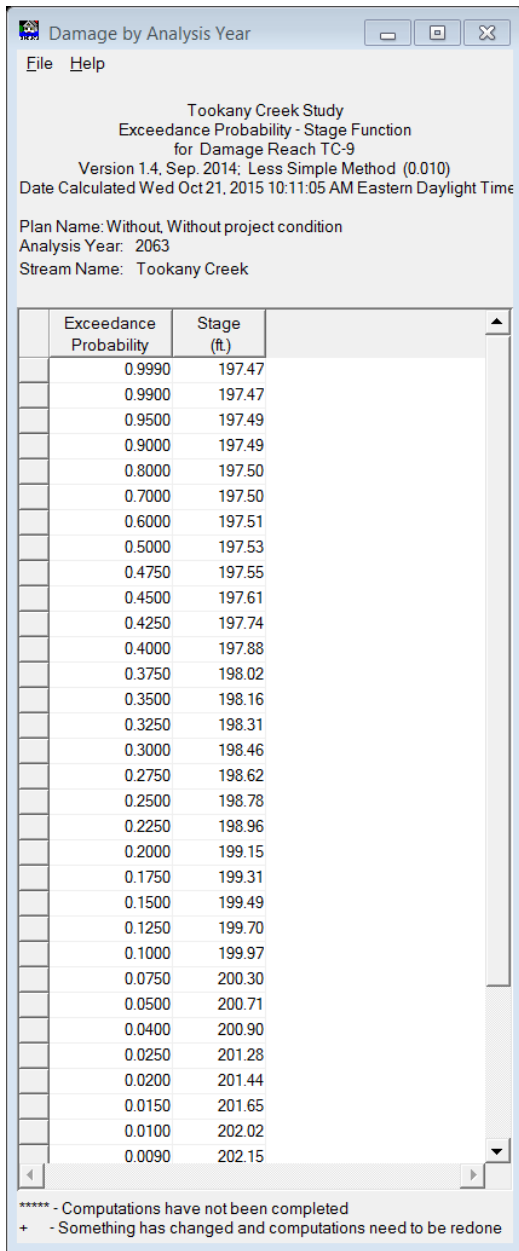
Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

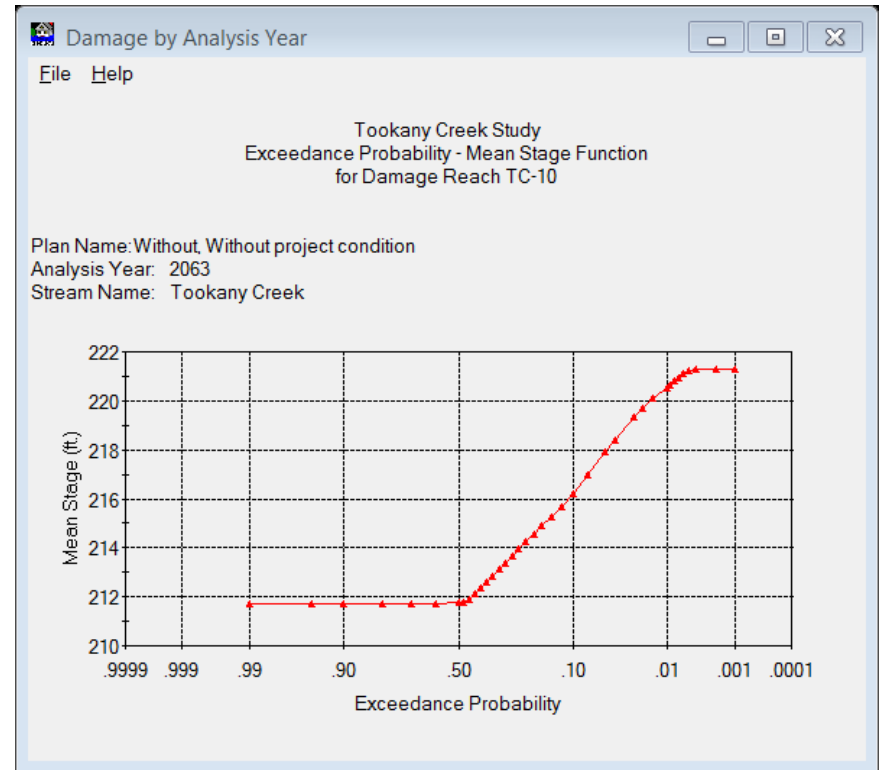
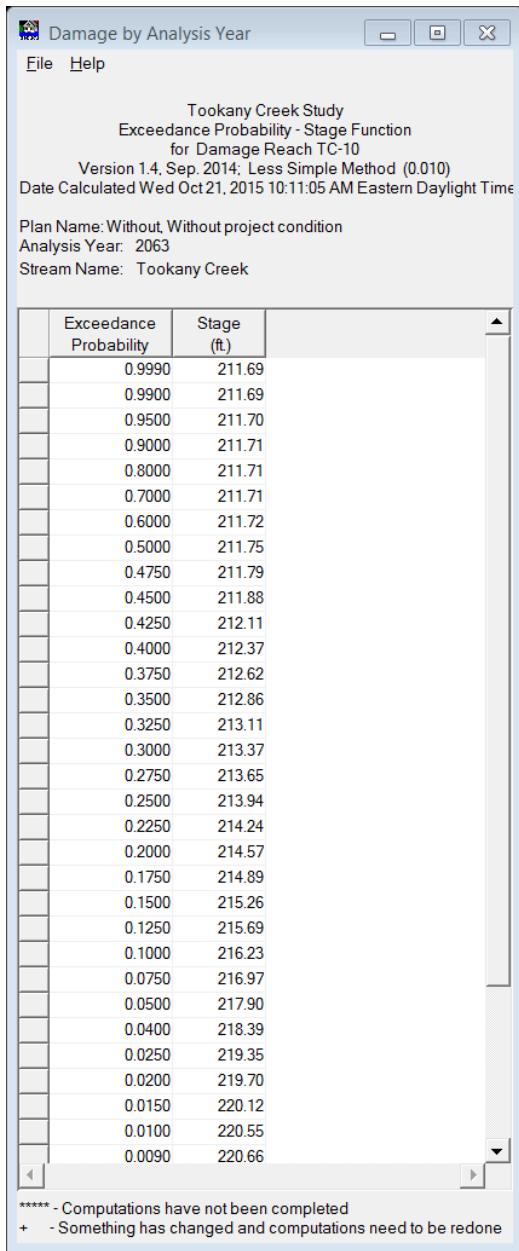
Exceedance Probability	Stage (ft.)
0.9990	149.62
0.9900	149.63
0.9500	149.64
0.9000	149.64
0.8000	149.65
0.7000	149.65
0.6000	149.66
0.5000	149.68
0.4750	149.72
0.4500	149.75
0.4250	149.87
0.4000	150.00
0.3750	150.14
0.3500	150.27
0.3250	150.41
0.3000	150.55
0.2750	150.70
0.2500	150.86
0.2250	151.04
0.2000	151.24
0.1750	151.50
0.1500	151.80
0.1250	152.15
0.1000	152.62
0.0750	153.26
0.0500	154.04
0.0400	154.34
0.0250	154.62
0.0200	154.75
0.0150	154.90
0.0100	155.15
0.0090	155.22

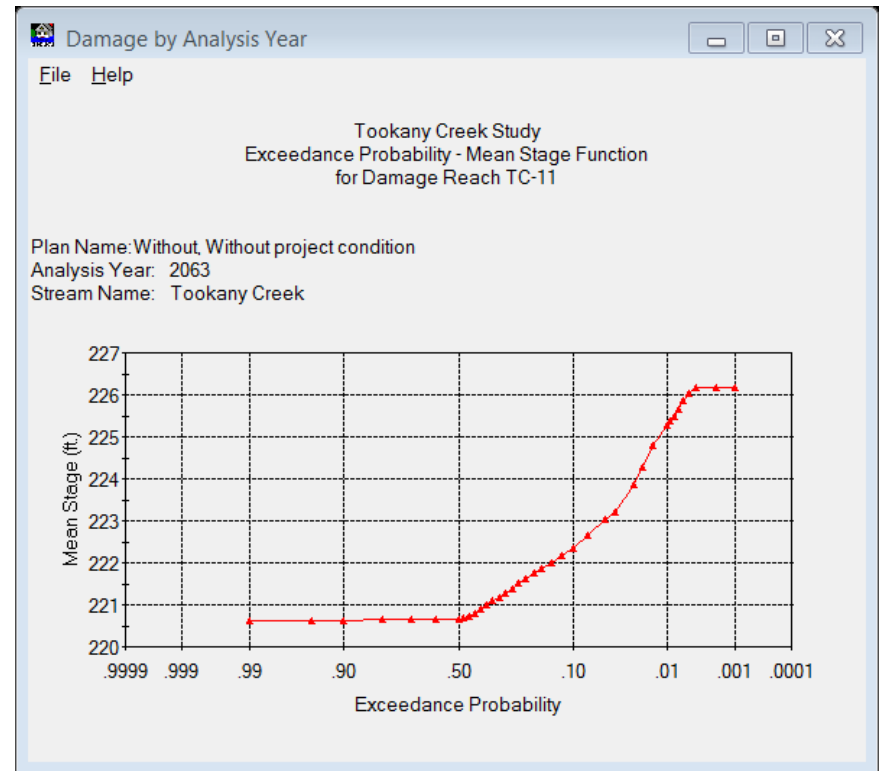
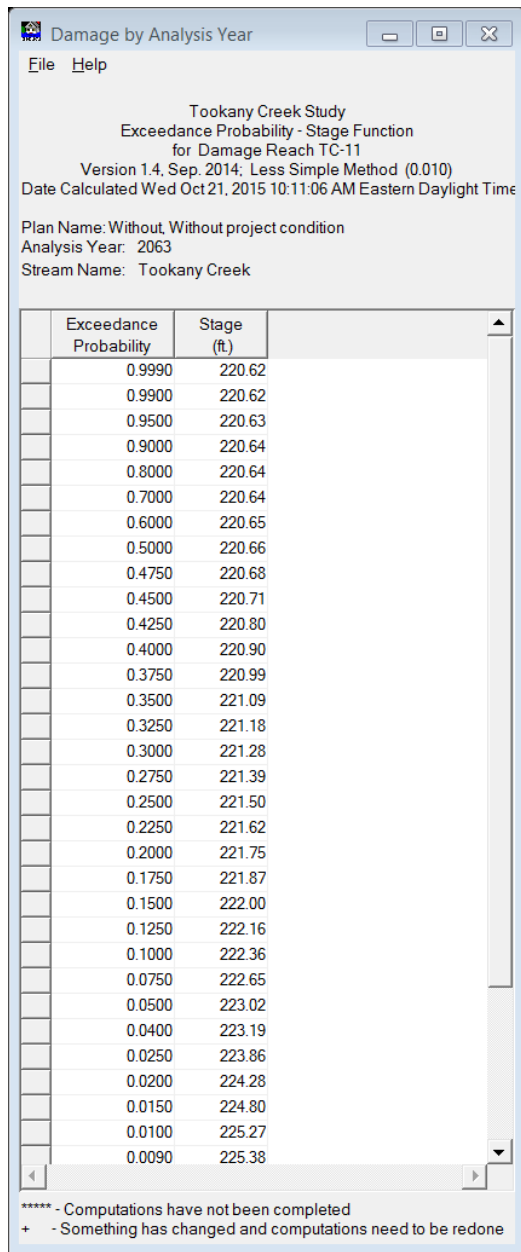
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone













Damage by Analysis Year

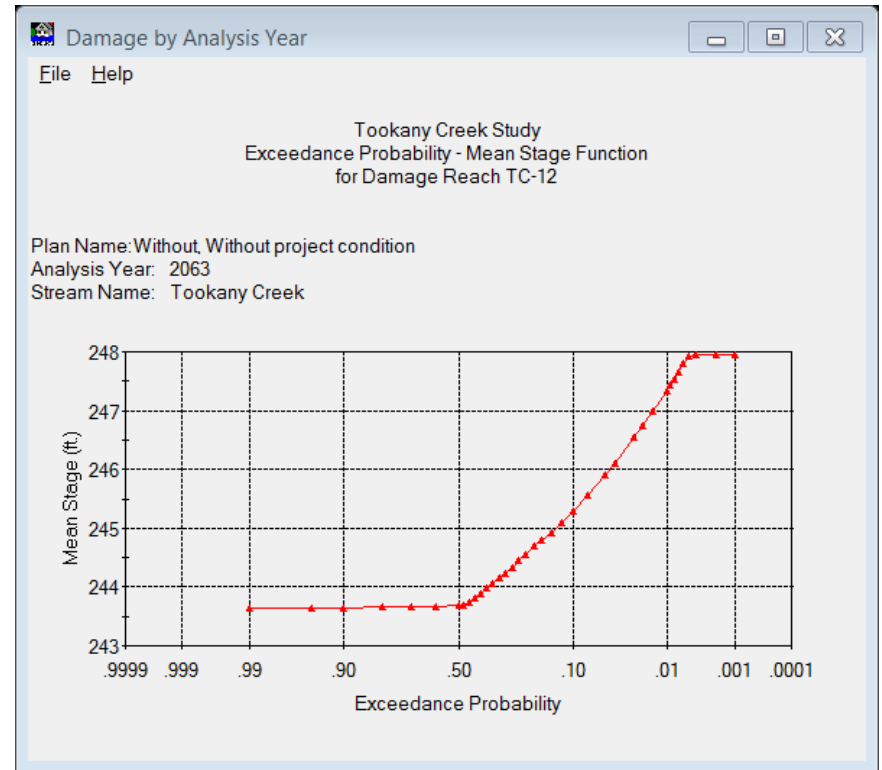
File Help

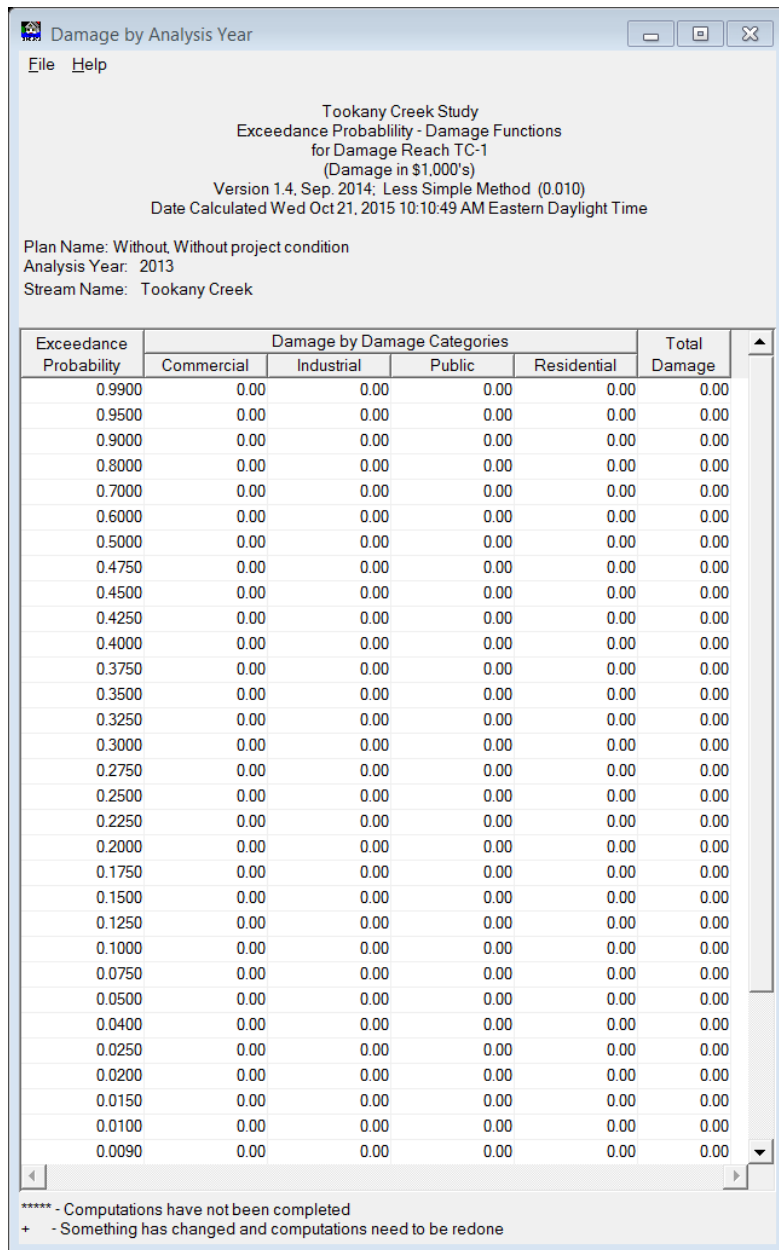
Tookany Creek Study  
 Exceedance Probability - Stage Function  
 for Damage Reach TC-12  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:06 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

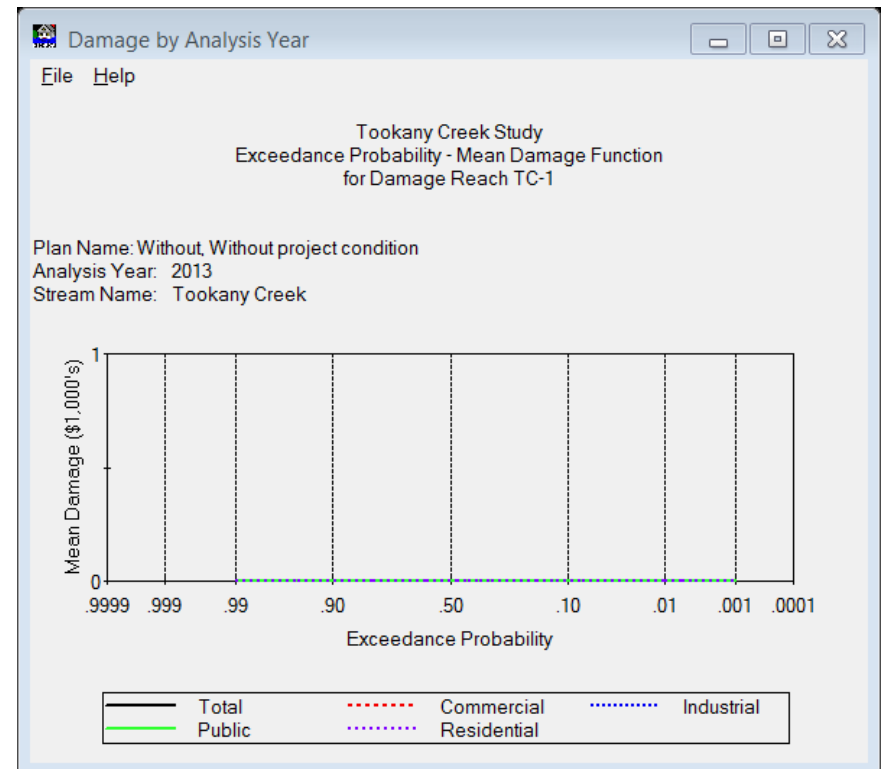
Exceedance Probability	Stage (ft.)
0.9990	243.63
0.9900	243.63
0.9500	243.65
0.9000	243.65
0.8000	243.66
0.7000	243.66
0.6000	243.67
0.5000	243.68
0.4750	243.69
0.4500	243.73
0.4250	243.81
0.4000	243.89
0.3750	243.98
0.3500	244.06
0.3250	244.15
0.3000	244.24
0.2750	244.34
0.2500	244.44
0.2250	244.56
0.2000	244.69
0.1750	244.80
0.1500	244.93
0.1250	245.09
0.1000	245.28
0.0750	245.56
0.0500	245.91
0.0400	246.11
0.0250	246.54
0.0200	246.74
0.0150	246.99
0.0100	247.33
0.0090	247.42

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





## Exceedance Probability – Mean Damage Functions



Damage by Analysis Year

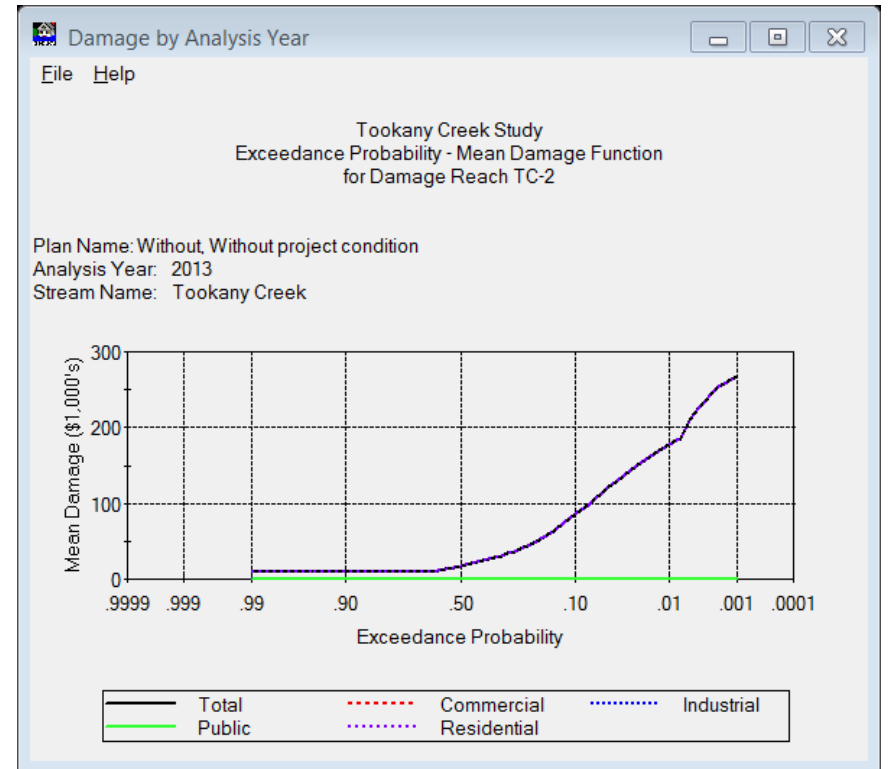
File Help

Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-2  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:49 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.00	0.00	0.00	8.77	8.77
0.9500	0.00	0.00	0.00	8.77	8.77
0.9000	0.00	0.00	0.00	8.77	8.77
0.8000	0.00	0.00	0.00	8.77	8.77
0.7000	0.00	0.00	0.00	8.77	8.77
0.6000	0.00	0.00	0.00	11.21	11.21
0.5000	0.00	0.00	0.00	17.40	17.40
0.4750	0.00	0.00	0.00	19.03	19.03
0.4500	0.00	0.00	0.00	20.75	20.75
0.4250	0.00	0.00	0.00	22.56	22.56
0.4000	0.00	0.00	0.00	24.47	24.47
0.3750	0.00	0.00	0.00	26.41	26.41
0.3500	0.00	0.00	0.00	28.51	28.51
0.3250	0.00	0.00	0.00	30.89	30.89
0.3000	0.00	0.00	0.00	33.50	33.50
0.2750	0.00	0.00	0.00	36.60	36.60
0.2500	0.00	0.00	0.00	40.01	40.01
0.2250	0.00	0.00	0.00	44.24	44.24
0.2000	0.00	0.00	0.00	49.43	49.43
0.1750	0.00	0.00	0.00	55.85	55.85
0.1500	0.00	0.00	0.00	63.91	63.91
0.1250	0.00	0.00	0.00	73.69	73.69
0.1000	0.00	0.00	0.00	85.47	85.47
0.0750	0.00	0.00	0.00	99.98	99.98
0.0500	0.00	0.00	0.00	119.46	119.46
0.0400	0.00	0.00	0.00	129.39	129.39
0.0250	0.00	0.00	0.00	148.65	148.65
0.0200	0.00	0.00	0.00	156.67	156.67
0.0150	0.00	0.00	0.00	166.13	166.13
0.0100	0.00	0.00	0.00	177.61	177.61
0.0090	0.00	0.00	0.00	180.21	180.21

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

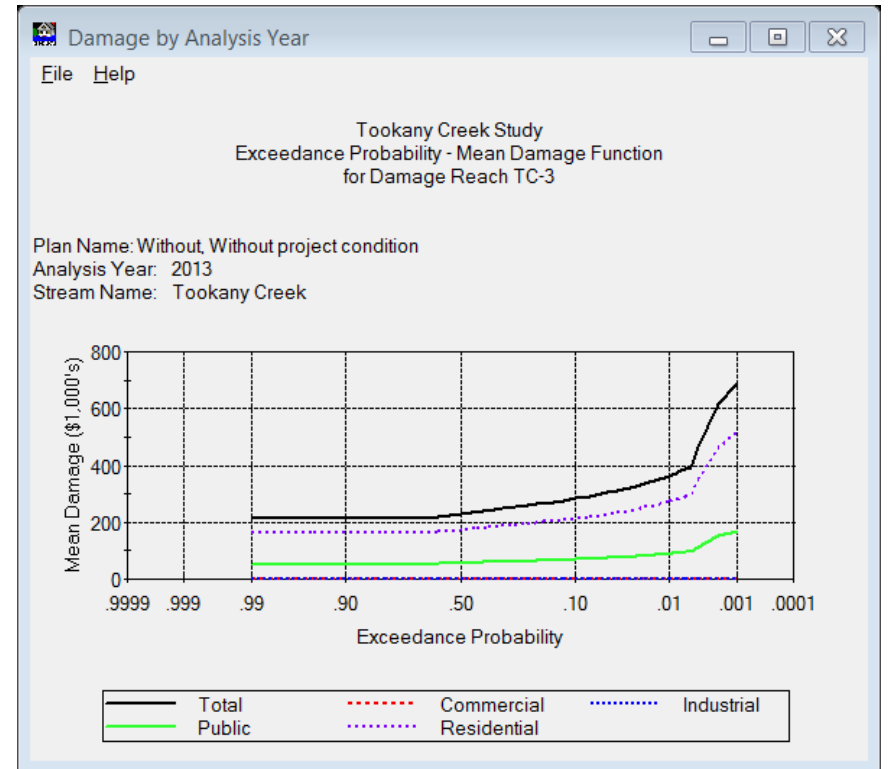
File Help

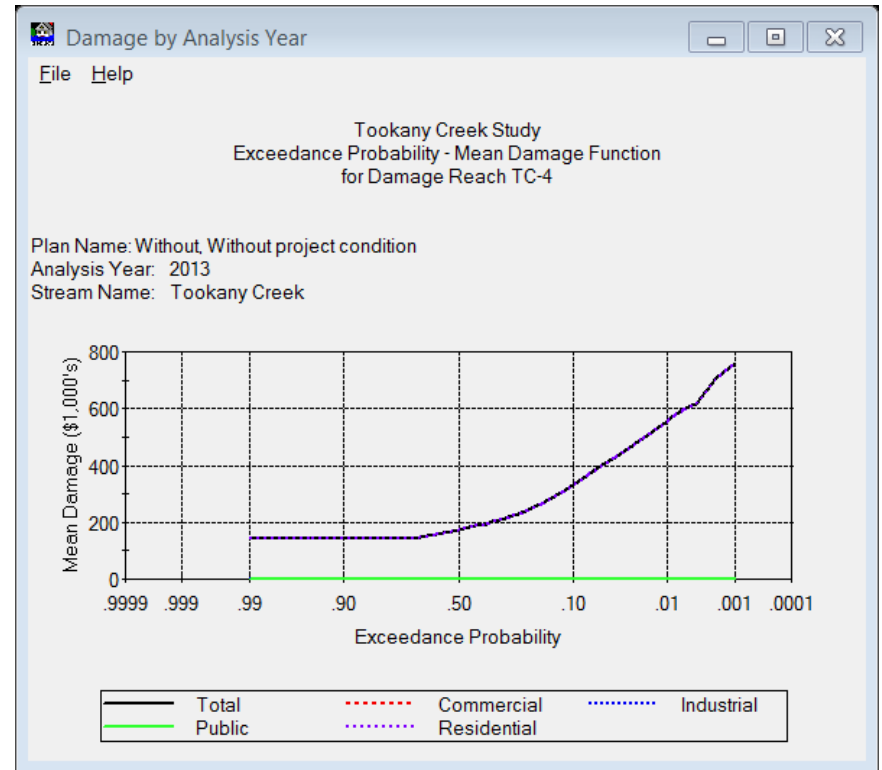
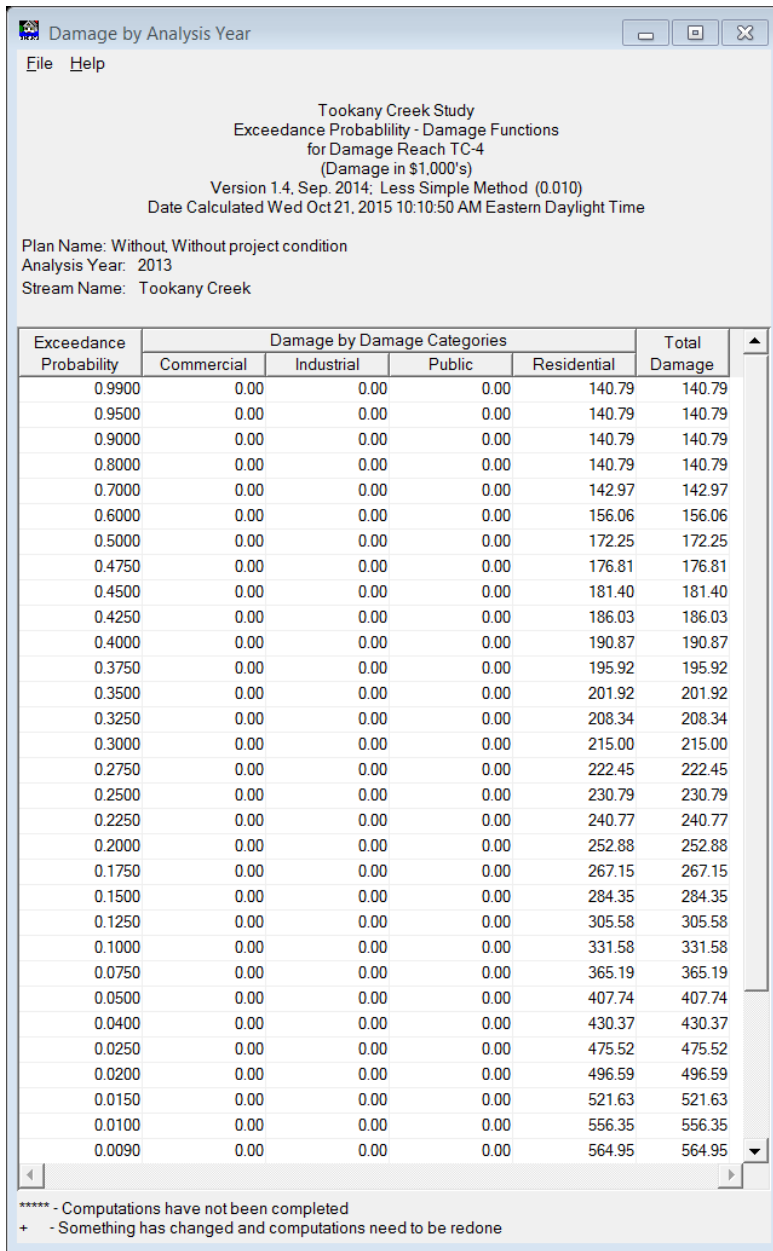
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-3  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:50 AM Eastern Daylight Time

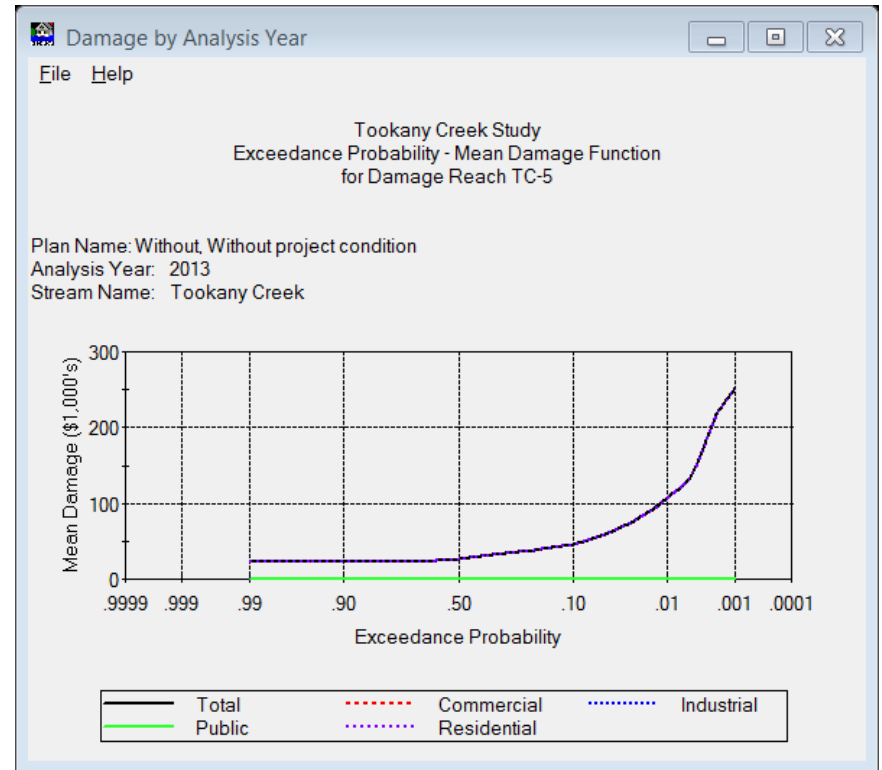
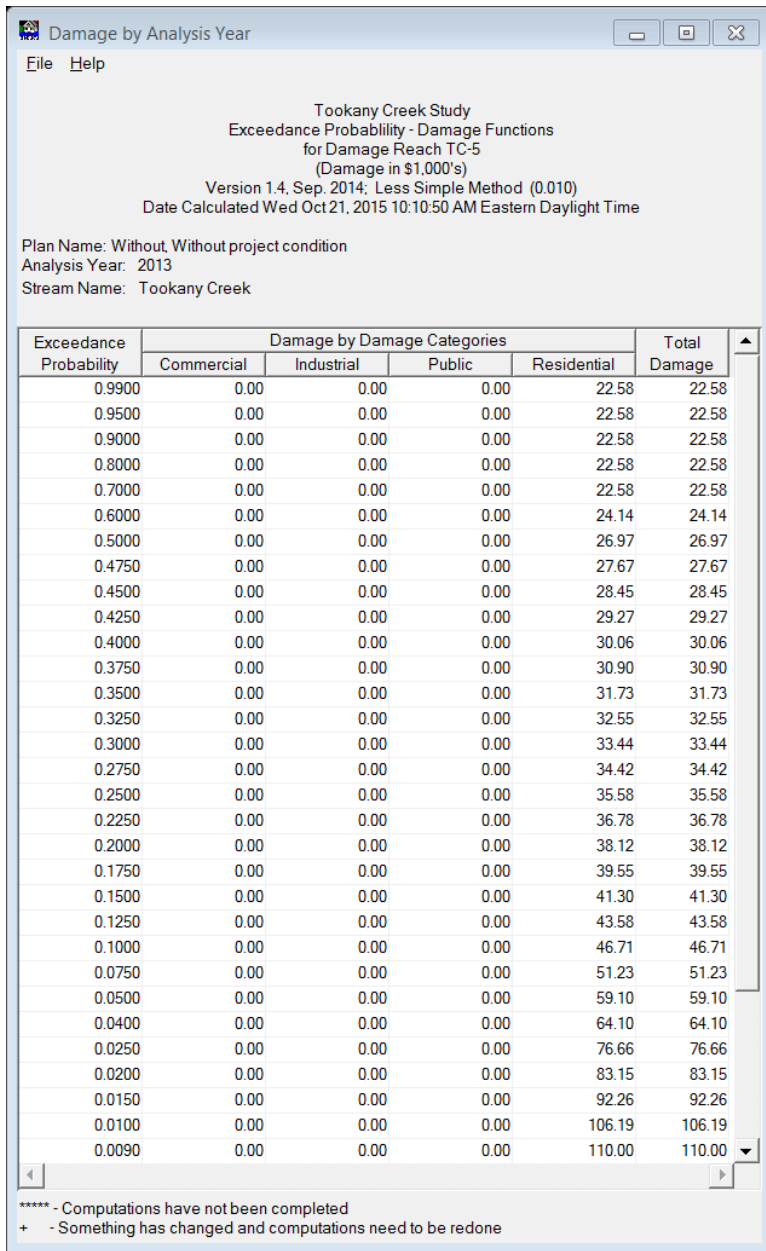
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

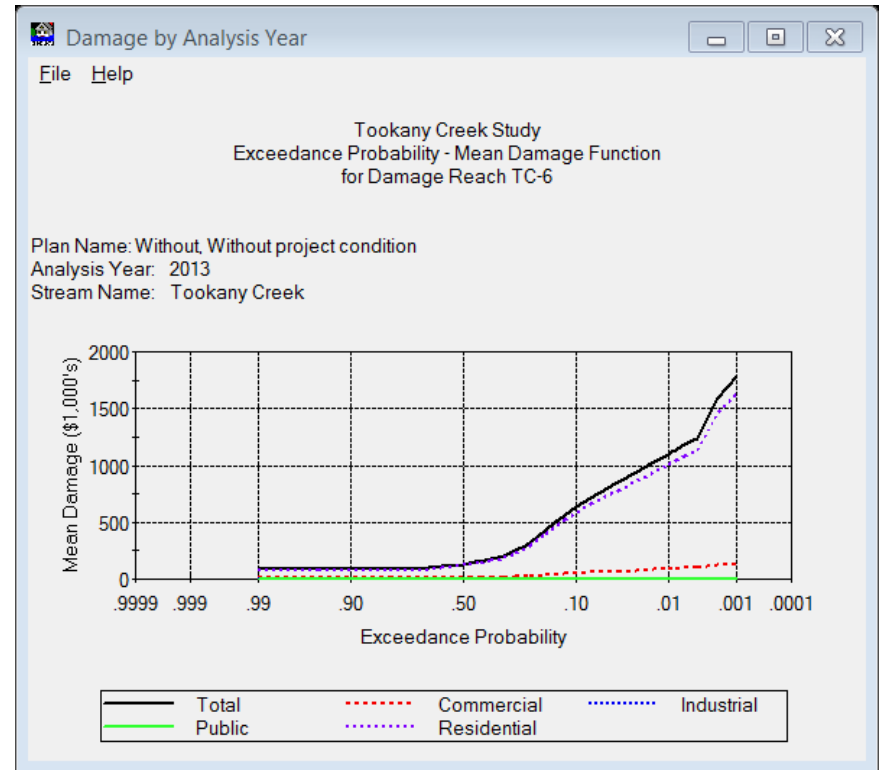
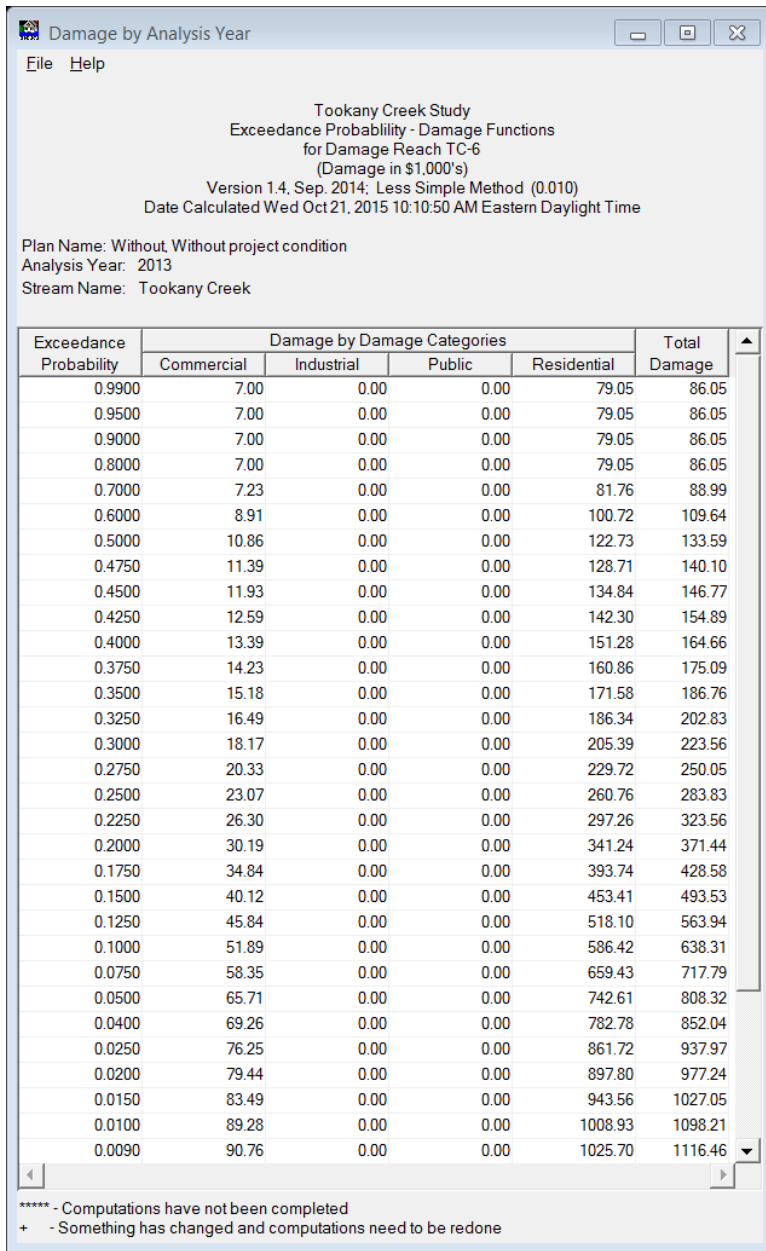
Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.00	0.00	52.95	163.31	216.27
0.9500	0.00	0.00	52.95	163.31	216.27
0.9000	0.00	0.00	52.95	163.31	216.27
0.8000	0.00	0.00	52.95	163.31	216.27
0.7000	0.00	0.00	52.95	163.31	216.27
0.6000	0.00	0.00	53.88	166.18	220.06
0.5000	0.00	0.00	56.19	173.31	229.50
0.4750	0.00	0.00	56.75	175.02	231.76
0.4500	0.00	0.00	57.32	176.80	234.12
0.4250	0.00	0.00	57.95	178.73	236.69
0.4000	0.00	0.00	58.60	180.73	239.33
0.3750	0.00	0.00	59.23	182.67	241.90
0.3500	0.00	0.00	59.89	184.72	244.61
0.3250	0.00	0.00	60.55	186.75	247.31
0.3000	0.00	0.00	61.22	188.82	250.04
0.2750	0.00	0.00	61.90	190.93	252.83
0.2500	0.00	0.00	62.71	193.41	256.12
0.2250	0.00	0.00	63.56	196.04	259.60
0.2000	0.00	0.00	64.49	198.89	263.38
0.1750	0.00	0.00	65.49	201.97	267.45
0.1500	0.00	0.00	66.56	205.30	271.86
0.1250	0.00	0.00	67.91	209.44	277.35
0.1000	0.00	0.00	69.39	214.00	283.39
0.0750	0.00	0.00	71.55	220.68	292.24
0.0500	0.00	0.00	74.33	229.25	303.58
0.0400	0.00	0.00	76.07	234.60	310.66
0.0250	0.00	0.00	79.91	246.46	326.37
0.0200	0.00	0.00	81.89	252.57	334.46
0.0150	0.00	0.00	84.63	261.03	345.66
0.0100	0.00	0.00	88.83	273.97	362.80
0.0090	0.00	0.00	90.21	278.21	368.42

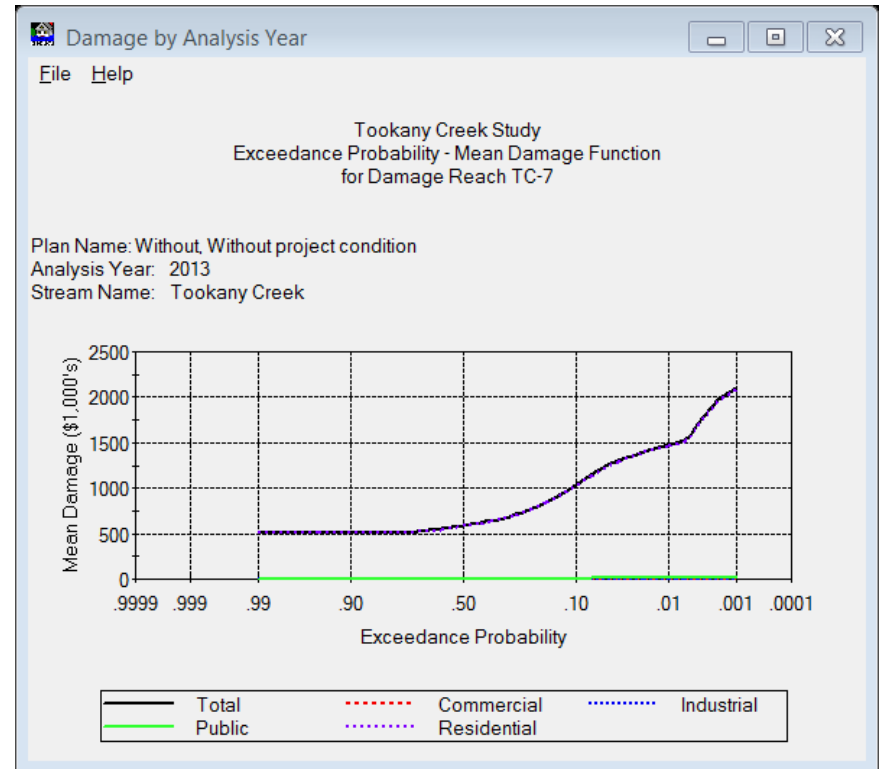
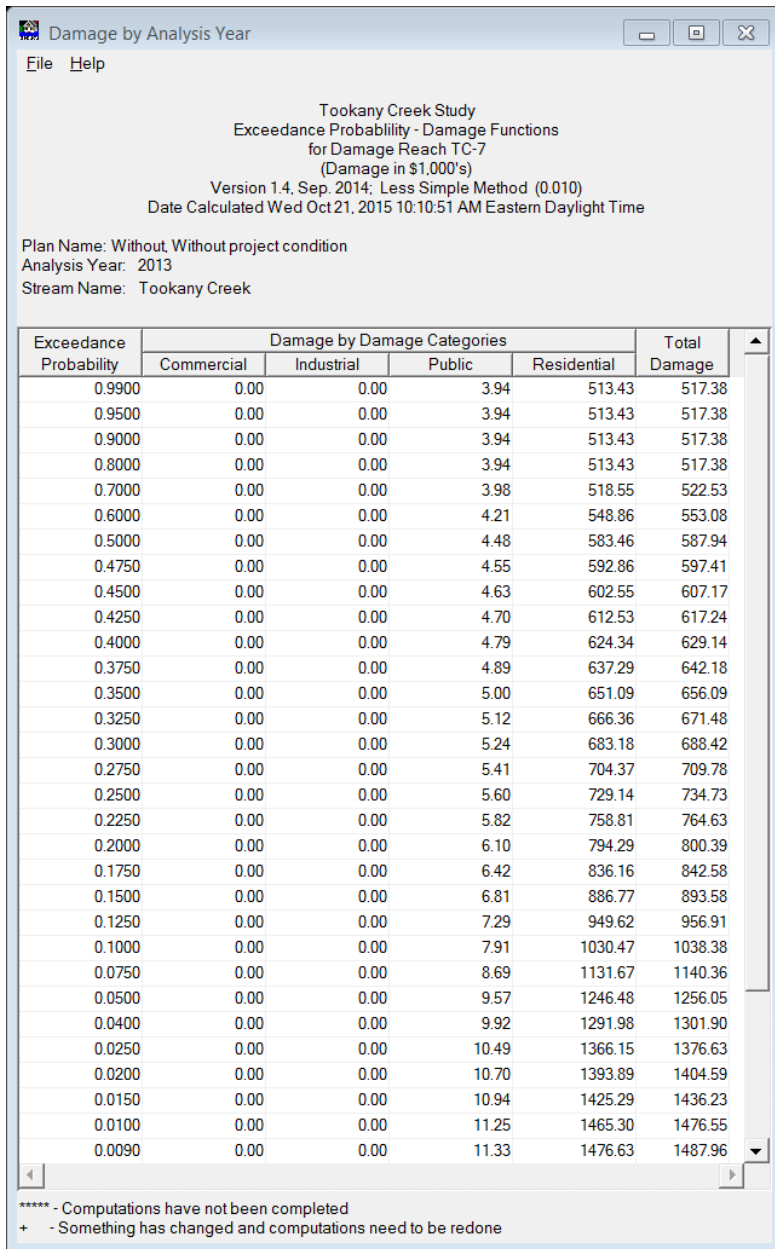
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



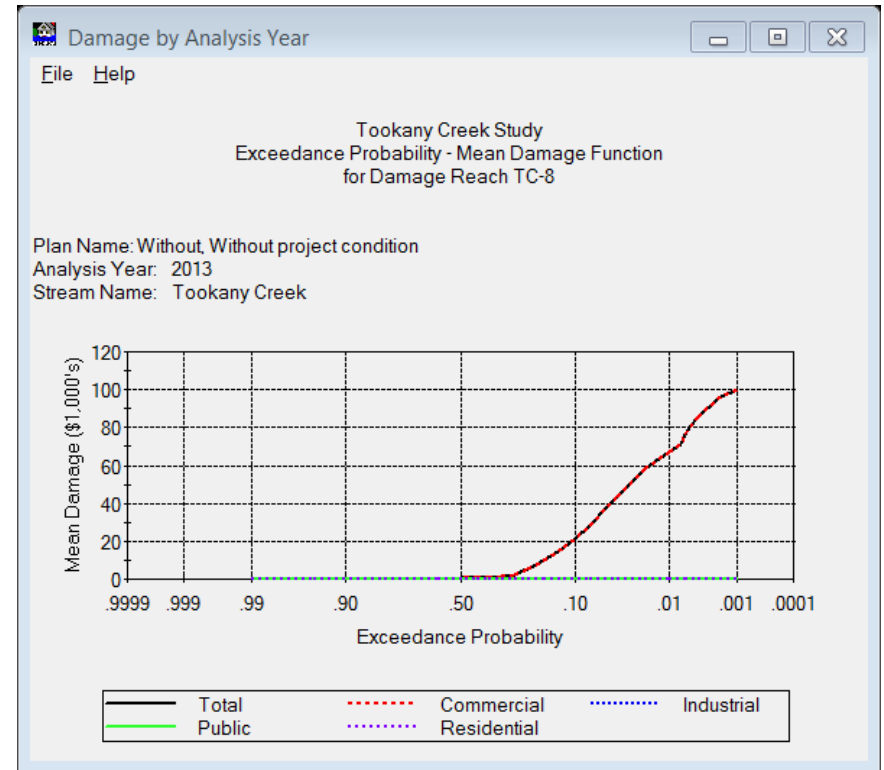
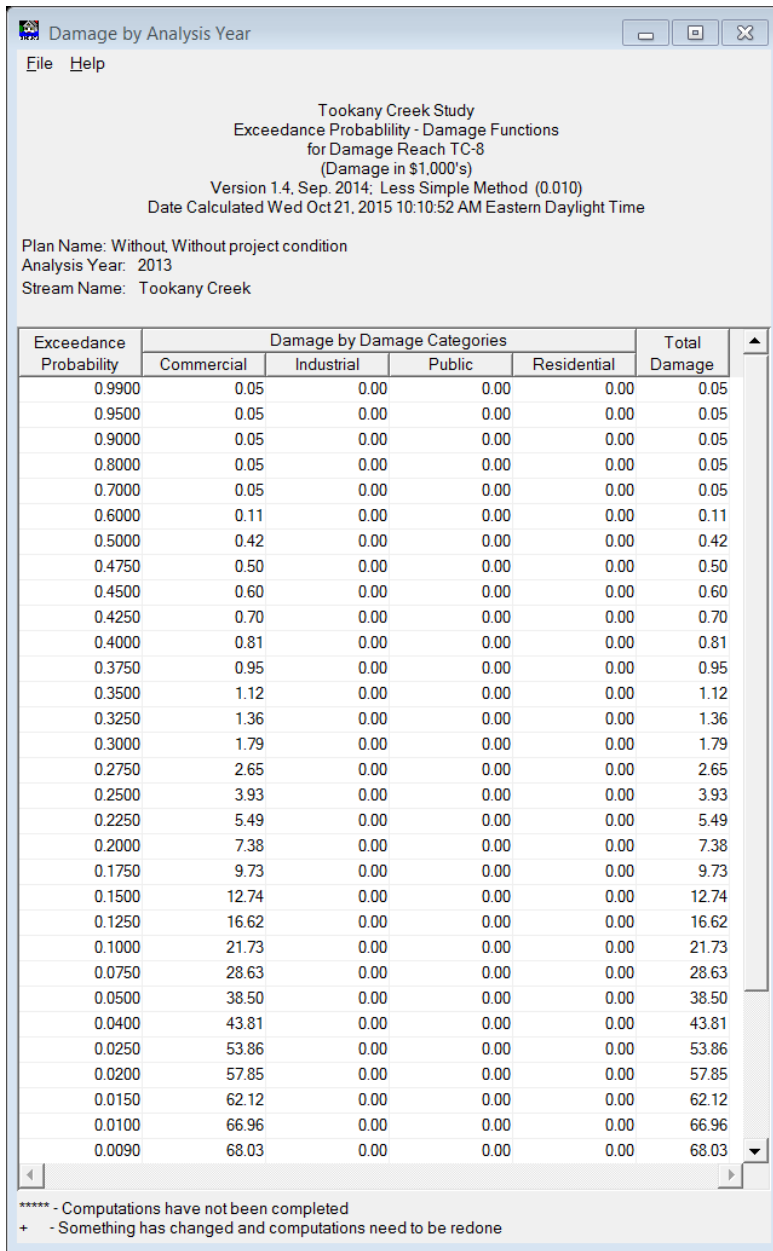












Damage by Analysis Year

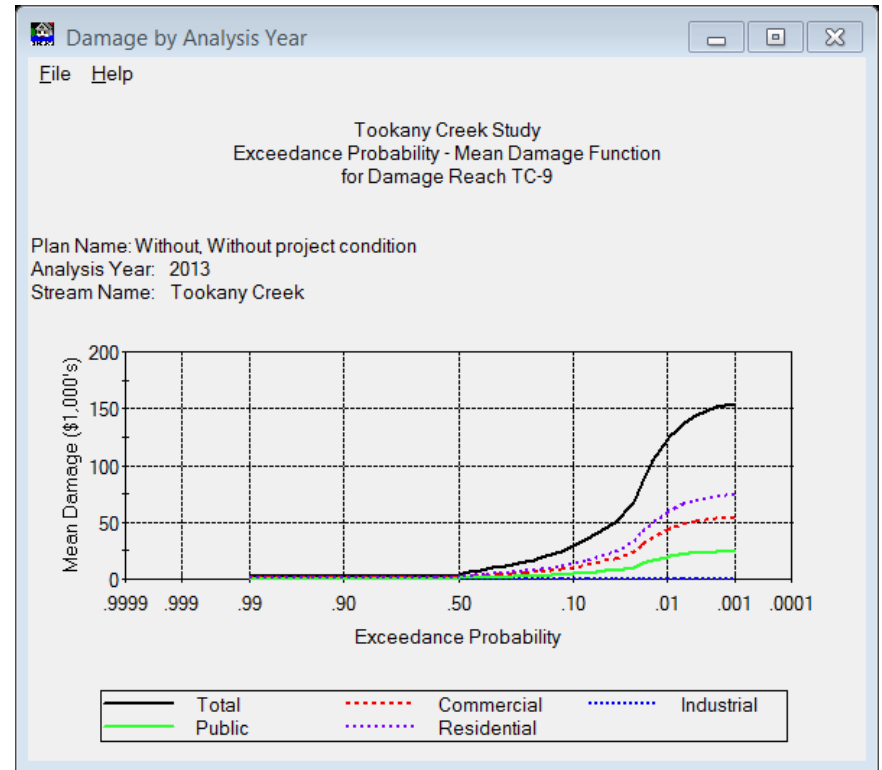
File Help

Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-9  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:54 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.82	0.00	0.36	1.10	2.29
0.9500	0.82	0.00	0.36	1.10	2.29
0.9000	0.82	0.00	0.36	1.10	2.29
0.8000	0.82	0.00	0.36	1.10	2.29
0.7000	0.82	0.00	0.36	1.10	2.29
0.6000	0.82	0.00	0.36	1.10	2.29
0.5000	1.56	0.00	0.69	2.11	4.36
0.4750	1.85	0.00	0.82	2.49	5.16
0.4500	2.15	0.00	0.95	2.89	5.99
0.4250	2.44	0.00	1.08	3.29	6.81
0.4000	2.75	0.00	1.22	3.71	7.68
0.3750	3.08	0.00	1.37	4.15	8.60
0.3500	3.43	0.00	1.52	4.62	9.57
0.3250	3.79	0.00	1.69	5.12	10.60
0.3000	4.18	0.00	1.86	5.64	11.67
0.2750	4.58	0.00	2.04	6.18	12.81
0.2500	5.04	0.00	2.24	6.79	14.07
0.2250	5.53	0.00	2.46	7.47	15.46
0.2000	6.12	0.00	2.72	8.25	17.10
0.1750	6.81	0.00	3.03	9.18	19.02
0.1500	7.65	0.00	3.40	10.32	21.37
0.1250	8.77	0.00	3.90	11.83	24.51
0.1000	10.33	0.00	4.60	13.94	28.88
0.0750	12.63	0.00	5.62	17.04	35.28
0.0500	16.06	0.00	7.15	21.66	44.87
0.0400	17.94	0.00	7.98	24.20	50.12
0.0250	24.27	0.00	10.80	32.75	67.82
0.0200	30.74	0.00	13.68	41.47	85.89
0.0150	37.21	0.00	16.56	50.20	103.97
0.0100	43.68	0.00	19.44	58.93	122.04
0.0090	44.97	0.00	20.01	60.67	125.66

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

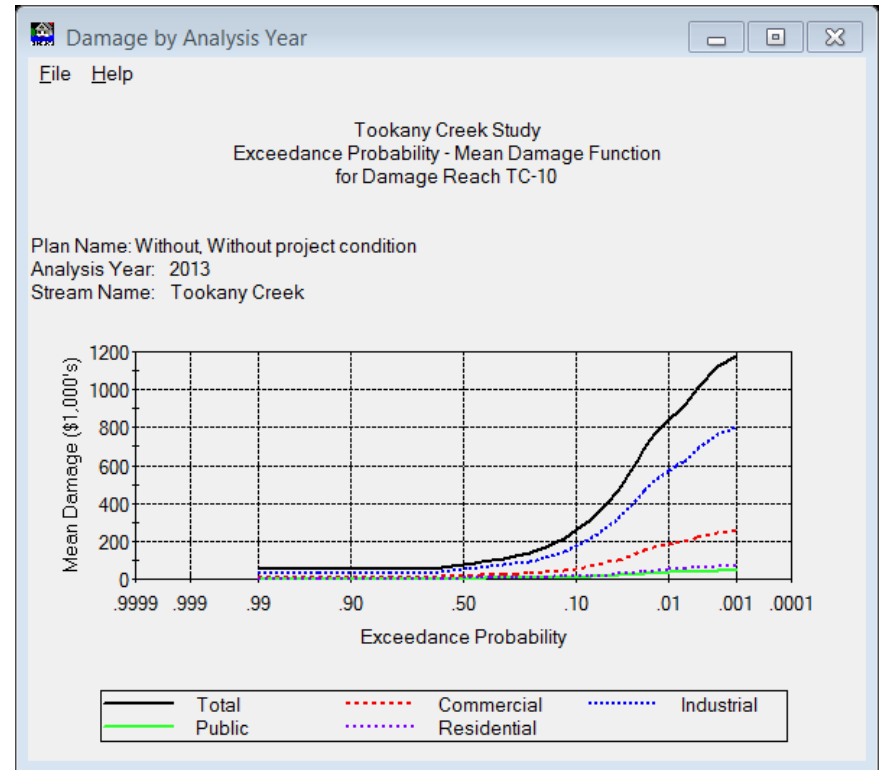
File Help

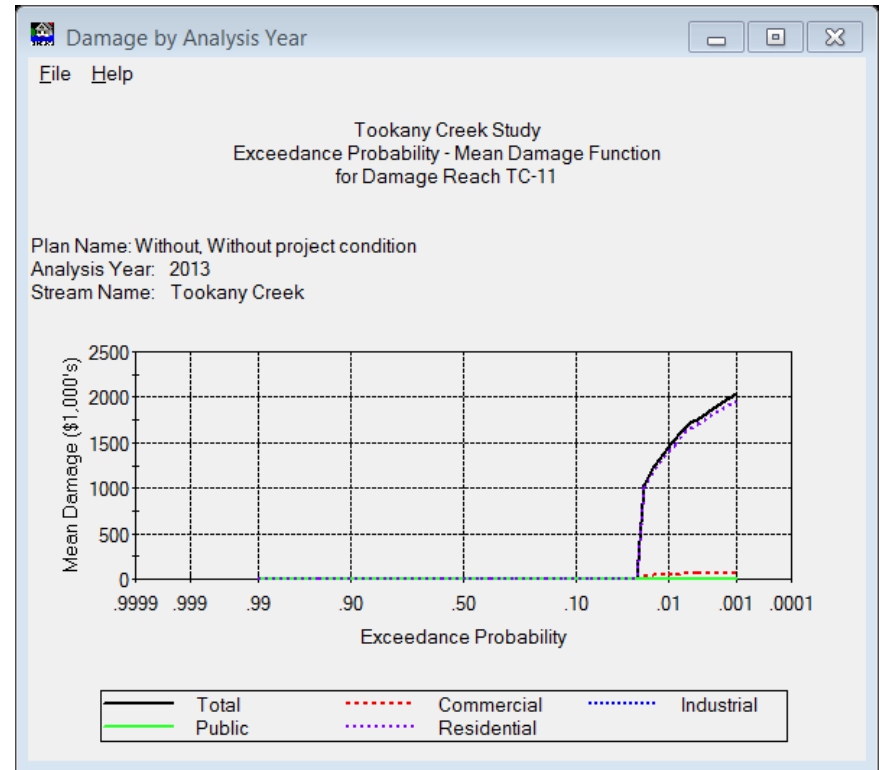
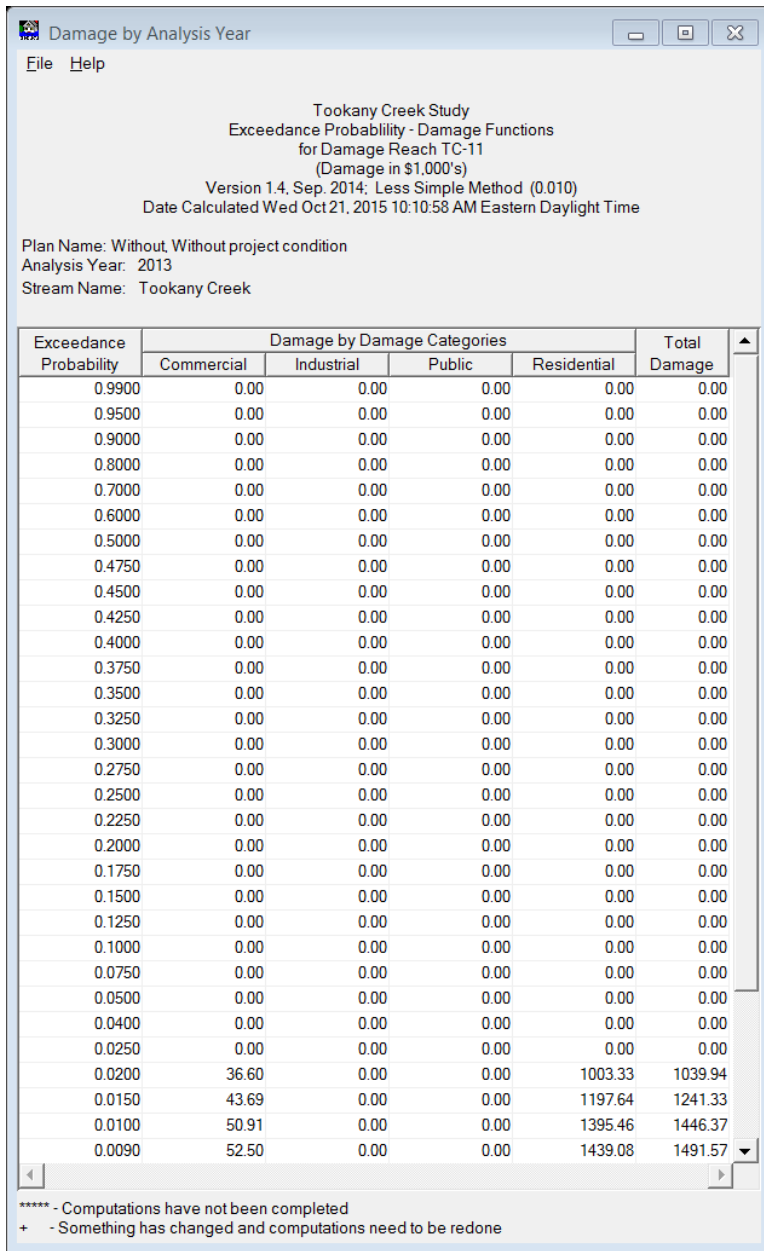
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-10  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:55 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	10.99	34.32	2.09	3.07	50.47
0.9500	10.99	34.32	2.09	3.07	50.47
0.9000	10.99	34.32	2.09	3.07	50.47
0.8000	10.99	34.32	2.09	3.07	50.47
0.7000	10.99	34.32	2.09	3.07	50.47
0.6000	13.15	41.06	2.50	3.68	60.38
0.5000	16.44	51.35	3.13	4.60	75.52
0.4750	17.34	54.16	3.30	4.85	79.65
0.4500	18.25	57.00	3.47	5.11	83.82
0.4250	19.19	59.95	3.65	5.37	88.16
0.4000	20.18	63.03	3.84	5.65	92.70
0.3750	21.22	66.29	4.04	5.94	97.49
0.3500	22.30	69.67	4.24	6.24	102.46
0.3250	23.48	73.34	4.47	6.57	107.86
0.3000	24.81	77.50	4.72	6.94	113.98
0.2750	26.38	82.41	5.02	7.38	121.20
0.2500	28.10	87.77	5.35	7.86	129.08
0.2250	30.10	94.02	5.73	8.42	138.27
0.2000	32.80	102.45	6.24	9.18	150.66
0.1750	36.37	113.60	6.92	10.18	167.06
0.1500	41.03	128.17	7.81	11.48	188.49
0.1250	47.19	147.39	8.98	13.21	216.75
0.1000	55.81	174.32	10.62	15.62	256.36
0.0750	68.01	212.44	12.94	19.04	312.43
0.0500	88.55	276.60	16.85	24.78	406.78
0.0400	102.21	319.27	19.44	28.61	469.53
0.0250	134.95	421.53	25.67	37.77	619.92
0.0200	149.70	467.59	28.48	41.90	687.67
0.0150	165.64	517.37	31.51	46.36	760.87
0.0100	182.76	570.84	34.77	51.15	839.51
0.0090	186.43	582.33	35.46	52.18	856.41

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





Damage by Analysis Year

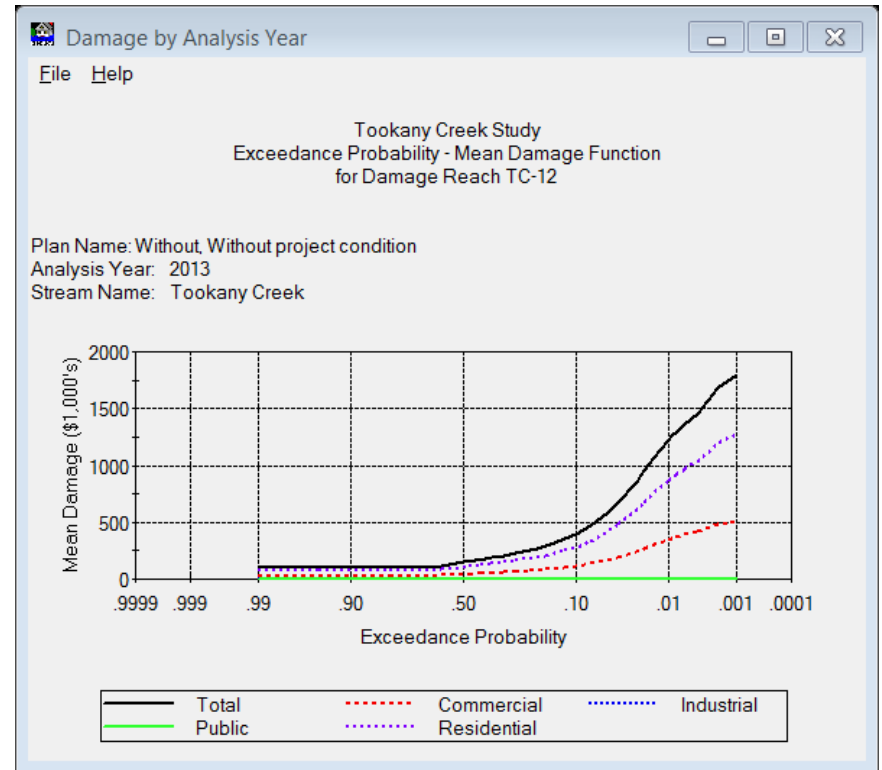
File Help

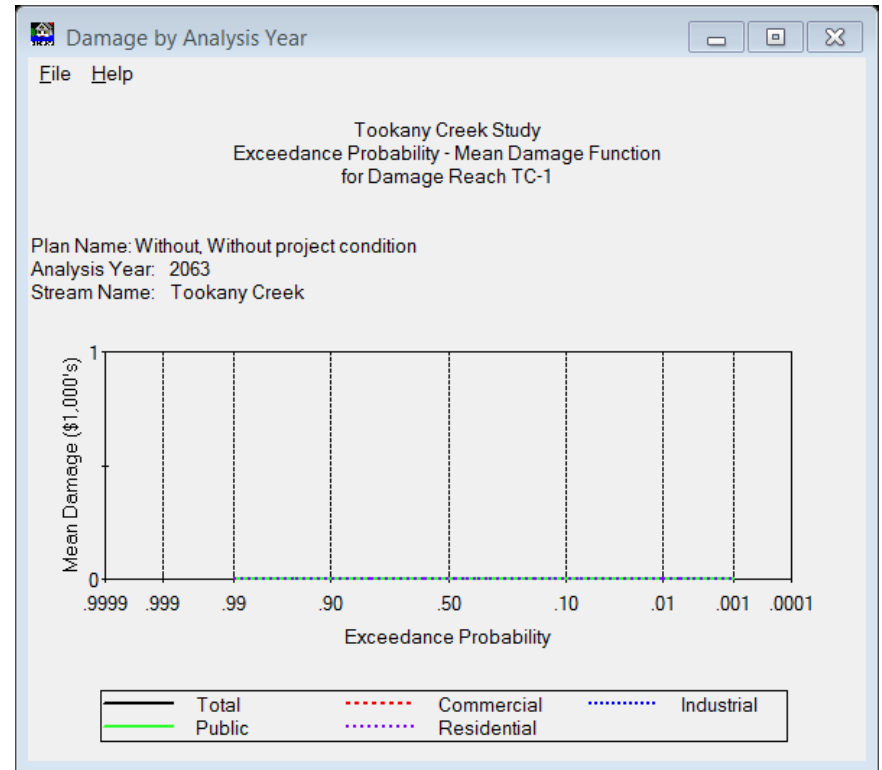
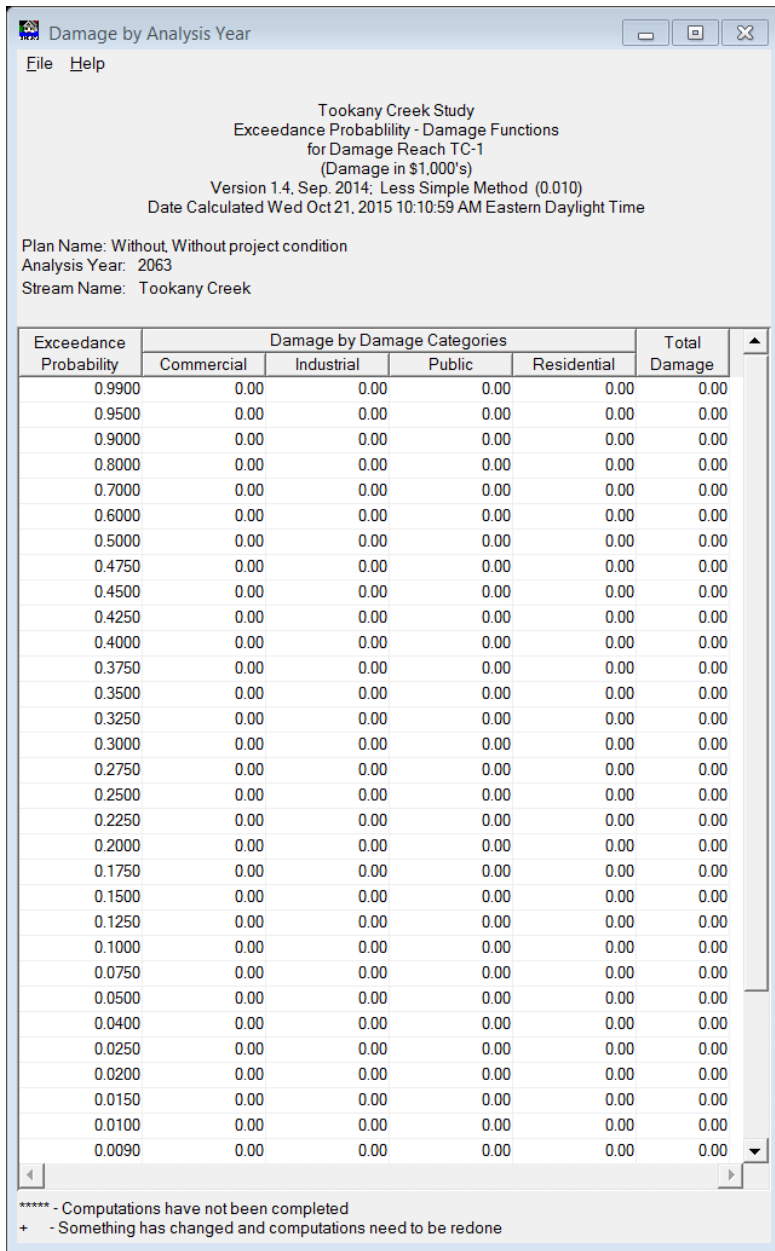
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-12  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:58 AM Eastern Daylight Time

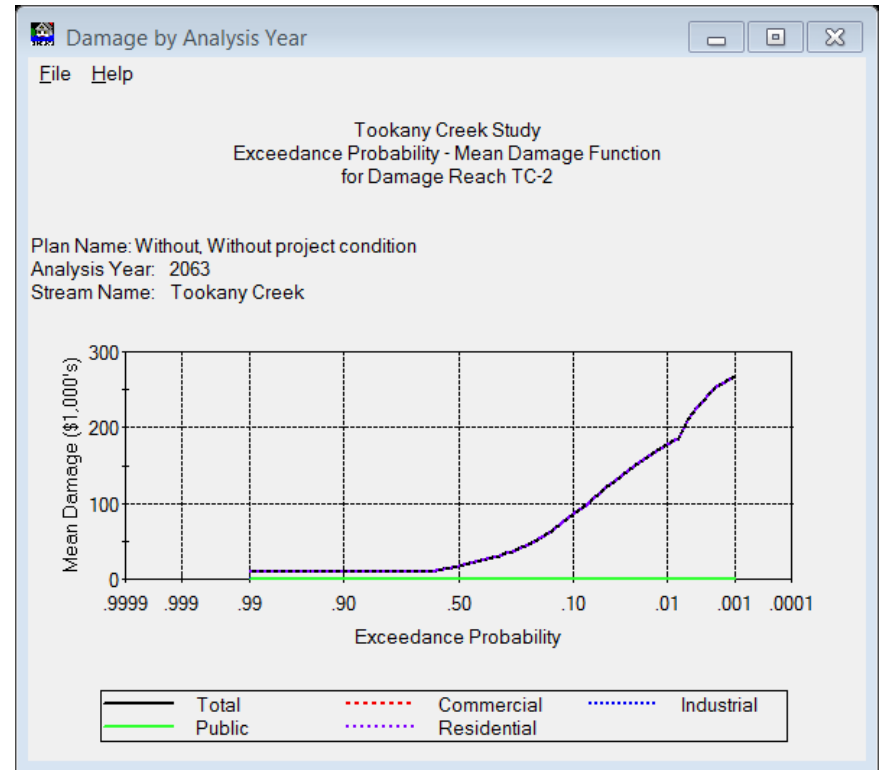
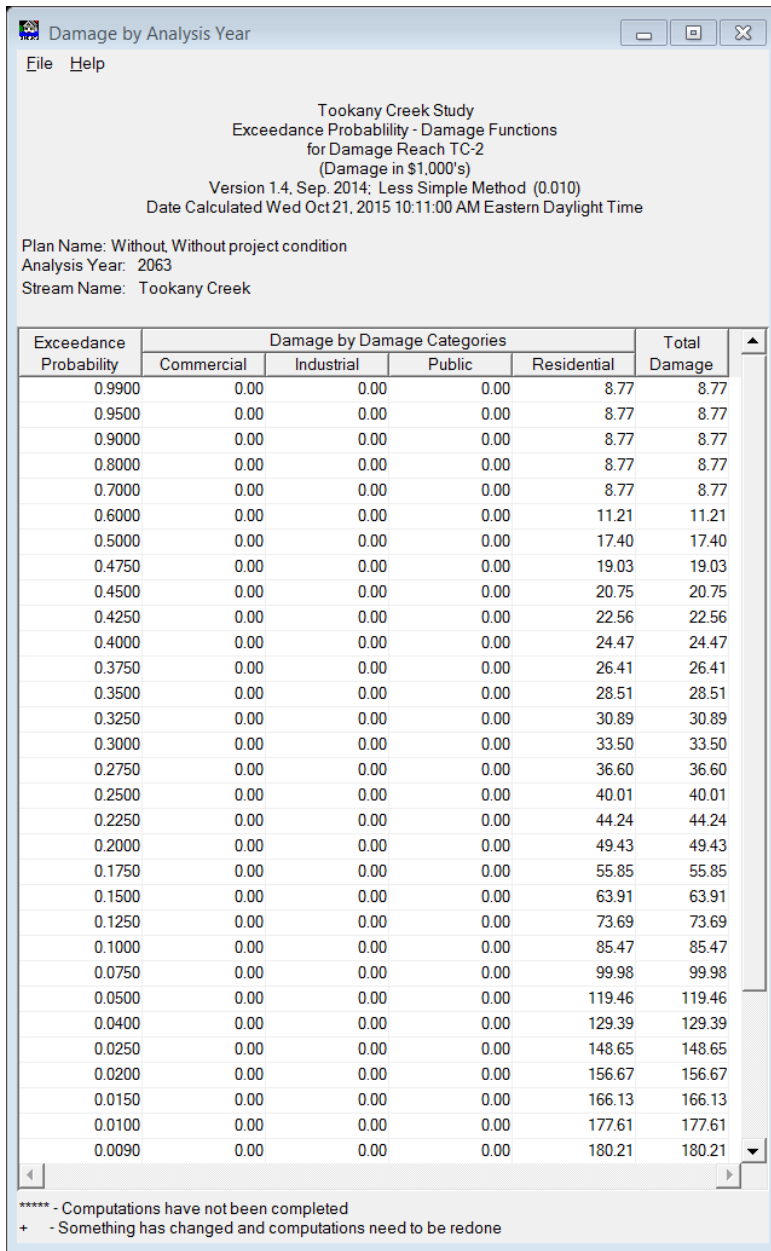
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	29.06	0.00	0.00	72.54	101.60
0.9500	29.06	0.00	0.00	72.54	101.60
0.9000	29.06	0.00	0.00	72.54	101.60
0.8000	29.06	0.00	0.00	72.54	101.60
0.7000	29.06	0.00	0.00	72.54	101.60
0.6000	33.77	0.00	0.00	84.29	118.06
0.5000	41.98	0.00	0.00	104.78	146.76
0.4750	44.19	0.00	0.00	110.29	154.48
0.4500	46.53	0.00	0.00	116.15	162.68
0.4250	48.93	0.00	0.00	122.13	171.05
0.4000	51.32	0.00	0.00	128.09	179.41
0.3750	53.90	0.00	0.00	134.54	188.45
0.3500	56.46	0.00	0.00	140.94	197.40
0.3250	59.28	0.00	0.00	147.96	207.23
0.3000	62.32	0.00	0.00	155.56	217.88
0.2750	65.72	0.00	0.00	164.06	229.78
0.2500	69.59	0.00	0.00	173.70	243.29
0.2250	73.64	0.00	0.00	183.81	257.45
0.2000	78.29	0.00	0.00	195.41	273.69
0.1750	84.15	0.00	0.00	210.04	294.19
0.1500	91.33	0.00	0.00	227.96	319.29
0.1250	100.71	0.00	0.00	251.39	352.10
0.1000	113.92	0.00	0.00	284.37	398.29
0.0750	133.79	0.00	0.00	333.94	467.73
0.0500	169.38	0.00	0.00	422.80	592.18
0.0400	193.09	0.00	0.00	481.98	675.07
0.0250	245.80	0.00	0.00	613.55	859.35
0.0200	272.09	0.00	0.00	679.16	951.24
0.0150	305.97	0.00	0.00	763.74	1069.71
0.0100	349.33	0.00	0.00	871.96	1221.29
0.0090	359.17	0.00	0.00	896.52	1255.69

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone







Damage by Analysis Year

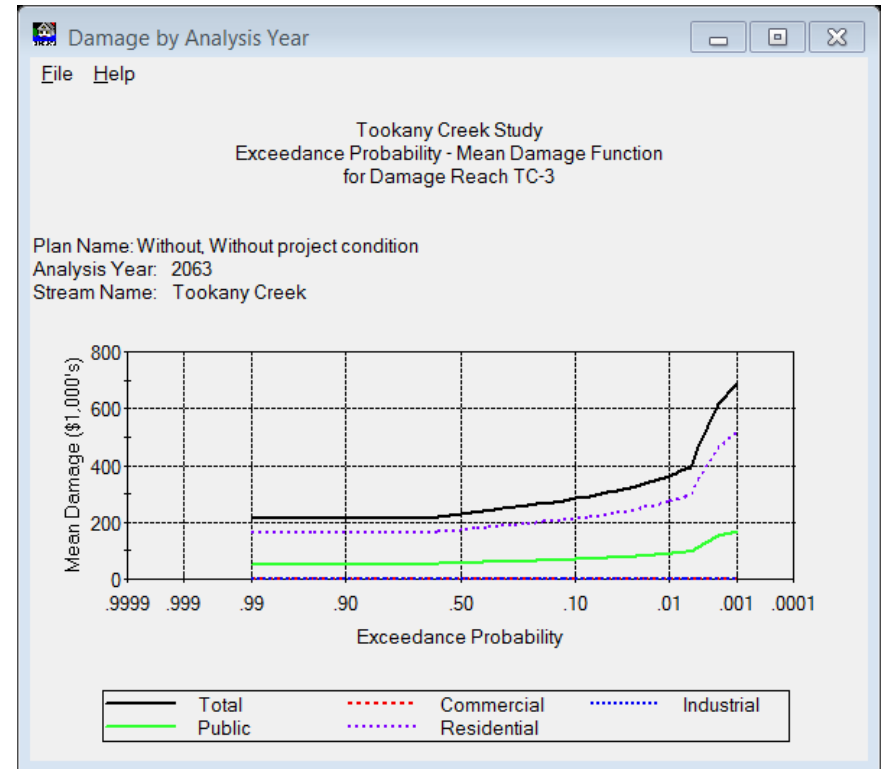
File Help

Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-3  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:00 AM Eastern Daylight Time

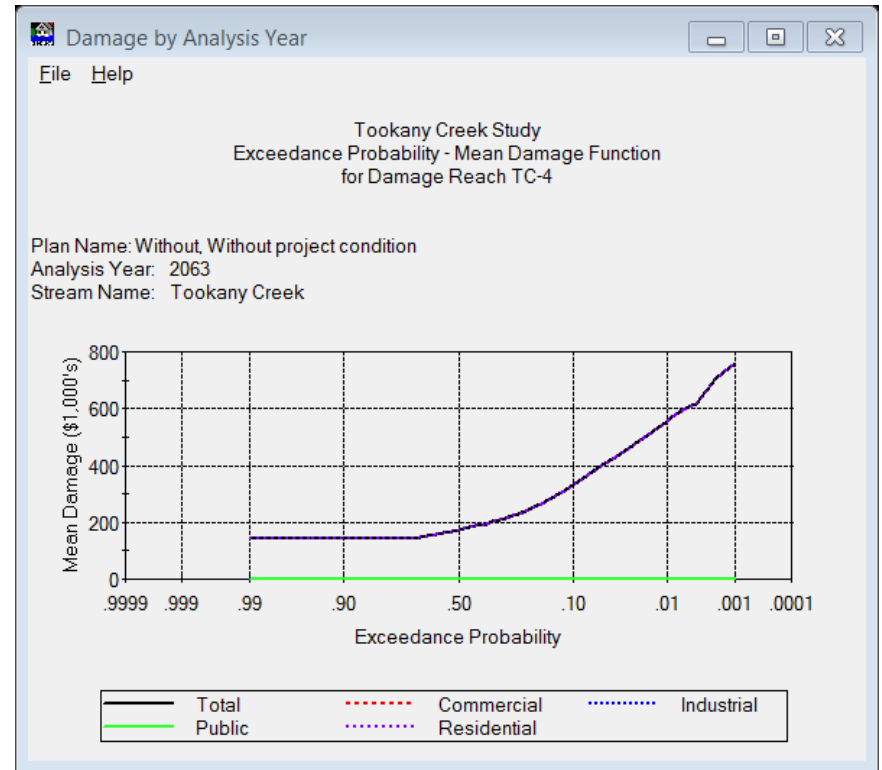
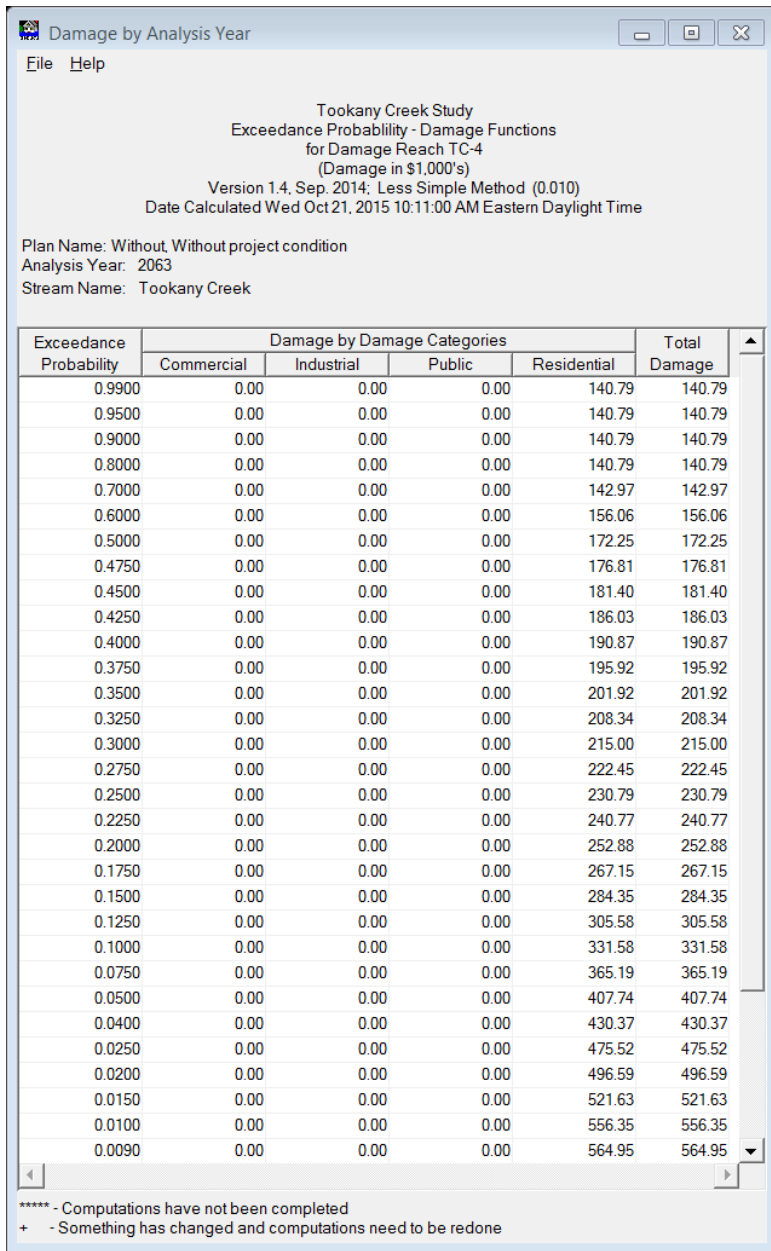
Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.00	0.00	52.95	163.31	216.27
0.9500	0.00	0.00	52.95	163.31	216.27
0.9000	0.00	0.00	52.95	163.31	216.27
0.8000	0.00	0.00	52.95	163.31	216.27
0.7000	0.00	0.00	52.95	163.31	216.27
0.6000	0.00	0.00	53.88	166.18	220.06
0.5000	0.00	0.00	56.19	173.31	229.50
0.4750	0.00	0.00	56.75	175.02	231.76
0.4500	0.00	0.00	57.32	176.80	234.12
0.4250	0.00	0.00	57.95	178.73	236.69
0.4000	0.00	0.00	58.60	180.73	239.33
0.3750	0.00	0.00	59.23	182.67	241.90
0.3500	0.00	0.00	59.89	184.72	244.61
0.3250	0.00	0.00	60.55	186.75	247.31
0.3000	0.00	0.00	61.22	188.82	250.04
0.2750	0.00	0.00	61.90	190.93	252.83
0.2500	0.00	0.00	62.71	193.41	256.12
0.2250	0.00	0.00	63.56	196.04	259.60
0.2000	0.00	0.00	64.49	198.89	263.38
0.1750	0.00	0.00	65.49	201.97	267.45
0.1500	0.00	0.00	66.56	205.30	271.86
0.1250	0.00	0.00	67.91	209.44	277.35
0.1000	0.00	0.00	69.39	214.00	283.39
0.0750	0.00	0.00	71.55	220.68	292.24
0.0500	0.00	0.00	74.33	229.25	303.58
0.0400	0.00	0.00	76.07	234.60	310.66
0.0250	0.00	0.00	79.91	246.46	326.37
0.0200	0.00	0.00	81.89	252.57	334.46
0.0150	0.00	0.00	84.63	261.03	345.66
0.0100	0.00	0.00	88.83	273.97	362.80
0.0090	0.00	0.00	90.21	278.21	368.42

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone







Damage by Analysis Year

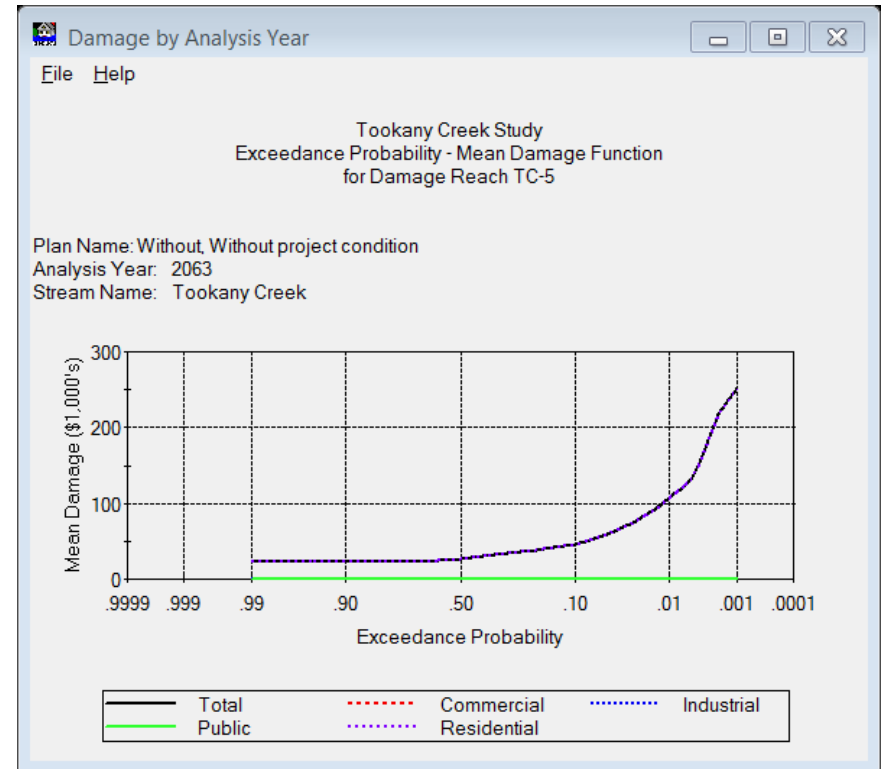
File Help

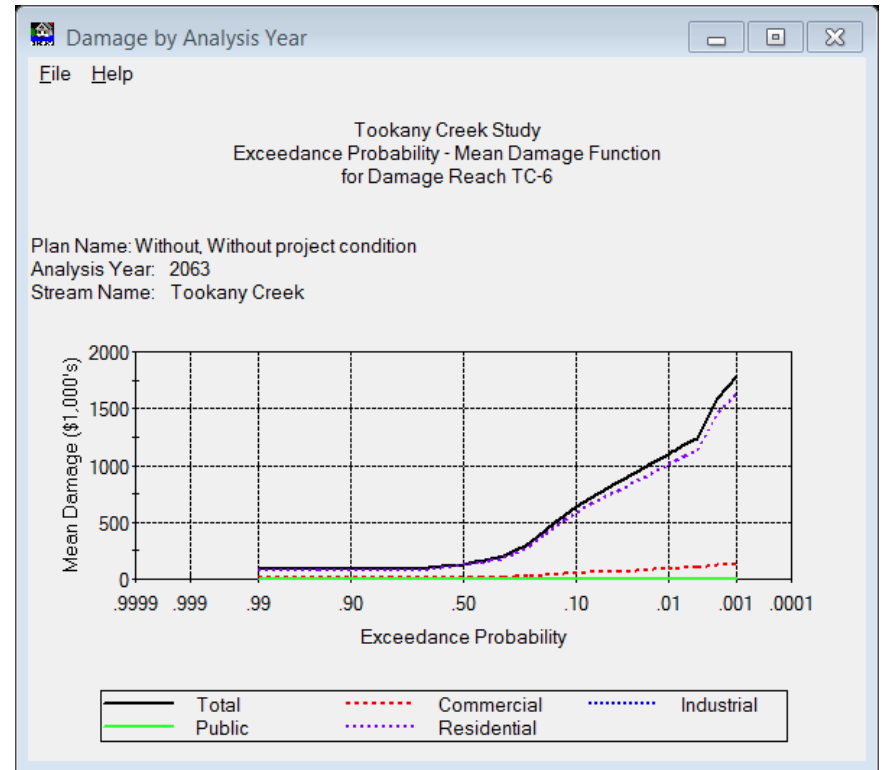
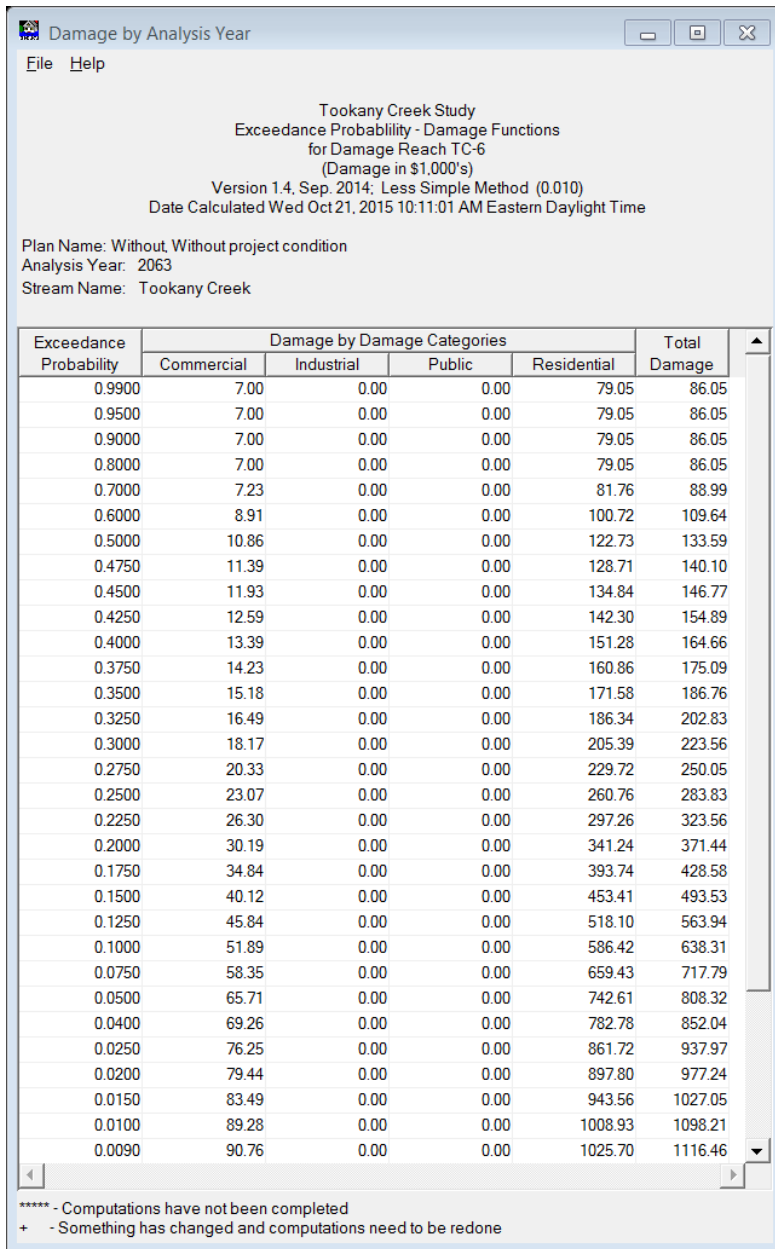
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-5  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:01 AM Eastern Daylight Time

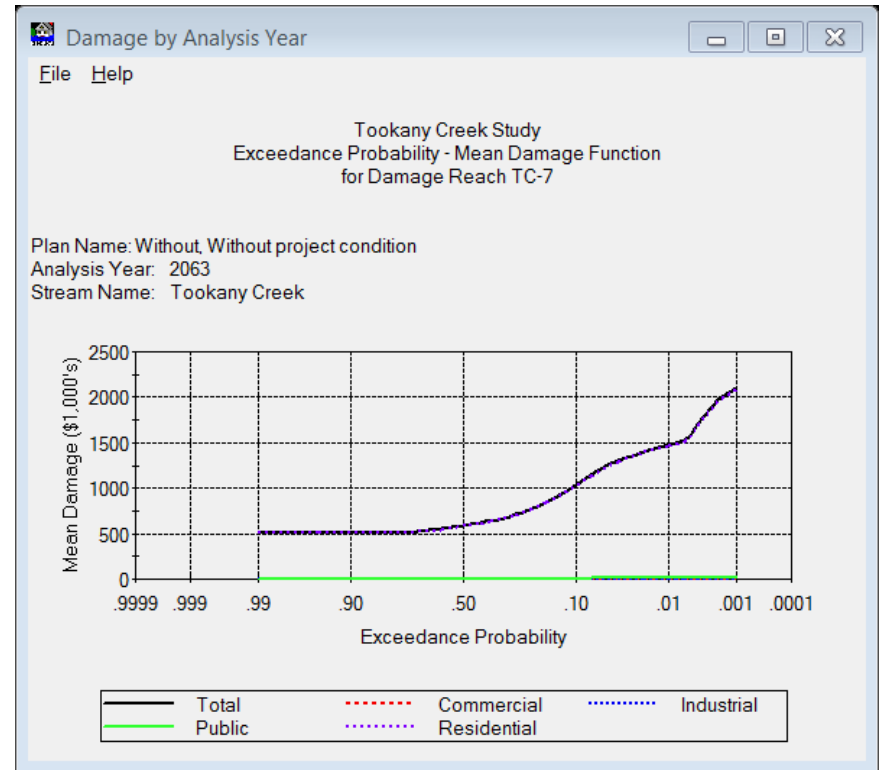
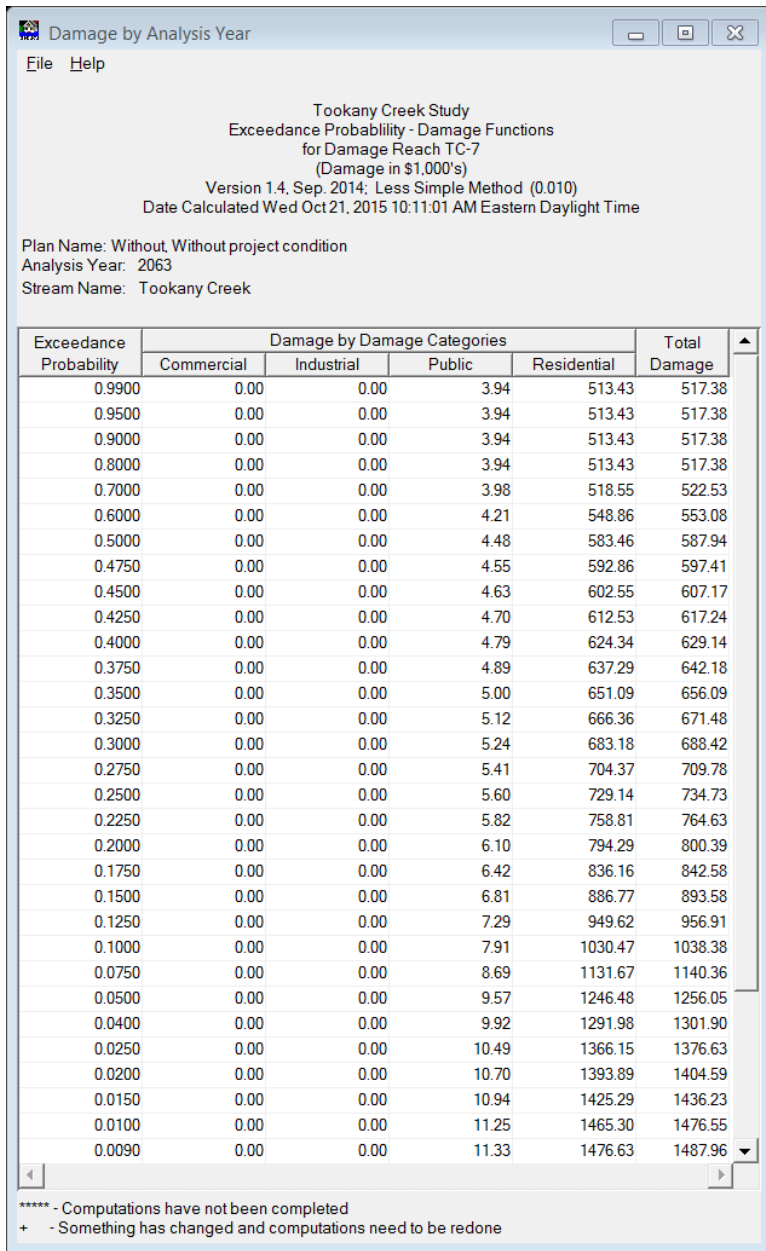
Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

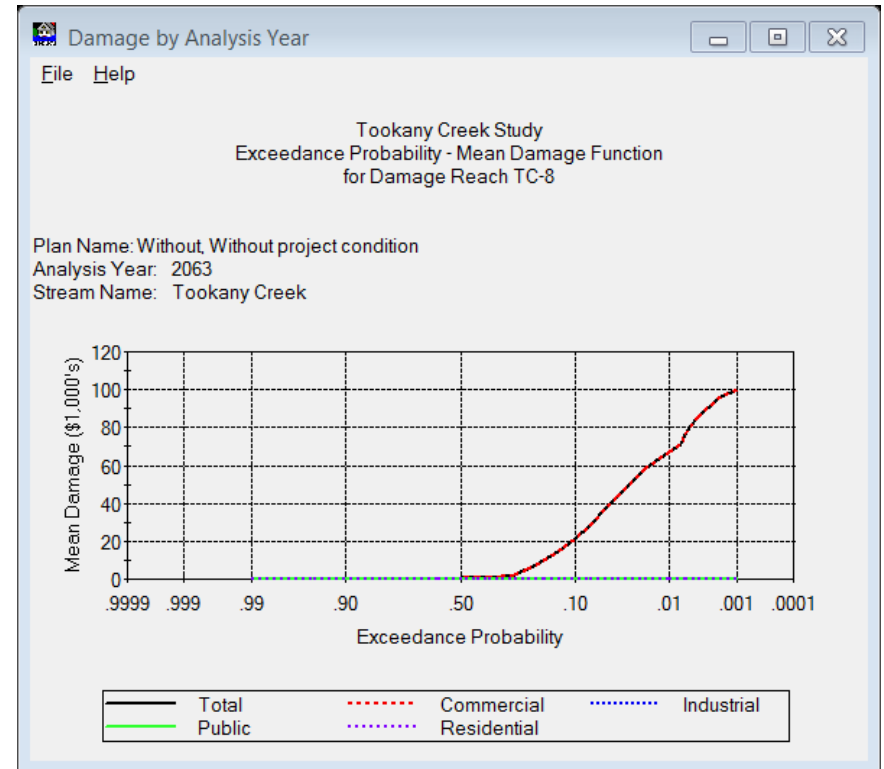
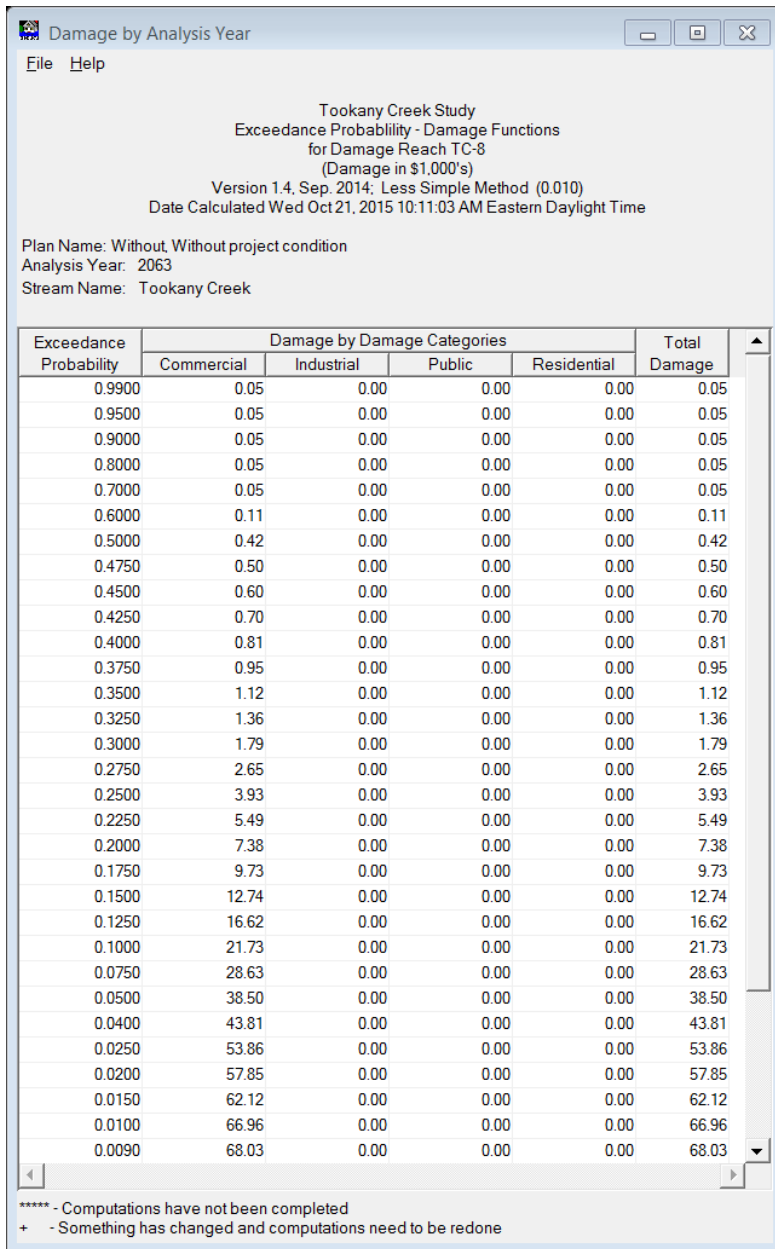
Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.00	0.00	0.00	22.58	22.58
0.9500	0.00	0.00	0.00	22.58	22.58
0.9000	0.00	0.00	0.00	22.58	22.58
0.8000	0.00	0.00	0.00	22.58	22.58
0.7000	0.00	0.00	0.00	22.58	22.58
0.6000	0.00	0.00	0.00	24.14	24.14
0.5000	0.00	0.00	0.00	26.97	26.97
0.4750	0.00	0.00	0.00	27.67	27.67
0.4500	0.00	0.00	0.00	28.45	28.45
0.4250	0.00	0.00	0.00	29.27	29.27
0.4000	0.00	0.00	0.00	30.06	30.06
0.3750	0.00	0.00	0.00	30.90	30.90
0.3500	0.00	0.00	0.00	31.73	31.73
0.3250	0.00	0.00	0.00	32.55	32.55
0.3000	0.00	0.00	0.00	33.44	33.44
0.2750	0.00	0.00	0.00	34.42	34.42
0.2500	0.00	0.00	0.00	35.58	35.58
0.2250	0.00	0.00	0.00	36.78	36.78
0.2000	0.00	0.00	0.00	38.12	38.12
0.1750	0.00	0.00	0.00	39.55	39.55
0.1500	0.00	0.00	0.00	41.30	41.30
0.1250	0.00	0.00	0.00	43.58	43.58
0.1000	0.00	0.00	0.00	46.71	46.71
0.0750	0.00	0.00	0.00	51.23	51.23
0.0500	0.00	0.00	0.00	59.10	59.10
0.0400	0.00	0.00	0.00	64.10	64.10
0.0250	0.00	0.00	0.00	76.66	76.66
0.0200	0.00	0.00	0.00	83.15	83.15
0.0150	0.00	0.00	0.00	92.26	92.26
0.0100	0.00	0.00	0.00	106.19	106.19
0.0090	0.00	0.00	0.00	110.00	110.00

