

Subbasin : KettleRv_S040

Area : 829.37
Latitude : 49.72
Longitude : -118.71
Downstream : Kettle Nr West Br

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.23
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