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone









Damage by Analysis Year

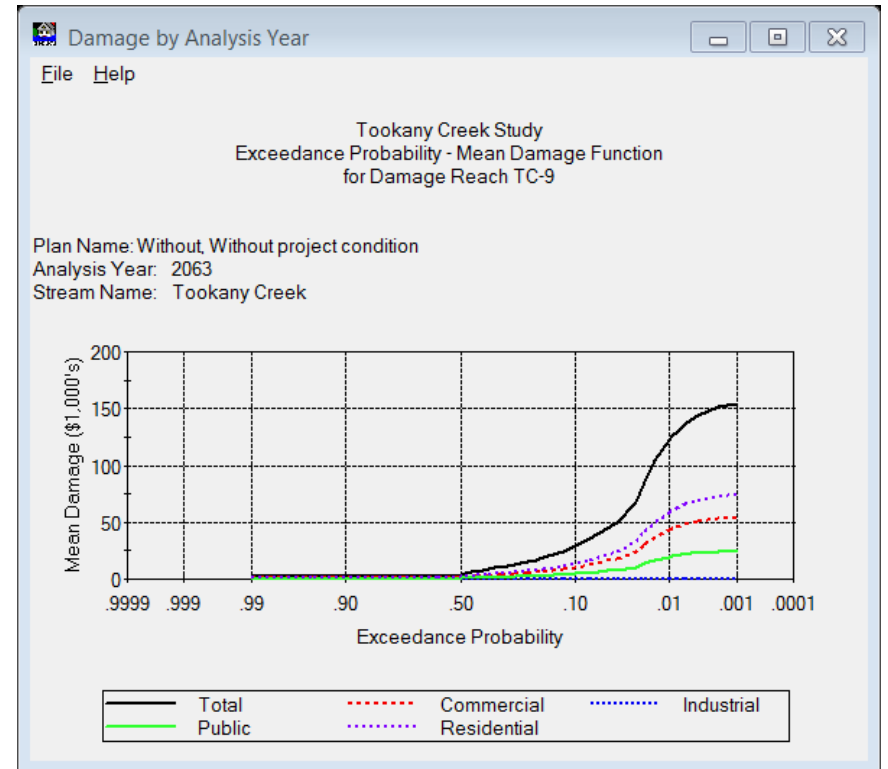
File Help

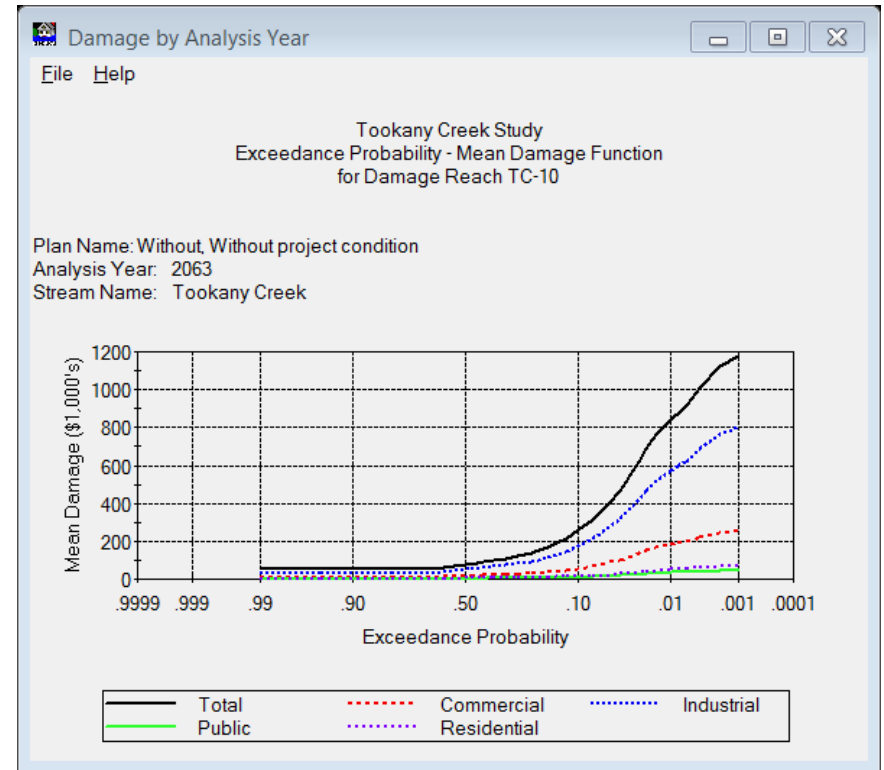
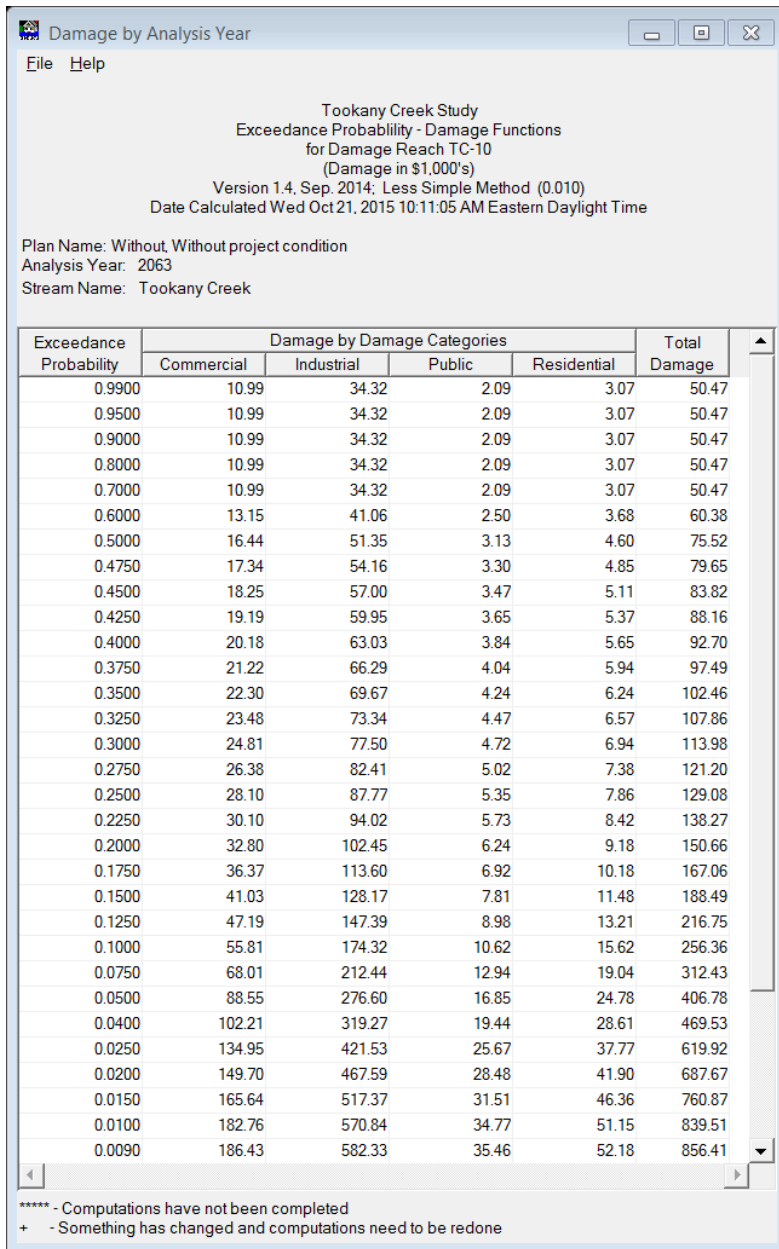
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-9  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:05 AM Eastern Daylight Time

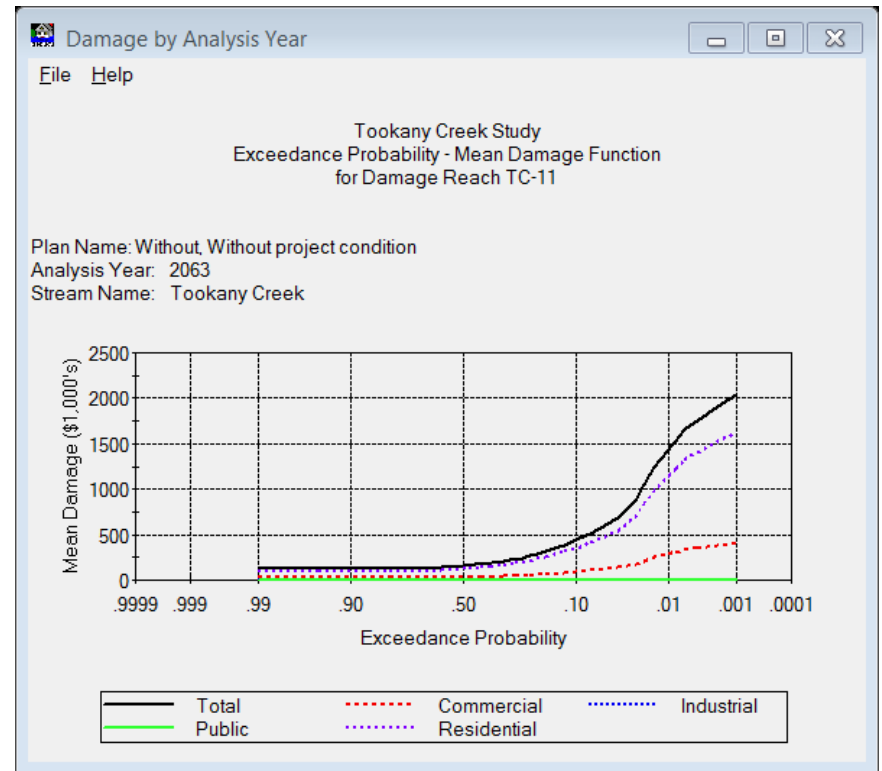
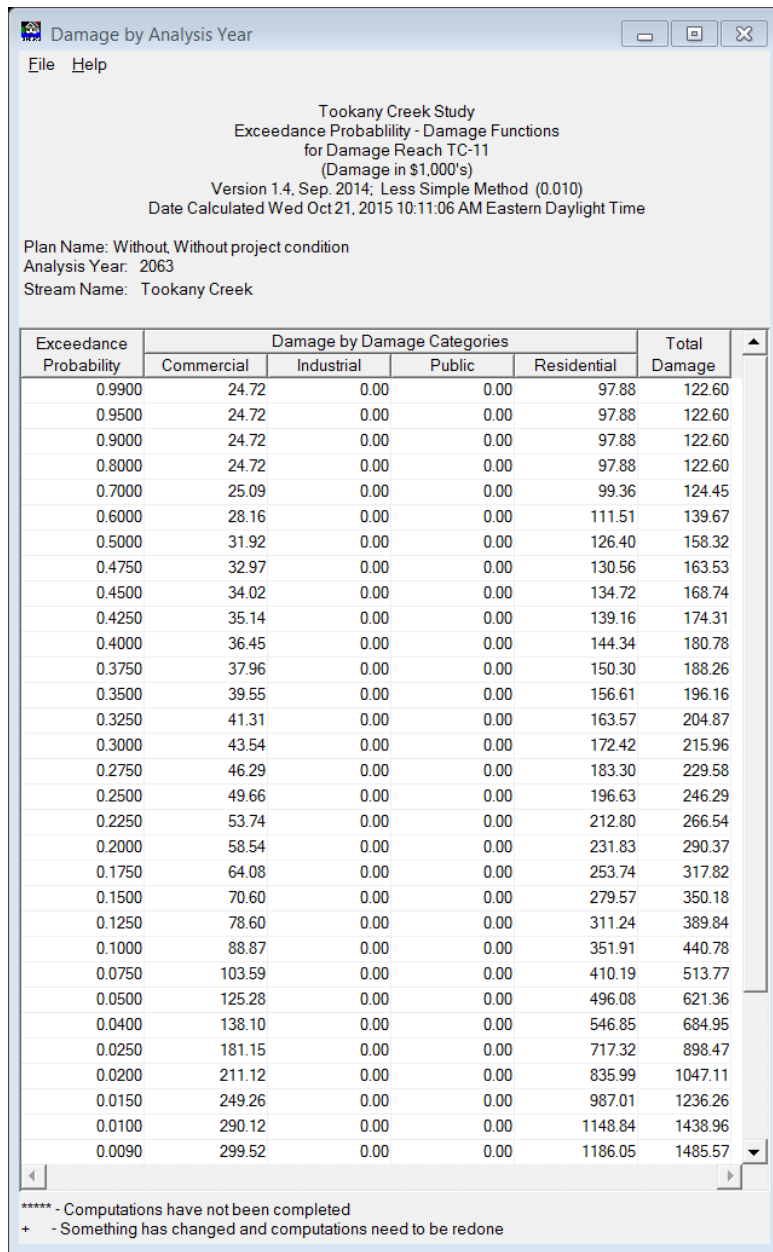
Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.82	0.00	0.36	1.10	2.29
0.9500	0.82	0.00	0.36	1.10	2.29
0.9000	0.82	0.00	0.36	1.10	2.29
0.8000	0.82	0.00	0.36	1.10	2.29
0.7000	0.82	0.00	0.36	1.10	2.29
0.6000	0.82	0.00	0.36	1.10	2.29
0.5000	1.56	0.00	0.69	2.11	4.36
0.4750	1.85	0.00	0.82	2.49	5.16
0.4500	2.15	0.00	0.95	2.89	5.99
0.4250	2.44	0.00	1.08	3.29	6.81
0.4000	2.75	0.00	1.22	3.71	7.68
0.3750	3.08	0.00	1.37	4.15	8.60
0.3500	3.43	0.00	1.52	4.62	9.57
0.3250	3.79	0.00	1.69	5.12	10.60
0.3000	4.18	0.00	1.86	5.64	11.67
0.2750	4.58	0.00	2.04	6.18	12.81
0.2500	5.04	0.00	2.24	6.79	14.07
0.2250	5.53	0.00	2.46	7.47	15.46
0.2000	6.12	0.00	2.72	8.25	17.10
0.1750	6.81	0.00	3.03	9.18	19.02
0.1500	7.65	0.00	3.40	10.32	21.37
0.1250	8.77	0.00	3.90	11.83	24.51
0.1000	10.33	0.00	4.60	13.94	28.88
0.0750	12.63	0.00	5.62	17.04	35.28
0.0500	16.06	0.00	7.15	21.66	44.87
0.0400	17.94	0.00	7.98	24.20	50.12
0.0250	24.27	0.00	10.80	32.75	67.82
0.0200	30.74	0.00	13.68	41.47	85.89
0.0150	37.21	0.00	16.56	50.20	103.97
0.0100	43.68	0.00	19.44	58.93	122.04
0.0090	44.97	0.00	20.01	60.67	125.66

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone









Damage by Analysis Year

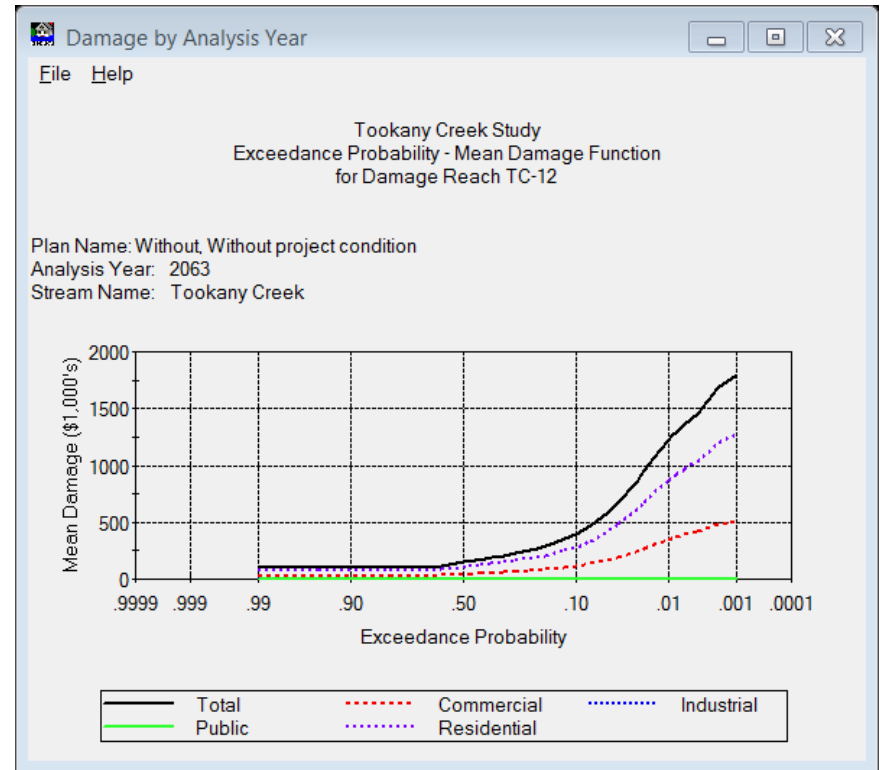
File Help

Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-12  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:06 AM Eastern Daylight Time

Plan Name: Without, Without project condition  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	29.06	0.00	0.00	72.54	101.60
0.9500	29.06	0.00	0.00	72.54	101.60
0.9000	29.06	0.00	0.00	72.54	101.60
0.8000	29.06	0.00	0.00	72.54	101.60
0.7000	29.06	0.00	0.00	72.54	101.60
0.6000	33.77	0.00	0.00	84.29	118.06
0.5000	41.98	0.00	0.00	104.78	146.76
0.4750	44.19	0.00	0.00	110.29	154.48
0.4500	46.53	0.00	0.00	116.15	162.68
0.4250	48.93	0.00	0.00	122.13	171.05
0.4000	51.32	0.00	0.00	128.09	179.41
0.3750	53.90	0.00	0.00	134.54	188.45
0.3500	56.46	0.00	0.00	140.94	197.40
0.3250	59.28	0.00	0.00	147.96	207.23
0.3000	62.32	0.00	0.00	155.56	217.88
0.2750	65.72	0.00	0.00	164.06	229.78
0.2500	69.59	0.00	0.00	173.70	243.29
0.2250	73.64	0.00	0.00	183.81	257.45
0.2000	78.29	0.00	0.00	195.41	273.69
0.1750	84.15	0.00	0.00	210.04	294.19
0.1500	91.33	0.00	0.00	227.96	319.29
0.1250	100.71	0.00	0.00	251.39	352.10
0.1000	113.92	0.00	0.00	284.37	398.29
0.0750	133.79	0.00	0.00	333.94	467.73
0.0500	169.38	0.00	0.00	422.80	592.18
0.0400	193.09	0.00	0.00	481.98	675.07
0.0250	245.80	0.00	0.00	613.55	859.35
0.0200	272.09	0.00	0.00	679.16	951.24
0.0150	305.97	0.00	0.00	763.74	1069.71
0.0100	349.33	0.00	0.00	871.96	1221.29
0.0090	359.17	0.00	0.00	896.52	1255.69

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

File Help

Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-1  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:49 AM Eastern Daylight Time

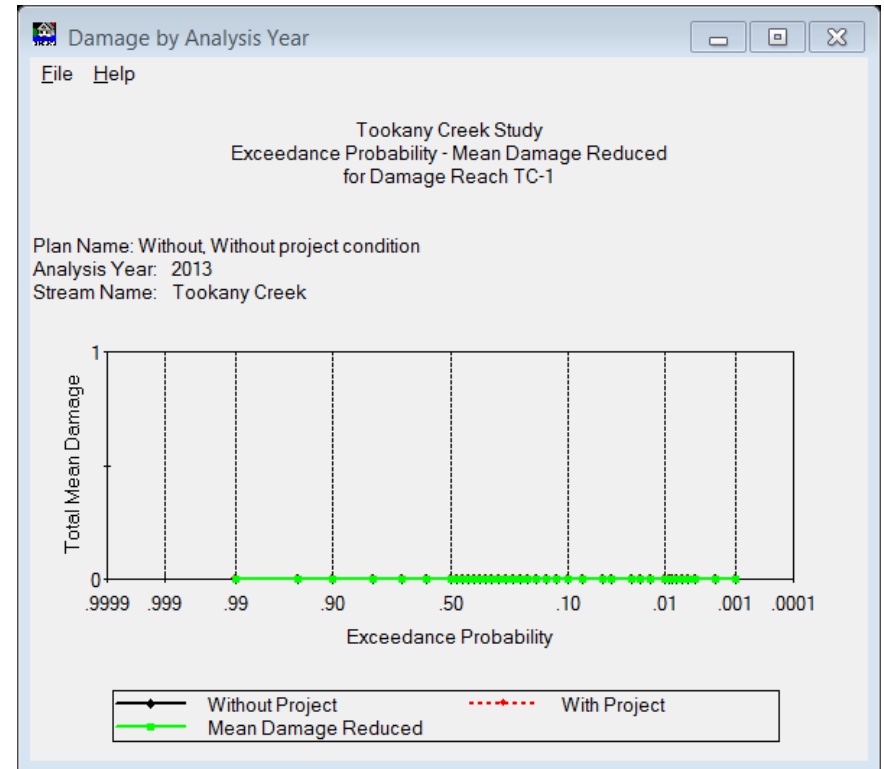
(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

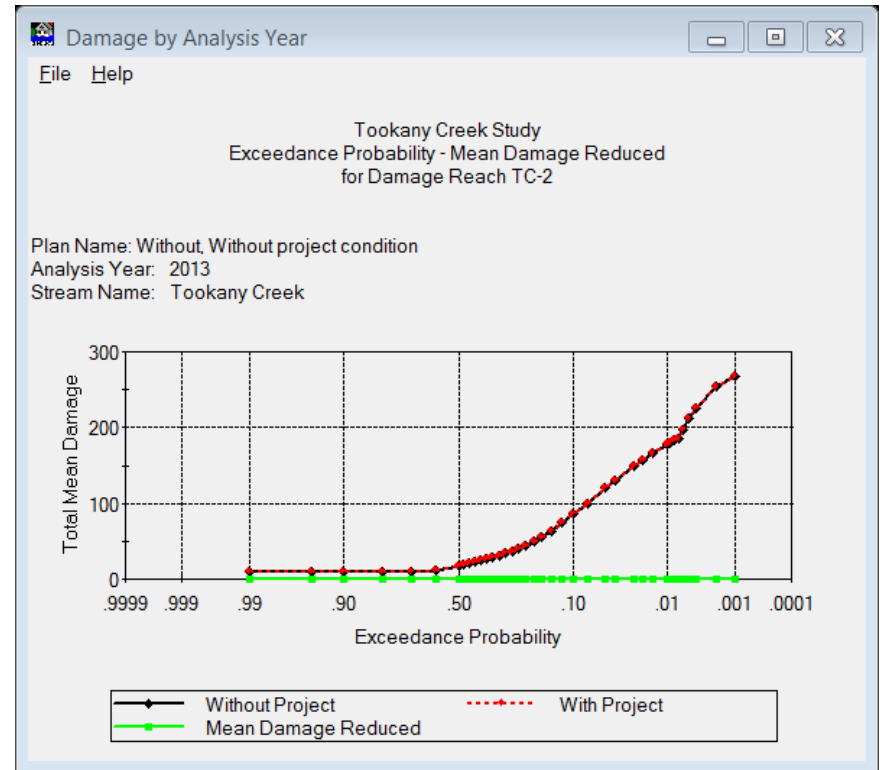
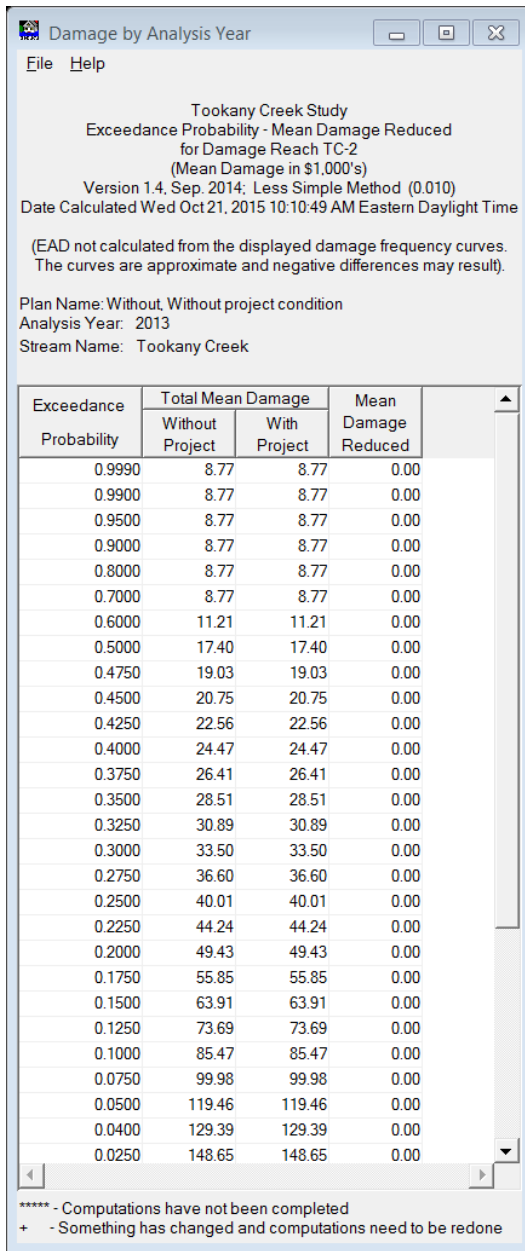
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

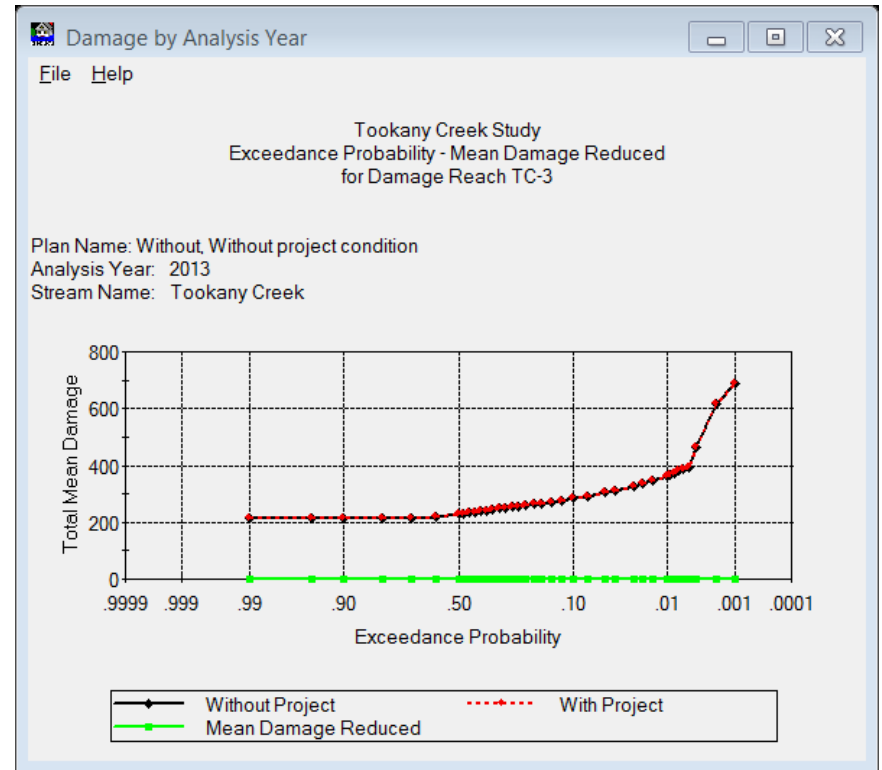
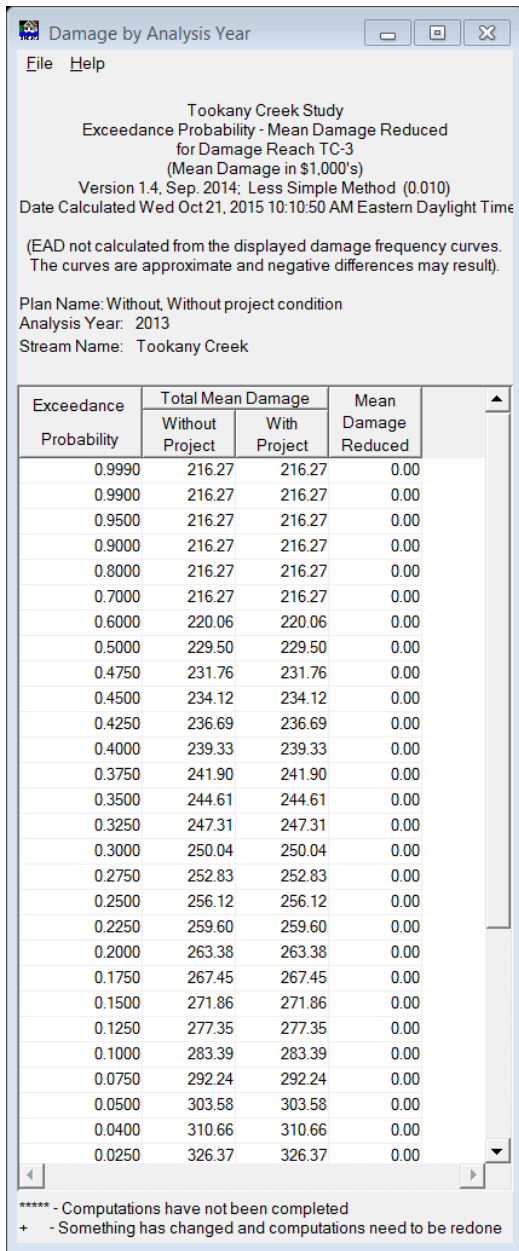
Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	0.00	0.00	0.00
0.9900	0.00	0.00	0.00
0.9500	0.00	0.00	0.00
0.9000	0.00	0.00	0.00
0.8000	0.00	0.00	0.00
0.7000	0.00	0.00	0.00
0.6000	0.00	0.00	0.00
0.5000	0.00	0.00	0.00
0.4750	0.00	0.00	0.00
0.4500	0.00	0.00	0.00
0.4250	0.00	0.00	0.00
0.4000	0.00	0.00	0.00
0.3750	0.00	0.00	0.00
0.3500	0.00	0.00	0.00
0.3250	0.00	0.00	0.00
0.3000	0.00	0.00	0.00
0.2750	0.00	0.00	0.00
0.2500	0.00	0.00	0.00
0.2250	0.00	0.00	0.00
0.2000	0.00	0.00	0.00
0.1750	0.00	0.00	0.00
0.1500	0.00	0.00	0.00
0.1250	0.00	0.00	0.00
0.1000	0.00	0.00	0.00
0.0750	0.00	0.00	0.00
0.0500	0.00	0.00	0.00
0.0400	0.00	0.00	0.00
0.0250	0.00	0.00	0.00

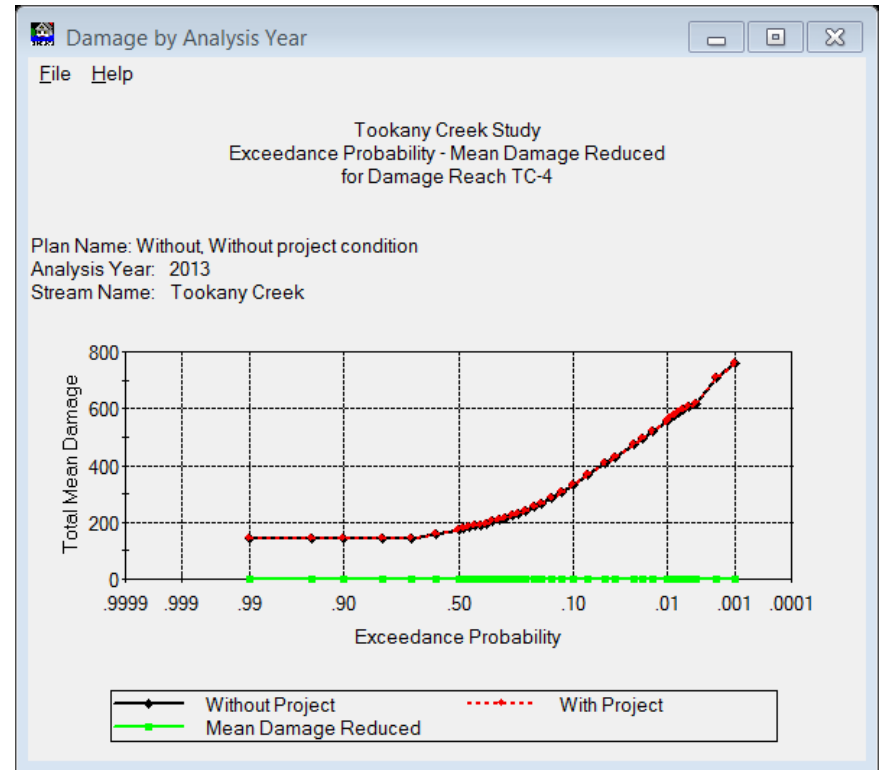
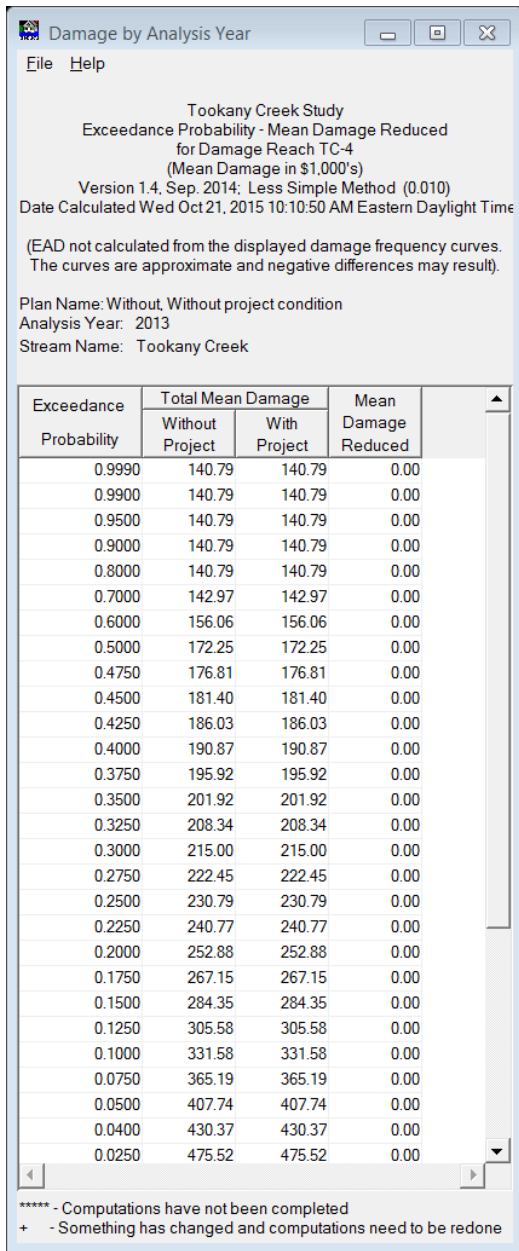
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

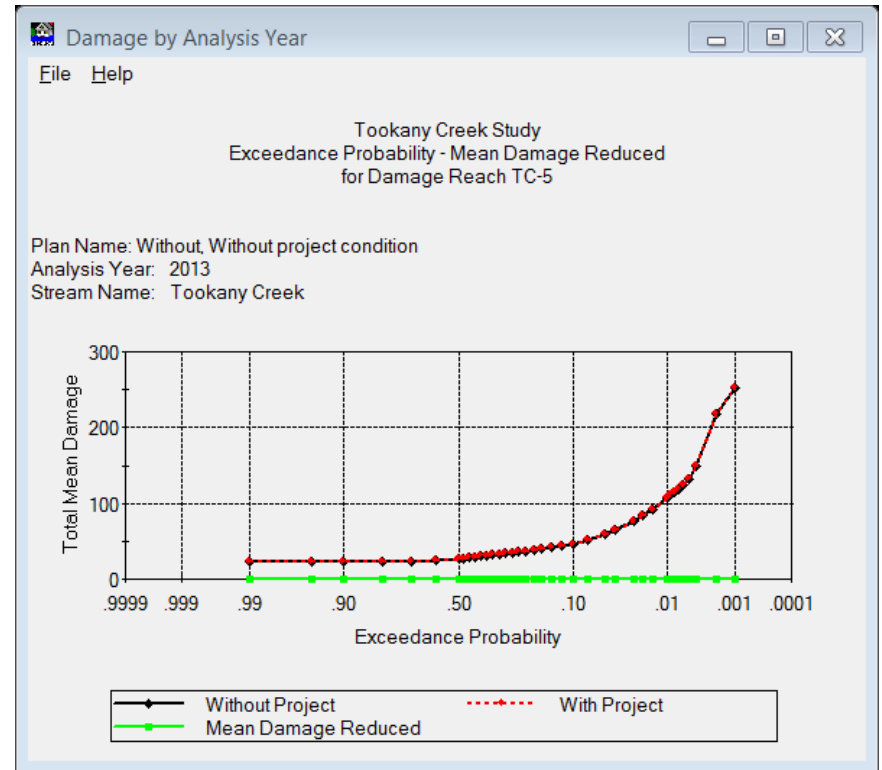
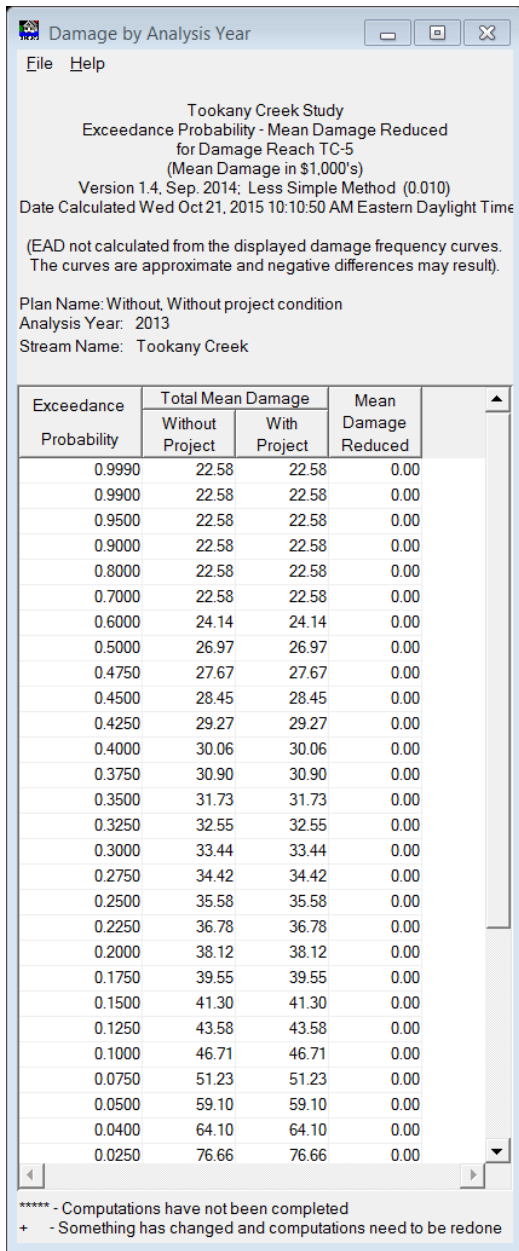
### Exceedance Probability – Mean Damage Reduced Functions

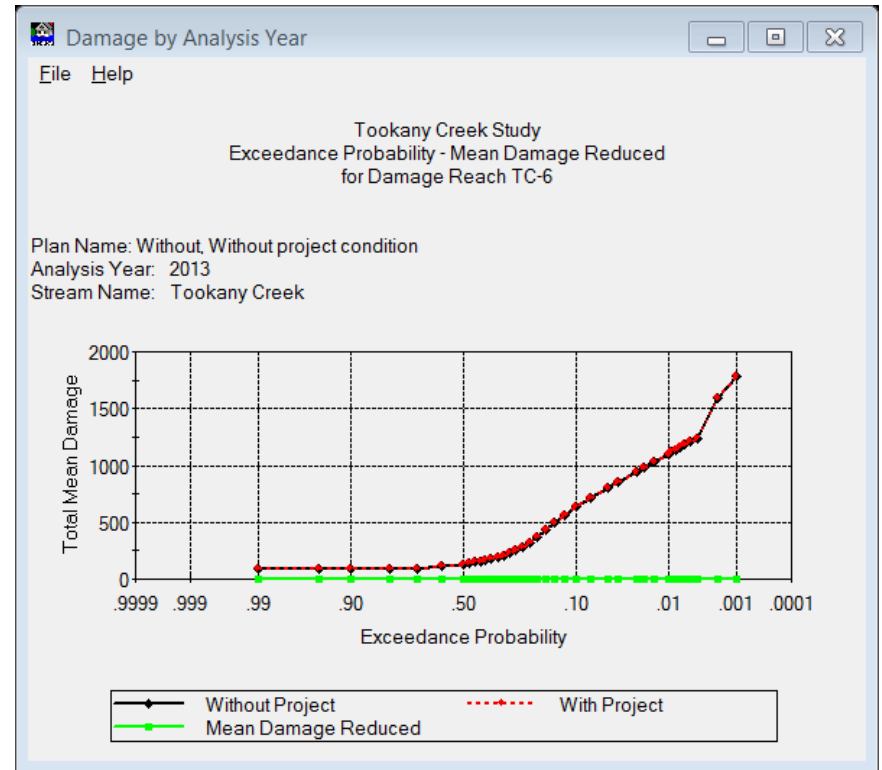
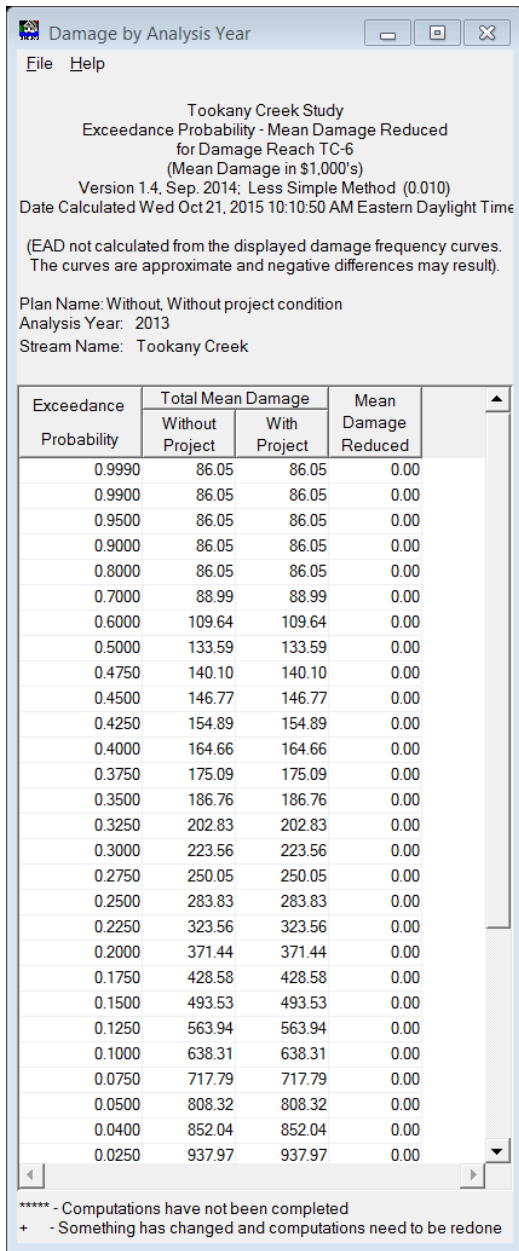


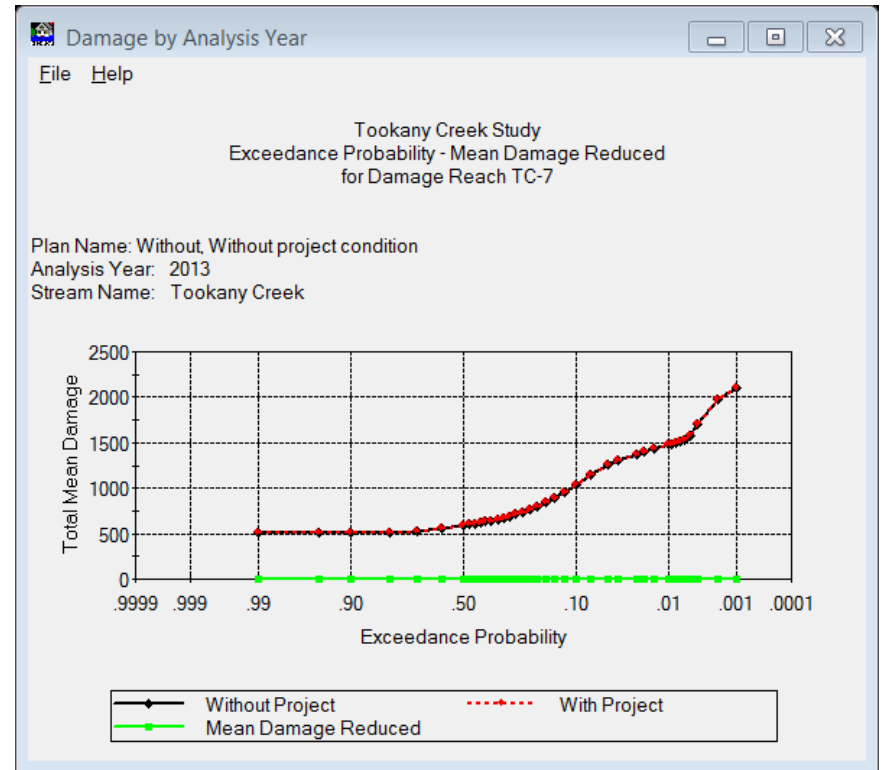
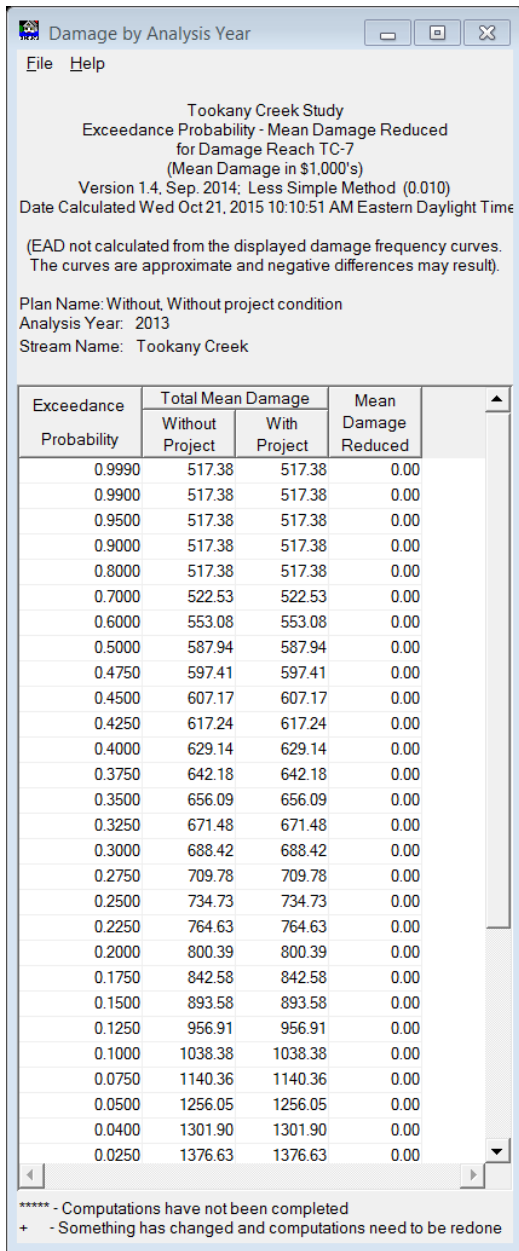














Damage by Analysis Year

File Help

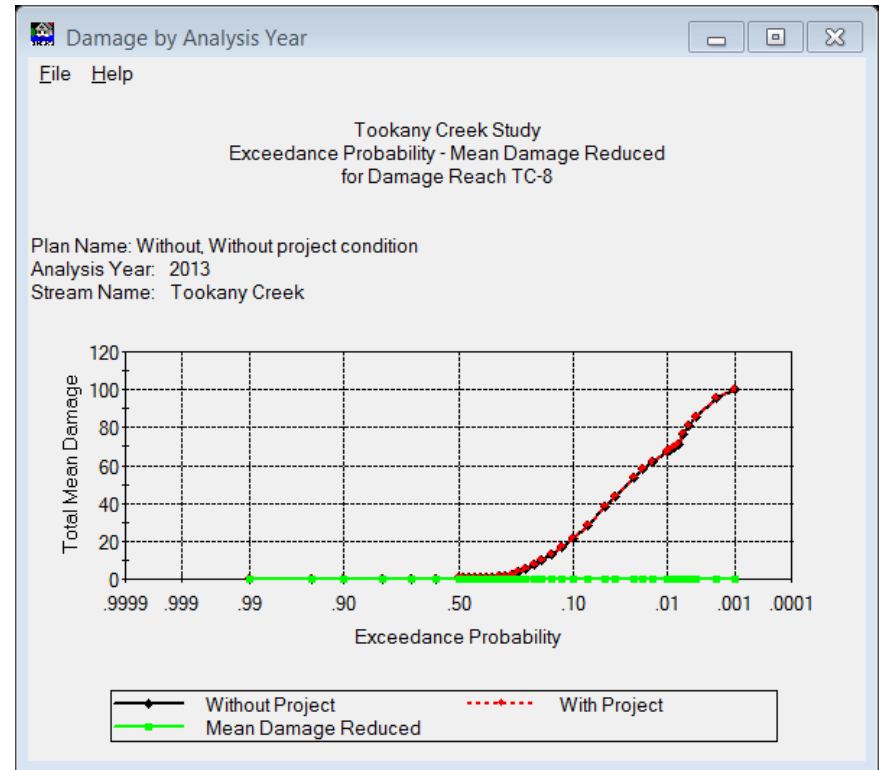
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-8  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:52 AM Eastern Daylight Time

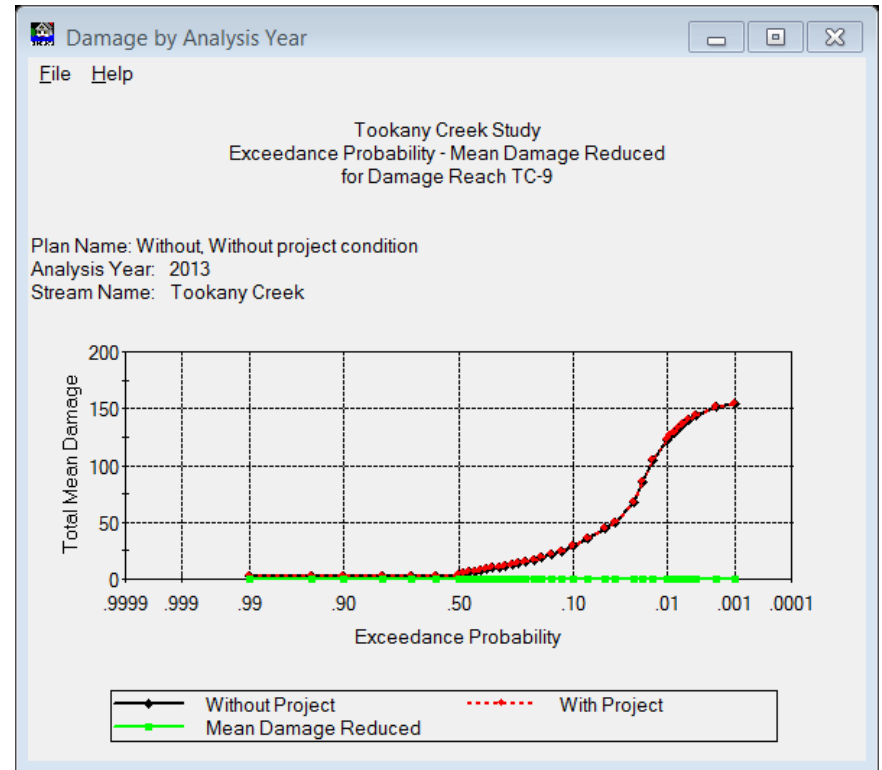
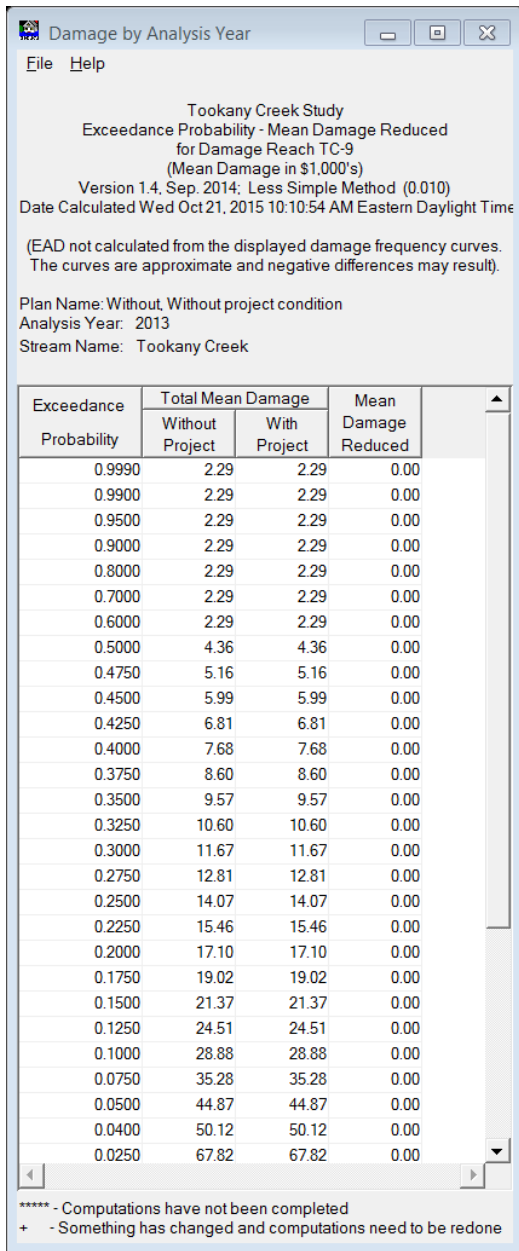
(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

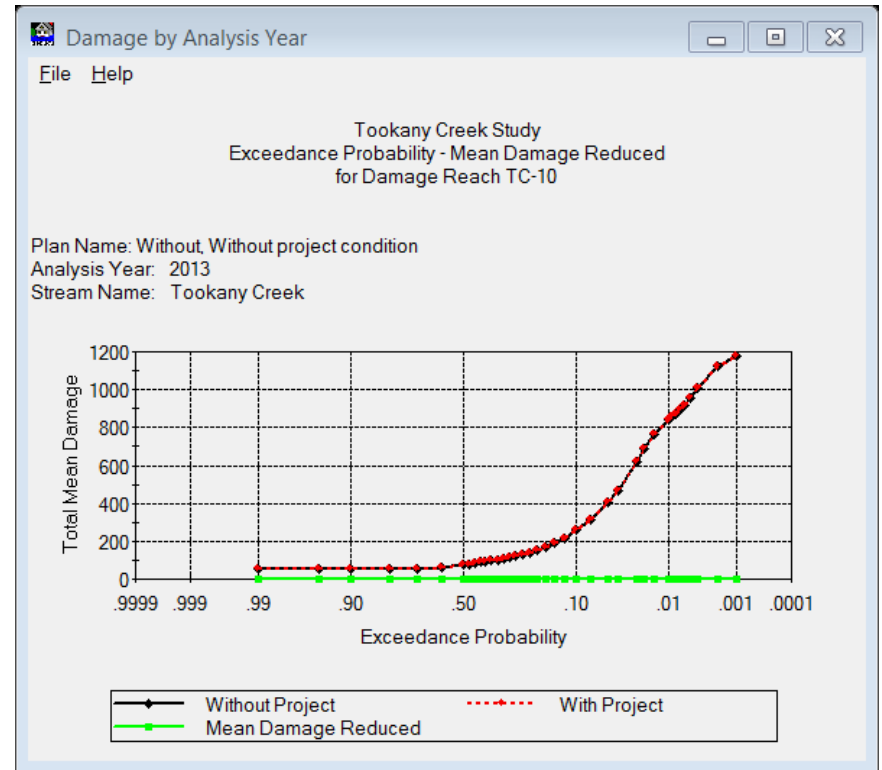
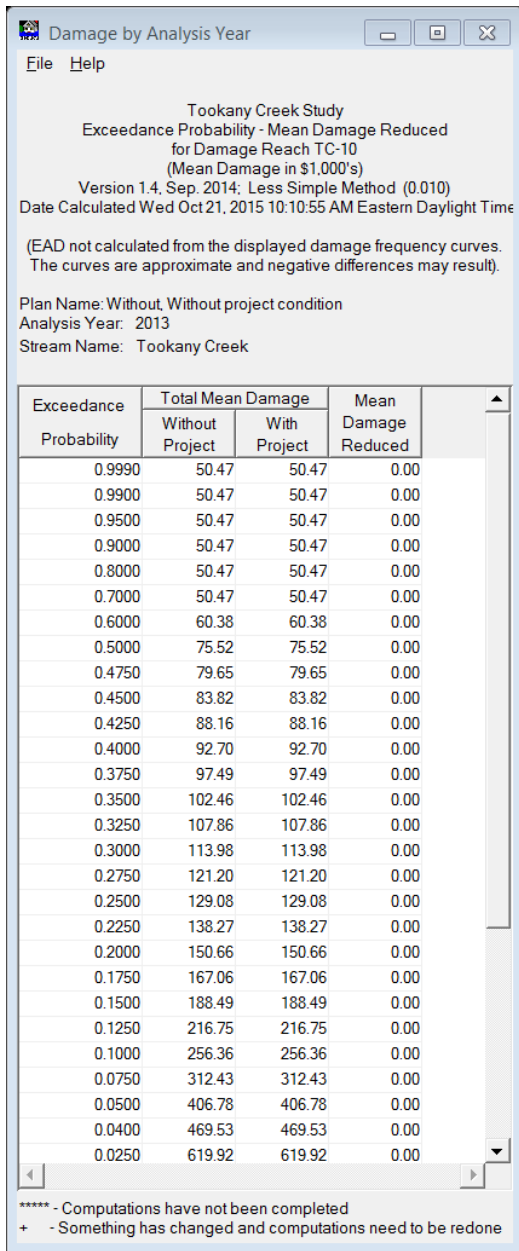
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	0.05	0.05	0.00
0.9900	0.05	0.05	0.00
0.9500	0.05	0.05	0.00
0.9000	0.05	0.05	0.00
0.8000	0.05	0.05	0.00
0.7000	0.05	0.05	0.00
0.6000	0.11	0.11	0.00
0.5000	0.42	0.42	0.00
0.4750	0.50	0.50	0.00
0.4500	0.60	0.60	0.00
0.4250	0.70	0.70	0.00
0.4000	0.81	0.81	0.00
0.3750	0.95	0.95	0.00
0.3500	1.12	1.12	0.00
0.3250	1.36	1.36	0.00
0.3000	1.79	1.79	0.00
0.2750	2.65	2.65	0.00
0.2500	3.93	3.93	0.00
0.2250	5.49	5.49	0.00
0.2000	7.38	7.38	0.00
0.1750	9.73	9.73	0.00
0.1500	12.74	12.74	0.00
0.1250	16.62	16.62	0.00
0.1000	21.73	21.73	0.00
0.0750	28.63	28.63	0.00
0.0500	38.50	38.50	0.00
0.0400	43.81	43.81	0.00
0.0250	53.86	53.86	0.00

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone







Damage by Analysis Year

File Help

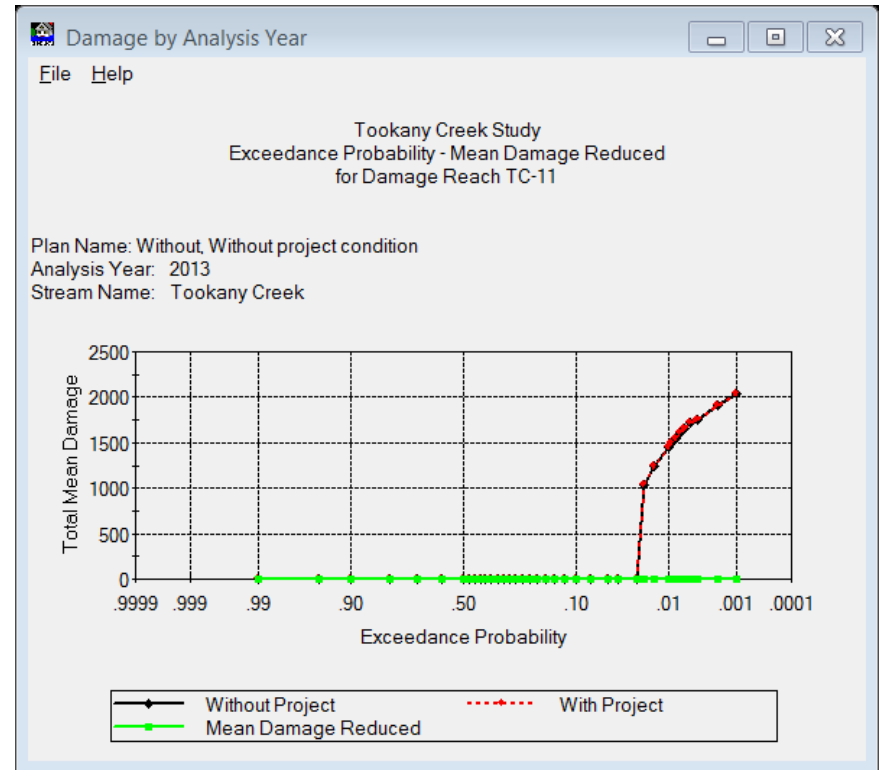
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-11  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:10:58 AM Eastern Daylight Time

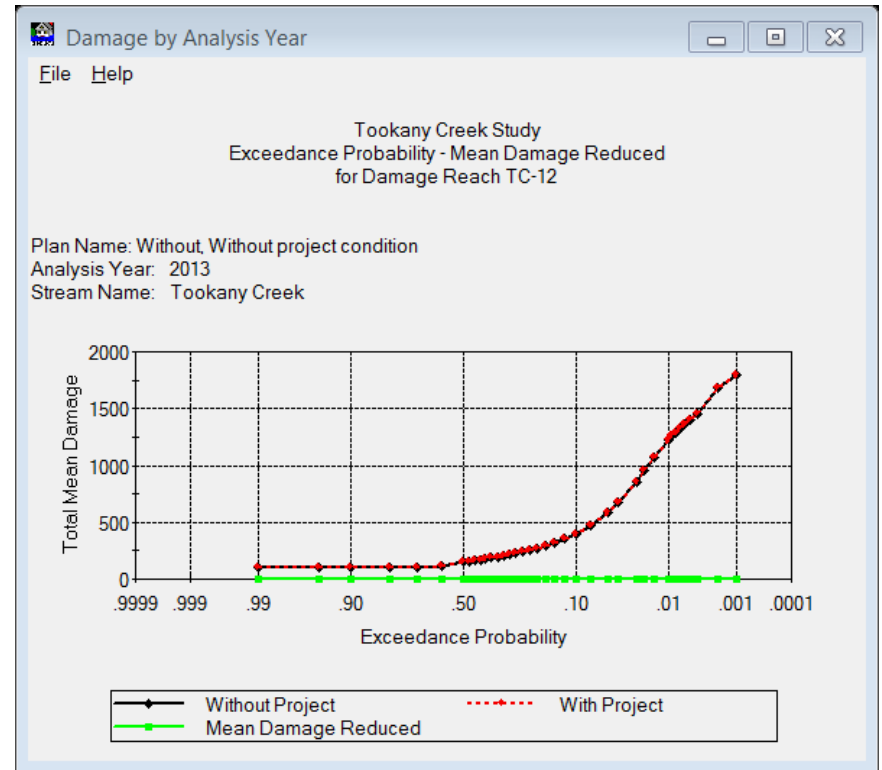
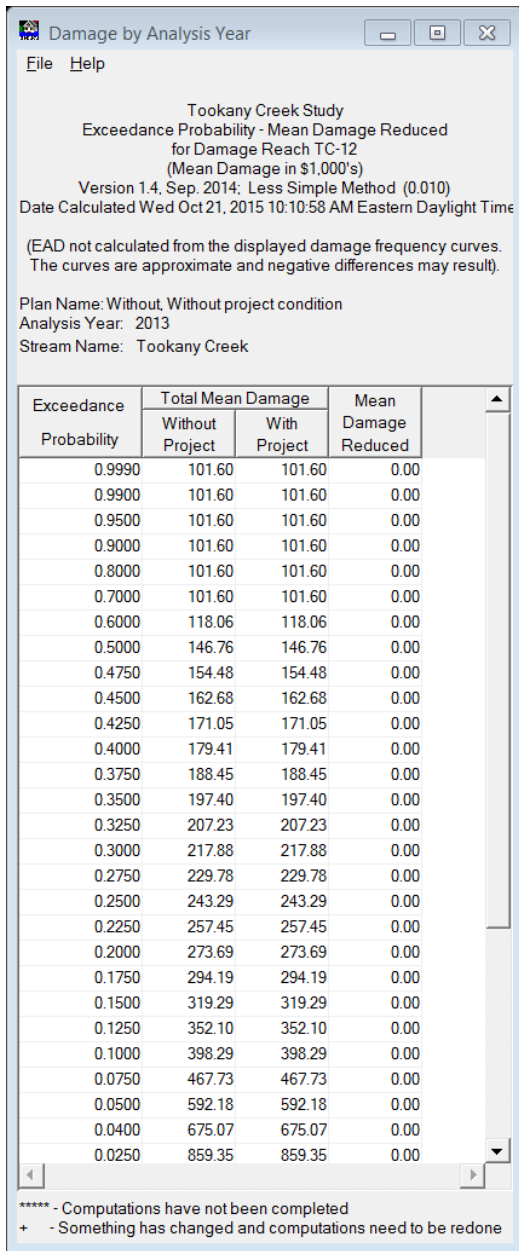
(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

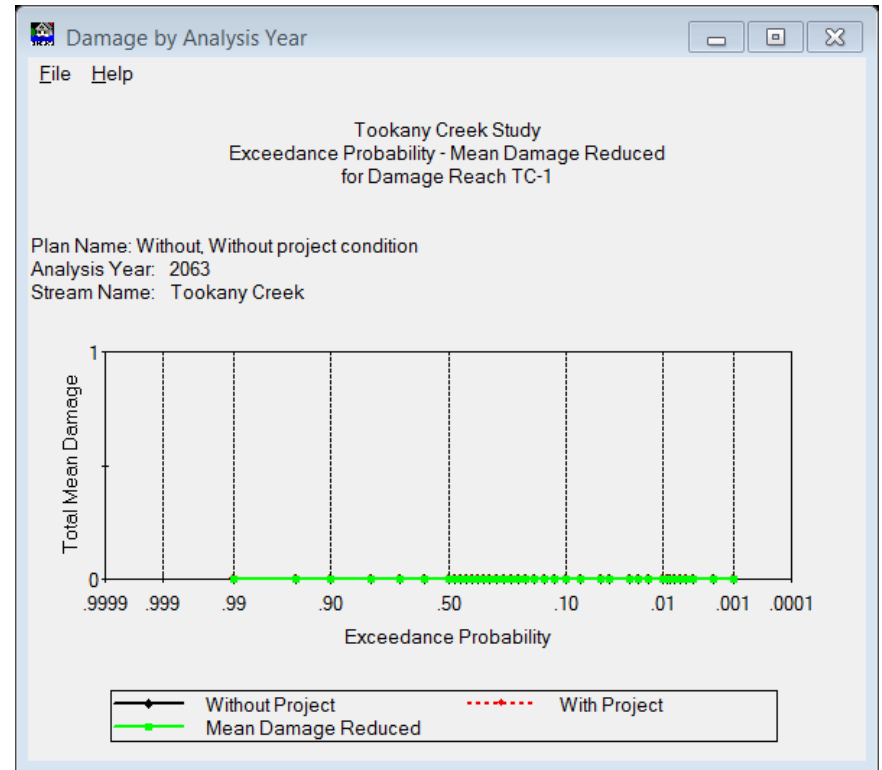
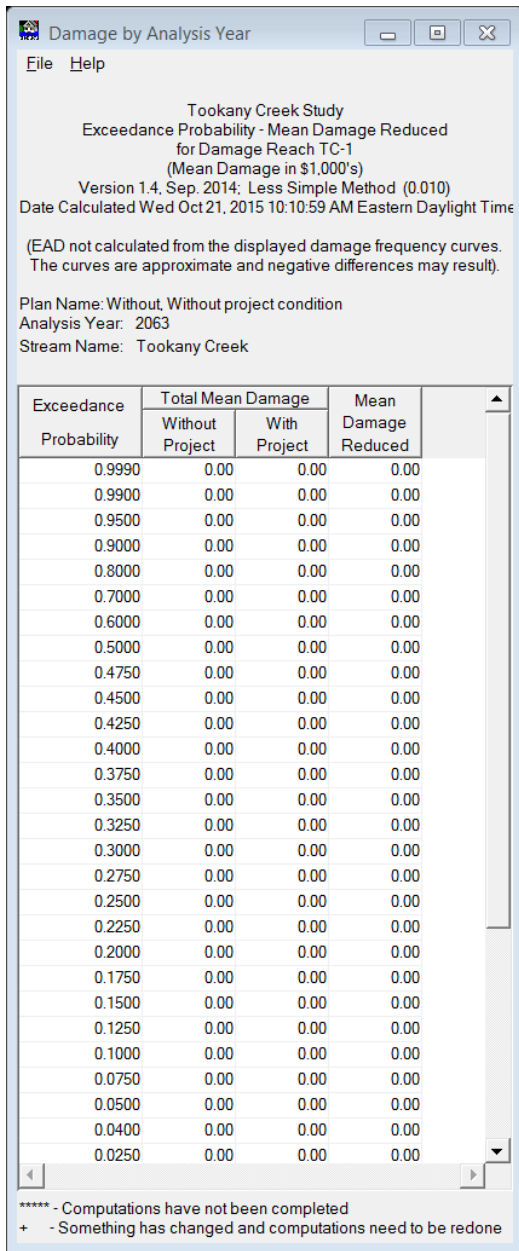
Plan Name: Without, Without project condition  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

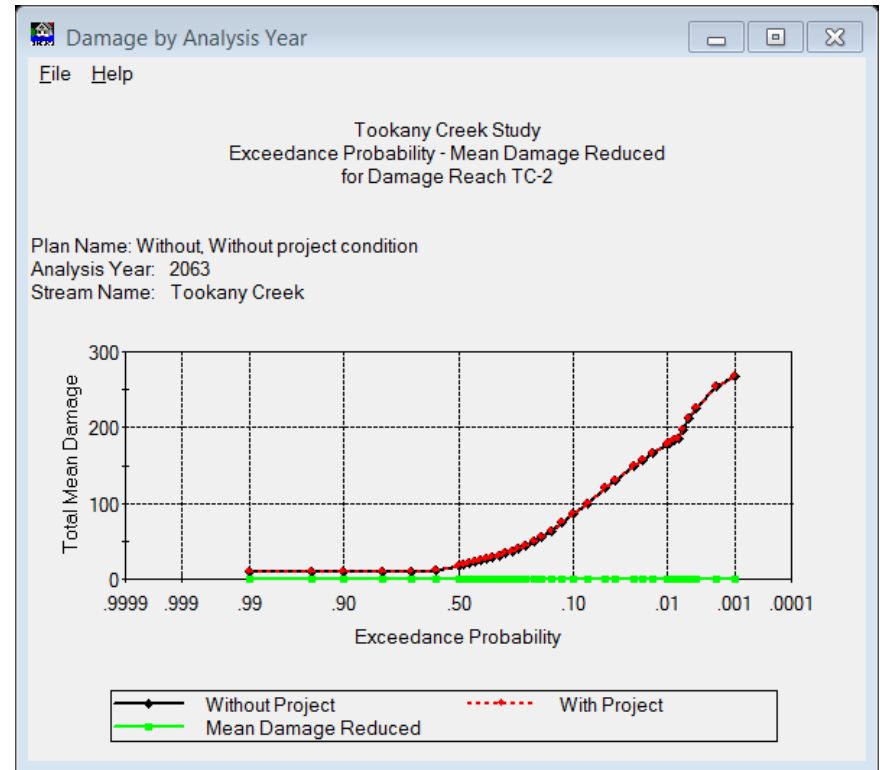
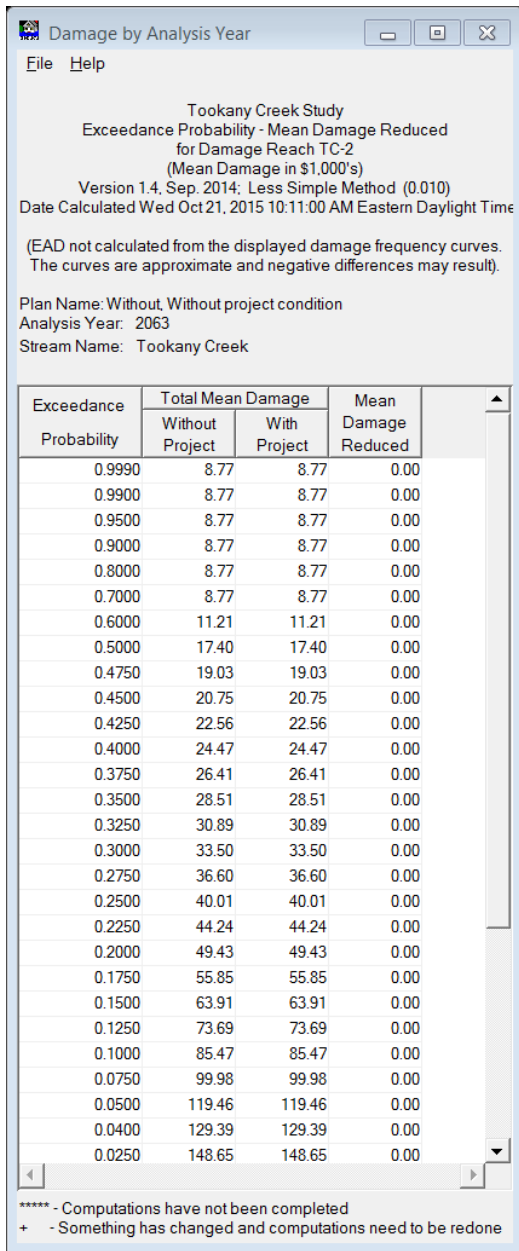
Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	0.00	0.00	0.00
0.9900	0.00	0.00	0.00
0.9500	0.00	0.00	0.00
0.9000	0.00	0.00	0.00
0.8000	0.00	0.00	0.00
0.7000	0.00	0.00	0.00
0.6000	0.00	0.00	0.00
0.5000	0.00	0.00	0.00
0.4750	0.00	0.00	0.00
0.4500	0.00	0.00	0.00
0.4250	0.00	0.00	0.00
0.4000	0.00	0.00	0.00
0.3750	0.00	0.00	0.00
0.3500	0.00	0.00	0.00
0.3250	0.00	0.00	0.00
0.3000	0.00	0.00	0.00
0.2750	0.00	0.00	0.00
0.2500	0.00	0.00	0.00
0.2250	0.00	0.00	0.00
0.2000	0.00	0.00	0.00
0.1750	0.00	0.00	0.00
0.1500	0.00	0.00	0.00
0.1250	0.00	0.00	0.00
0.1000	0.00	0.00	0.00
0.0750	0.00	0.00	0.00
0.0500	0.00	0.00	0.00
0.0400	0.00	0.00	0.00
0.0250	0.00	0.00	0.00

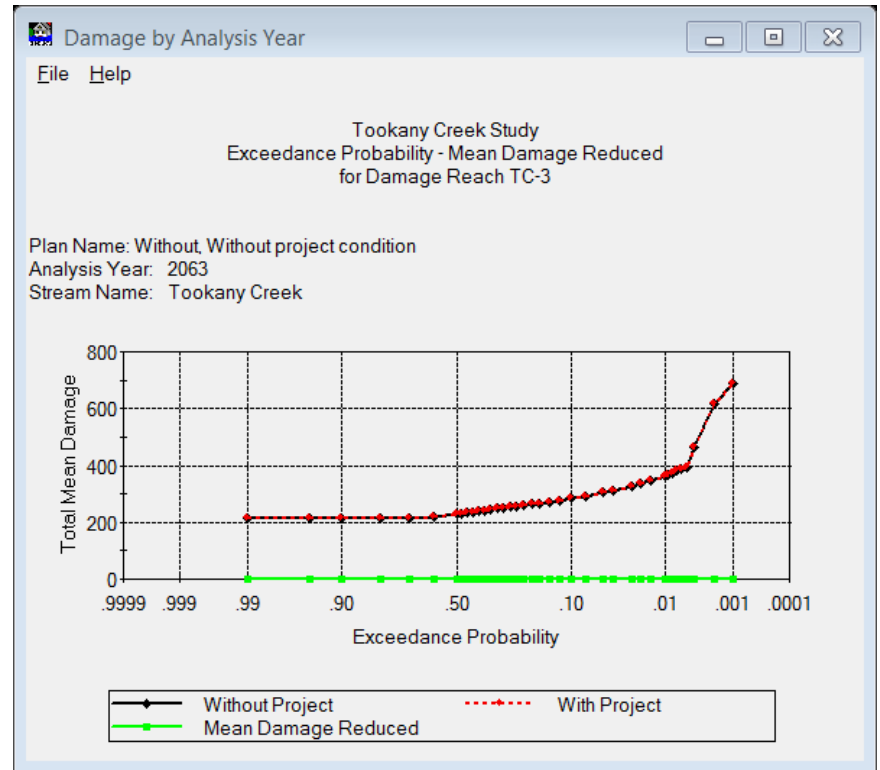
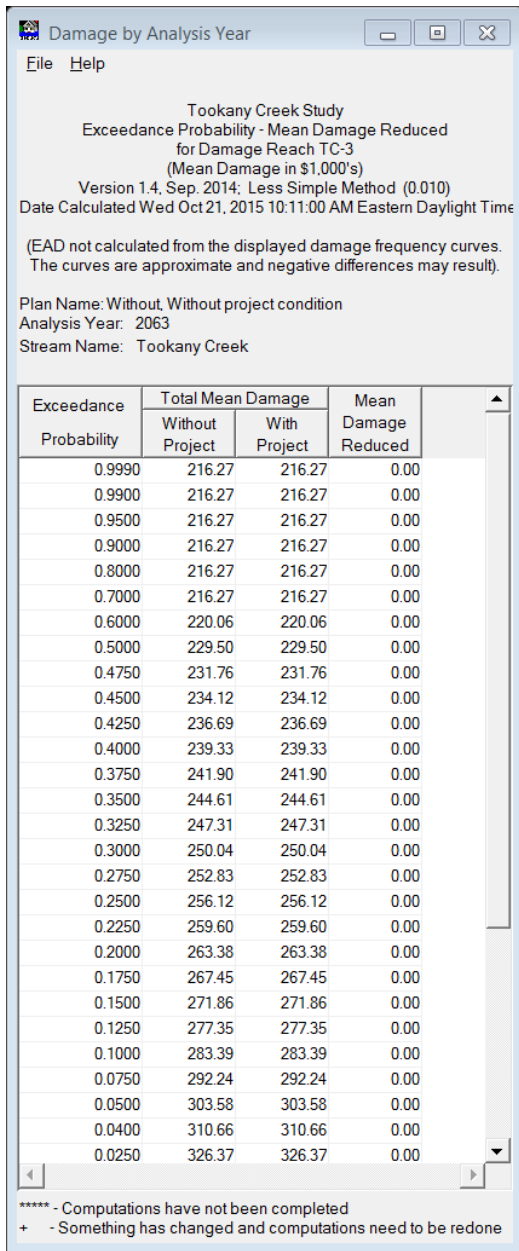
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



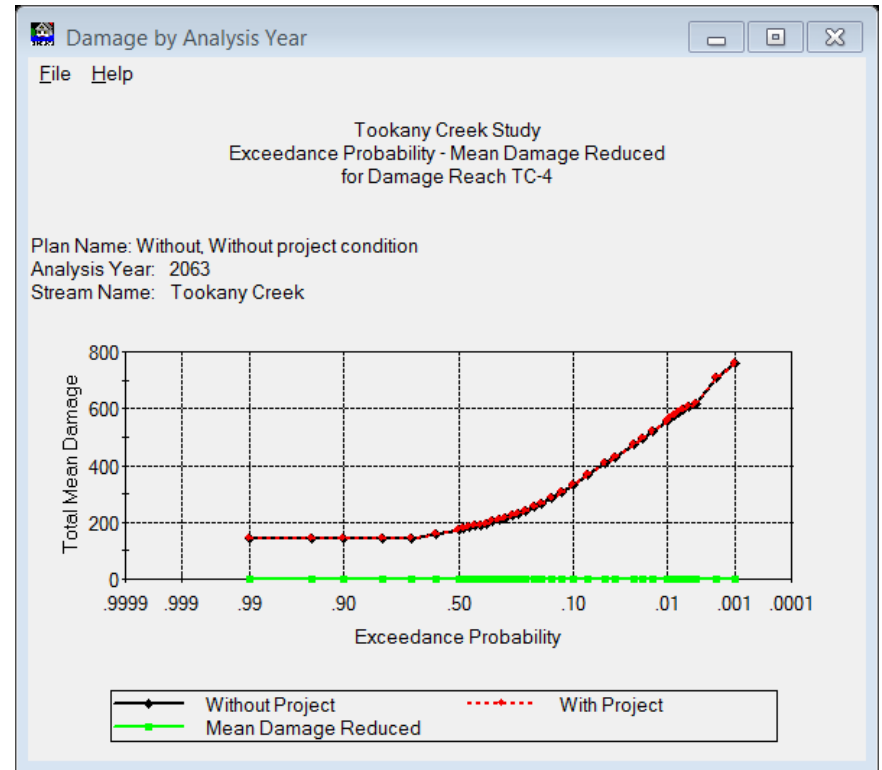
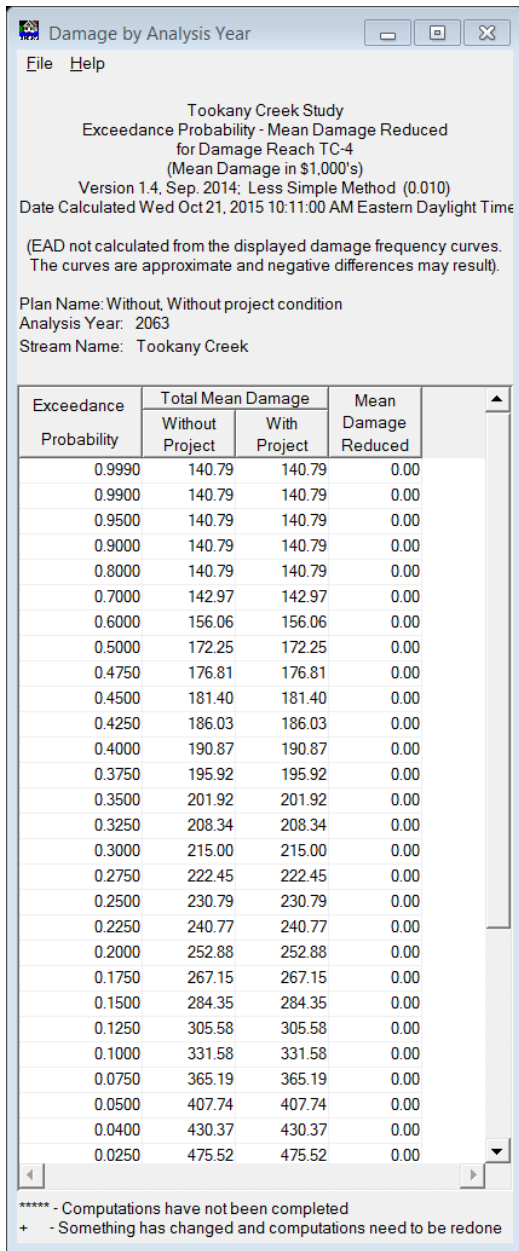


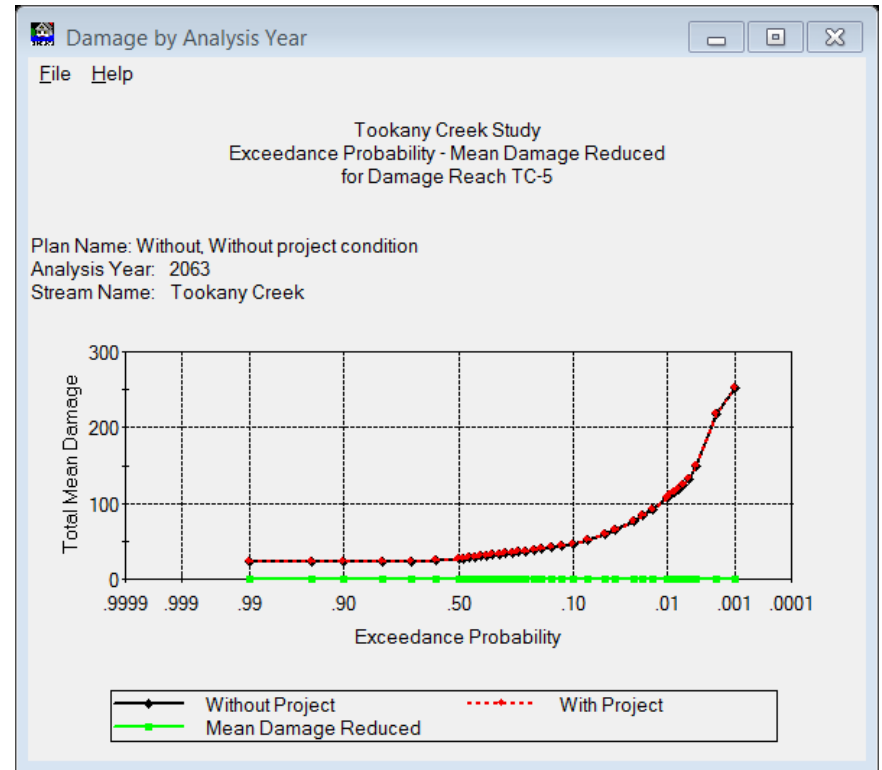
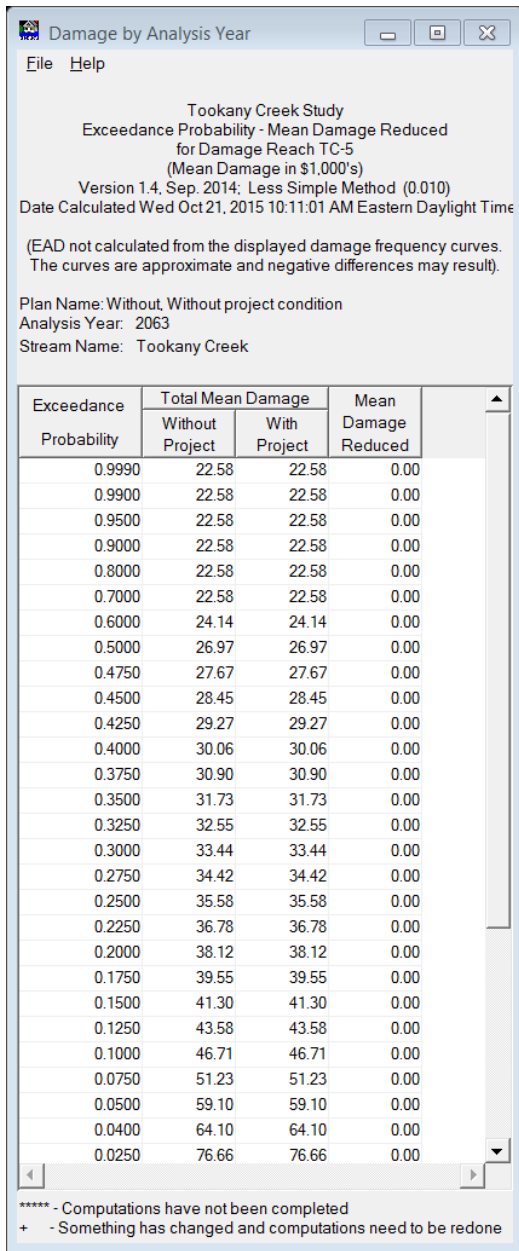


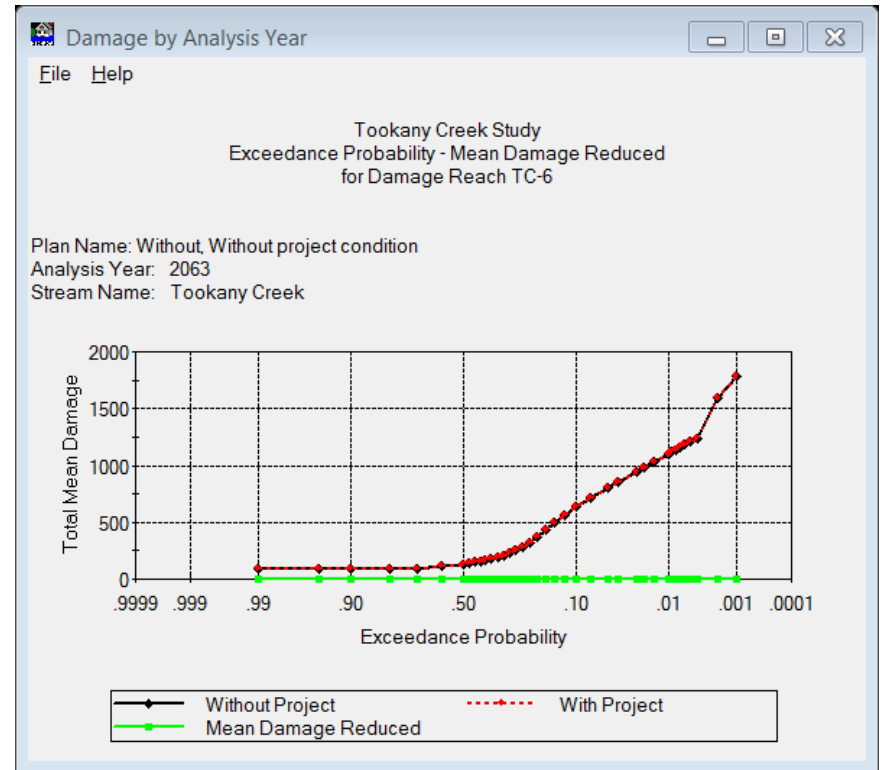
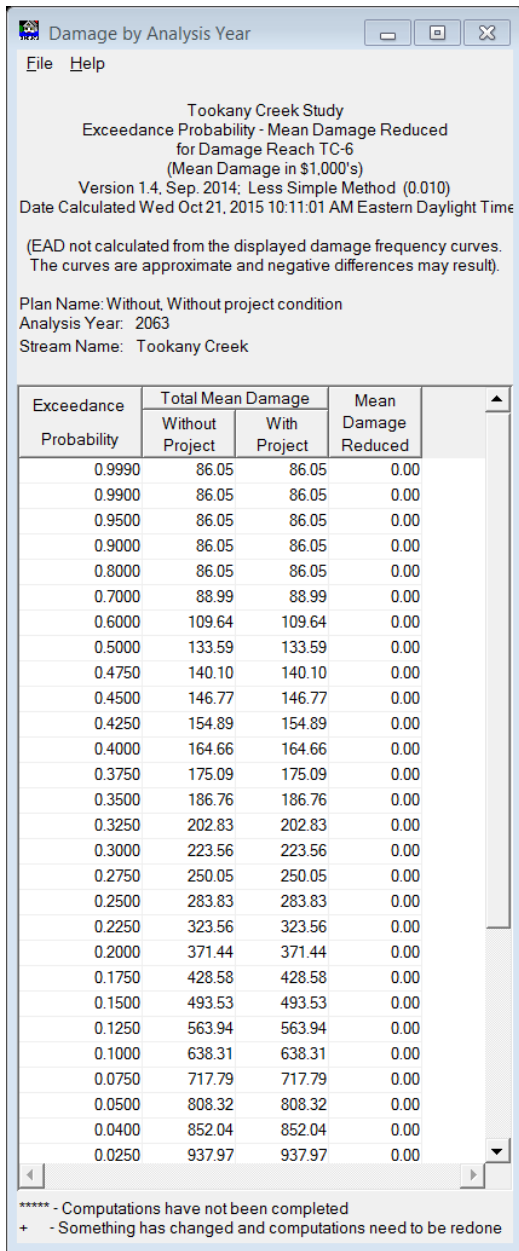


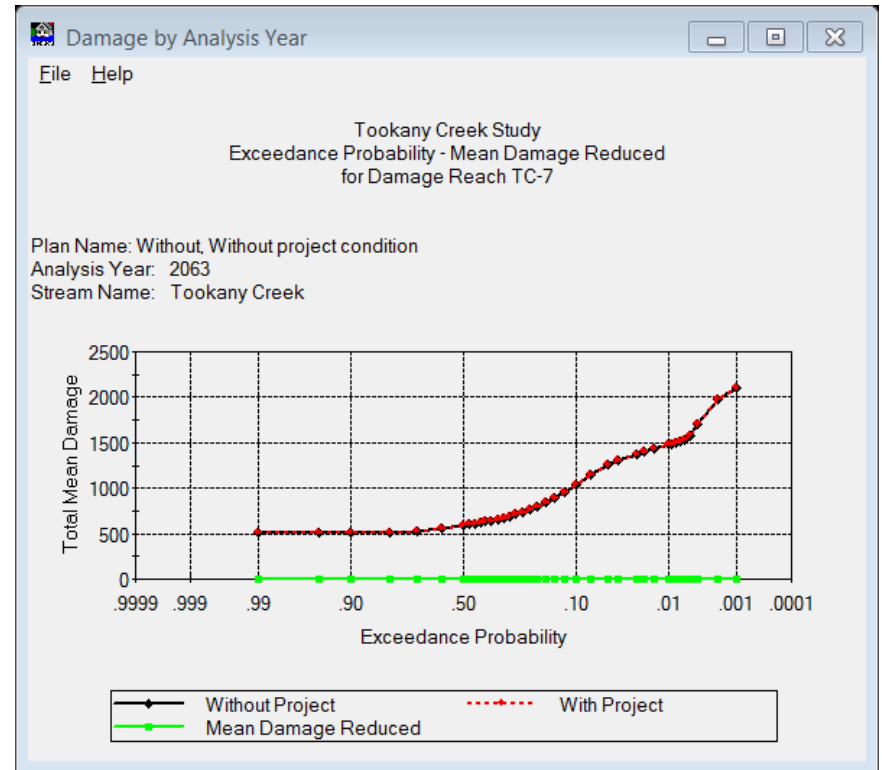
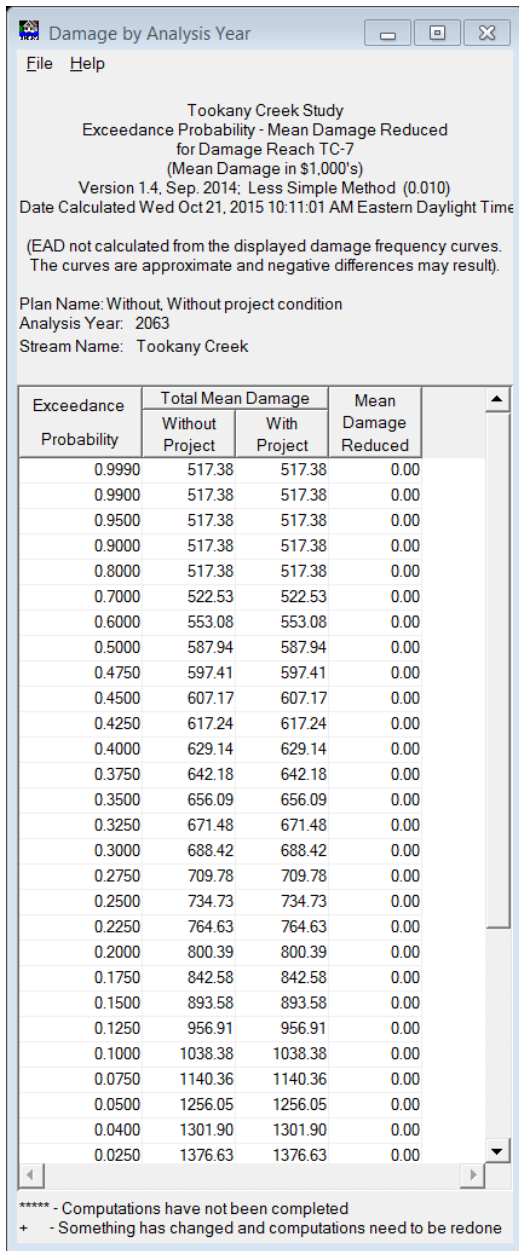


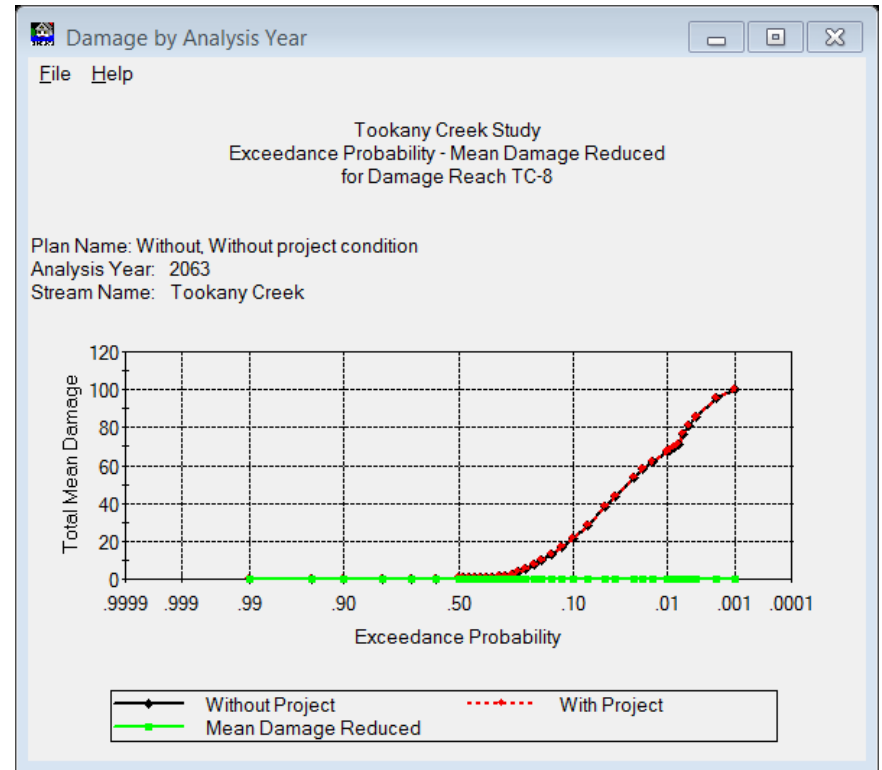
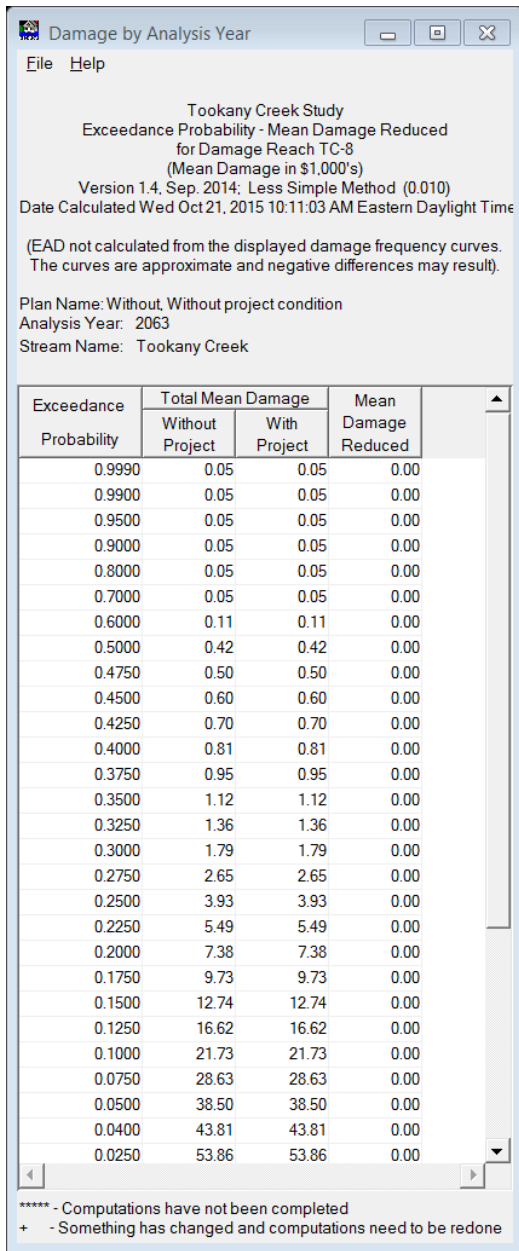


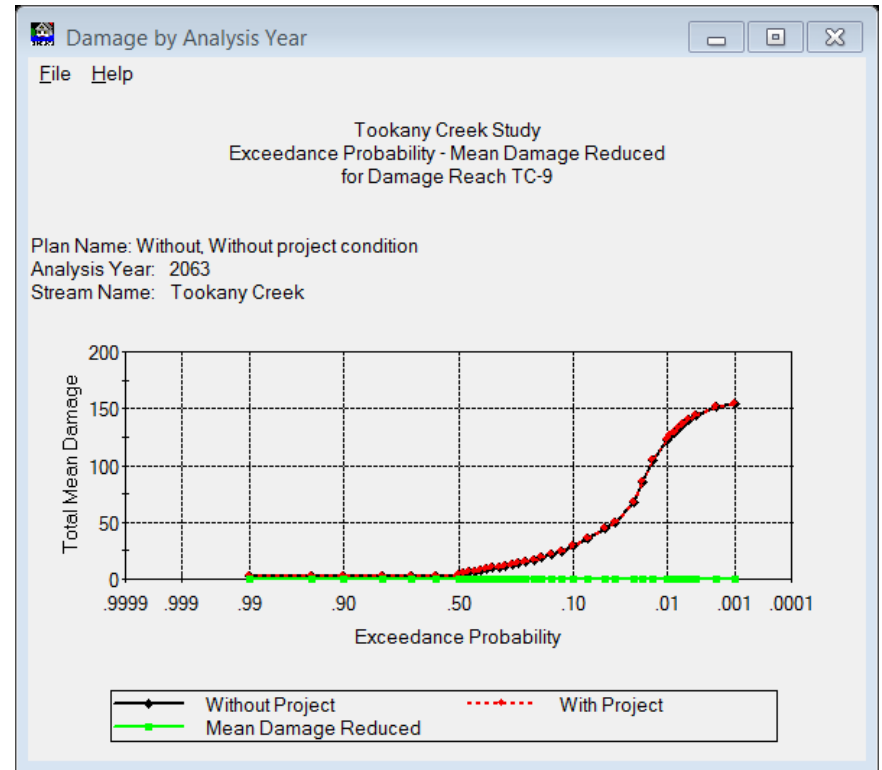
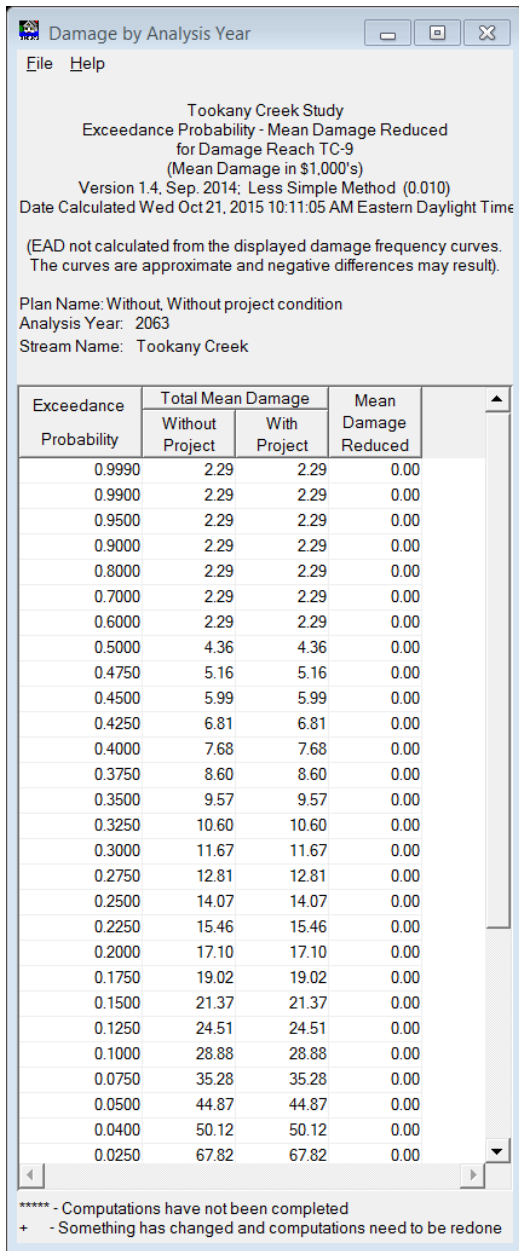


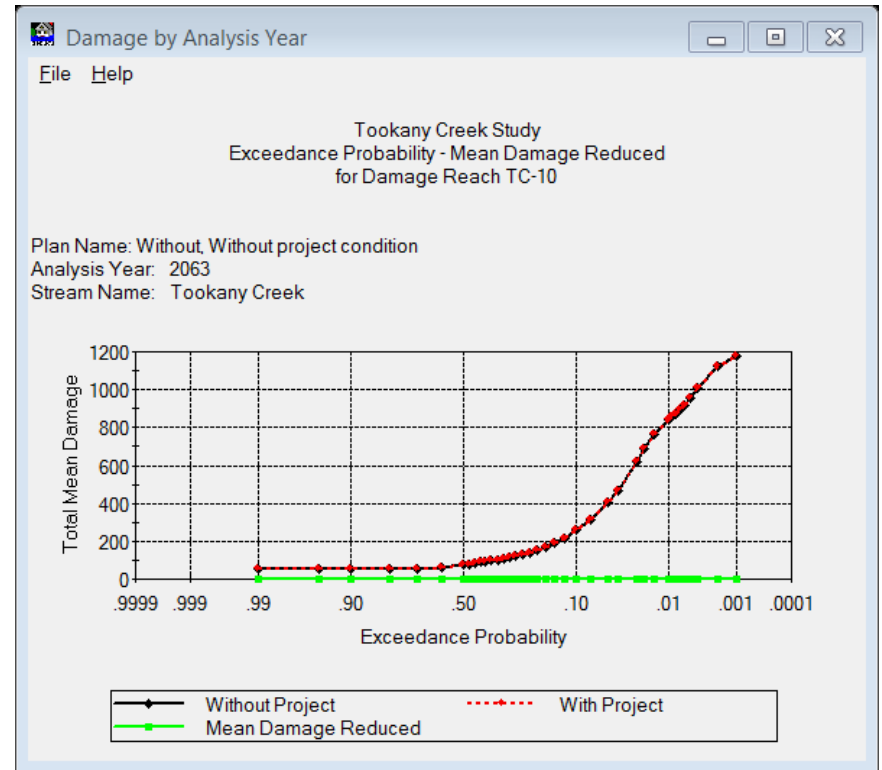
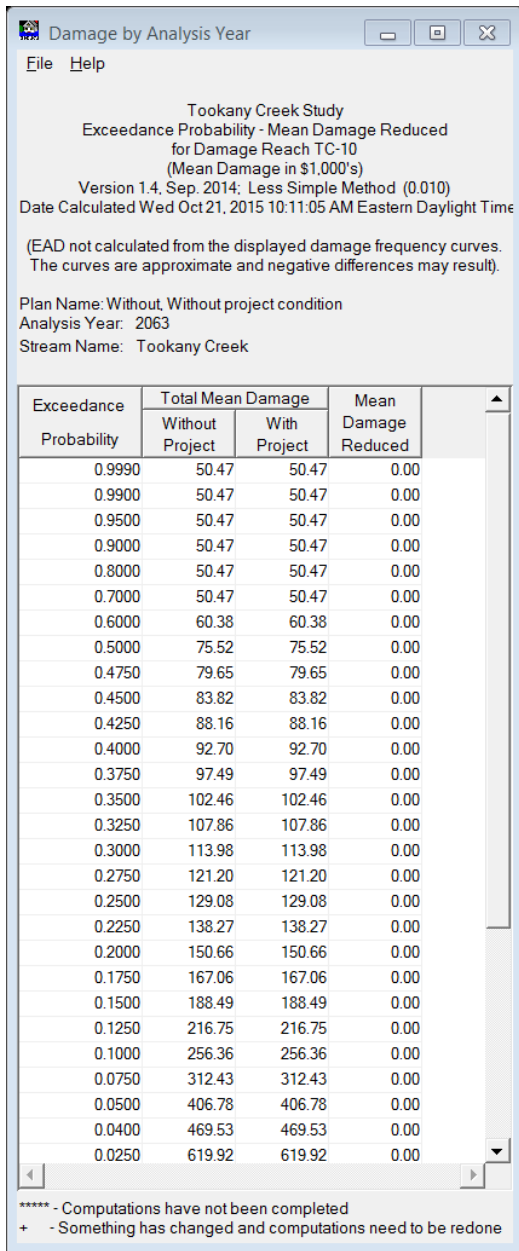


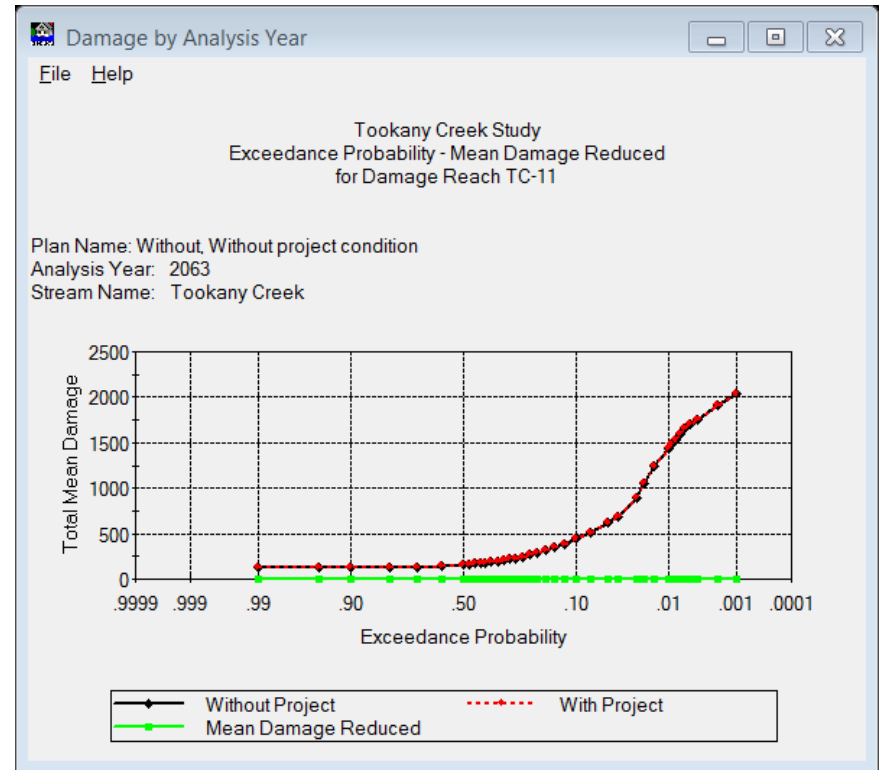
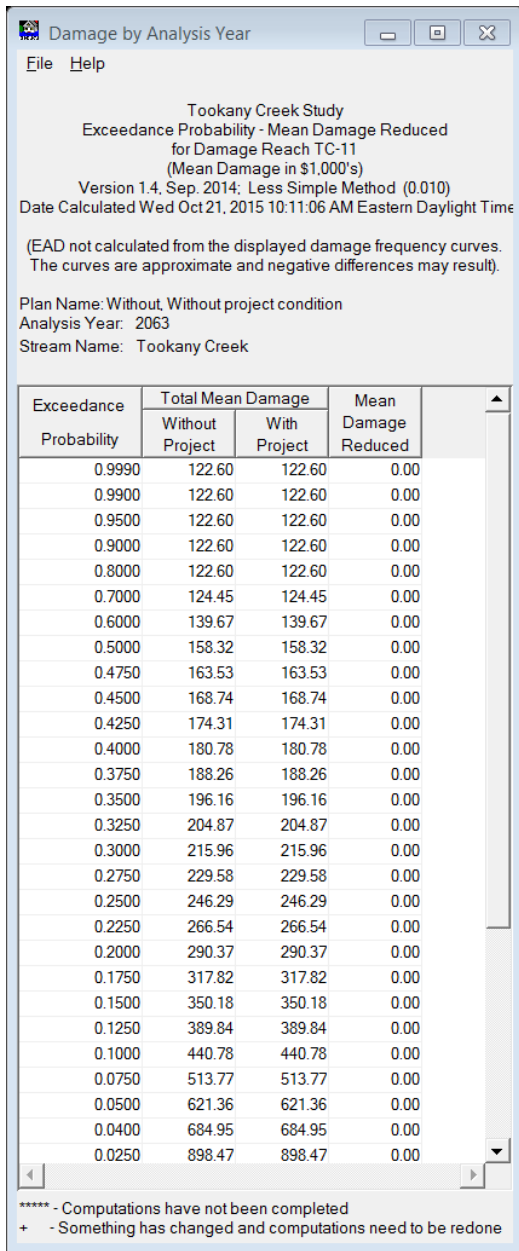




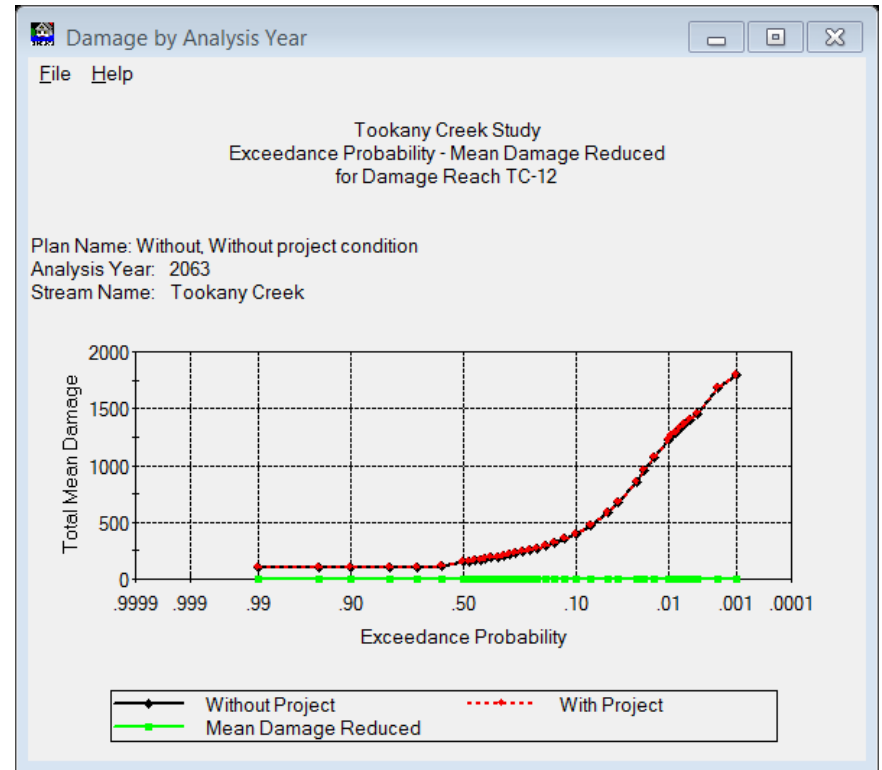
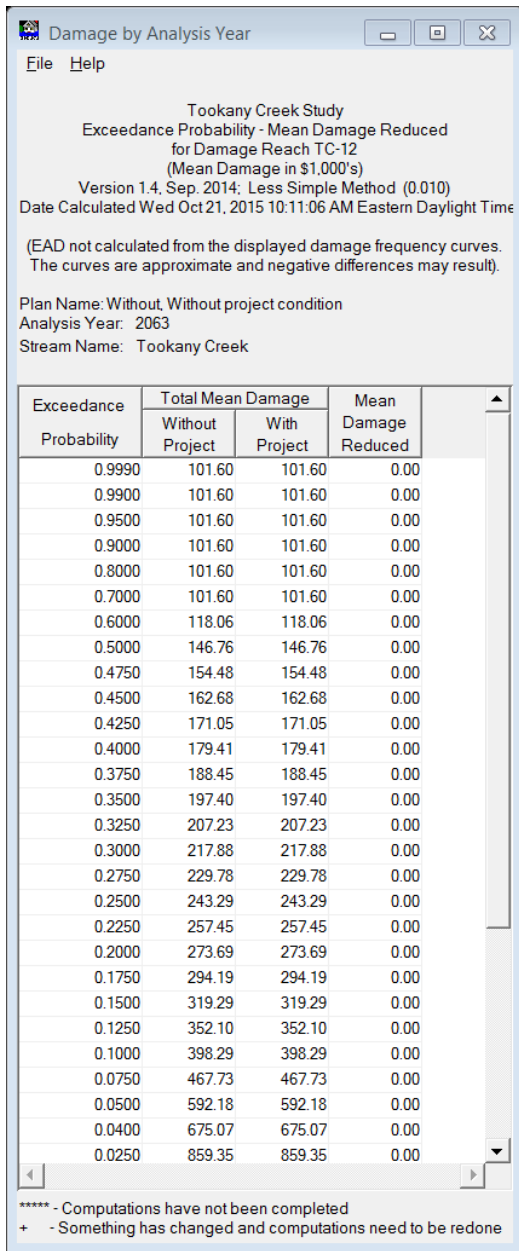








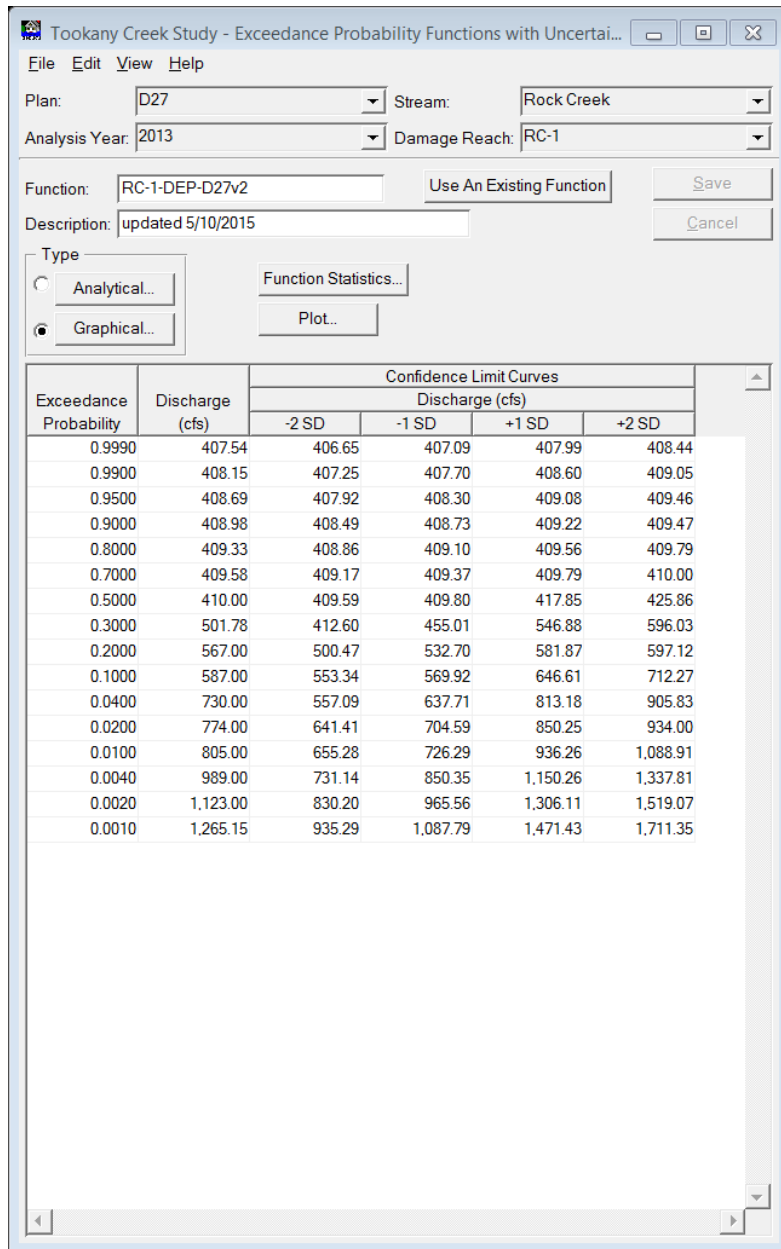




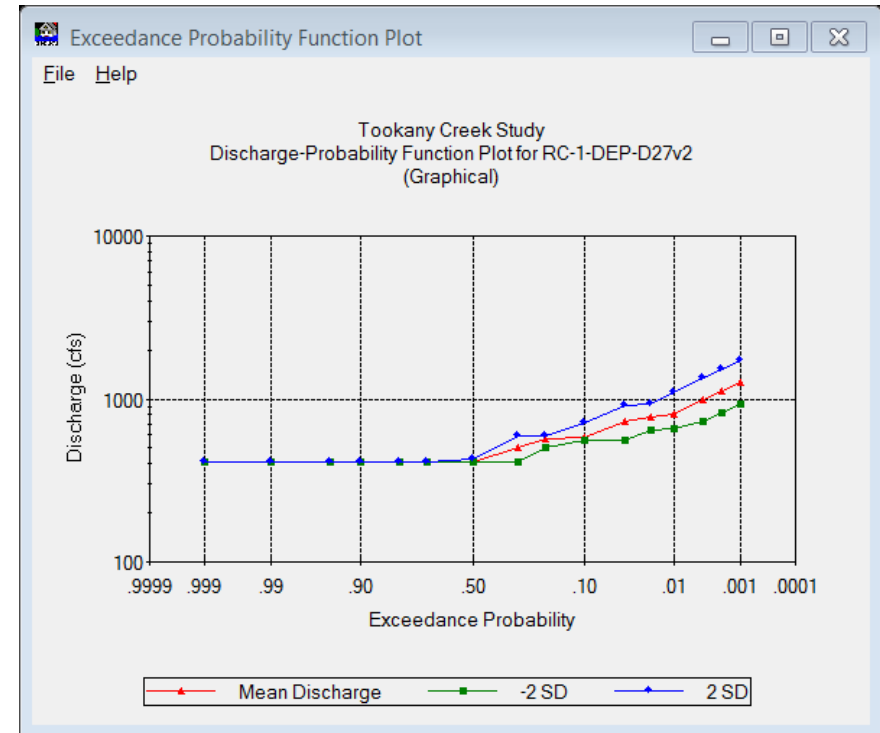
## 10. Tentatively Selected Plan (D27) HEC-FDA Modeling

Rock Creek

Rock Creek TSP D27 Water Surface Profile



Rock Creek D27 Exceedance Probability Functions with Uncertainty



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

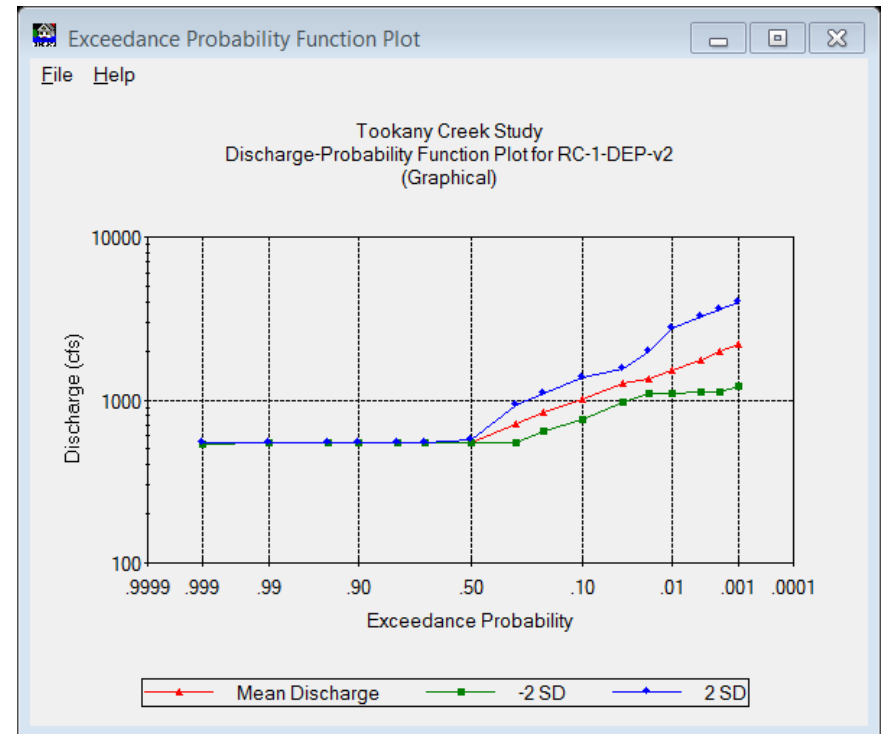
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	541.58	540.33	540.95	542.20	542.83
0.9900	542.42	541.17	541.80	543.05	543.67
0.9500	543.18	542.10	542.64	543.71	544.25
0.9000	543.58	542.89	543.24	543.92	544.26
0.8000	544.07	543.42	543.74	544.39	544.71
0.7000	544.42	543.84	544.13	544.71	544.99
0.5000	545.00	544.42	544.71	558.95	573.26
0.3000	714.14	549.63	626.51	814.03	927.89
0.2000	841.00	649.81	739.25	956.75	1,088.44
0.1000	1,013.00	752.07	872.84	1,175.67	1,364.47
0.0400	1,260.00	965.87	1,103.17	1,397.85	1,550.79
0.0200	1,333.00	1,106.55	1,214.51	1,622.28	1,974.34
0.0100	1,518.00	1,107.57	1,296.64	2,043.95	2,752.14
0.0040	1,773.00	1,110.63	1,403.26	2,387.31	3,214.46
0.0020	1,980.00	1,111.14	1,483.26	2,666.03	3,589.75
0.0010	2,196.08	1,211.29	1,630.98	2,956.98	3,981.51



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

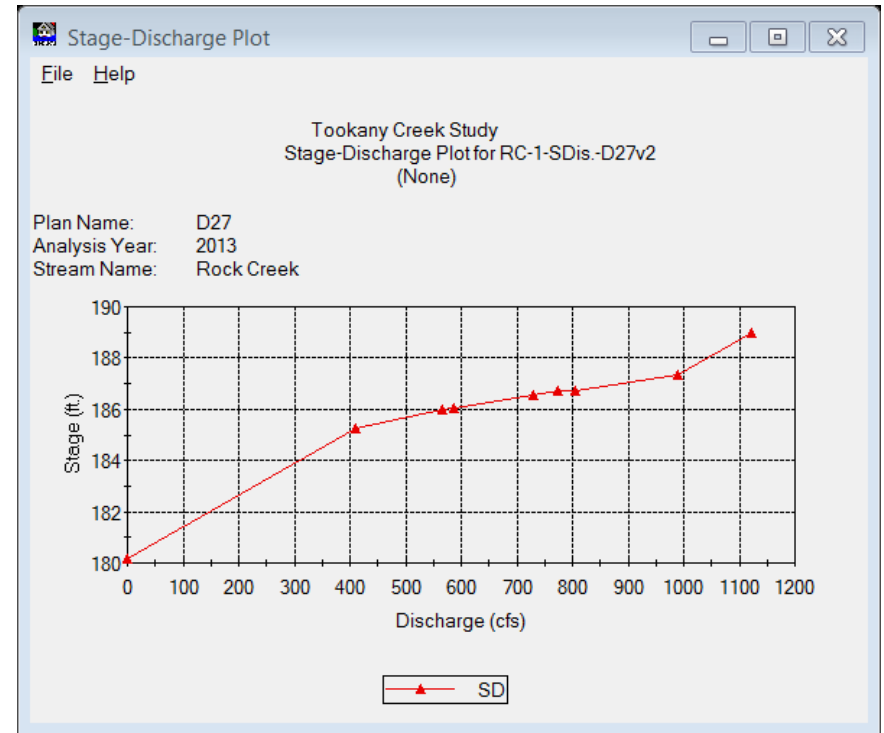
Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	180.15
2	410.00	185.23
3	567.00	185.99
4	587.00	186.07
5	730.00	186.57
6	774.00	186.71
7	805.00	186.74
8	989.00	187.35
9	1123.00	188.97
10		
11		
12		
13		
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30		
31		

### Rock Creek D27 Stage – Discharge Functions



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

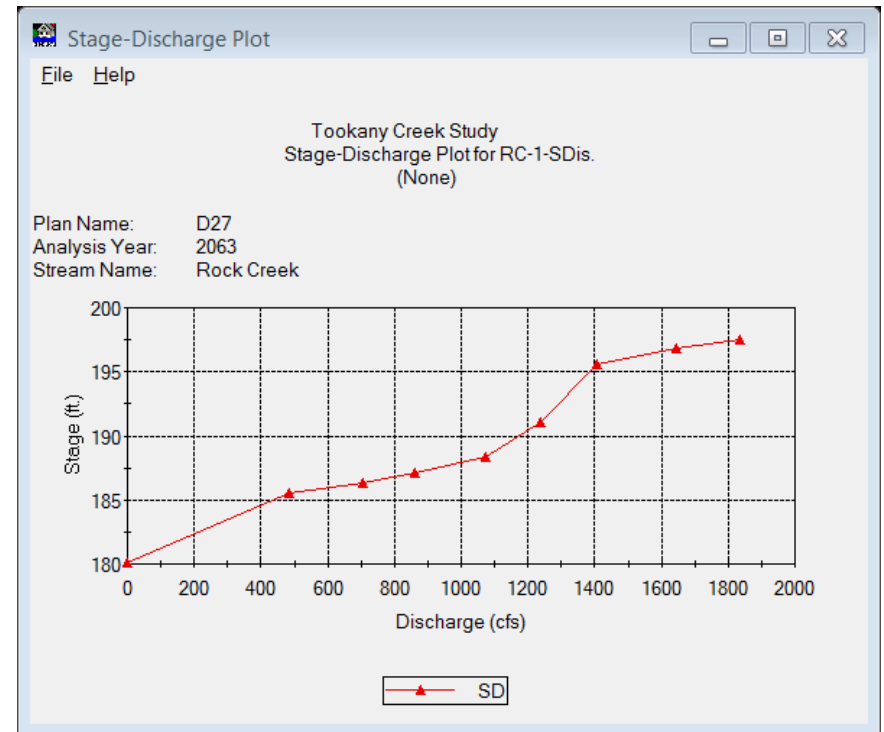
Function:  Use An Existing Function Plot...

Description:  Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft.)
1	0.00	180.06
2	487.00	185.49
3	707.00	186.31
4	863.00	187.07
5	1073.00	188.31
6	1237.00	191.02
7	1408.00	195.60
8	1645.00	196.78
9	1837.00	197.52
10		
11		
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31		



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

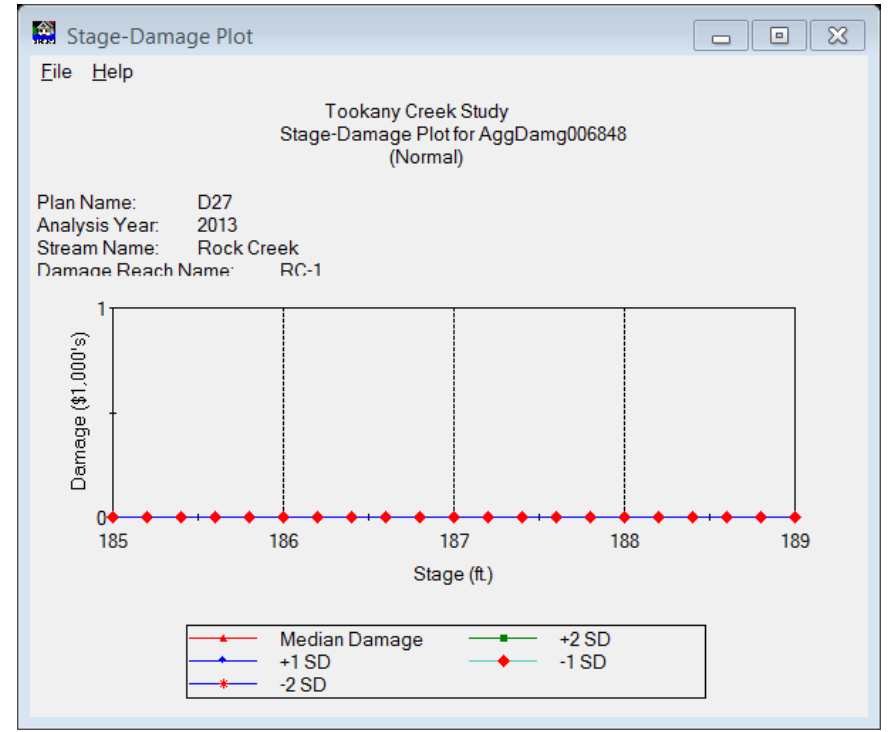
Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.00	0.00	0.00
2	185.20	0.00	0.00
3	185.40	0.00	0.00
4	185.60	0.00	0.00
5	185.80	0.00	0.00
6	186.00	0.00	0.00
7	186.20	0.00	0.00
8	186.40	0.00	0.00
9	186.60	0.00	0.00
10	186.80	0.00	0.00
11	187.00	0.00	0.00
12	187.20	0.00	0.00
13	187.40	0.00	0.00
14	187.60	0.00	0.00
15	187.80	0.00	0.00
16	188.00	0.00	0.00
17	188.20	0.00	0.00
18	188.40	0.00	0.00
19	188.60	0.00	0.00
20	188.80	0.00	0.00
21	189.00	0.00	0.00
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

### Rock Creek D27 Stage – Damage Functions



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Damage Category: Industrial

Function: AggDamg006849 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.00	0.00	0.00
2	185.20	0.00	0.00
3	185.40	0.00	0.00
4	185.60	0.00	0.00
5	185.80	0.00	0.00
6	186.00	0.00	0.00
7	186.20	0.00	0.00
8	186.40	0.00	0.00
9	186.60	0.00	0.00
10	186.80	0.00	0.00
11	187.00	0.00	0.00
12	187.20	0.00	0.00
13	187.40	0.00	0.00
14	187.60	0.00	0.00
15	187.80	0.00	0.00
16	188.00	0.00	0.00
17	188.20	0.00	0.00
18	188.40	0.00	0.00
19	188.60	0.00	0.00
20	188.80	0.00	0.00
21	189.00	0.00	0.00
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Rock Creek

Analysis Year: 2013 Damage Reach: RC-1

Damage Category: Public

Function: AggDamg006850 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.00	0.00	0.00
2	185.20	0.00	0.00
3	185.40	0.00	0.00
4	185.60	0.00	0.00
5	185.80	0.00	0.00
6	186.00	0.00	0.00
7	186.20	0.00	0.00
8	186.40	0.00	0.00
9	186.60	0.00	0.00
10	186.80	0.00	0.00
11	187.00	0.00	0.00
12	187.20	0.00	0.00
13	187.40	0.00	0.00
14	187.60	0.00	0.00
15	187.80	0.00	0.00
16	188.00	0.00	0.00
17	188.20	0.00	0.00
18	188.40	0.00	0.00
19	188.60	0.00	0.00
20	188.80	0.00	0.00
21	189.00	0.00	0.00
22			
23			
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Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

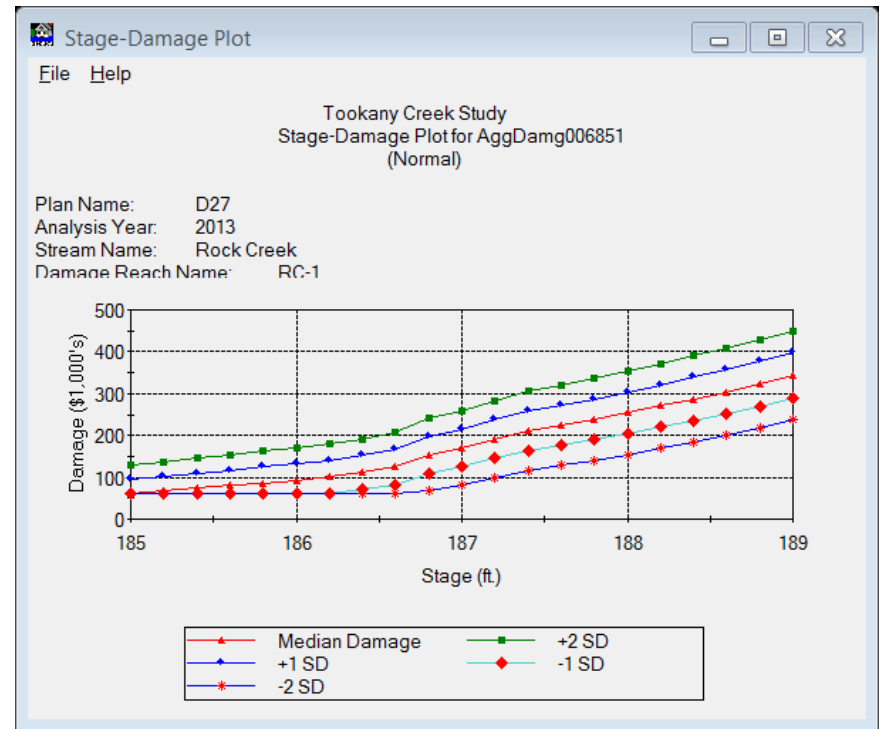
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	185.00	62.36	33.10
2	185.20	68.83	34.29
3	185.40	74.54	35.38
4	185.60	80.80	36.51
5	185.80	86.72	37.46
6	186.00	93.35	38.24
7	186.20	101.23	39.27
8	186.40	111.26	40.18
9	186.60	124.34	41.47
10	186.80	153.69	43.57
11	187.00	170.69	44.74
12	187.20	191.29	45.80
13	187.40	211.06	47.13
14	187.60	224.58	48.09
15	187.80	238.15	48.88
16	188.00	253.95	49.90
17	188.20	270.43	50.96
18	188.40	286.96	51.55
19	188.60	304.21	52.23
20	188.80	323.33	52.94
21	189.00	343.30	53.31
22			
23			
24			
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27			
28			
29			
30			
31			
32			
33			



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00
25	197.50	0.00	0.00
26	198.00	0.00	0.00
27			
28			
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00
25	197.50	0.00	0.00
26	198.00	0.00	0.00
27			
28			
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00
25	197.50	0.00	0.00
26	198.00	0.00	0.00
27			
28			
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

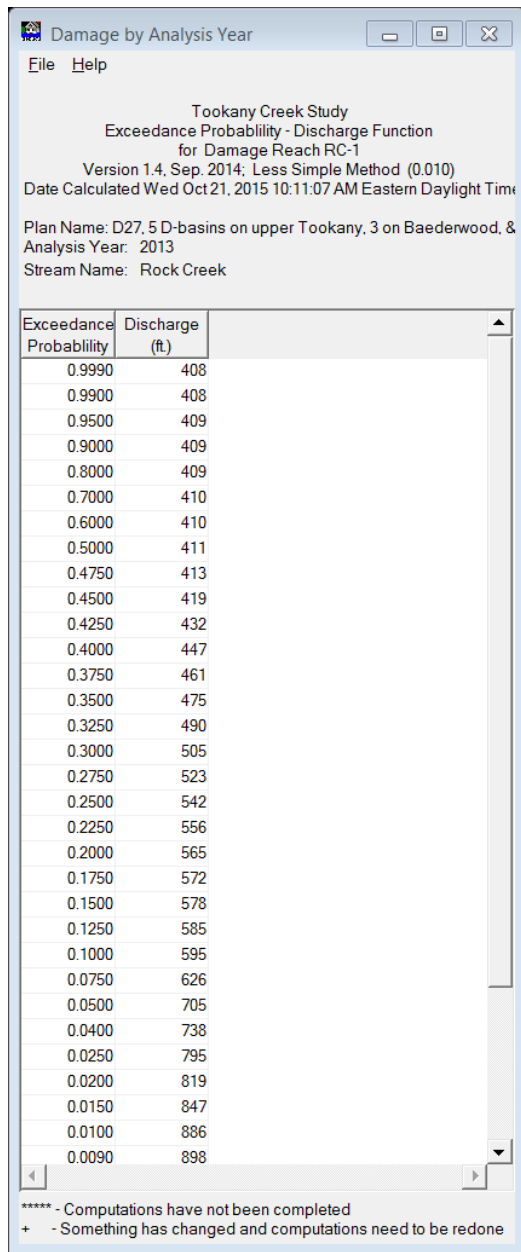
Damage Category:

Function:

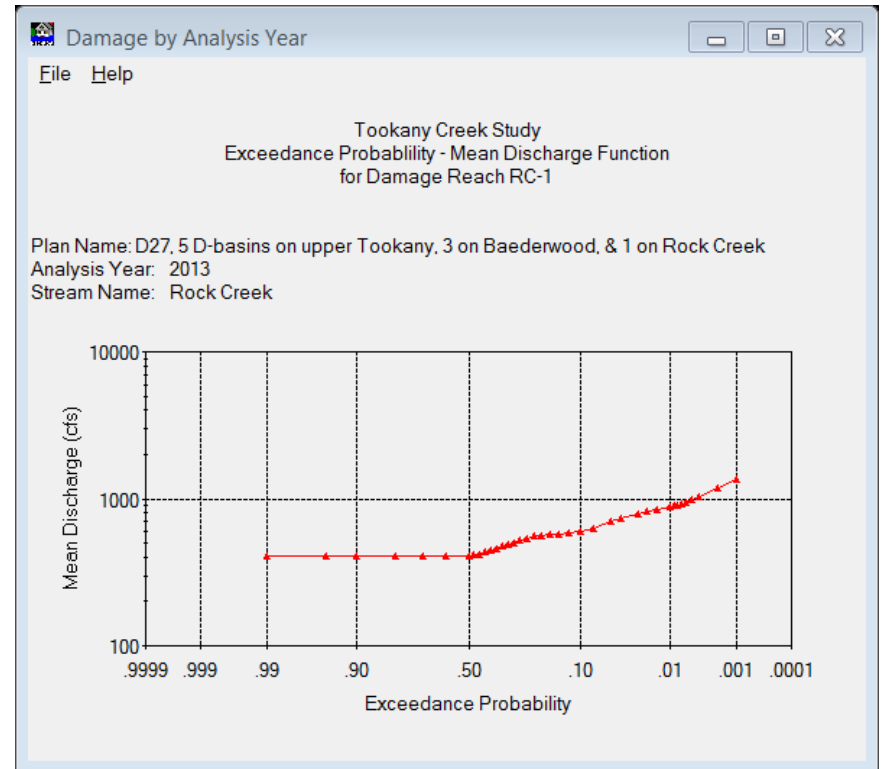
Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	185.50	0.00	0.00
2	186.00	0.00	0.00
3	186.50	0.00	0.00
4	187.00	0.00	0.00
5	187.50	0.00	0.00
6	188.00	0.00	0.00
7	188.50	0.00	0.00
8	189.00	0.00	0.00
9	189.50	0.00	0.00
10	190.00	0.00	0.00
11	190.50	0.00	0.00
12	191.00	0.00	0.00
13	191.50	0.00	0.00
14	192.00	0.00	0.00
15	192.50	0.00	0.00
16	193.00	0.00	0.00
17	193.50	0.00	0.00
18	194.00	0.00	0.00
19	194.50	0.00	0.00
20	195.00	0.00	0.00
21	195.50	0.00	0.00
22	196.00	0.00	0.00
23	196.50	0.00	0.00
24	197.00	0.00	0.00
25	197.50	0.00	0.00
26	198.00	0.00	0.00
27			
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32			
33			



### Rock Creek D27 Exceedance Probability – Mean Discharge Functions



Damage by Analysis Year

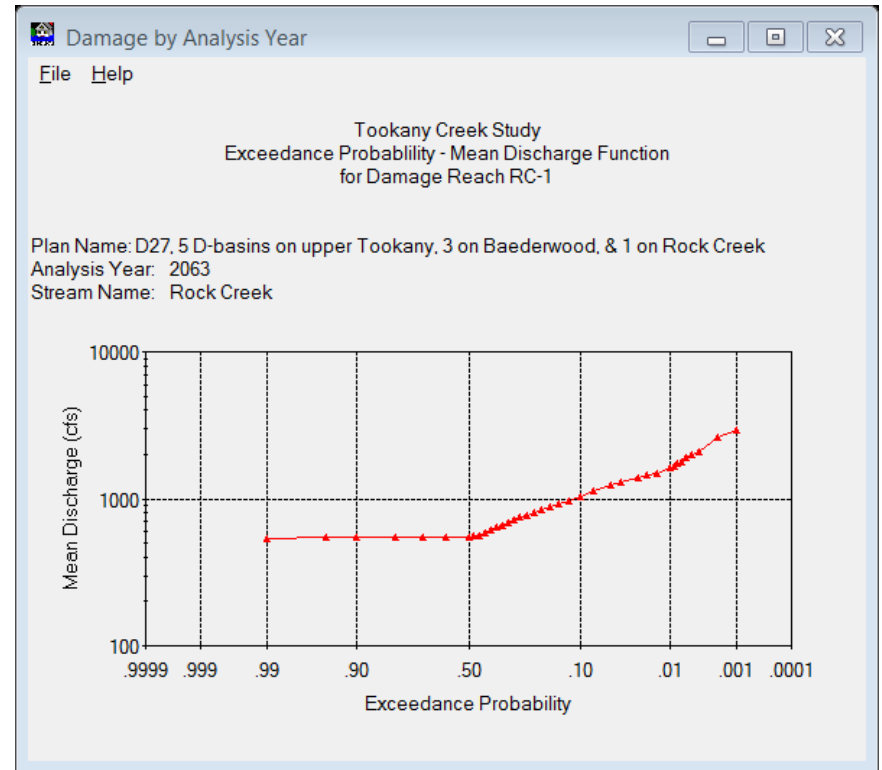
File Help

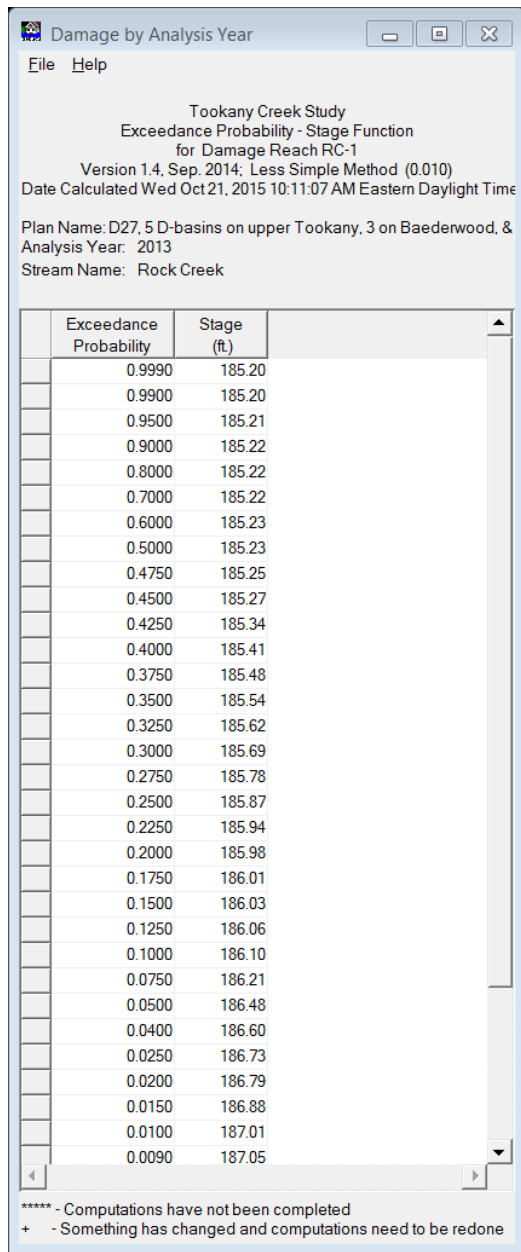
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach RC-1  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:20 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Rock Creek

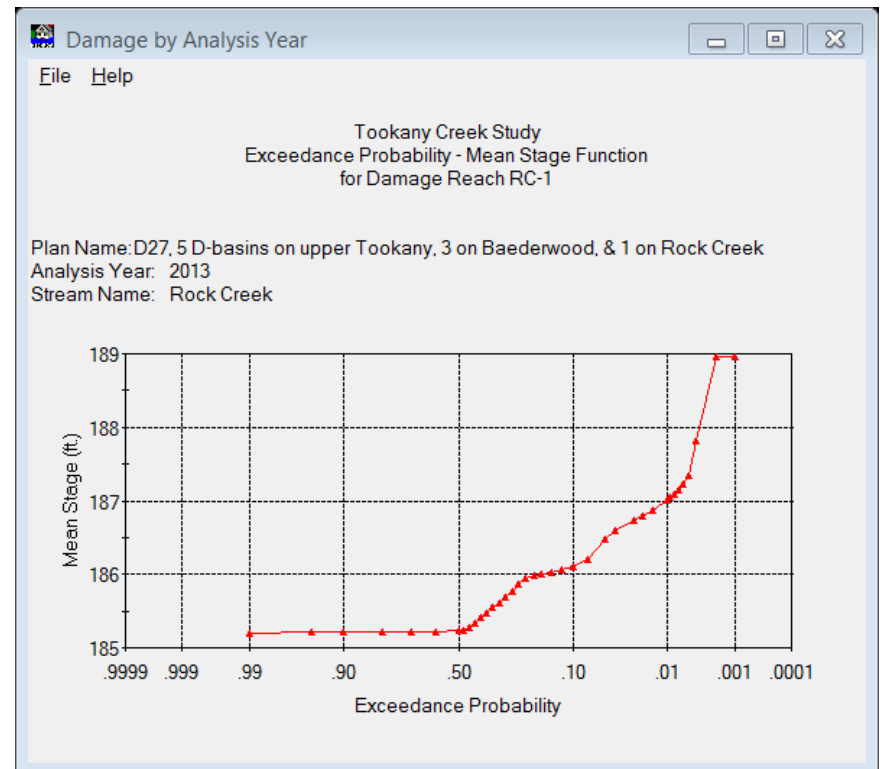
Exceedance Probability	Discharge (ft.)
0.9990	542
0.9900	542
0.9500	543
0.9000	544
0.8000	544
0.7000	544
0.6000	545
0.5000	550
0.4750	556
0.4500	562
0.4250	585
0.4000	612
0.3750	637
0.3500	663
0.3250	689
0.3000	717
0.2750	746
0.2500	776
0.2250	809
0.2000	844
0.1750	882
0.1500	925
0.1250	976
0.1000	1041
0.0750	1126
0.0500	1232
0.0400	1284
0.0250	1392
0.0200	1444
0.0150	1504
0.0100	1624
0.0090	1669

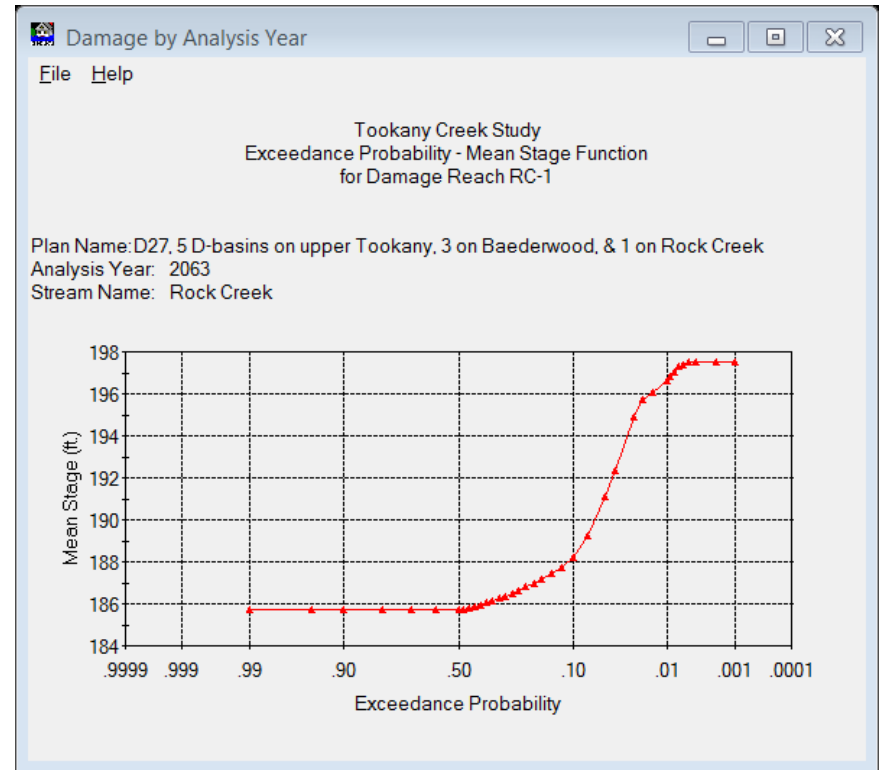
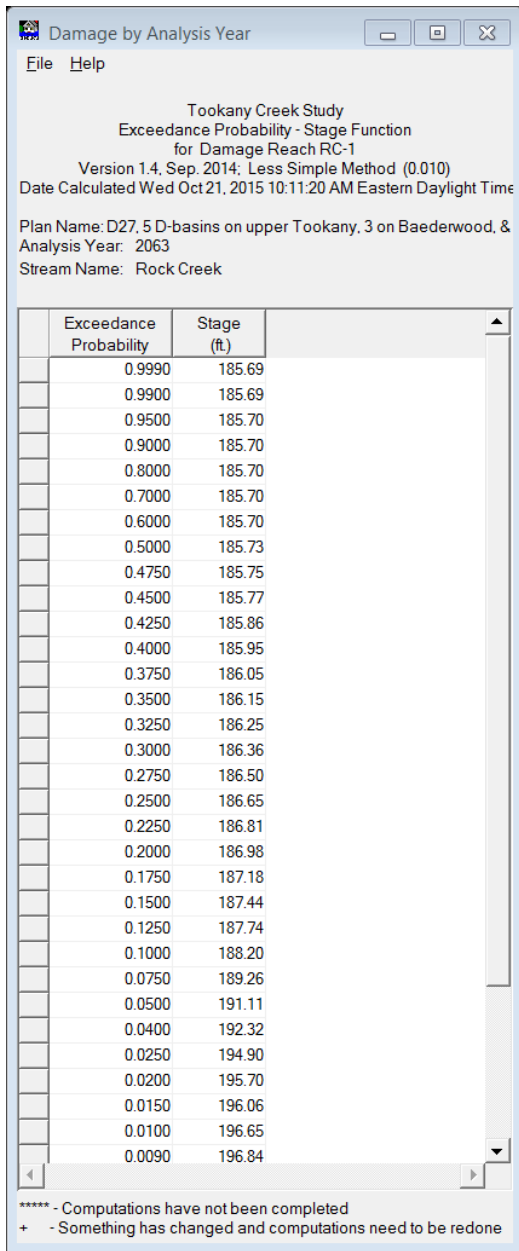
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

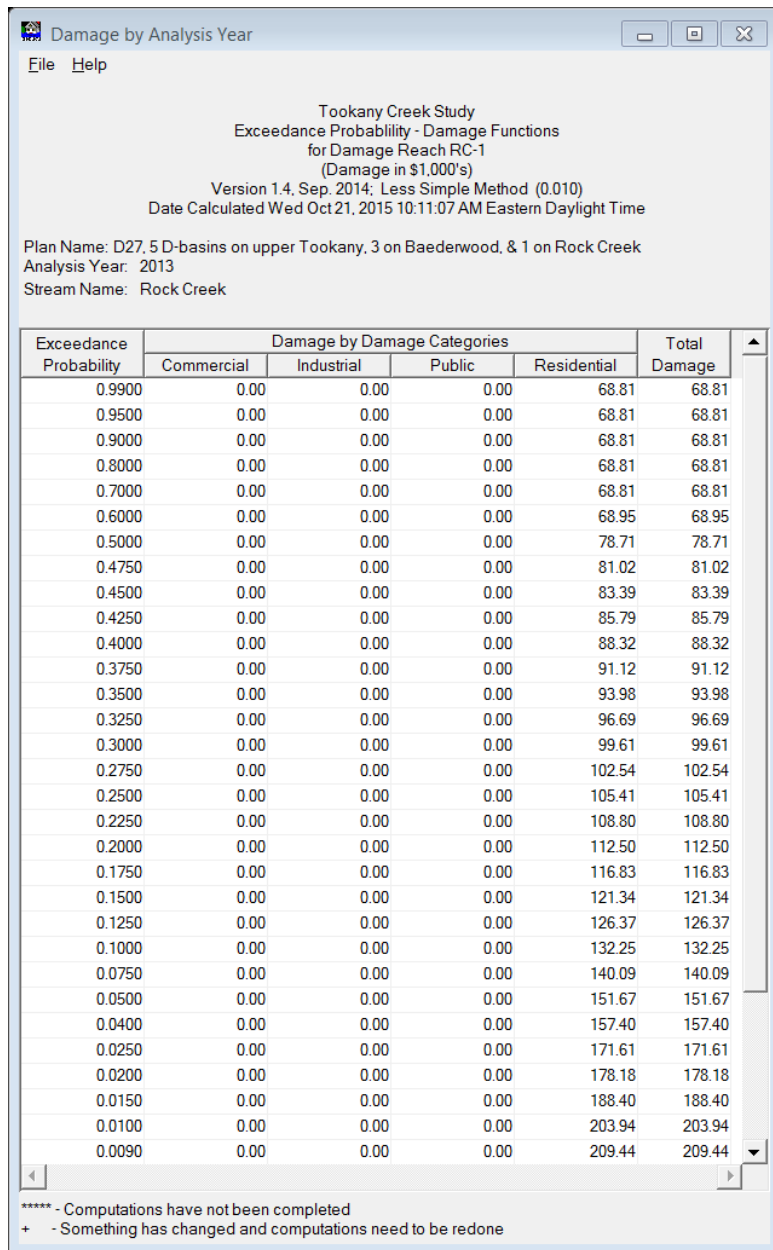




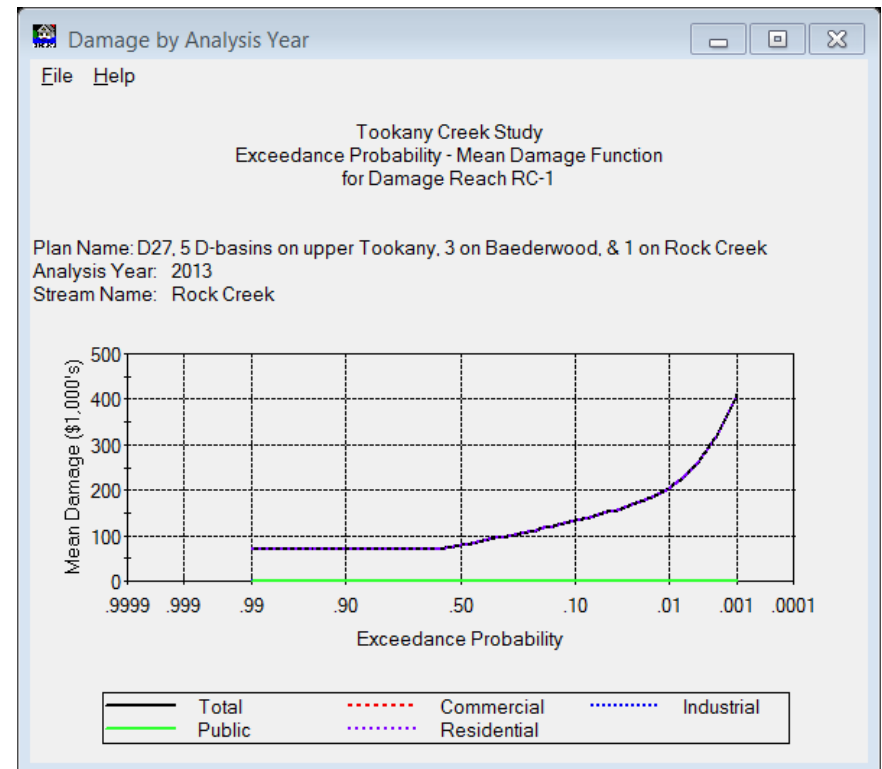
## Rock Creek D27 Exceedance Probability – Stage Functions



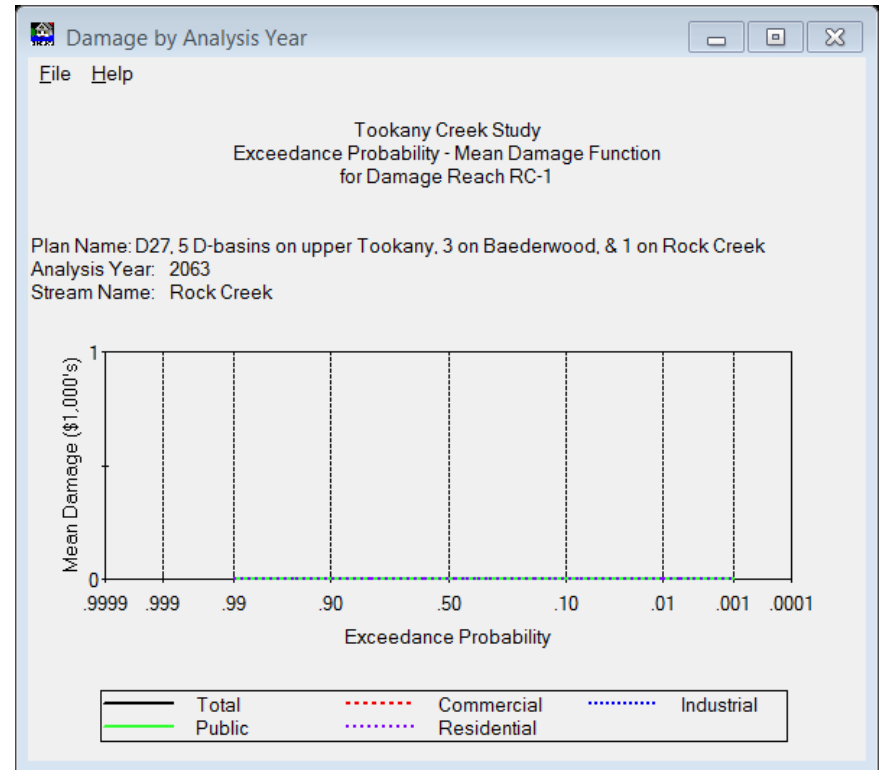
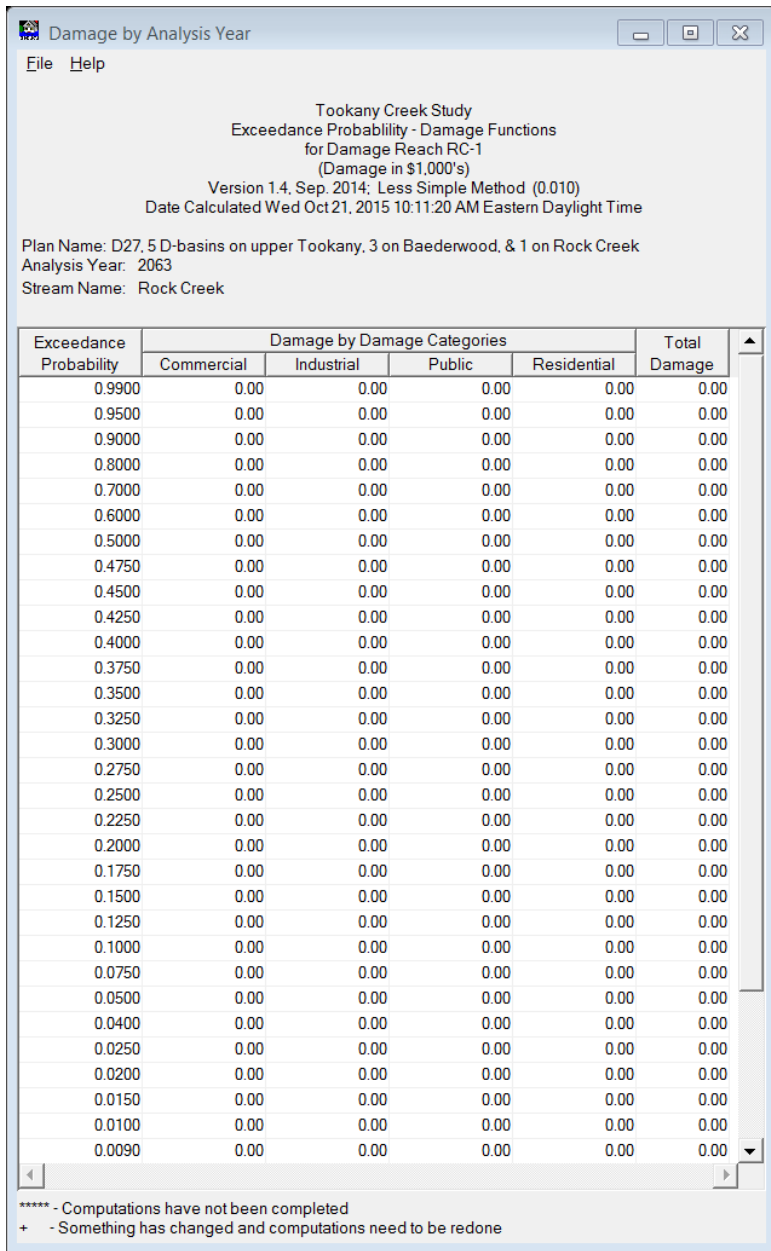


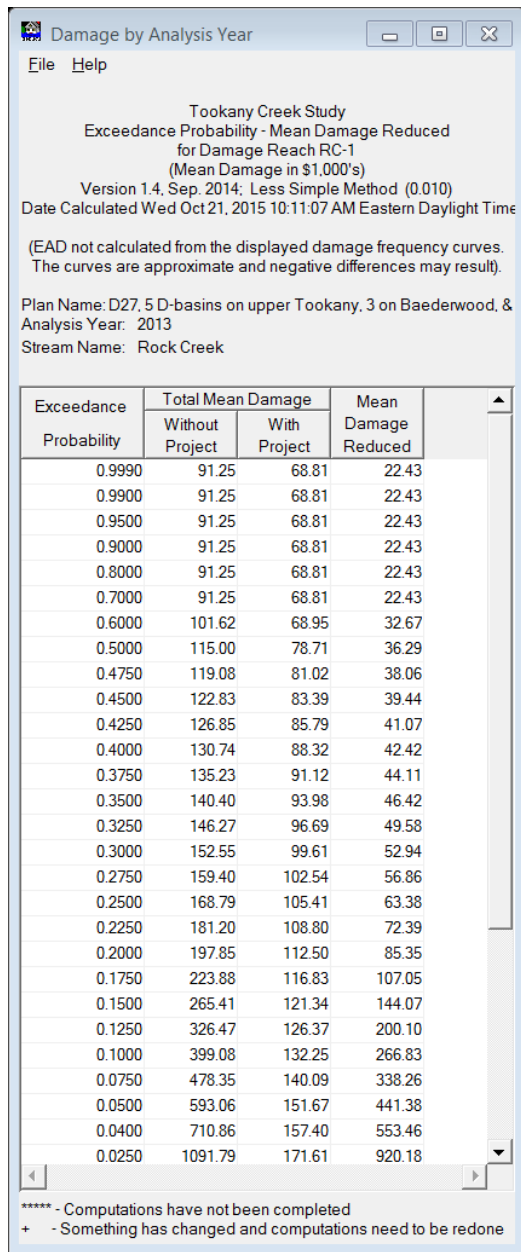


## Rock Creek D27 Exceedance Probability – Mean Damage Functions

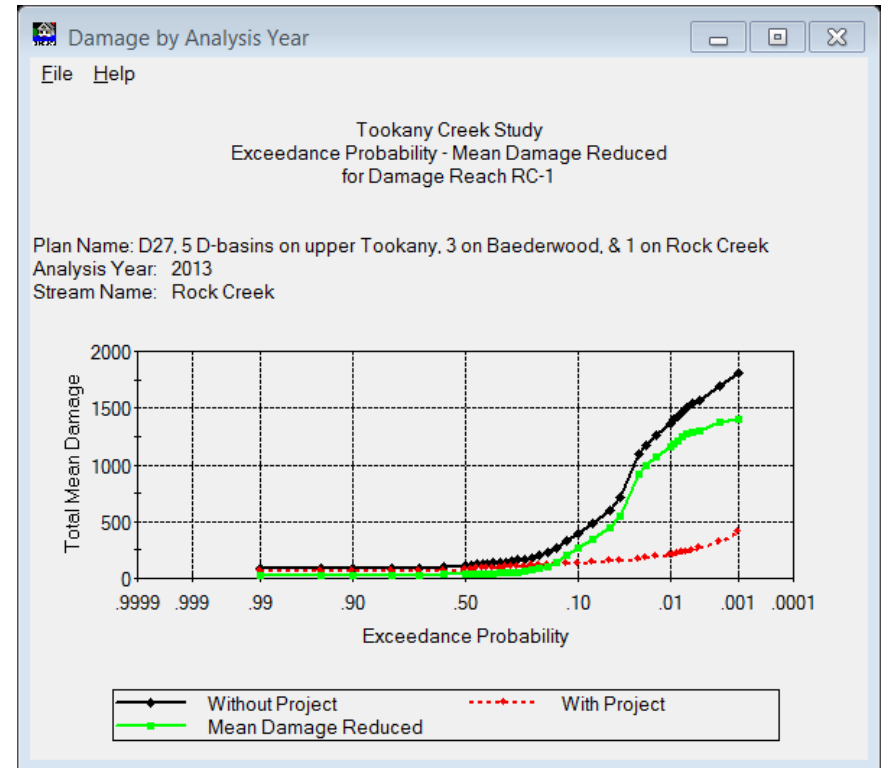








### Rock Creek D27 Exceedance Probability – Mean Damage Reduced Functions



Damage by Analysis Year

File Help

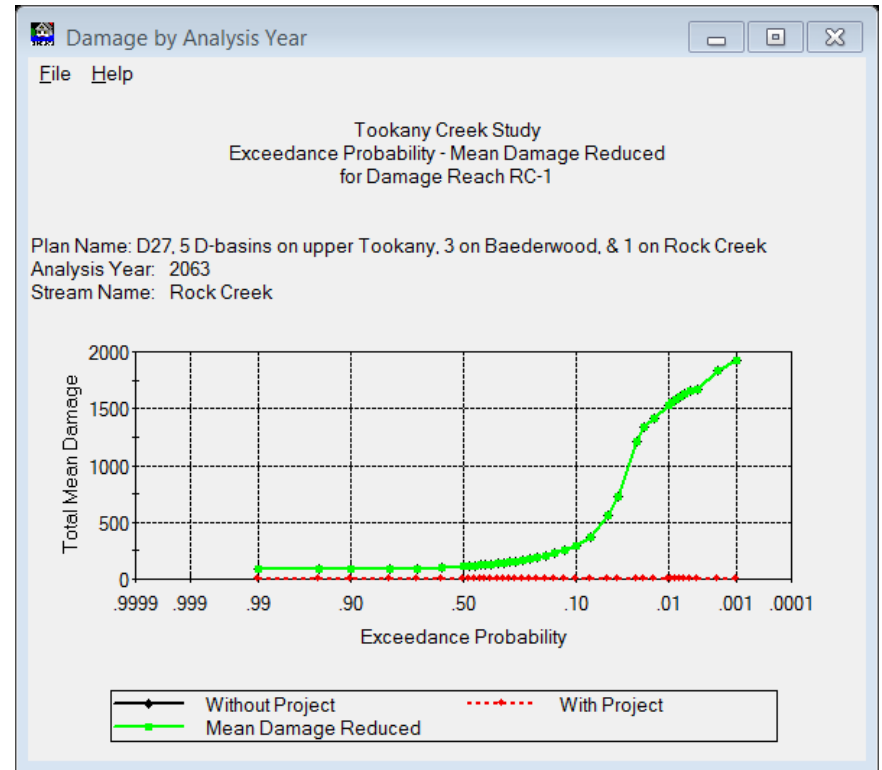
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach RC-1  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:20 AM Eastern Daylight Time

(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baerdenwood, &  
 Analysis Year: 2063  
 Stream Name: Rock Creek

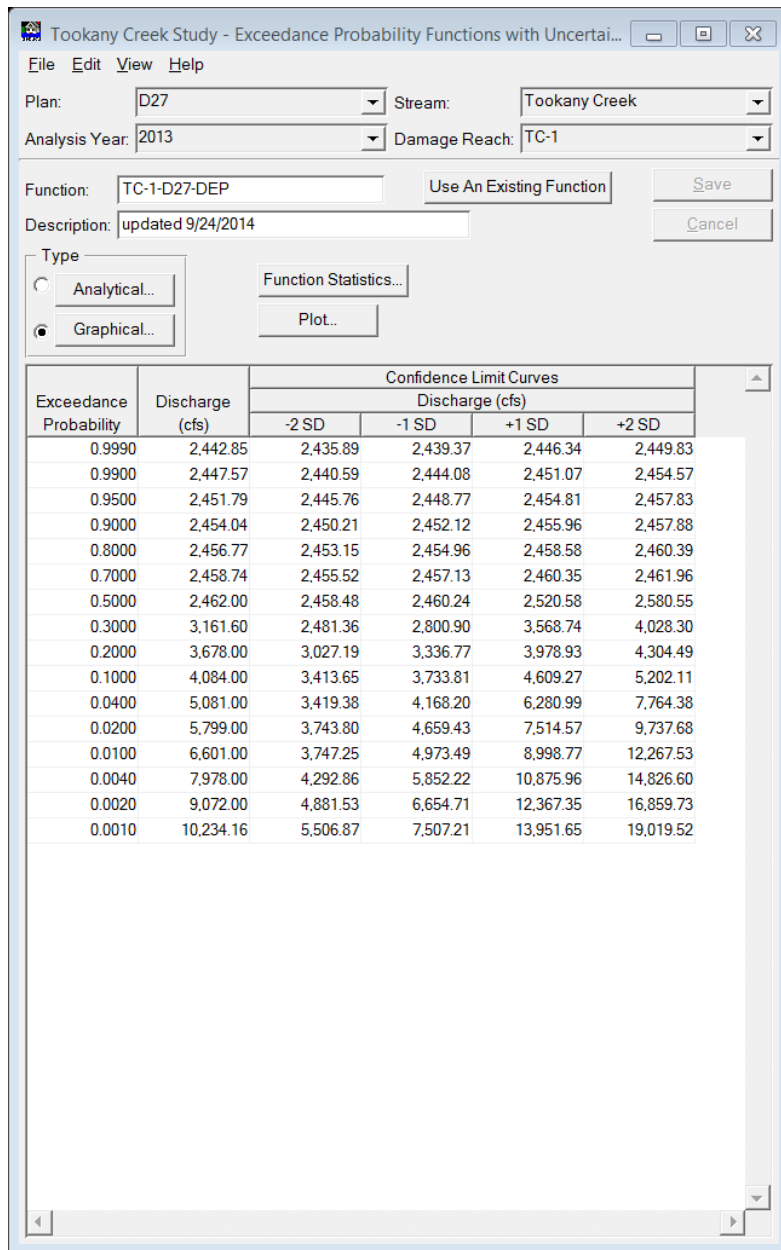
Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	88.97	0.00	88.97
0.9900	88.97	0.00	88.97
0.9500	88.97	0.00	88.97
0.9000	88.97	0.00	88.97
0.8000	88.97	0.00	88.97
0.7000	88.97	0.00	88.97
0.6000	98.50	0.00	98.50
0.5000	111.80	0.00	111.80
0.4750	115.81	0.00	115.81
0.4500	119.55	0.00	119.55
0.4250	123.52	0.00	123.52
0.4000	127.44	0.00	127.44
0.3750	131.98	0.00	131.98
0.3500	137.27	0.00	137.27
0.3250	143.03	0.00	143.03
0.3000	149.37	0.00	149.37
0.2750	156.31	0.00	156.31
0.2500	165.44	0.00	165.44
0.2250	176.72	0.00	176.72
0.2000	190.27	0.00	190.27
0.1750	207.41	0.00	207.41
0.1500	228.43	0.00	228.43
0.1250	254.34	0.00	254.34
0.1000	290.43	0.00	290.43
0.0750	364.46	0.00	364.46
0.0500	558.17	0.00	558.17
0.0400	728.04	0.00	728.04
0.0250	1204.86	0.00	1204.86

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

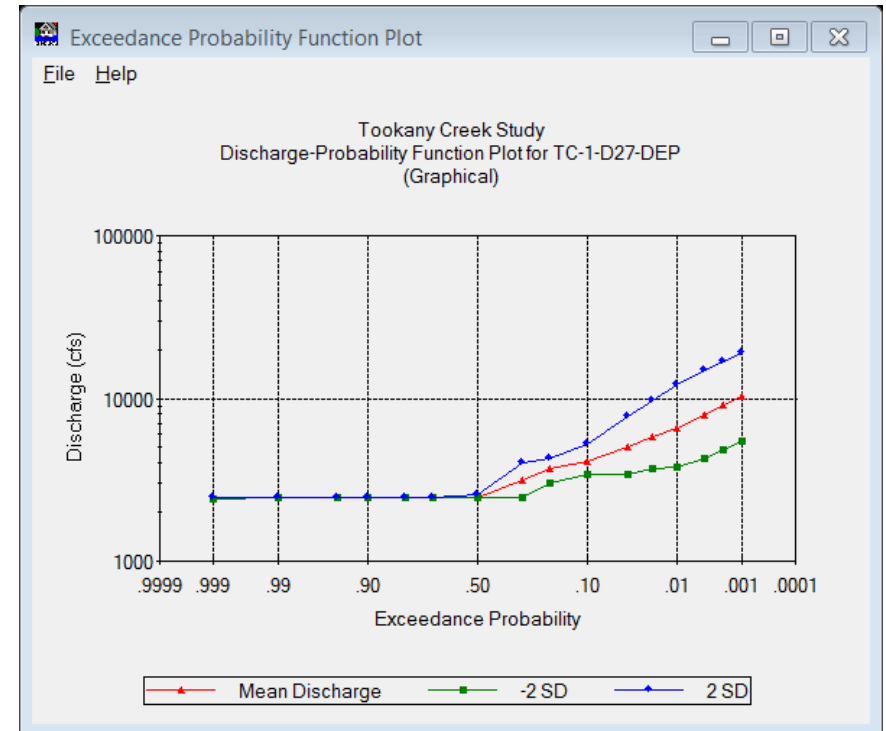


Tookany Creek

Tookany Creek, TSP D27 Water Surface Profile



Tookany Creek D27 Discharge – Exceedance Probability Functions with Uncertainty



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

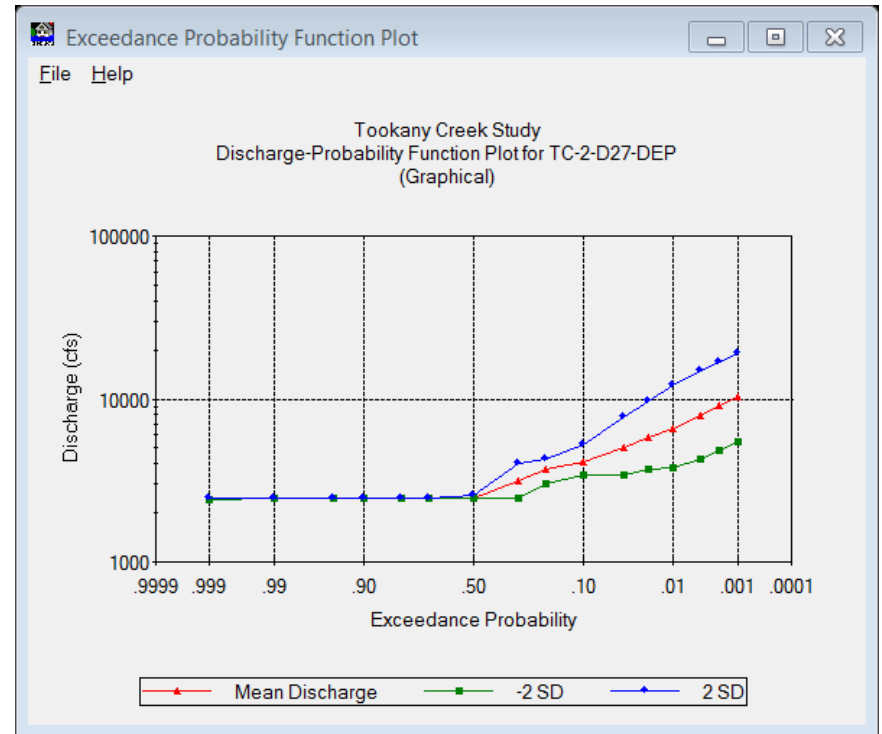
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,442.85	2,435.89	2,439.37	2,446.34	2,449.83
0.9900	2,447.57	2,440.59	2,444.08	2,451.07	2,454.57
0.9500	2,451.79	2,445.76	2,448.77	2,454.81	2,457.83
0.9000	2,454.04	2,450.21	2,452.12	2,455.96	2,457.88
0.8000	2,456.77	2,453.15	2,454.96	2,458.58	2,460.39
0.7000	2,458.74	2,455.52	2,457.13	2,460.35	2,461.96
0.5000	2,462.00	2,458.48	2,460.24	2,520.58	2,580.55
0.3000	3,161.60	2,481.36	2,800.90	3,568.74	4,028.30
0.2000	3,678.00	3,027.19	3,336.77	3,978.93	4,304.49
0.1000	4,084.00	3,413.65	3,733.81	4,609.27	5,202.11
0.0400	5,081.00	3,419.38	4,168.20	6,280.99	7,764.38
0.0200	5,799.00	3,743.80	4,659.43	7,514.57	9,737.68
0.0100	6,601.00	3,747.25	4,973.49	8,998.77	12,267.53
0.0040	7,978.00	4,292.86	5,852.22	10,875.96	14,826.60
0.0020	9,072.00	4,881.53	6,654.71	12,367.35	16,859.73
0.0010	10,234.16	5,506.87	7,507.21	13,951.65	19,019.52



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

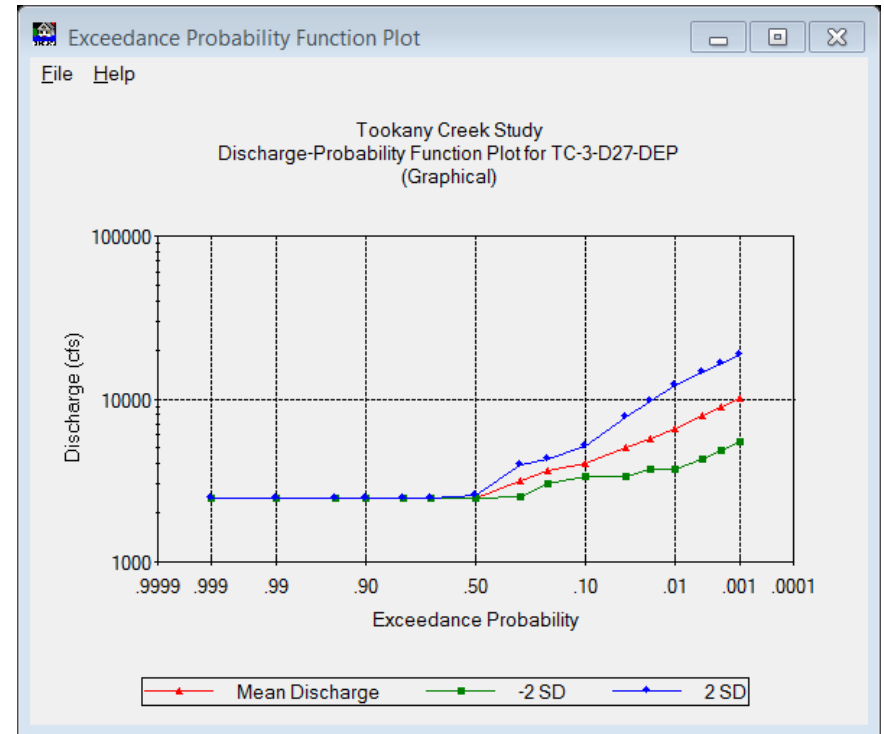
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,448.80	2,441.82	2,445.30	2,452.30	2,455.80
0.9900	2,453.53	2,446.54	2,450.03	2,457.04	2,460.55
0.9500	2,457.76	2,451.72	2,454.74	2,460.79	2,463.82
0.9000	2,460.02	2,456.18	2,458.10	2,461.94	2,463.87
0.8000	2,462.76	2,459.13	2,460.94	2,464.57	2,466.39
0.7000	2,464.73	2,461.50	2,463.12	2,466.35	2,467.97
0.5000	2,468.00	2,464.48	2,466.24	2,524.27	2,581.82
0.3000	3,136.01	2,486.59	2,792.48	3,521.79	3,955.04
0.2000	3,625.00	2,999.15	3,297.26	3,922.22	4,243.81
0.1000	4,026.00	3,363.95	3,680.12	4,544.20	5,129.10
0.0400	5,009.00	3,370.73	4,109.01	6,197.89	7,668.96
0.0200	5,722.00	3,683.03	4,590.67	7,419.93	9,621.69
0.0100	6,513.00	3,686.42	4,899.96	8,878.09	12,102.04
0.0040	7,872.00	4,236.50	5,774.93	10,730.60	14,627.25
0.0020	8,952.00	4,817.73	6,567.22	12,202.78	16,634.02
0.0010	10,099.35	5,435.21	7,408.92	13,766.77	18,765.96



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-4

Function: TC-4-D27-DEP Use An Existing Function Save

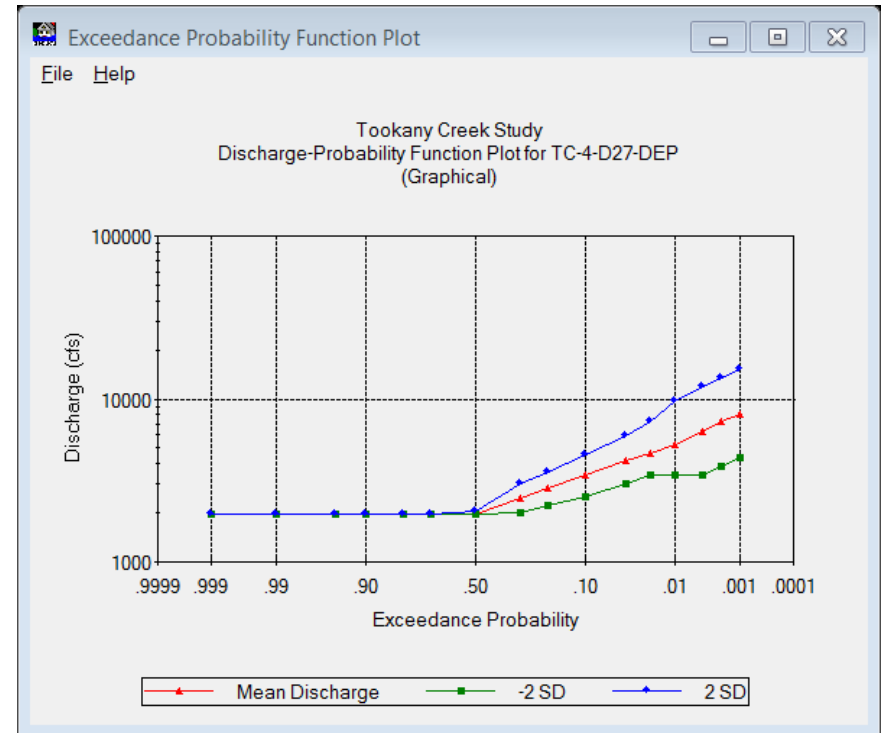
Description: updated 9/24/2014 Cancel

Type

Analytical... Function Statistics...

Graphical... Plot...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,964.04	1,958.59	1,961.31	1,966.76	1,969.49
0.9900	1,967.72	1,962.27	1,965.00	1,970.46	1,973.19
0.9500	1,971.02	1,966.31	1,968.67	1,973.38	1,975.74
0.9000	1,972.78	1,969.79	1,971.28	1,974.28	1,975.78
0.8000	1,974.91	1,972.09	1,973.50	1,976.33	1,977.74
0.7000	1,976.45	1,973.94	1,975.19	1,977.71	1,978.97
0.5000	1,979.00	1,976.28	1,977.64	2,020.41	2,062.69
0.3000	2,465.44	1,992.67	2,216.48	2,742.35	3,050.37
0.2000	2,816.00	2,234.73	2,508.59	3,161.09	3,548.46
0.1000	3,386.00	2,516.19	2,918.88	3,927.88	4,556.48
0.0400	4,213.00	3,008.32	3,560.06	4,976.50	5,878.36
0.0200	4,611.00	3,420.35	3,971.30	5,769.06	7,217.96
0.0100	5,248.00	3,423.50	4,238.70	7,152.68	9,748.62
0.0040	6,343.00	3,432.98	4,666.41	8,645.09	11,782.68
0.0020	7,213.00	3,882.99	5,292.26	9,830.84	13,398.79
0.0010	8,137.23	4,380.53	5,970.38	11,090.51	15,115.63





**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

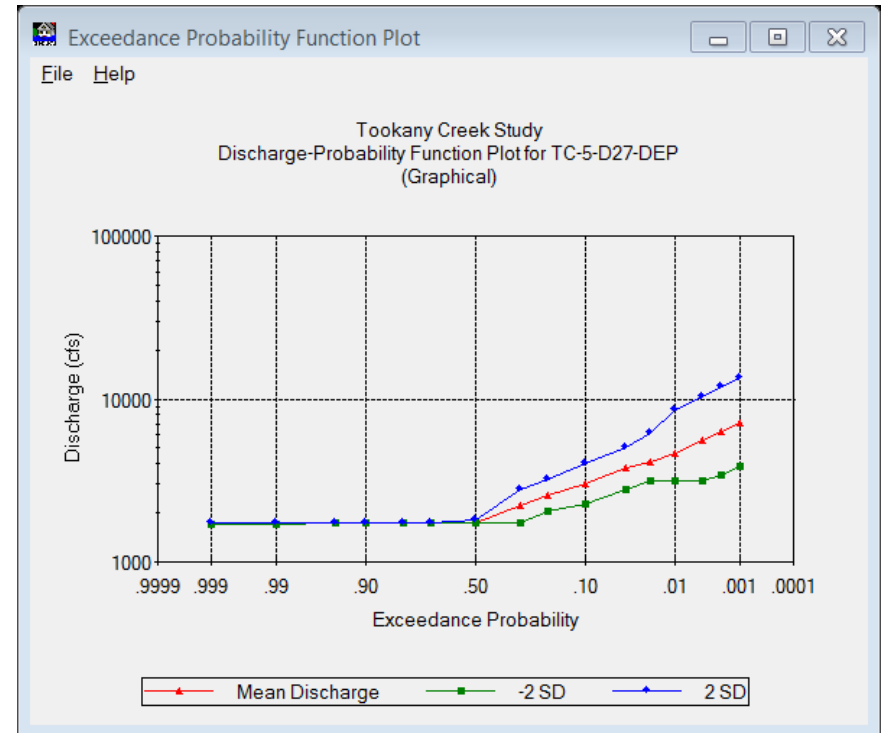
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,721.12	1,716.43	1,718.77	1,723.46	1,725.82
0.9900	1,724.29	1,719.60	1,721.94	1,726.64	1,729.00
0.9500	1,727.13	1,723.08	1,725.10	1,729.16	1,731.19
0.9000	1,728.65	1,726.07	1,727.36	1,729.94	1,731.23
0.8000	1,730.48	1,728.05	1,729.27	1,731.70	1,732.92
0.7000	1,731.81	1,729.64	1,730.72	1,732.89	1,733.98
0.5000	1,734.00	1,731.67	1,732.84	1,773.94	1,814.79
0.3000	2,209.32	1,747.21	1,964.72	2,484.36	2,793.65
0.2000	2,558.00	2,026.71	2,276.91	2,873.79	3,228.57
0.1000	3,030.00	2,275.51	2,625.80	3,496.43	4,034.65
0.0400	3,769.00	2,763.96	3,227.60	4,348.78	5,017.75
0.0200	4,073.00	3,151.15	3,582.55	5,042.67	6,243.19
0.0100	4,636.00	3,154.06	3,823.90	6,319.24	8,613.62
0.0040	5,603.00	3,162.78	4,209.64	7,637.34	10,410.30
0.0020	6,371.00	3,428.98	4,673.97	8,684.18	11,837.22
0.0010	7,186.81	3,868.06	5,272.48	9,796.19	13,352.99



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

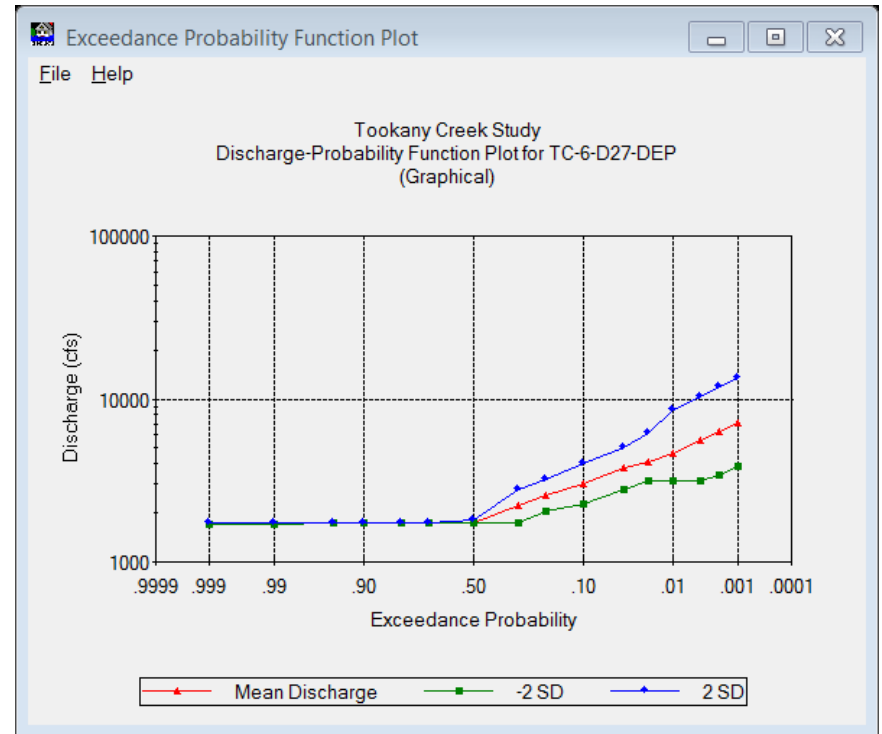
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,721.12	1,716.43	1,718.77	1,723.46	1,725.82
0.9900	1,724.29	1,719.60	1,721.94	1,726.64	1,729.00
0.9500	1,727.13	1,723.08	1,725.10	1,729.16	1,731.19
0.9000	1,728.65	1,726.07	1,727.36	1,729.94	1,731.23
0.8000	1,730.48	1,728.05	1,729.27	1,731.70	1,732.92
0.7000	1,731.81	1,729.64	1,730.72	1,732.89	1,733.98
0.5000	1,734.00	1,731.67	1,732.84	1,773.94	1,814.79
0.3000	2,209.32	1,747.21	1,964.72	2,484.36	2,793.65
0.2000	2,558.00	2,026.71	2,276.91	2,873.79	3,228.57
0.1000	3,030.00	2,275.51	2,625.80	3,496.43	4,034.65
0.0400	3,769.00	2,763.96	3,227.60	4,348.78	5,017.75
0.0200	4,073.00	3,151.15	3,582.55	5,042.67	6,243.19
0.0100	4,636.00	3,154.06	3,823.90	6,319.24	8,613.62
0.0040	5,603.00	3,162.78	4,209.64	7,637.34	10,410.30
0.0020	6,371.00	3,428.98	4,673.97	8,684.18	11,837.22
0.0010	7,186.81	3,868.06	5,272.48	9,796.19	13,352.99



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

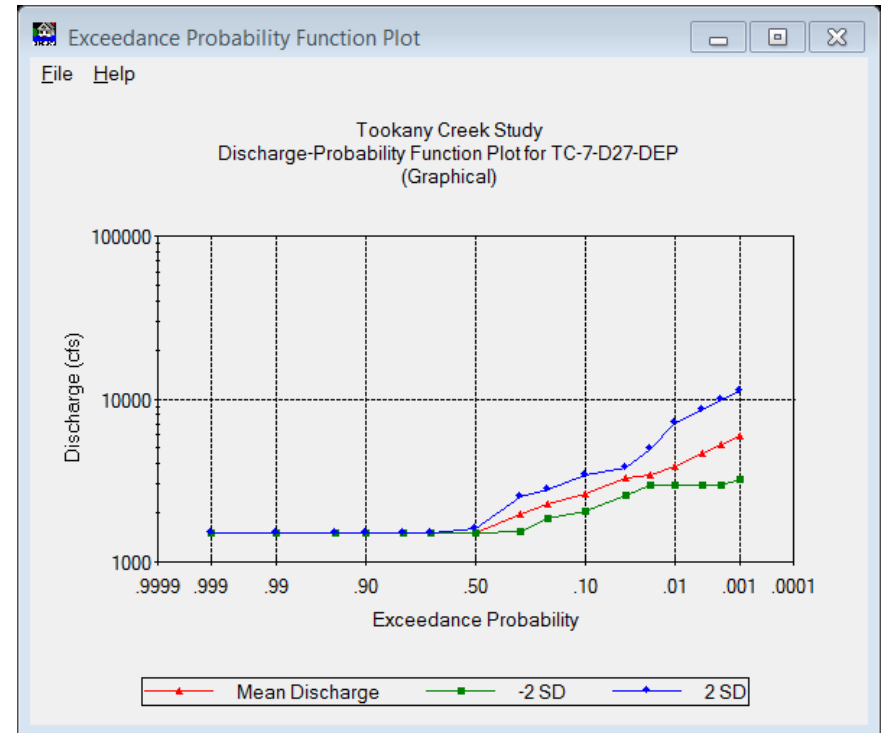
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,509.90	1,505.86	1,507.87	1,511.92	1,513.95
0.9900	1,512.63	1,508.59	1,510.61	1,514.66	1,516.69
0.9500	1,515.08	1,511.59	1,513.33	1,516.83	1,518.58
0.9000	1,516.39	1,514.16	1,515.27	1,517.50	1,518.61
0.8000	1,517.97	1,515.87	1,516.92	1,519.02	1,520.07
0.7000	1,519.11	1,517.24	1,518.18	1,520.04	1,520.98
0.5000	1,521.00	1,519.01	1,520.00	1,557.33	1,594.53
0.3000	1,955.76	1,533.03	1,731.54	2,209.01	2,495.05
0.2000	2,277.00	1,833.15	2,043.06	2,525.18	2,800.40
0.1000	2,613.00	2,064.05	2,322.36	2,982.75	3,404.82
0.0400	3,251.00	2,572.54	2,891.94	3,505.91	3,780.80
0.0200	3,387.00	2,958.22	3,165.36	4,068.36	4,886.79
0.0100	3,856.00	2,960.95	3,378.97	5,257.95	7,169.62
0.0040	4,660.00	2,969.14	3,719.70	6,354.27	8,664.53
0.0020	5,299.00	2,970.51	3,967.46	7,225.59	9,852.64
0.0010	5,977.80	3,215.01	4,383.92	8,151.19	11,114.78



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

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Analysis Year:  Damage Reach:

Function:

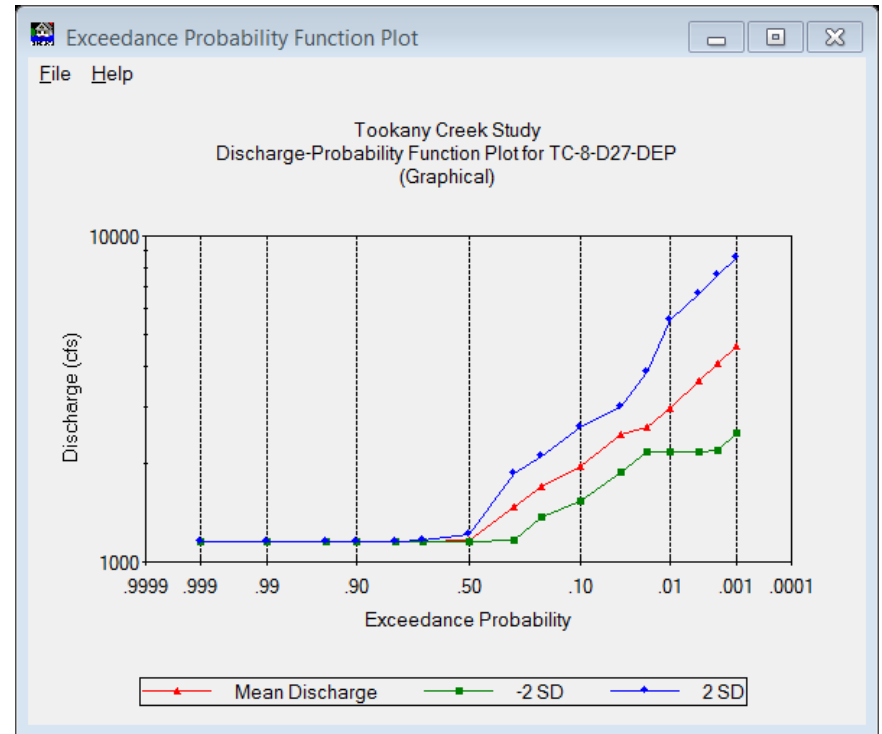
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,151.84	1,148.88	1,150.36	1,153.33	1,154.82
0.9900	1,153.85	1,150.88	1,152.37	1,155.34	1,156.83
0.9500	1,155.65	1,153.08	1,154.37	1,156.94	1,158.22
0.9000	1,156.61	1,154.98	1,155.79	1,157.43	1,158.24
0.8000	1,157.77	1,156.23	1,157.00	1,158.54	1,159.31
0.7000	1,158.61	1,157.24	1,157.93	1,159.30	1,159.98
0.5000	1,160.00	1,158.55	1,159.28	1,186.52	1,213.64
0.3000	1,475.69	1,168.78	1,313.30	1,658.17	1,863.20
0.2000	1,707.00	1,374.83	1,531.94	1,902.07	2,119.42
0.1000	1,974.00	1,538.86	1,742.90	2,259.31	2,585.85
0.0400	2,456.00	1,893.37	2,156.41	2,710.59	2,991.58
0.0200	2,591.00	2,170.96	2,371.70	3,143.95	3,814.91
0.0100	2,949.00	2,172.96	2,531.41	4,025.80	5,495.79
0.0040	3,579.00	2,178.97	2,792.59	4,885.84	6,669.87
0.0020	4,080.00	2,189.30	2,988.70	5,569.78	7,603.54
0.0010	4,613.51	2,475.57	3,379.51	6,298.09	8,597.79



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

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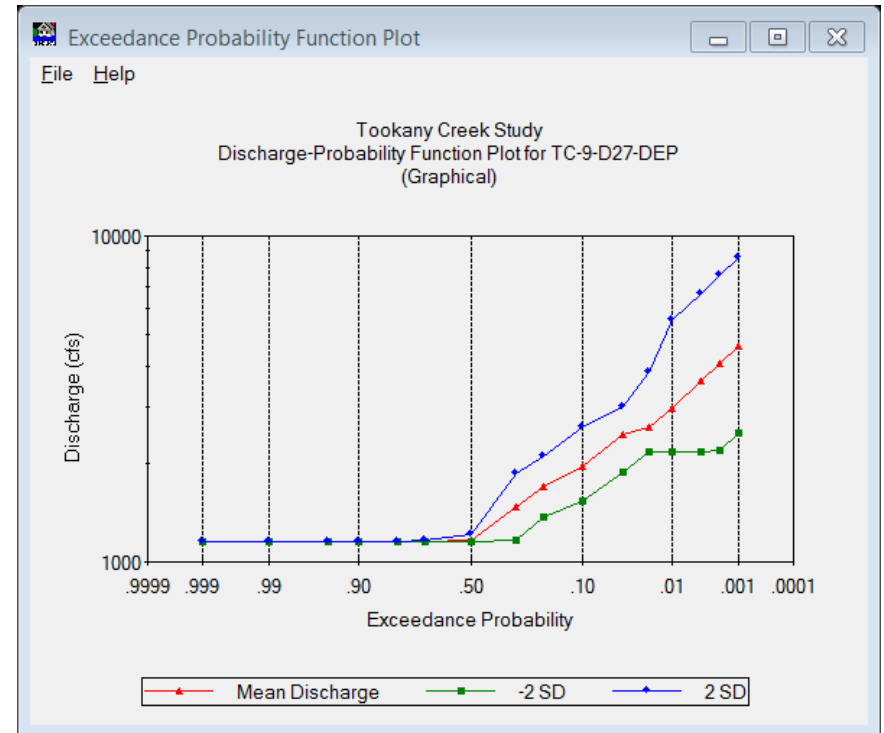
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,151.84	1,148.88	1,150.36	1,153.33	1,154.82
0.9900	1,153.85	1,150.88	1,152.37	1,155.34	1,156.83
0.9500	1,155.65	1,153.08	1,154.37	1,156.94	1,158.22
0.9000	1,156.61	1,154.98	1,155.79	1,157.43	1,158.24
0.8000	1,157.77	1,156.23	1,157.00	1,158.54	1,159.31
0.7000	1,158.61	1,157.24	1,157.93	1,159.30	1,159.98
0.5000	1,160.00	1,158.55	1,159.28	1,186.52	1,213.64
0.3000	1,475.69	1,168.78	1,313.30	1,658.17	1,863.20
0.2000	1,707.00	1,374.83	1,531.94	1,902.07	2,119.42
0.1000	1,974.00	1,538.86	1,742.90	2,259.31	2,585.85
0.0400	2,456.00	1,893.37	2,156.41	2,710.59	2,991.58
0.0200	2,591.00	2,170.96	2,371.70	3,143.95	3,814.91
0.0100	2,949.00	2,172.96	2,531.41	4,025.80	5,495.79
0.0040	3,579.00	2,178.97	2,792.59	4,885.84	6,669.87
0.0020	4,080.00	2,189.30	2,988.70	5,569.78	7,603.54
0.0010	4,613.51	2,475.57	3,379.51	6,298.09	8,597.79



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

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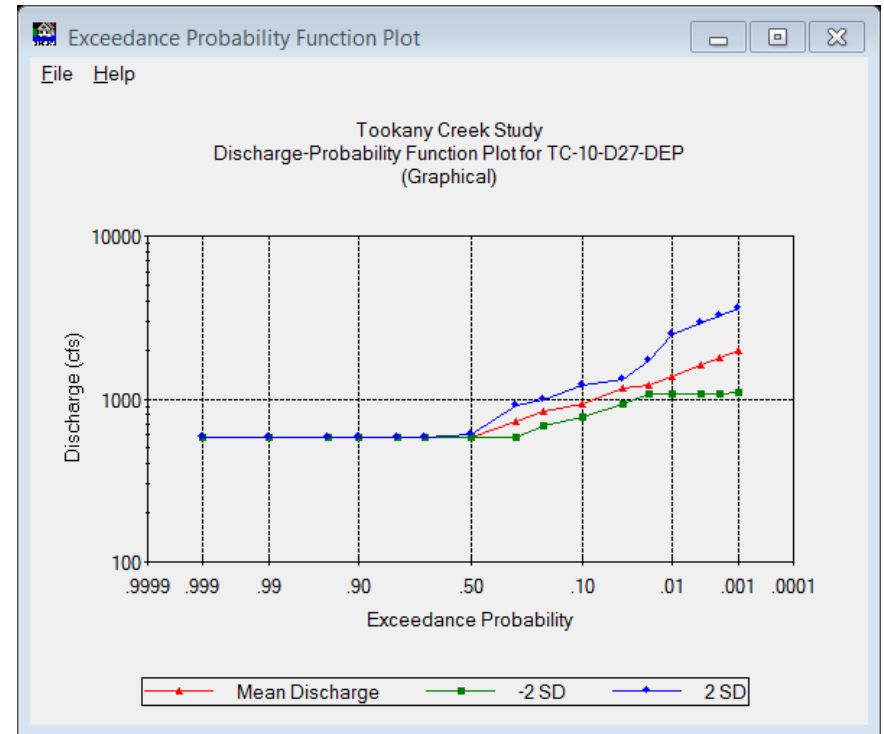
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	579.30	577.95	578.63	579.97	580.65
0.9900	580.21	578.86	579.54	580.89	581.56
0.9500	581.03	579.86	580.44	581.61	582.19
0.9000	581.46	580.72	581.09	581.83	582.20
0.8000	581.99	581.29	581.64	582.34	582.69
0.7000	582.37	581.75	582.06	582.68	582.99
0.5000	583.00	582.37	582.69	595.38	608.02
0.3000	729.26	587.10	654.33	812.76	905.83
0.2000	835.00	690.73	759.44	911.99	996.07
0.1000	939.00	767.98	849.19	1,064.33	1,206.38
0.0400	1,168.00	935.35	1,045.22	1,246.49	1,330.26
0.0200	1,210.00	1,076.81	1,141.46	1,445.91	1,727.82
0.0100	1,377.00	1,077.80	1,218.25	1,851.68	2,489.98
0.0040	1,608.00	1,080.79	1,318.30	2,162.31	2,907.69
0.0020	1,794.00	1,081.28	1,392.77	2,412.42	3,244.03
0.0010	1,987.98	1,099.38	1,478.36	2,673.27	3,594.79



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

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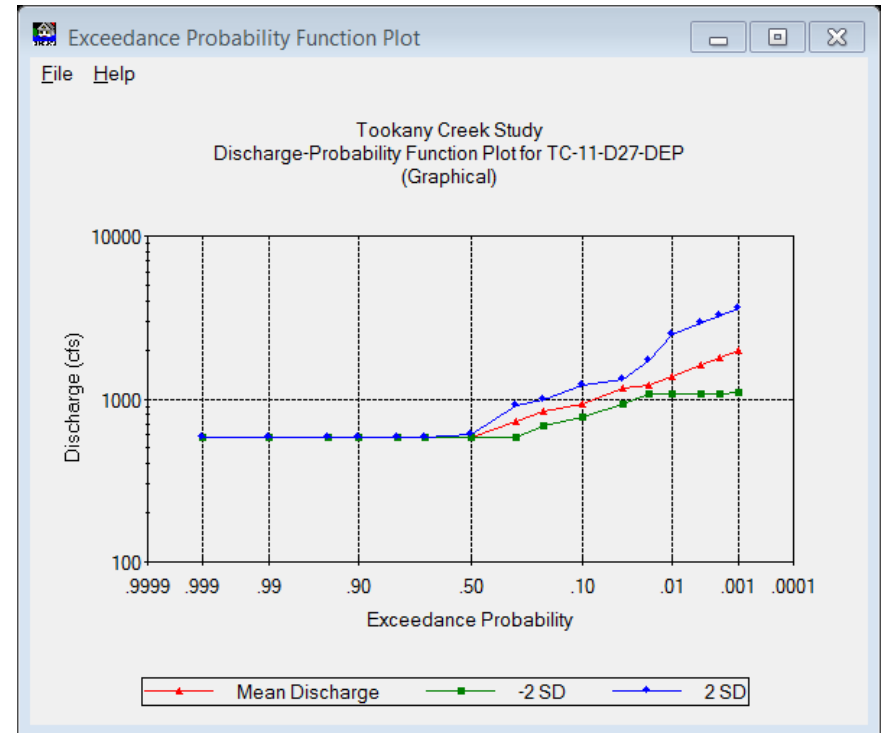
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	579.30	577.95	578.63	579.97	580.65
0.9900	580.21	578.86	579.54	580.89	581.56
0.9500	581.03	579.86	580.44	581.61	582.19
0.9000	581.46	580.72	581.09	581.83	582.20
0.8000	581.99	581.29	581.64	582.34	582.69
0.7000	582.37	581.75	582.06	582.68	582.99
0.5000	583.00	582.37	582.69	595.38	608.02
0.3000	729.26	587.10	654.33	812.76	905.83
0.2000	835.00	690.73	759.44	911.99	996.07
0.1000	939.00	767.98	849.19	1,064.33	1,206.38
0.0400	1,168.00	935.35	1,045.22	1,246.49	1,330.26
0.0200	1,210.00	1,076.81	1,141.46	1,445.91	1,727.82
0.0100	1,377.00	1,077.80	1,218.25	1,851.68	2,489.98
0.0040	1,608.00	1,080.79	1,318.30	2,162.31	2,907.69
0.0020	1,794.00	1,081.28	1,392.77	2,412.42	3,244.03
0.0010	1,987.98	1,099.38	1,478.36	2,673.27	3,594.79



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

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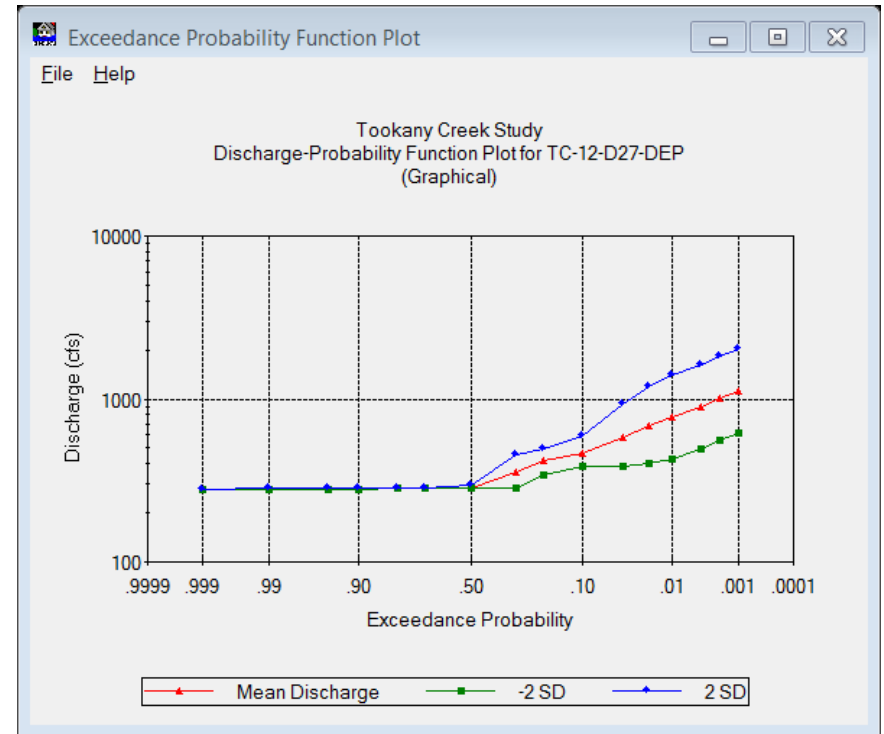
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	280.42	279.85	280.13	280.71	281.00
0.9900	280.81	280.24	280.53	281.10	281.39
0.9500	281.16	280.66	280.91	281.41	281.66
0.9000	281.35	281.03	281.19	281.51	281.67
0.8000	281.58	281.28	281.43	281.73	281.88
0.7000	281.74	281.47	281.61	281.87	282.01
0.5000	282.01	281.75	281.88	288.43	295.00
0.3000	358.76	284.14	319.28	403.12	452.96
0.2000	414.99	341.65	376.54	451.28	490.75
0.1000	463.99	383.26	421.70	525.17	594.42
0.0400	577.99	388.08	473.61	736.33	938.05
0.0200	678.73	398.70	520.20	900.79	1,195.50
0.0100	772.69	426.98	574.39	1,039.45	1,398.31
0.0040	901.64	498.24	670.25	1,212.92	1,631.66
0.0020	1,005.60	555.68	747.53	1,352.77	1,819.79
0.0010	1,113.98	615.58	828.10	1,498.57	2,015.93





**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

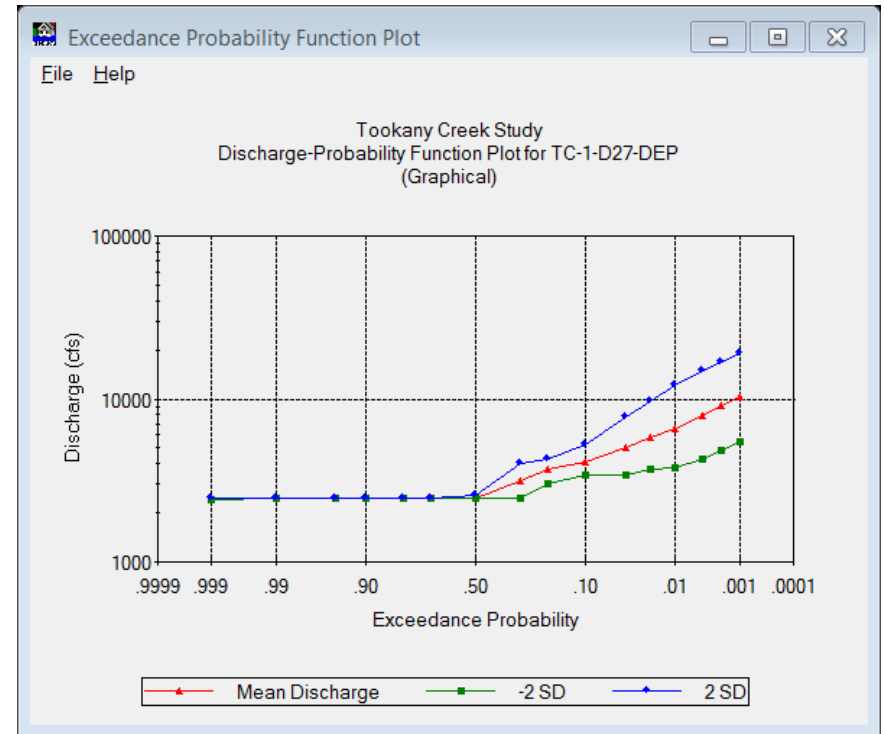
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,442.85	2,435.89	2,439.37	2,446.34	2,449.83
0.9900	2,447.57	2,440.59	2,444.08	2,451.07	2,454.57
0.9500	2,451.79	2,445.76	2,448.77	2,454.81	2,457.83
0.9000	2,454.04	2,450.21	2,452.12	2,455.96	2,457.88
0.8000	2,456.77	2,453.15	2,454.96	2,458.58	2,460.39
0.7000	2,458.74	2,455.52	2,457.13	2,460.35	2,461.96
0.5000	2,462.00	2,458.48	2,460.24	2,520.58	2,580.55
0.3000	3,161.60	2,481.36	2,800.90	3,568.74	4,028.30
0.2000	3,678.00	3,027.19	3,336.77	3,978.93	4,304.49
0.1000	4,084.00	3,413.65	3,733.81	4,609.27	5,202.11
0.0400	5,081.00	3,419.38	4,168.20	6,280.99	7,764.38
0.0200	5,799.00	3,743.80	4,659.43	7,514.57	9,737.68
0.0100	6,601.00	3,747.25	4,973.49	8,998.77	12,267.53
0.0040	7,978.00	4,292.86	5,852.22	10,875.96	14,826.60
0.0020	9,072.00	4,881.53	6,654.71	12,367.35	16,859.73
0.0010	10,234.16	5,506.87	7,507.21	13,951.65	19,019.52



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

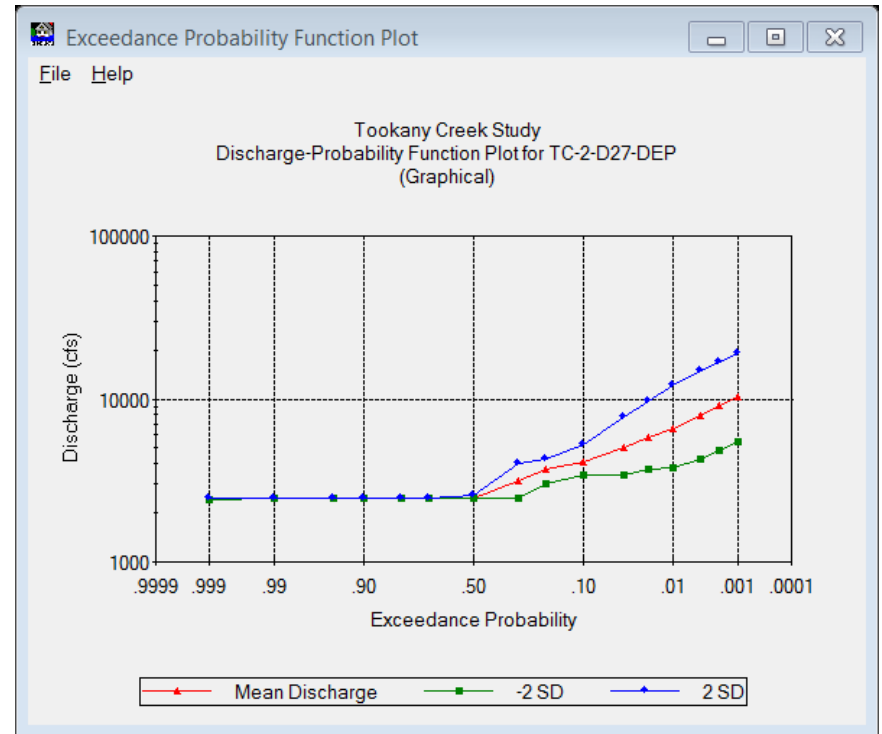
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,442.85	2,435.89	2,439.37	2,446.34	2,449.83
0.9900	2,447.57	2,440.59	2,444.08	2,451.07	2,454.57
0.9500	2,451.79	2,445.76	2,448.77	2,454.81	2,457.83
0.9000	2,454.04	2,450.21	2,452.12	2,455.96	2,457.88
0.8000	2,456.77	2,453.15	2,454.96	2,458.58	2,460.39
0.7000	2,458.74	2,455.52	2,457.13	2,460.35	2,461.96
0.5000	2,462.00	2,458.48	2,460.24	2,520.58	2,580.55
0.3000	3,161.60	2,481.36	2,800.90	3,568.74	4,028.30
0.2000	3,678.00	3,027.19	3,336.77	3,978.93	4,304.49
0.1000	4,084.00	3,413.65	3,733.81	4,609.27	5,202.11
0.0400	5,081.00	3,419.38	4,168.20	6,280.99	7,764.38
0.0200	5,799.00	3,743.80	4,659.43	7,514.57	9,737.68
0.0100	6,601.00	3,747.25	4,973.49	8,998.77	12,267.53
0.0040	7,978.00	4,292.86	5,852.22	10,875.96	14,826.60
0.0020	9,072.00	4,881.53	6,654.71	12,367.35	16,859.73
0.0010	10,234.16	5,506.87	7,507.21	13,951.65	19,019.52



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

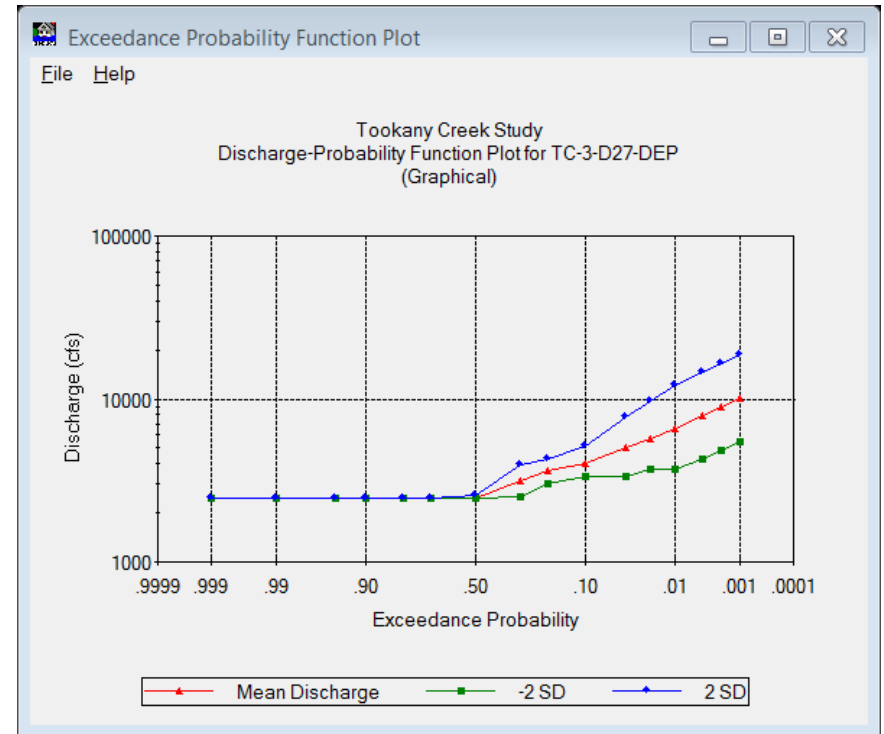
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	2,448.80	2,441.82	2,445.30	2,452.30	2,455.80
0.9900	2,453.53	2,446.54	2,450.03	2,457.04	2,460.55
0.9500	2,457.76	2,451.72	2,454.74	2,460.79	2,463.82
0.9000	2,460.02	2,456.18	2,458.10	2,461.94	2,463.87
0.8000	2,462.76	2,459.13	2,460.94	2,464.57	2,466.39
0.7000	2,464.73	2,461.50	2,463.12	2,466.35	2,467.97
0.5000	2,468.00	2,464.48	2,466.24	2,524.27	2,581.82
0.3000	3,136.01	2,486.59	2,792.48	3,521.79	3,955.04
0.2000	3,625.00	2,999.15	3,297.26	3,922.22	4,243.81
0.1000	4,026.00	3,363.95	3,680.12	4,544.20	5,129.10
0.0400	5,009.00	3,370.73	4,109.01	6,197.89	7,668.96
0.0200	5,722.00	3,683.03	4,590.67	7,419.93	9,621.69
0.0100	6,513.00	3,686.42	4,899.96	8,878.09	12,102.04
0.0040	7,872.00	4,236.50	5,774.93	10,730.60	14,627.25
0.0020	8,952.00	4,817.73	6,567.22	12,202.78	16,634.02
0.0010	10,099.35	5,435.21	7,408.92	13,766.77	18,765.96



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

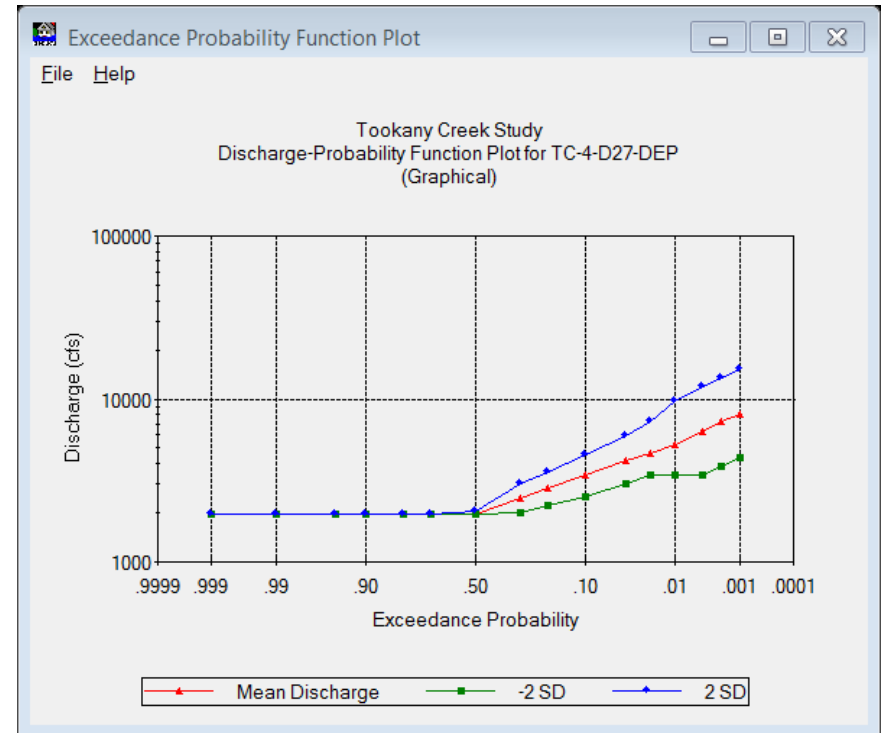
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,964.04	1,958.59	1,961.31	1,966.76	1,969.49
0.9900	1,967.72	1,962.27	1,965.00	1,970.46	1,973.19
0.9500	1,971.02	1,966.31	1,968.67	1,973.38	1,975.74
0.9000	1,972.78	1,969.79	1,971.28	1,974.28	1,975.78
0.8000	1,974.91	1,972.09	1,973.50	1,976.33	1,977.74
0.7000	1,976.45	1,973.94	1,975.19	1,977.71	1,978.97
0.5000	1,979.00	1,976.28	1,977.64	2,020.41	2,062.69
0.3000	2,465.44	1,992.67	2,216.48	2,742.35	3,050.37
0.2000	2,816.00	2,234.73	2,508.59	3,161.09	3,548.46
0.1000	3,386.00	2,516.19	2,918.88	3,927.88	4,556.48
0.0400	4,213.00	3,008.32	3,560.06	4,976.50	5,878.36
0.0200	4,611.00	3,420.35	3,971.30	5,769.06	7,217.96
0.0100	5,248.00	3,423.50	4,238.70	7,152.68	9,748.62
0.0040	6,343.00	3,432.98	4,666.41	8,645.09	11,782.68
0.0020	7,213.00	3,882.99	5,292.26	9,830.84	13,398.79
0.0010	8,137.23	4,380.53	5,970.38	11,090.51	15,115.63



Tookany Creek Study - Exceedance Probability Functions with Uncertai...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

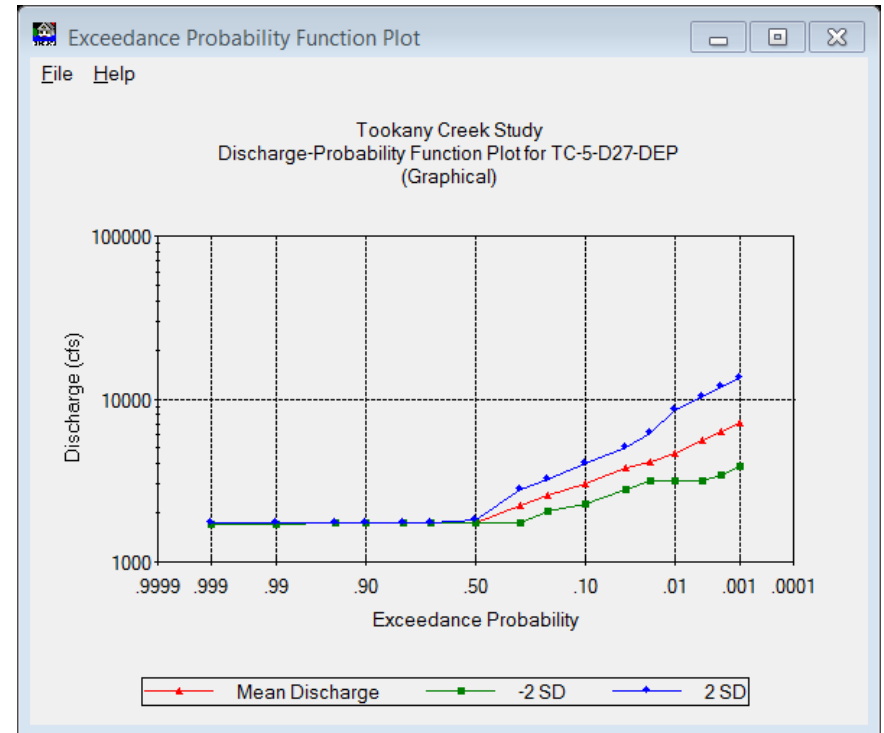
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,721.12	1,716.43	1,718.77	1,723.46	1,725.82
0.9900	1,724.29	1,719.60	1,721.94	1,726.64	1,729.00
0.9500	1,727.13	1,723.08	1,725.10	1,729.16	1,731.19
0.9000	1,728.65	1,726.07	1,727.36	1,729.94	1,731.23
0.8000	1,730.48	1,728.05	1,729.27	1,731.70	1,732.92
0.7000	1,731.81	1,729.64	1,730.72	1,732.89	1,733.98
0.5000	1,734.00	1,731.67	1,732.84	1,773.94	1,814.79
0.3000	2,209.32	1,747.21	1,964.72	2,484.36	2,793.65
0.2000	2,558.00	2,026.71	2,276.91	2,873.79	3,228.57
0.1000	3,030.00	2,275.51	2,625.80	3,496.43	4,034.65
0.0400	3,769.00	2,763.96	3,227.60	4,348.78	5,017.75
0.0200	4,073.00	3,151.15	3,582.55	5,042.67	6,243.19
0.0100	4,636.00	3,154.06	3,823.90	6,319.24	8,613.62
0.0040	5,603.00	3,162.78	4,209.64	7,637.34	10,410.30
0.0020	6,371.00	3,428.98	4,673.97	8,684.18	11,837.22
0.0010	7,186.81	3,868.06	5,272.48	9,796.19	13,352.99



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:  Use An Existing Function

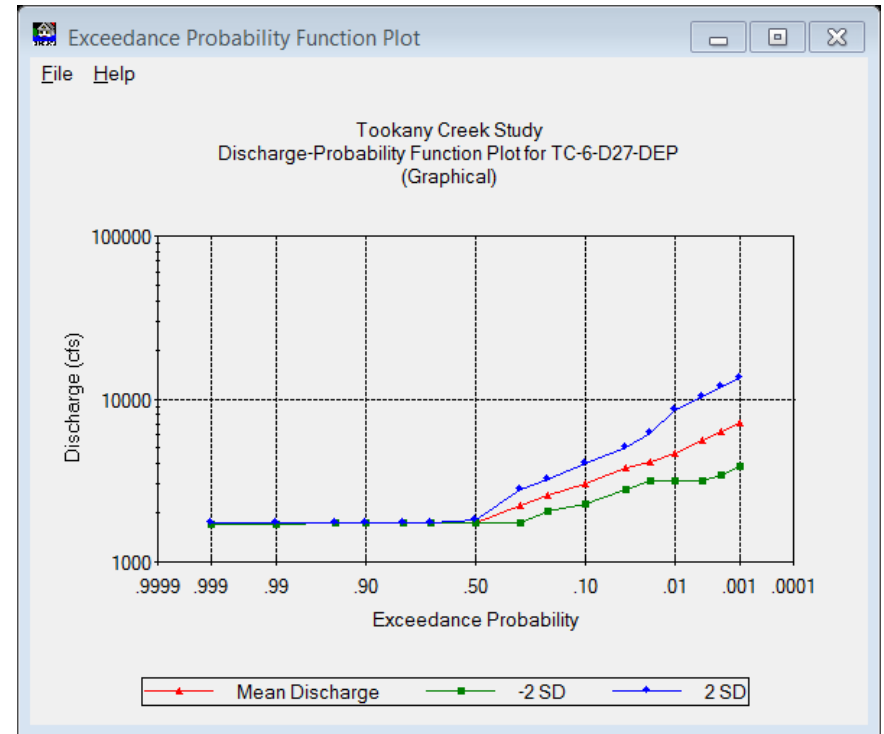
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		Discharge (cfs)			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,721.12	1,716.43	1,718.77	1,723.46	1,725.82
0.9900	1,724.29	1,719.60	1,721.94	1,726.64	1,729.00
0.9500	1,727.13	1,723.08	1,725.10	1,729.16	1,731.19
0.9000	1,728.65	1,726.07	1,727.36	1,729.94	1,731.23
0.8000	1,730.48	1,728.05	1,729.27	1,731.70	1,732.92
0.7000	1,731.81	1,729.64	1,730.72	1,732.89	1,733.98
0.5000	1,734.00	1,731.67	1,732.84	1,773.94	1,814.79
0.3000	2,209.32	1,747.21	1,964.72	2,484.36	2,793.65
0.2000	2,558.00	2,026.71	2,276.91	2,873.79	3,228.57
0.1000	3,030.00	2,275.51	2,625.80	3,496.43	4,034.65
0.0400	3,769.00	2,763.96	3,227.60	4,348.78	5,017.75
0.0200	4,073.00	3,151.15	3,582.55	5,042.67	6,243.19
0.0100	4,636.00	3,154.06	3,823.90	6,319.24	8,613.62
0.0040	5,603.00	3,162.78	4,209.64	7,637.34	10,410.30
0.0020	6,371.00	3,428.98	4,673.97	8,684.18	11,837.22
0.0010	7,186.81	3,868.06	5,272.48	9,796.19	13,352.99



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

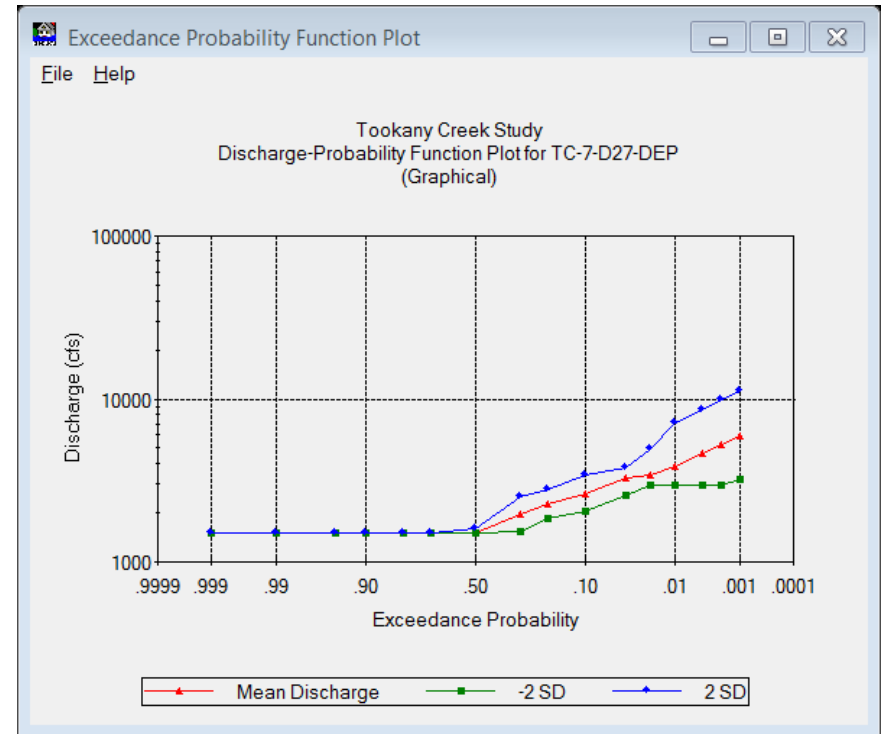
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,509.90	1,505.86	1,507.87	1,511.92	1,513.95
0.9900	1,512.63	1,508.59	1,510.61	1,514.66	1,516.69
0.9500	1,515.08	1,511.59	1,513.33	1,516.83	1,518.58
0.9000	1,516.39	1,514.16	1,515.27	1,517.50	1,518.61
0.8000	1,517.97	1,515.87	1,516.92	1,519.02	1,520.07
0.7000	1,519.11	1,517.24	1,518.18	1,520.04	1,520.98
0.5000	1,521.00	1,519.01	1,520.00	1,557.33	1,594.53
0.3000	1,955.76	1,533.03	1,731.54	2,209.01	2,495.05
0.2000	2,277.00	1,833.15	2,043.06	2,525.18	2,800.40
0.1000	2,613.00	2,064.05	2,322.36	2,982.75	3,404.82
0.0400	3,251.00	2,572.54	2,891.94	3,505.91	3,780.80
0.0200	3,387.00	2,958.22	3,165.36	4,068.36	4,886.79
0.0100	3,856.00	2,960.95	3,378.97	5,257.95	7,169.62
0.0040	4,660.00	2,969.14	3,719.70	6,354.27	8,664.53
0.0020	5,299.00	2,970.51	3,967.46	7,225.59	9,852.64
0.0010	5,977.80	3,215.01	4,383.92	8,151.19	11,114.78



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

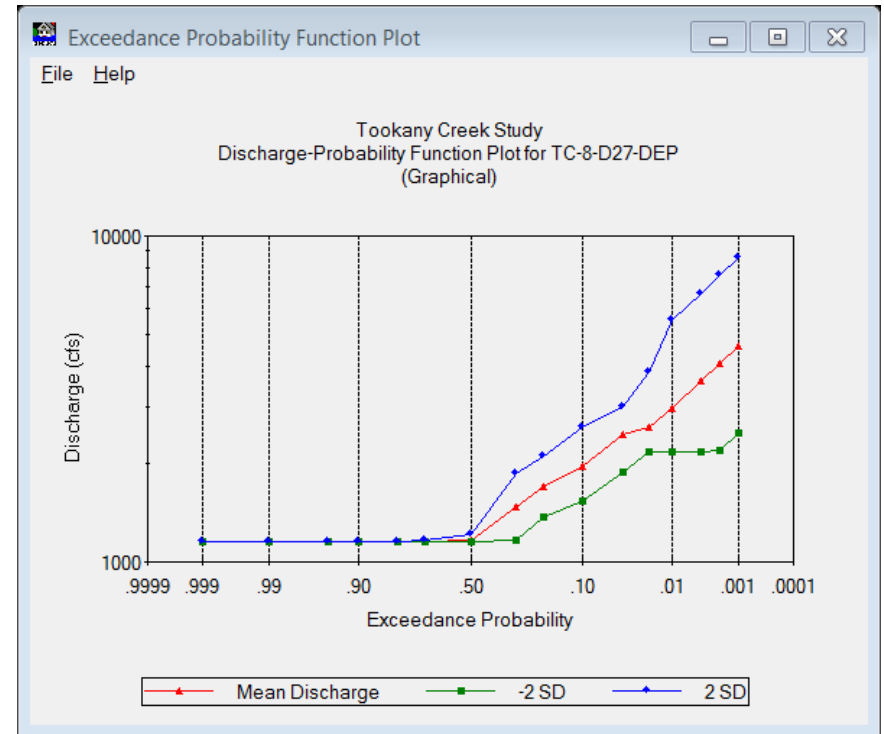
Description:

Type

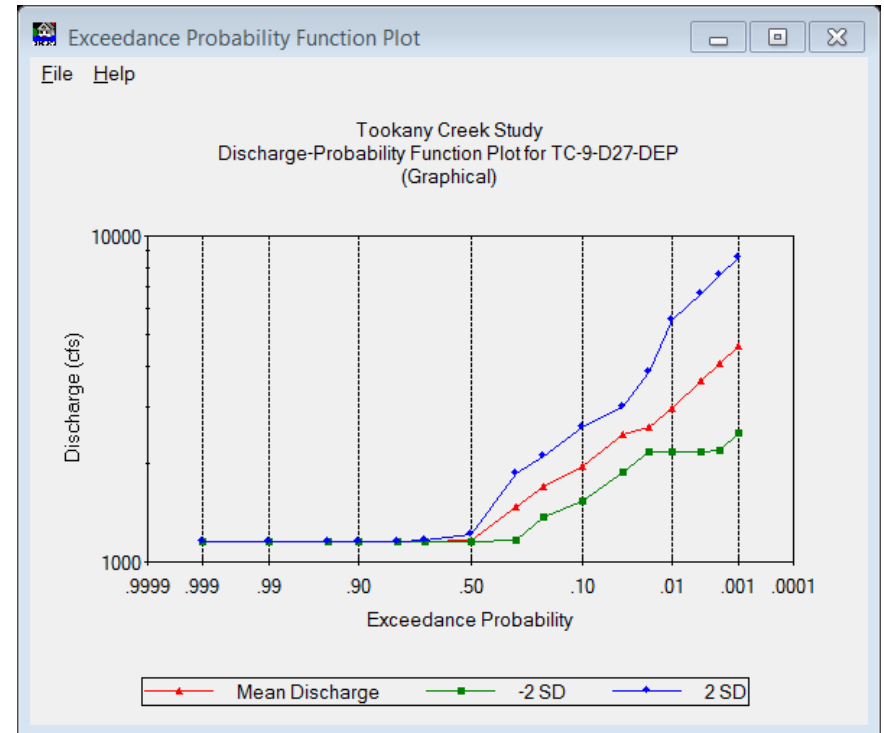
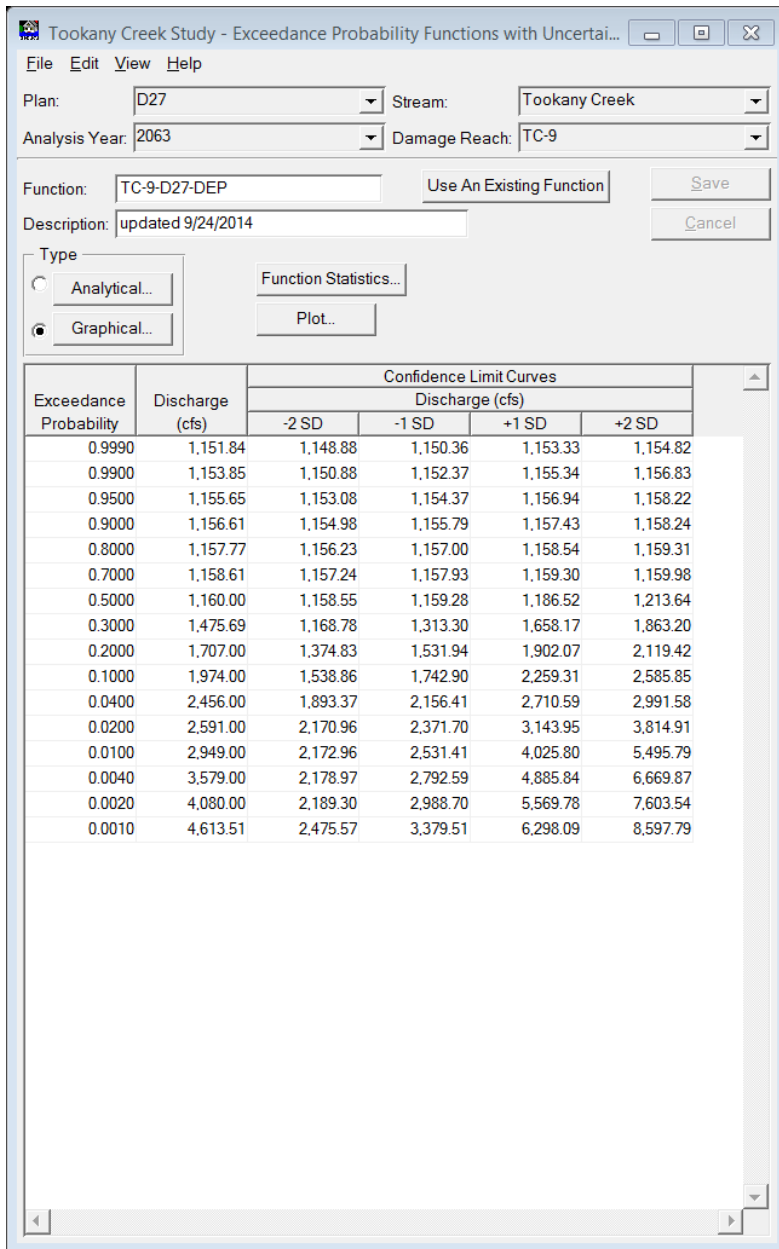
Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	1,151.84	1,148.88	1,150.36	1,153.33	1,154.82
0.9900	1,153.85	1,150.88	1,152.37	1,155.34	1,156.83
0.9500	1,155.65	1,153.08	1,154.37	1,156.94	1,158.22
0.9000	1,156.61	1,154.98	1,155.79	1,157.43	1,158.24
0.8000	1,157.77	1,156.23	1,157.00	1,158.54	1,159.31
0.7000	1,158.61	1,157.24	1,157.93	1,159.30	1,159.98
0.5000	1,160.00	1,158.55	1,159.28	1,186.52	1,213.64
0.3000	1,475.69	1,168.78	1,313.30	1,658.17	1,863.20
0.2000	1,707.00	1,374.83	1,531.94	1,902.07	2,119.42
0.1000	1,974.00	1,538.86	1,742.90	2,259.31	2,585.85
0.0400	2,456.00	1,893.37	2,156.41	2,710.59	2,991.58
0.0200	2,591.00	2,170.96	2,371.70	3,143.95	3,814.91
0.0100	2,949.00	2,172.96	2,531.41	4,025.80	5,495.79
0.0040	3,579.00	2,178.97	2,792.59	4,885.84	6,669.87
0.0020	4,080.00	2,189.30	2,988.70	5,569.78	7,603.54
0.0010	4,613.51	2,475.57	3,379.51	6,298.09	8,597.79







**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

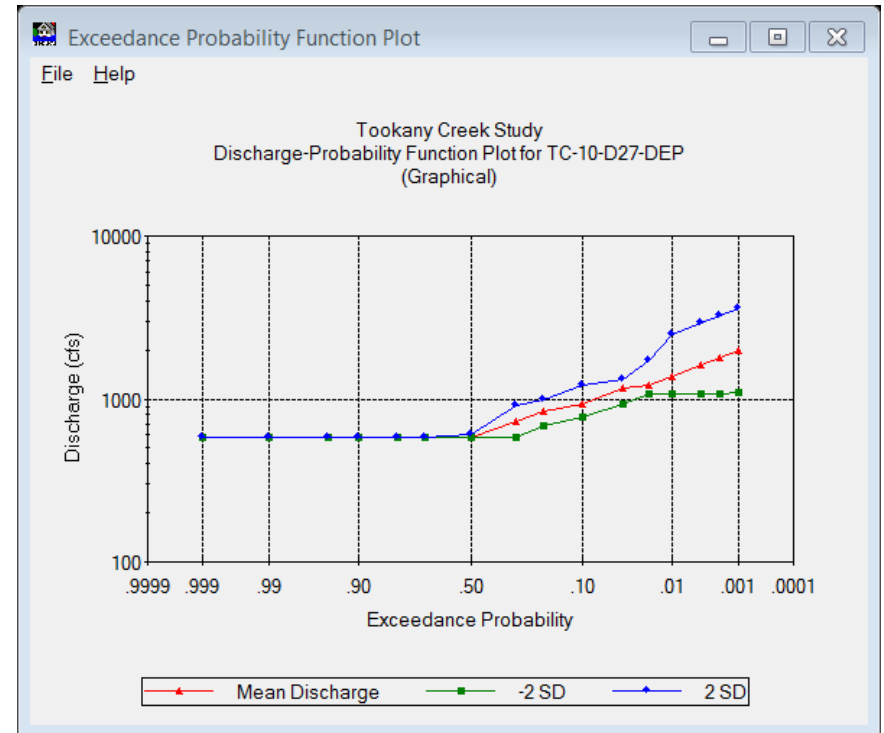
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	579.30	577.95	578.63	579.97	580.65
0.9900	580.21	578.86	579.54	580.89	581.56
0.9500	581.03	579.86	580.44	581.61	582.19
0.9000	581.46	580.72	581.09	581.83	582.20
0.8000	581.99	581.29	581.64	582.34	582.69
0.7000	582.37	581.75	582.06	582.68	582.99
0.5000	583.00	582.37	582.69	595.38	608.02
0.3000	729.26	587.10	654.33	812.76	905.83
0.2000	835.00	690.73	759.44	911.99	996.07
0.1000	939.00	767.98	849.19	1,064.33	1,206.38
0.0400	1,168.00	935.35	1,045.22	1,246.49	1,330.26
0.0200	1,210.00	1,076.81	1,141.46	1,445.91	1,727.82
0.0100	1,377.00	1,077.80	1,218.25	1,851.68	2,489.98
0.0040	1,608.00	1,080.79	1,318.30	2,162.31	2,907.69
0.0020	1,794.00	1,081.28	1,392.77	2,412.42	3,244.03
0.0010	1,987.98	1,099.38	1,478.36	2,673.27	3,594.79



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

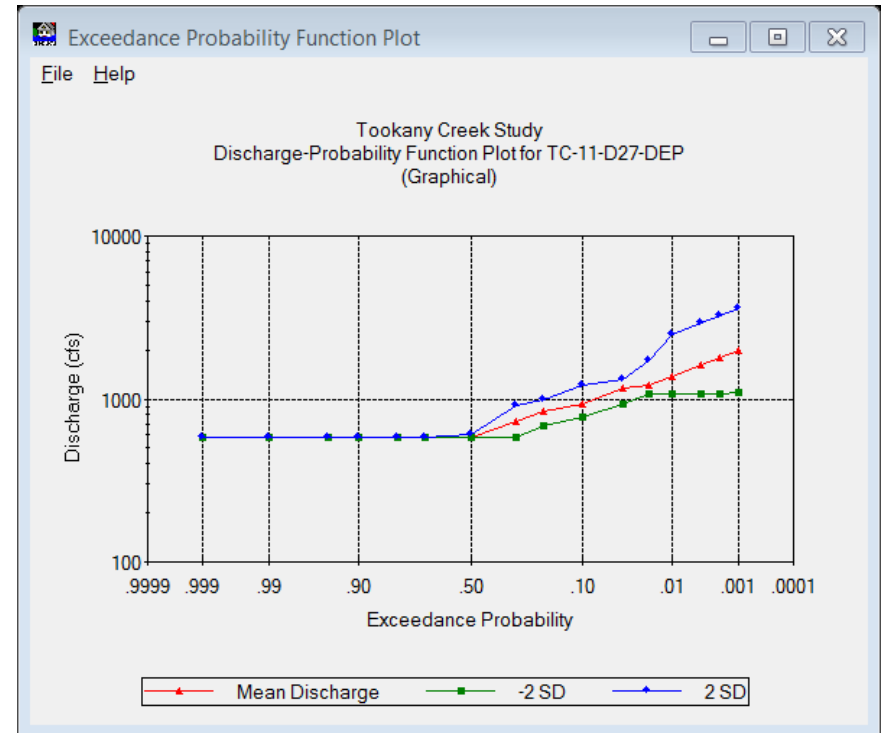
Description:

Type

Analytical...

Graphical...

Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	579.30	577.95	578.63	579.97	580.65
0.9900	580.21	578.86	579.54	580.89	581.56
0.9500	581.03	579.86	580.44	581.61	582.19
0.9000	581.46	580.72	581.09	581.83	582.20
0.8000	581.99	581.29	581.64	582.34	582.69
0.7000	582.37	581.75	582.06	582.68	582.99
0.5000	583.00	582.37	582.69	595.38	608.02
0.3000	729.26	587.10	654.33	812.76	905.83
0.2000	835.00	690.73	759.44	911.99	996.07
0.1000	939.00	767.98	849.19	1,064.33	1,206.38
0.0400	1,168.00	935.35	1,045.22	1,246.49	1,330.26
0.0200	1,210.00	1,076.81	1,141.46	1,445.91	1,727.82
0.0100	1,377.00	1,077.80	1,218.25	1,851.68	2,489.98
0.0040	1,608.00	1,080.79	1,318.30	2,162.31	2,907.69
0.0020	1,794.00	1,081.28	1,392.77	2,412.42	3,244.03
0.0010	1,987.98	1,099.38	1,478.36	2,673.27	3,594.79



**Tookany Creek Study - Exceedance Probability Functions with Uncertai...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Function:

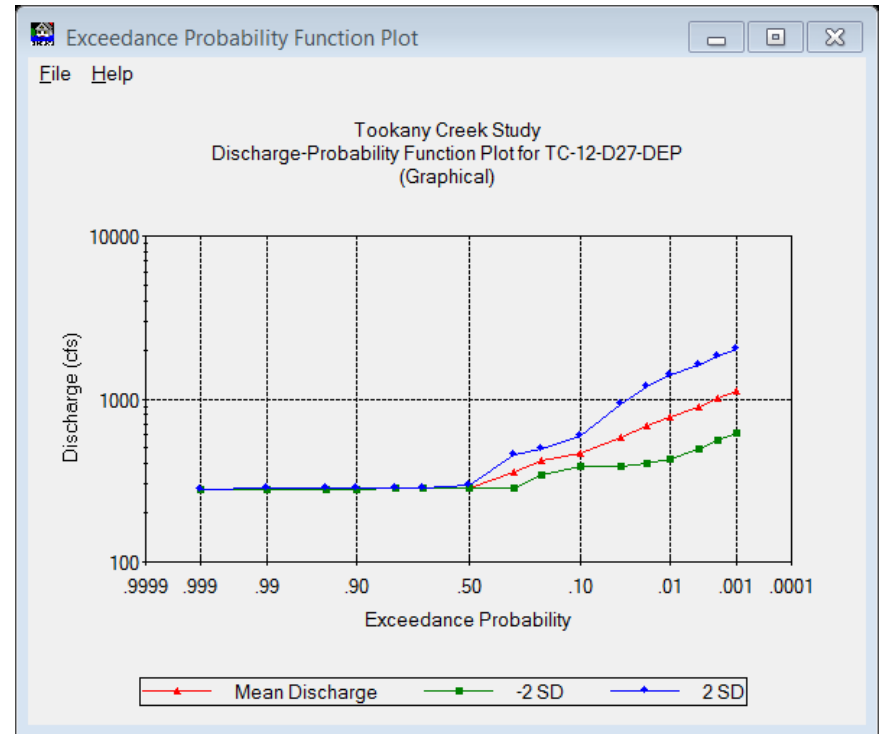
Description:

Type

Analytical...

Graphical...

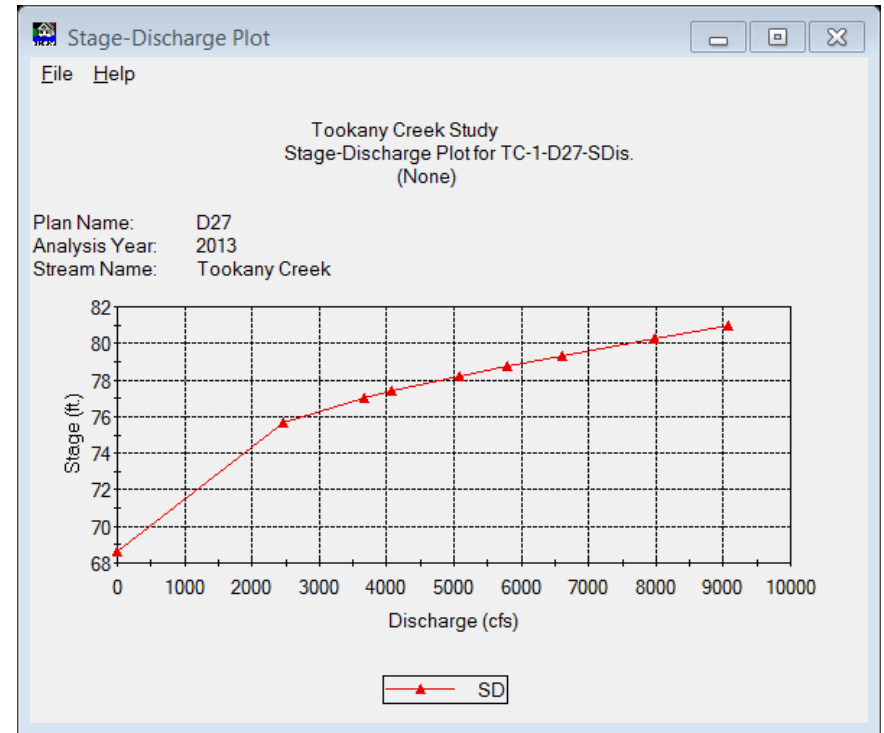
Exceedance Probability	Discharge (cfs)	Confidence Limit Curves			
		-2 SD	-1 SD	+1 SD	+2 SD
0.9990	280.42	279.85	280.13	280.71	281.00
0.9900	280.81	280.24	280.53	281.10	281.39
0.9500	281.16	280.66	280.91	281.41	281.66
0.9000	281.35	281.03	281.19	281.51	281.67
0.8000	281.58	281.28	281.43	281.73	281.88
0.7000	281.74	281.47	281.61	281.87	282.01
0.5000	282.01	281.75	281.88	288.43	295.00
0.3000	358.76	284.14	319.28	403.12	452.96
0.2000	414.99	341.65	376.54	451.28	490.75
0.1000	463.99	383.26	421.70	525.17	594.42
0.0400	577.99	388.08	473.61	736.33	938.05
0.0200	678.73	398.70	520.20	900.79	1,195.50
0.0100	772.69	426.98	574.39	1,039.45	1,398.31
0.0040	901.64	498.24	670.25	1,212.92	1,631.66
0.0020	1,005.60	555.68	747.53	1,352.77	1,819.79
0.0010	1,113.98	615.58	828.10	1,498.57	2,015.93



Tookany Creek Study - Stage-Discharge Function with Uncer...  
 File Edit View Help  
 Plan: D27 Stream: Tookany Creek  
 Analysis Year: 2013 Damage Reach: TC-1  
 Function: TC-1-D27-SDis. Use An Existing Function Plot...  
 Description: updated 9/30/2014 Tabulate...  
 Distribution Type  
 None  Normal  Triangular  Log Normal  
 Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...  
 Save  
 Cancel

	Discharge (cfs)	Stage (ft.)
1	0.00	68.61
2	2462.00	75.71
3	3678.00	77.05
4	4084.00	77.44
5	5081.00	78.22
6	5799.00	78.75
7	6601.00	79.32
8	7978.00	80.23
9	9072.00	80.99
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### Tookany Creek D27 Stage – Discharge Functions



Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

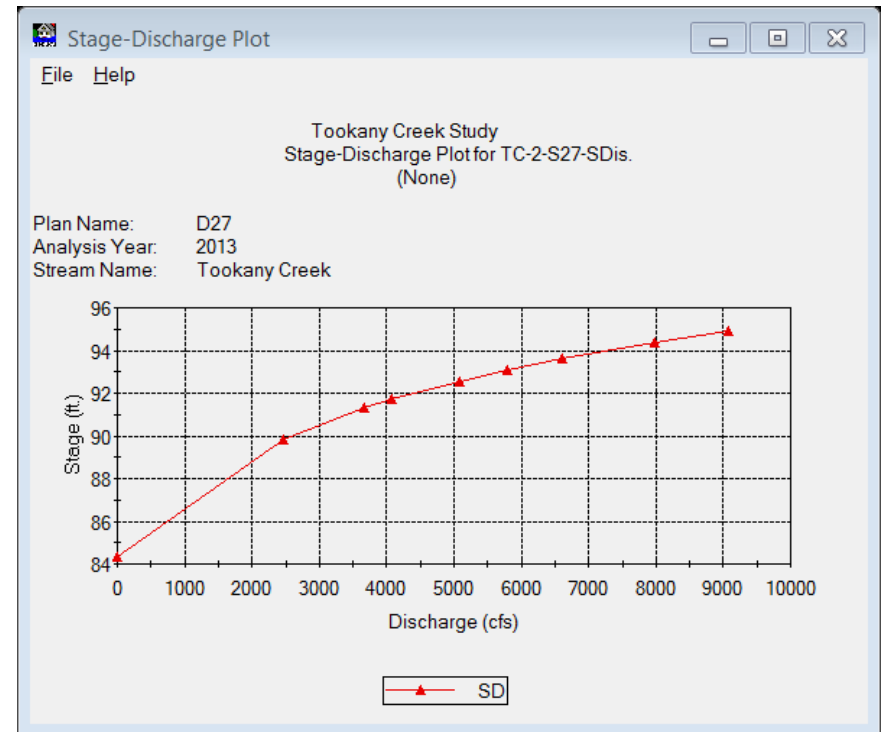
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	84.32
2	2462.00	89.82
3	3678.00	91.29
4	4084.00	91.71
5	5081.00	92.57
6	5799.00	93.11
7	6601.00	93.61
8	7978.00	94.35
9	9072.00	94.91
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**Tookany Creek Study - Stage-Discharge Function with Uncer...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

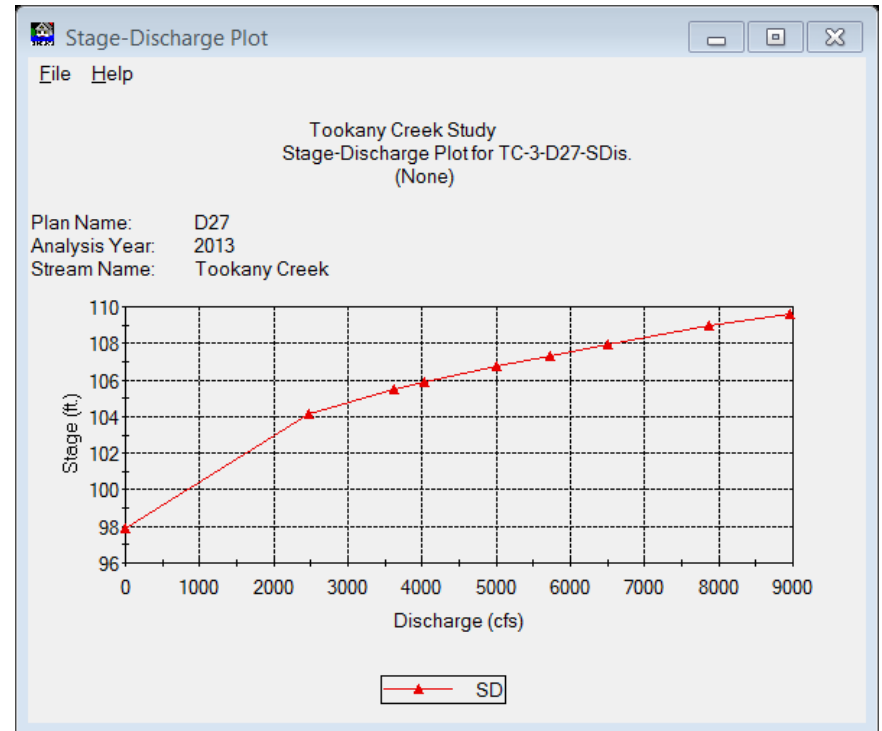
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	97.87
2	2468.00	104.15
3	3625.00	105.47
4	4026.00	105.87
5	5009.00	106.76
6	5722.00	107.34
7	6513.00	107.96
8	7872.00	108.94
9	8952.00	109.60
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

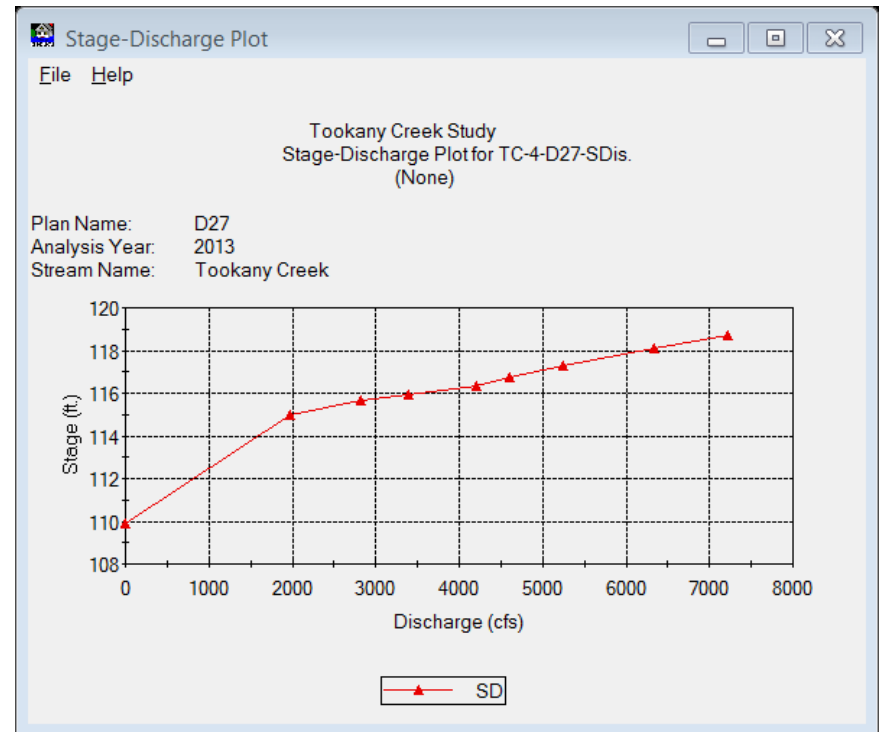
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	109.89
2	1979.00	114.96
3	2816.00	115.65
4	3386.00	115.92
5	4213.00	116.35
6	4611.00	116.72
7	5248.00	117.28
8	6343.00	118.11
9	7213.00	118.69
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

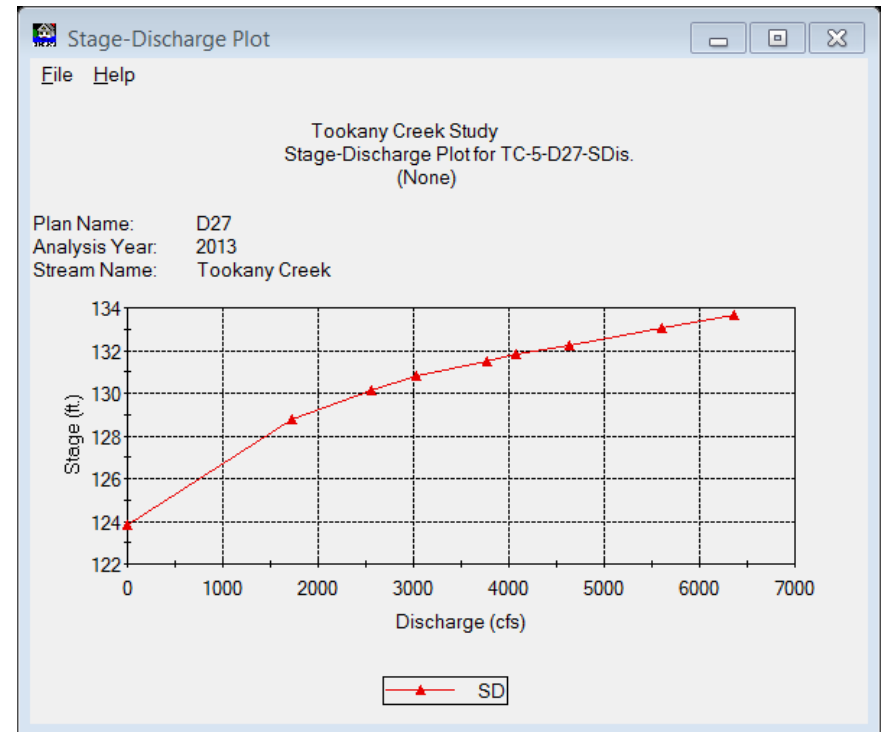
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	123.83
2	1734.00	128.76
3	2558.00	130.14
4	3030.00	130.83
5	3769.00	131.52
6	4073.00	131.80
7	4636.00	132.27
8	5603.00	133.05
9	6371.00	133.64
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

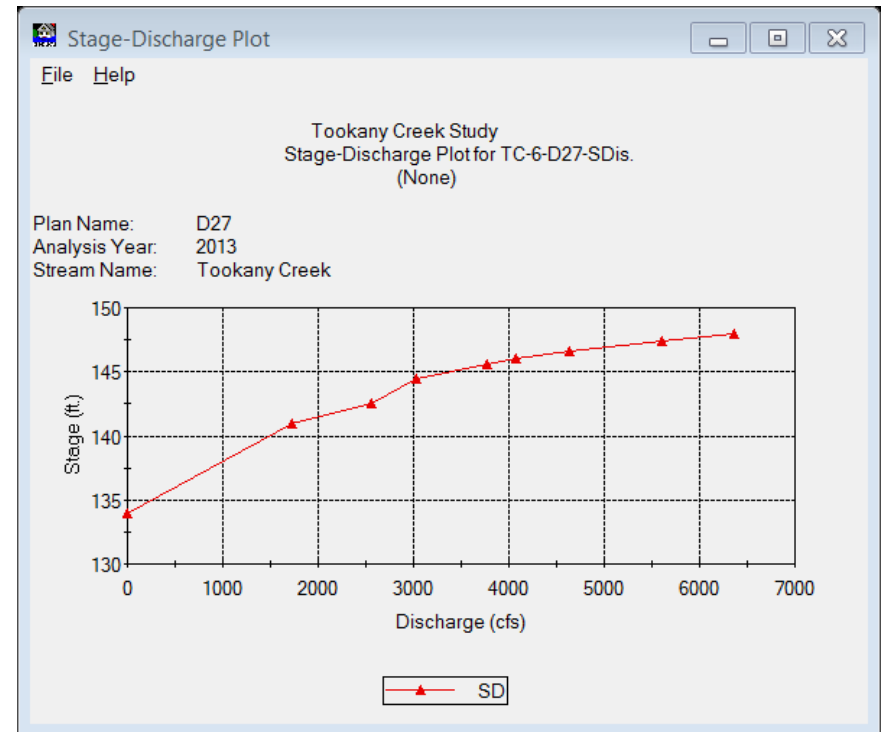
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	133.94
2	1734.00	140.98
3	2558.00	142.59
4	3030.00	144.46
5	3769.00	145.59
6	4073.00	146.01
7	4636.00	146.63
8	5603.00	147.45
9	6371.00	148.00
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**Tookany Creek Study - Stage-Discharge Function with Uncer...**

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

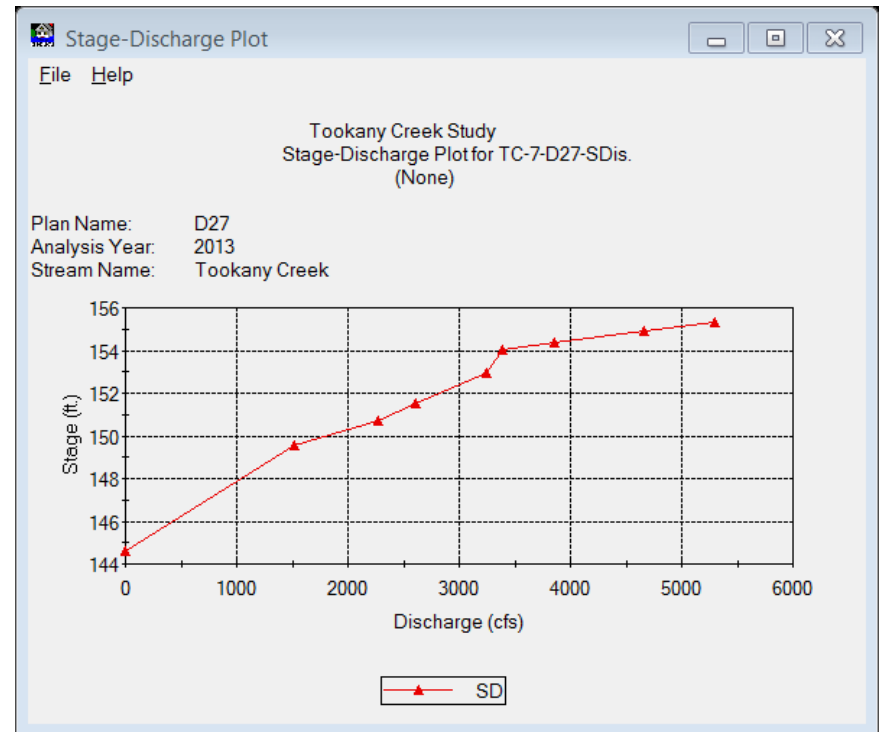
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	144.62
2	1521.00	149.53
3	2277.00	150.71
4	2613.00	151.51
5	3251.00	152.96
6	3387.00	154.06
7	3856.00	154.38
8	4660.00	154.94
9	5299.00	155.34
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

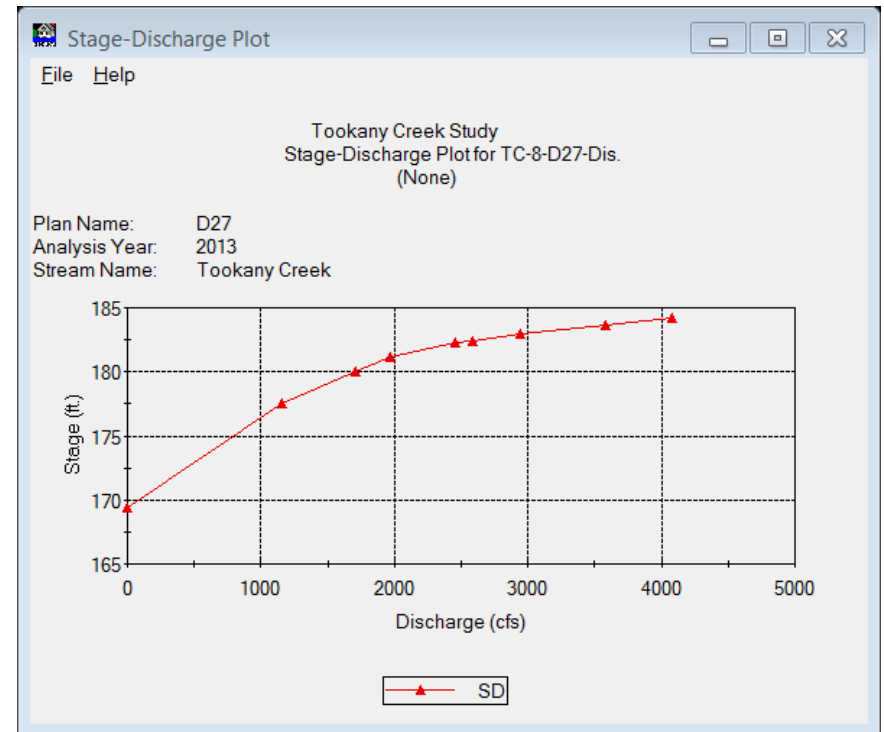
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	169.39
2	1160.00	177.50
3	1707.00	180.03
4	1974.00	181.19
5	2456.00	182.24
6	2591.00	182.44
7	2949.00	182.95
8	3579.00	183.70
9	4080.00	184.23
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

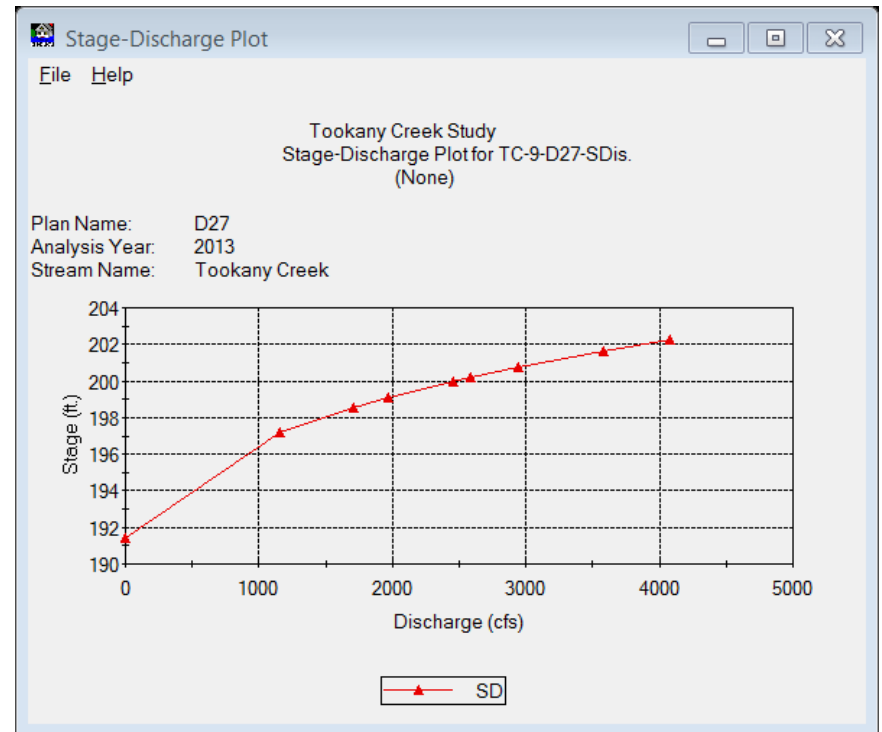
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	191.46
2	1160.00	197.18
3	1707.00	198.51
4	1974.00	199.09
5	2456.00	199.94
6	2591.00	200.17
7	2949.00	200.74
8	3579.00	201.65
9	4080.00	202.28
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

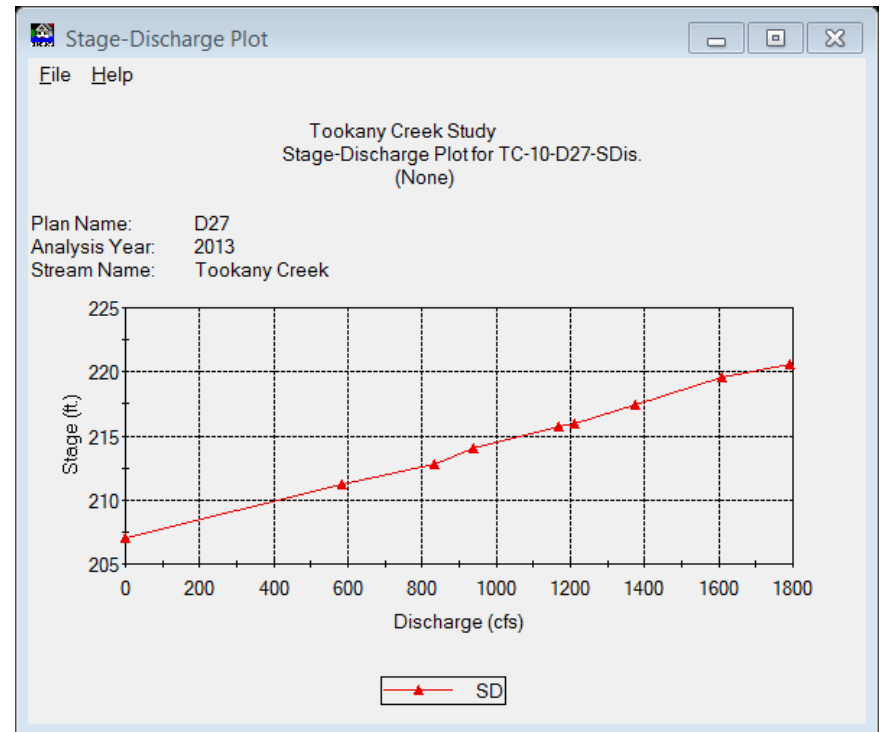
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	207.04
2	583.00	211.25
3	835.00	212.77
4	939.00	214.05
5	1168.00	215.78
6	1210.00	215.98
7	1377.00	217.41
8	1608.00	219.55
9	1794.00	220.54
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

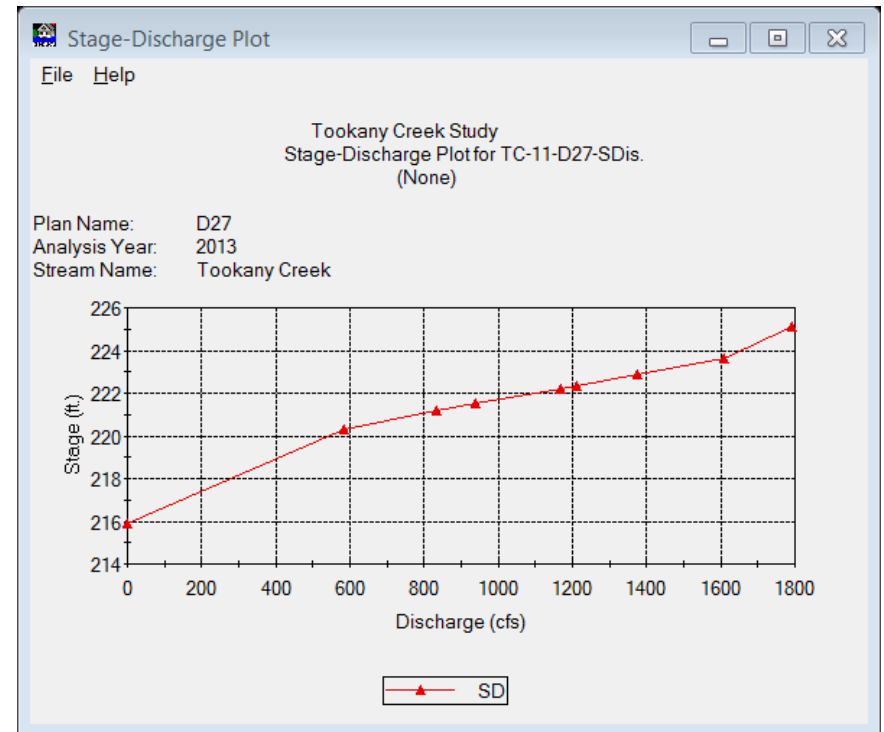
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	215.91
2	583.00	220.31
3	835.00	221.19
4	939.00	221.52
5	1168.00	222.19
6	1210.00	222.35
7	1377.00	222.89
8	1608.00	223.62
9	1794.00	225.12
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

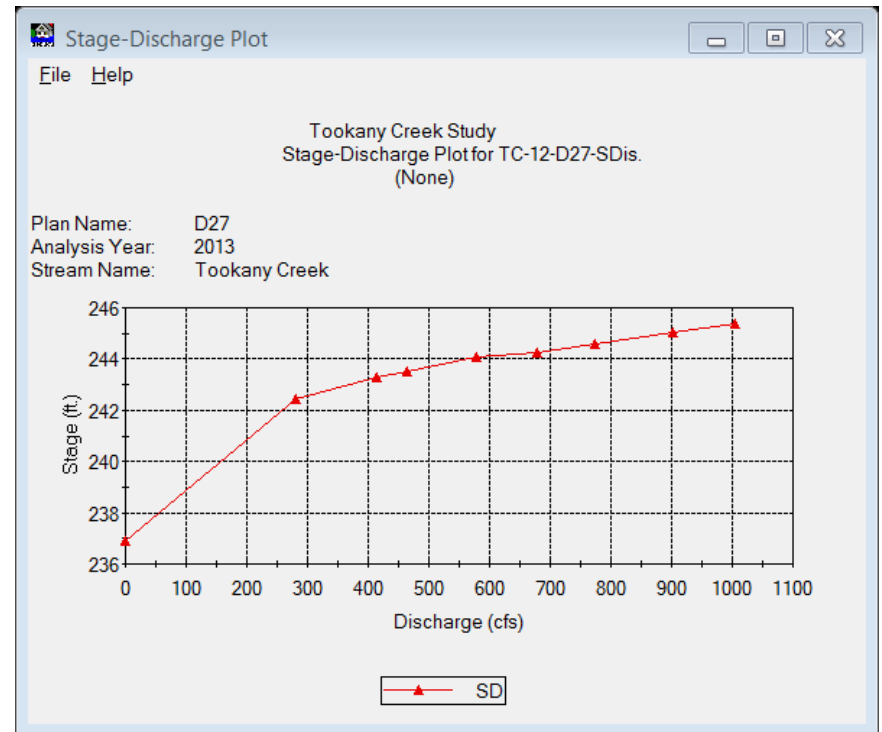
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	236.91
2	282.01	242.44
3	414.99	243.26
4	463.99	243.52
5	577.99	244.07
6	678.73	244.26
7	772.69	244.61
8	901.64	245.06
9	1005.60	245.40
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

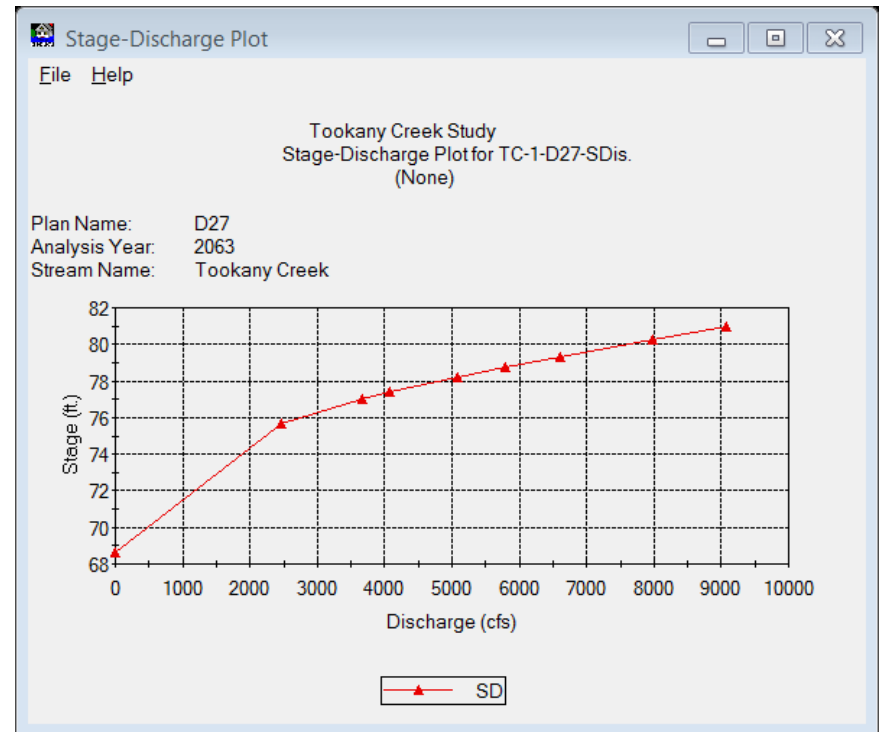
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	68.61
2	2462.00	75.71
3	3678.00	77.05
4	4084.00	77.44
5	5081.00	78.22
6	5799.00	78.75
7	6601.00	79.32
8	7978.00	80.23
9	9072.00	80.99
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

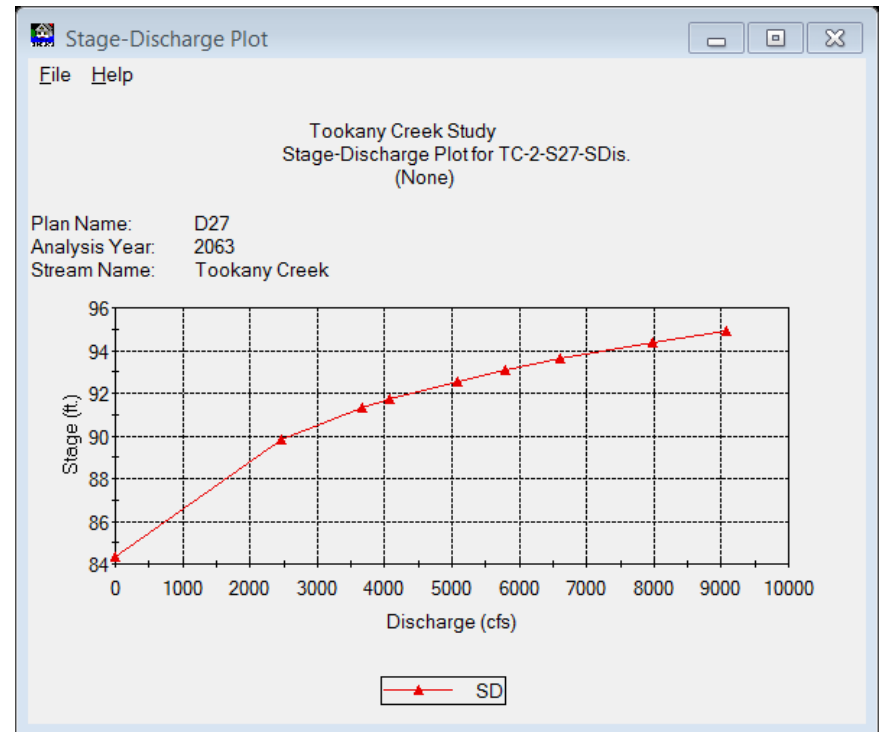
Function:  Use An Existing Function Plot...

Description:  Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft.)
1	0.00	84.32
2	2462.00	89.82
3	3678.00	91.29
4	4084.00	91.71
5	5081.00	92.57
6	5799.00	93.11
7	6601.00	93.61
8	7978.00	94.35
9	9072.00	94.91
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

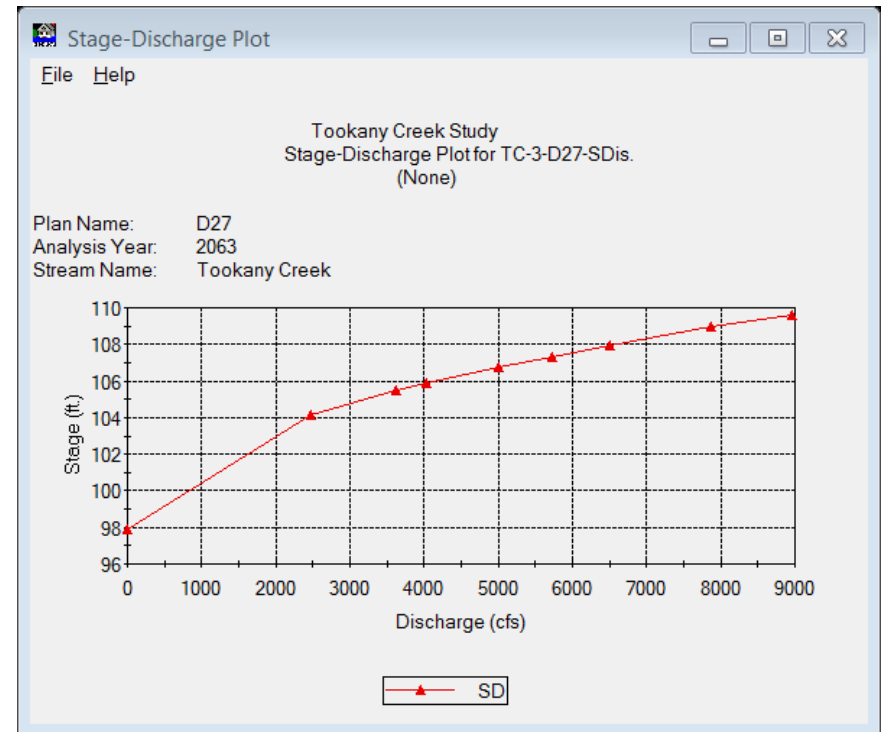
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	97.87
2	2468.00	104.15
3	3625.00	105.47
4	4026.00	105.87
5	5009.00	106.76
6	5722.00	107.34
7	6513.00	107.96
8	7872.00	108.94
9	8952.00	109.60
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

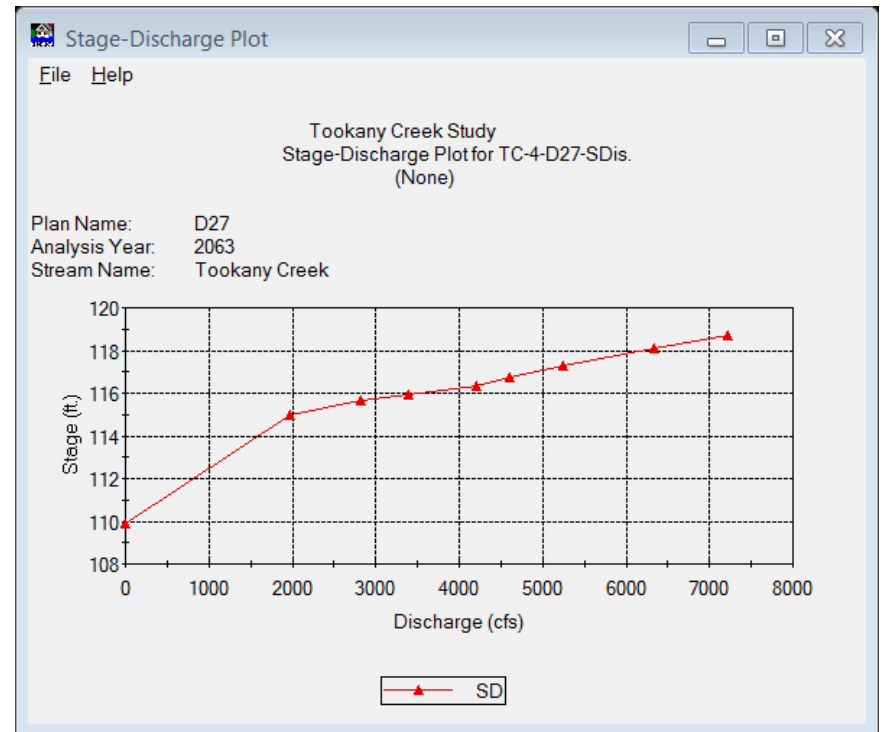
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	109.89
2	1979.00	114.96
3	2816.00	115.65
4	3386.00	115.92
5	4213.00	116.35
6	4611.00	116.72
7	5248.00	117.28
8	6343.00	118.11
9	7213.00	118.69
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

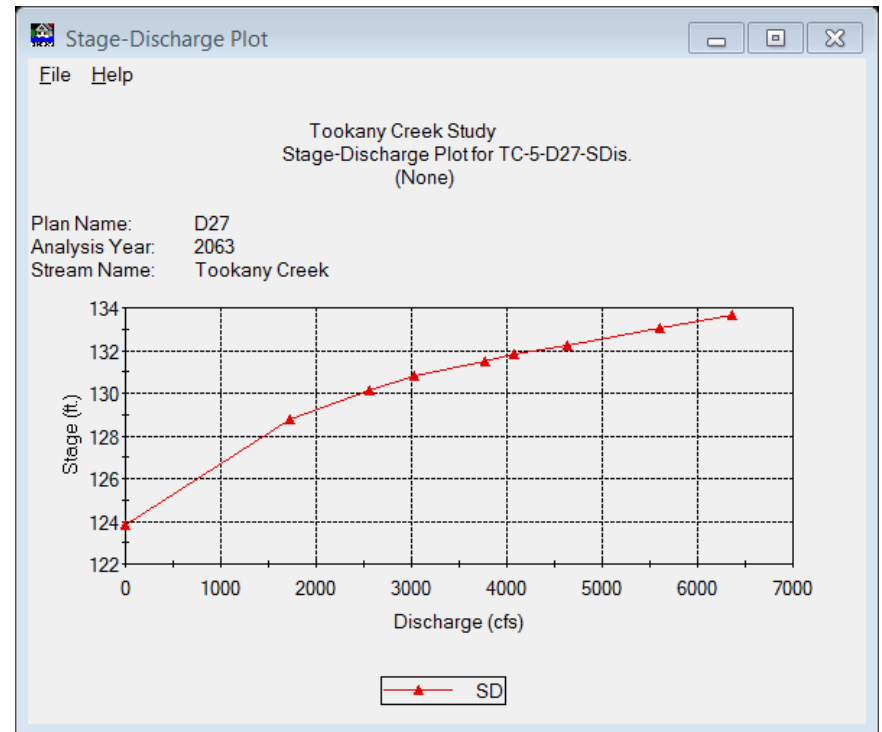
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	123.83
2	1734.00	128.76
3	2558.00	130.14
4	3030.00	130.83
5	3769.00	131.52
6	4073.00	131.80
7	4636.00	132.27
8	5603.00	133.05
9	6371.00	133.64
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

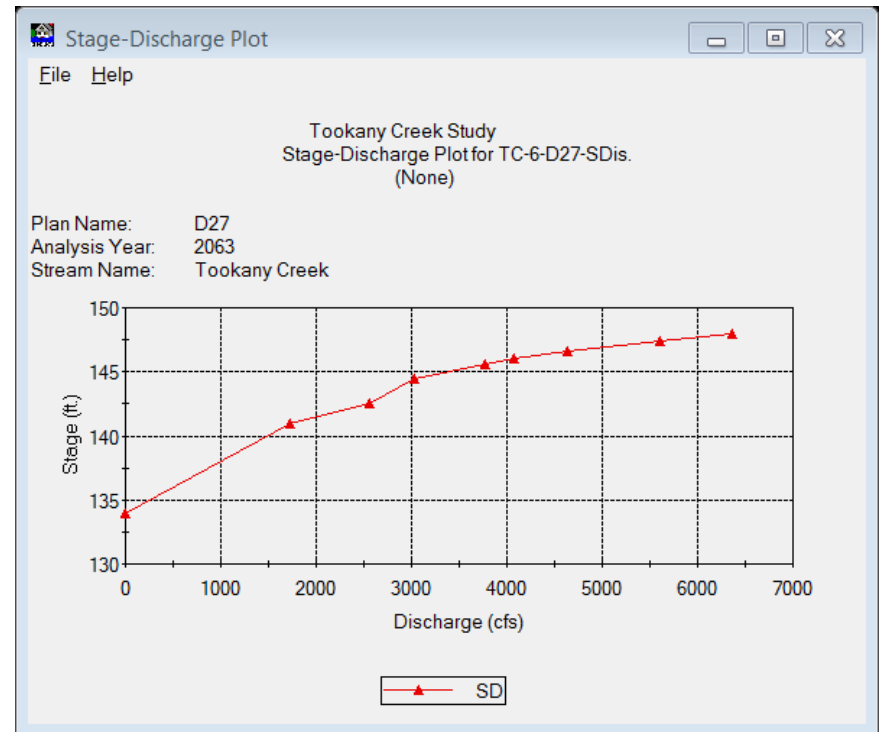
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	133.94
2	1734.00	140.98
3	2558.00	142.59
4	3030.00	144.46
5	3769.00	145.59
6	4073.00	146.01
7	4636.00	146.63
8	5603.00	147.45
9	6371.00	148.00
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

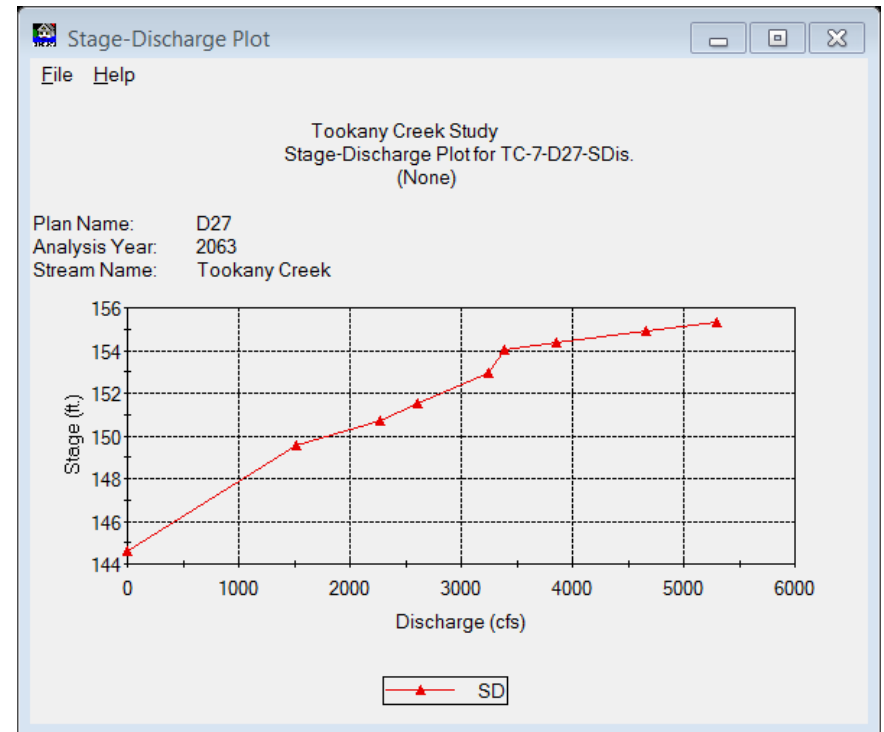
Function:  Use An Existing Function Plot...

Description:  Tabulate...

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate Set Stage Error...

	Discharge (cfs)	Stage (ft.)
1	0.00	144.62
2	1521.00	149.53
3	2277.00	150.71
4	2613.00	151.51
5	3251.00	152.96
6	3387.00	154.06
7	3856.00	154.38
8	4660.00	154.94
9	5299.00	155.34
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

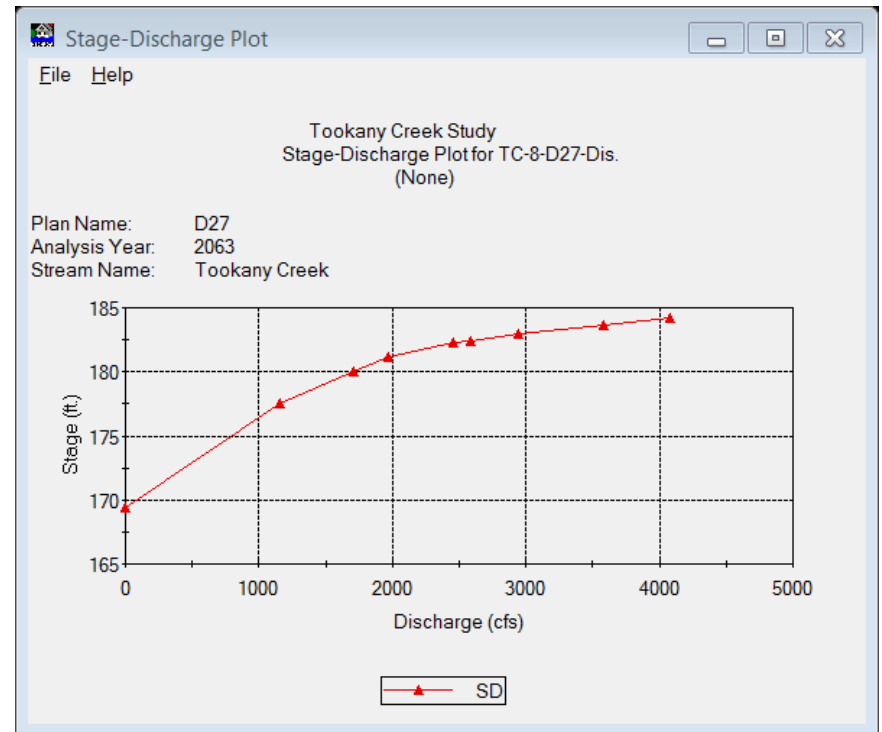
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	169.39
2	1160.00	177.50
3	1707.00	180.03
4	1974.00	181.19
5	2456.00	182.24
6	2591.00	182.44
7	2949.00	182.95
8	3579.00	183.70
9	4080.00	184.23
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

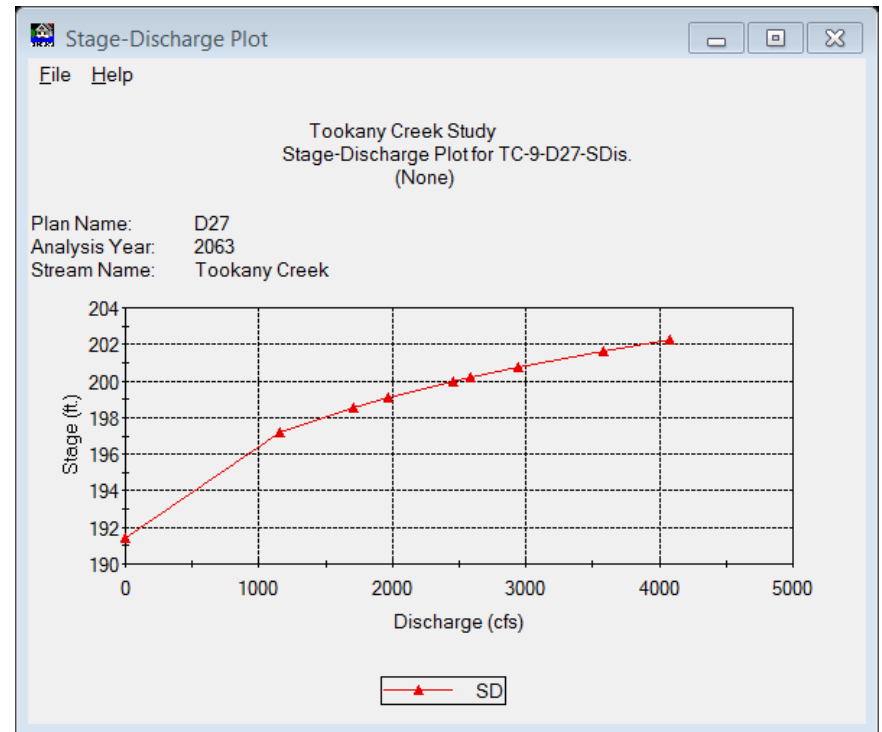
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	191.46
2	1160.00	197.18
3	1707.00	198.51
4	1974.00	199.09
5	2456.00	199.94
6	2591.00	200.17
7	2949.00	200.74
8	3579.00	201.65
9	4080.00	202.28
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

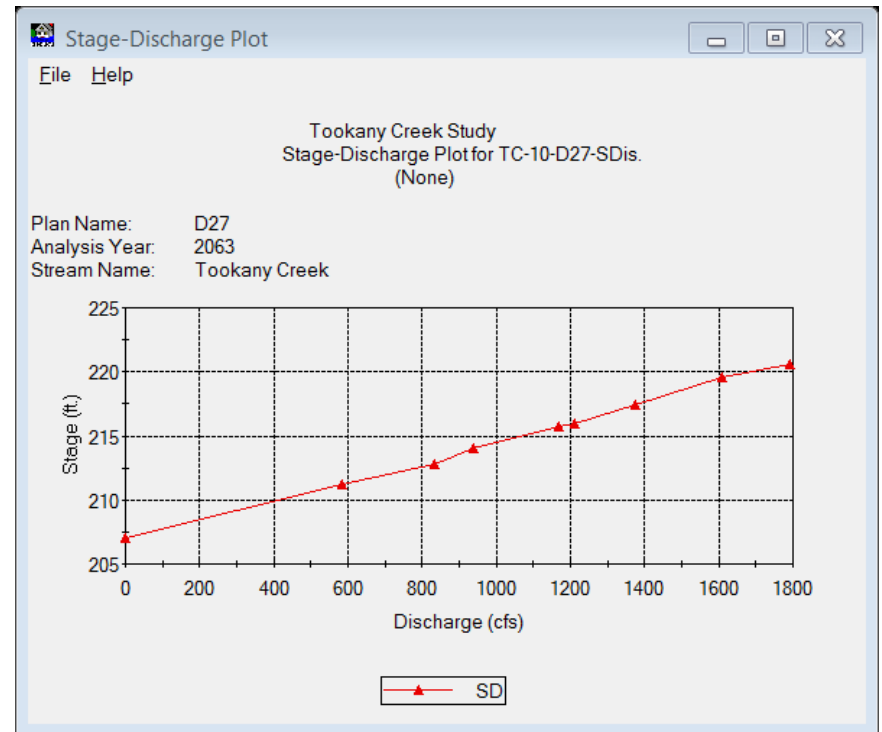
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	207.04
2	583.00	211.25
3	835.00	212.77
4	939.00	214.05
5	1168.00	215.78
6	1210.00	215.98
7	1377.00	217.41
8	1608.00	219.55
9	1794.00	220.54
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

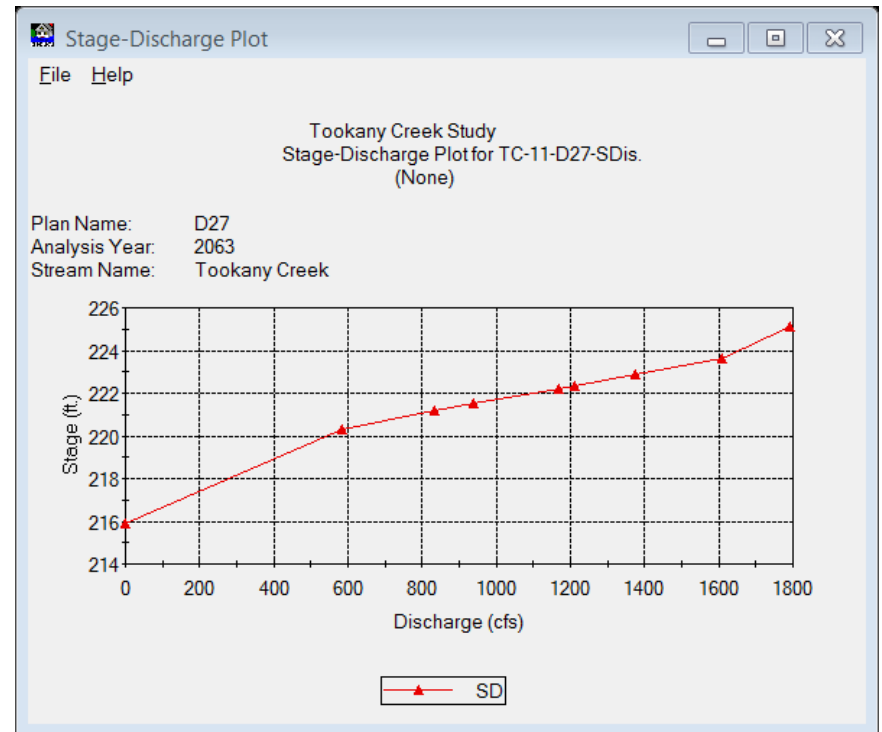
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	215.91
2	583.00	220.31
3	835.00	221.19
4	939.00	221.52
5	1168.00	222.19
6	1210.00	222.35
7	1377.00	222.89
8	1608.00	223.62
9	1794.00	225.12
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Tookany Creek Study - Stage-Discharge Function with Uncer...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

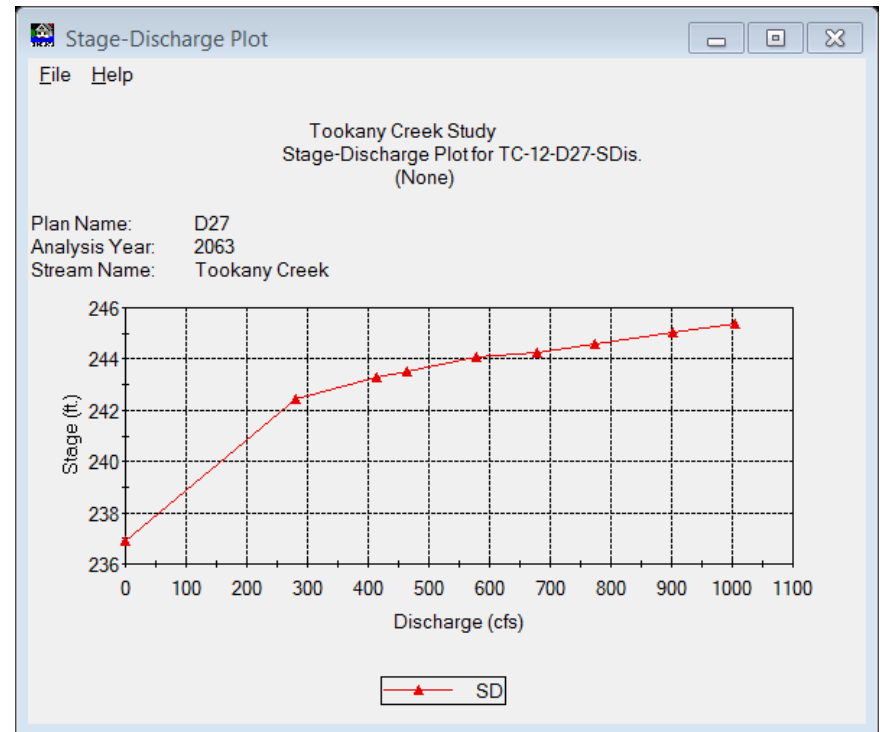
Function:  Use An Existing Function

Description:

Distribution Type  
 None  Normal  Triangular  Log Normal

Define Uncertainty  
 Enter by Ordinate  Calculate

	Discharge (cfs)	Stage (ft.)
1	0.00	236.91
2	282.01	242.44
3	414.99	243.26
4	463.99	243.52
5	577.99	244.07
6	678.73	244.26
7	772.69	244.61
8	901.64	245.06
9	1005.60	245.40
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## Tookany Creek D27 Stage – Damage Functions

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
29			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
29			
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31			
32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

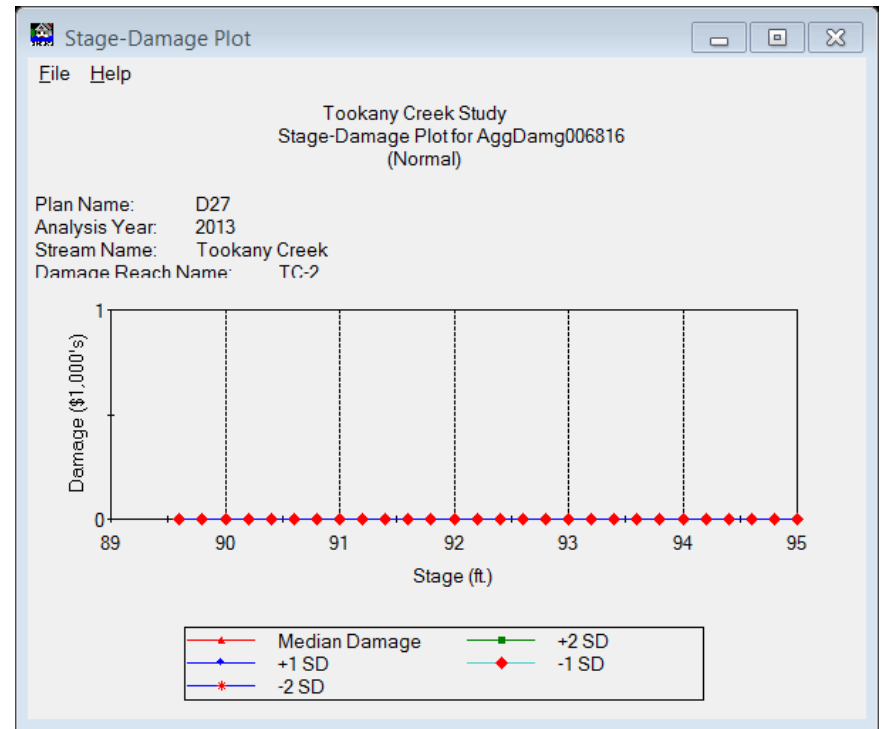
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Damage Category: Industrial

Function: AggDmg006817 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-2

Damage Category: Public

Function: AggDmg006818 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
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Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

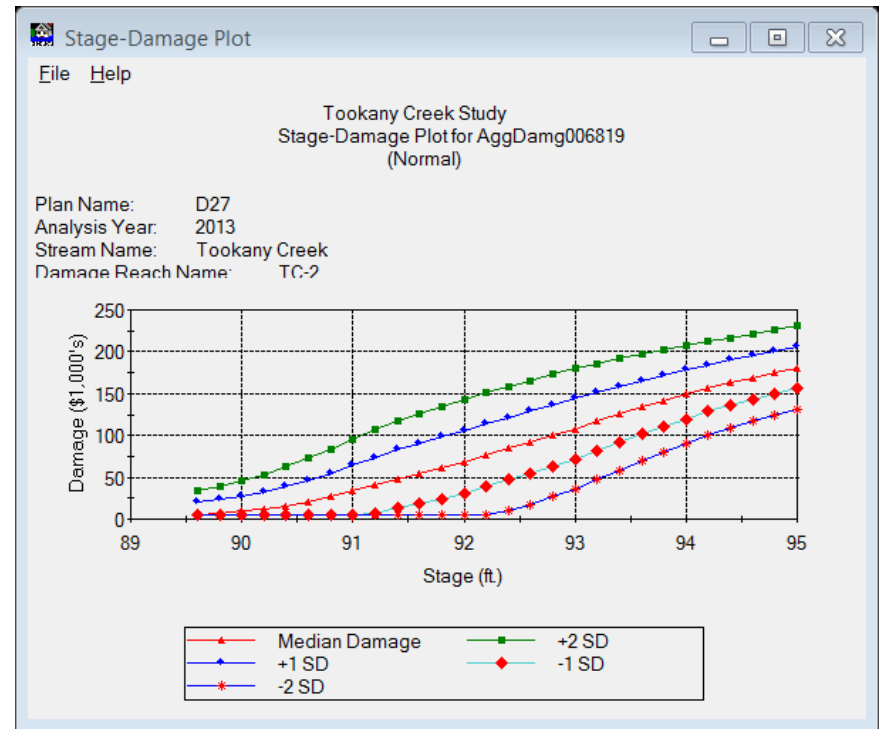
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	5.60	14.00
2	89.80	7.39	16.01
3	90.00	9.51	18.09
4	90.20	12.22	20.38
5	90.40	15.97	23.11
6	90.60	20.63	25.84
7	90.80	26.44	28.61
8	91.00	33.18	31.17
9	91.20	40.48	33.35
10	91.40	48.22	34.95
11	91.60	54.21	36.03
12	91.80	61.17	36.81
13	92.00	68.47	37.24
14	92.20	76.34	37.41
15	92.40	84.34	37.22
16	92.60	91.72	37.00
17	92.80	100.08	36.51
18	93.00	107.83	36.10
19	93.20	116.79	34.69
20	93.40	125.36	33.39
21	93.60	133.70	31.78
22	93.80	141.27	30.58
23	94.00	148.87	29.20
24	94.20	156.31	27.77
25	94.40	163.13	26.72
26	94.60	169.18	26.06
27	94.80	175.09	25.44
28	95.00	180.70	24.98
29			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.20	0.00	0.00
3	104.40	0.00	0.00
4	104.60	0.00	0.00
5	104.80	0.00	0.00
6	105.00	0.00	0.00
7	105.20	0.00	0.00
8	105.40	0.00	0.00
9	105.60	0.00	0.00
10	105.80	0.00	0.00
11	106.00	0.00	0.00
12	106.20	0.00	0.00
13	106.40	0.00	0.00
14	106.60	0.00	0.00
15	106.80	0.00	0.00
16	107.00	0.00	0.00
17	107.20	0.00	0.00
18	107.40	0.00	0.00
19	107.60	0.00	0.00
20	107.80	0.00	0.00
21	108.00	0.00	0.00
22	108.20	0.00	0.00
23	108.40	0.00	0.00
24	108.60	0.00	0.00
25	108.80	0.00	0.00
26	109.00	0.00	0.00
27	109.20	0.00	0.00
28	109.40	0.00	0.00
29	109.60	0.00	0.00
30			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.20	0.00	0.00
3	104.40	0.00	0.00
4	104.60	0.00	0.00
5	104.80	0.00	0.00
6	105.00	0.00	0.00
7	105.20	0.00	0.00
8	105.40	0.00	0.00
9	105.60	0.00	0.00
10	105.80	0.00	0.00
11	106.00	0.00	0.00
12	106.20	0.00	0.00
13	106.40	0.00	0.00
14	106.60	0.00	0.00
15	106.80	0.00	0.00
16	107.00	0.00	0.00
17	107.20	0.00	0.00
18	107.40	0.00	0.00
19	107.60	0.00	0.00
20	107.80	0.00	0.00
21	108.00	0.00	0.00
22	108.20	0.00	0.00
23	108.40	0.00	0.00
24	108.60	0.00	0.00
25	108.80	0.00	0.00
26	109.00	0.00	0.00
27	109.20	0.00	0.00
28	109.40	0.00	0.00
29	109.60	0.00	0.00
30			
31			
32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

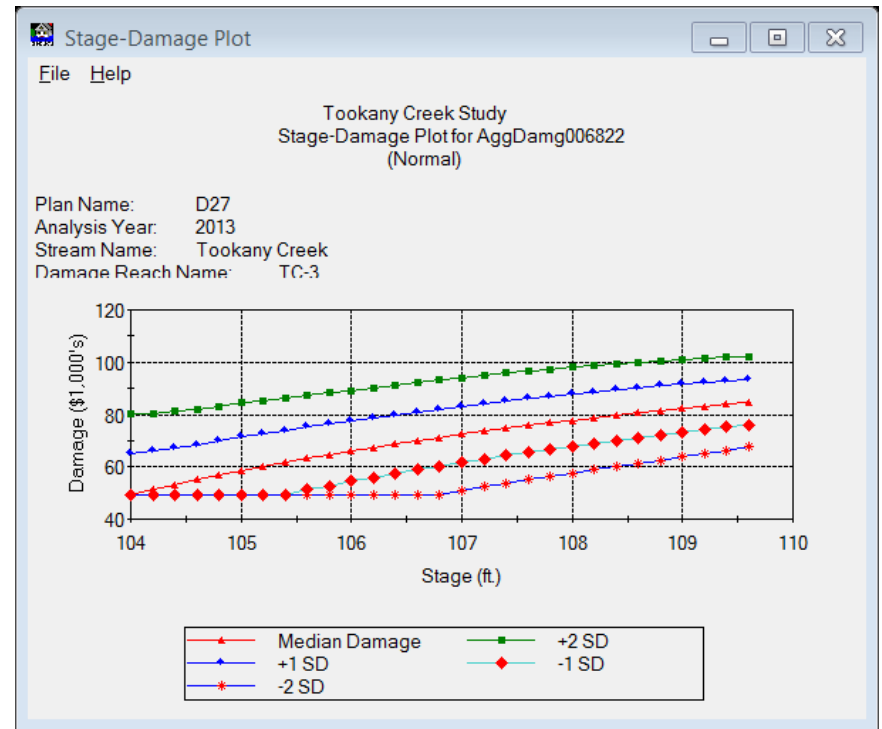
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	49.44	15.40
2	104.20	51.38	14.58
3	104.40	53.14	14.19
4	104.60	55.01	13.42
5	104.80	56.70	13.09
6	105.00	58.29	13.04
7	105.20	59.99	12.51
8	105.40	61.59	12.27
9	105.60	63.15	11.97
10	105.80	64.61	11.90
11	106.00	66.03	11.56
12	106.20	67.36	11.32
13	106.40	68.65	11.21
14	106.60	69.92	11.09
15	106.80	71.17	10.96
16	107.00	72.41	10.83
17	107.20	73.62	10.68
18	107.40	74.77	10.53
19	107.60	75.80	10.39
20	107.80	76.80	10.24
21	108.00	77.78	10.09
22	108.20	78.73	9.94
23	108.40	79.66	9.78
24	108.60	80.57	9.61
25	108.80	81.45	9.45
26	109.00	82.32	9.27
27	109.20	83.20	9.08
28	109.40	84.05	8.88
29	109.60	84.87	8.69
30			
31			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

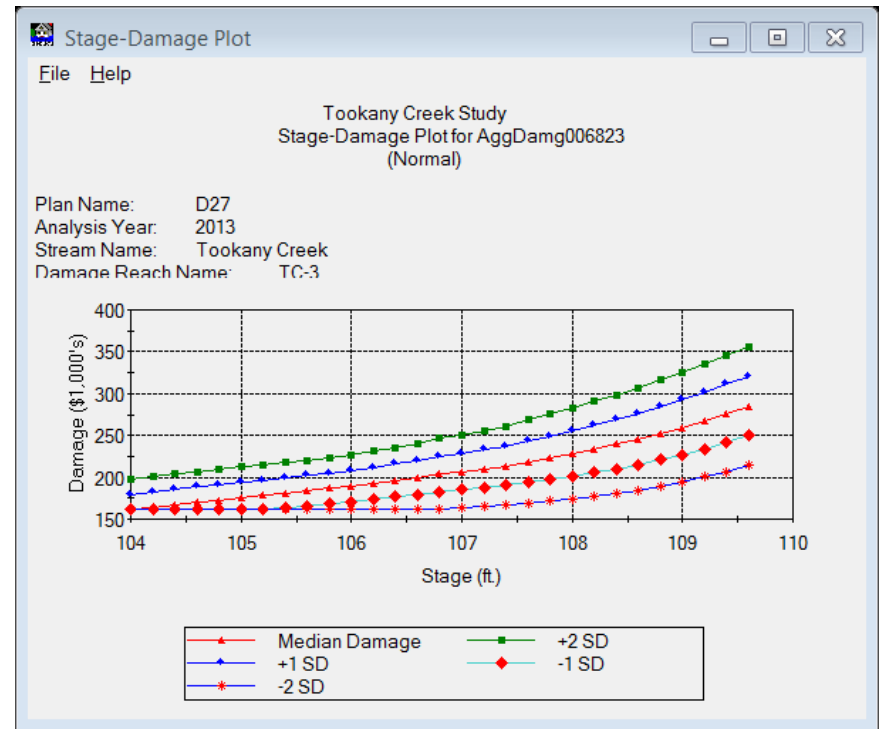
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	161.20	18.37
2	104.20	164.28	18.36
3	104.40	167.16	18.33
4	104.60	170.03	18.30
5	104.80	172.88	18.27
6	105.00	175.72	18.23
7	105.20	178.53	18.19
8	105.40	181.33	18.14
9	105.60	184.00	18.08
10	105.80	186.60	18.03
11	106.00	189.45	18.23
12	106.20	192.79	19.01
13	106.40	195.96	19.54
14	106.60	199.46	20.27
15	106.80	203.67	21.43
16	107.00	206.95	22.08
17	107.20	210.27	22.77
18	107.40	213.72	23.49
19	107.60	218.70	24.84
20	107.80	223.45	25.92
21	108.00	228.44	27.04
22	108.20	233.98	28.27
23	108.40	239.66	29.35
24	108.60	245.36	30.41
25	108.80	252.65	31.73
26	109.00	259.68	32.75
27	109.20	267.82	33.70
28	109.40	276.41	34.72
29	109.60	285.03	35.47
30			
31			
32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

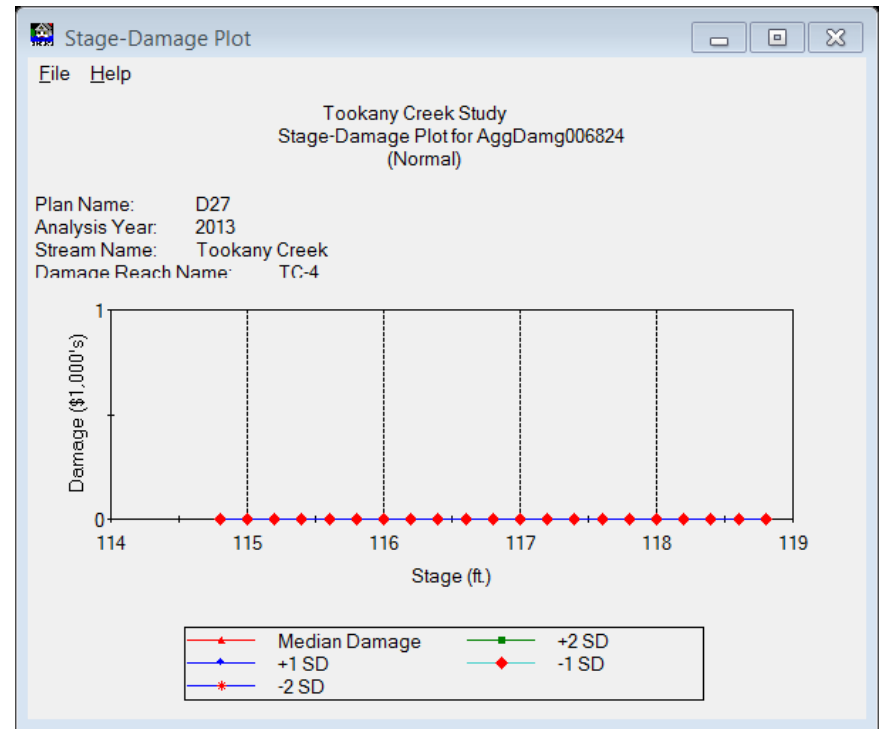
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
22			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

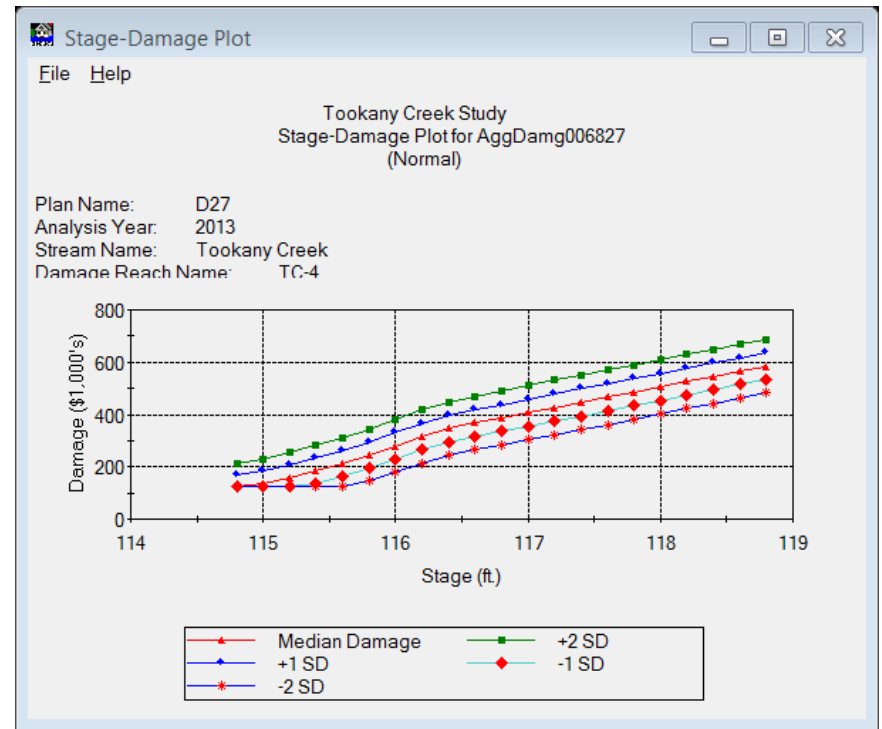
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	123.49	44.78
2	115.00	137.39	45.37
3	115.20	159.99	46.58
4	115.40	185.57	47.69
5	115.60	211.99	48.48
6	115.80	244.98	49.45
7	116.00	279.70	50.52
8	116.20	315.63	50.90
9	116.40	347.09	50.92
10	116.60	367.48	50.71
11	116.80	386.83	51.01
12	117.00	406.50	51.64
13	117.20	426.42	52.19
14	117.40	446.05	52.53
15	117.60	465.64	52.64
16	117.80	485.30	52.53
17	118.00	505.72	52.05
18	118.20	526.18	51.96
19	118.40	546.35	51.48
20	118.60	566.05	51.29
21	118.80	584.51	50.91
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

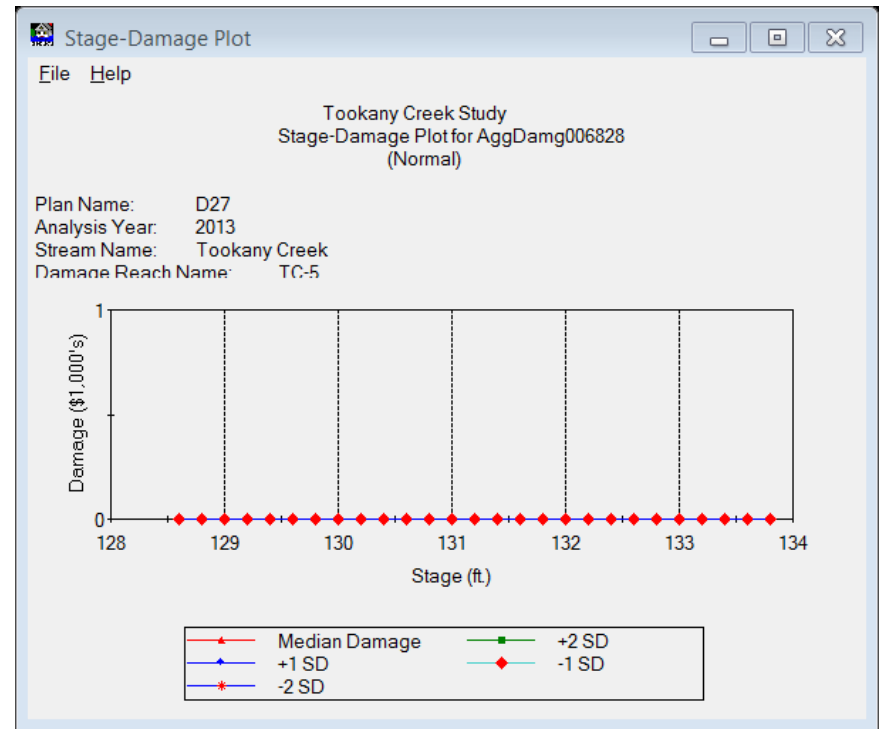
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
28			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

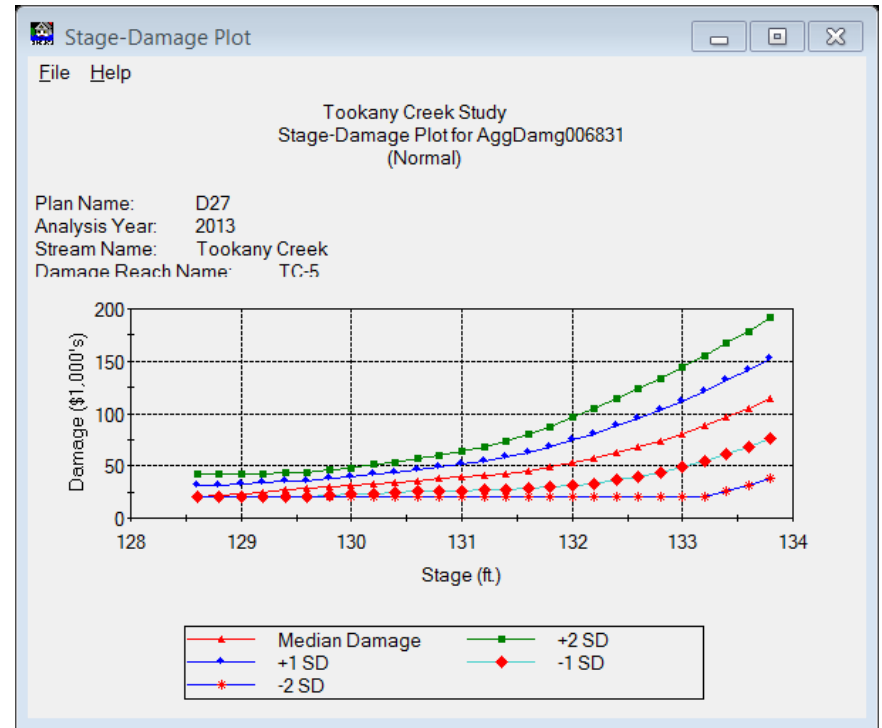
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	20.50	10.53
2	128.80	21.83	10.11
3	129.00	23.53	9.46
4	129.20	25.10	8.85
5	129.40	26.63	8.21
6	129.60	27.98	7.84
7	129.80	29.71	8.30
8	130.00	31.10	8.55
9	130.20	32.77	9.15
10	130.40	34.25	9.73
11	130.60	35.76	10.38
12	130.80	37.58	11.32
13	131.00	38.95	12.55
14	131.20	40.55	13.96
15	131.40	42.57	15.50
16	131.60	45.33	17.41
17	131.80	48.46	19.16
18	132.00	52.54	21.81
19	132.20	56.67	23.88
20	132.40	62.16	26.10
21	132.60	67.73	28.12
22	132.80	73.89	30.04
23	133.00	80.17	31.82
24	133.20	87.83	33.50
25	133.40	96.14	35.34
26	133.60	104.69	36.90
27	133.80	114.65	38.29
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

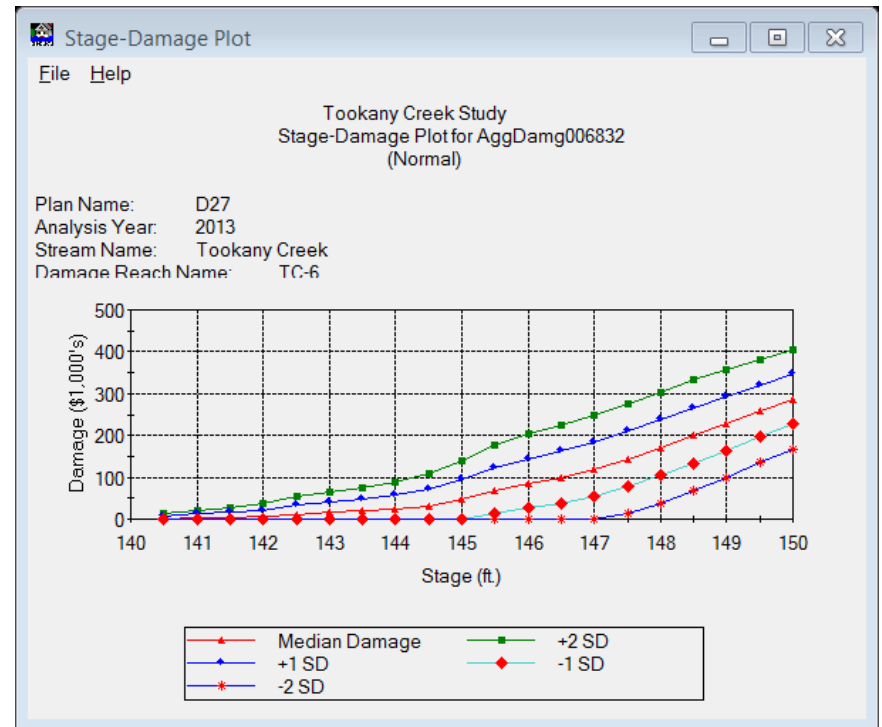
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	1.48	6.87
2	141.00	2.71	9.45
3	141.50	4.42	12.02
4	142.00	6.79	14.73
5	142.50	11.72	20.82
6	143.00	15.32	24.63
7	143.50	18.75	28.39
8	144.00	23.85	33.04
9	144.50	31.27	38.70
10	145.00	47.78	46.56
11	145.50	68.45	53.61
12	146.00	85.31	58.97
13	146.50	100.27	61.41
14	147.00	119.81	63.81
15	147.50	144.08	65.72
16	148.00	171.06	66.40
17	148.50	199.29	66.36
18	149.00	228.79	64.34
19	149.50	258.02	61.53
20	150.00	286.42	59.45
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Damage Category: Industrial

Function: AggDmg006833 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	0.00	0.00
2	141.00	0.00	0.00
3	141.50	0.00	0.00
4	142.00	0.00	0.00
5	142.50	0.00	0.00
6	143.00	0.00	0.00
7	143.50	0.00	0.00
8	144.00	0.00	0.00
9	144.50	0.00	0.00
10	145.00	0.00	0.00
11	145.50	0.00	0.00
12	146.00	0.00	0.00
13	146.50	0.00	0.00
14	147.00	0.00	0.00
15	147.50	0.00	0.00
16	148.00	0.00	0.00
17	148.50	0.00	0.00
18	149.00	0.00	0.00
19	149.50	0.00	0.00
20	150.00	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-6

Damage Category: Public

Function: AggDmg006834 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	0.00	0.00
2	141.00	0.00	0.00
3	141.50	0.00	0.00
4	142.00	0.00	0.00
5	142.50	0.00	0.00
6	143.00	0.00	0.00
7	143.50	0.00	0.00
8	144.00	0.00	0.00
9	144.50	0.00	0.00
10	145.00	0.00	0.00
11	145.50	0.00	0.00
12	146.00	0.00	0.00
13	146.50	0.00	0.00
14	147.00	0.00	0.00
15	147.50	0.00	0.00
16	148.00	0.00	0.00
17	148.50	0.00	0.00
18	149.00	0.00	0.00
19	149.50	0.00	0.00
20	150.00	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

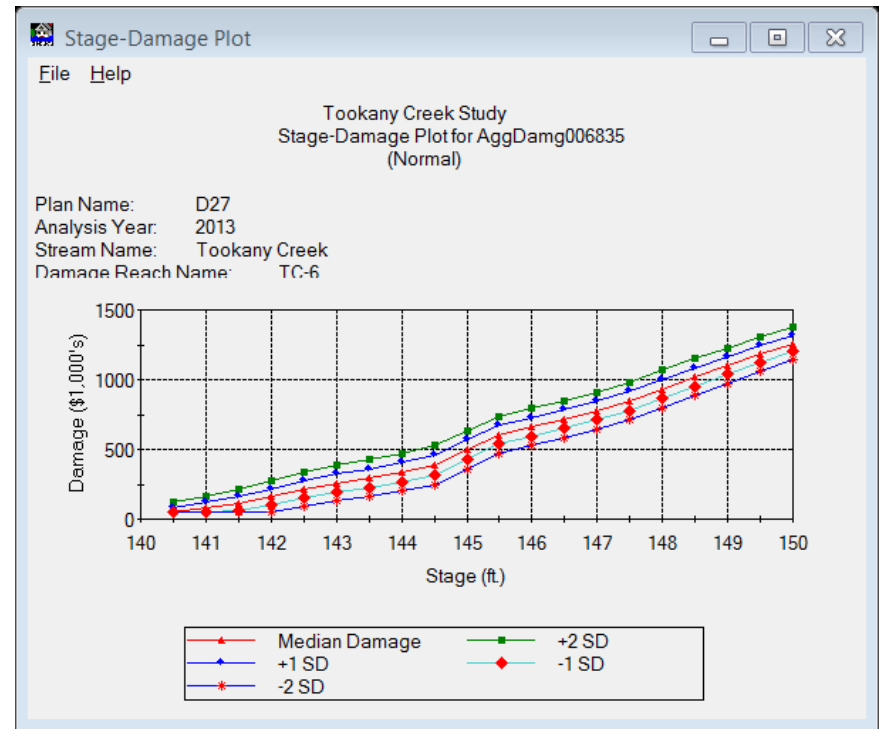
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	48.38	35.14
2	141.00	76.59	42.93
3	141.50	113.04	49.98
4	142.00	159.18	56.16
5	142.50	216.27	61.74
6	143.00	257.50	64.64
7	143.50	295.30	66.71
8	144.00	338.16	68.06
9	144.50	387.86	69.19
10	145.00	498.10	68.24
11	145.50	602.63	66.18
12	146.00	662.81	66.27
13	146.50	716.16	66.18
14	147.00	777.53	66.89
15	147.50	845.93	67.85
16	148.00	933.11	67.50
17	148.50	1017.00	65.99
18	149.00	1100.40	63.31
19	149.50	1181.38	60.47
20	150.00	1259.69	57.92
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.00	0.00
2	149.50	0.00	0.00
3	150.00	0.00	0.00
4	150.50	0.00	0.00
5	151.00	0.00	0.00
6	151.50	0.00	0.00
7	152.00	0.00	0.00
8	152.50	0.00	0.00
9	153.00	0.00	0.00
10	153.50	0.00	0.00
11	154.00	0.00	0.00
12	154.50	0.00	0.00
13	155.00	0.00	0.00
14	155.50	0.00	0.00
15	156.00	0.00	0.00
16	156.50	0.00	0.00
17	157.00	0.00	0.00
18	157.50	0.00	0.00
19	158.00	0.00	0.00
20	158.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.00	0.00
2	149.50	0.00	0.00
3	150.00	0.00	0.00
4	150.50	0.00	0.00
5	151.00	0.00	0.00
6	151.50	0.00	0.00
7	152.00	0.00	0.00
8	152.50	0.00	0.00
9	153.00	0.00	0.00
10	153.50	0.00	0.00
11	154.00	0.00	0.00
12	154.50	0.00	0.00
13	155.00	0.00	0.00
14	155.50	0.00	0.00
15	156.00	0.00	0.00
16	156.50	0.00	0.00
17	157.00	0.00	0.00
18	157.50	0.00	0.00
19	158.00	0.00	0.00
20	158.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

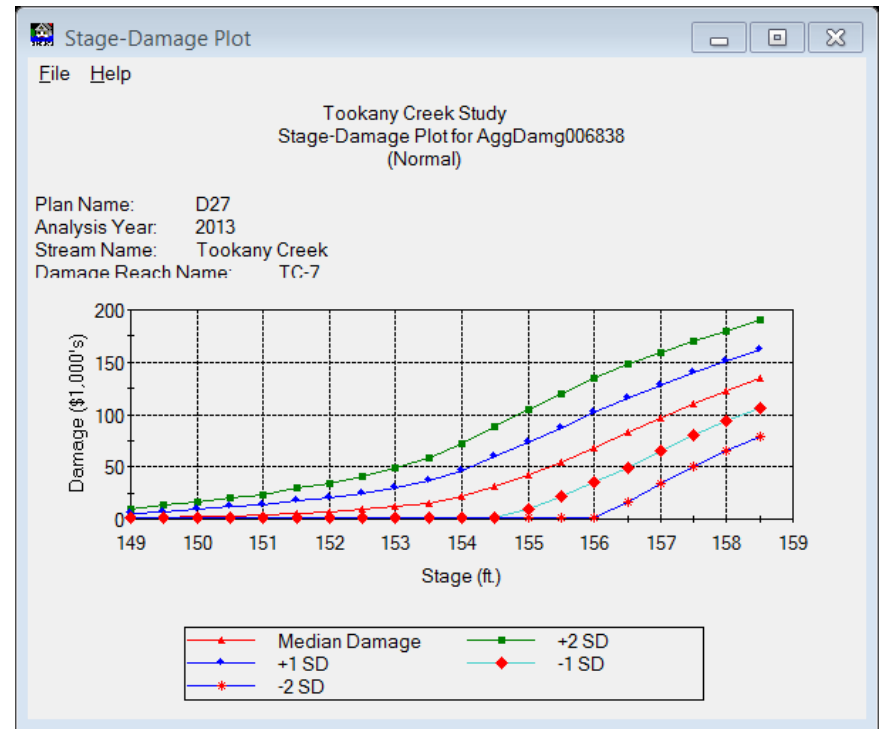
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.80	4.30
2	149.50	1.40	5.84
3	150.00	2.12	7.20
4	150.50	3.20	8.73
5	151.00	4.08	9.78
6	151.50	5.60	11.83
7	152.00	6.95	13.56
8	152.50	8.91	15.74
9	153.00	11.77	18.60
10	153.50	15.56	21.70
11	154.00	21.41	25.19
12	154.50	30.87	28.95
13	155.00	41.60	31.61
14	155.50	54.38	32.91
15	156.00	68.46	33.36
16	156.50	82.40	32.97
17	157.00	96.51	31.42
18	157.50	110.06	29.84
19	158.00	122.60	28.78
20	158.50	134.64	27.87
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

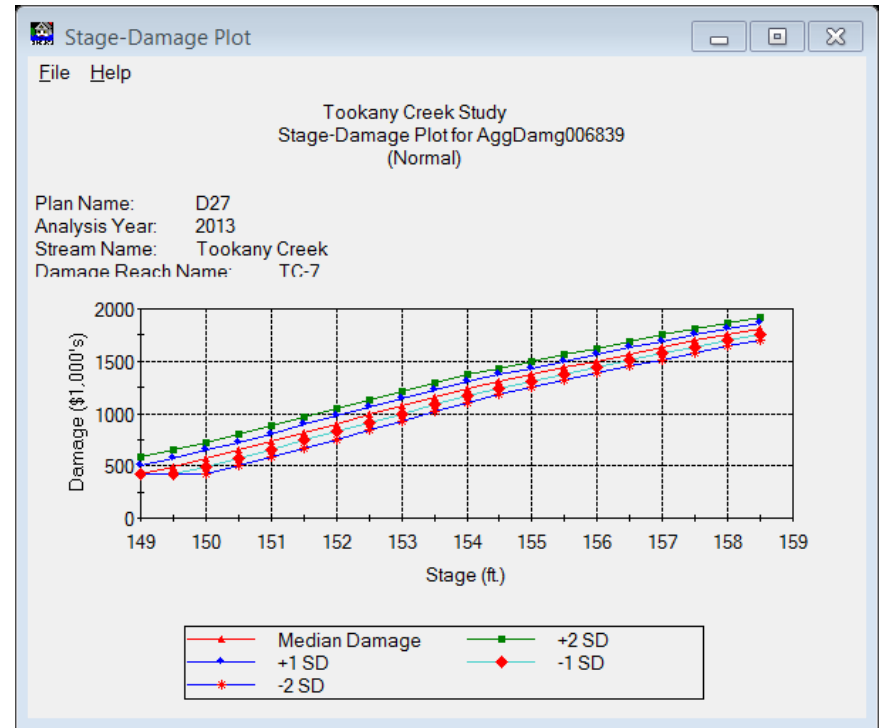
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	421.29	82.21
2	149.50	493.96	81.21
3	150.00	570.09	77.86
4	150.50	649.56	75.62
5	151.00	732.13	75.20
6	151.50	818.14	75.03
7	152.00	902.72	74.56
8	152.50	987.53	73.19
9	153.00	1070.34	71.32
10	153.50	1155.56	68.64
11	154.00	1235.61	66.44
12	154.50	1305.74	64.16
13	155.00	1370.93	62.68
14	155.50	1435.79	61.39
15	156.00	1503.16	60.28
16	156.50	1568.62	59.41
17	157.00	1632.30	58.65
18	157.50	1694.28	57.91
19	158.00	1754.51	57.07
20	158.50	1812.61	56.23
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

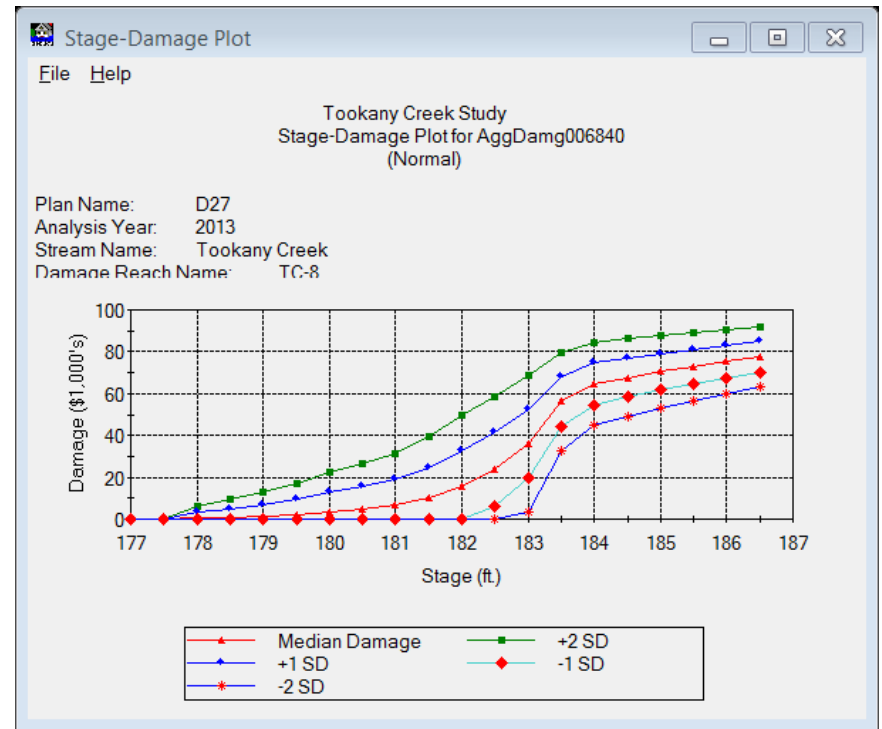
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.35	2.85
4	178.50	0.81	4.26
5	179.00	1.32	5.66
6	179.50	2.22	7.35
7	180.00	3.61	9.30
8	180.50	4.92	10.77
9	181.00	6.65	12.28
10	181.50	10.17	14.58
11	182.00	15.85	16.74
12	182.50	23.68	17.51
13	183.00	35.90	16.41
14	183.50	56.16	11.76
15	184.00	64.57	9.95
16	184.50	67.65	9.34
17	185.00	70.43	8.77
18	185.50	72.99	8.23
19	186.00	75.35	7.72
20	186.50	77.50	7.25
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

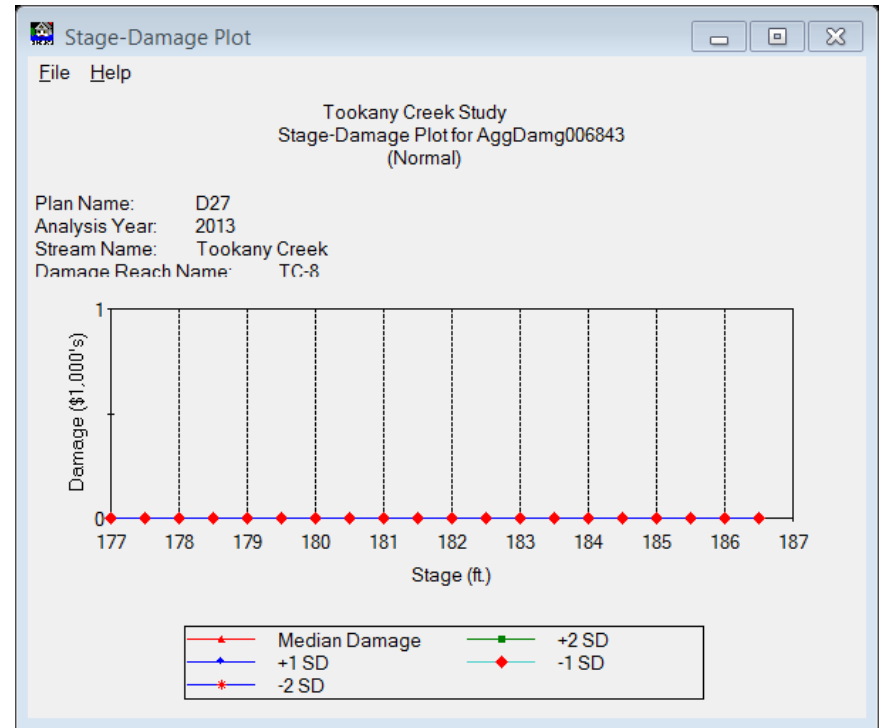
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

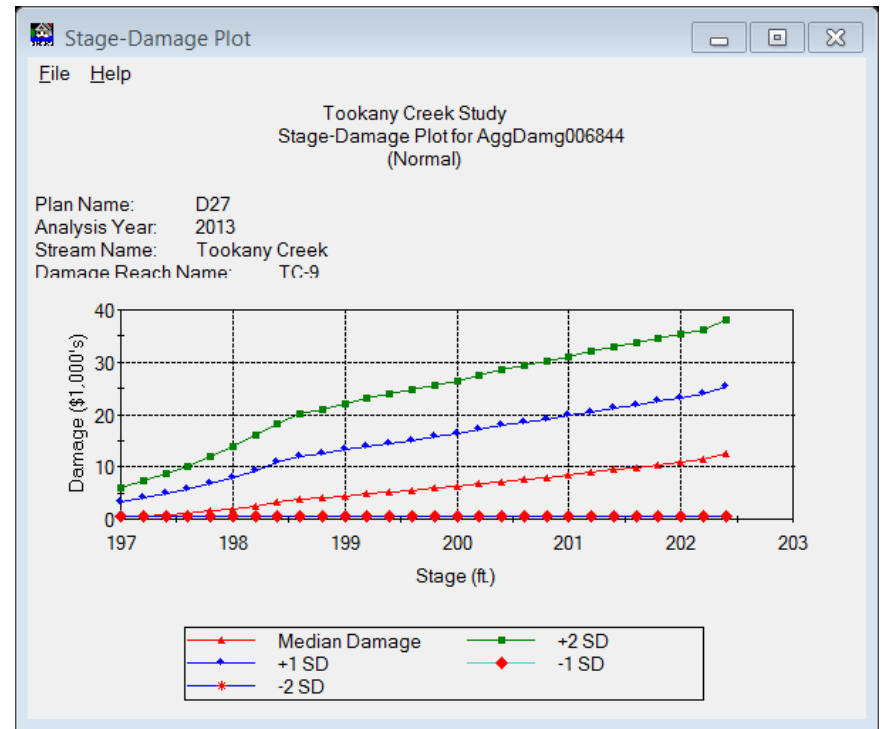
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.46	2.83
2	197.20	0.65	3.37
3	197.40	0.87	3.93
4	197.60	1.12	4.53
5	197.80	1.52	5.26
6	198.00	1.97	6.00
7	198.20	2.57	6.80
8	198.40	3.21	7.55
9	198.60	3.80	8.16
10	198.80	4.06	8.45
11	199.00	4.47	8.77
12	199.20	4.84	9.08
13	199.40	5.18	9.33
14	199.60	5.51	9.58
15	199.80	5.86	9.84
16	200.00	6.29	10.12
17	200.20	6.75	10.39
18	200.40	7.20	10.66
19	200.60	7.54	10.90
20	200.80	7.98	11.14
21	201.00	8.45	11.34
22	201.20	8.93	11.53
23	201.40	9.41	11.71
24	201.60	9.83	11.91
25	201.80	10.37	12.09
26	202.00	10.87	12.28
27	202.20	11.43	12.44
28	202.40	12.54	12.72
29			
30			
31			
32			
33			



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

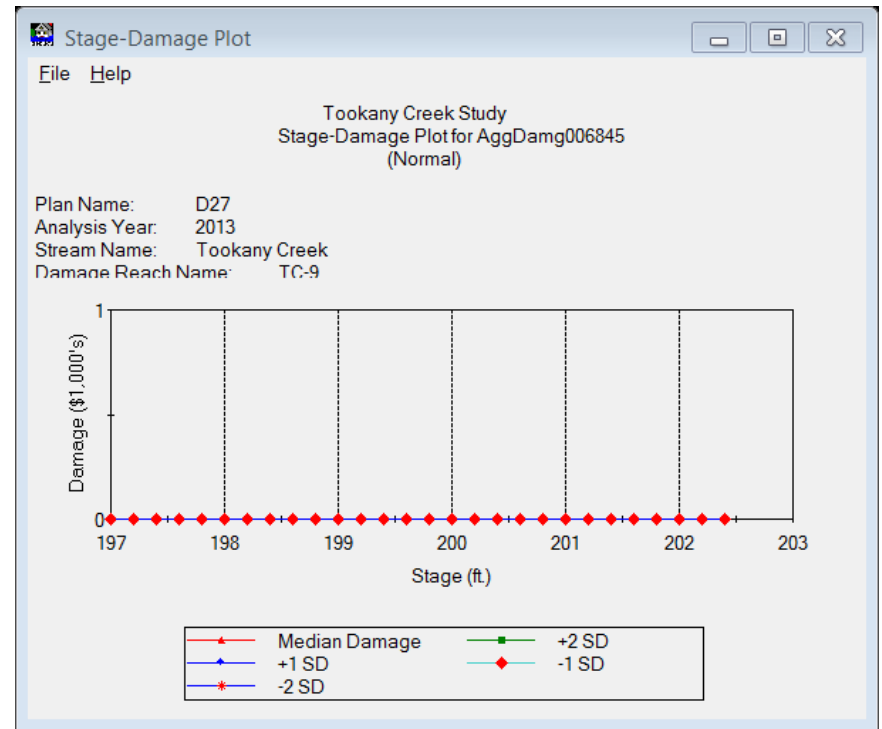
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.00	0.00
2	197.20	0.00	0.00
3	197.40	0.00	0.00
4	197.60	0.00	0.00
5	197.80	0.00	0.00
6	198.00	0.00	0.00
7	198.20	0.00	0.00
8	198.40	0.00	0.00
9	198.60	0.00	0.00
10	198.80	0.00	0.00
11	199.00	0.00	0.00
12	199.20	0.00	0.00
13	199.40	0.00	0.00
14	199.60	0.00	0.00
15	199.80	0.00	0.00
16	200.00	0.00	0.00
17	200.20	0.00	0.00
18	200.40	0.00	0.00
19	200.60	0.00	0.00
20	200.80	0.00	0.00
21	201.00	0.00	0.00
22	201.20	0.00	0.00
23	201.40	0.00	0.00
24	201.60	0.00	0.00
25	201.80	0.00	0.00
26	202.00	0.00	0.00
27	202.20	0.00	0.00
28	202.40	0.00	0.00
29			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

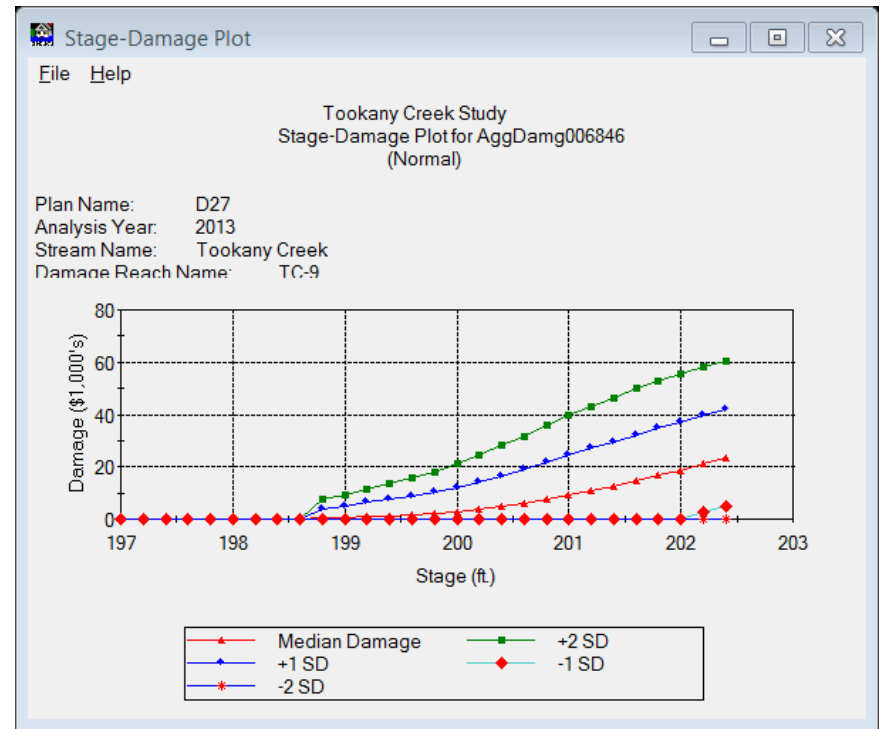
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.00	0.00
2	197.20	0.00	0.00
3	197.40	0.00	0.00
4	197.60	0.00	0.00
5	197.80	0.00	0.00
6	198.00	0.00	0.00
7	198.20	0.00	0.00
8	198.40	0.00	0.00
9	198.60	0.00	0.00
10	198.80	0.44	3.64
11	199.00	0.66	4.43
12	199.20	0.96	5.34
13	199.40	1.26	6.15
14	199.60	1.69	7.13
15	199.80	2.10	7.99
16	200.00	2.86	9.21
17	200.20	3.71	10.41
18	200.40	4.81	11.67
19	200.60	5.99	12.86
20	200.80	7.57	14.14
21	201.00	9.15	15.18
22	201.20	10.90	16.11
23	201.40	12.45	16.90
24	201.60	14.66	17.59
25	201.80	16.78	18.09
26	202.00	18.65	18.48
27	202.20	21.05	18.58
28	202.40	23.39	18.52
29			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

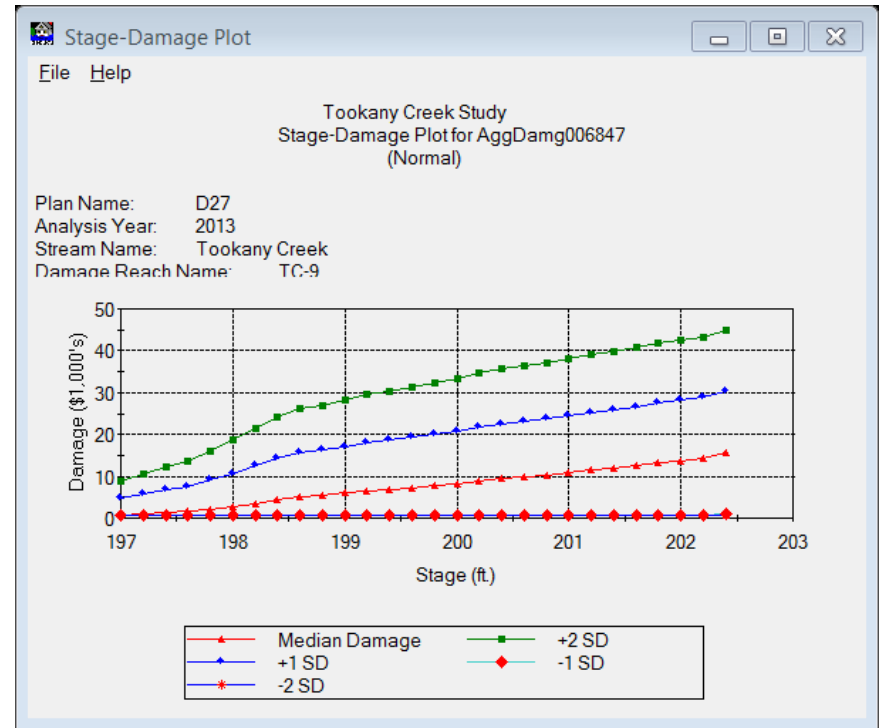
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.69	4.01
2	197.20	0.96	4.75
3	197.40	1.27	5.46
4	197.60	1.55	6.09
5	197.80	2.10	7.01
6	198.00	2.73	7.94
7	198.20	3.54	8.92
8	198.40	4.43	9.83
9	198.60	5.09	10.47
10	198.80	5.43	10.76
11	199.00	5.98	11.16
12	199.20	6.48	11.50
13	199.40	6.89	11.77
14	199.60	7.31	12.04
15	199.80	7.76	12.30
16	200.00	8.27	12.56
17	200.20	8.86	12.84
18	200.40	9.40	13.08
19	200.60	9.75	13.28
20	200.80	10.26	13.48
21	201.00	10.85	13.66
22	201.20	11.45	13.82
23	201.40	12.02	13.97
24	201.60	12.54	14.11
25	201.80	13.22	14.23
26	202.00	13.71	14.36
27	202.20	14.33	14.46
28	202.40	15.63	14.58
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

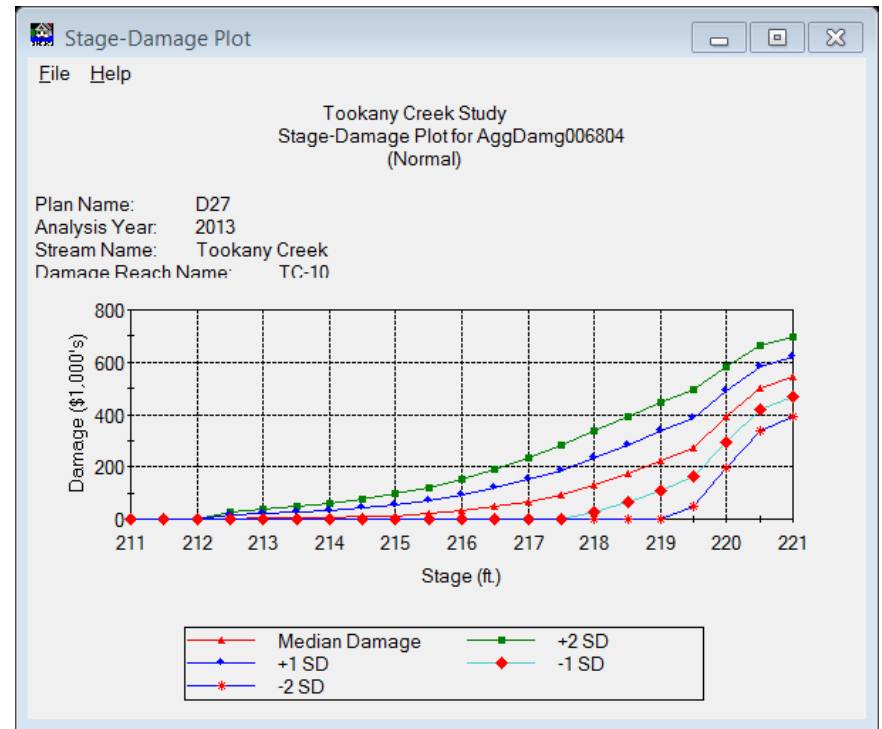
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.00	0.00
2	211.50	0.00	0.00
3	212.00	0.00	0.00
4	212.50	1.27	12.93
5	213.00	2.74	18.92
6	213.50	4.26	23.48
7	214.00	5.48	27.31
8	214.50	8.82	33.90
9	215.00	13.52	41.30
10	215.50	20.32	49.67
11	216.00	31.37	60.85
12	216.50	46.52	72.70
13	217.00	65.85	84.07
14	217.50	91.03	94.74
15	218.00	129.33	104.80
16	218.50	174.29	110.03
17	219.00	223.03	111.89
18	219.50	273.32	110.89
19	220.00	390.48	97.26
20	220.50	499.63	82.24
21	221.00	544.05	75.58
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

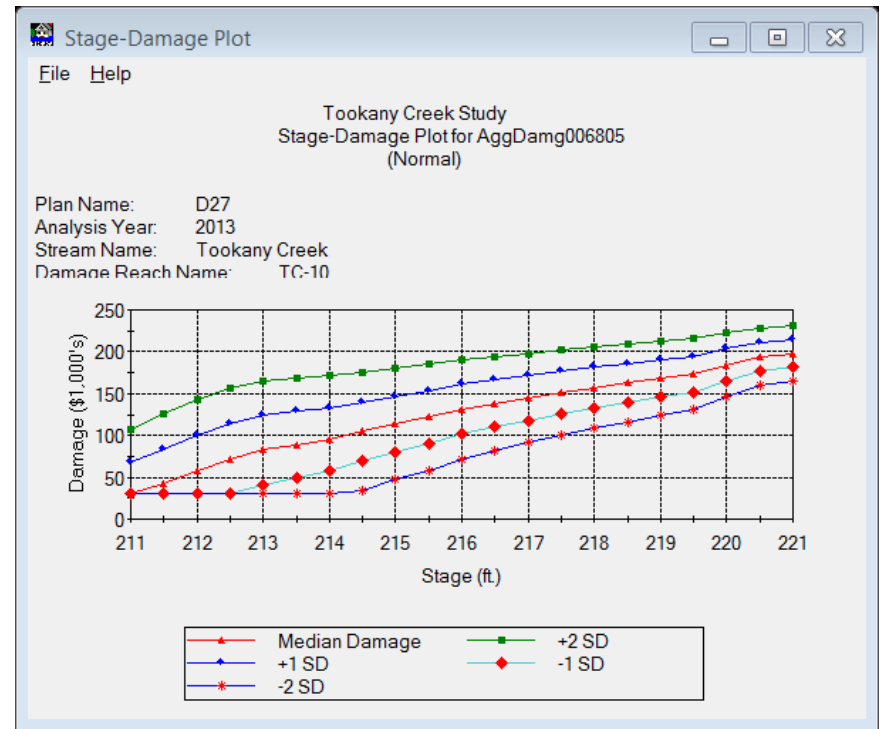
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	29.80	38.25
2	211.50	42.08	41.95
3	212.00	57.23	43.09
4	212.50	71.98	42.58
5	213.00	82.73	41.18
6	213.50	88.98	39.87
7	214.00	95.28	37.96
8	214.50	104.64	35.53
9	215.00	113.71	33.22
10	215.50	121.95	31.81
11	216.00	131.21	29.67
12	216.50	138.15	28.09
13	217.00	144.71	26.58
14	217.50	150.88	25.43
15	218.00	156.96	24.27
16	218.50	162.64	23.19
17	219.00	167.95	22.17
18	219.50	172.90	21.23
19	220.00	184.52	18.98
20	220.50	194.20	17.12
21	221.00	197.79	16.43
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

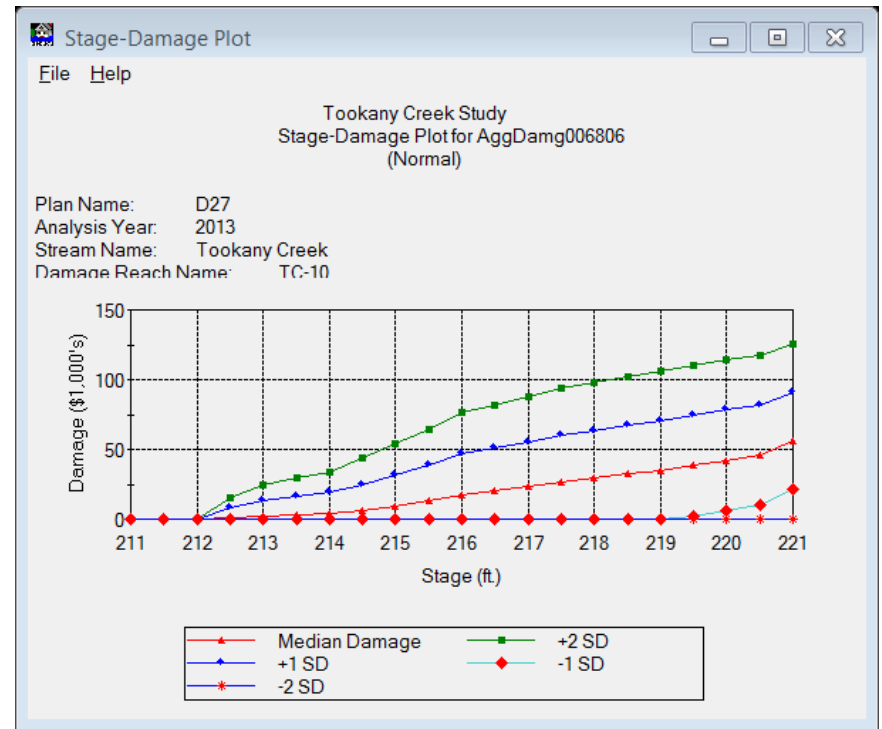
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.00	0.00
2	211.50	0.00	0.00
3	212.00	0.00	0.00
4	212.50	0.86	7.04
5	213.00	2.16	11.13
6	213.50	3.09	13.32
7	214.00	3.87	15.07
8	214.50	6.11	18.66
9	215.00	9.01	22.29
10	215.50	12.76	25.95
11	216.00	17.70	29.37
12	216.50	20.35	30.89
13	217.00	23.30	32.31
14	217.50	26.50	33.48
15	218.00	29.37	34.34
16	218.50	32.46	34.99
17	219.00	35.14	35.57
18	219.50	38.33	35.89
19	220.00	42.18	35.96
20	220.50	45.87	35.87
21	221.00	56.28	34.38
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

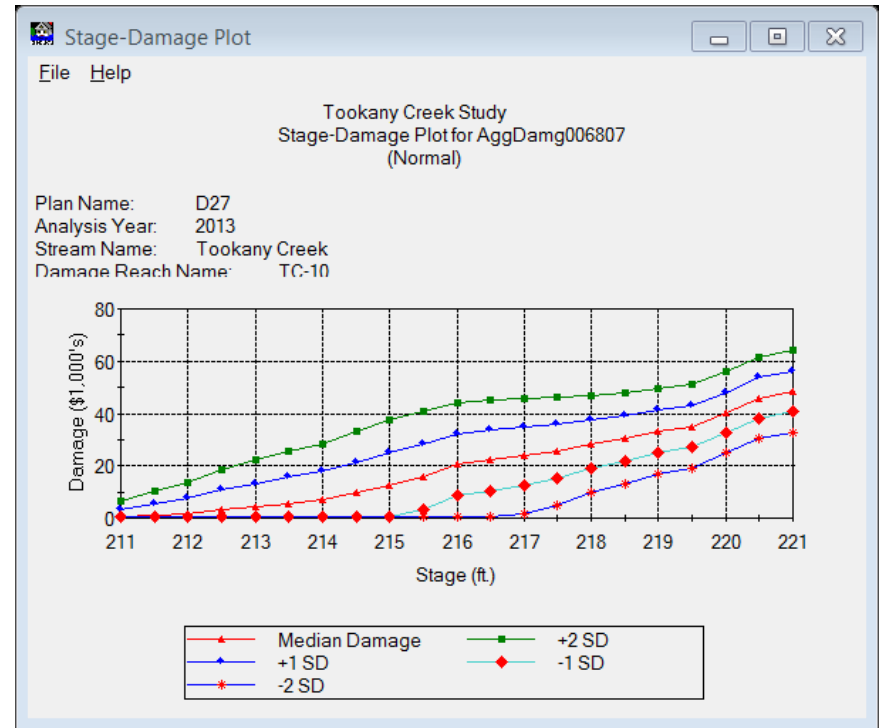
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.45	3.03
2	211.50	1.07	4.61
3	212.00	1.77	5.94
4	212.50	3.07	7.64
5	213.00	4.39	8.94
6	213.50	5.68	9.90
7	214.00	7.13	10.71
8	214.50	9.64	11.74
9	215.00	12.55	12.39
10	215.50	15.91	12.43
11	216.00	20.57	11.73
12	216.50	22.09	11.49
13	217.00	23.72	11.01
14	217.50	25.60	10.30
15	218.00	28.33	9.21
16	218.50	30.66	8.67
17	219.00	32.94	8.17
18	219.50	35.09	8.00
19	220.00	40.36	7.75
20	220.50	45.83	7.80
21	221.00	48.44	7.78
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

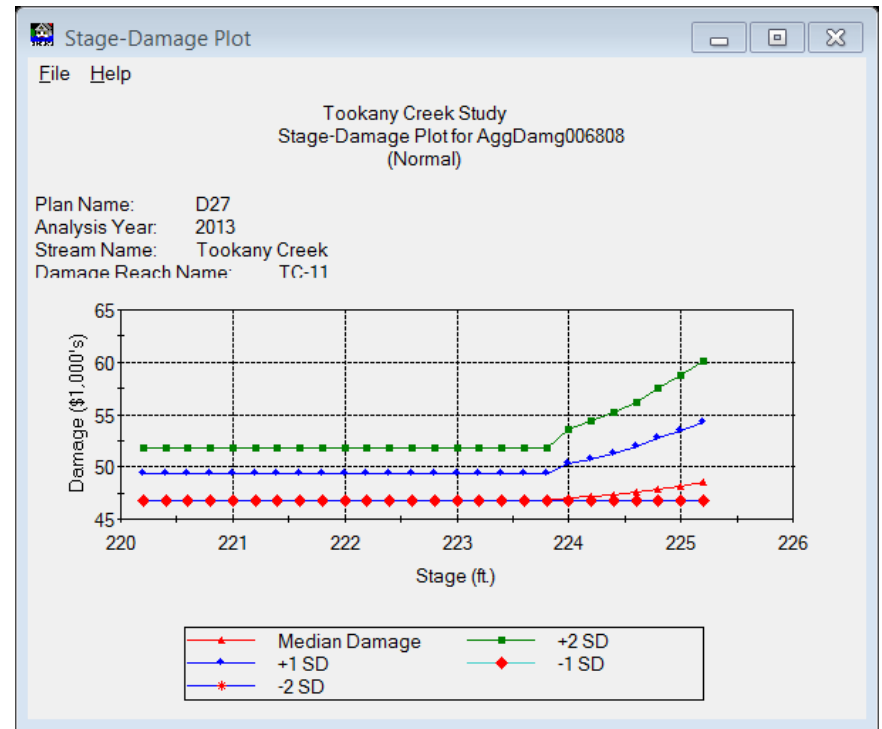
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	46.77	2.52
2	220.40	46.77	2.52
3	220.60	46.77	2.52
4	220.80	46.77	2.52
5	221.00	46.77	2.52
6	221.20	46.77	2.52
7	221.40	46.77	2.52
8	221.60	46.77	2.52
9	221.80	46.77	2.52
10	222.00	46.77	2.52
11	222.20	46.77	2.52
12	222.40	46.77	2.52
13	222.60	46.77	2.52
14	222.80	46.77	2.52
15	223.00	46.77	2.52
16	223.20	46.77	2.52
17	223.40	46.77	2.52
18	223.60	46.77	2.52
19	223.80	46.77	2.52
20	224.00	47.06	3.27
21	224.20	47.20	3.57
22	224.40	47.36	3.89
23	224.60	47.59	4.31
24	224.80	47.88	4.82
25	225.00	48.17	5.29
26	225.20	48.47	5.80
27			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	0.00	0.00
2	220.40	0.00	0.00
3	220.60	0.00	0.00
4	220.80	0.00	0.00
5	221.00	0.00	0.00
6	221.20	0.00	0.00
7	221.40	0.00	0.00
8	221.60	0.00	0.00
9	221.80	0.00	0.00
10	222.00	0.00	0.00
11	222.20	0.00	0.00
12	222.40	0.00	0.00
13	222.60	0.00	0.00
14	222.80	0.00	0.00
15	223.00	0.00	0.00
16	223.20	0.00	0.00
17	223.40	0.00	0.00
18	223.60	0.00	0.00
19	223.80	0.00	0.00
20	224.00	0.00	0.00
21	224.20	0.00	0.00
22	224.40	0.00	0.00
23	224.60	0.00	0.00
24	224.80	0.00	0.00
25	225.00	0.00	0.00
26	225.20	0.00	0.00
27			
28			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	0.00	0.00
2	220.40	0.00	0.00
3	220.60	0.00	0.00
4	220.80	0.00	0.00
5	221.00	0.00	0.00
6	221.20	0.00	0.00
7	221.40	0.00	0.00
8	221.60	0.00	0.00
9	221.80	0.00	0.00
10	222.00	0.00	0.00
11	222.20	0.00	0.00
12	222.40	0.00	0.00
13	222.60	0.00	0.00
14	222.80	0.00	0.00
15	223.00	0.00	0.00
16	223.20	0.00	0.00
17	223.40	0.00	0.00
18	223.60	0.00	0.00
19	223.80	0.00	0.00
20	224.00	0.00	0.00
21	224.20	0.00	0.00
22	224.40	0.00	0.00
23	224.60	0.00	0.00
24	224.80	0.00	0.00
25	225.00	0.00	0.00
26	225.20	0.00	0.00
27			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

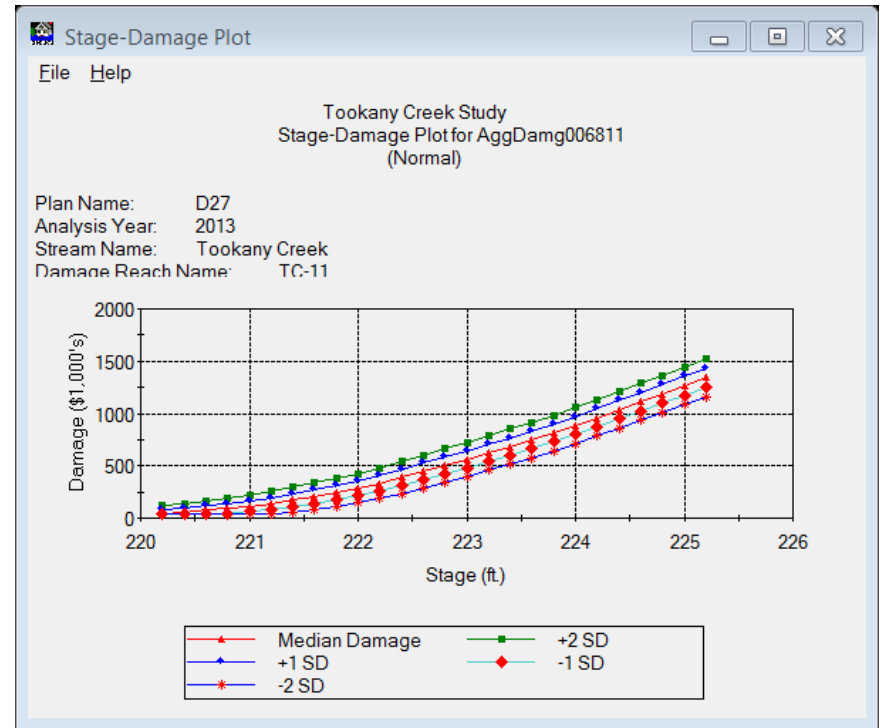
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	47.30	34.94
2	220.40	58.96	38.71
3	220.60	75.07	43.08
4	220.80	94.00	47.51
5	221.00	115.06	51.69
6	221.20	140.12	56.01
7	221.40	172.32	60.32
8	221.60	206.19	64.32
9	221.80	244.41	68.01
10	222.00	285.98	71.19
11	222.20	332.25	74.13
12	222.40	389.04	76.81
13	222.60	445.35	79.23
14	222.80	502.82	80.90
15	223.00	563.26	82.14
16	223.20	623.02	83.26
17	223.40	684.28	83.84
18	223.60	746.61	84.81
19	223.80	814.81	85.57
20	224.00	886.51	86.16
21	224.20	958.73	87.02
22	224.40	1035.41	87.69
23	224.60	1110.64	88.58
24	224.80	1187.32	89.64
25	225.00	1266.05	90.68
26	225.20	1341.08	91.38
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

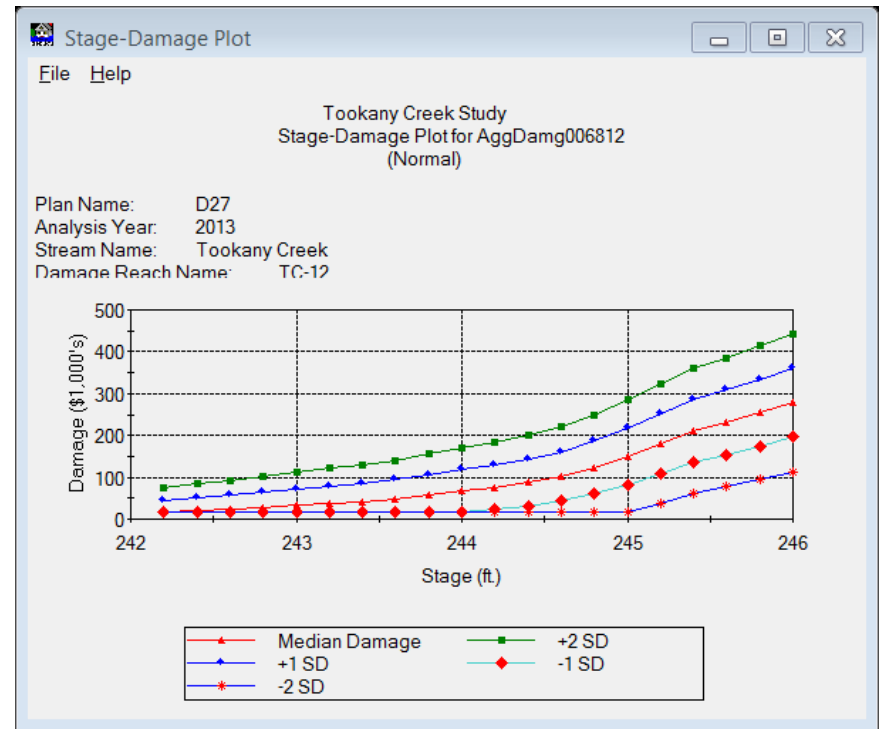
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	15.87	29.30
2	242.40	20.03	32.22
3	242.60	23.73	34.51
4	242.80	27.92	36.79
5	243.00	32.67	39.62
6	243.20	37.89	41.81
7	243.40	42.43	43.53
8	243.60	48.73	45.92
9	243.80	57.51	48.75
10	244.00	67.31	51.28
11	244.20	76.49	53.45
12	244.40	88.26	56.01
13	244.60	102.36	59.08
14	244.80	123.40	63.14
15	245.00	150.54	67.57
16	245.20	179.32	71.64
17	245.40	209.74	74.86
18	245.60	231.33	77.36
19	245.80	254.55	80.16
20	246.00	278.27	82.35
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Damage Category: Industrial

Function: AggDmg006813 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	0.00	0.00
2	242.40	0.00	0.00
3	242.60	0.00	0.00
4	242.80	0.00	0.00
5	243.00	0.00	0.00
6	243.20	0.00	0.00
7	243.40	0.00	0.00
8	243.60	0.00	0.00
9	243.80	0.00	0.00
10	244.00	0.00	0.00
11	244.20	0.00	0.00
12	244.40	0.00	0.00
13	244.60	0.00	0.00
14	244.80	0.00	0.00
15	245.00	0.00	0.00
16	245.20	0.00	0.00
17	245.40	0.00	0.00
18	245.60	0.00	0.00
19	245.80	0.00	0.00
20	246.00	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2013 Damage Reach: TC-12

Damage Category: Public

Function: AggDmg006814 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	0.00	0.00
2	242.40	0.00	0.00
3	242.60	0.00	0.00
4	242.80	0.00	0.00
5	243.00	0.00	0.00
6	243.20	0.00	0.00
7	243.40	0.00	0.00
8	243.60	0.00	0.00
9	243.80	0.00	0.00
10	244.00	0.00	0.00
11	244.20	0.00	0.00
12	244.40	0.00	0.00
13	244.60	0.00	0.00
14	244.80	0.00	0.00
15	245.00	0.00	0.00
16	245.20	0.00	0.00
17	245.40	0.00	0.00
18	245.60	0.00	0.00
19	245.80	0.00	0.00
20	246.00	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

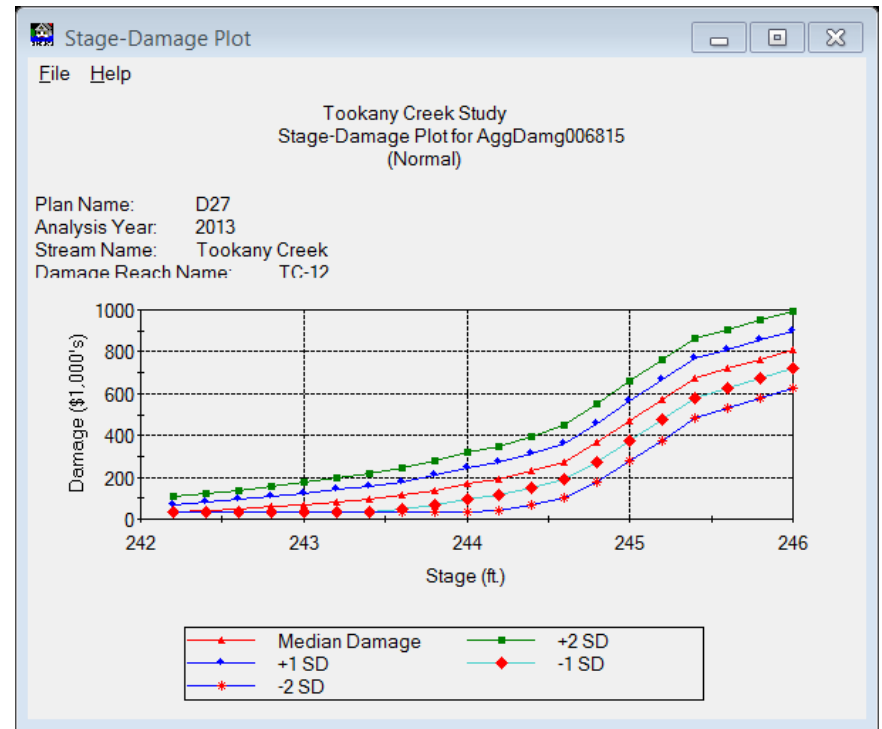
Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	31.12	37.33
2	242.40	39.30	41.45
3	242.60	48.24	45.35
4	242.80	58.08	49.14
5	243.00	70.23	53.33
6	243.20	82.85	57.44
7	243.40	95.92	60.80
8	243.60	113.40	64.88
9	243.80	137.84	69.78
10	244.00	167.55	74.63
11	244.20	193.84	78.16
12	244.40	230.26	82.43
13	244.60	274.54	86.83
14	244.80	364.47	92.40
15	245.00	467.86	95.52
16	245.20	569.79	96.14
17	245.40	672.30	95.16
18	245.60	717.91	94.19
19	245.80	763.66	92.70
20	246.00	809.96	90.97
21			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Damage Category: Commercial

Function: AggDmg004251 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-1

Damage Category: Industrial

Function: AggDmg004253 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
29			
30			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	75.60	0.00	0.00
2	75.80	0.00	0.00
3	76.00	0.00	0.00
4	76.20	0.00	0.00
5	76.40	0.00	0.00
6	76.60	0.00	0.00
7	76.80	0.00	0.00
8	77.00	0.00	0.00
9	77.20	0.00	0.00
10	77.40	0.00	0.00
11	77.60	0.00	0.00
12	77.80	0.00	0.00
13	78.00	0.00	0.00
14	78.20	0.00	0.00
15	78.40	0.00	0.00
16	78.60	0.00	0.00
17	78.80	0.00	0.00
18	79.00	0.00	0.00
19	79.20	0.00	0.00
20	79.40	0.00	0.00
21	79.60	0.00	0.00
22	79.80	0.00	0.00
23	80.00	0.00	0.00
24	80.20	0.00	0.00
25	80.40	0.00	0.00
26	80.60	0.00	0.00
27	80.80	0.00	0.00
28	81.00	0.00	0.00
29			
30			
31			
32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Damage Category: Commercial

Function: AggDmg004283 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-2

Damage Category: Industrial

Function: AggDmg004285 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	89.60	0.00	0.00
2	89.80	0.00	0.00
3	90.00	0.00	0.00
4	90.20	0.00	0.00
5	90.40	0.00	0.00
6	90.60	0.00	0.00
7	90.80	0.00	0.00
8	91.00	0.00	0.00
9	91.20	0.00	0.00
10	91.40	0.00	0.00
11	91.60	0.00	0.00
12	91.80	0.00	0.00
13	92.00	0.00	0.00
14	92.20	0.00	0.00
15	92.40	0.00	0.00
16	92.60	0.00	0.00
17	92.80	0.00	0.00
18	93.00	0.00	0.00
19	93.20	0.00	0.00
20	93.40	0.00	0.00
21	93.60	0.00	0.00
22	93.80	0.00	0.00
23	94.00	0.00	0.00
24	94.20	0.00	0.00
25	94.40	0.00	0.00
26	94.60	0.00	0.00
27	94.80	0.00	0.00
28	95.00	0.00	0.00
29			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.20	0.00	0.00
3	104.40	0.00	0.00
4	104.60	0.00	0.00
5	104.80	0.00	0.00
6	105.00	0.00	0.00
7	105.20	0.00	0.00
8	105.40	0.00	0.00
9	105.60	0.00	0.00
10	105.80	0.00	0.00
11	106.00	0.00	0.00
12	106.20	0.00	0.00
13	106.40	0.00	0.00
14	106.60	0.00	0.00
15	106.80	0.00	0.00
16	107.00	0.00	0.00
17	107.20	0.00	0.00
18	107.40	0.00	0.00
19	107.60	0.00	0.00
20	107.80	0.00	0.00
21	108.00	0.00	0.00
22	108.20	0.00	0.00
23	108.40	0.00	0.00
24	108.60	0.00	0.00
25	108.80	0.00	0.00
26	109.00	0.00	0.00
27	109.20	0.00	0.00
28	109.40	0.00	0.00
29	109.60	0.00	0.00
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.20	0.00	0.00
3	104.40	0.00	0.00
4	104.60	0.00	0.00
5	104.80	0.00	0.00
6	105.00	0.00	0.00
7	105.20	0.00	0.00
8	105.40	0.00	0.00
9	105.60	0.00	0.00
10	105.80	0.00	0.00
11	106.00	0.00	0.00
12	106.20	0.00	0.00
13	106.40	0.00	0.00
14	106.60	0.00	0.00
15	106.80	0.00	0.00
16	107.00	0.00	0.00
17	107.20	0.00	0.00
18	107.40	0.00	0.00
19	107.60	0.00	0.00
20	107.80	0.00	0.00
21	108.00	0.00	0.00
22	108.20	0.00	0.00
23	108.40	0.00	0.00
24	108.60	0.00	0.00
25	108.80	0.00	0.00
26	109.00	0.00	0.00
27	109.20	0.00	0.00
28	109.40	0.00	0.00
29	109.60	0.00	0.00
30			
31			
32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.20	0.00	0.00
3	104.40	0.00	0.00
4	104.60	0.00	0.00
5	104.80	0.00	0.00
6	105.00	0.00	0.00
7	105.20	0.00	0.00
8	105.40	0.00	0.00
9	105.60	0.00	0.00
10	105.80	0.00	0.00
11	106.00	0.00	0.00
12	106.20	0.00	0.00
13	106.40	0.00	0.00
14	106.60	0.00	0.00
15	106.80	0.00	0.00
16	107.00	0.00	0.00
17	107.20	0.00	0.00
18	107.40	0.00	0.00
19	107.60	0.00	0.00
20	107.80	0.00	0.00
21	108.00	0.00	0.00
22	108.20	0.00	0.00
23	108.40	0.00	0.00
24	108.60	0.00	0.00
25	108.80	0.00	0.00
26	109.00	0.00	0.00
27	109.20	0.00	0.00
28	109.40	0.00	0.00
29	109.60	0.00	0.00
30			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	104.00	0.00	0.00
2	104.20	0.00	0.00
3	104.40	0.00	0.00
4	104.60	0.00	0.00
5	104.80	0.00	0.00
6	105.00	0.00	0.00
7	105.20	0.00	0.00
8	105.40	0.00	0.00
9	105.60	0.00	0.00
10	105.80	0.00	0.00
11	106.00	0.00	0.00
12	106.20	0.00	0.00
13	106.40	0.00	0.00
14	106.60	0.00	0.00
15	106.80	0.00	0.00
16	107.00	0.00	0.00
17	107.20	0.00	0.00
18	107.40	0.00	0.00
19	107.60	0.00	0.00
20	107.80	0.00	0.00
21	108.00	0.00	0.00
22	108.20	0.00	0.00
23	108.40	0.00	0.00
24	108.60	0.00	0.00
25	108.80	0.00	0.00
26	109.00	0.00	0.00
27	109.20	0.00	0.00
28	109.40	0.00	0.00
29	109.60	0.00	0.00
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
22			
23			
24			
25			
26			
27			
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32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
22			
23			
24			
25			
26			
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32			
33			



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
22			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	114.80	0.00	0.00
2	115.00	0.00	0.00
3	115.20	0.00	0.00
4	115.40	0.00	0.00
5	115.60	0.00	0.00
6	115.80	0.00	0.00
7	116.00	0.00	0.00
8	116.20	0.00	0.00
9	116.40	0.00	0.00
10	116.60	0.00	0.00
11	116.80	0.00	0.00
12	117.00	0.00	0.00
13	117.20	0.00	0.00
14	117.40	0.00	0.00
15	117.60	0.00	0.00
16	117.80	0.00	0.00
17	118.00	0.00	0.00
18	118.20	0.00	0.00
19	118.40	0.00	0.00
20	118.60	0.00	0.00
21	118.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	128.60	0.00	0.00
2	128.80	0.00	0.00
3	129.00	0.00	0.00
4	129.20	0.00	0.00
5	129.40	0.00	0.00
6	129.60	0.00	0.00
7	129.80	0.00	0.00
8	130.00	0.00	0.00
9	130.20	0.00	0.00
10	130.40	0.00	0.00
11	130.60	0.00	0.00
12	130.80	0.00	0.00
13	131.00	0.00	0.00
14	131.20	0.00	0.00
15	131.40	0.00	0.00
16	131.60	0.00	0.00
17	131.80	0.00	0.00
18	132.00	0.00	0.00
19	132.20	0.00	0.00
20	132.40	0.00	0.00
21	132.60	0.00	0.00
22	132.80	0.00	0.00
23	133.00	0.00	0.00
24	133.20	0.00	0.00
25	133.40	0.00	0.00
26	133.60	0.00	0.00
27	133.80	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	0.00	0.00
2	141.00	0.00	0.00
3	141.50	0.00	0.00
4	142.00	0.00	0.00
5	142.50	0.00	0.00
6	143.00	0.00	0.00
7	143.50	0.00	0.00
8	144.00	0.00	0.00
9	144.50	0.00	0.00
10	145.00	0.00	0.00
11	145.50	0.00	0.00
12	146.00	0.00	0.00
13	146.50	0.00	0.00
14	147.00	0.00	0.00
15	147.50	0.00	0.00
16	148.00	0.00	0.00
17	148.50	0.00	0.00
18	149.00	0.00	0.00
19	149.50	0.00	0.00
20	150.00	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	0.00	0.00
2	141.00	0.00	0.00
3	141.50	0.00	0.00
4	142.00	0.00	0.00
5	142.50	0.00	0.00
6	143.00	0.00	0.00
7	143.50	0.00	0.00
8	144.00	0.00	0.00
9	144.50	0.00	0.00
10	145.00	0.00	0.00
11	145.50	0.00	0.00
12	146.00	0.00	0.00
13	146.50	0.00	0.00
14	147.00	0.00	0.00
15	147.50	0.00	0.00
16	148.00	0.00	0.00
17	148.50	0.00	0.00
18	149.00	0.00	0.00
19	149.50	0.00	0.00
20	150.00	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	0.00	0.00
2	141.00	0.00	0.00
3	141.50	0.00	0.00
4	142.00	0.00	0.00
5	142.50	0.00	0.00
6	143.00	0.00	0.00
7	143.50	0.00	0.00
8	144.00	0.00	0.00
9	144.50	0.00	0.00
10	145.00	0.00	0.00
11	145.50	0.00	0.00
12	146.00	0.00	0.00
13	146.50	0.00	0.00
14	147.00	0.00	0.00
15	147.50	0.00	0.00
16	148.00	0.00	0.00
17	148.50	0.00	0.00
18	149.00	0.00	0.00
19	149.50	0.00	0.00
20	150.00	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	140.50	0.00	0.00
2	141.00	0.00	0.00
3	141.50	0.00	0.00
4	142.00	0.00	0.00
5	142.50	0.00	0.00
6	143.00	0.00	0.00
7	143.50	0.00	0.00
8	144.00	0.00	0.00
9	144.50	0.00	0.00
10	145.00	0.00	0.00
11	145.50	0.00	0.00
12	146.00	0.00	0.00
13	146.50	0.00	0.00
14	147.00	0.00	0.00
15	147.50	0.00	0.00
16	148.00	0.00	0.00
17	148.50	0.00	0.00
18	149.00	0.00	0.00
19	149.50	0.00	0.00
20	150.00	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.00	0.00
2	149.50	0.00	0.00
3	150.00	0.00	0.00
4	150.50	0.00	0.00
5	151.00	0.00	0.00
6	151.50	0.00	0.00
7	152.00	0.00	0.00
8	152.50	0.00	0.00
9	153.00	0.00	0.00
10	153.50	0.00	0.00
11	154.00	0.00	0.00
12	154.50	0.00	0.00
13	155.00	0.00	0.00
14	155.50	0.00	0.00
15	156.00	0.00	0.00
16	156.50	0.00	0.00
17	157.00	0.00	0.00
18	157.50	0.00	0.00
19	158.00	0.00	0.00
20	158.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.00	0.00
2	149.50	0.00	0.00
3	150.00	0.00	0.00
4	150.50	0.00	0.00
5	151.00	0.00	0.00
6	151.50	0.00	0.00
7	152.00	0.00	0.00
8	152.50	0.00	0.00
9	153.00	0.00	0.00
10	153.50	0.00	0.00
11	154.00	0.00	0.00
12	154.50	0.00	0.00
13	155.00	0.00	0.00
14	155.50	0.00	0.00
15	156.00	0.00	0.00
16	156.50	0.00	0.00
17	157.00	0.00	0.00
18	157.50	0.00	0.00
19	158.00	0.00	0.00
20	158.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.00	0.00
2	149.50	0.00	0.00
3	150.00	0.00	0.00
4	150.50	0.00	0.00
5	151.00	0.00	0.00
6	151.50	0.00	0.00
7	152.00	0.00	0.00
8	152.50	0.00	0.00
9	153.00	0.00	0.00
10	153.50	0.00	0.00
11	154.00	0.00	0.00
12	154.50	0.00	0.00
13	155.00	0.00	0.00
14	155.50	0.00	0.00
15	156.00	0.00	0.00
16	156.50	0.00	0.00
17	157.00	0.00	0.00
18	157.50	0.00	0.00
19	158.00	0.00	0.00
20	158.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	149.00	0.00	0.00
2	149.50	0.00	0.00
3	150.00	0.00	0.00
4	150.50	0.00	0.00
5	151.00	0.00	0.00
6	151.50	0.00	0.00
7	152.00	0.00	0.00
8	152.50	0.00	0.00
9	153.00	0.00	0.00
10	153.50	0.00	0.00
11	154.00	0.00	0.00
12	154.50	0.00	0.00
13	155.00	0.00	0.00
14	155.50	0.00	0.00
15	156.00	0.00	0.00
16	156.50	0.00	0.00
17	157.00	0.00	0.00
18	157.50	0.00	0.00
19	158.00	0.00	0.00
20	158.50	0.00	0.00
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Commercial

Function: AggDmg004331 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Industrial

Function: AggDmg004333 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Public

Function: AggDmg004335 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-8

Damage Category: Residential

Function: AggDmg004337 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft)	Damage (\$1,000's)	Standard Deviation of Error
1	177.00	0.00	0.00
2	177.50	0.00	0.00
3	178.00	0.00	0.00
4	178.50	0.00	0.00
5	179.00	0.00	0.00
6	179.50	0.00	0.00
7	180.00	0.00	0.00
8	180.50	0.00	0.00
9	181.00	0.00	0.00
10	181.50	0.00	0.00
11	182.00	0.00	0.00
12	182.50	0.00	0.00
13	183.00	0.00	0.00
14	183.50	0.00	0.00
15	184.00	0.00	0.00
16	184.50	0.00	0.00
17	185.00	0.00	0.00
18	185.50	0.00	0.00
19	186.00	0.00	0.00
20	186.50	0.00	0.00
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Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.00	0.00
2	197.20	0.00	0.00
3	197.40	0.00	0.00
4	197.60	0.00	0.00
5	197.80	0.00	0.00
6	198.00	0.00	0.00
7	198.20	0.00	0.00
8	198.40	0.00	0.00
9	198.60	0.00	0.00
10	198.80	0.00	0.00
11	199.00	0.00	0.00
12	199.20	0.00	0.00
13	199.40	0.00	0.00
14	199.60	0.00	0.00
15	199.80	0.00	0.00
16	200.00	0.00	0.00
17	200.20	0.00	0.00
18	200.40	0.00	0.00
19	200.60	0.00	0.00
20	200.80	0.00	0.00
21	201.00	0.00	0.00
22	201.20	0.00	0.00
23	201.40	0.00	0.00
24	201.60	0.00	0.00
25	201.80	0.00	0.00
26	202.00	0.00	0.00
27	202.20	0.00	0.00
28	202.40	0.00	0.00
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.00	0.00
2	197.20	0.00	0.00
3	197.40	0.00	0.00
4	197.60	0.00	0.00
5	197.80	0.00	0.00
6	198.00	0.00	0.00
7	198.20	0.00	0.00
8	198.40	0.00	0.00
9	198.60	0.00	0.00
10	198.80	0.00	0.00
11	199.00	0.00	0.00
12	199.20	0.00	0.00
13	199.40	0.00	0.00
14	199.60	0.00	0.00
15	199.80	0.00	0.00
16	200.00	0.00	0.00
17	200.20	0.00	0.00
18	200.40	0.00	0.00
19	200.60	0.00	0.00
20	200.80	0.00	0.00
21	201.00	0.00	0.00
22	201.20	0.00	0.00
23	201.40	0.00	0.00
24	201.60	0.00	0.00
25	201.80	0.00	0.00
26	202.00	0.00	0.00
27	202.20	0.00	0.00
28	202.40	0.00	0.00
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.00	0.00
2	197.20	0.00	0.00
3	197.40	0.00	0.00
4	197.60	0.00	0.00
5	197.80	0.00	0.00
6	198.00	0.00	0.00
7	198.20	0.00	0.00
8	198.40	0.00	0.00
9	198.60	0.00	0.00
10	198.80	0.00	0.00
11	199.00	0.00	0.00
12	199.20	0.00	0.00
13	199.40	0.00	0.00
14	199.60	0.00	0.00
15	199.80	0.00	0.00
16	200.00	0.00	0.00
17	200.20	0.00	0.00
18	200.40	0.00	0.00
19	200.60	0.00	0.00
20	200.80	0.00	0.00
21	201.00	0.00	0.00
22	201.20	0.00	0.00
23	201.40	0.00	0.00
24	201.60	0.00	0.00
25	201.80	0.00	0.00
26	202.00	0.00	0.00
27	202.20	0.00	0.00
28	202.40	0.00	0.00
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	197.00	0.00	0.00
2	197.20	0.00	0.00
3	197.40	0.00	0.00
4	197.60	0.00	0.00
5	197.80	0.00	0.00
6	198.00	0.00	0.00
7	198.20	0.00	0.00
8	198.40	0.00	0.00
9	198.60	0.00	0.00
10	198.80	0.00	0.00
11	199.00	0.00	0.00
12	199.20	0.00	0.00
13	199.40	0.00	0.00
14	199.60	0.00	0.00
15	199.80	0.00	0.00
16	200.00	0.00	0.00
17	200.20	0.00	0.00
18	200.40	0.00	0.00
19	200.60	0.00	0.00
20	200.80	0.00	0.00
21	201.00	0.00	0.00
22	201.20	0.00	0.00
23	201.40	0.00	0.00
24	201.60	0.00	0.00
25	201.80	0.00	0.00
26	202.00	0.00	0.00
27	202.20	0.00	0.00
28	202.40	0.00	0.00
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.00	0.00
2	211.50	0.00	0.00
3	212.00	0.00	0.00
4	212.50	0.00	0.00
5	213.00	0.00	0.00
6	213.50	0.00	0.00
7	214.00	0.00	0.00
8	214.50	0.00	0.00
9	215.00	0.00	0.00
10	215.50	0.00	0.00
11	216.00	0.00	0.00
12	216.50	0.00	0.00
13	217.00	0.00	0.00
14	217.50	0.00	0.00
15	218.00	0.00	0.00
16	218.50	0.00	0.00
17	219.00	0.00	0.00
18	219.50	0.00	0.00
19	220.00	0.00	0.00
20	220.50	0.00	0.00
21	221.00	0.00	0.00
22			
23			
24			
25			
26			
27			
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29			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.00	0.00
2	211.50	0.00	0.00
3	212.00	0.00	0.00
4	212.50	0.00	0.00
5	213.00	0.00	0.00
6	213.50	0.00	0.00
7	214.00	0.00	0.00
8	214.50	0.00	0.00
9	215.00	0.00	0.00
10	215.50	0.00	0.00
11	216.00	0.00	0.00
12	216.50	0.00	0.00
13	217.00	0.00	0.00
14	217.50	0.00	0.00
15	218.00	0.00	0.00
16	218.50	0.00	0.00
17	219.00	0.00	0.00
18	219.50	0.00	0.00
19	220.00	0.00	0.00
20	220.50	0.00	0.00
21	221.00	0.00	0.00
22			
23			
24			
25			
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31			
32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.00	0.00
2	211.50	0.00	0.00
3	212.00	0.00	0.00
4	212.50	0.00	0.00
5	213.00	0.00	0.00
6	213.50	0.00	0.00
7	214.00	0.00	0.00
8	214.50	0.00	0.00
9	215.00	0.00	0.00
10	215.50	0.00	0.00
11	216.00	0.00	0.00
12	216.50	0.00	0.00
13	217.00	0.00	0.00
14	217.50	0.00	0.00
15	218.00	0.00	0.00
16	218.50	0.00	0.00
17	219.00	0.00	0.00
18	219.50	0.00	0.00
19	220.00	0.00	0.00
20	220.50	0.00	0.00
21	221.00	0.00	0.00
22			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	211.00	0.00	0.00
2	211.50	0.00	0.00
3	212.00	0.00	0.00
4	212.50	0.00	0.00
5	213.00	0.00	0.00
6	213.50	0.00	0.00
7	214.00	0.00	0.00
8	214.50	0.00	0.00
9	215.00	0.00	0.00
10	215.50	0.00	0.00
11	216.00	0.00	0.00
12	216.50	0.00	0.00
13	217.00	0.00	0.00
14	217.50	0.00	0.00
15	218.00	0.00	0.00
16	218.50	0.00	0.00
17	219.00	0.00	0.00
18	219.50	0.00	0.00
19	220.00	0.00	0.00
20	220.50	0.00	0.00
21	221.00	0.00	0.00
22			
23			
24			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	0.00	0.00
2	220.40	0.00	0.00
3	220.60	0.00	0.00
4	220.80	0.00	0.00
5	221.00	0.00	0.00
6	221.20	0.00	0.00
7	221.40	0.00	0.00
8	221.60	0.00	0.00
9	221.80	0.00	0.00
10	222.00	0.00	0.00
11	222.20	0.00	0.00
12	222.40	0.00	0.00
13	222.60	0.00	0.00
14	222.80	0.00	0.00
15	223.00	0.00	0.00
16	223.20	0.00	0.00
17	223.40	0.00	0.00
18	223.60	0.00	0.00
19	223.80	0.00	0.00
20	224.00	0.00	0.00
21	224.20	0.00	0.00
22	224.40	0.00	0.00
23	224.60	0.00	0.00
24	224.80	0.00	0.00
25	225.00	0.00	0.00
26	225.20	0.00	0.00
27			
28			
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	0.00	0.00
2	220.40	0.00	0.00
3	220.60	0.00	0.00
4	220.80	0.00	0.00
5	221.00	0.00	0.00
6	221.20	0.00	0.00
7	221.40	0.00	0.00
8	221.60	0.00	0.00
9	221.80	0.00	0.00
10	222.00	0.00	0.00
11	222.20	0.00	0.00
12	222.40	0.00	0.00
13	222.60	0.00	0.00
14	222.80	0.00	0.00
15	223.00	0.00	0.00
16	223.20	0.00	0.00
17	223.40	0.00	0.00
18	223.60	0.00	0.00
19	223.80	0.00	0.00
20	224.00	0.00	0.00
21	224.20	0.00	0.00
22	224.40	0.00	0.00
23	224.60	0.00	0.00
24	224.80	0.00	0.00
25	225.00	0.00	0.00
26	225.20	0.00	0.00
27			
28			
29			
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31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	0.00	0.00
2	220.40	0.00	0.00
3	220.60	0.00	0.00
4	220.80	0.00	0.00
5	221.00	0.00	0.00
6	221.20	0.00	0.00
7	221.40	0.00	0.00
8	221.60	0.00	0.00
9	221.80	0.00	0.00
10	222.00	0.00	0.00
11	222.20	0.00	0.00
12	222.40	0.00	0.00
13	222.60	0.00	0.00
14	222.80	0.00	0.00
15	223.00	0.00	0.00
16	223.20	0.00	0.00
17	223.40	0.00	0.00
18	223.60	0.00	0.00
19	223.80	0.00	0.00
20	224.00	0.00	0.00
21	224.20	0.00	0.00
22	224.40	0.00	0.00
23	224.60	0.00	0.00
24	224.80	0.00	0.00
25	225.00	0.00	0.00
26	225.20	0.00	0.00
27			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	220.20	0.00	0.00
2	220.40	0.00	0.00
3	220.60	0.00	0.00
4	220.80	0.00	0.00
5	221.00	0.00	0.00
6	221.20	0.00	0.00
7	221.40	0.00	0.00
8	221.60	0.00	0.00
9	221.80	0.00	0.00
10	222.00	0.00	0.00
11	222.20	0.00	0.00
12	222.40	0.00	0.00
13	222.60	0.00	0.00
14	222.80	0.00	0.00
15	223.00	0.00	0.00
16	223.20	0.00	0.00
17	223.40	0.00	0.00
18	223.60	0.00	0.00
19	223.80	0.00	0.00
20	224.00	0.00	0.00
21	224.20	0.00	0.00
22	224.40	0.00	0.00
23	224.60	0.00	0.00
24	224.80	0.00	0.00
25	225.00	0.00	0.00
26	225.20	0.00	0.00
27			
28			
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32			
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Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Damage Category: Commercial

Function: AggDmg004275 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	0.00	0.00
2	242.40	0.00	0.00
3	242.60	0.00	0.00
4	242.80	0.00	0.00
5	243.00	0.00	0.00
6	243.20	0.00	0.00
7	243.40	0.00	0.00
8	243.60	0.00	0.00
9	243.80	0.00	0.00
10	244.00	0.00	0.00
11	244.20	0.00	0.00
12	244.40	0.00	0.00
13	244.60	0.00	0.00
14	244.80	0.00	0.00
15	245.00	0.00	0.00
16	245.20	0.00	0.00
17	245.40	0.00	0.00
18	245.60	0.00	0.00
19	245.80	0.00	0.00
20	246.00	0.00	0.00
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan: D27 Stream: Tookany Creek

Analysis Year: 2063 Damage Reach: TC-12

Damage Category: Industrial

Function: AggDmg004277 Use An Existing Function

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	0.00	0.00
2	242.40	0.00	0.00
3	242.60	0.00	0.00
4	242.80	0.00	0.00
5	243.00	0.00	0.00
6	243.20	0.00	0.00
7	243.40	0.00	0.00
8	243.60	0.00	0.00
9	243.80	0.00	0.00
10	244.00	0.00	0.00
11	244.20	0.00	0.00
12	244.40	0.00	0.00
13	244.60	0.00	0.00
14	244.80	0.00	0.00
15	245.00	0.00	0.00
16	245.20	0.00	0.00
17	245.40	0.00	0.00
18	245.60	0.00	0.00
19	245.80	0.00	0.00
20	246.00	0.00	0.00
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

Plot...  
 Tabulate...  
 Save  
 Cancel



Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

Damage Category:

Function:

Description:

Define Uncertainty  
 None  Normal  Triangular  Log Normal

	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	0.00	0.00
2	242.40	0.00	0.00
3	242.60	0.00	0.00
4	242.80	0.00	0.00
5	243.00	0.00	0.00
6	243.20	0.00	0.00
7	243.40	0.00	0.00
8	243.60	0.00	0.00
9	243.80	0.00	0.00
10	244.00	0.00	0.00
11	244.20	0.00	0.00
12	244.40	0.00	0.00
13	244.60	0.00	0.00
14	244.80	0.00	0.00
15	245.00	0.00	0.00
16	245.20	0.00	0.00
17	245.40	0.00	0.00
18	245.60	0.00	0.00
19	245.80	0.00	0.00
20	246.00	0.00	0.00
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

Tookany Creek Study - Stage-Damage Function at Index Locati...

File Edit View Help

Plan:  Stream:

Analysis Year:  Damage Reach:

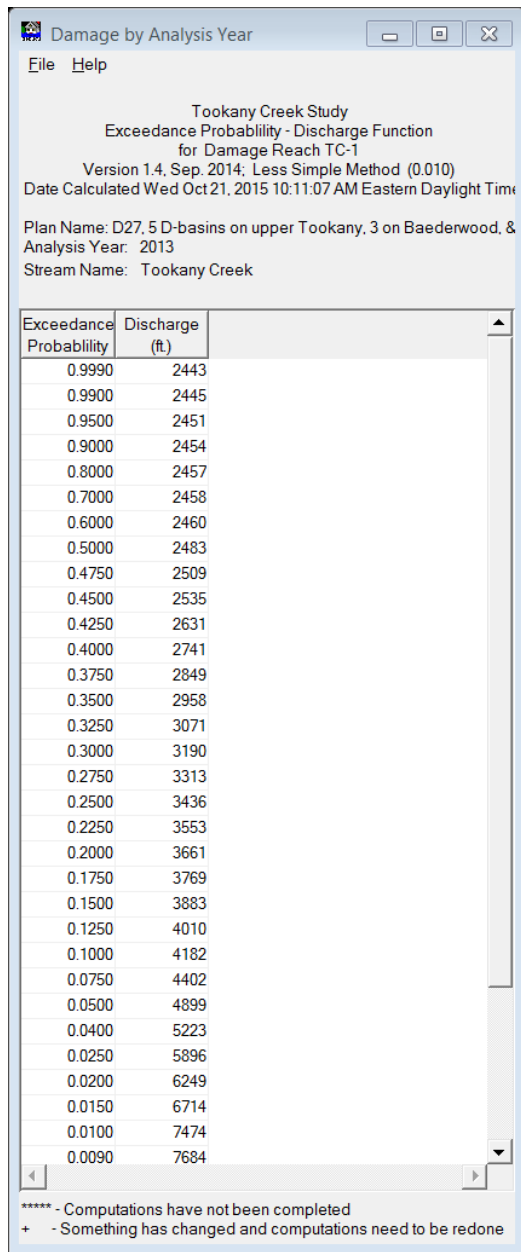
Damage Category:

Function:

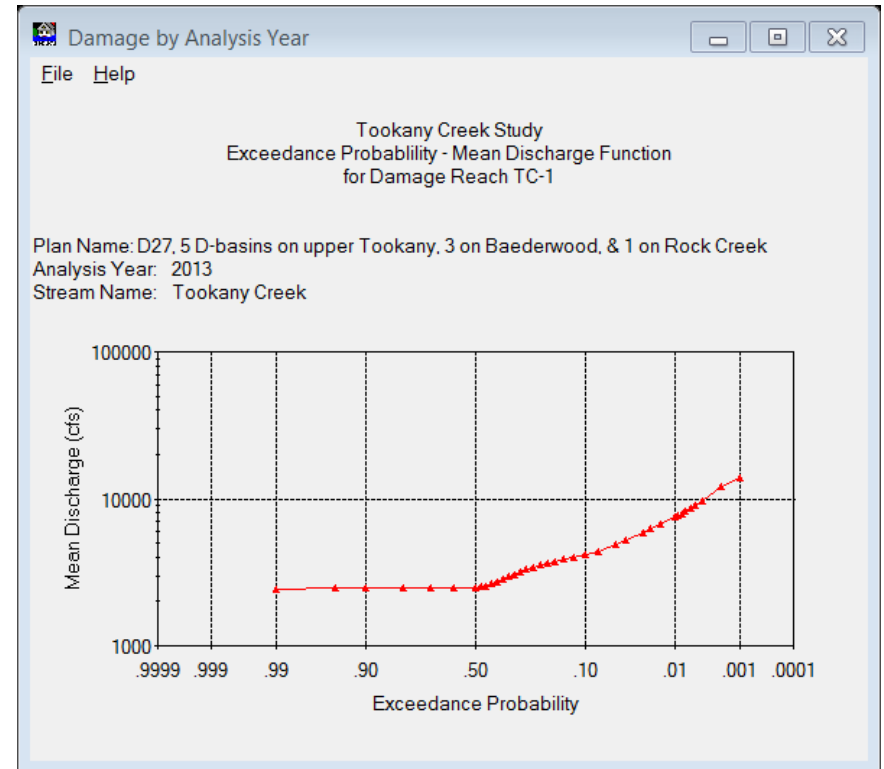
Description:

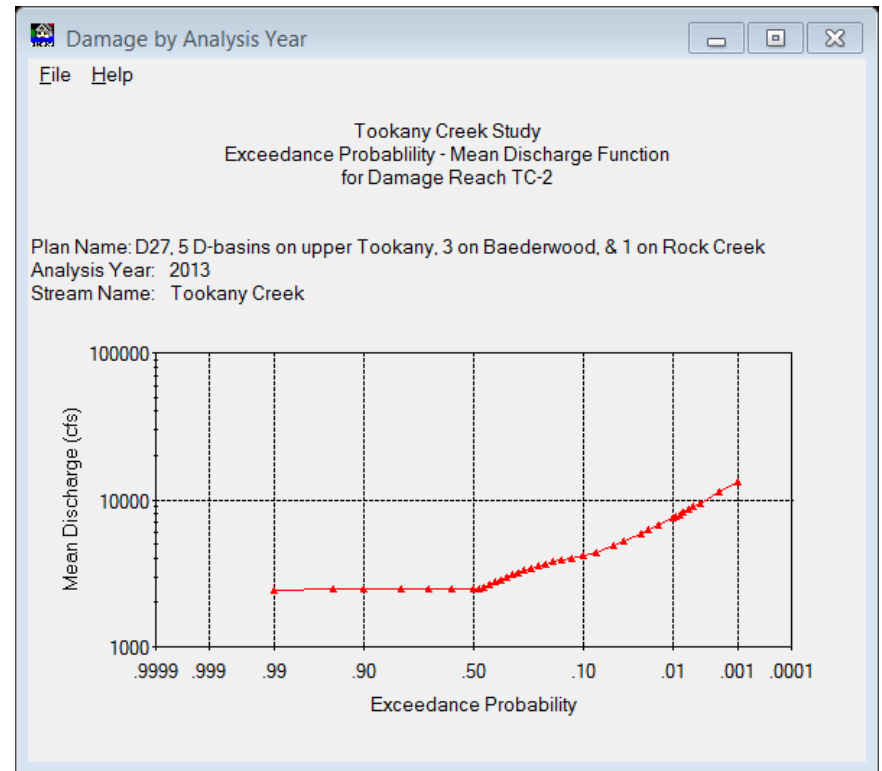
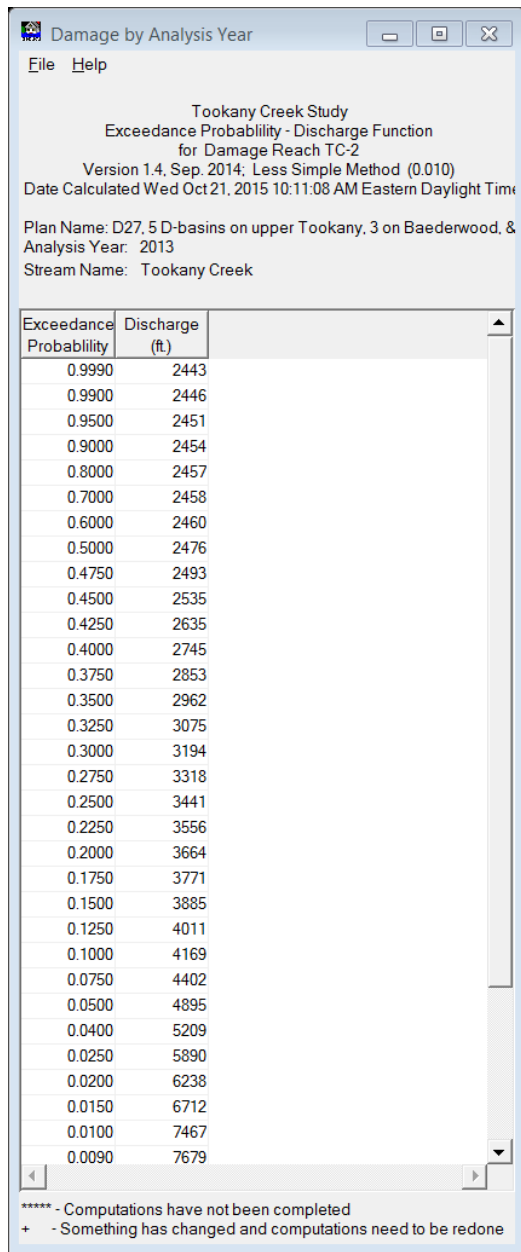
Define Uncertainty  
 None  Normal  Triangular  Log Normal

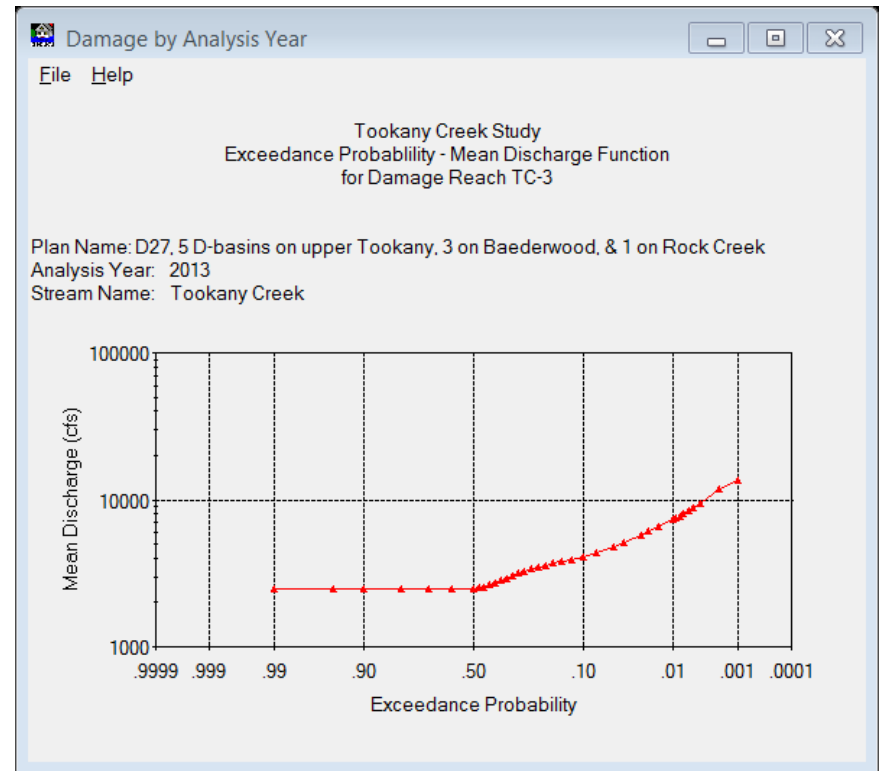
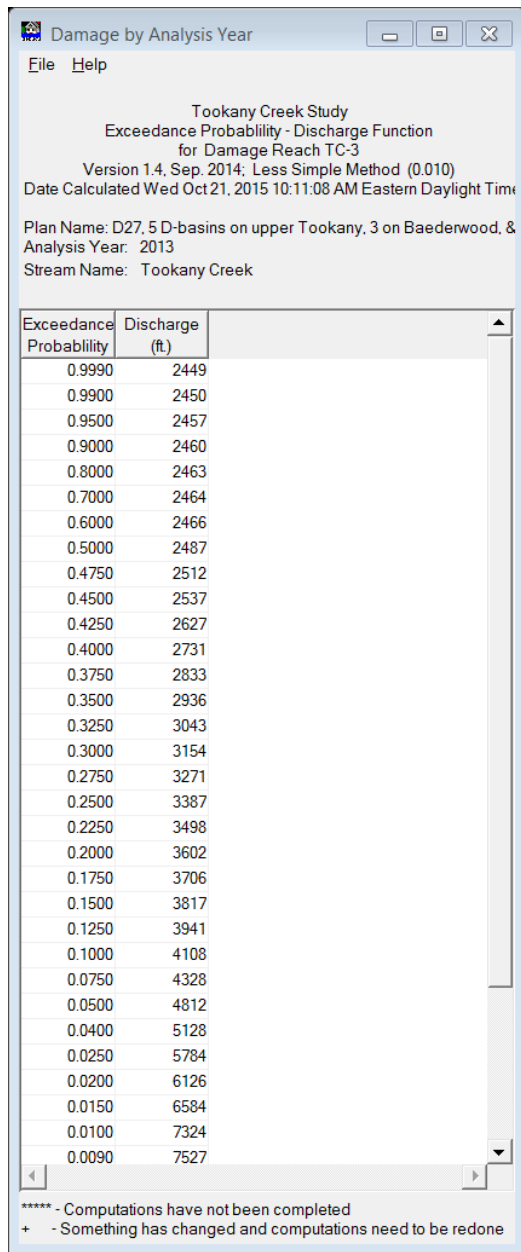
	Stage (ft.)	Damage (\$1,000's)	Standard Deviation of Error
1	242.20	0.00	0.00
2	242.40	0.00	0.00
3	242.60	0.00	0.00
4	242.80	0.00	0.00
5	243.00	0.00	0.00
6	243.20	0.00	0.00
7	243.40	0.00	0.00
8	243.60	0.00	0.00
9	243.80	0.00	0.00
10	244.00	0.00	0.00
11	244.20	0.00	0.00
12	244.40	0.00	0.00
13	244.60	0.00	0.00
14	244.80	0.00	0.00
15	245.00	0.00	0.00
16	245.20	0.00	0.00
17	245.40	0.00	0.00
18	245.60	0.00	0.00
19	245.80	0.00	0.00
20	246.00	0.00	0.00
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

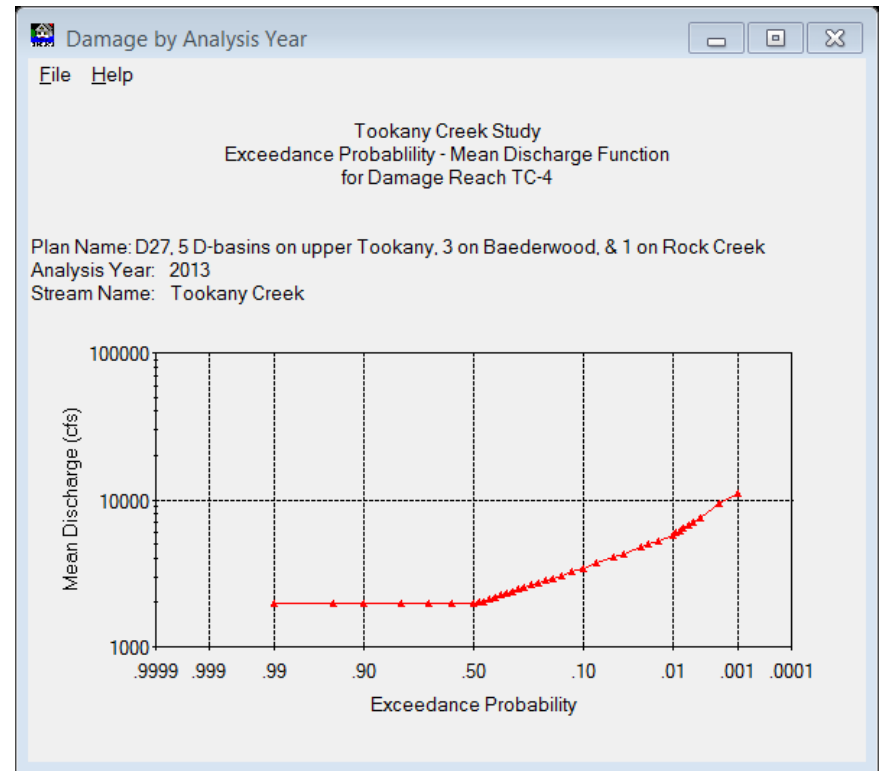
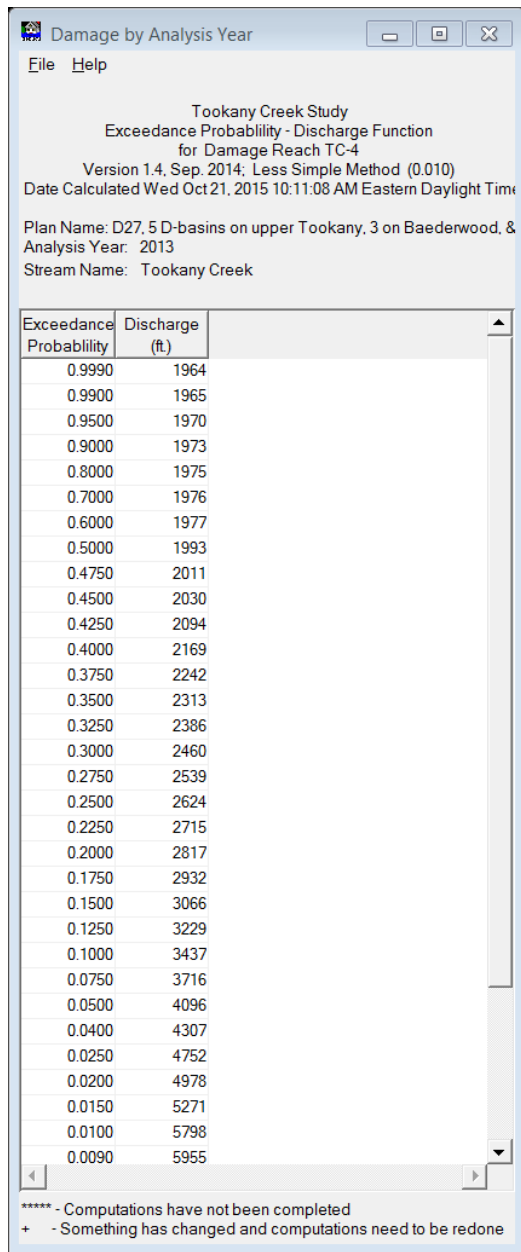


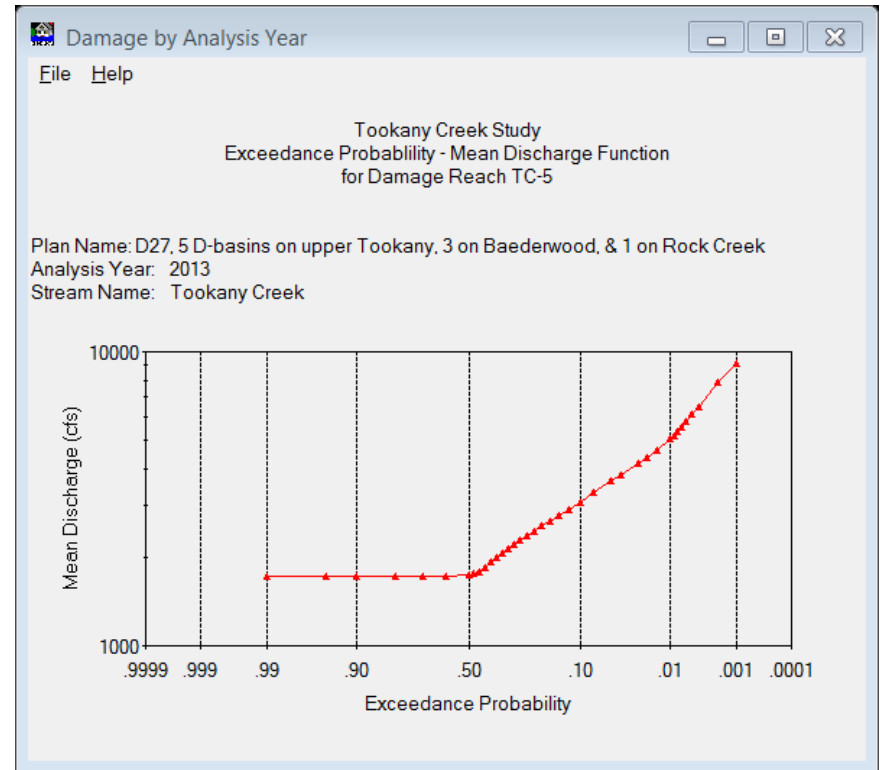
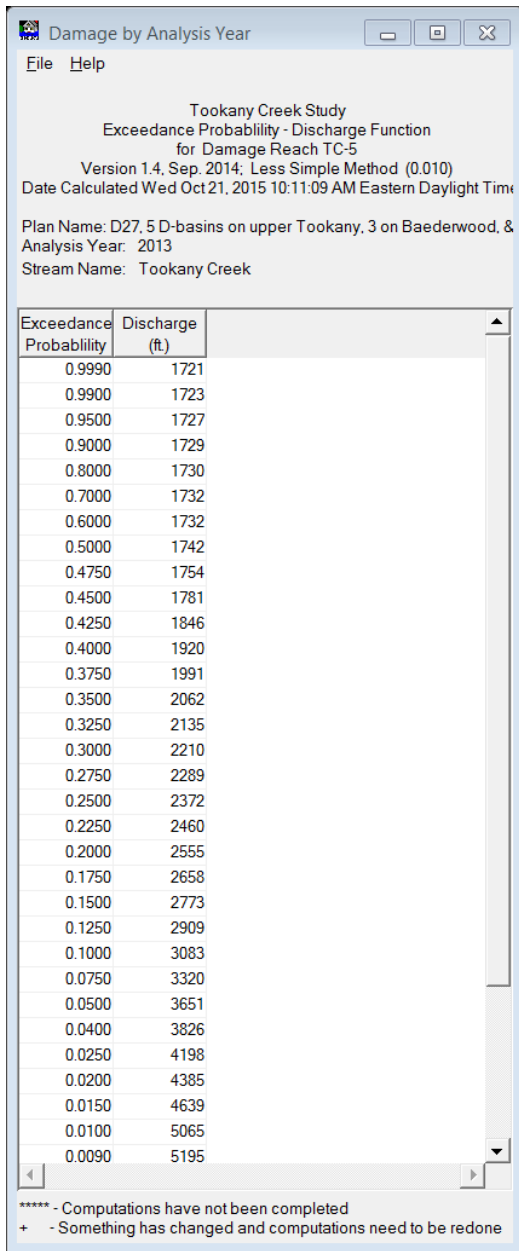
### Tookany Creek D27 Exceedance Probability – Mean Discharge Functions











Damage by Analysis Year

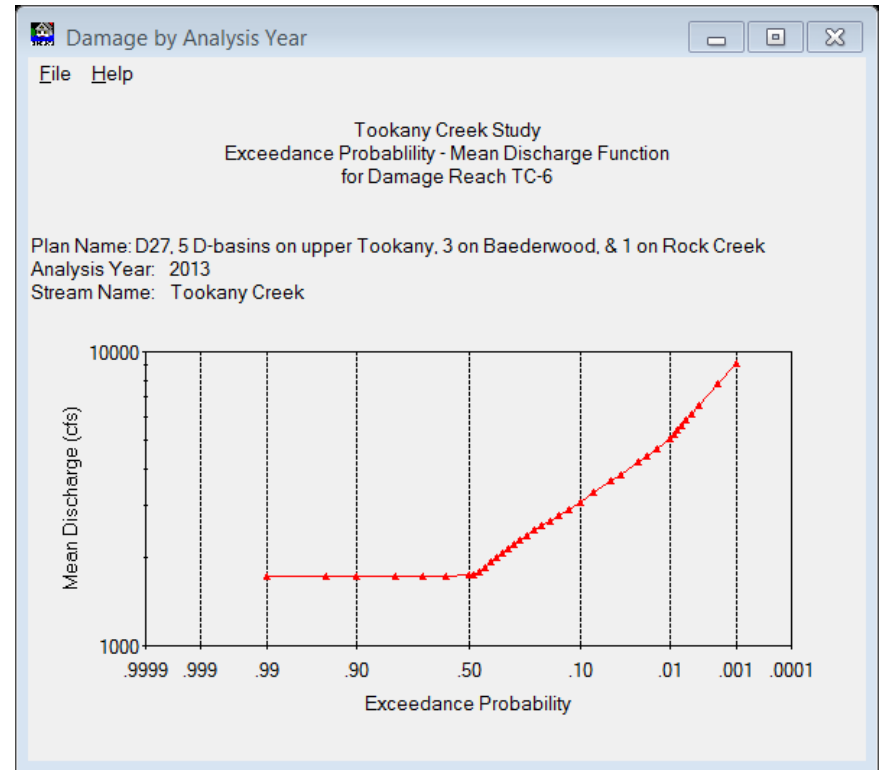
File Help

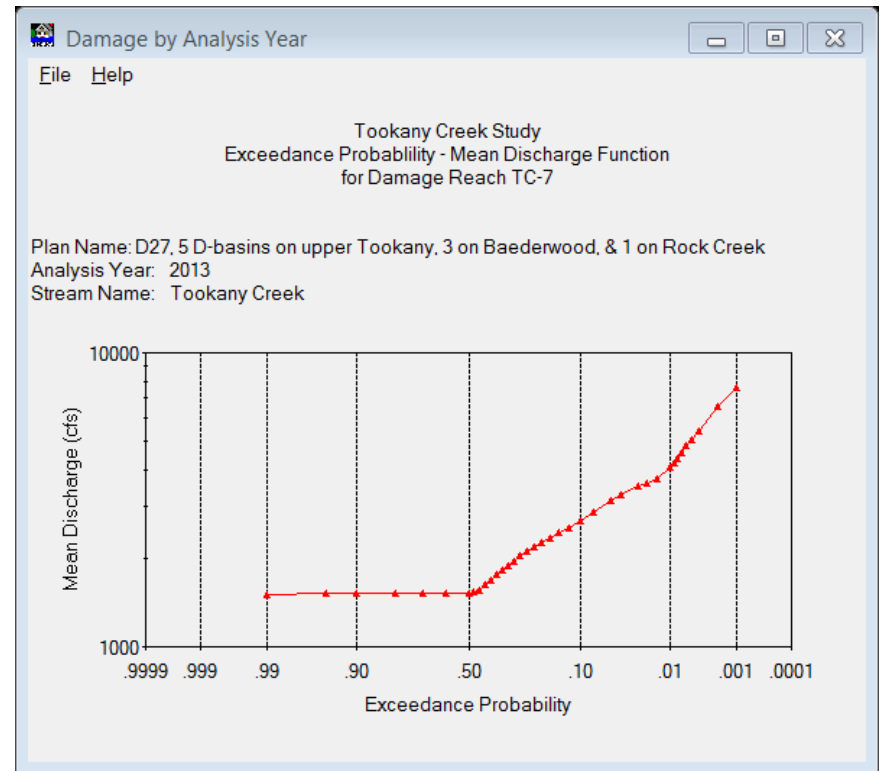
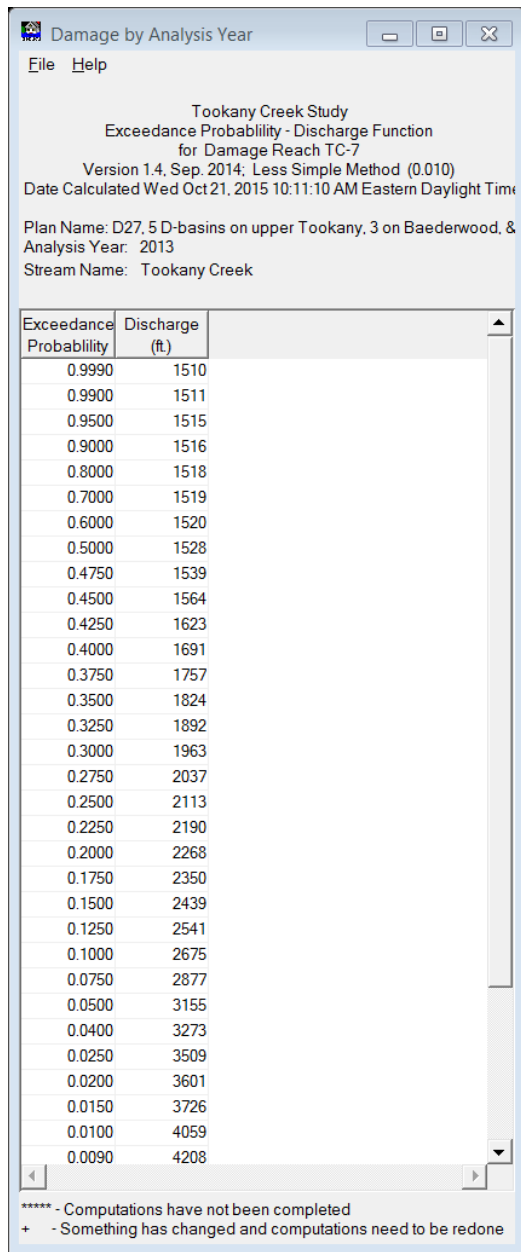
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-6  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:10 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

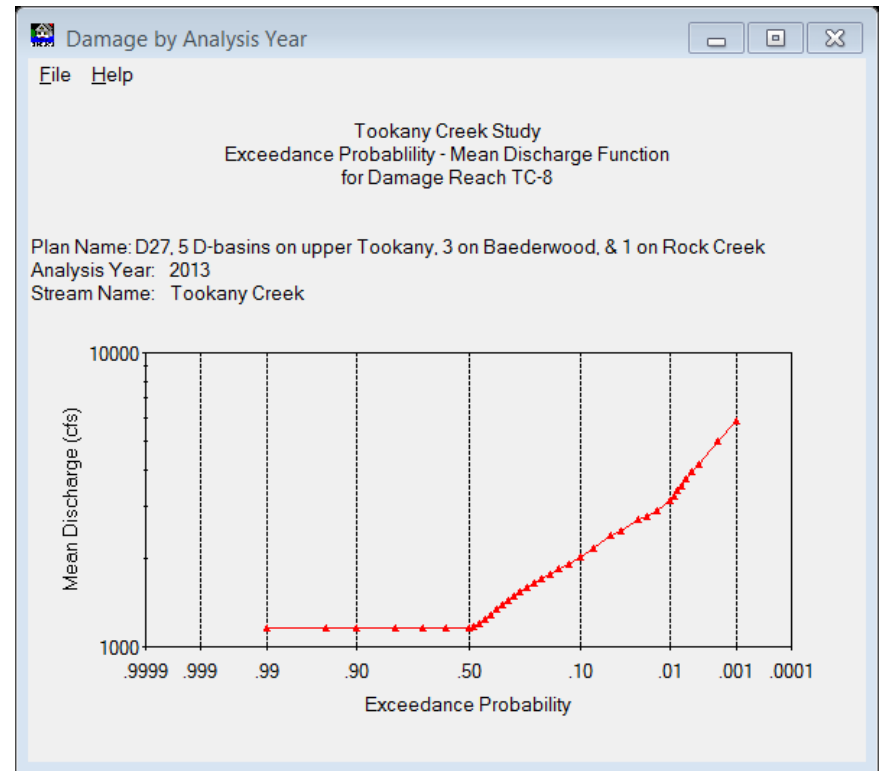
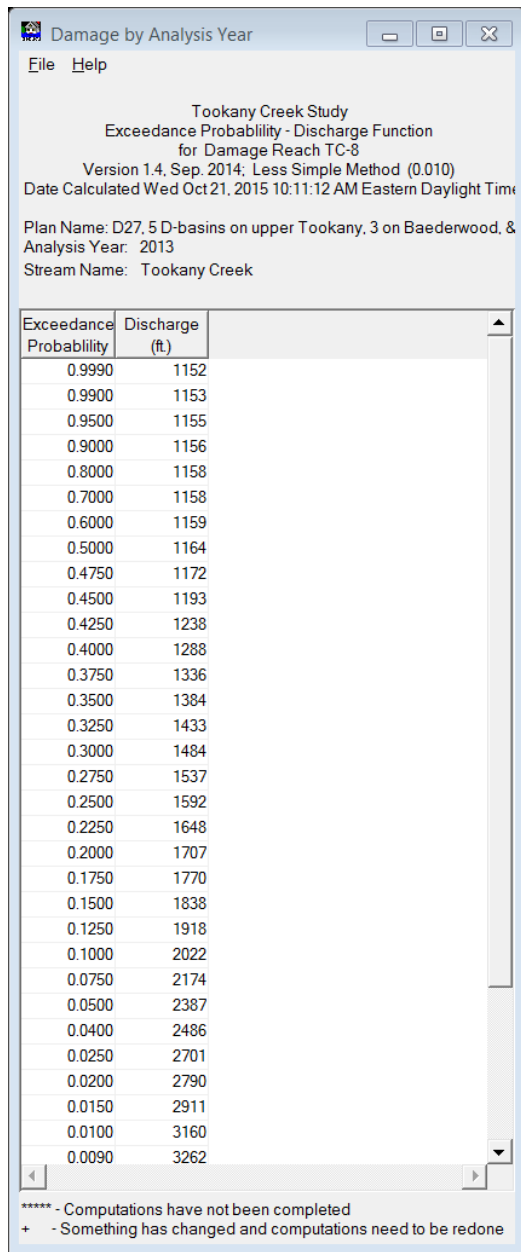
Exceedance Probability	Discharge (ft.)
0.9990	1721
0.9900	1723
0.9500	1727
0.9000	1729
0.8000	1730
0.7000	1732
0.6000	1733
0.5000	1740
0.4750	1751
0.4500	1781
0.4250	1848
0.4000	1922
0.3750	1994
0.3500	2066
0.3250	2139
0.3000	2214
0.2750	2293
0.2500	2376
0.2250	2465
0.2000	2560
0.1750	2663
0.1500	2779
0.1250	2915
0.1000	3087
0.0750	3324
0.0500	3659
0.0400	3835
0.0250	4214
0.0200	4399
0.0150	4659
0.0100	5083
0.0090	5222

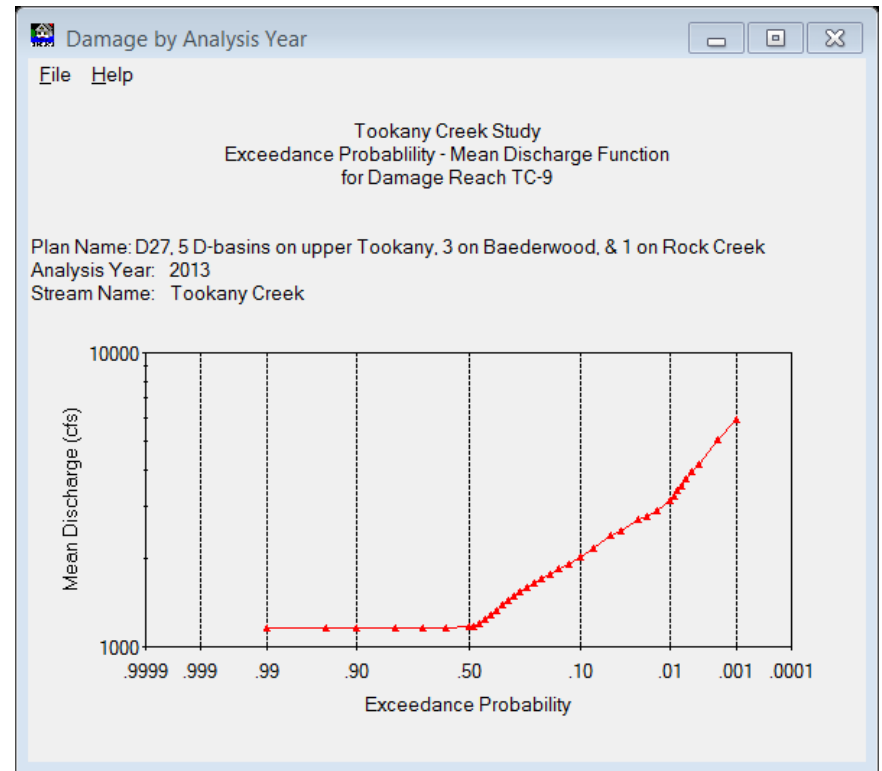
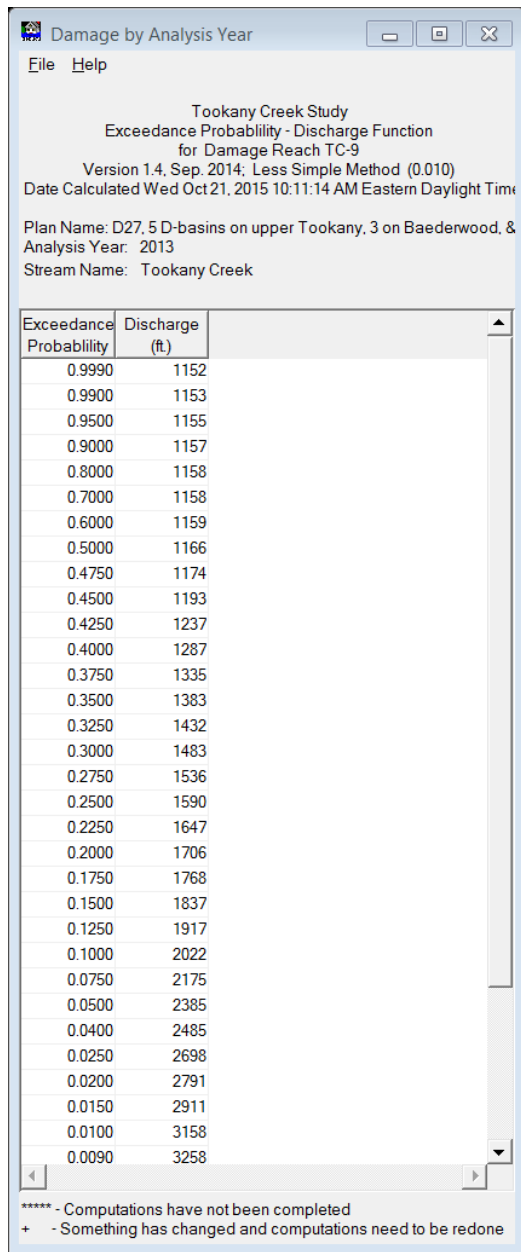
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

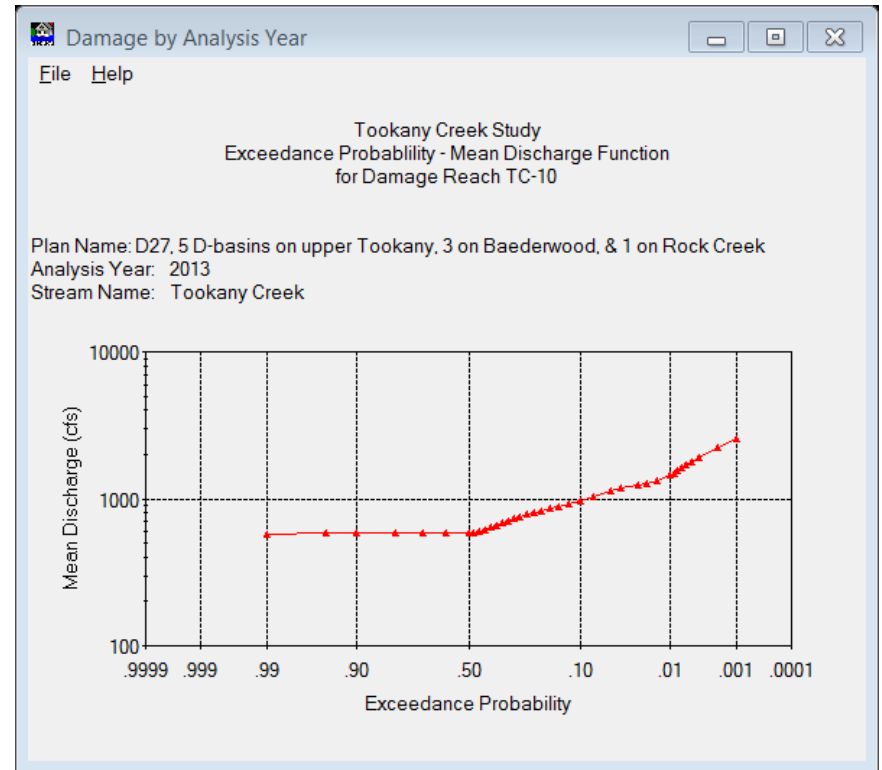
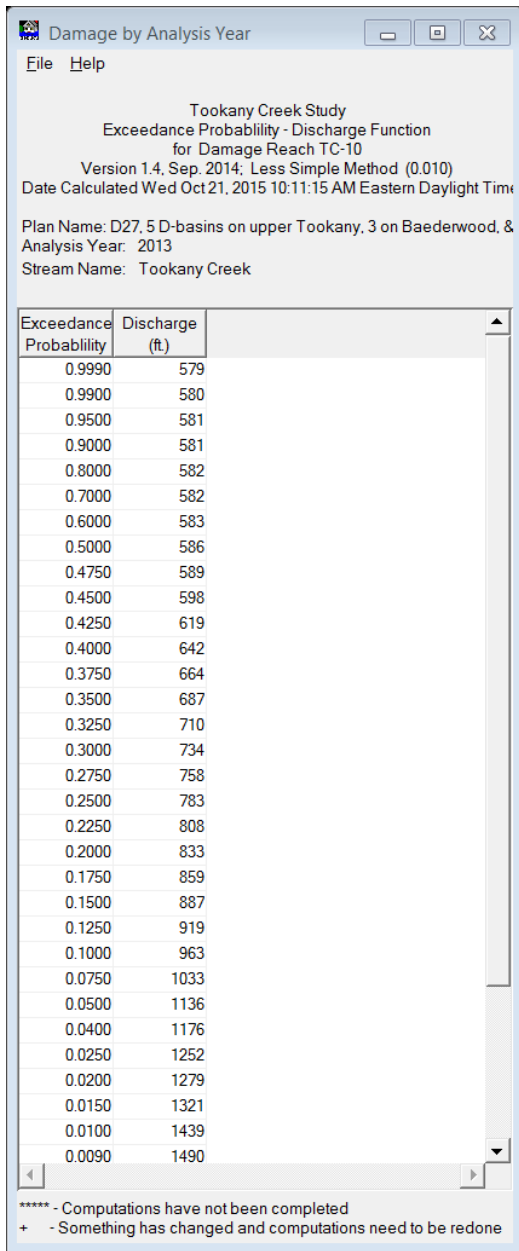


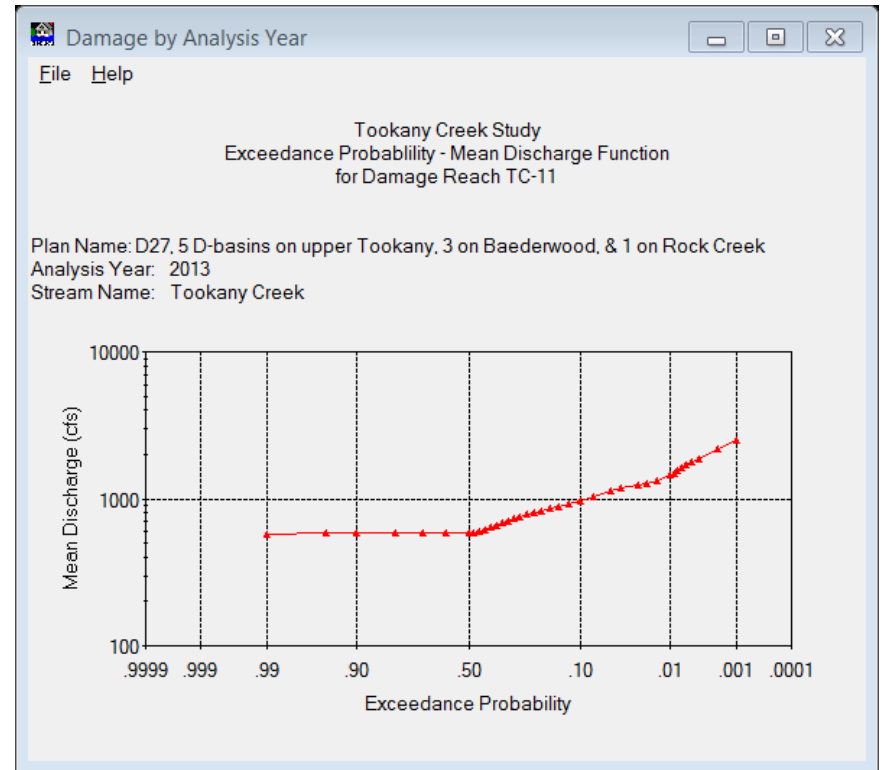
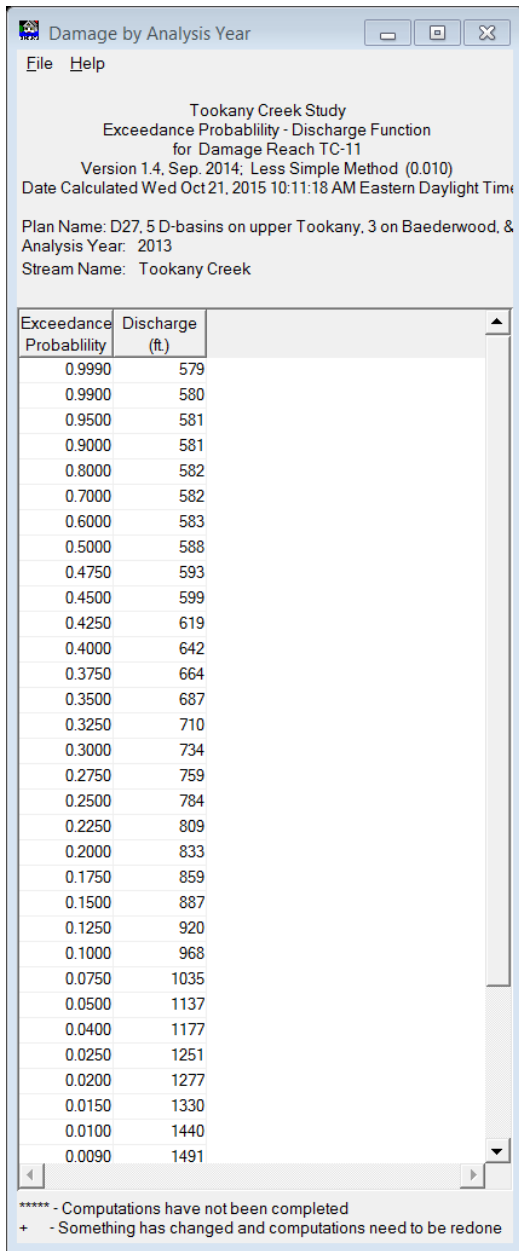


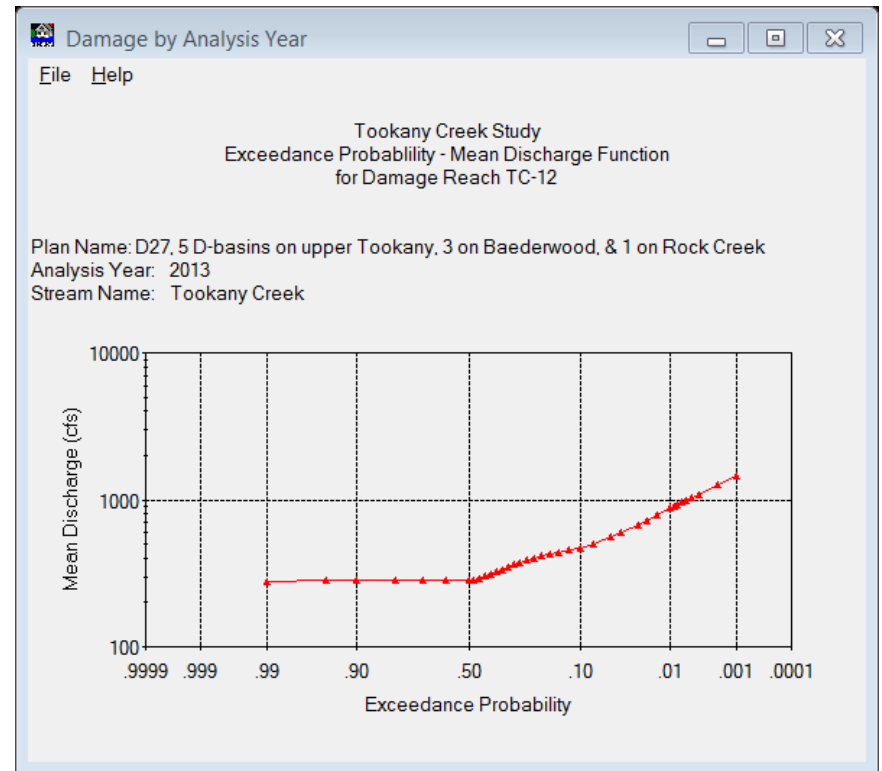
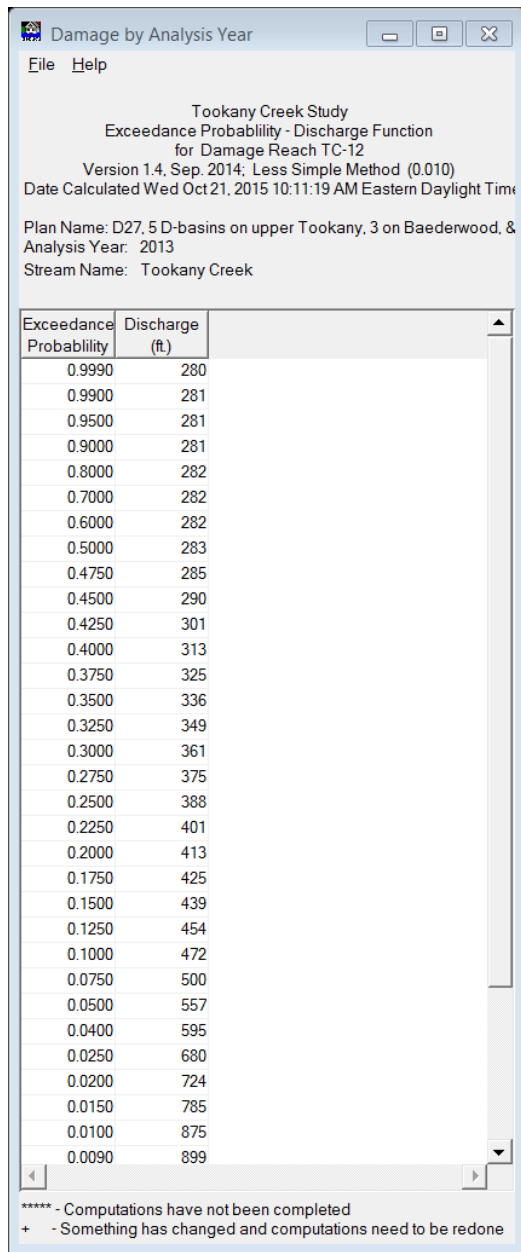


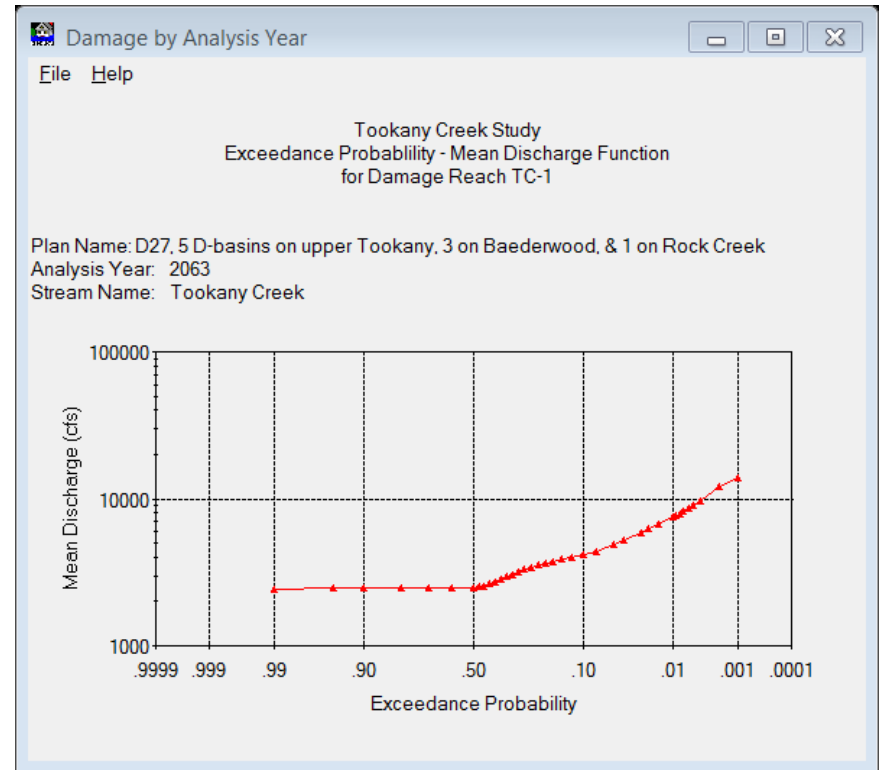
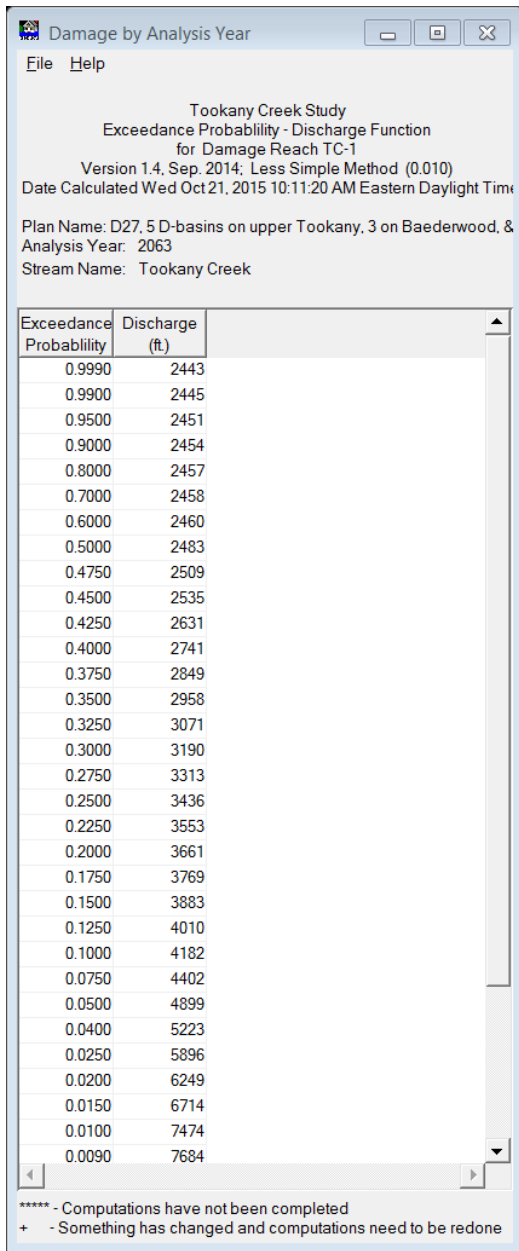


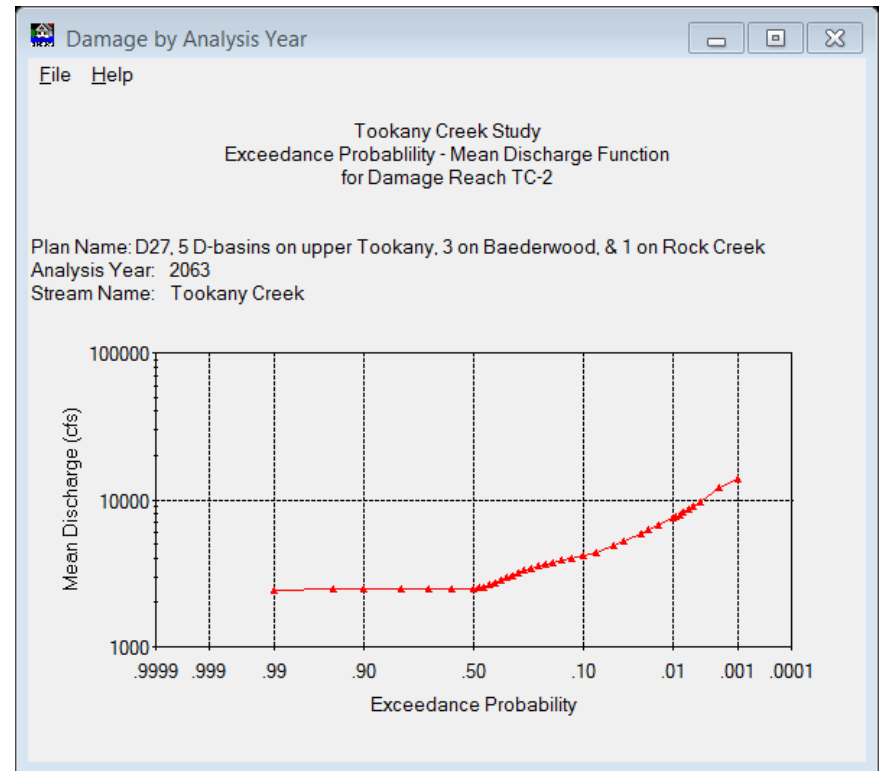
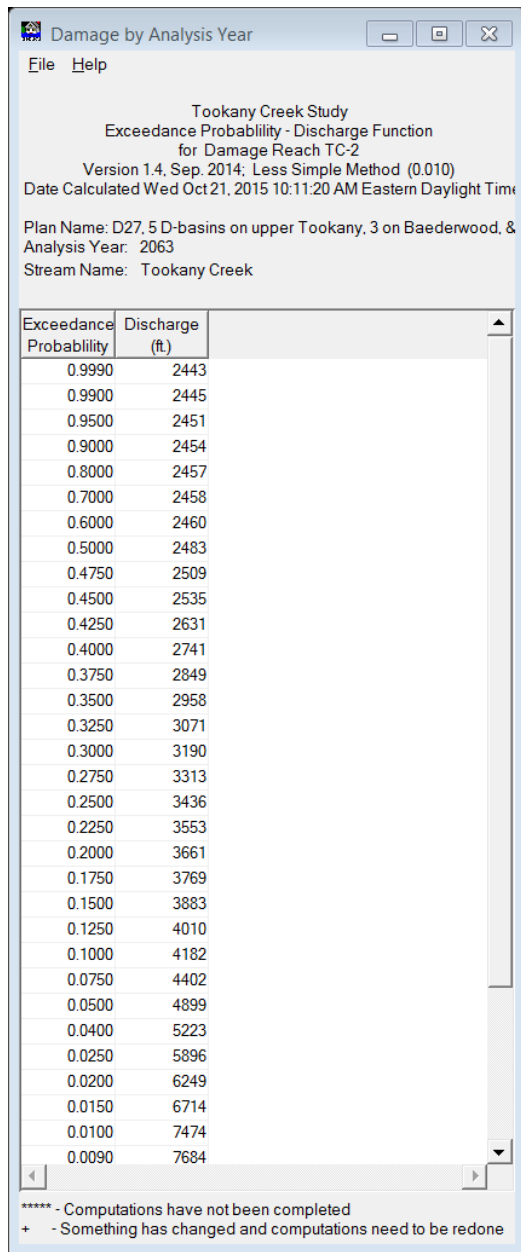


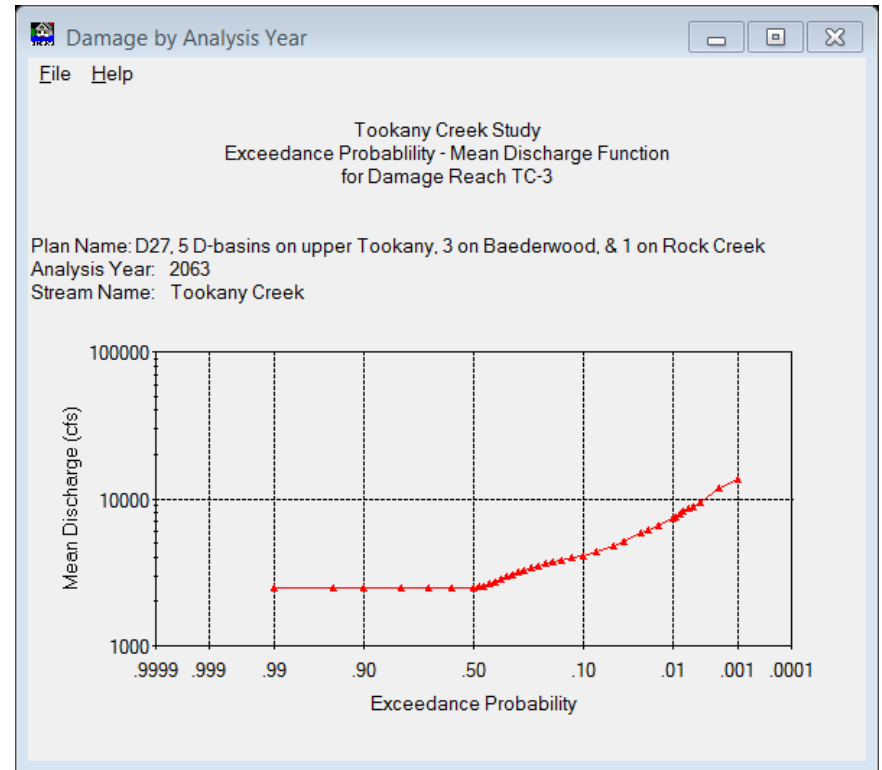
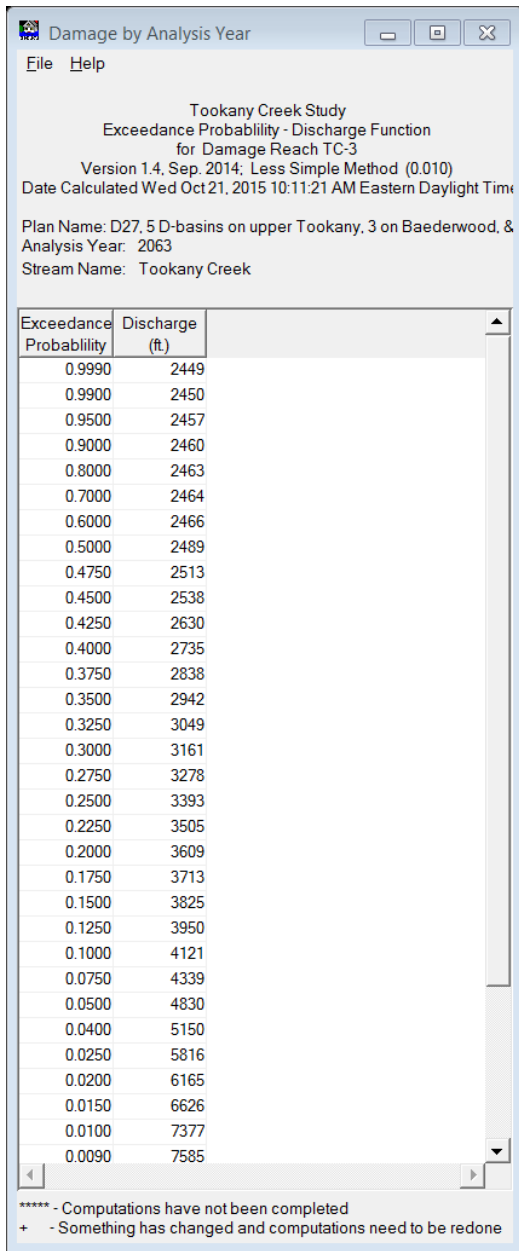














Damage by Analysis Year

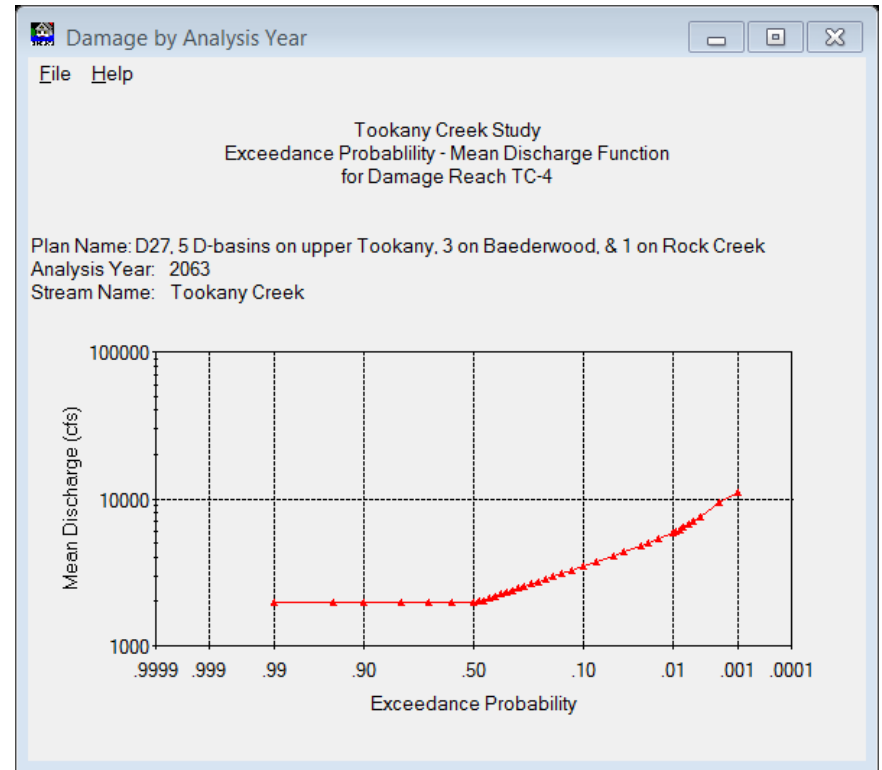
File Help

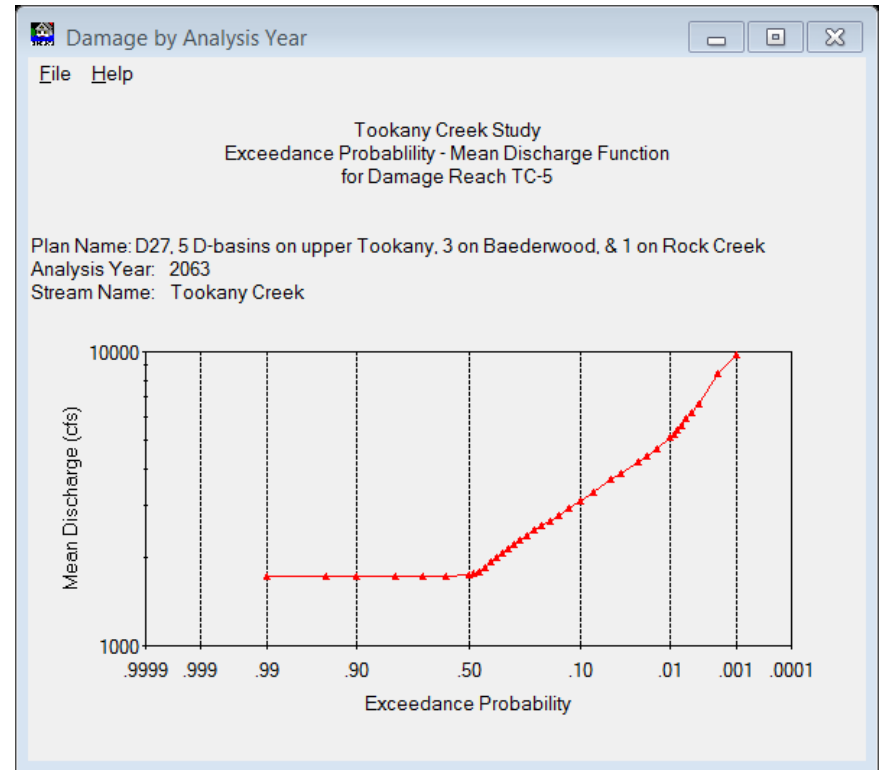
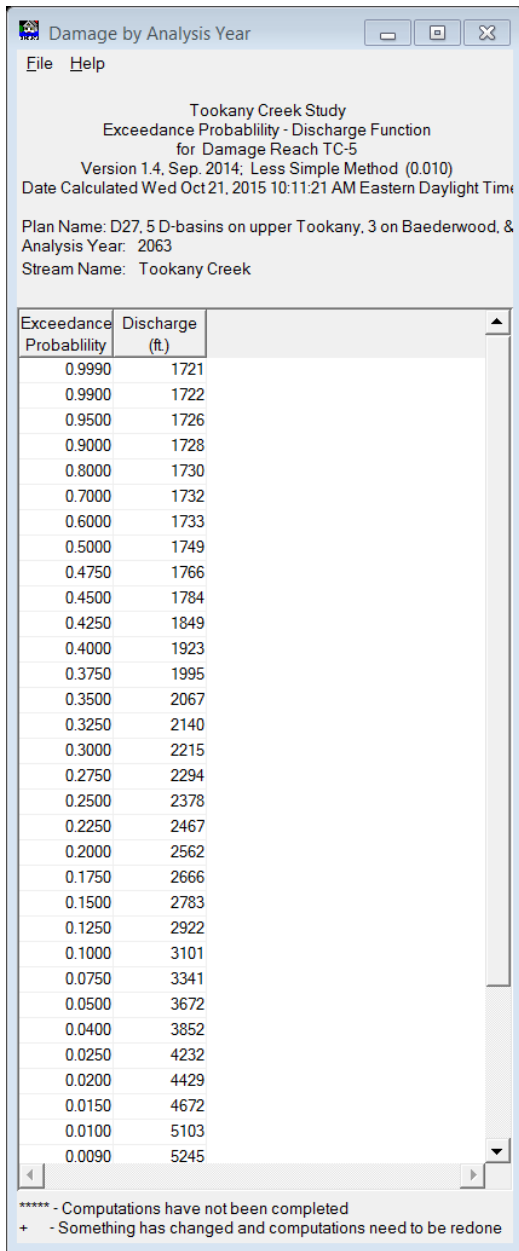
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-4  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:21 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Discharge (ft.)
0.9990	1964
0.9900	1965
0.9500	1970
0.9000	1973
0.8000	1975
0.7000	1976
0.6000	1977
0.5000	1994
0.4750	2012
0.4500	2030
0.4250	2097
0.4000	2172
0.3750	2245
0.3500	2317
0.3250	2390
0.3000	2465
0.2750	2544
0.2500	2629
0.2250	2721
0.2000	2823
0.1750	2939
0.1500	3074
0.1250	3238
0.1000	3449
0.0750	3729
0.0500	4110
0.0400	4325
0.0250	4775
0.0200	5008
0.0150	5304
0.0100	5829
0.0090	5992

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





Damage by Analysis Year

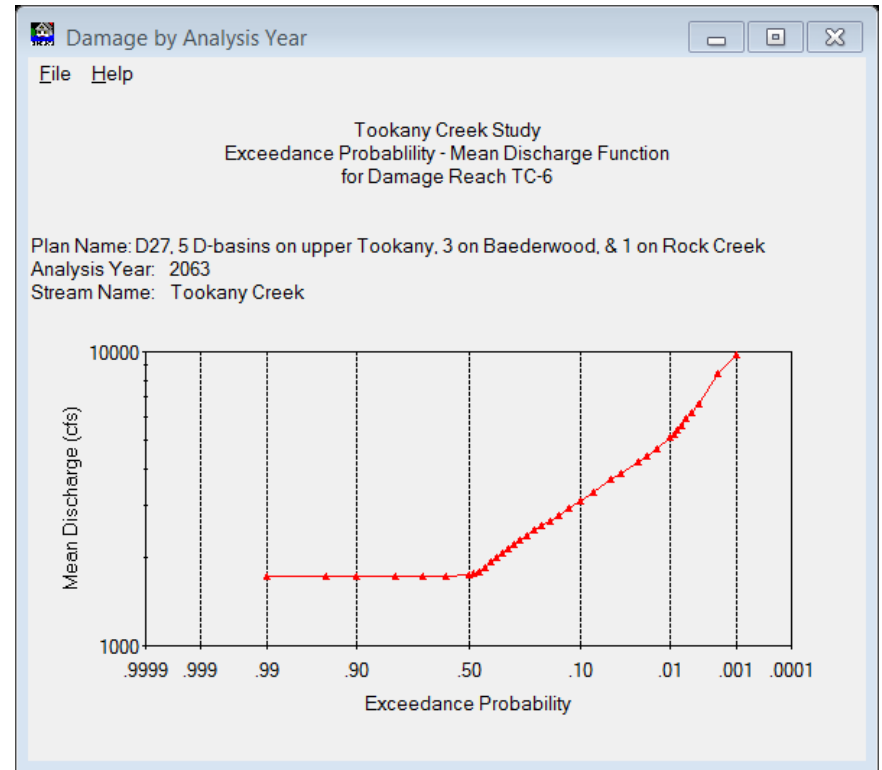
File Help

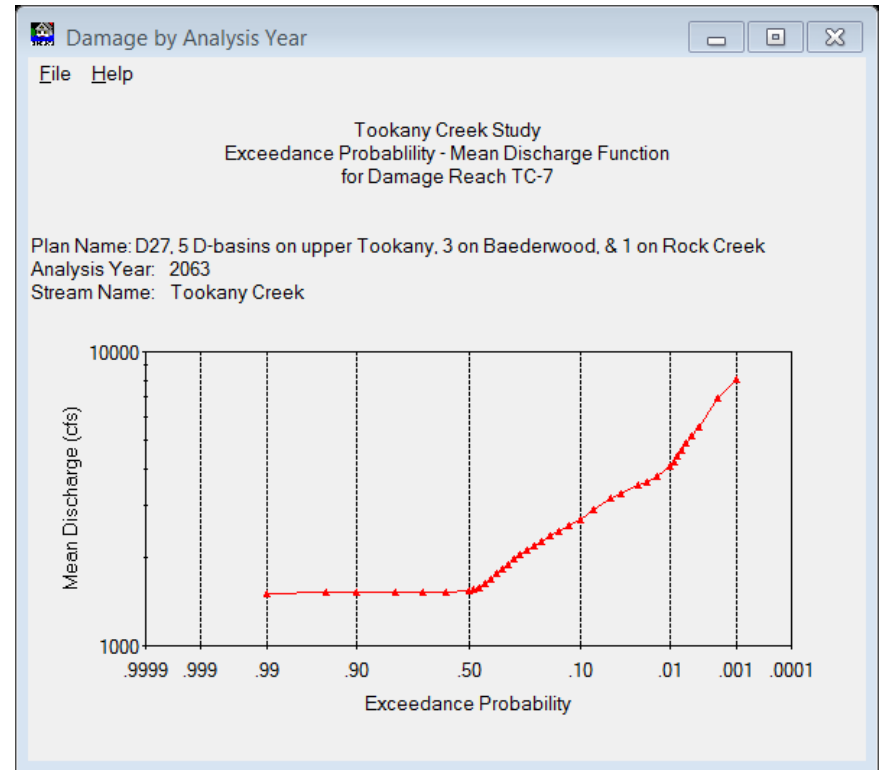
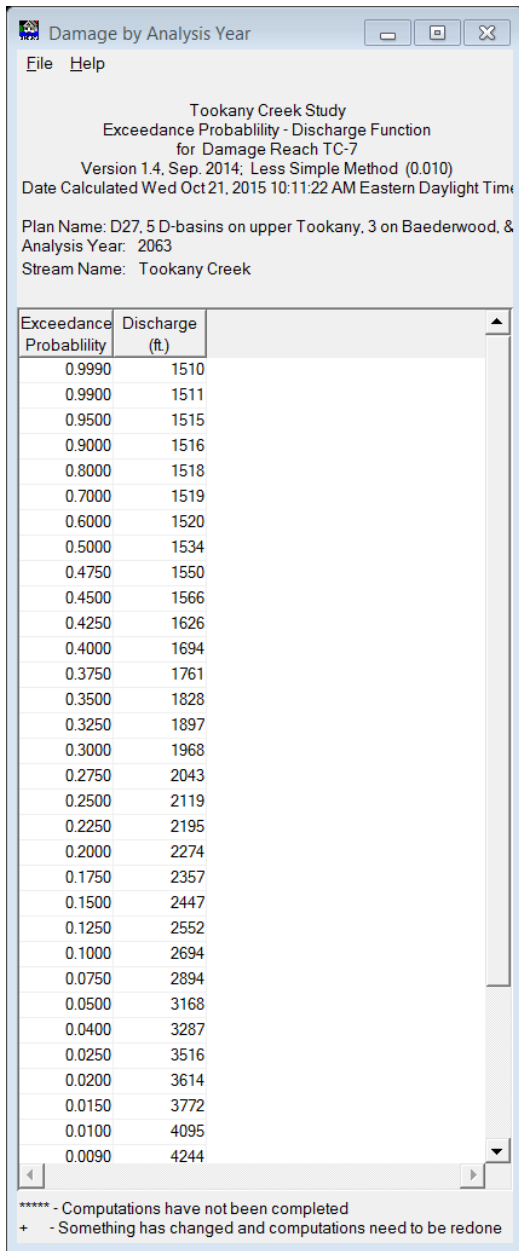
Tookany Creek Study  
 Exceedance Probability - Discharge Function  
 for Damage Reach TC-6  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:22 AM Eastern Daylight Time

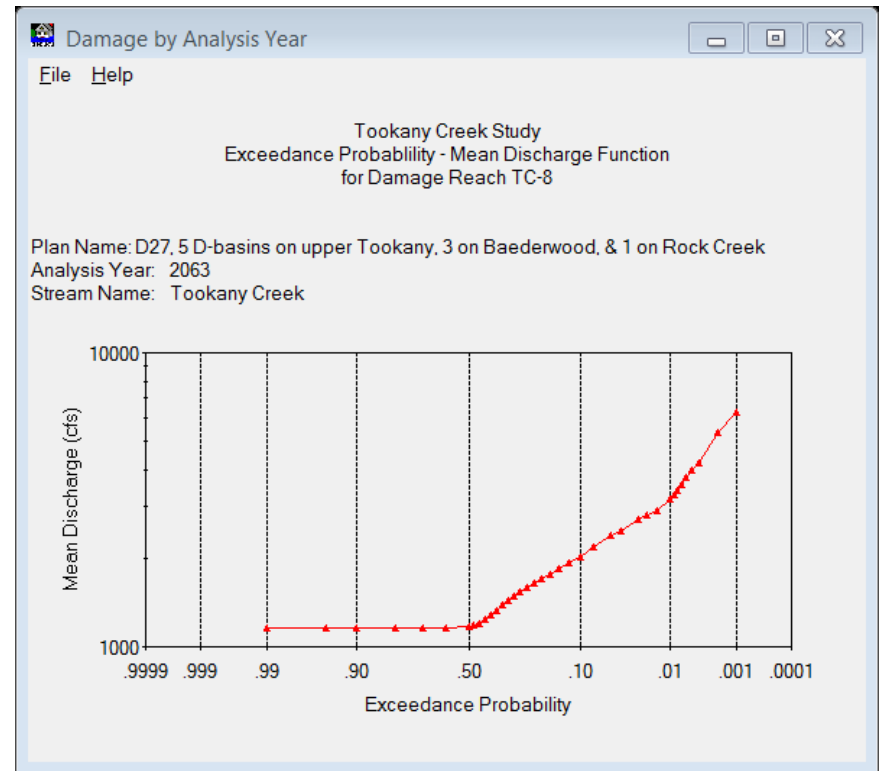
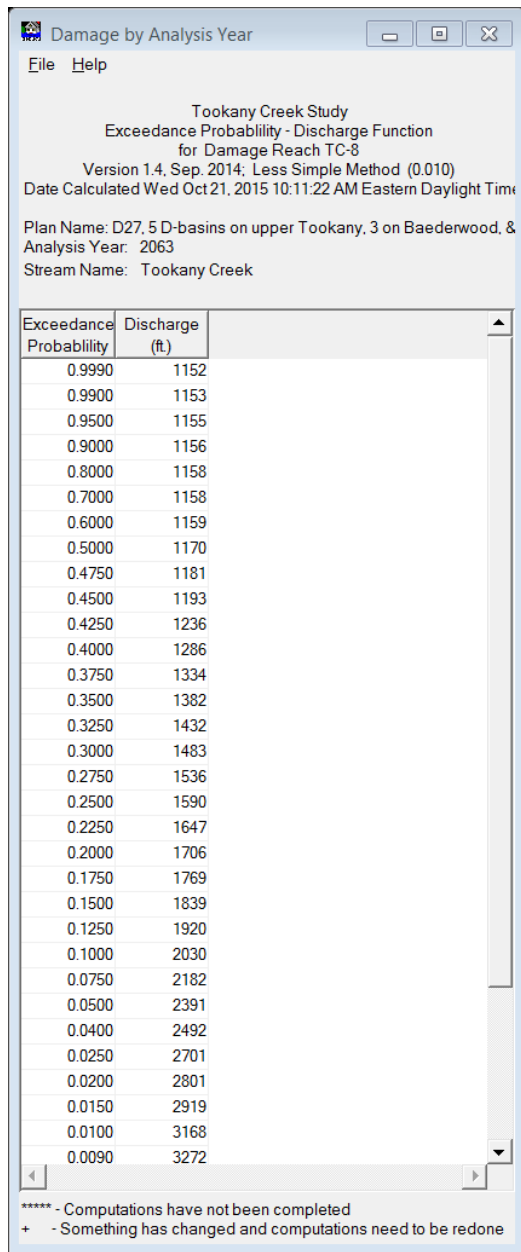
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

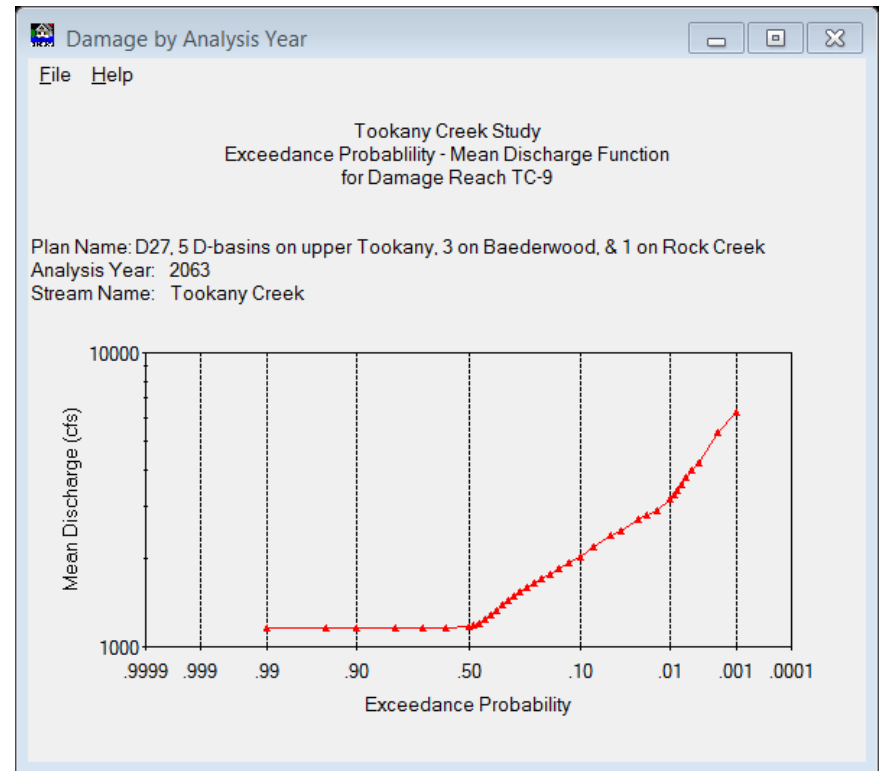
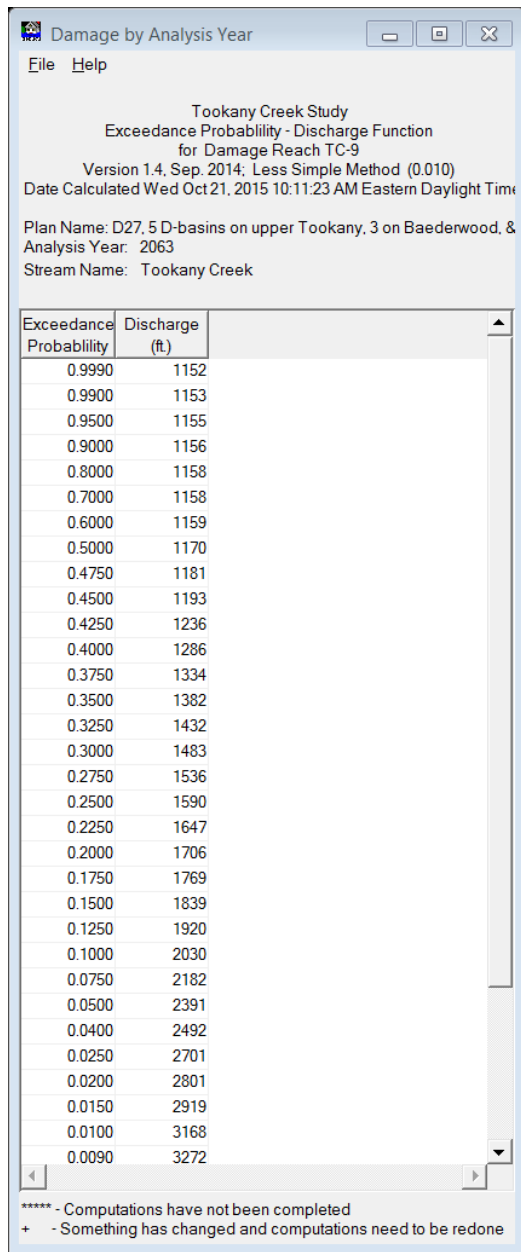
Exceedance Probability	Discharge (ft.)
0.9990	1721
0.9900	1722
0.9500	1726
0.9000	1728
0.8000	1730
0.7000	1732
0.6000	1733
0.5000	1749
0.4750	1766
0.4500	1784
0.4250	1849
0.4000	1923
0.3750	1995
0.3500	2067
0.3250	2140
0.3000	2215
0.2750	2294
0.2500	2378
0.2250	2467
0.2000	2562
0.1750	2666
0.1500	2783
0.1250	2922
0.1000	3101
0.0750	3341
0.0500	3672
0.0400	3852
0.0250	4232
0.0200	4429
0.0150	4672
0.0100	5103
0.0090	5245

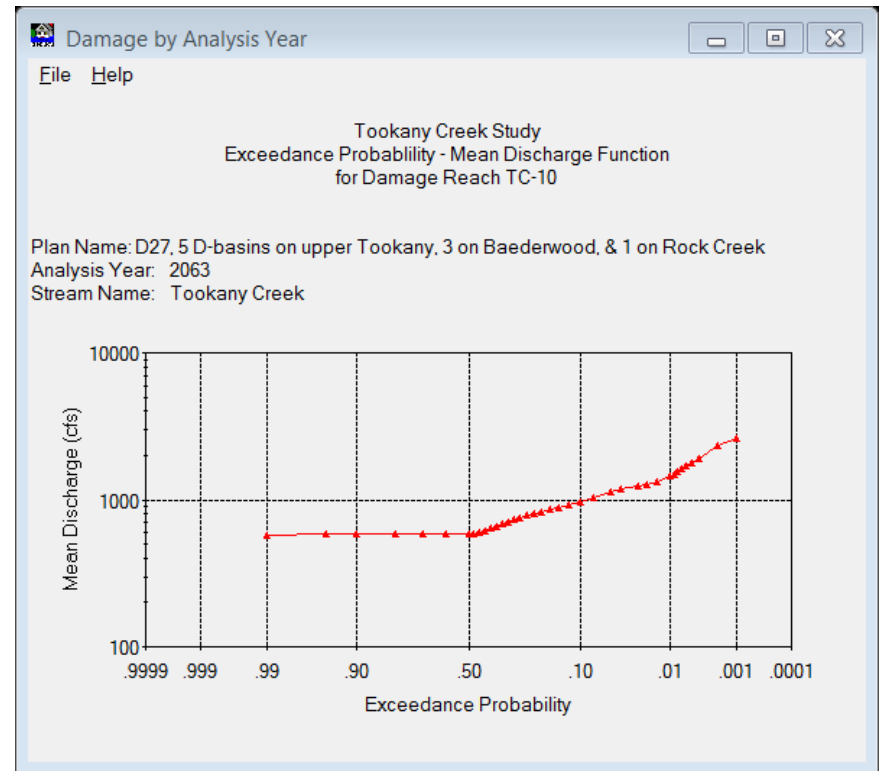
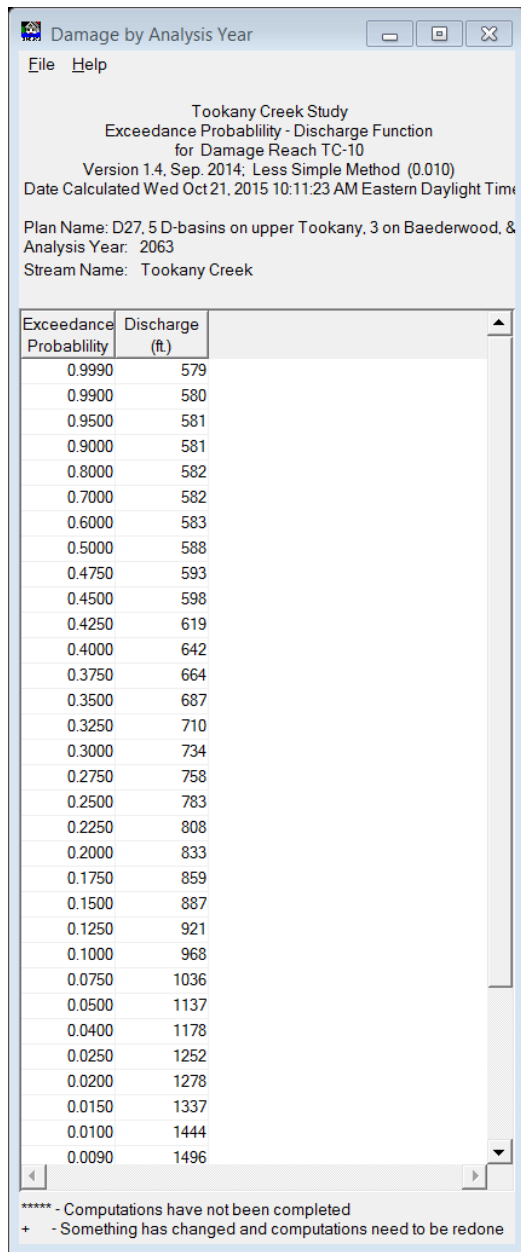
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

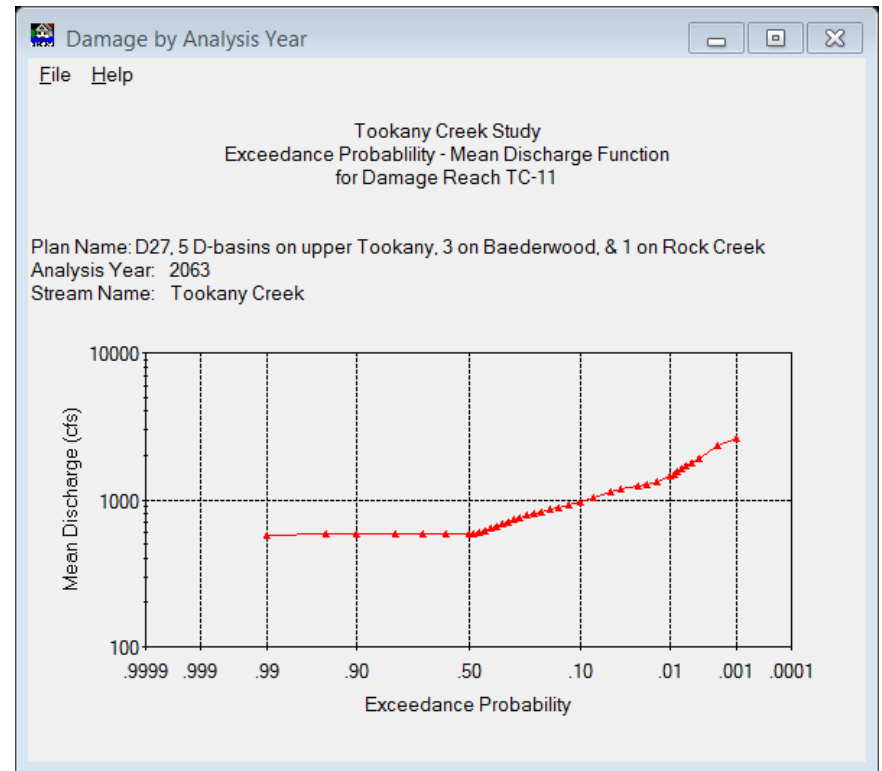
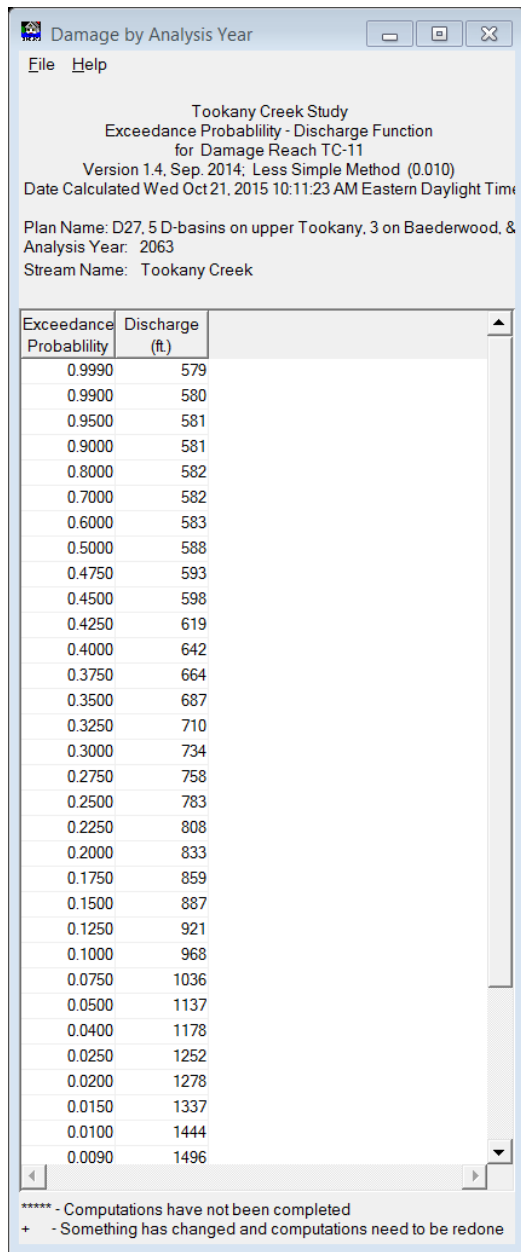




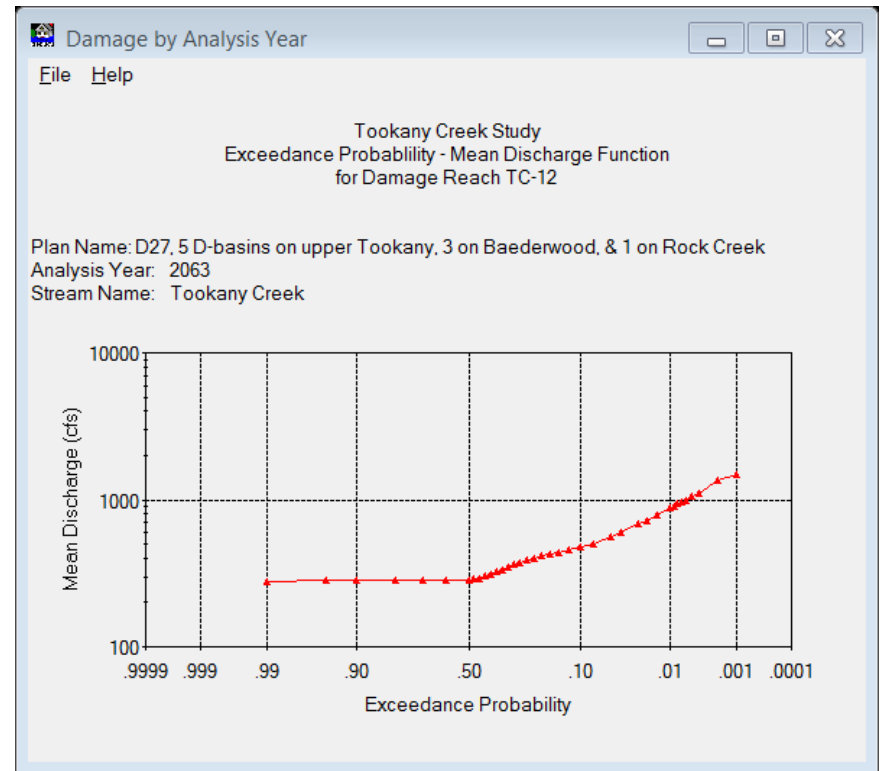
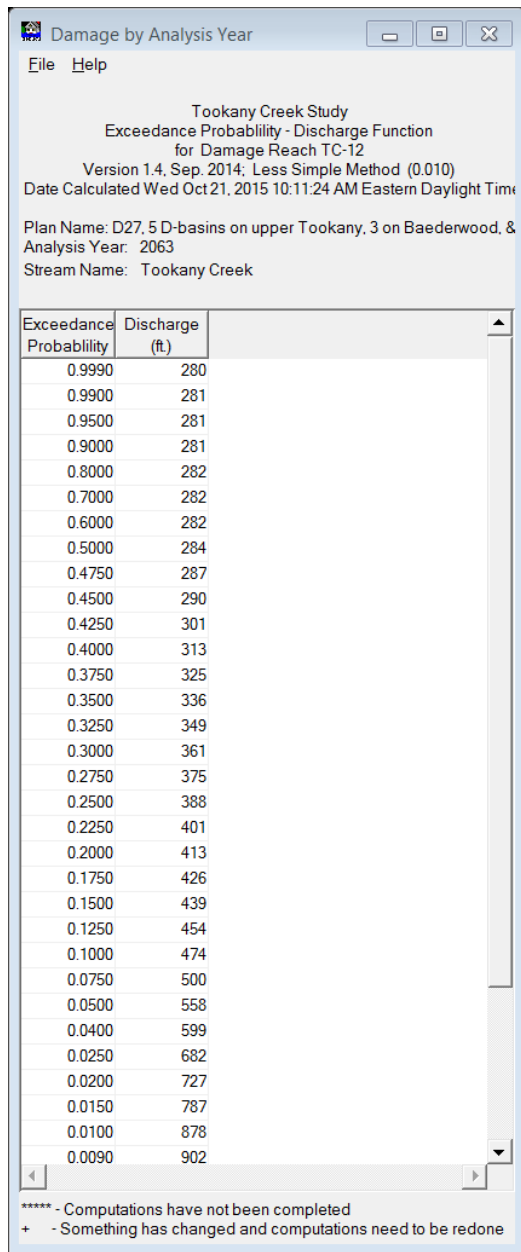


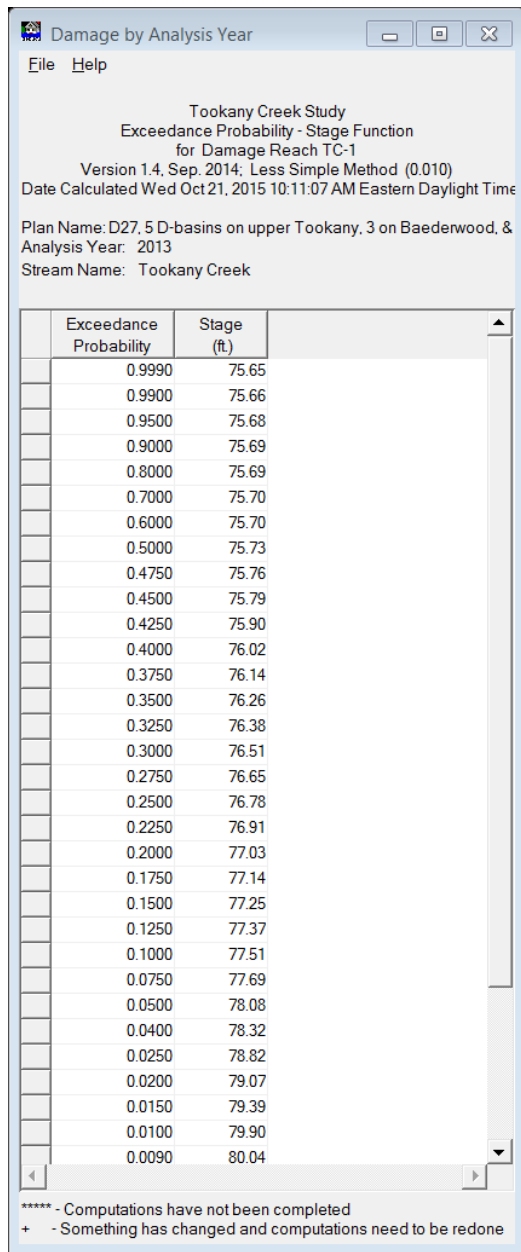




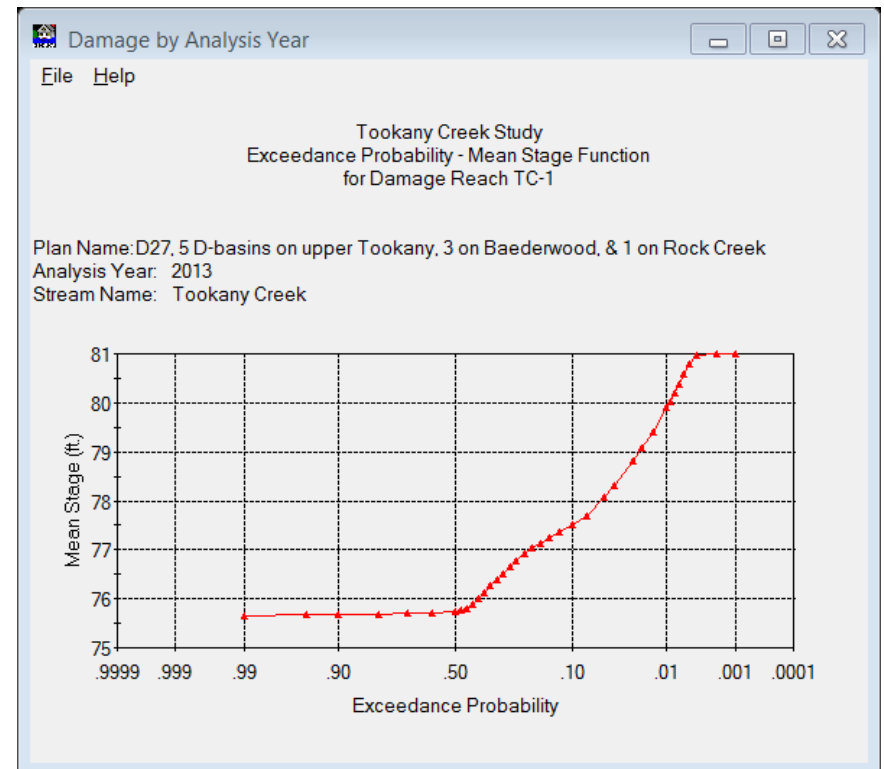


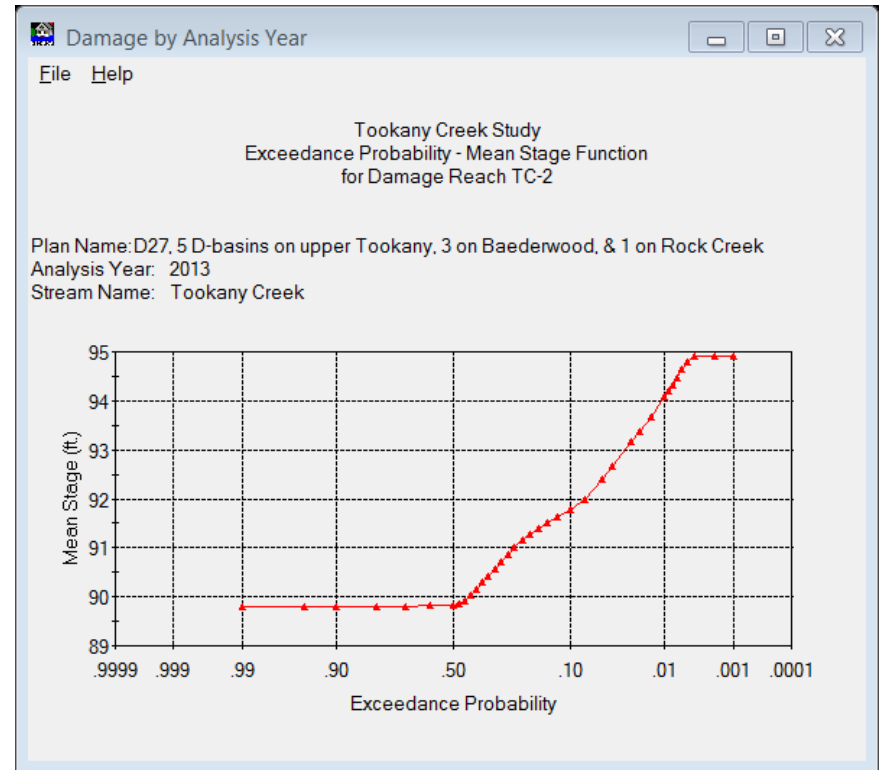
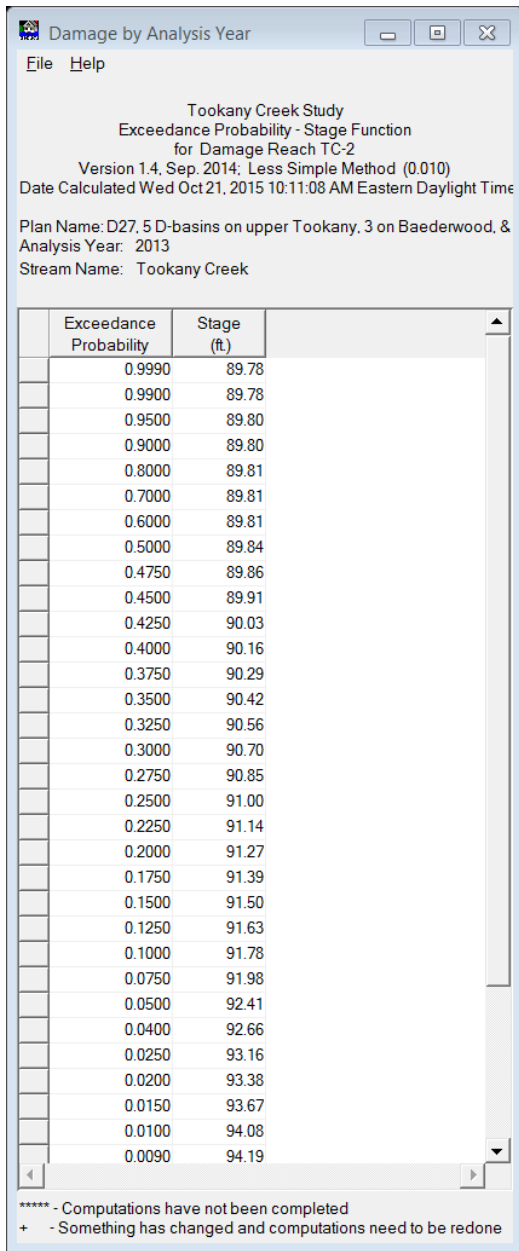


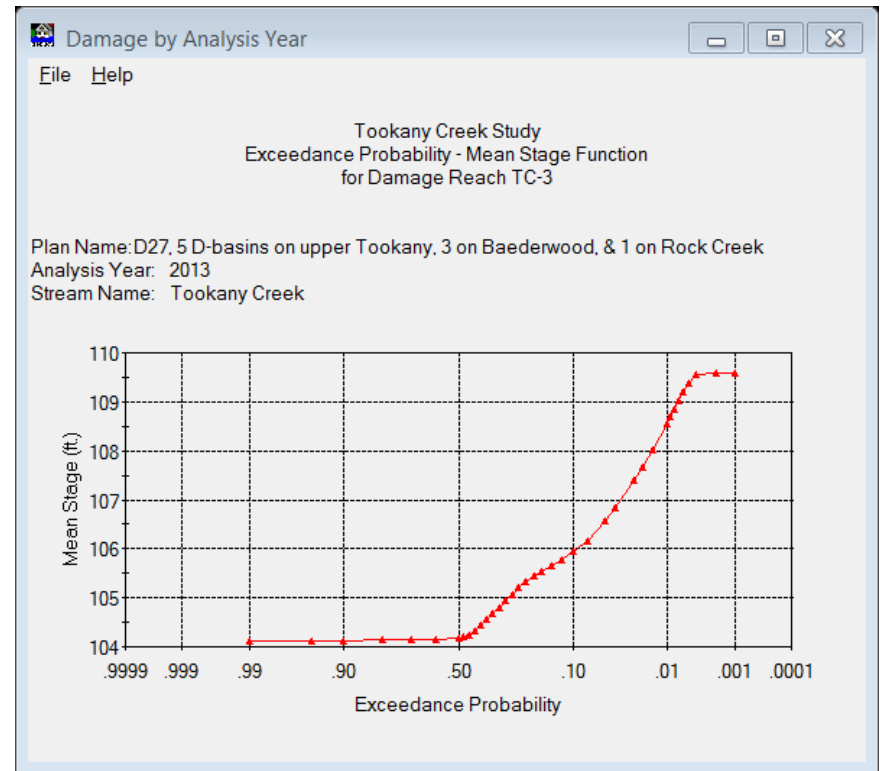
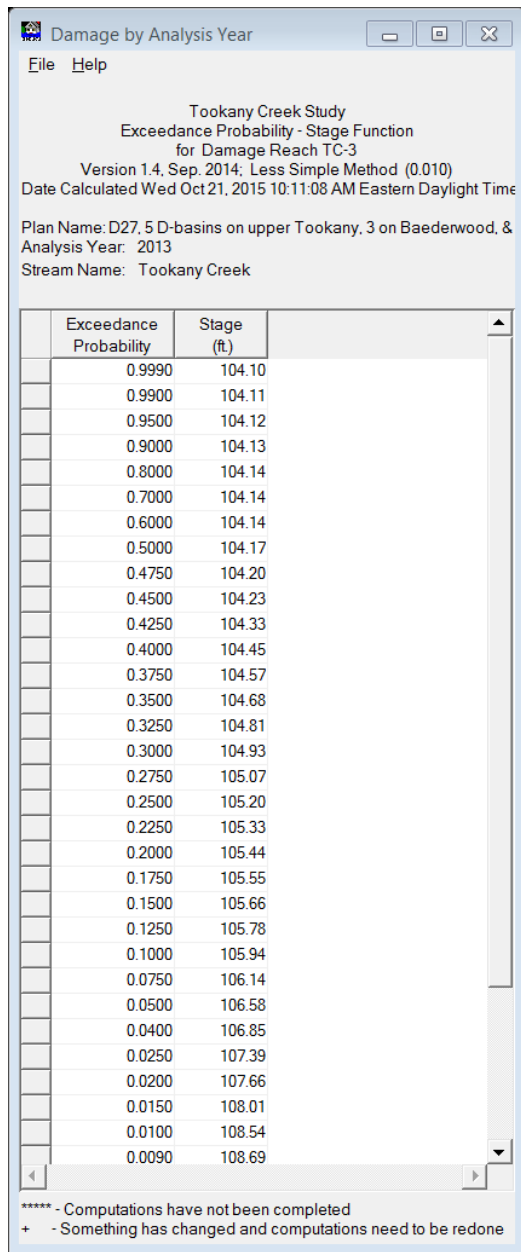


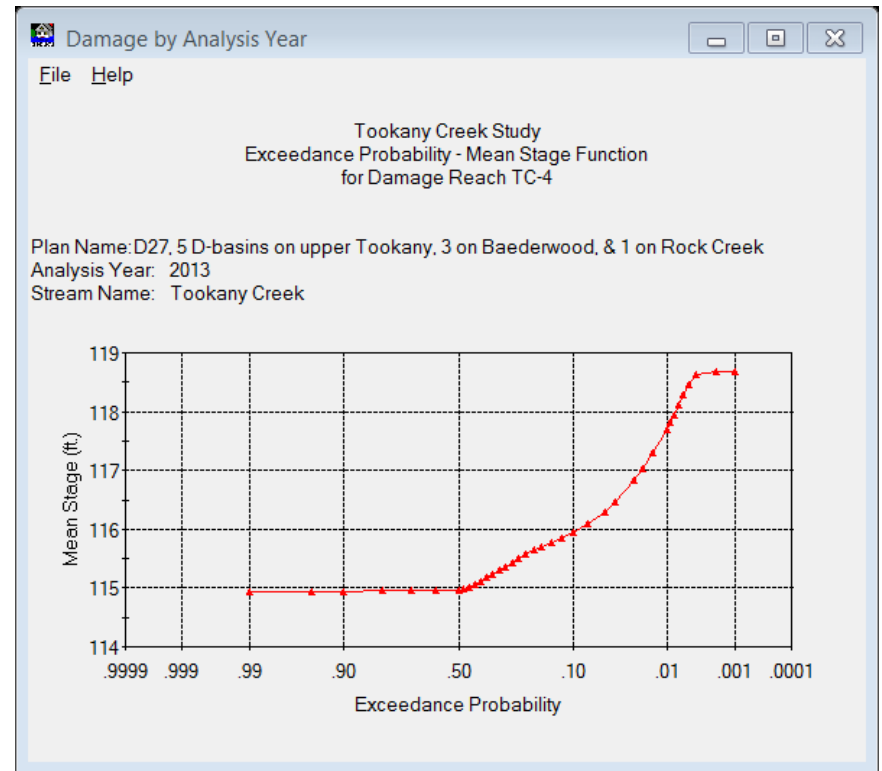
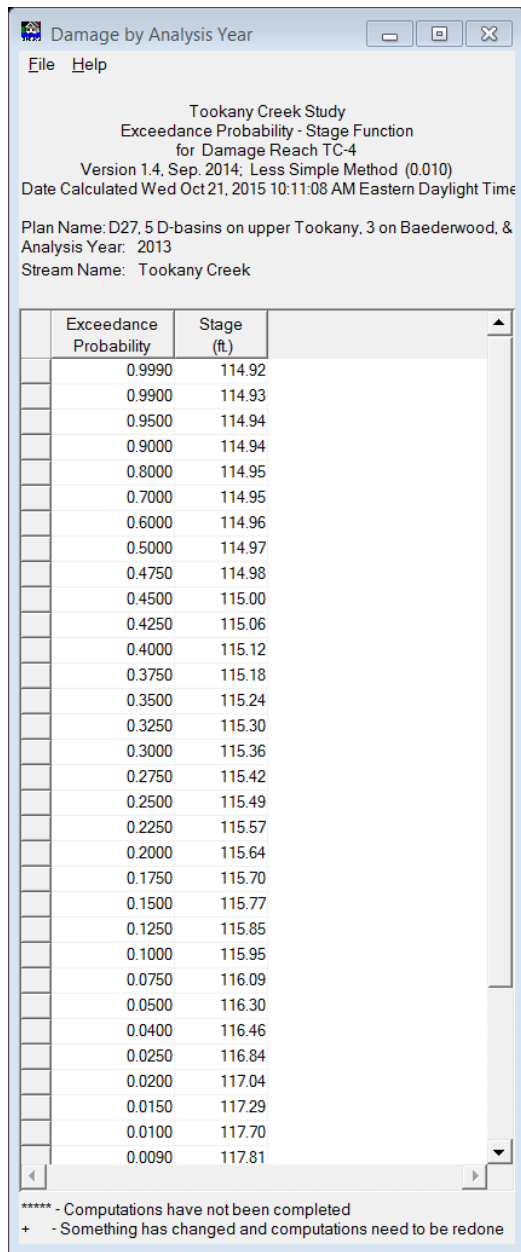


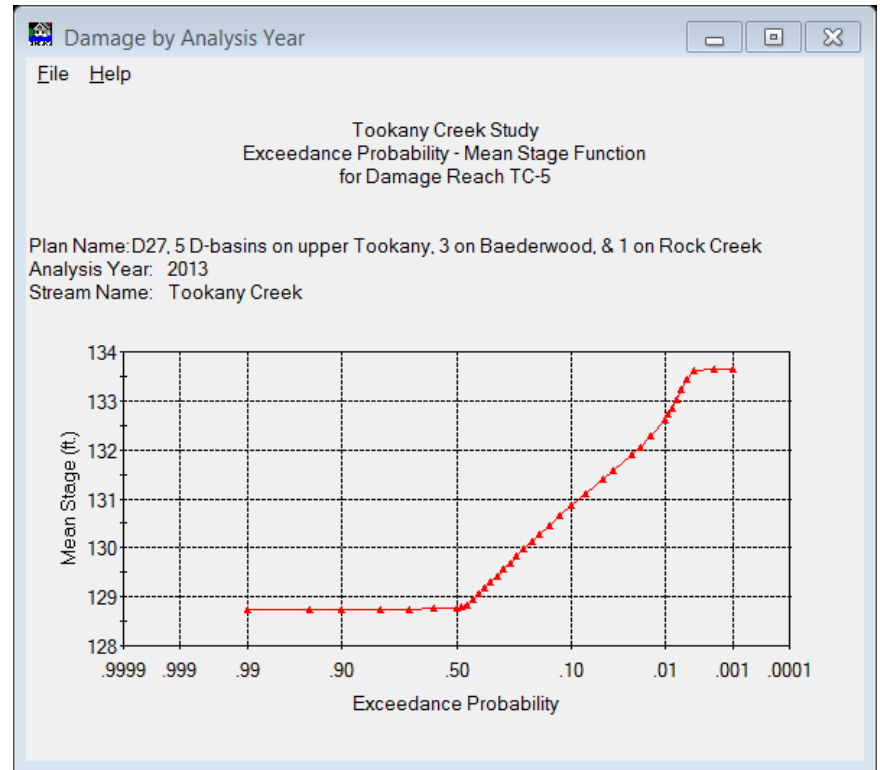
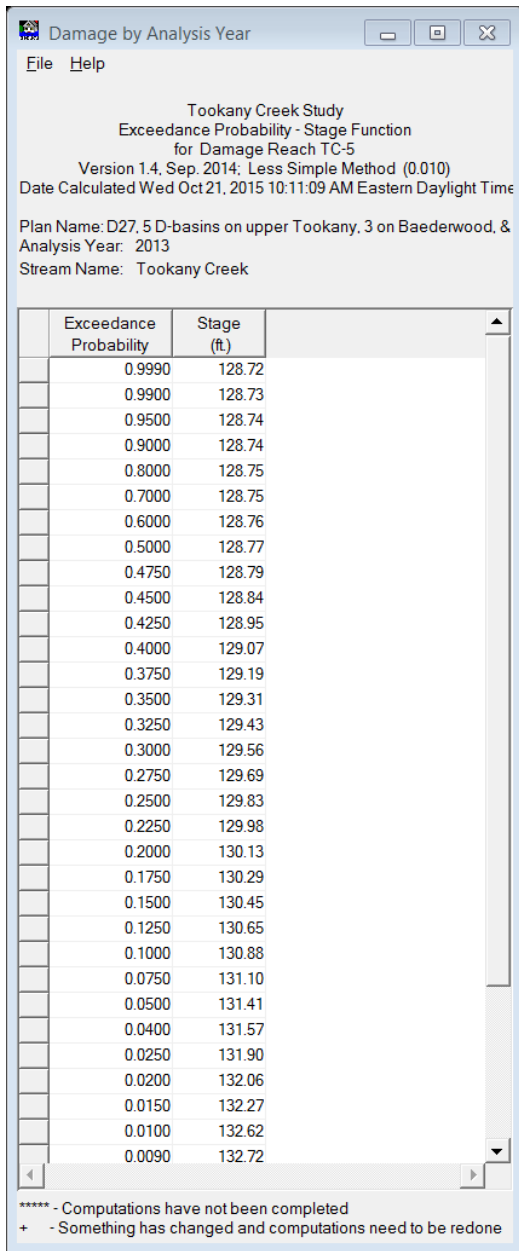
### Tookany Creek D27 Exceedance Probability – Mean Stage Functions

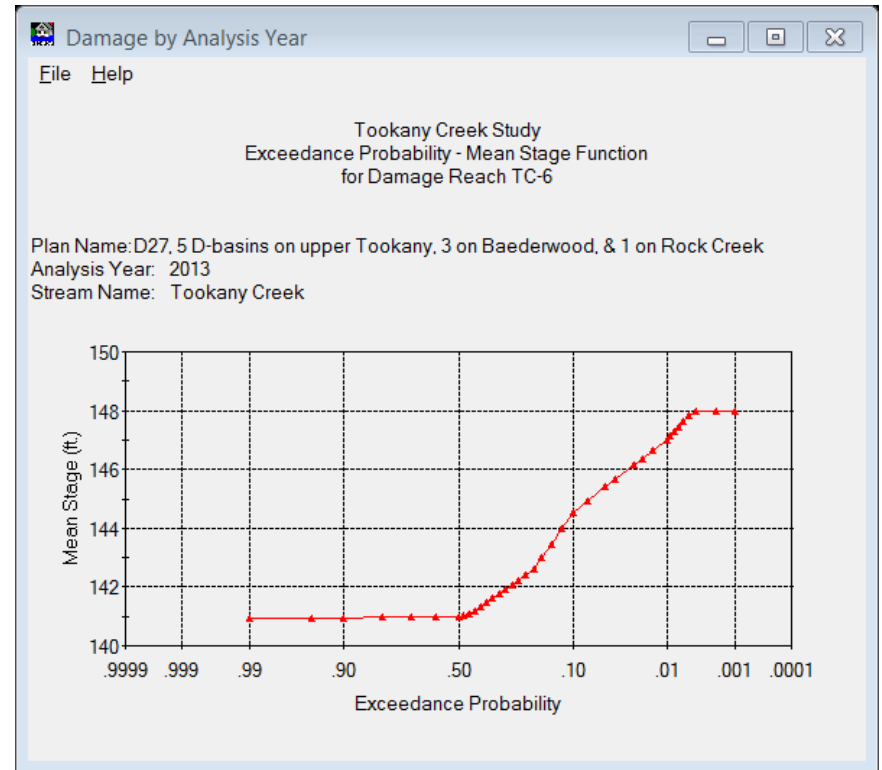
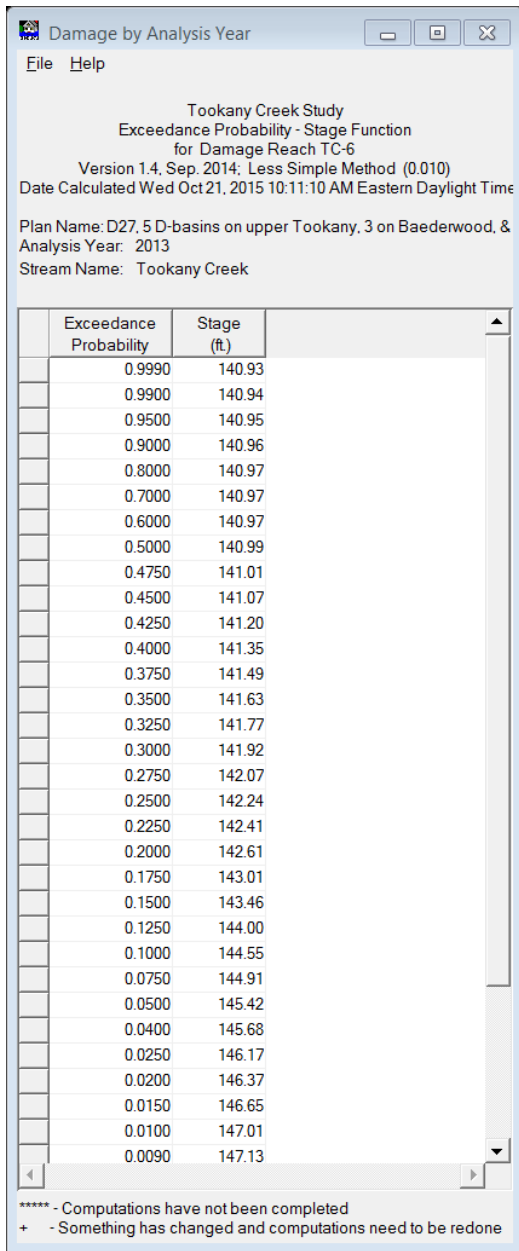


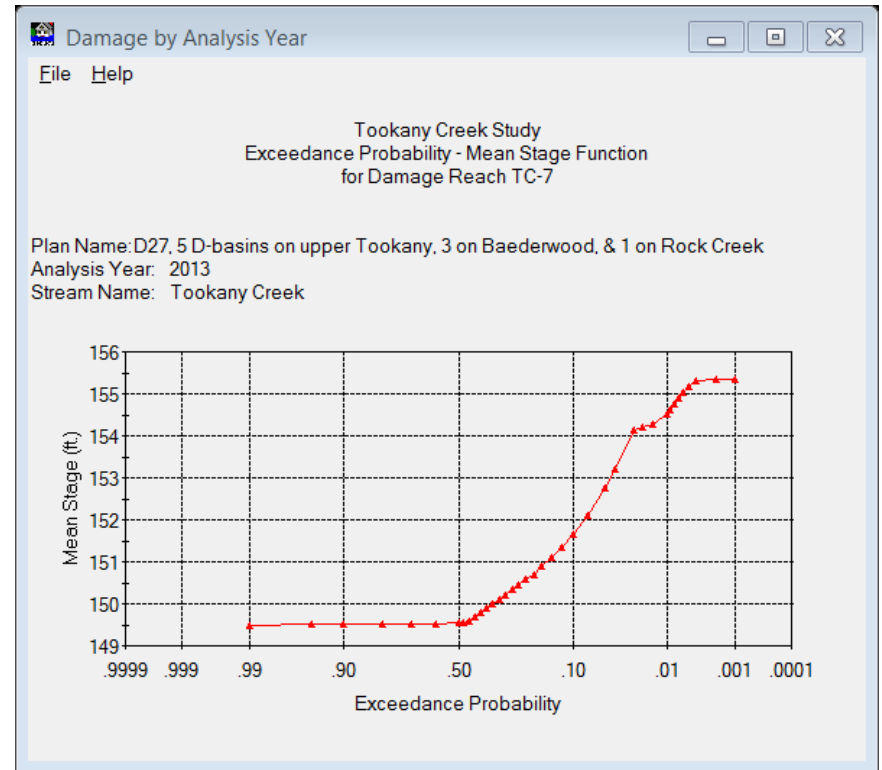
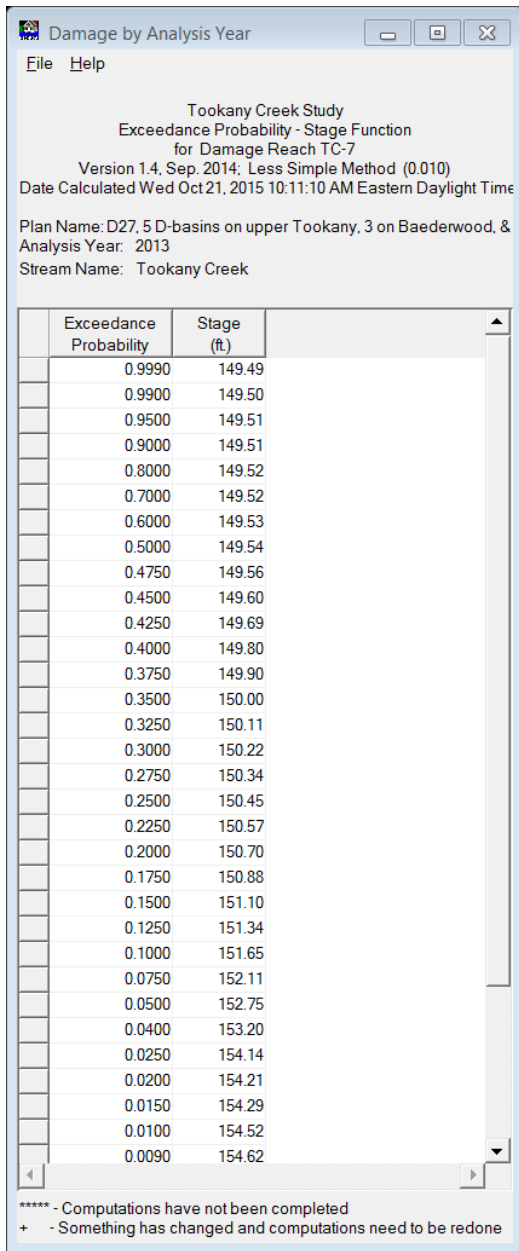




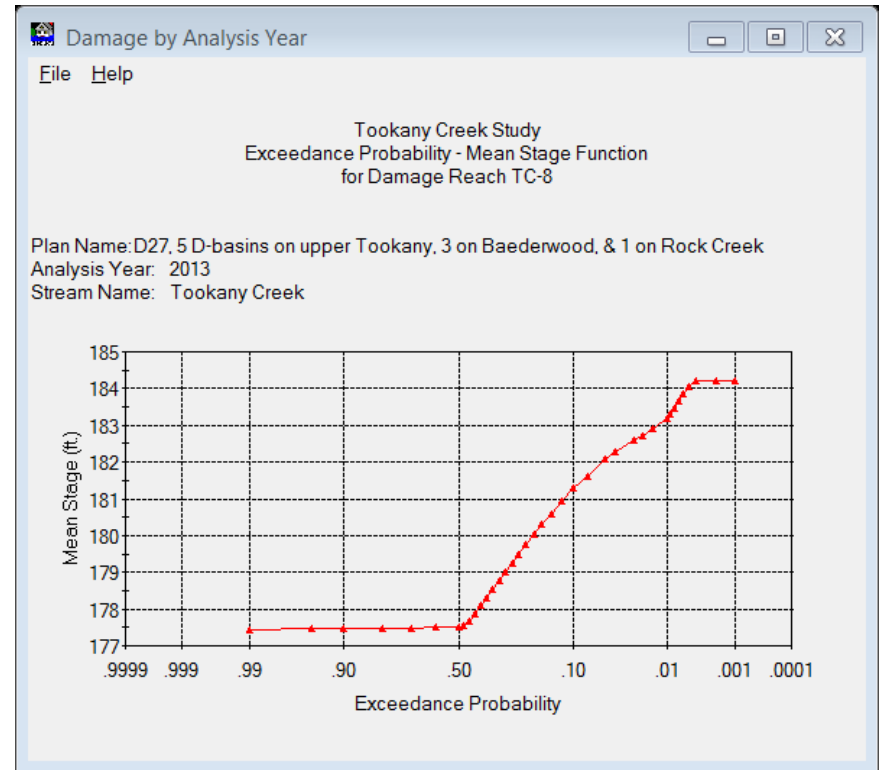
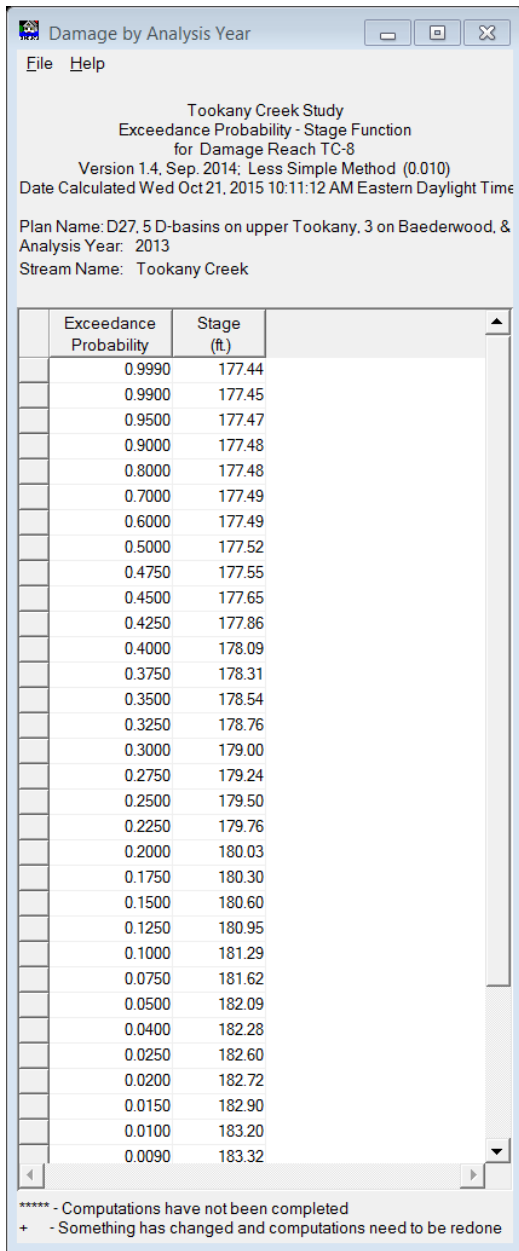


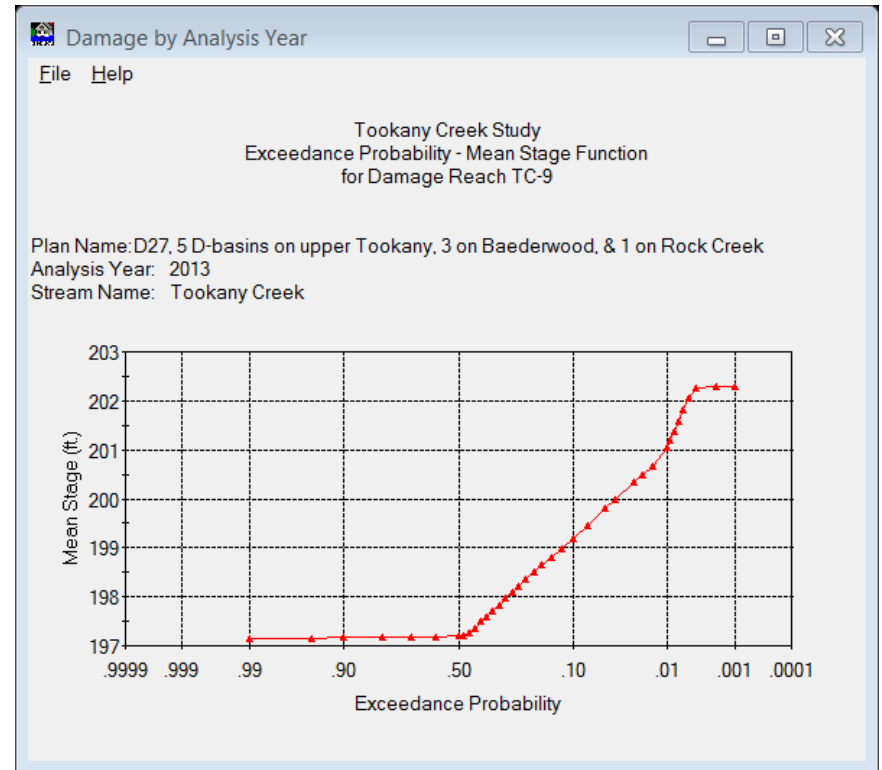
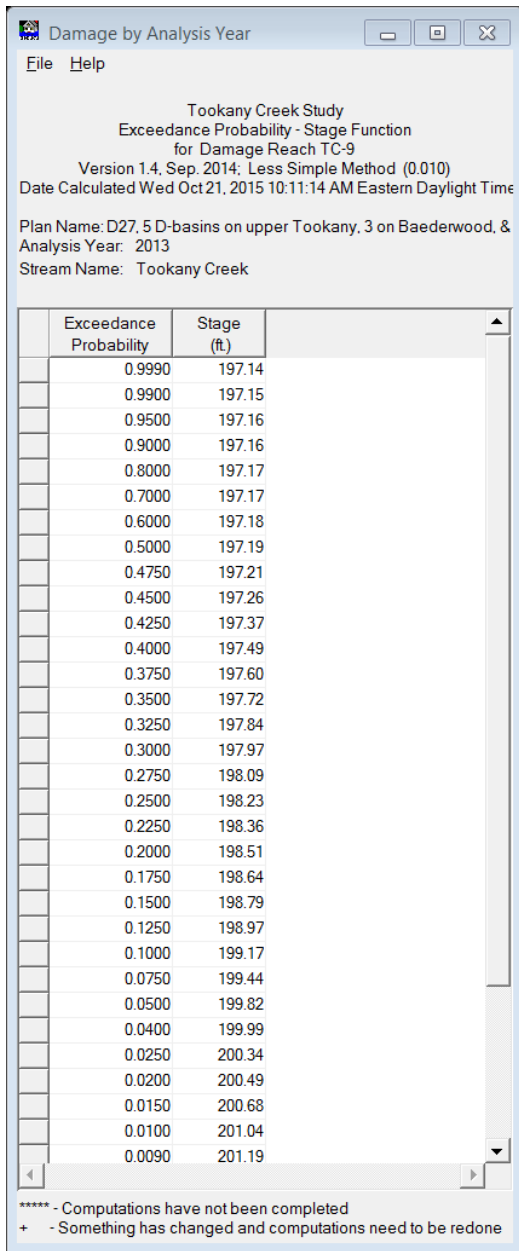


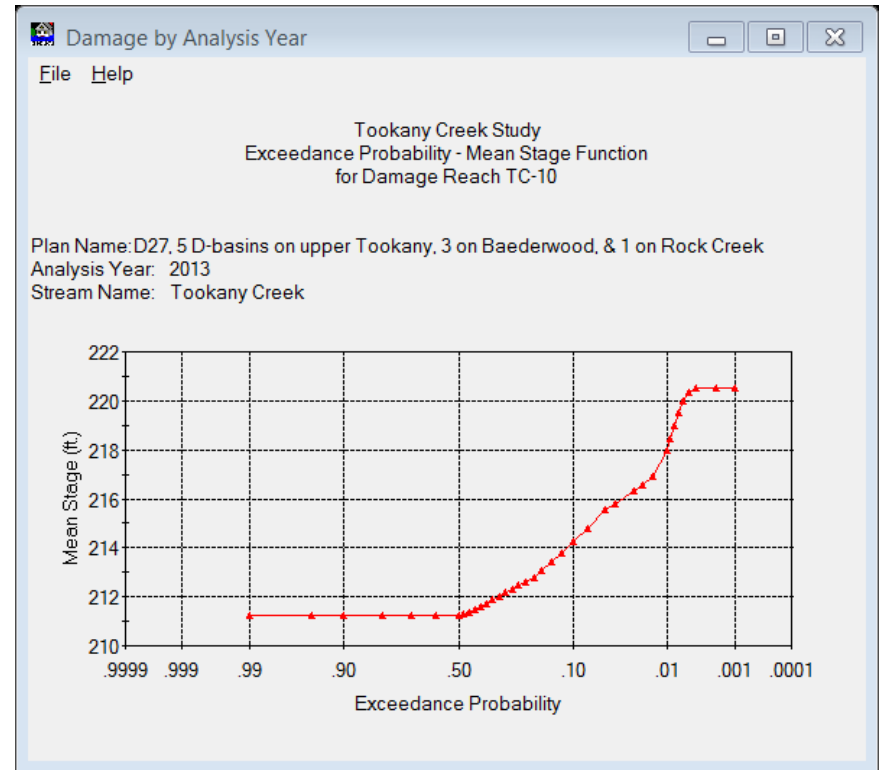
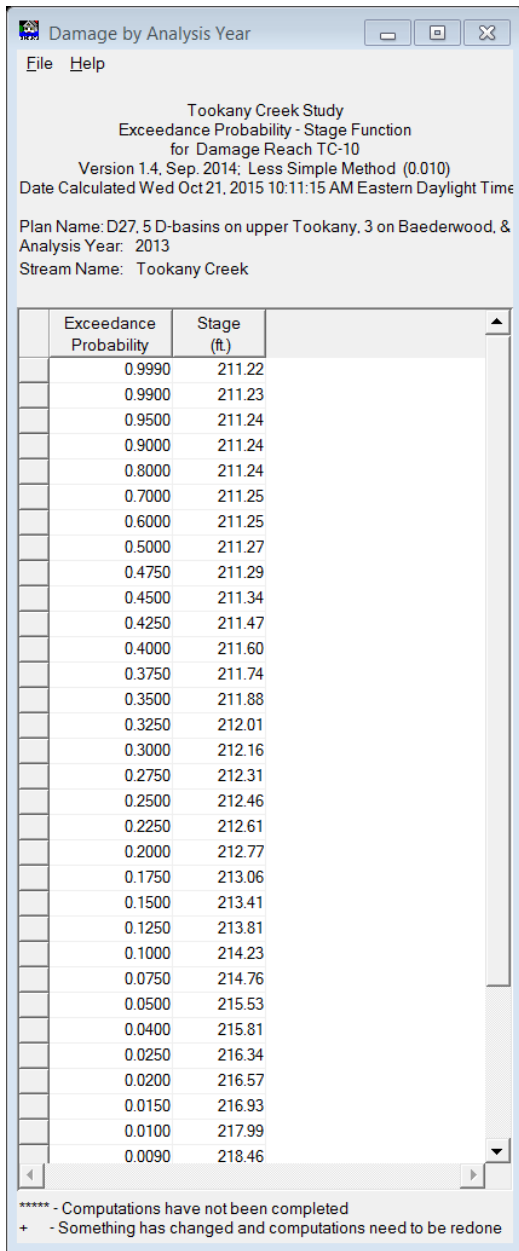


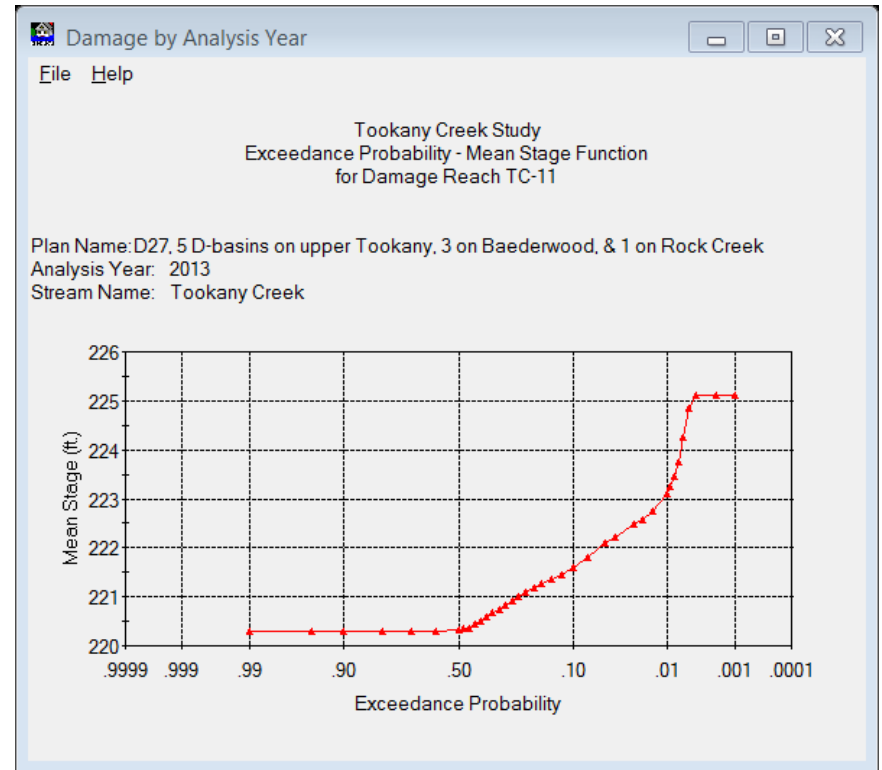
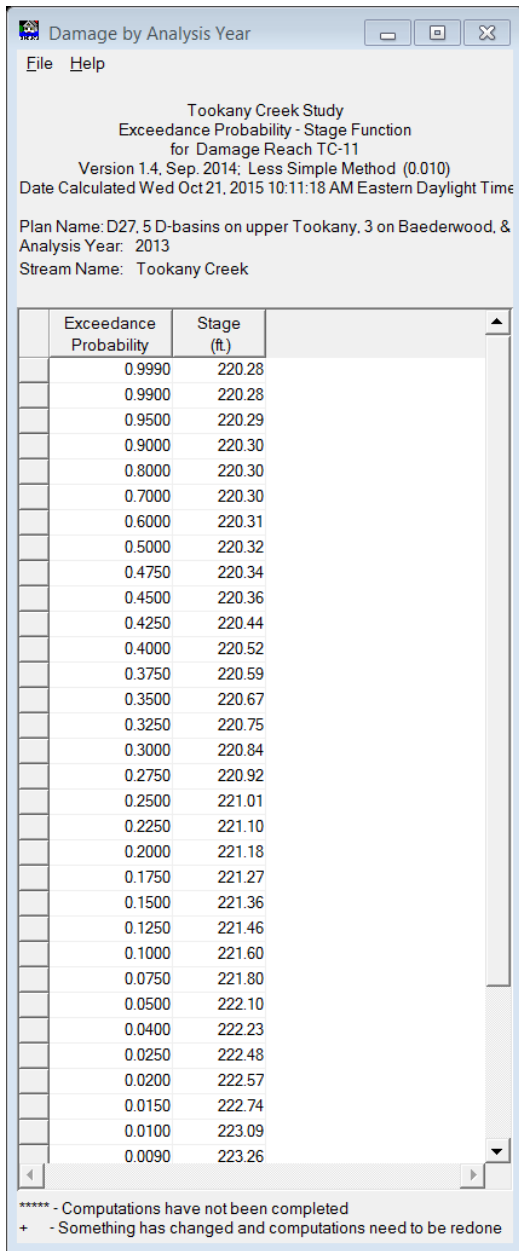


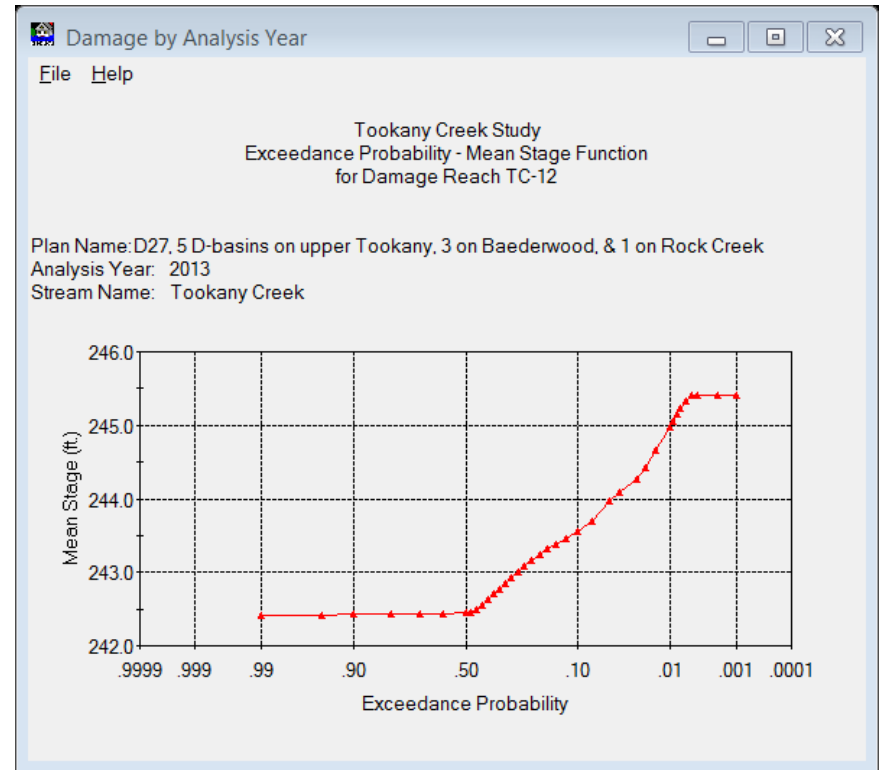
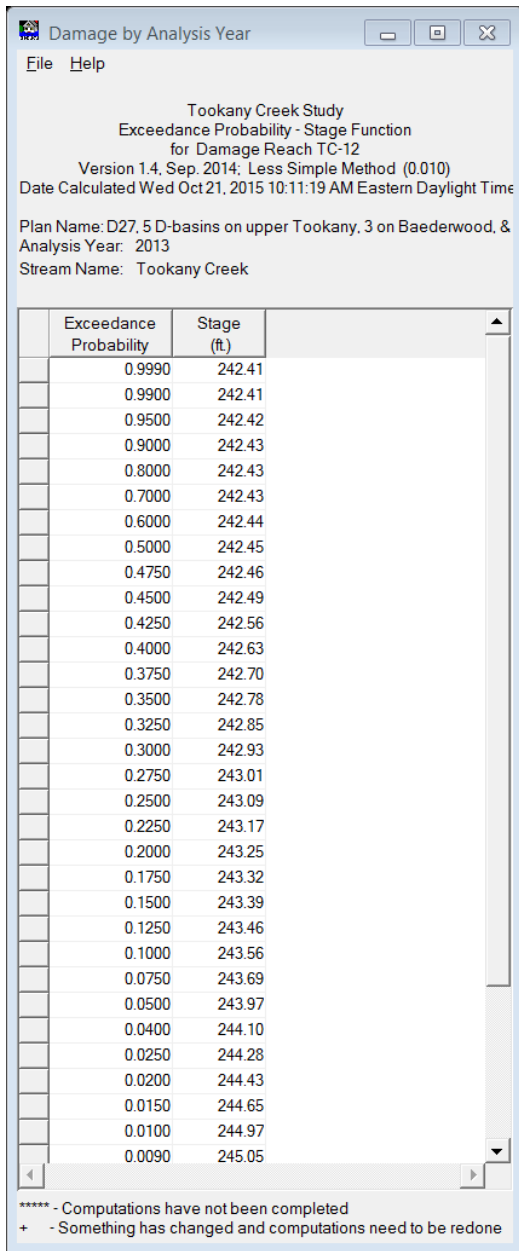


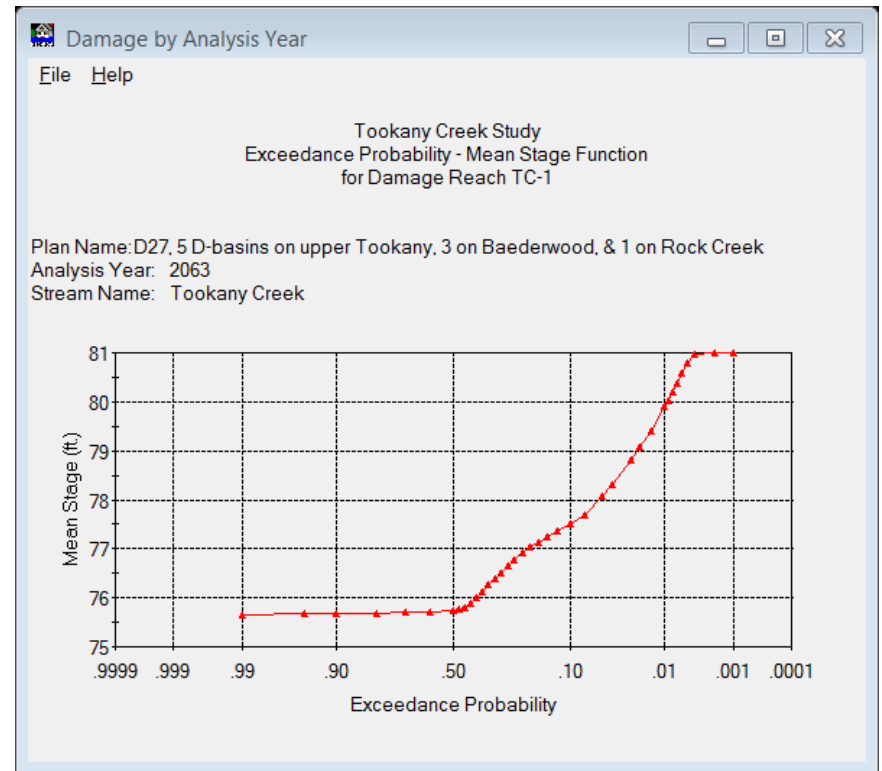
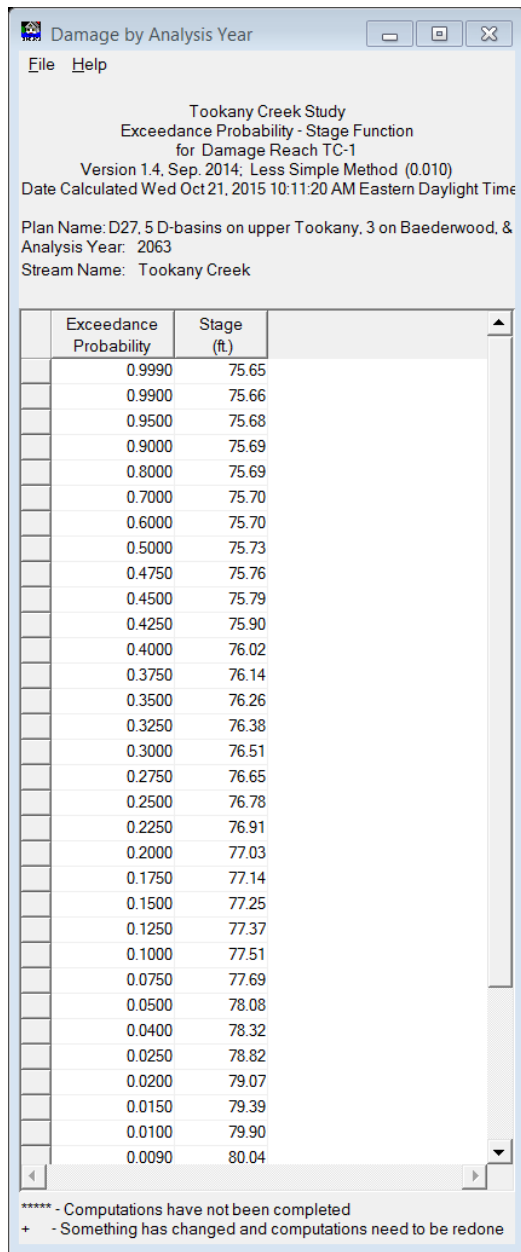


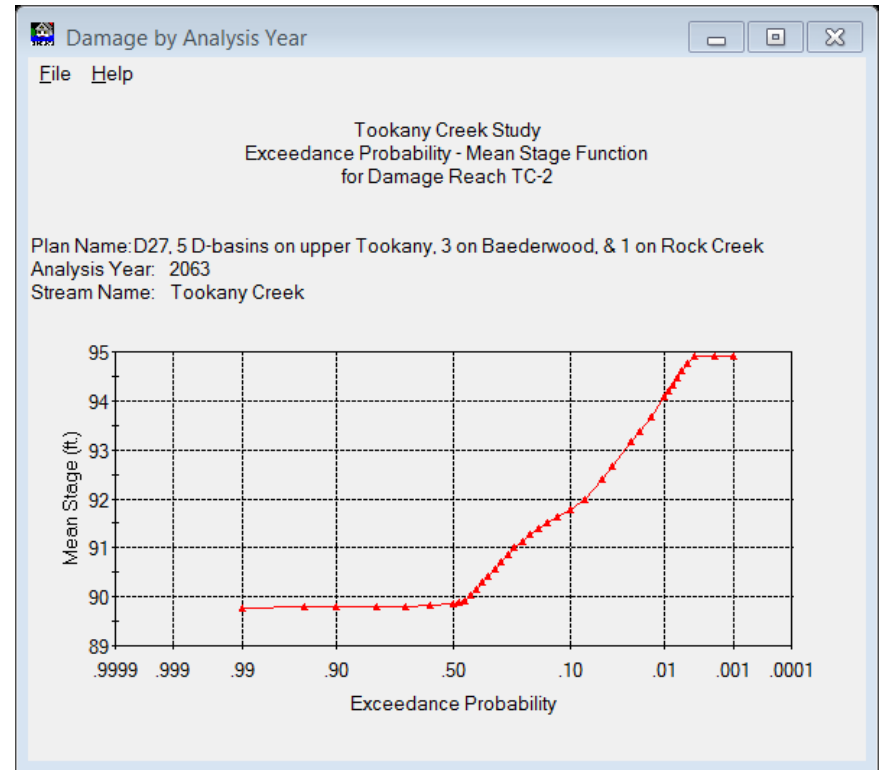
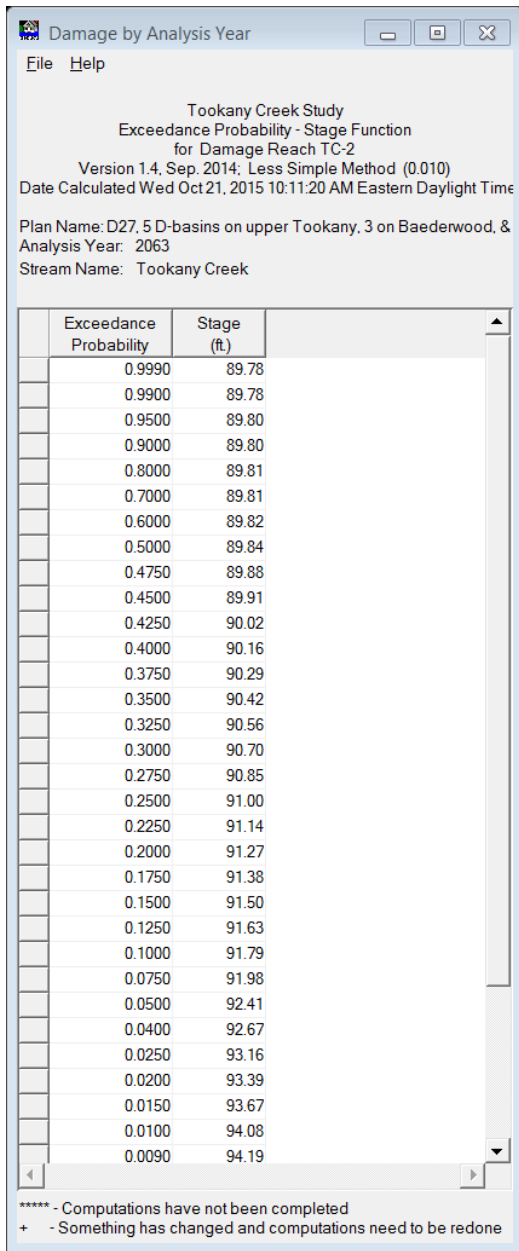


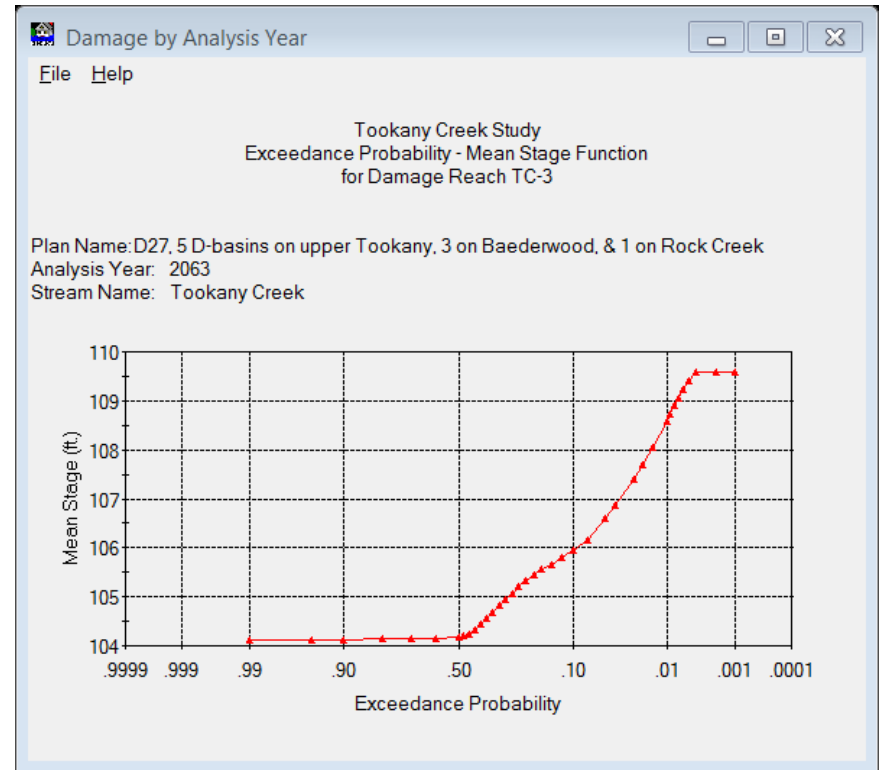
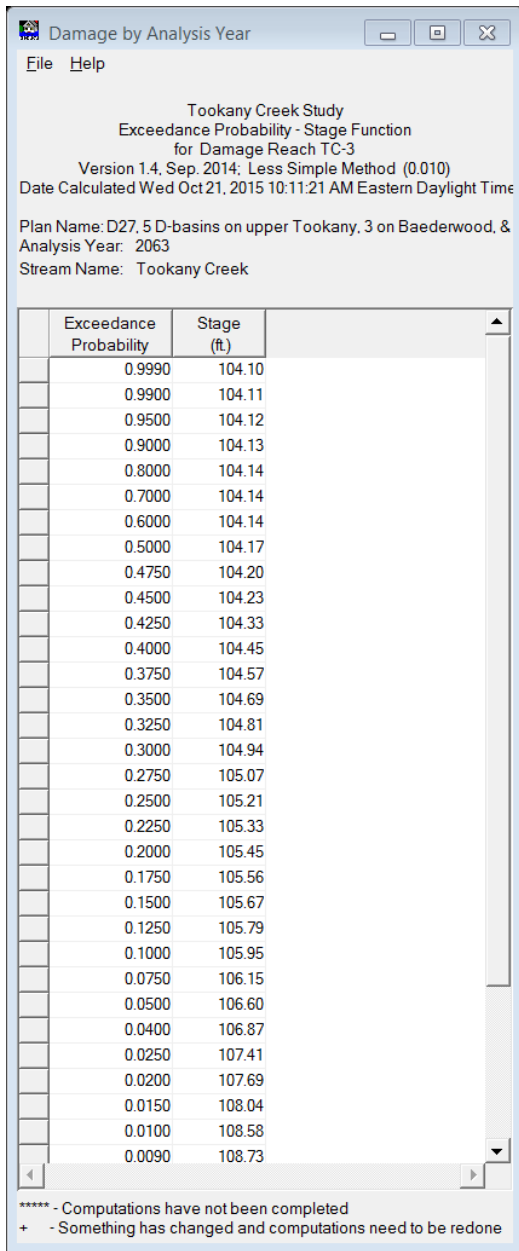




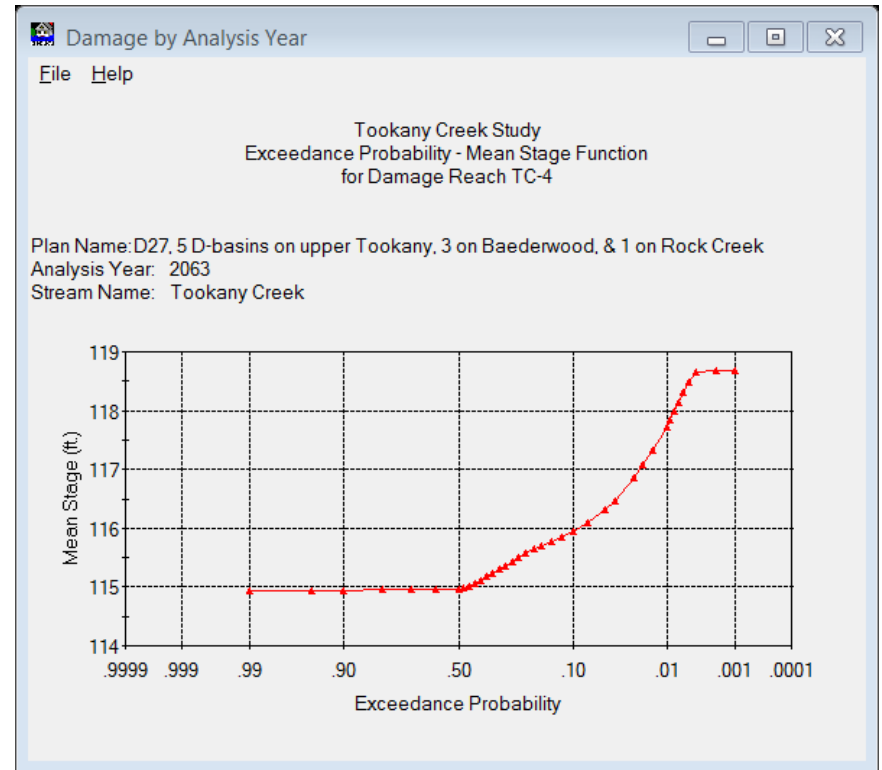
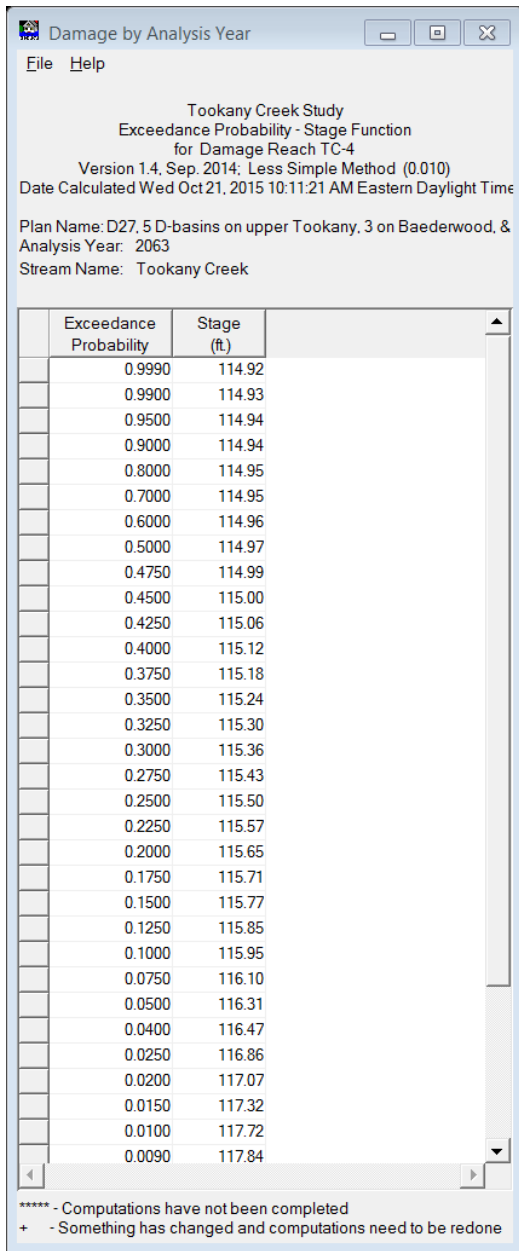












Damage by Analysis Year

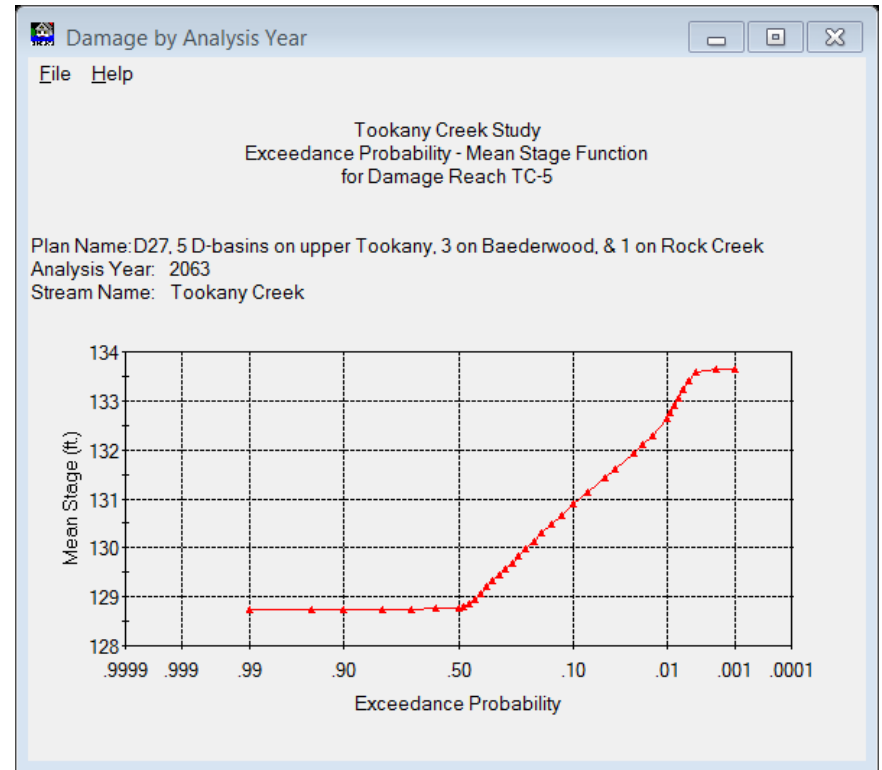
File Help

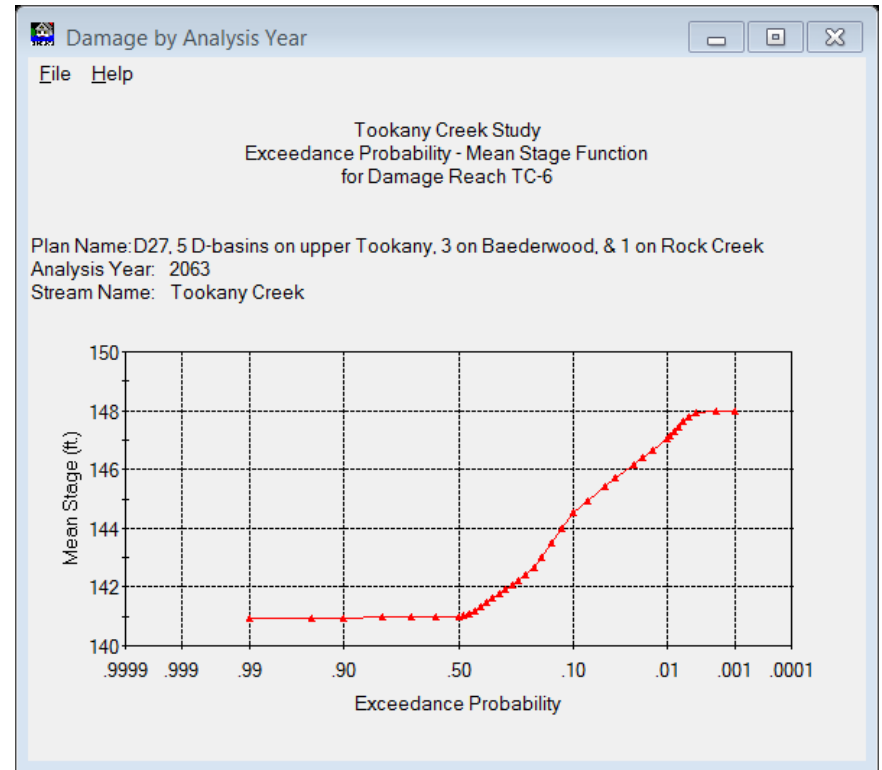
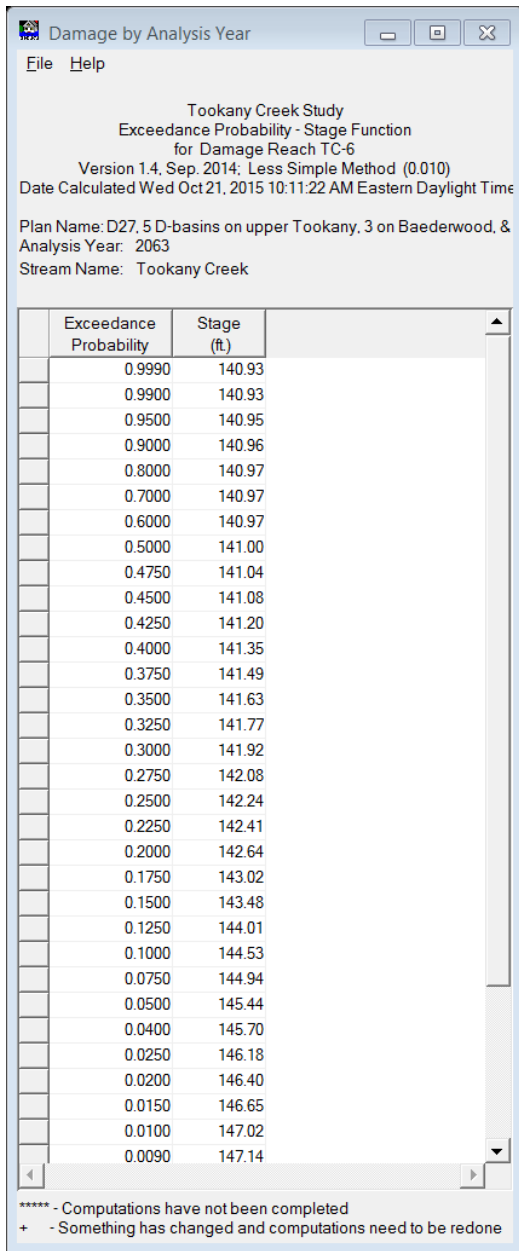
Tookany Creek Study  
 Exceedance Probability - Stage Function  
 for Damage Reach TC-5  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:21 AM Eastern Daylight Time

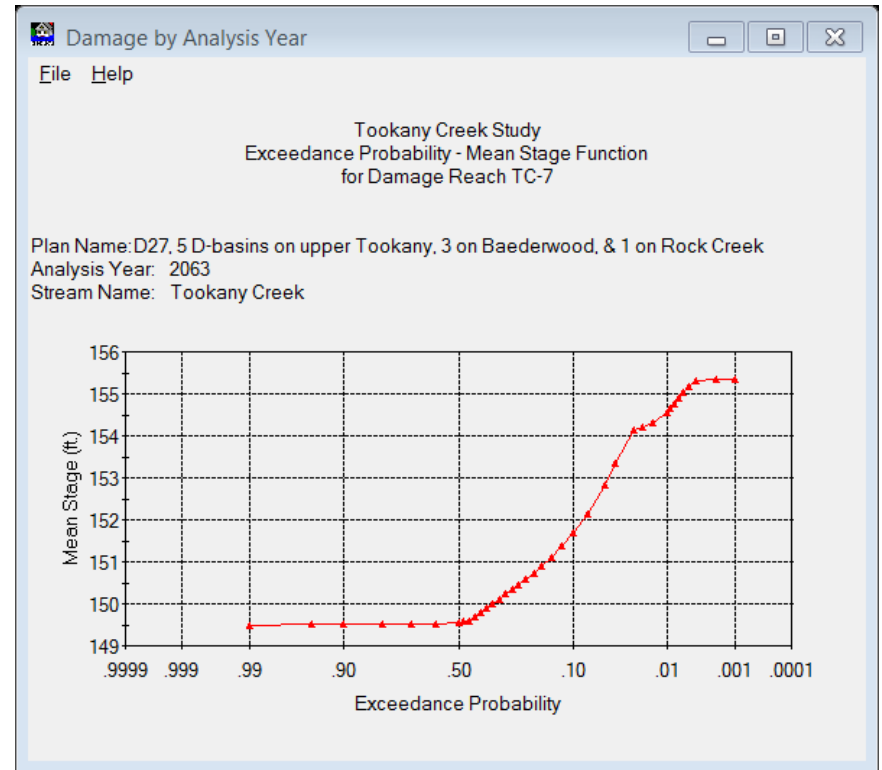
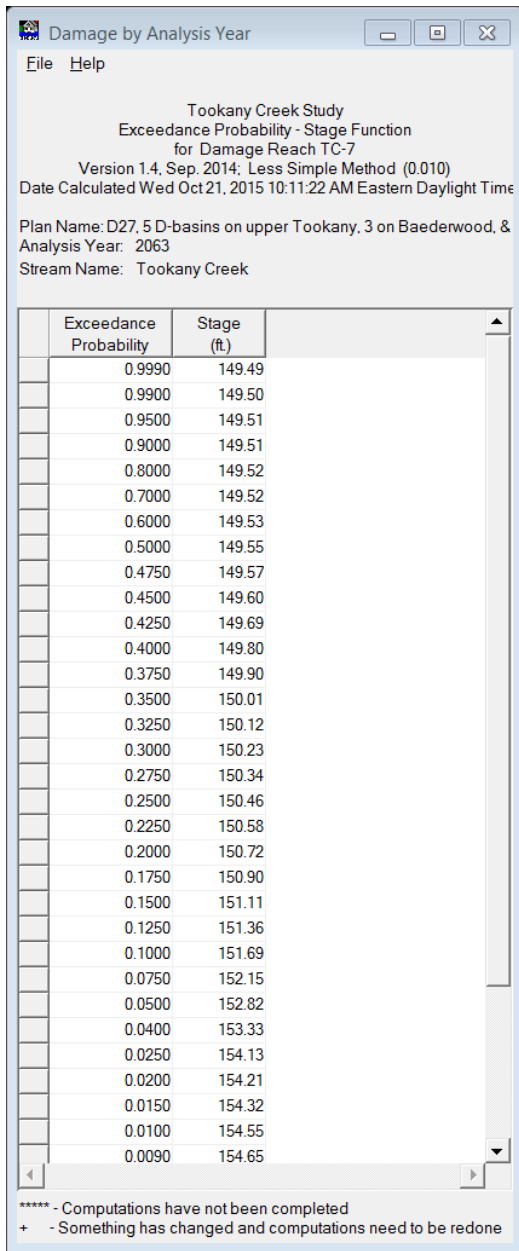
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

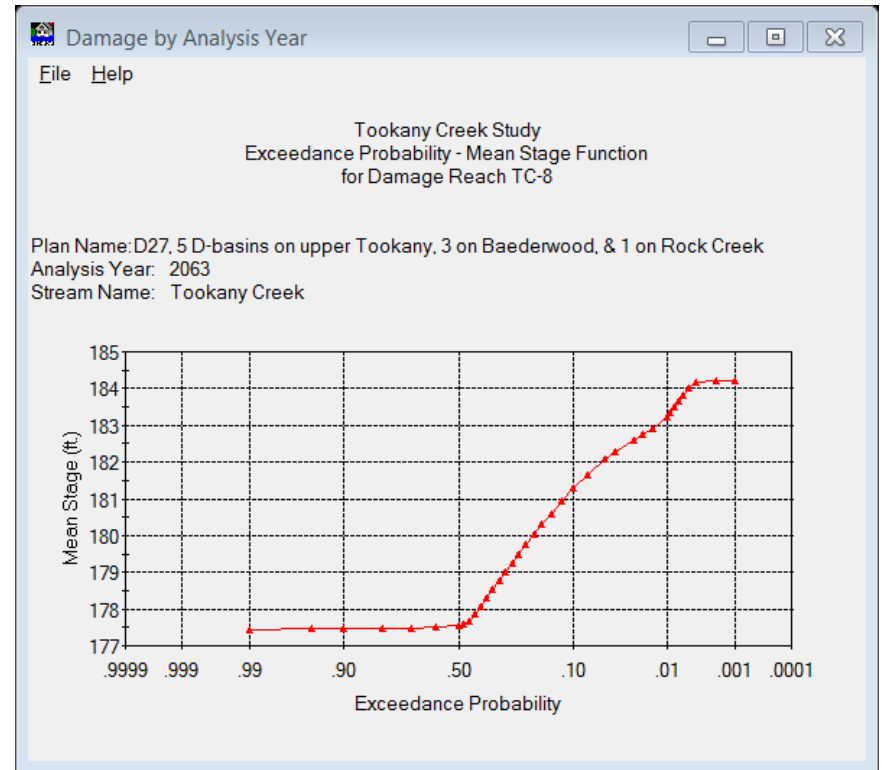
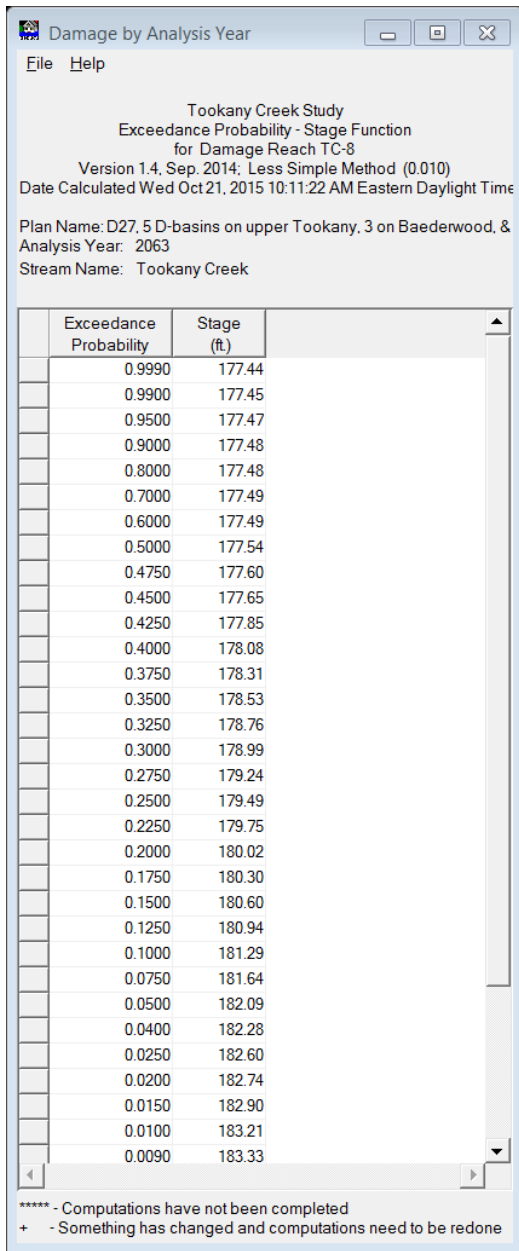
Exceedance Probability	Stage (ft.)
0.9990	128.72
0.9900	128.73
0.9500	128.74
0.9000	128.74
0.8000	128.75
0.7000	128.75
0.6000	128.76
0.5000	128.78
0.4750	128.81
0.4500	128.84
0.4250	128.95
0.4000	129.08
0.3750	129.20
0.3500	129.32
0.3250	129.44
0.3000	129.57
0.2750	129.70
0.2500	129.84
0.2250	129.99
0.2000	130.14
0.1750	130.30
0.1500	130.47
0.1250	130.67
0.1000	130.89
0.0750	131.12
0.0500	131.43
0.0400	131.60
0.0250	131.93
0.0200	132.10
0.0150	132.30
0.0100	132.65
0.0090	132.76

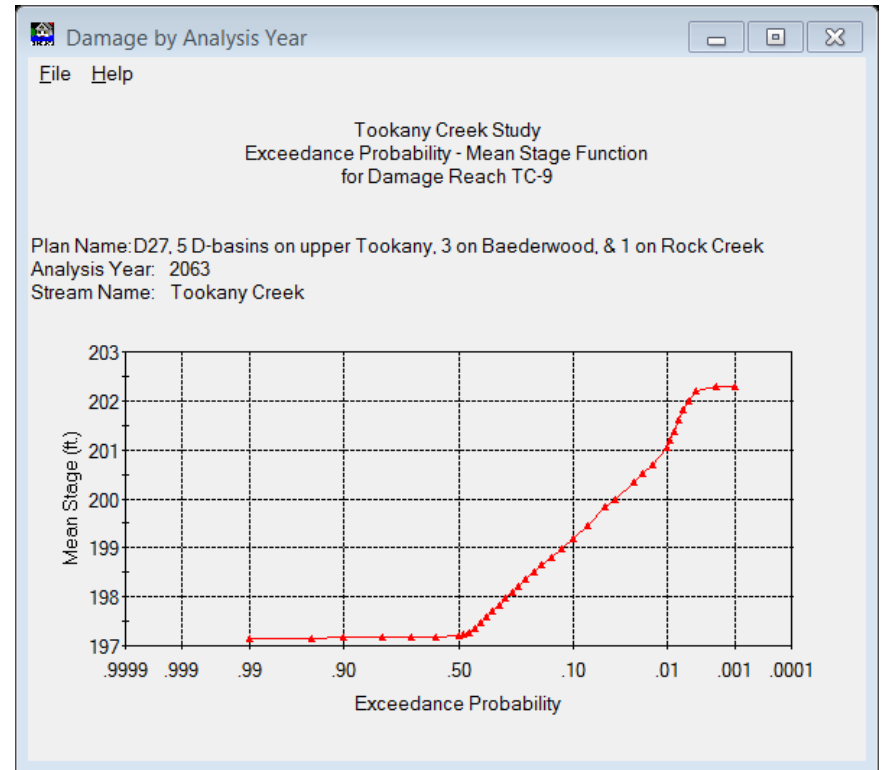
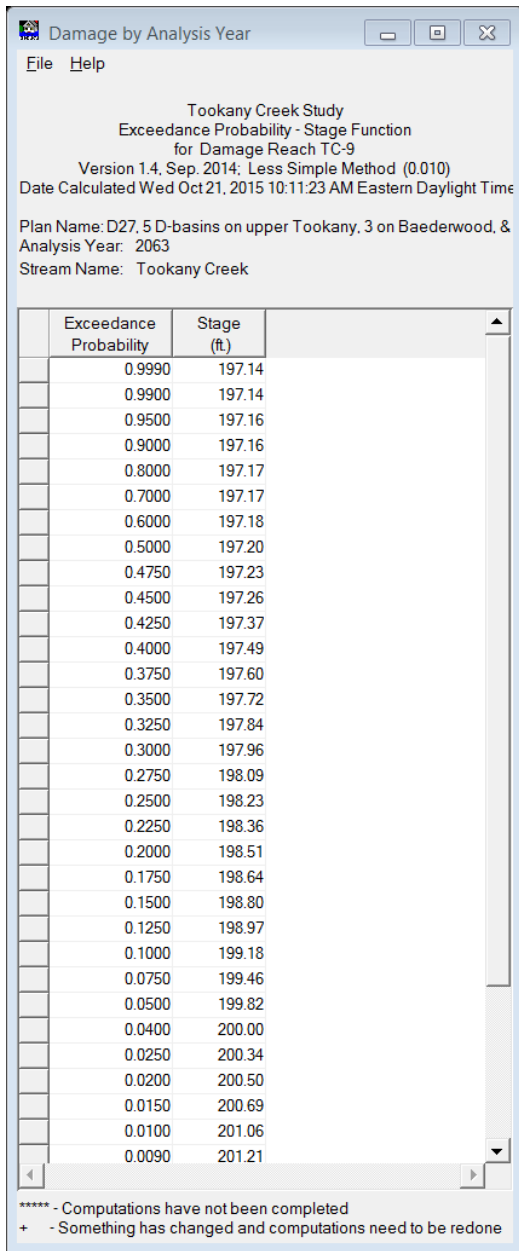
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

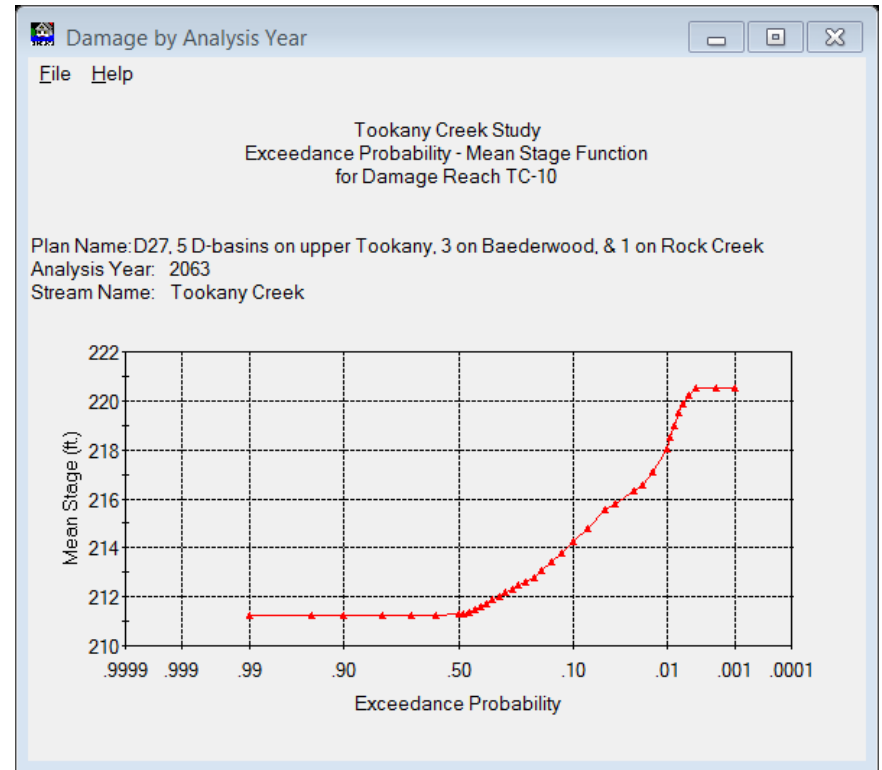
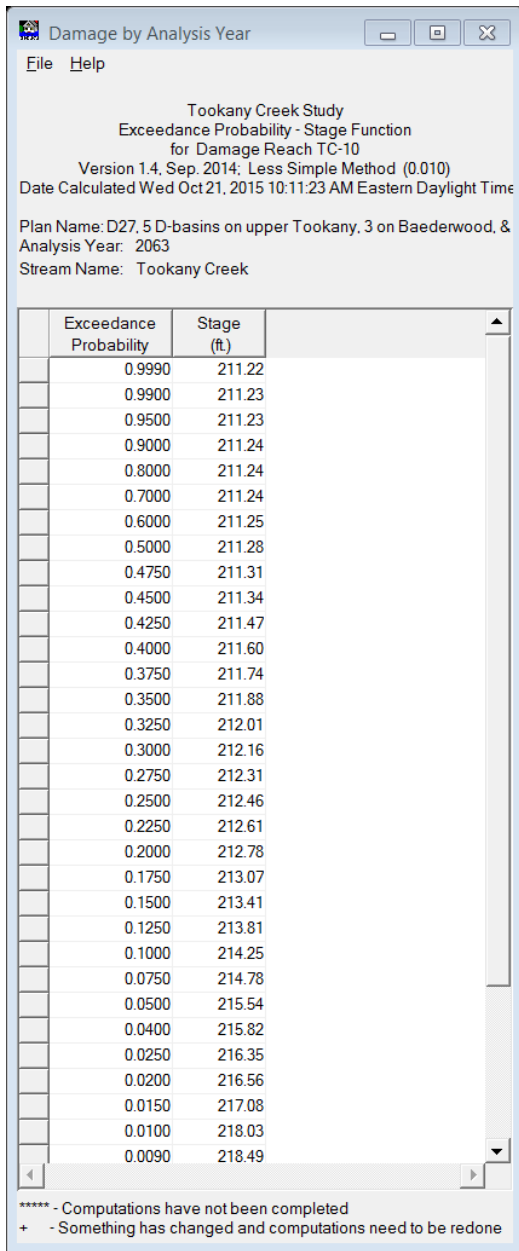


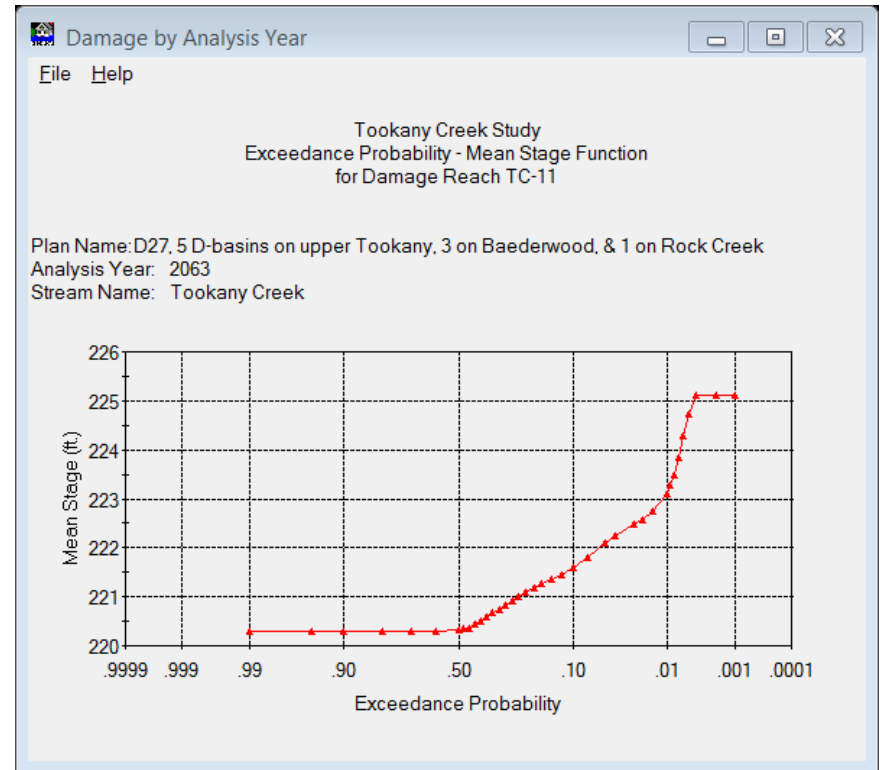
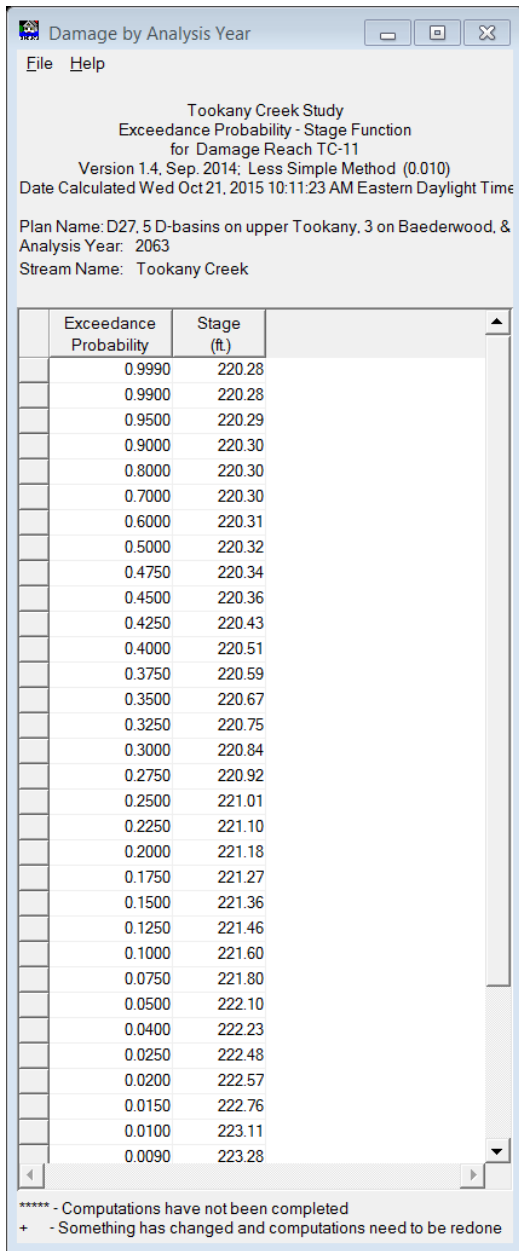














Damage by Analysis Year

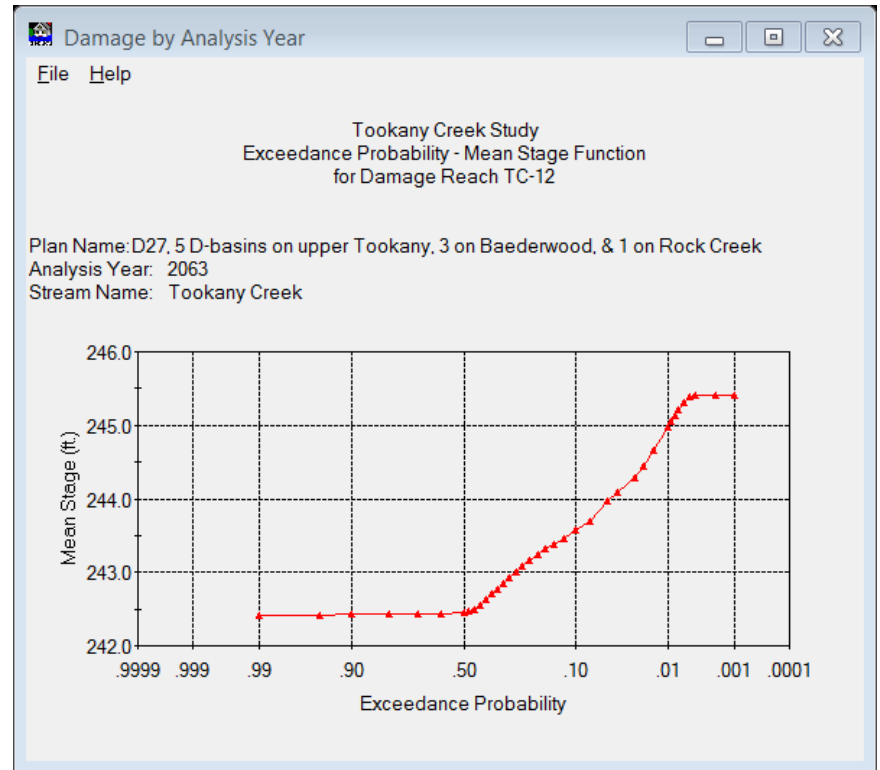
File Help

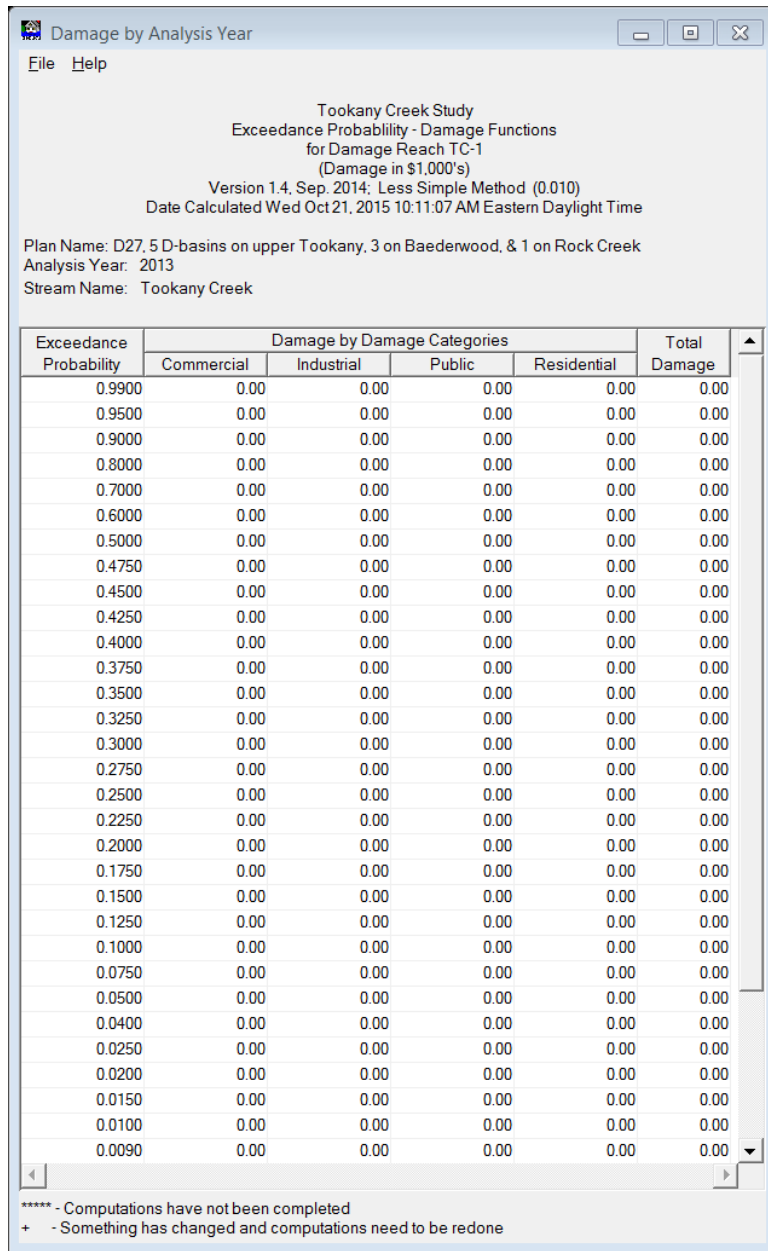
Tookany Creek Study  
 Exceedance Probability - Stage Function  
 for Damage Reach TC-12  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:24 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

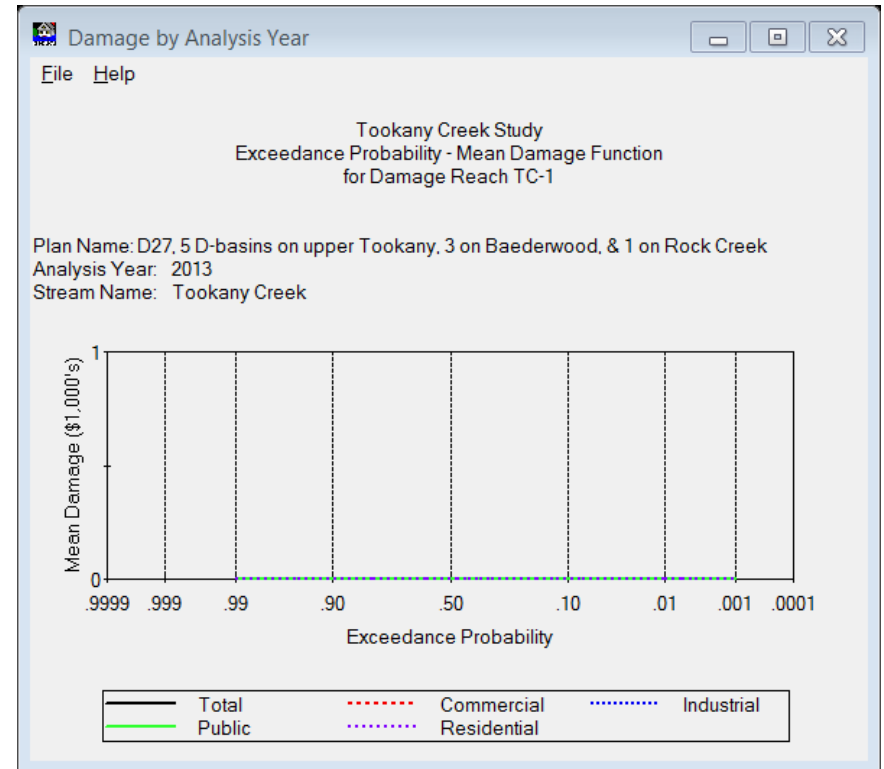
Exceedance Probability	Stage (ft.)
0.9990	242.41
0.9900	242.41
0.9500	242.42
0.9000	242.43
0.8000	242.43
0.7000	242.43
0.6000	242.44
0.5000	242.45
0.4750	242.47
0.4500	242.49
0.4250	242.55
0.4000	242.63
0.3750	242.70
0.3500	242.78
0.3250	242.85
0.3000	242.93
0.2750	243.01
0.2500	243.09
0.2250	243.17
0.2000	243.25
0.1750	243.32
0.1500	243.39
0.1250	243.47
0.1000	243.57
0.0750	243.70
0.0500	243.96
0.0400	244.09
0.0250	244.29
0.0200	244.44
0.0150	244.66
0.0100	244.98
0.0090	245.06

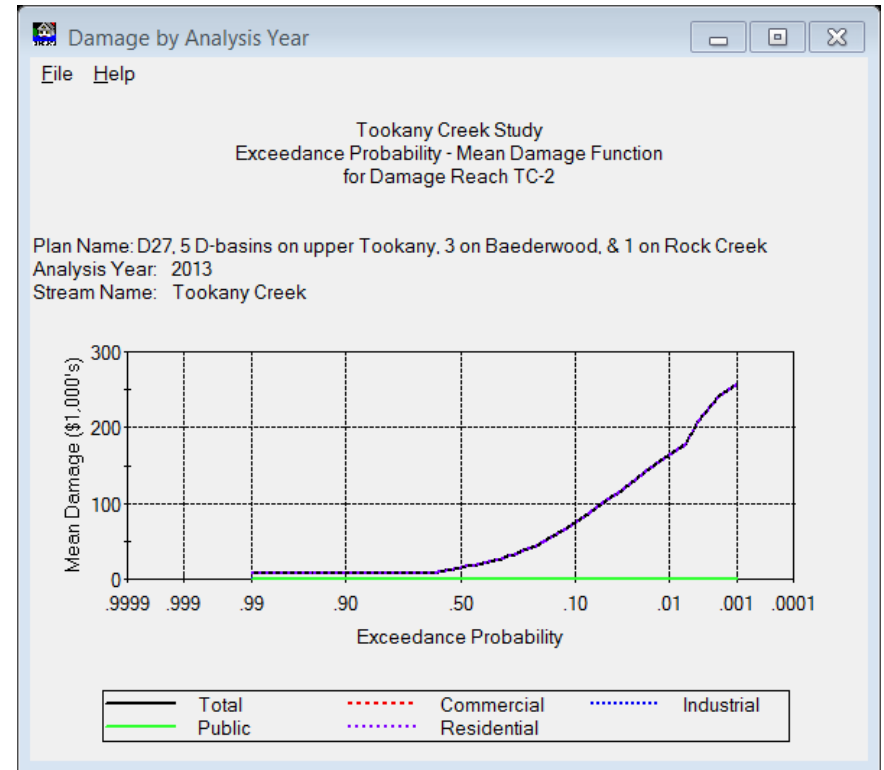
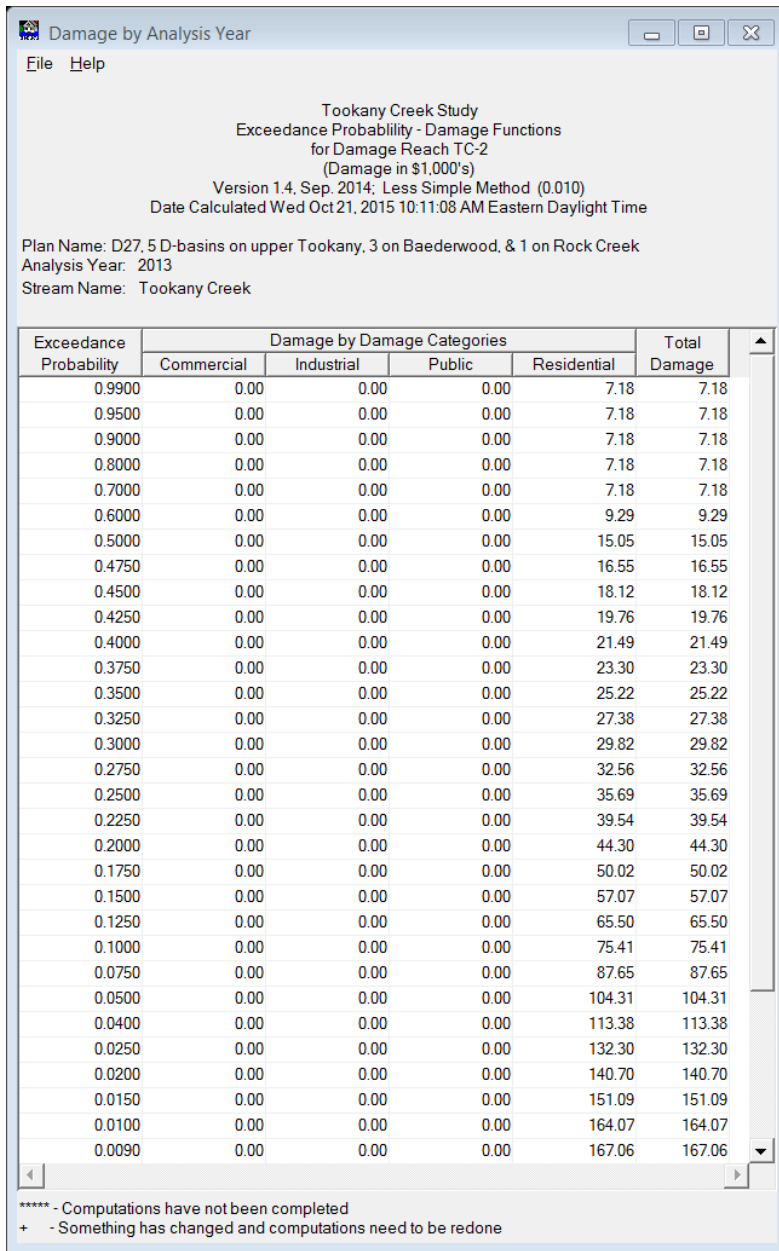
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





### Tookany Creek D27 Exceedance Probability – Mean Damage Functions





Damage by Analysis Year

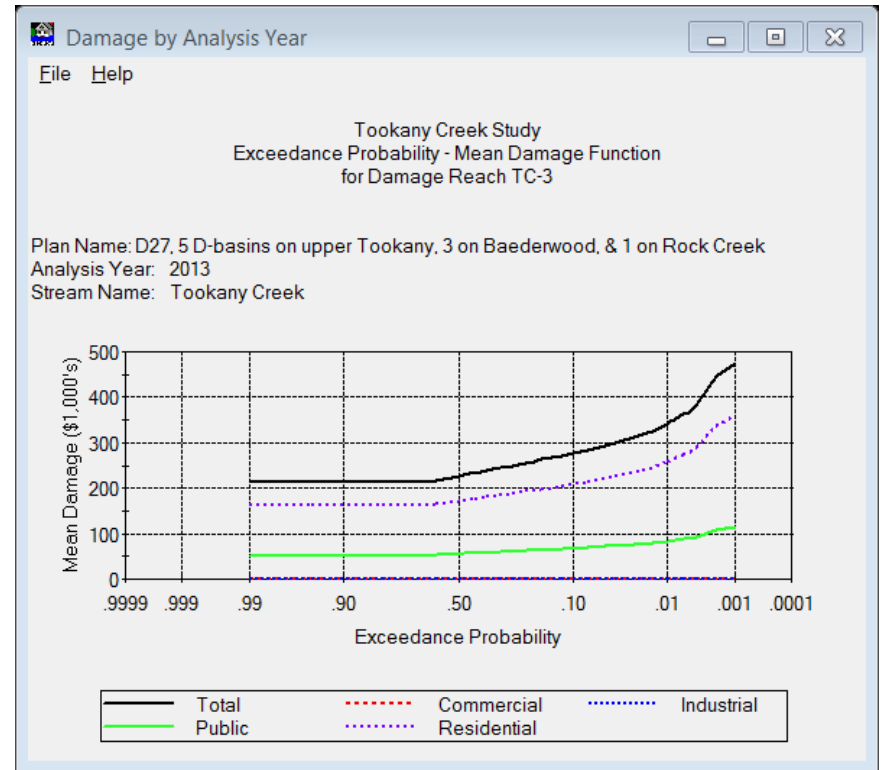
File Help

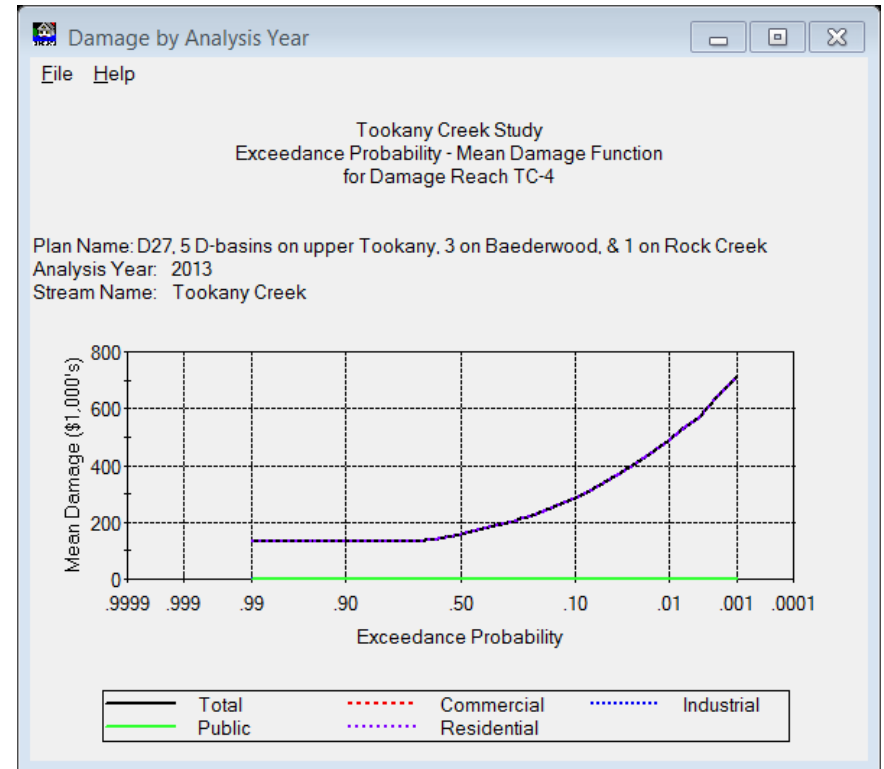
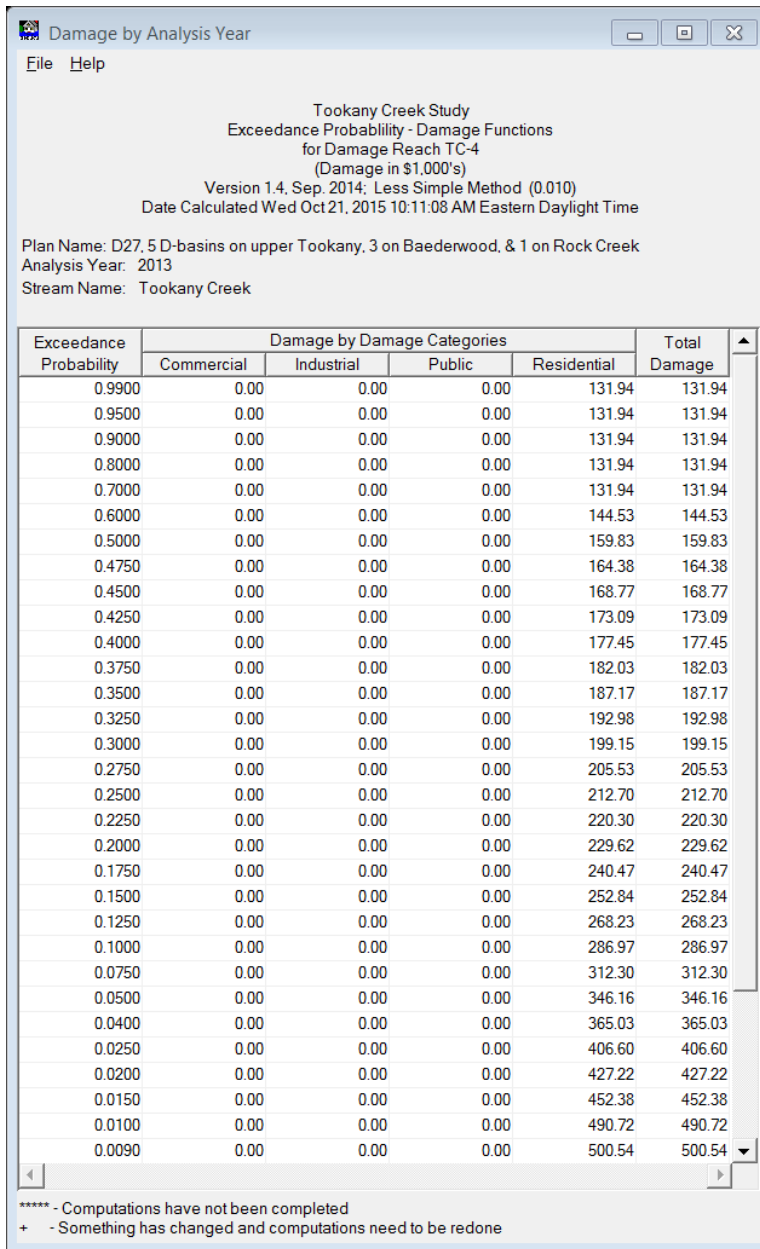
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-3  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:08 AM Eastern Daylight Time

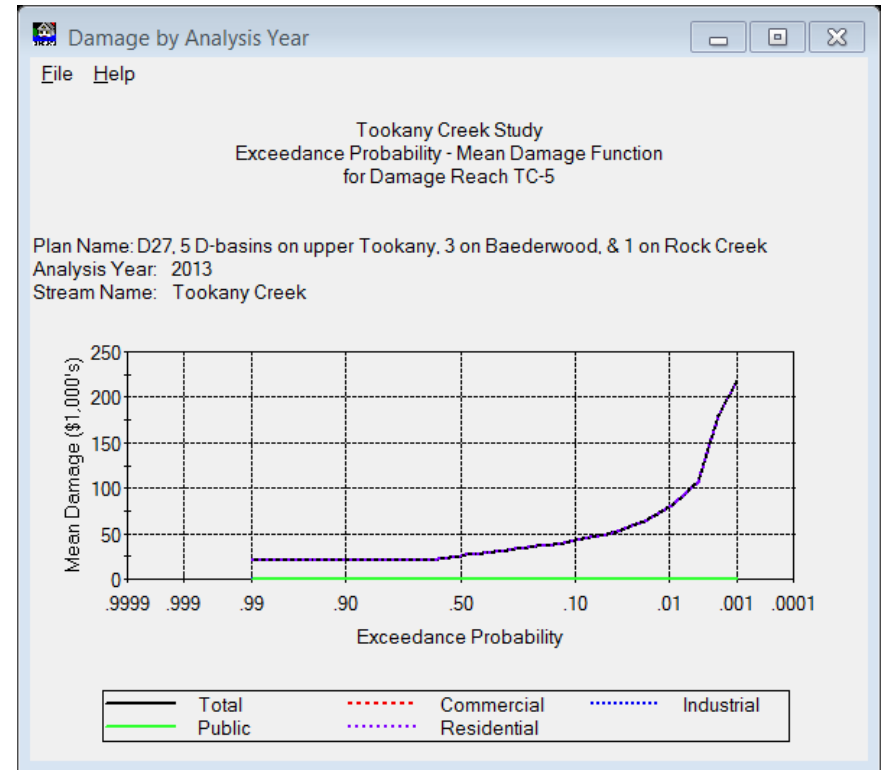
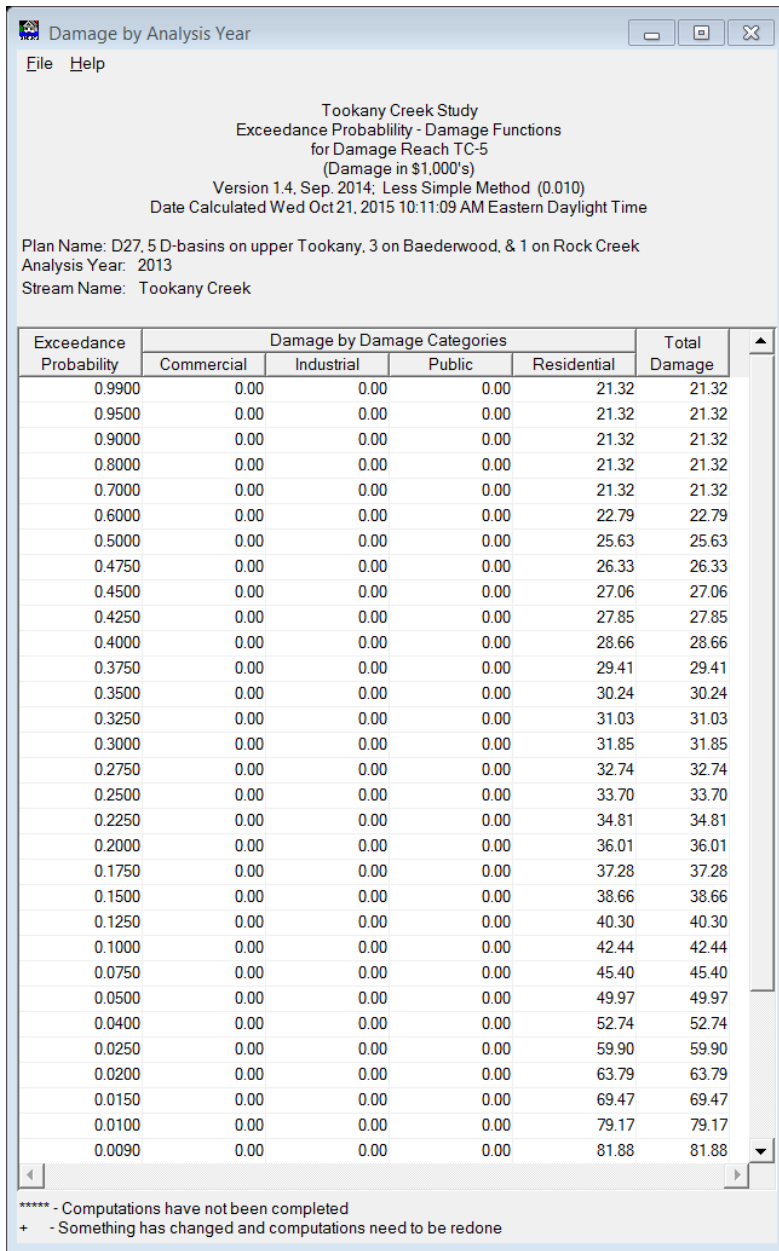
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, & 1 on Rock Creek  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

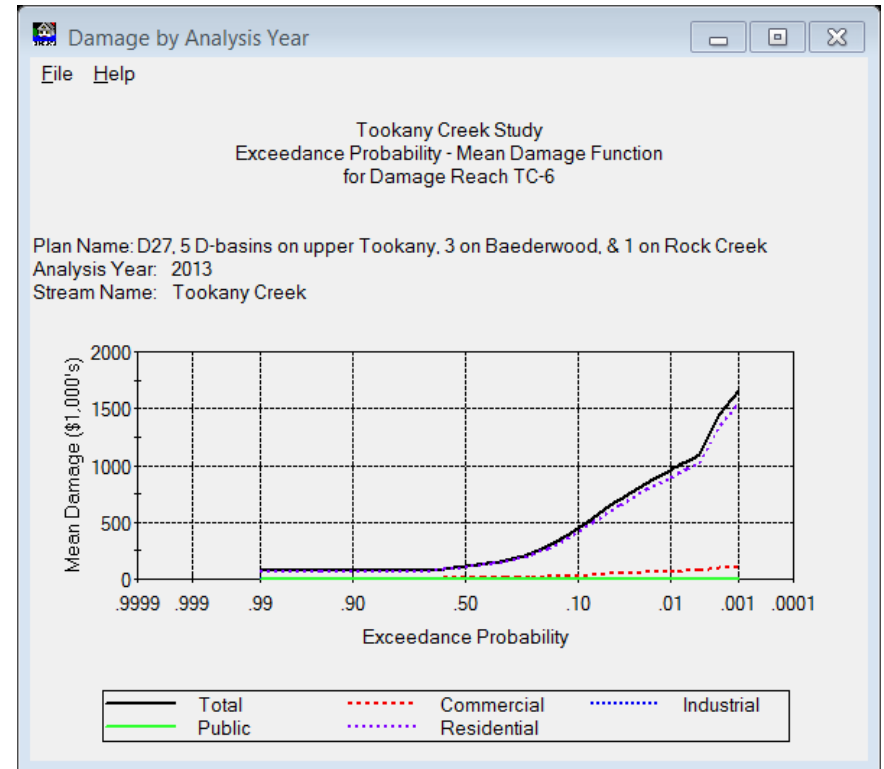
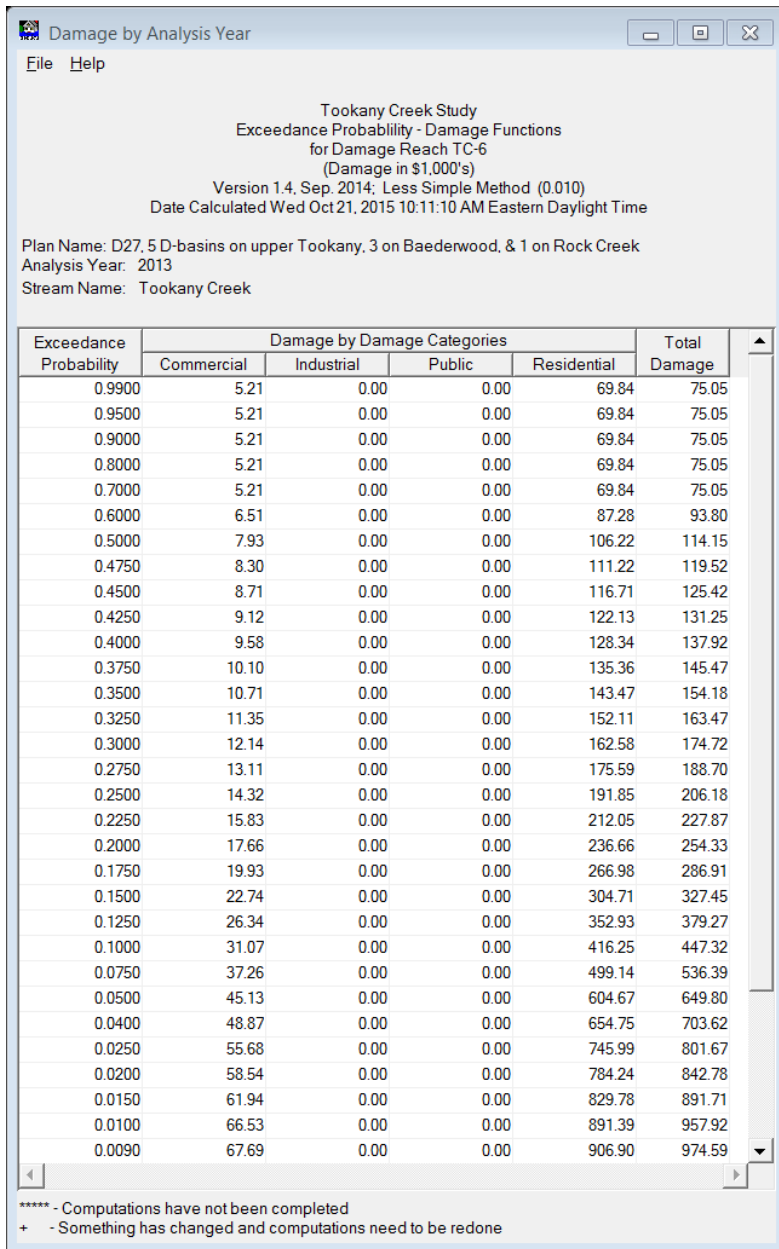
Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	0.00	0.00	52.02	161.16	213.18
0.9500	0.00	0.00	52.02	161.16	213.18
0.9000	0.00	0.00	52.02	161.16	213.18
0.8000	0.00	0.00	52.02	161.16	213.18
0.7000	0.00	0.00	52.02	161.16	213.18
0.6000	0.00	0.00	52.99	164.17	217.15
0.5000	0.00	0.00	55.25	171.18	226.43
0.4750	0.00	0.00	55.80	172.88	228.69
0.4500	0.00	0.00	56.37	174.64	231.00
0.4250	0.00	0.00	56.97	176.49	233.46
0.4000	0.00	0.00	57.60	178.44	236.04
0.3750	0.00	0.00	58.23	180.40	238.62
0.3500	0.00	0.00	58.85	182.32	241.17
0.3250	0.00	0.00	59.49	184.30	243.79
0.3000	0.00	0.00	60.13	186.29	246.42
0.2750	0.00	0.00	60.78	188.32	249.10
0.2500	0.00	0.00	61.51	190.57	252.08
0.2250	0.00	0.00	62.34	193.13	255.46
0.2000	0.00	0.00	63.19	195.76	258.94
0.1750	0.00	0.00	64.15	198.75	262.90
0.1500	0.00	0.00	65.12	201.74	266.85
0.1250	0.00	0.00	66.22	205.15	271.37
0.1000	0.00	0.00	67.59	209.42	277.01
0.0750	0.00	0.00	69.24	214.52	283.77
0.0500	0.00	0.00	71.70	222.15	293.85
0.0400	0.00	0.00	73.15	226.64	299.79
0.0250	0.00	0.00	75.99	235.43	311.42
0.0200	0.00	0.00	77.39	239.76	317.15
0.0150	0.00	0.00	79.65	246.77	326.43
0.0100	0.00	0.00	83.05	257.28	340.33
0.0090	0.00	0.00	84.34	261.30	345.64

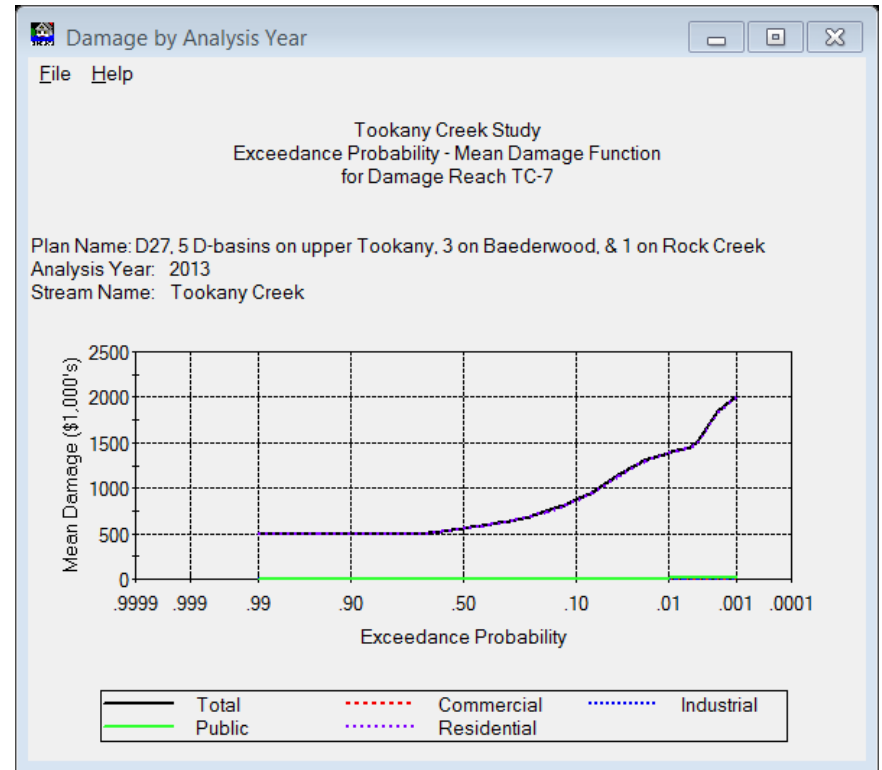
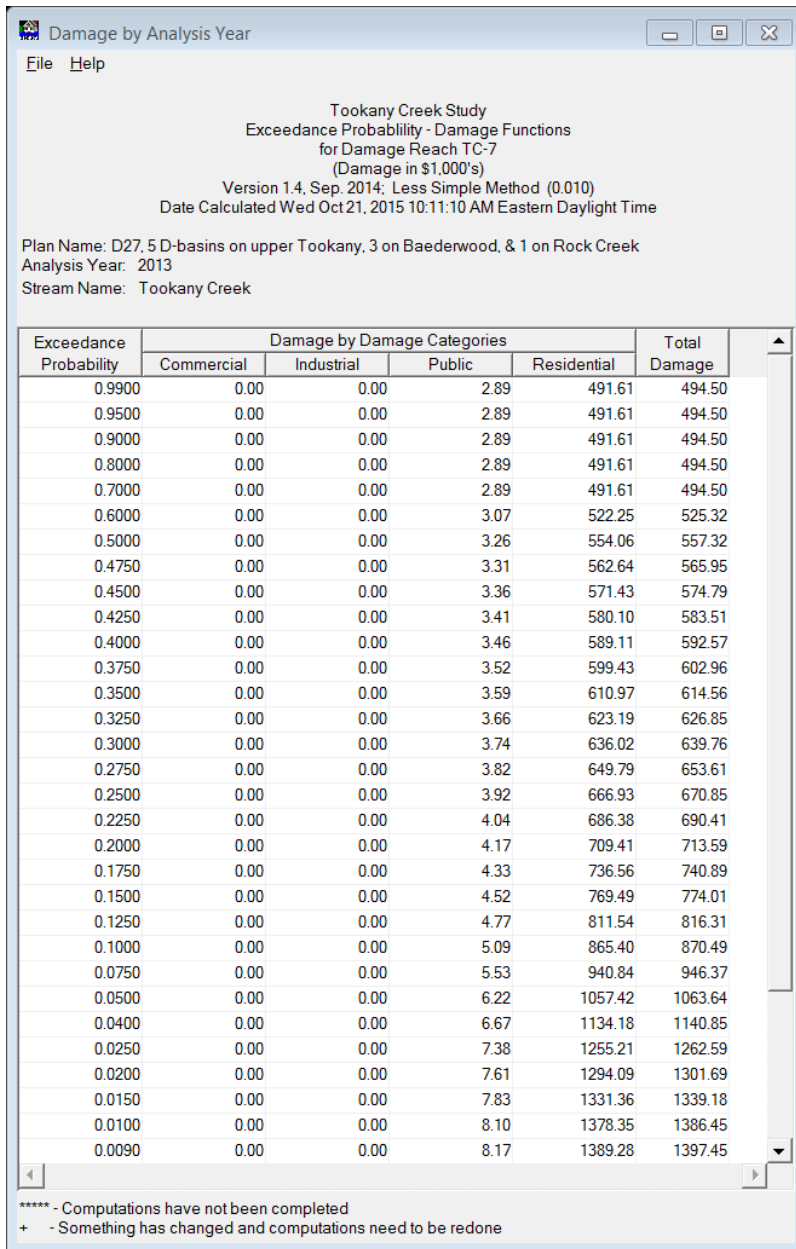
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



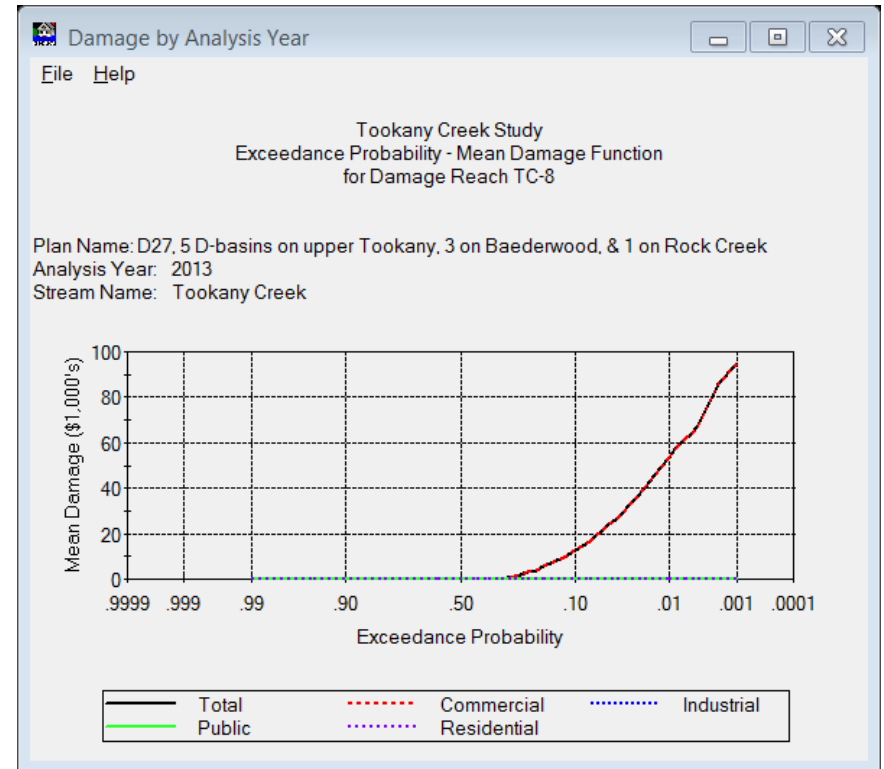
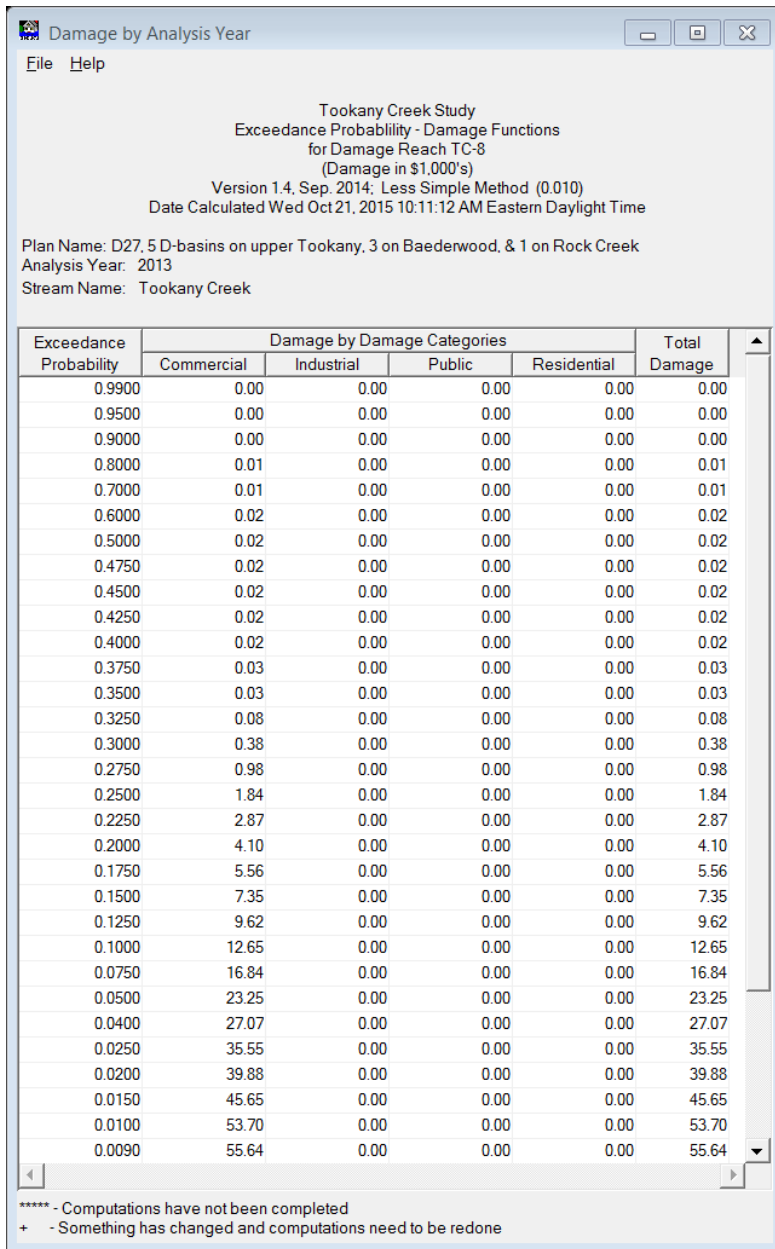


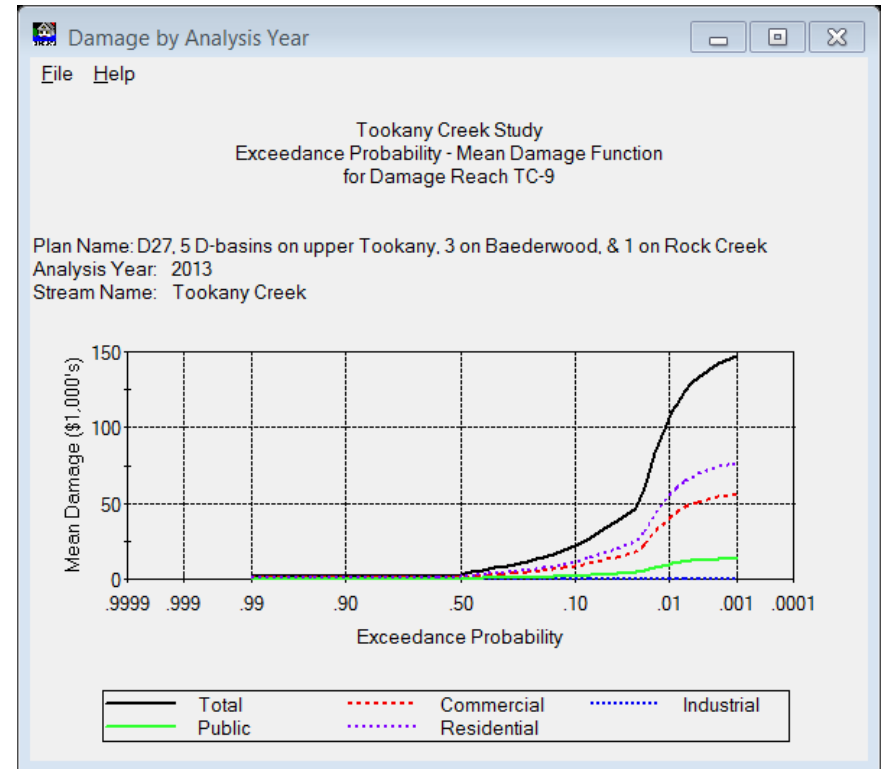
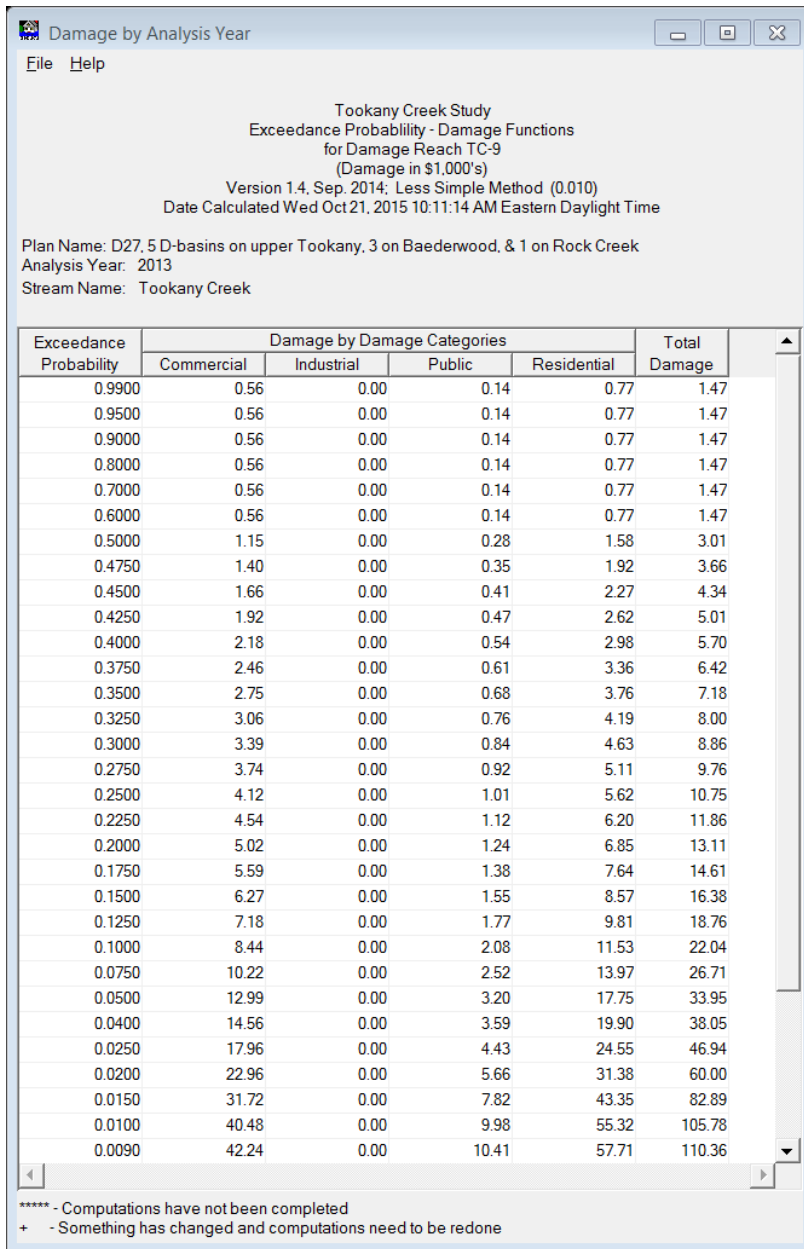












Damage by Analysis Year

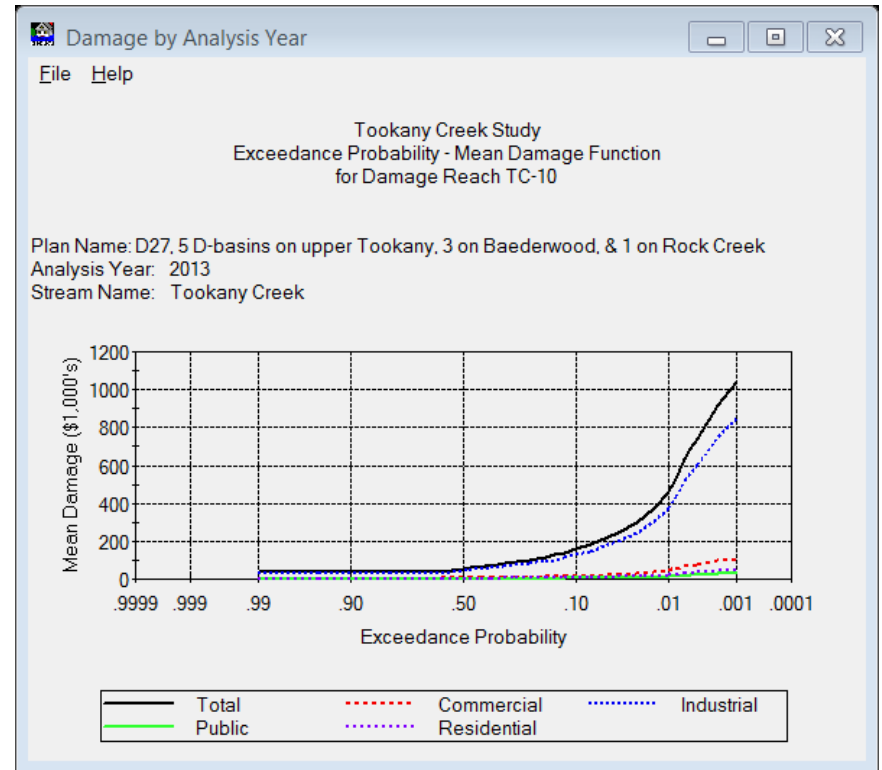
File Help

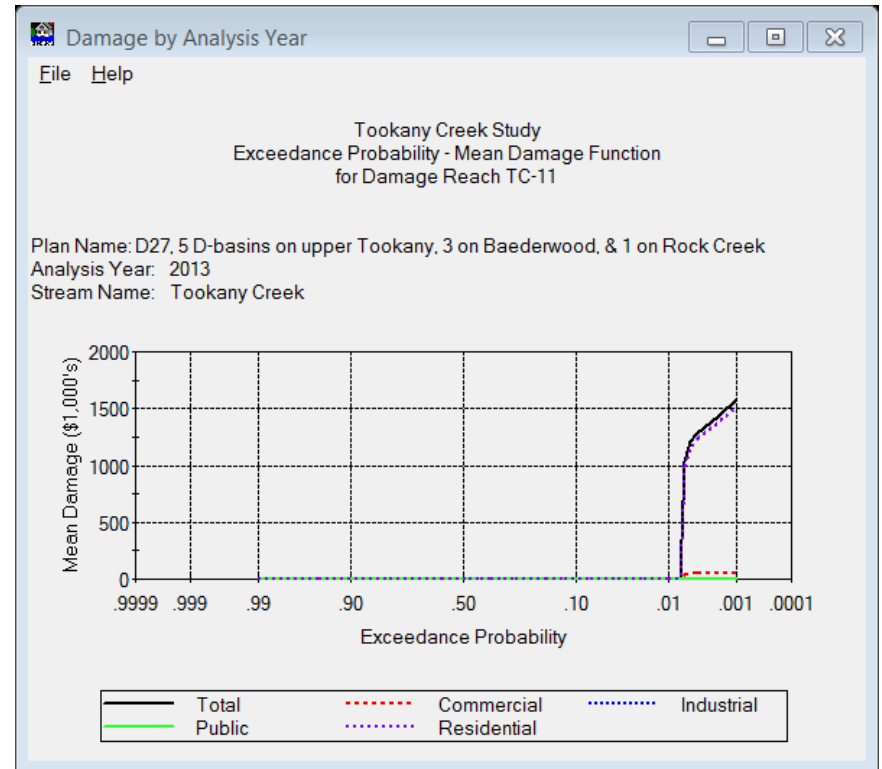
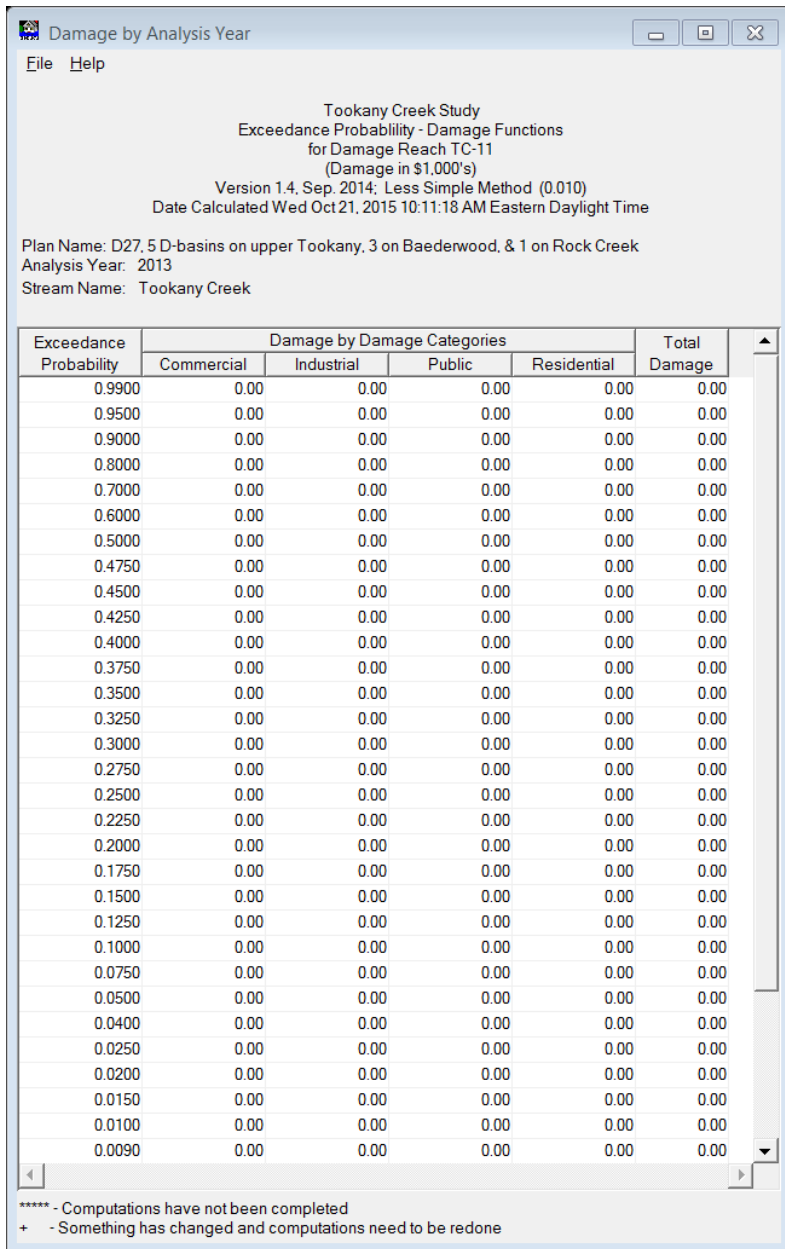
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-10  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:15 AM Eastern Daylight Time

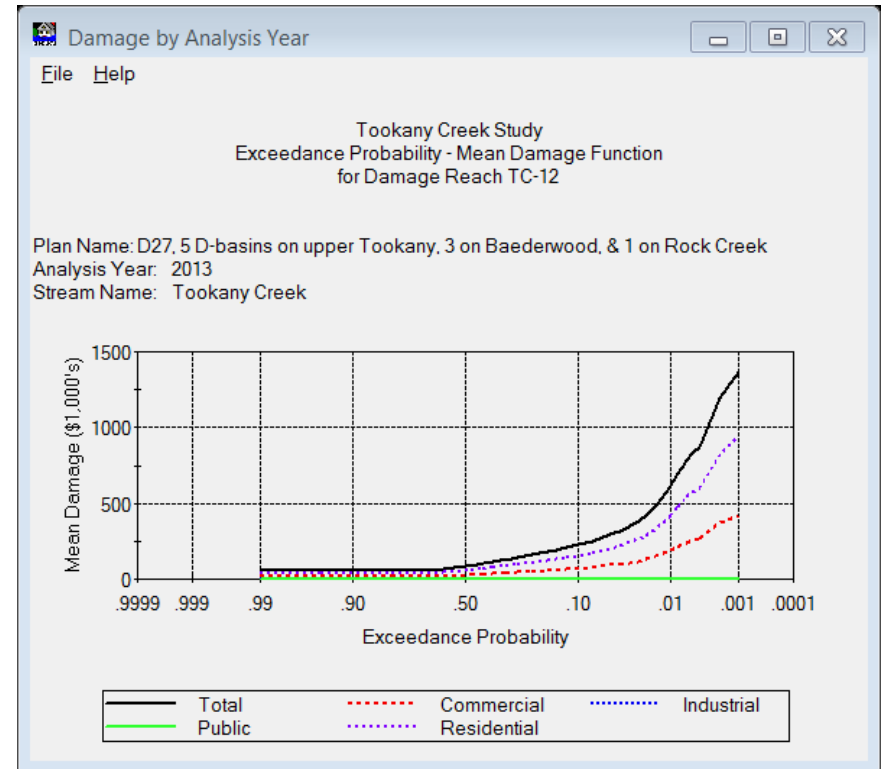
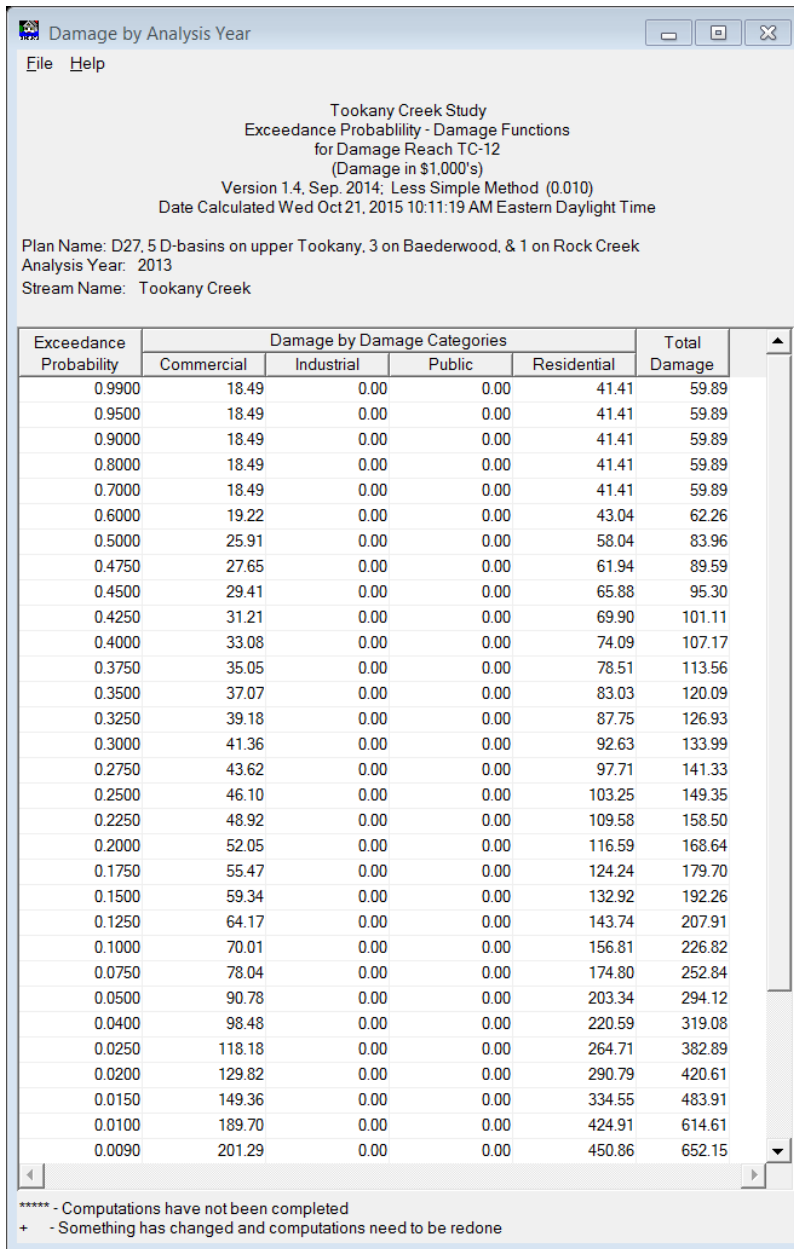
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, & 1 on Rock Creek  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

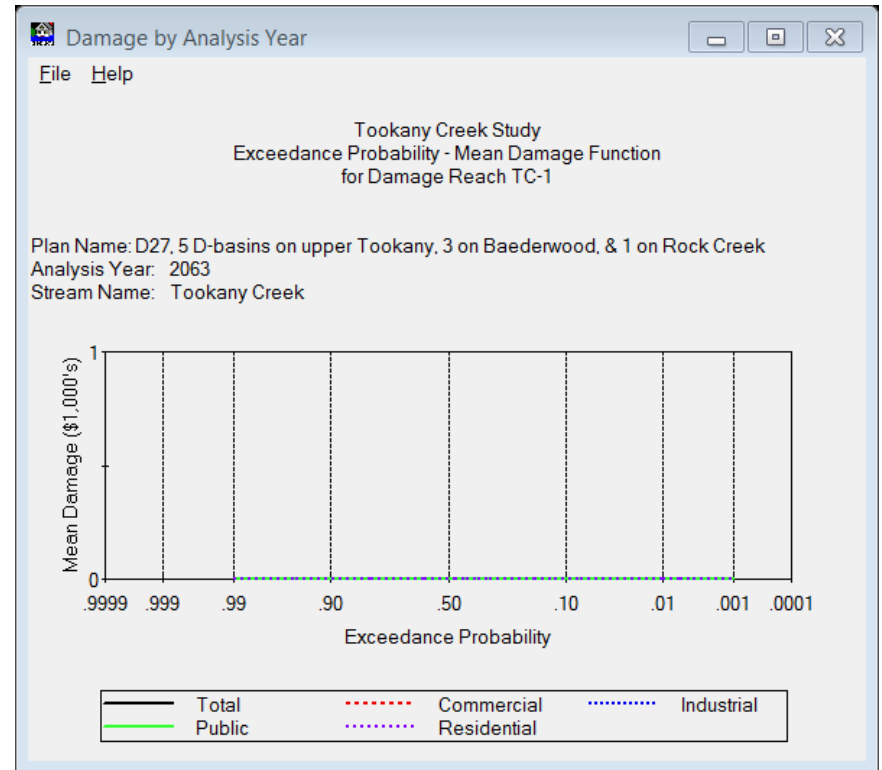
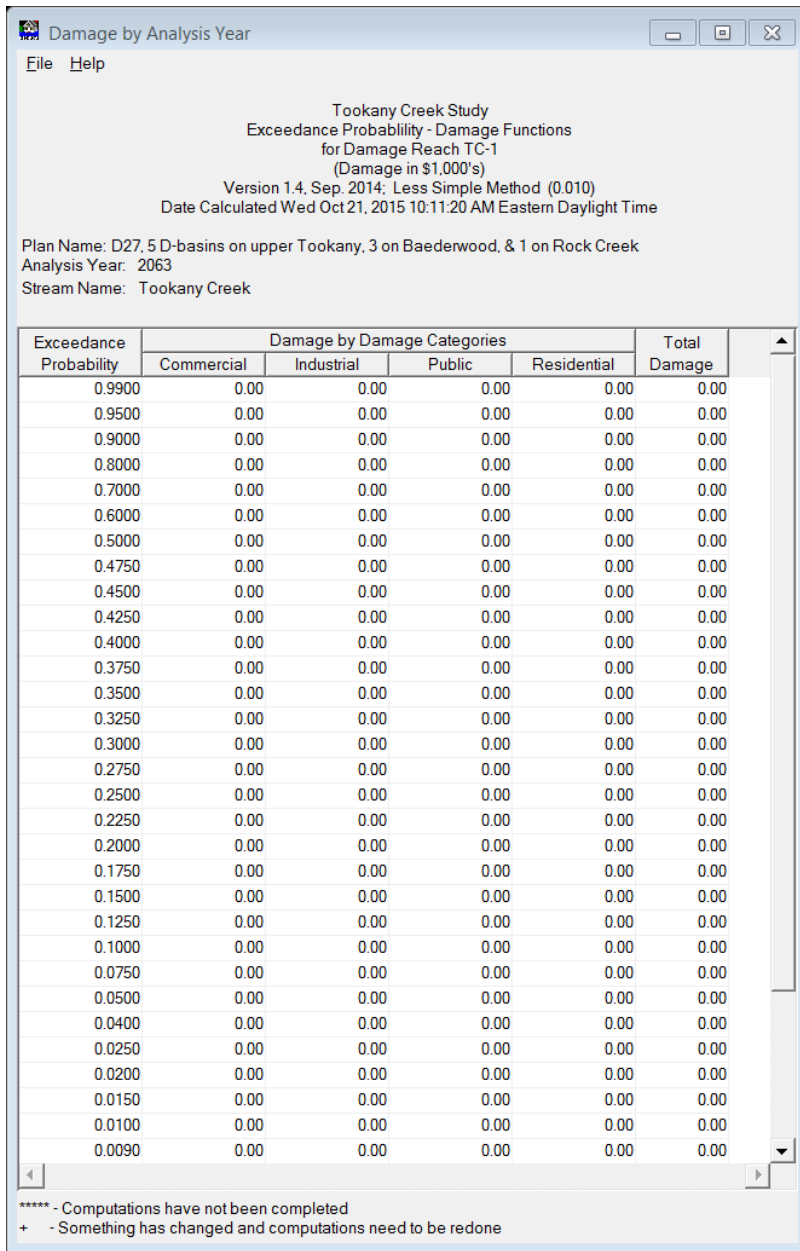
Exceedance Probability	Damage by Damage Categories				Total Damage
	Commercial	Industrial	Public	Residential	
0.9900	3.76	29.39	1.07	1.78	36.01
0.9500	3.76	29.39	1.07	1.78	36.01
0.9000	3.76	29.39	1.07	1.78	36.01
0.8000	3.76	29.39	1.07	1.78	36.01
0.7000	3.76	29.39	1.07	1.78	36.01
0.6000	4.31	33.69	1.23	2.04	41.27
0.5000	5.68	44.42	1.62	2.69	54.41
0.4750	6.03	47.14	1.72	2.86	57.75
0.4500	6.38	49.91	1.82	3.03	61.15
0.4250	6.75	52.79	1.93	3.20	64.67
0.4000	7.14	55.82	2.04	3.39	68.38
0.3750	7.54	58.93	2.15	3.57	72.19
0.3500	7.96	62.22	2.27	3.77	76.22
0.3250	8.38	65.52	2.40	3.97	80.27
0.3000	8.85	69.21	2.53	4.20	84.79
0.2750	9.36	73.16	2.67	4.44	89.63
0.2500	9.93	77.69	2.84	4.71	95.18
0.2250	10.58	82.76	3.03	5.02	101.39
0.2000	11.29	88.30	3.23	5.35	108.17
0.1750	12.12	94.82	3.47	5.75	116.16
0.1500	13.17	102.97	3.76	6.25	126.15
0.1250	14.53	113.62	4.15	6.89	139.19
0.1000	16.38	128.06	4.68	7.77	156.89
0.0750	18.98	148.43	5.43	9.00	181.84
0.0500	23.10	180.65	6.60	10.96	221.31
0.0400	25.60	200.21	7.32	12.14	245.27
0.0250	31.25	244.37	8.93	14.82	299.37
0.0200	34.35	268.60	9.82	16.29	329.05
0.0150	38.90	304.22	11.12	18.45	372.69
0.0100	48.04	375.73	13.73	22.79	460.30
0.0090	51.25	400.80	14.65	24.31	491.01

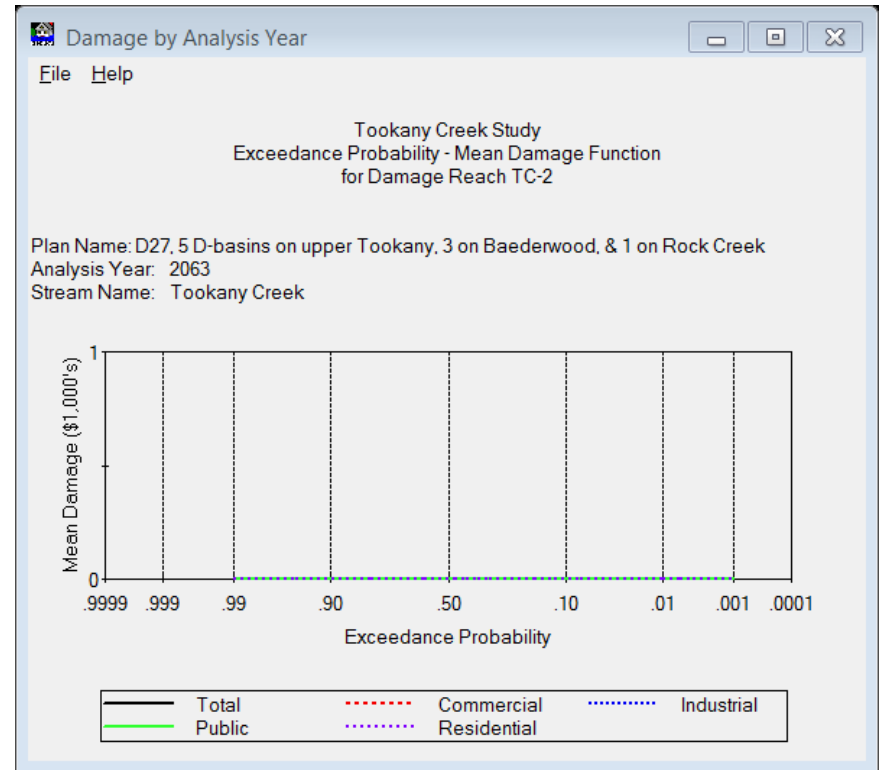
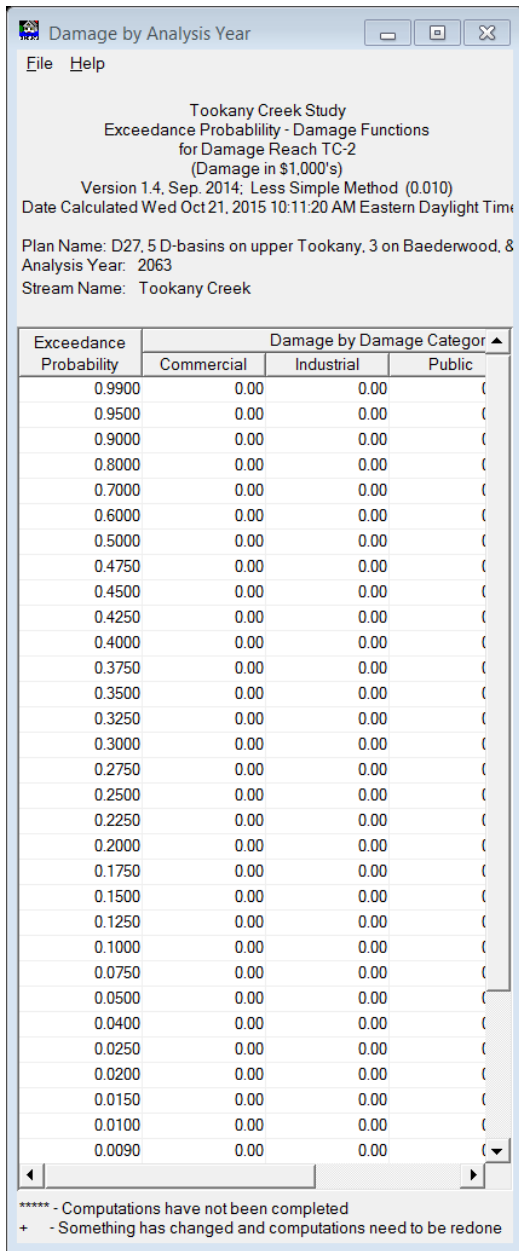
\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

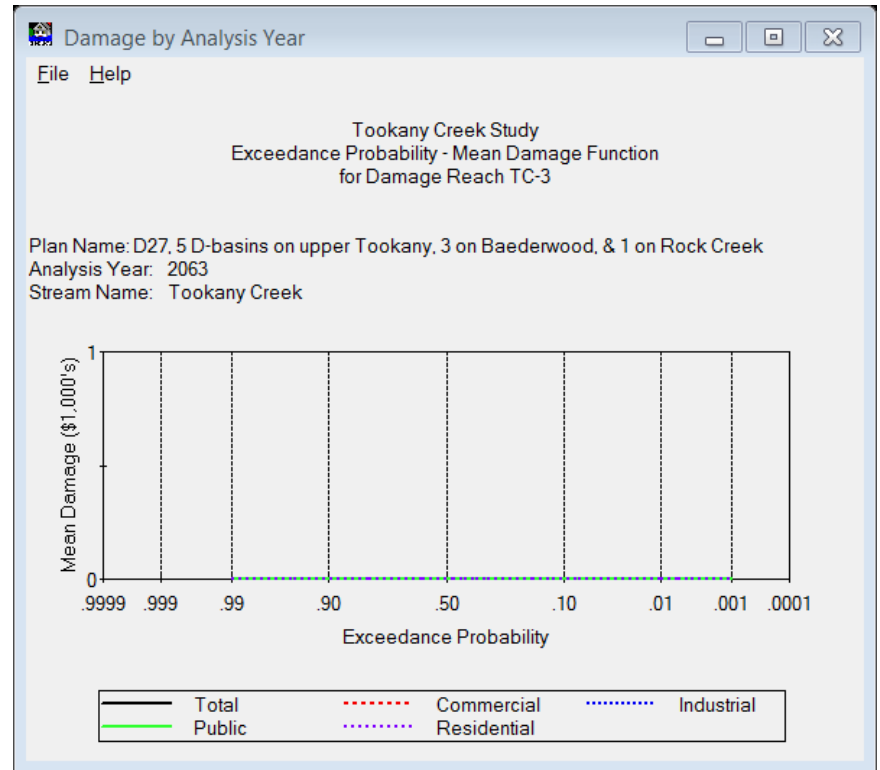
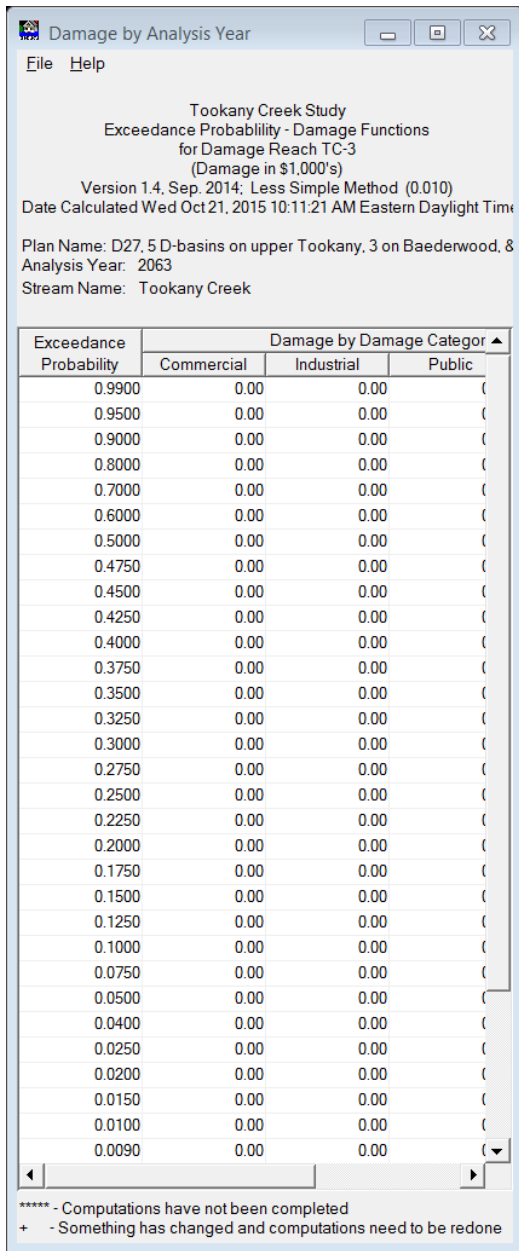














Damage by Analysis Year

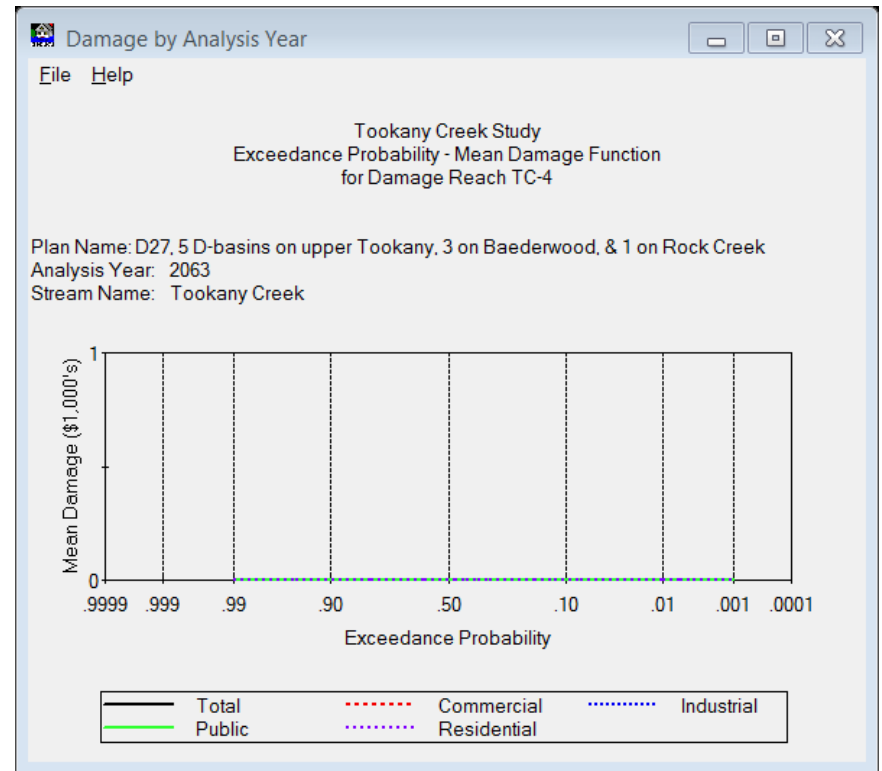
File Help

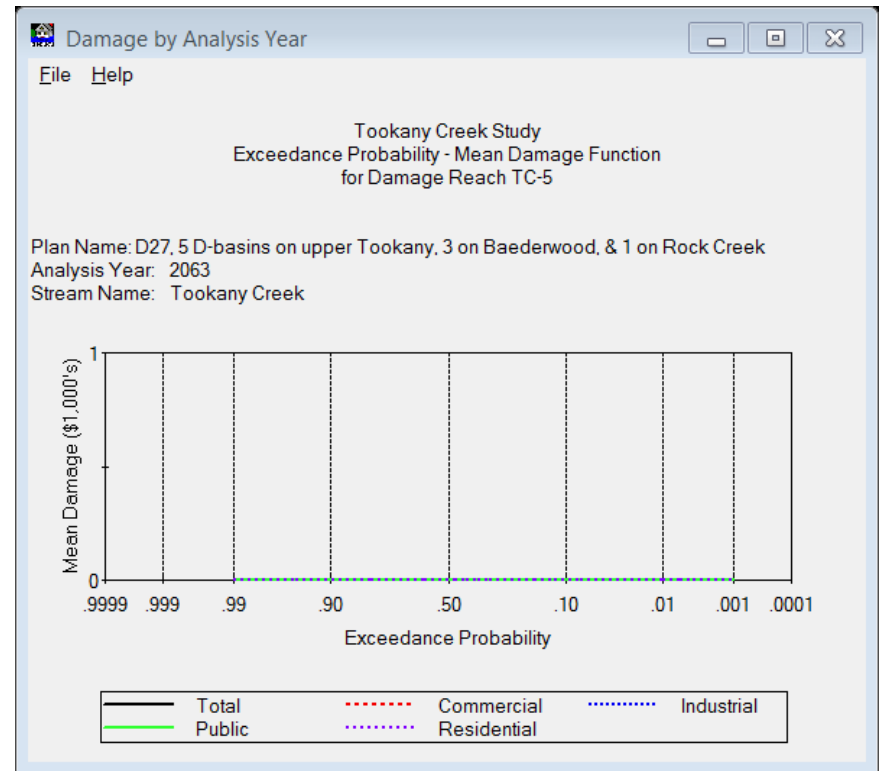
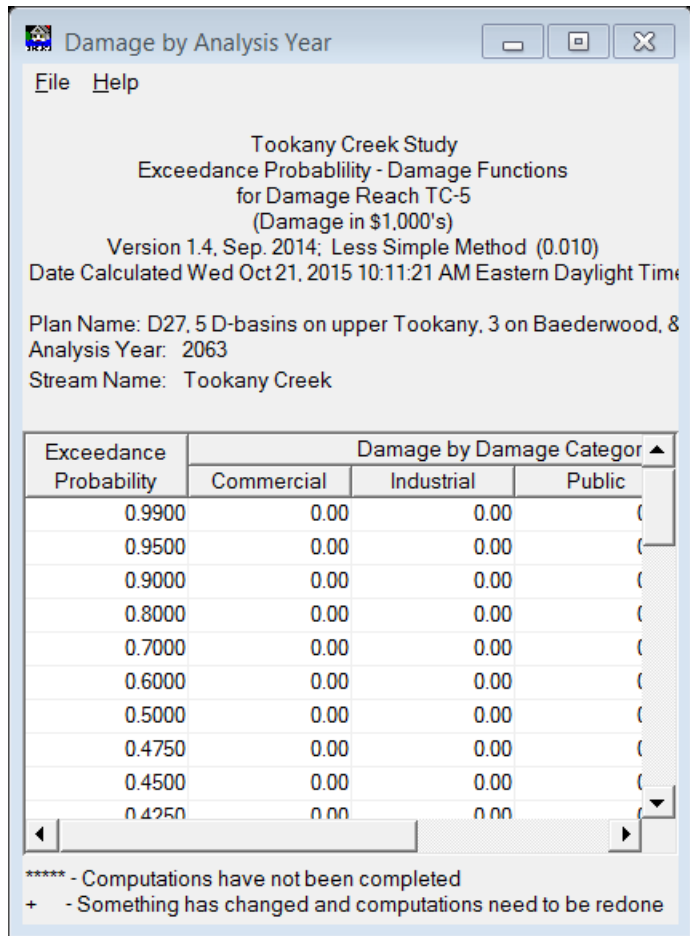
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-4  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:21 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Category		
	Commercial	Industrial	Public
0.9900	0.00	0.00	(
0.9500	0.00	0.00	(
0.9000	0.00	0.00	(
0.8000	0.00	0.00	(
0.7000	0.00	0.00	(
0.6000	0.00	0.00	(
0.5000	0.00	0.00	(
0.4750	0.00	0.00	(
0.4500	0.00	0.00	(
0.4250	0.00	0.00	(

\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





Damage by Analysis Year

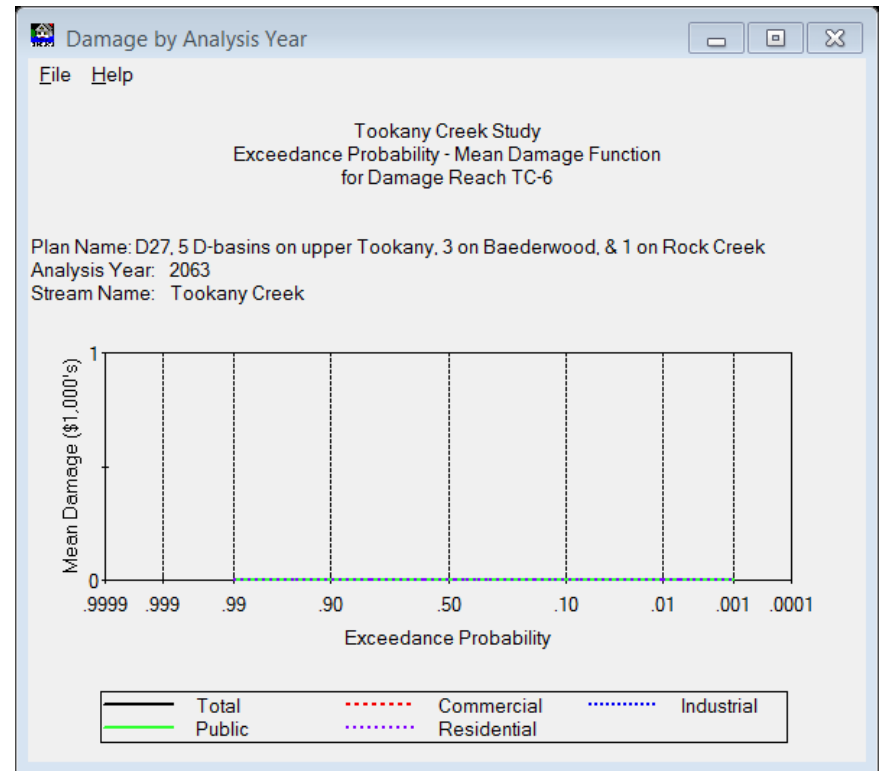
File Help

Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-6  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:22 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Category		
	Commercial	Industrial	Public
0.9900	0.00	0.00	(
0.9500	0.00	0.00	(
0.9000	0.00	0.00	(
0.8000	0.00	0.00	(
0.7000	0.00	0.00	(
0.6000	0.00	0.00	(
0.5000	0.00	0.00	(
0.4750	0.00	0.00	(
0.4500	0.00	0.00	(
0.4250	0.00	0.00	(

\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

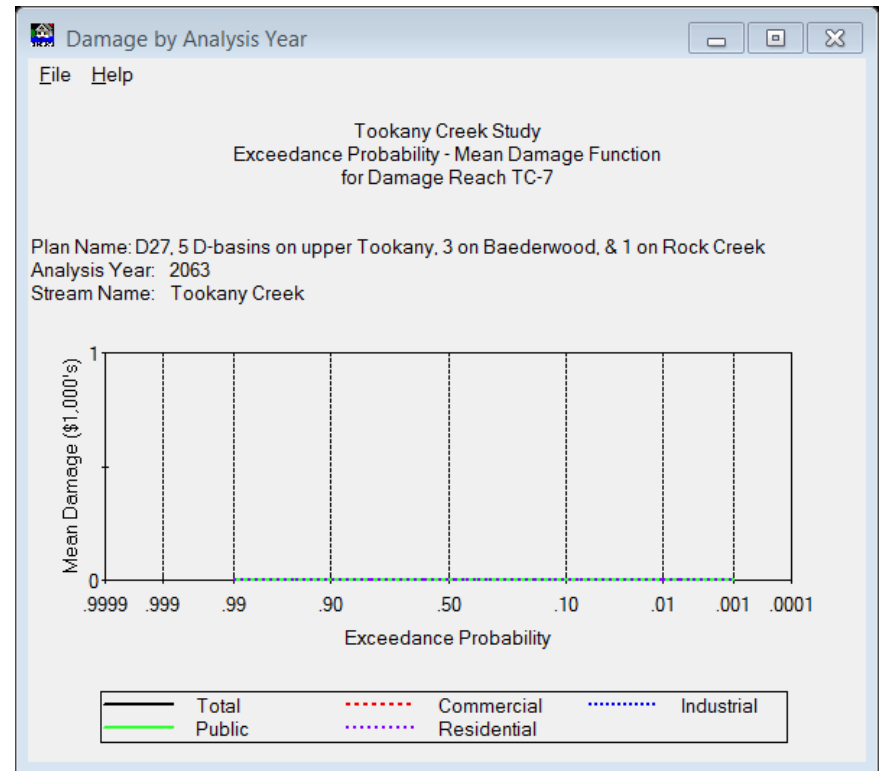
File Help

Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-7  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:22 AM Eastern Daylight Time

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

Exceedance Probability	Damage by Damage Category		
	Commercial	Industrial	Public
0.9900	0.00	0.00	(
0.9500	0.00	0.00	(
0.9000	0.00	0.00	(
0.8000	0.00	0.00	(
0.7000	0.00	0.00	(
0.6000	0.00	0.00	(
0.5000	0.00	0.00	(
0.4750	0.00	0.00	(
0.4500	0.00	0.00	(
0.4250	0.00	0.00	(

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

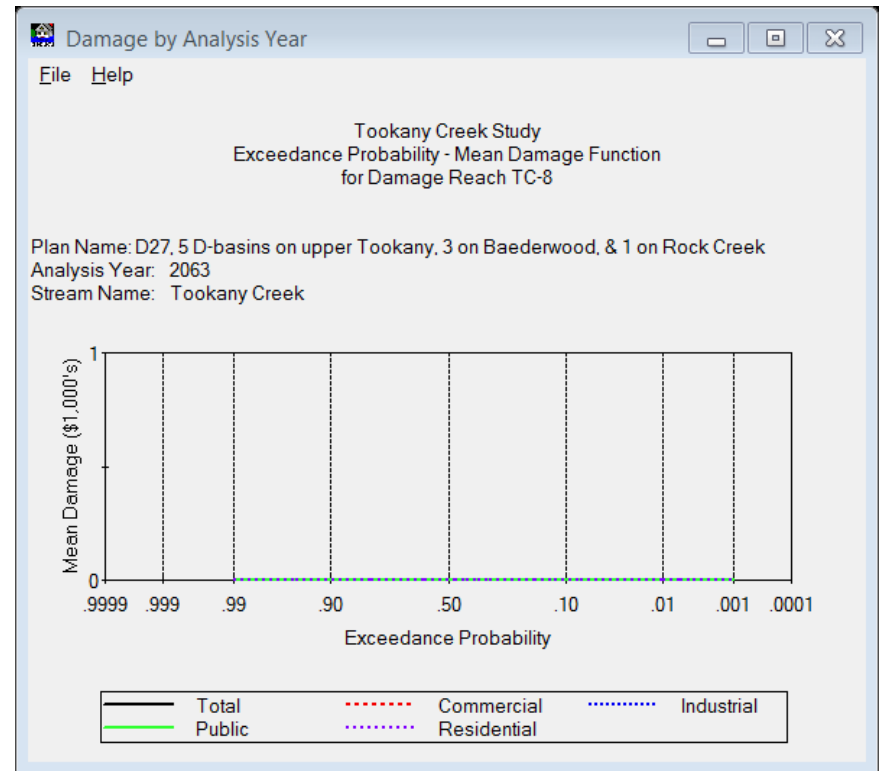
File Help

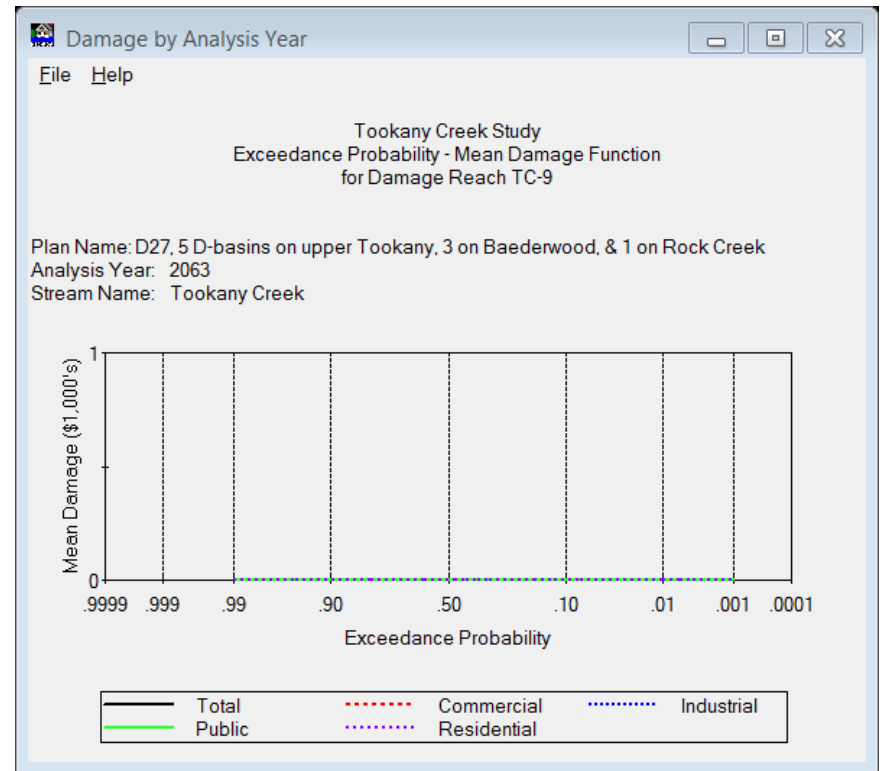
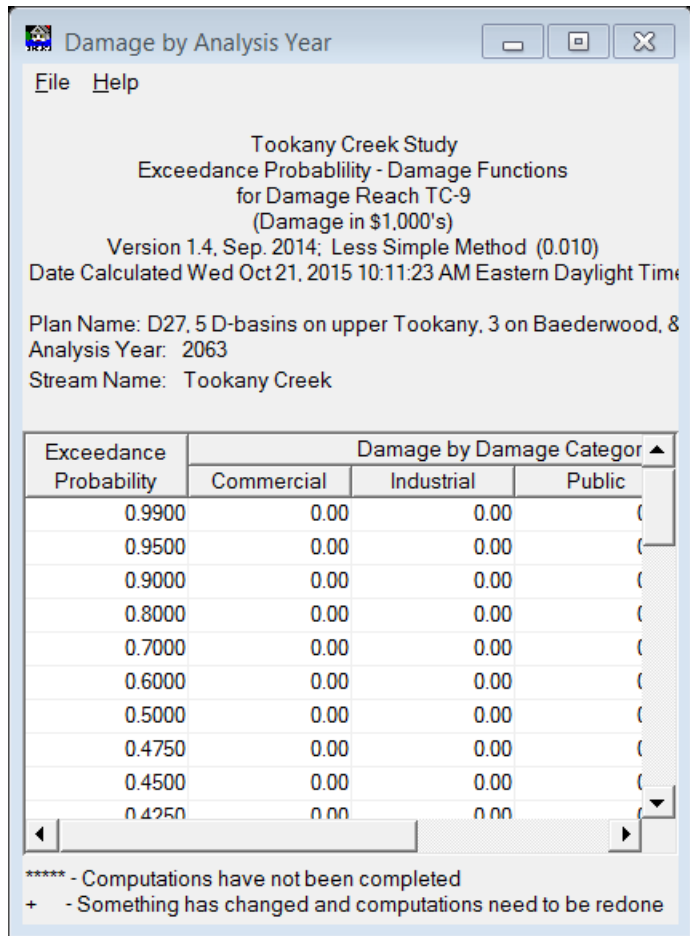
Tookany Creek Study  
 Exceedance Probability - Damage Functions  
 for Damage Reach TC-8  
 (Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:22 AM Eastern Daylight Time

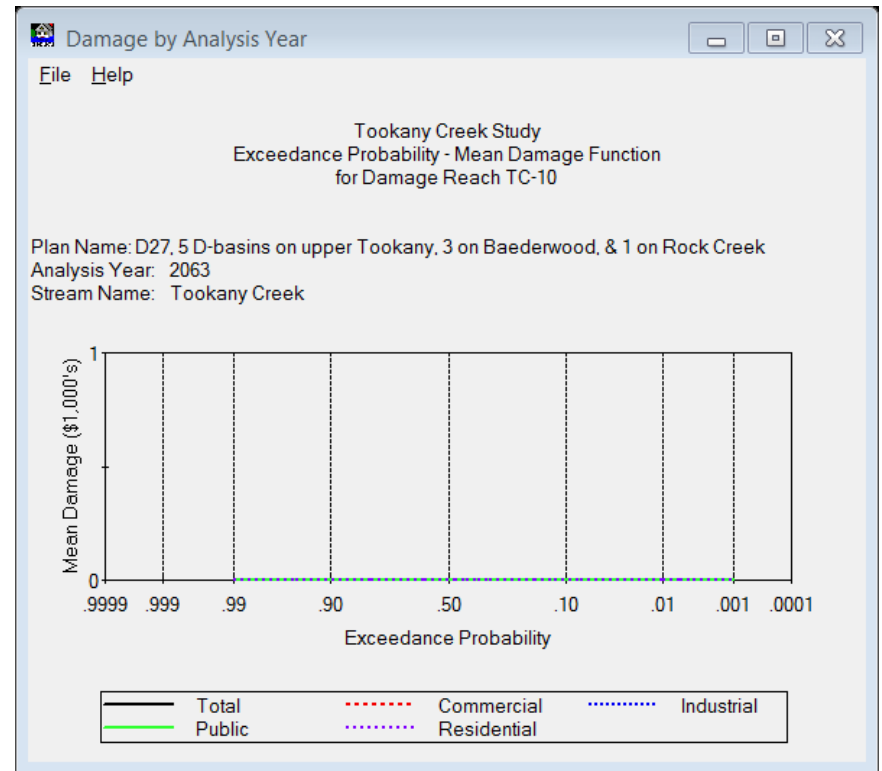
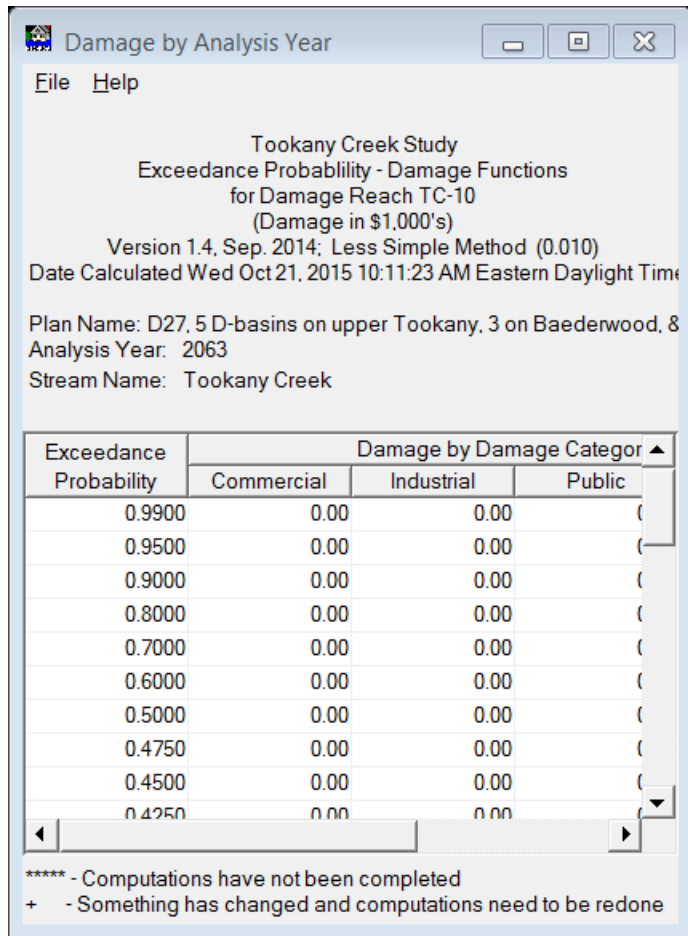
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baederwood, &  
 Analysis Year: 2063  
 Stream Name: Tookany Creek

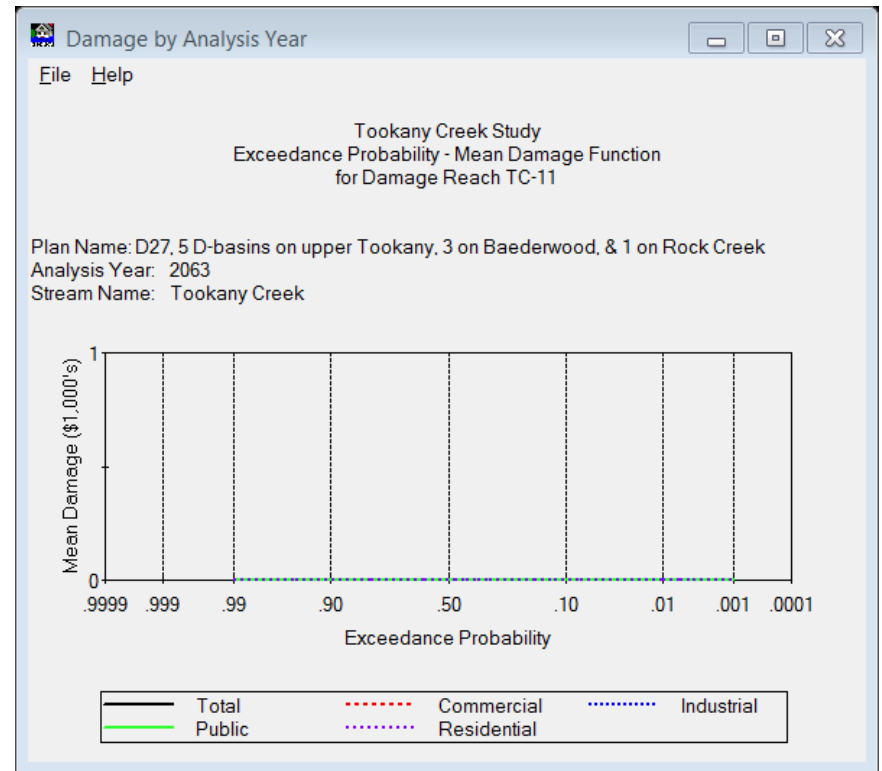
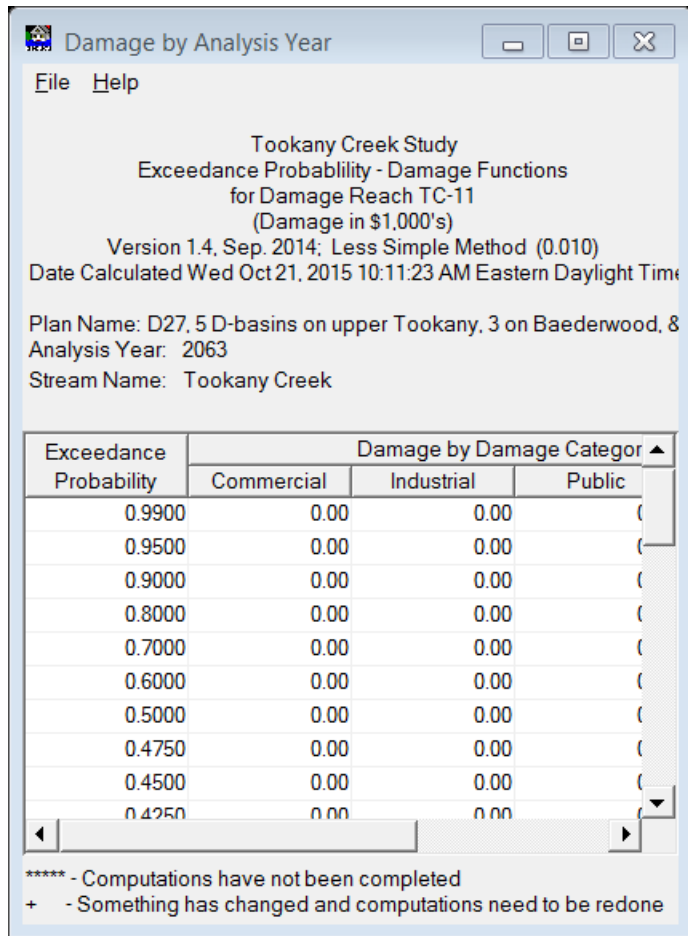
Exceedance Probability	Damage by Damage Category		
	Commercial	Industrial	Public
0.9900	0.00	0.00	(
0.9500	0.00	0.00	(
0.9000	0.00	0.00	(
0.8000	0.00	0.00	(
0.7000	0.00	0.00	(
0.6000	0.00	0.00	(
0.5000	0.00	0.00	(
0.4750	0.00	0.00	(
0.4500	0.00	0.00	(
0.4250	0.00	0.00	(

\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

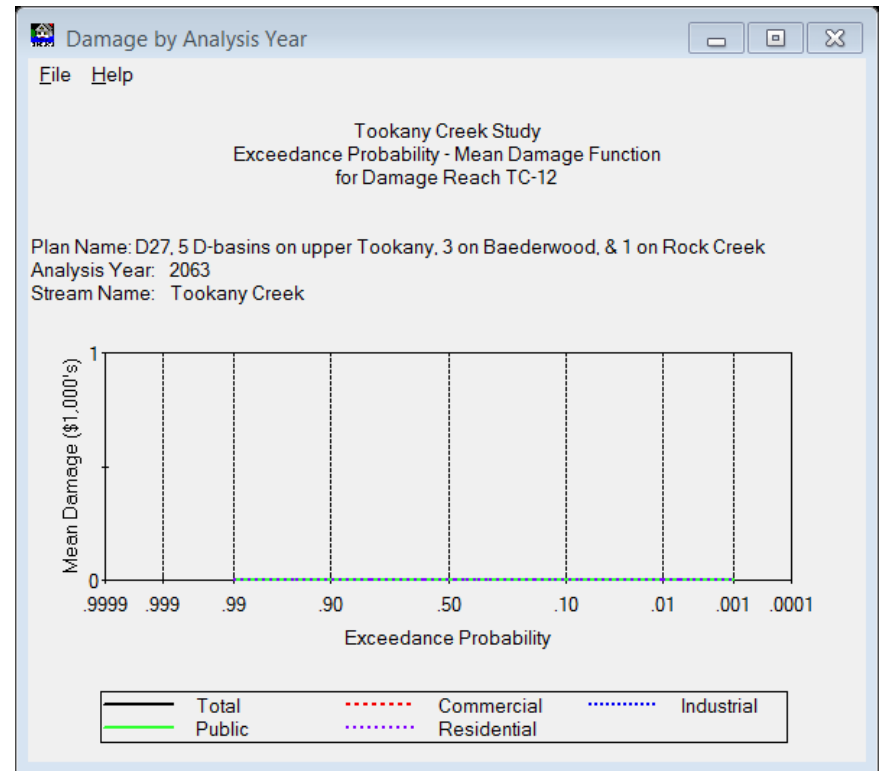
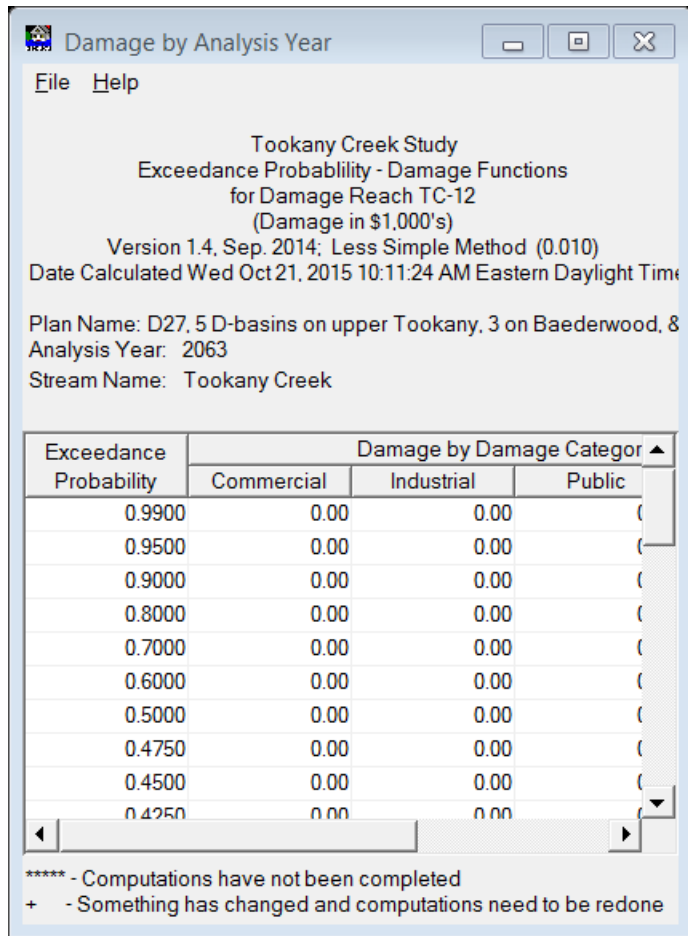


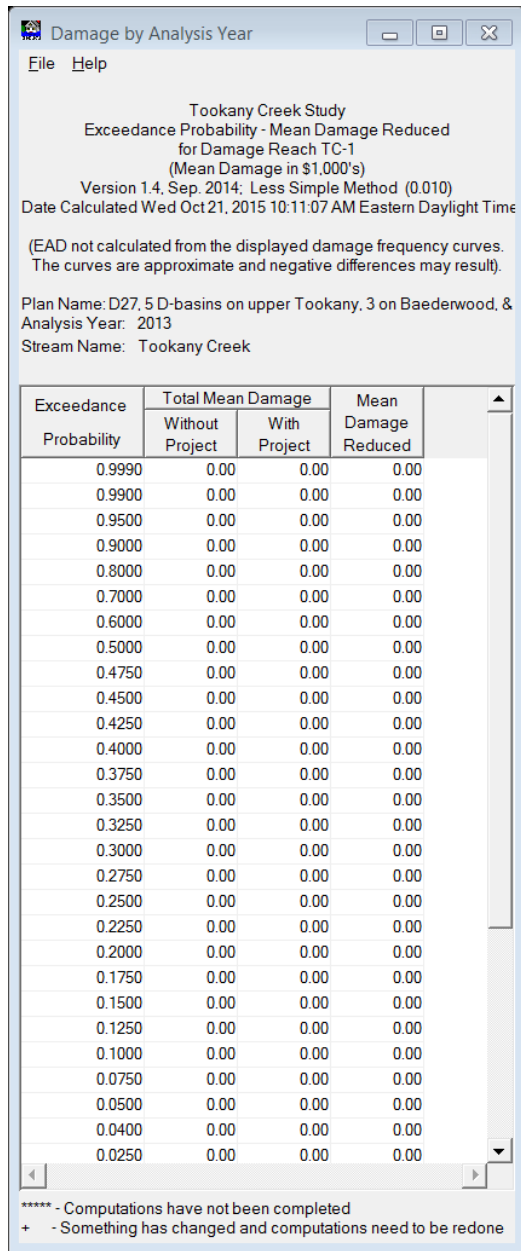




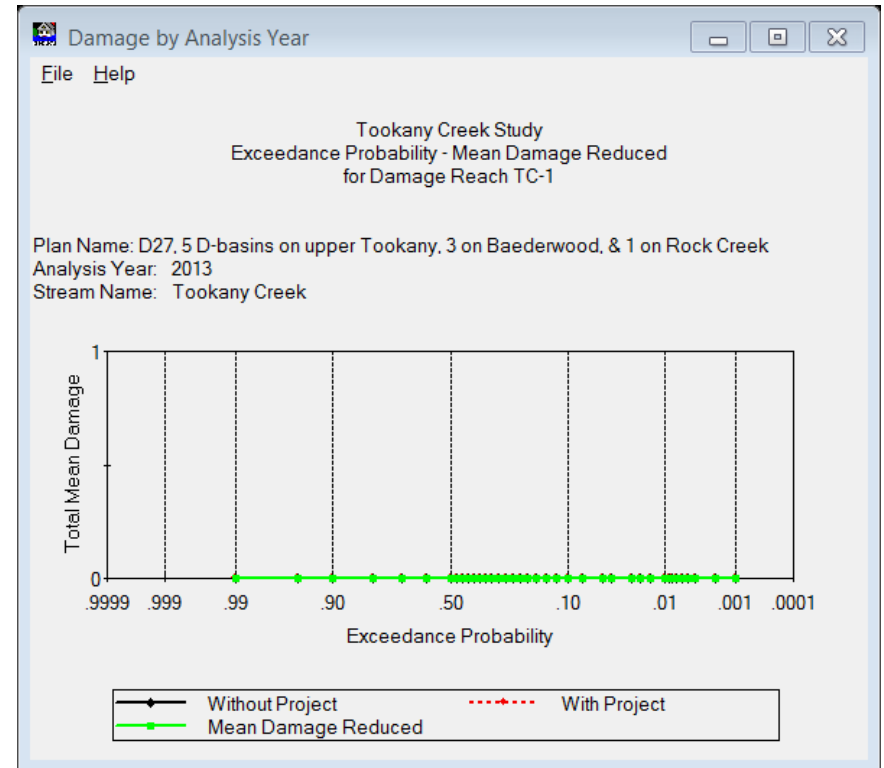


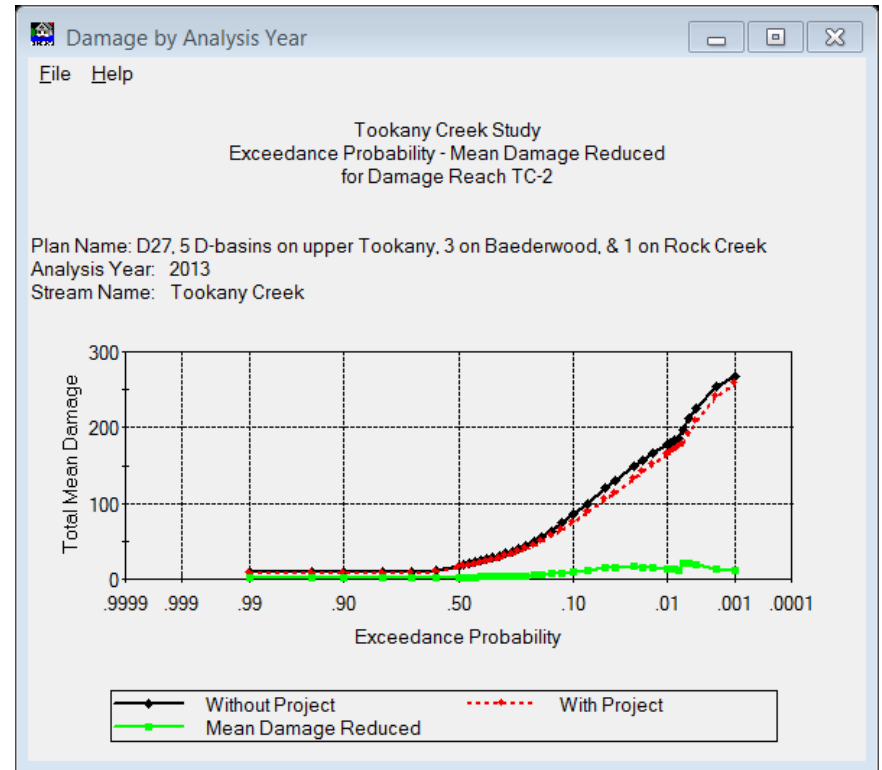
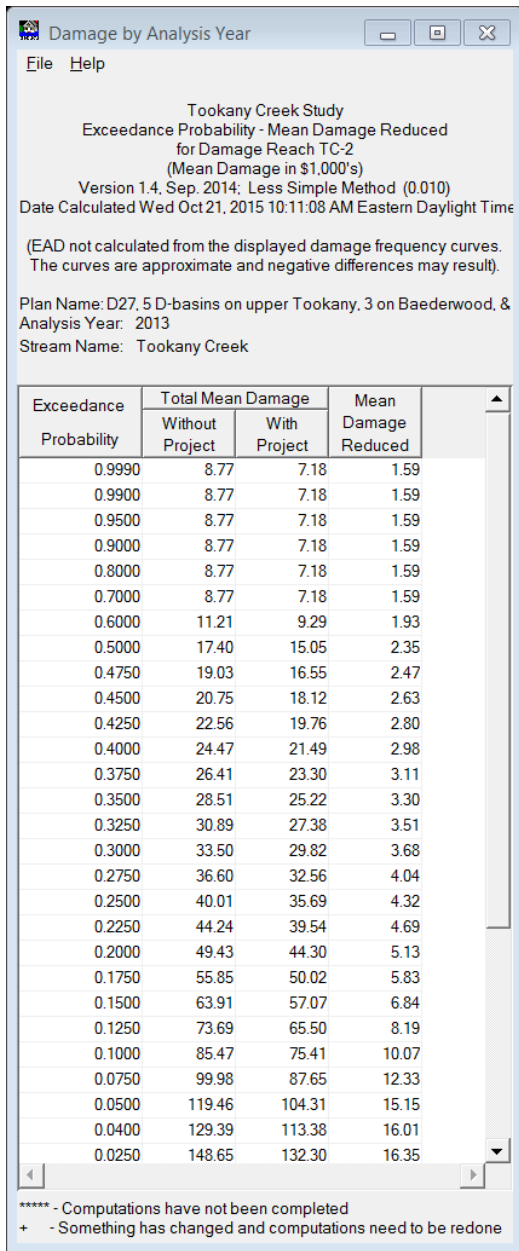






### Tookany Creek D27 Exceedance Probability – Mean Damage Reduced Functions





Damage by Analysis Year

File Help

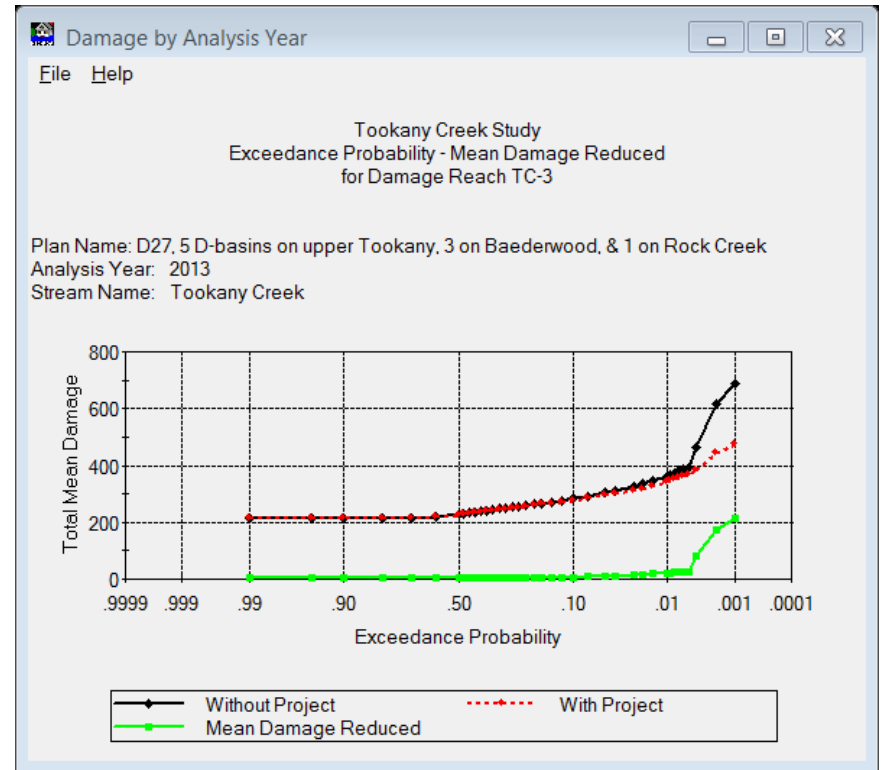
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-3  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:08 AM Eastern Daylight Time

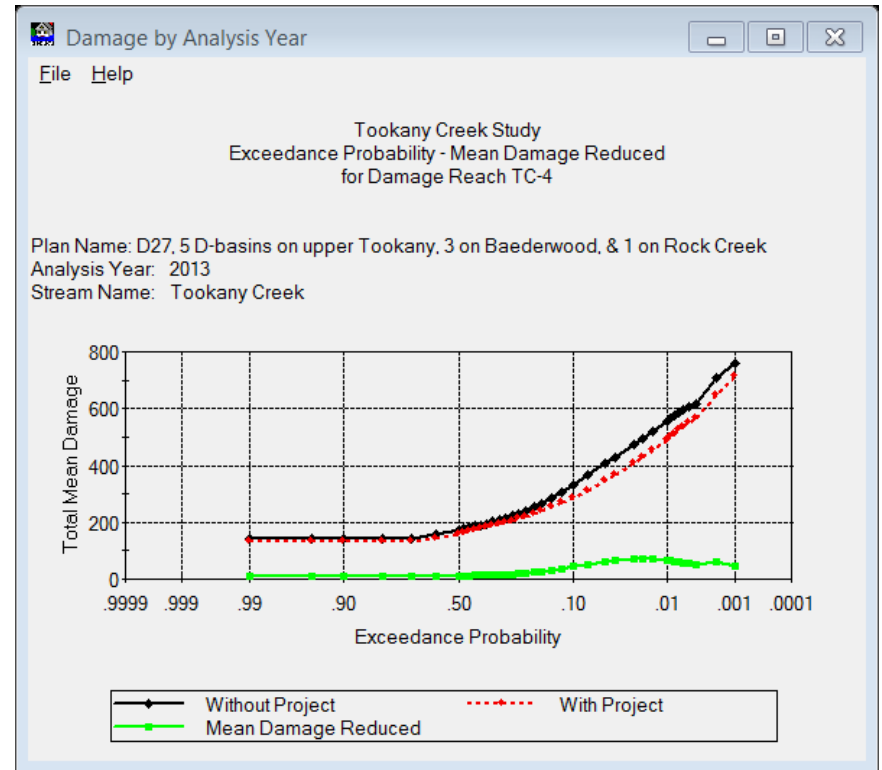
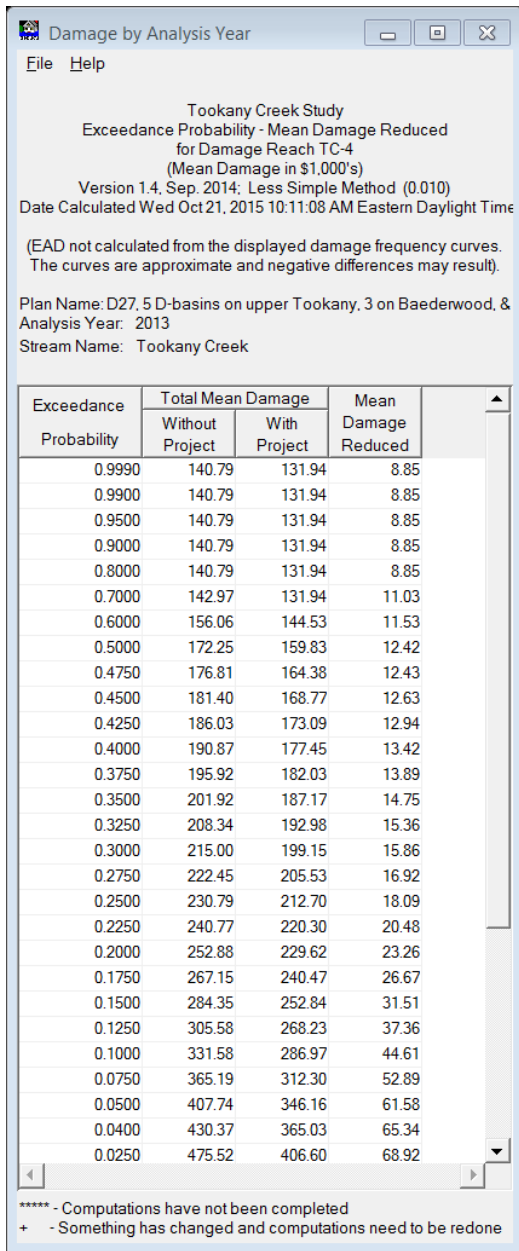
(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

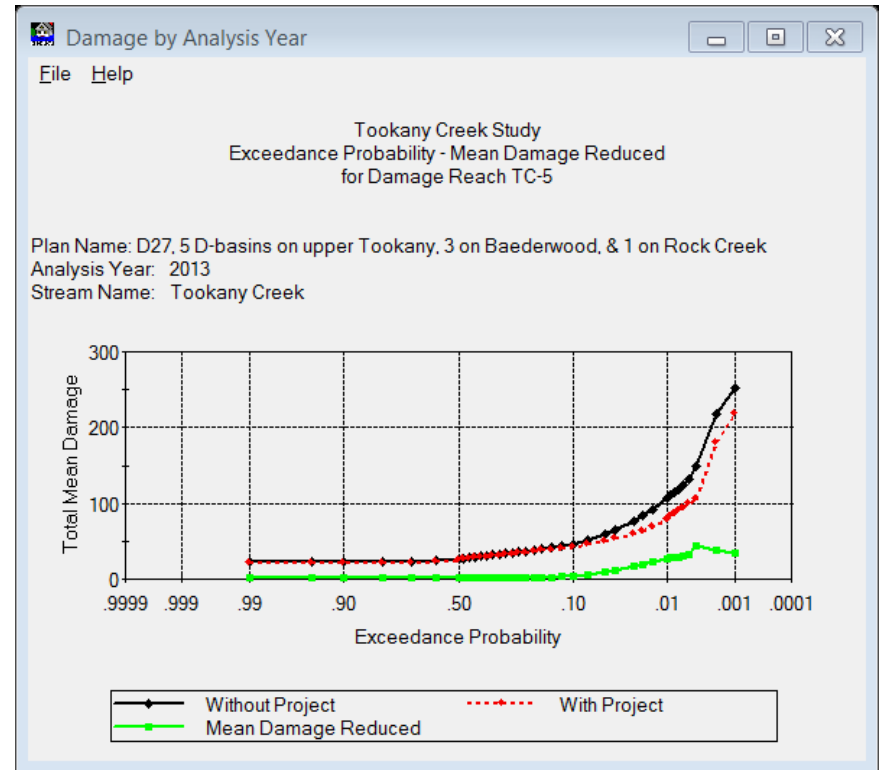
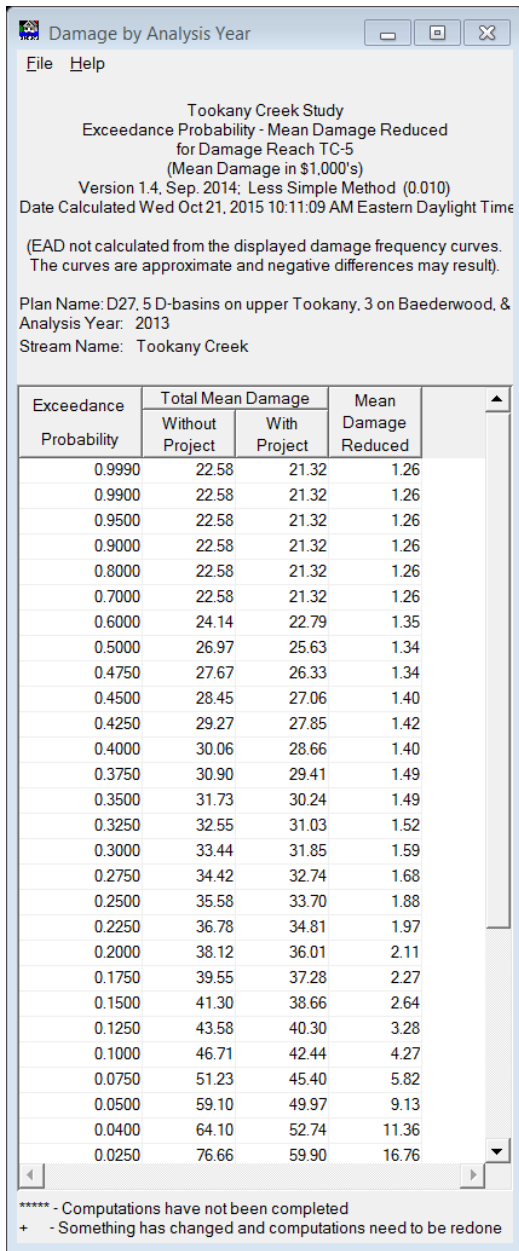
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baerdenwood, &  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

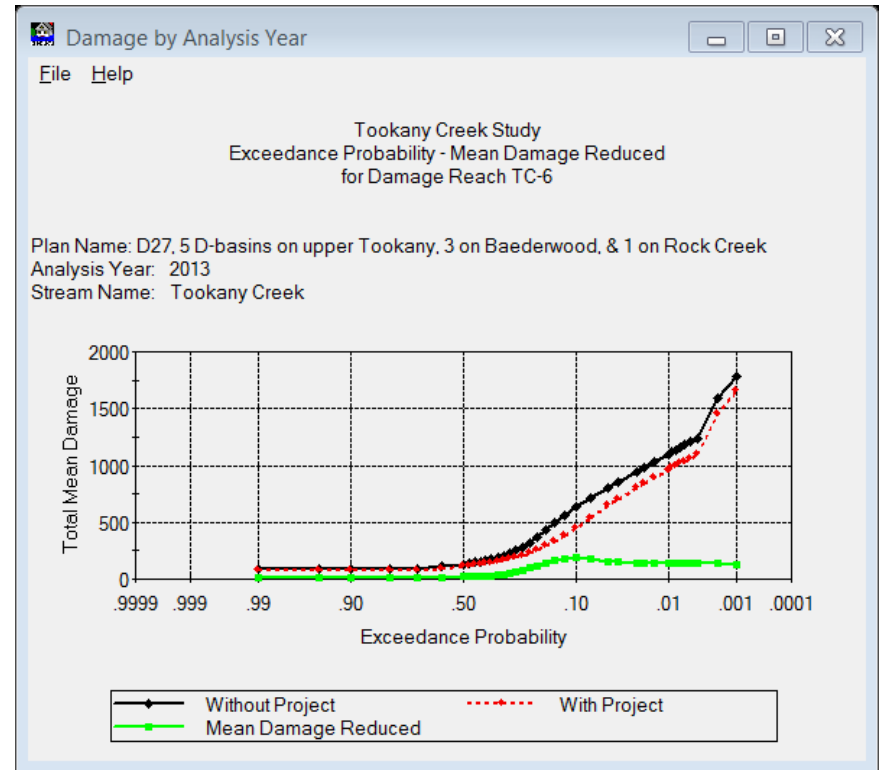
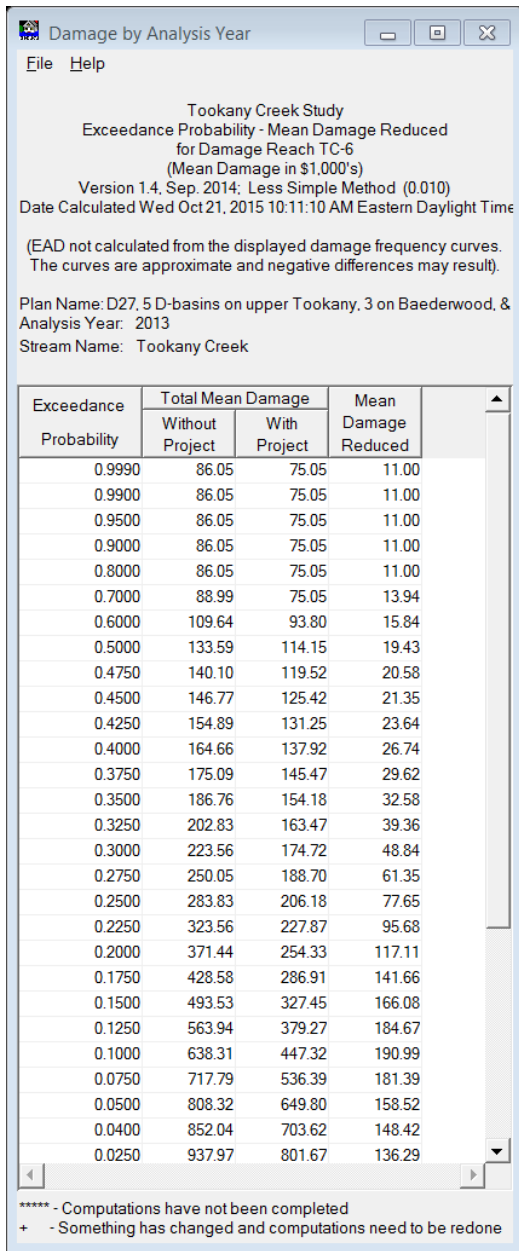
Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	216.27	213.18	3.09
0.9900	216.27	213.18	3.09
0.9500	216.27	213.18	3.09
0.9000	216.27	213.18	3.09
0.8000	216.27	213.18	3.09
0.7000	216.27	213.18	3.09
0.6000	220.06	217.15	2.91
0.5000	229.50	226.43	3.08
0.4750	231.76	228.69	3.08
0.4500	234.12	231.00	3.11
0.4250	236.69	233.46	3.22
0.4000	239.33	236.04	3.30
0.3750	241.90	238.62	3.27
0.3500	244.61	241.17	3.44
0.3250	247.31	243.79	3.52
0.3000	250.04	246.42	3.61
0.2750	252.83	249.10	3.73
0.2500	256.12	252.08	4.04
0.2250	259.60	255.46	4.14
0.2000	263.38	258.94	4.44
0.1750	267.45	262.90	4.56
0.1500	271.86	266.85	5.01
0.1250	277.35	271.37	5.98
0.1000	283.39	277.01	6.38
0.0750	292.24	283.77	8.47
0.0500	303.58	293.85	9.73
0.0400	310.66	299.79	10.87
0.0250	326.37	311.42	14.95

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone









Damage by Analysis Year

File Help

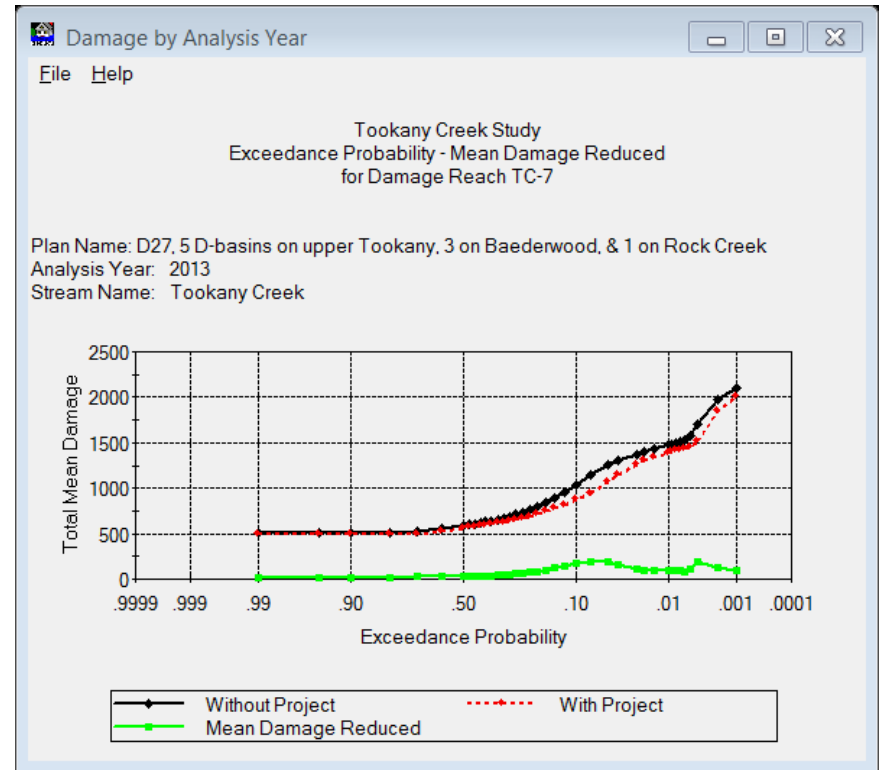
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-7  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:10 AM Eastern Daylight Time

(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baerdenwood, &  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	517.38	494.50	22.87
0.9900	517.38	494.50	22.87
0.9500	517.38	494.50	22.87
0.9000	517.38	494.50	22.87
0.8000	517.38	494.50	22.87
0.7000	522.53	494.50	28.02
0.6000	553.08	525.32	27.76
0.5000	587.94	557.32	30.62
0.4750	597.41	565.95	31.46
0.4500	607.17	574.79	32.38
0.4250	617.24	583.51	33.73
0.4000	629.14	592.57	36.57
0.3750	642.18	602.96	39.22
0.3500	656.09	614.56	41.53
0.3250	671.48	626.85	44.62
0.3000	688.42	639.76	48.67
0.2750	709.78	653.61	56.17
0.2500	734.73	670.85	63.88
0.2250	764.63	690.41	74.22
0.2000	800.39	713.59	86.80
0.1750	842.58	740.89	101.69
0.1500	893.58	774.01	119.56
0.1250	956.91	816.31	140.60
0.1000	1038.38	870.49	167.90
0.0750	1140.36	946.37	193.98
0.0500	1256.05	1063.64	192.41
0.0400	1301.90	1140.85	161.05
0.0250	1376.63	1262.59	114.04

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone





Damage by Analysis Year

File Help

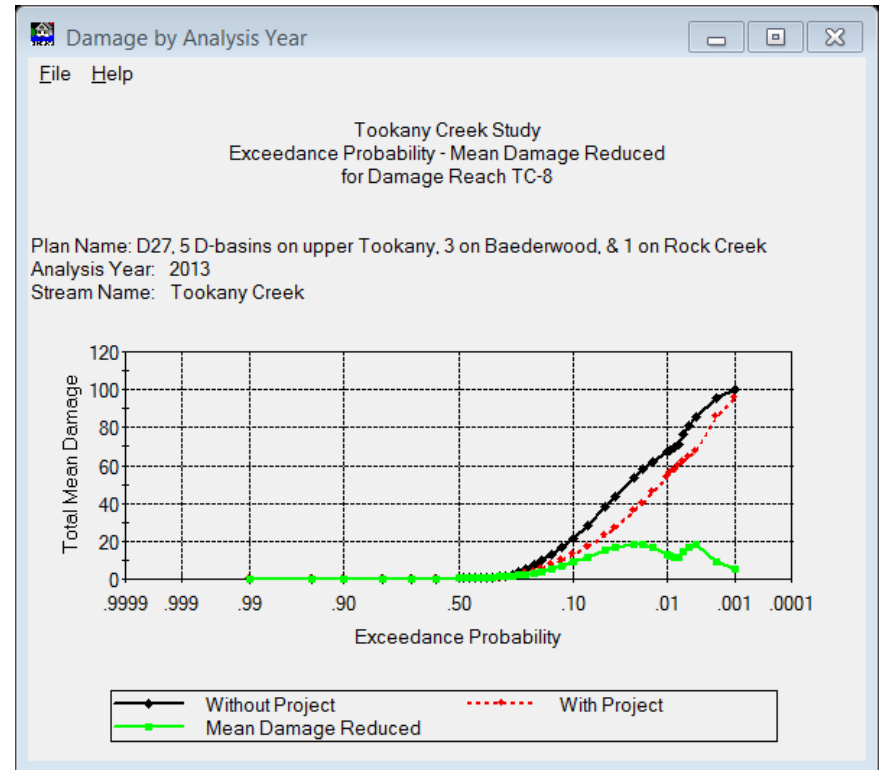
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-8  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:12 AM Eastern Daylight Time

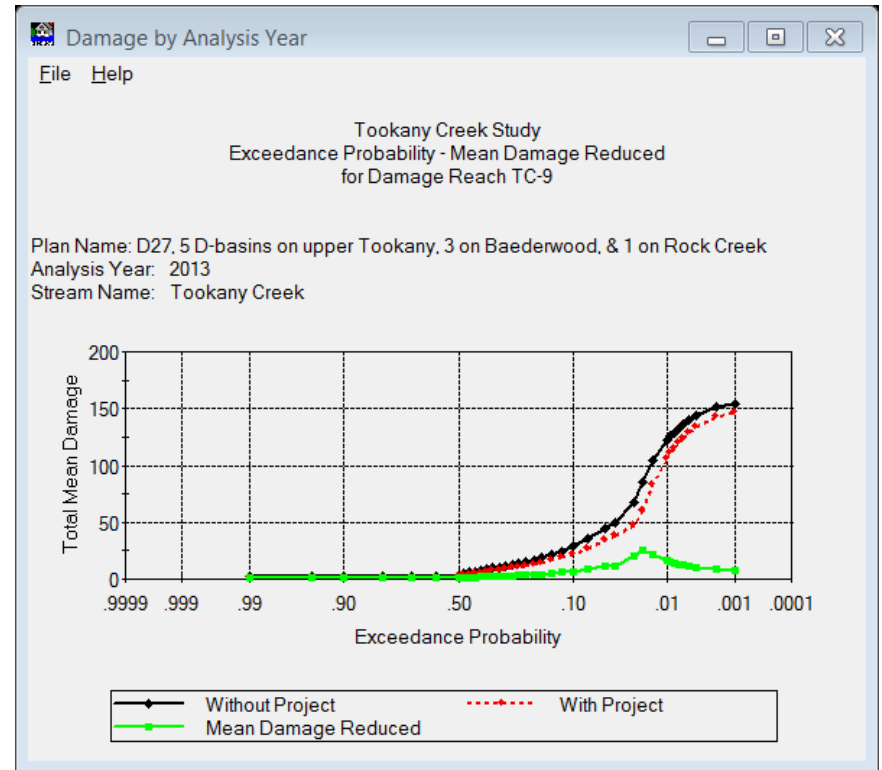
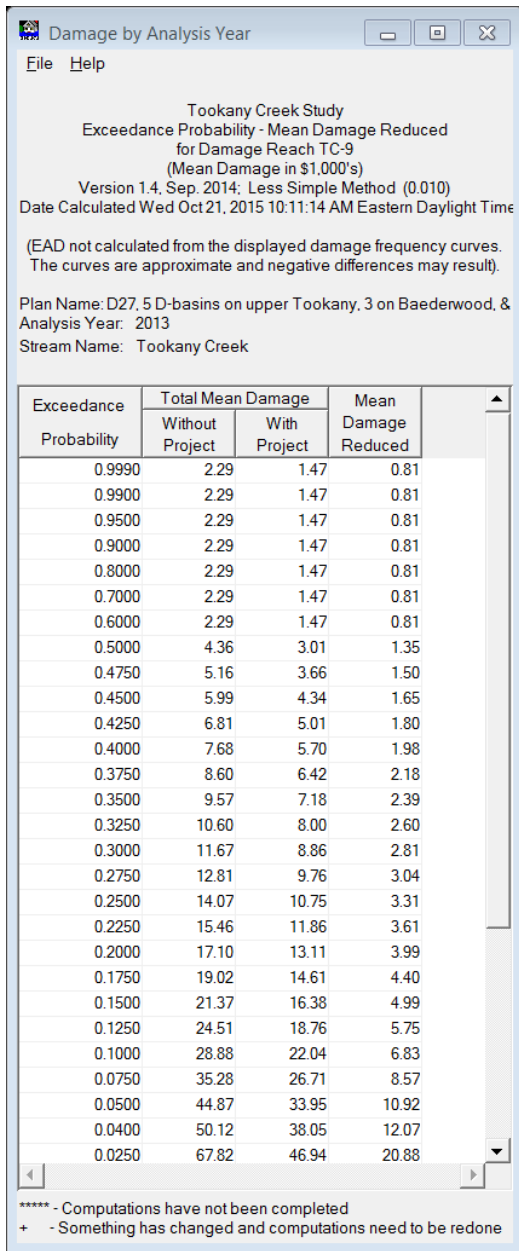
(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

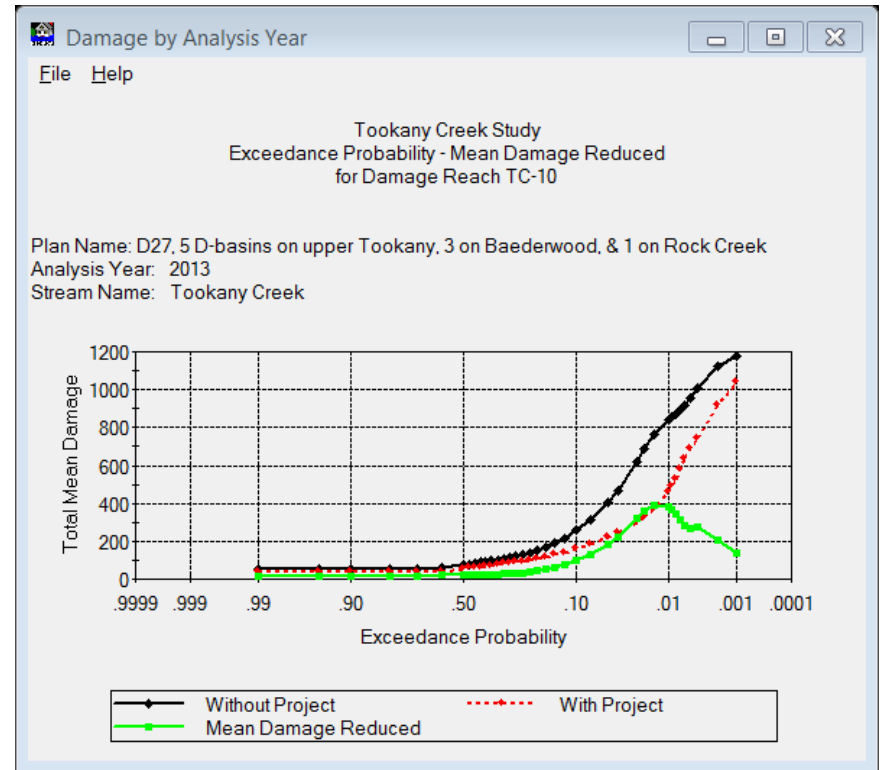
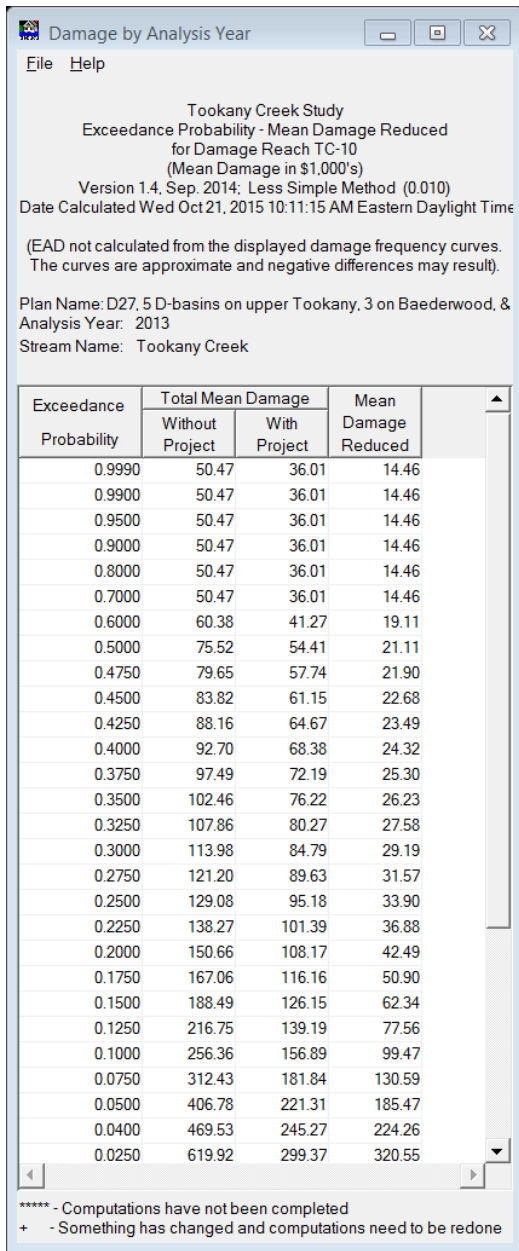
Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baedenwood, &  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	0.05	0.00	0.05
0.9900	0.05	0.00	0.05
0.9500	0.05	0.00	0.05
0.9000	0.05	0.00	0.05
0.8000	0.05	0.01	0.05
0.7000	0.05	0.01	0.04
0.6000	0.11	0.02	0.09
0.5000	0.42	0.02	0.40
0.4750	0.50	0.02	0.48
0.4500	0.60	0.02	0.58
0.4250	0.70	0.02	0.68
0.4000	0.81	0.02	0.79
0.3750	0.95	0.03	0.92
0.3500	1.12	0.03	1.09
0.3250	1.36	0.08	1.28
0.3000	1.79	0.38	1.40
0.2750	2.65	0.98	1.67
0.2500	3.93	1.84	2.10
0.2250	5.49	2.87	2.61
0.2000	7.38	4.10	3.28
0.1750	9.73	5.56	4.17
0.1500	12.74	7.35	5.39
0.1250	16.62	9.62	7.00
0.1000	21.73	12.65	9.09
0.0750	28.63	16.84	11.79
0.0500	38.50	23.25	15.24
0.0400	43.81	27.07	16.73
0.0250	53.86	35.55	18.31

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone







Damage by Analysis Year

File Help

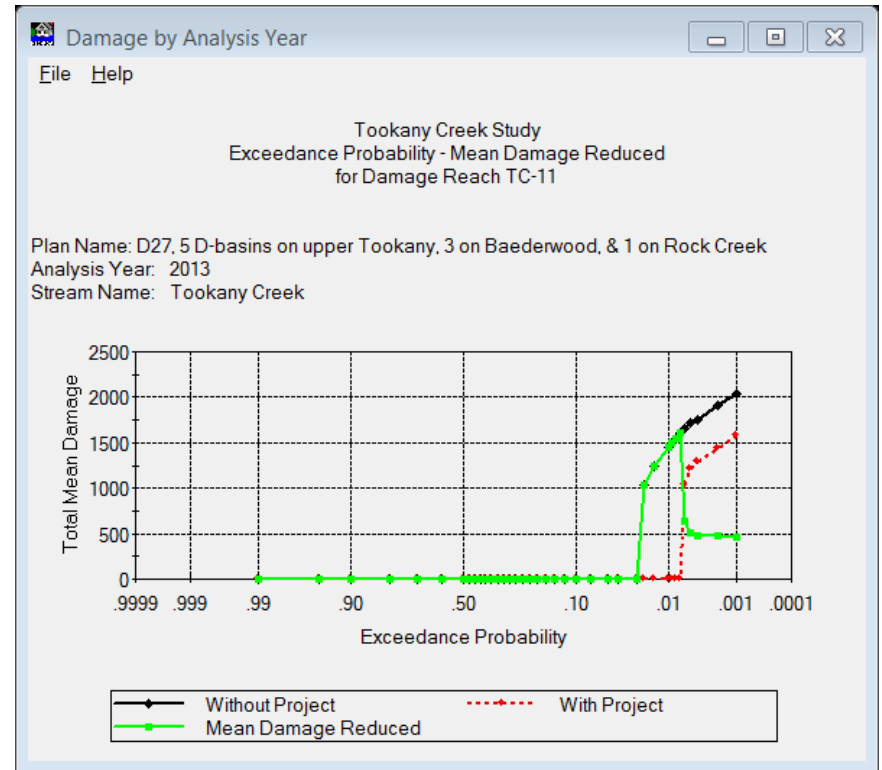
Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-11  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:18 AM Eastern Daylight Time

(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baedewood, &  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	0.00	0.00	0.00
0.9900	0.00	0.00	0.00
0.9500	0.00	0.00	0.00
0.9000	0.00	0.00	0.00
0.8000	0.00	0.00	0.00
0.7000	0.00	0.00	0.00
0.6000	0.00	0.00	0.00
0.5000	0.00	0.00	0.00
0.4750	0.00	0.00	0.00
0.4500	0.00	0.00	0.00
0.4250	0.00	0.00	0.00
0.4000	0.00	0.00	0.00
0.3750	0.00	0.00	0.00
0.3500	0.00	0.00	0.00
0.3250	0.00	0.00	0.00
0.3000	0.00	0.00	0.00
0.2750	0.00	0.00	0.00
0.2500	0.00	0.00	0.00
0.2250	0.00	0.00	0.00
0.2000	0.00	0.00	0.00
0.1750	0.00	0.00	0.00
0.1500	0.00	0.00	0.00
0.1250	0.00	0.00	0.00
0.1000	0.00	0.00	0.00
0.0750	0.00	0.00	0.00
0.0500	0.00	0.00	0.00
0.0400	0.00	0.00	0.00
0.0250	0.00	0.00	0.00

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone



Damage by Analysis Year

File Help

Tookany Creek Study  
 Exceedance Probability - Mean Damage Reduced  
 for Damage Reach TC-12  
 (Mean Damage in \$1,000's)  
 Version 1.4, Sep. 2014; Less Simple Method (0.010)  
 Date Calculated Wed Oct 21, 2015 10:11:19 AM Eastern Daylight Time

(EAD not calculated from the displayed damage frequency curves.  
 The curves are approximate and negative differences may result).

Plan Name: D27, 5 D-basins on upper Tookany, 3 on Baerdenwood, &  
 Analysis Year: 2013  
 Stream Name: Tookany Creek

Exceedance Probability	Total Mean Damage		Mean Damage Reduced
	Without Project	With Project	
0.9990	101.60	59.89	41.70
0.9900	101.60	59.89	41.70
0.9500	101.60	59.89	41.70
0.9000	101.60	59.89	41.70
0.8000	101.60	59.89	41.70
0.7000	101.60	59.89	41.70
0.6000	118.06	62.26	55.80
0.5000	146.76	83.96	62.81
0.4750	154.48	89.59	64.89
0.4500	162.68	95.30	67.38
0.4250	171.05	101.11	69.95
0.4000	179.41	107.17	72.24
0.3750	188.45	113.56	74.88
0.3500	197.40	120.09	77.31
0.3250	207.23	126.93	80.30
0.3000	217.88	133.99	83.89
0.2750	229.78	141.33	88.45
0.2500	243.29	149.35	93.94
0.2250	257.45	158.50	98.95
0.2000	273.69	168.64	105.06
0.1750	294.19	179.70	114.49
0.1500	319.29	192.26	127.03
0.1250	352.10	207.91	144.19
0.1000	398.29	226.82	171.48
0.0750	467.73	252.84	214.89
0.0500	592.18	294.12	298.06
0.0400	675.07	319.08	355.99
0.0250	859.35	382.89	476.46

\*\*\*\*\* - Computations have not been completed  
 + - Something has changed and computations need to be redone

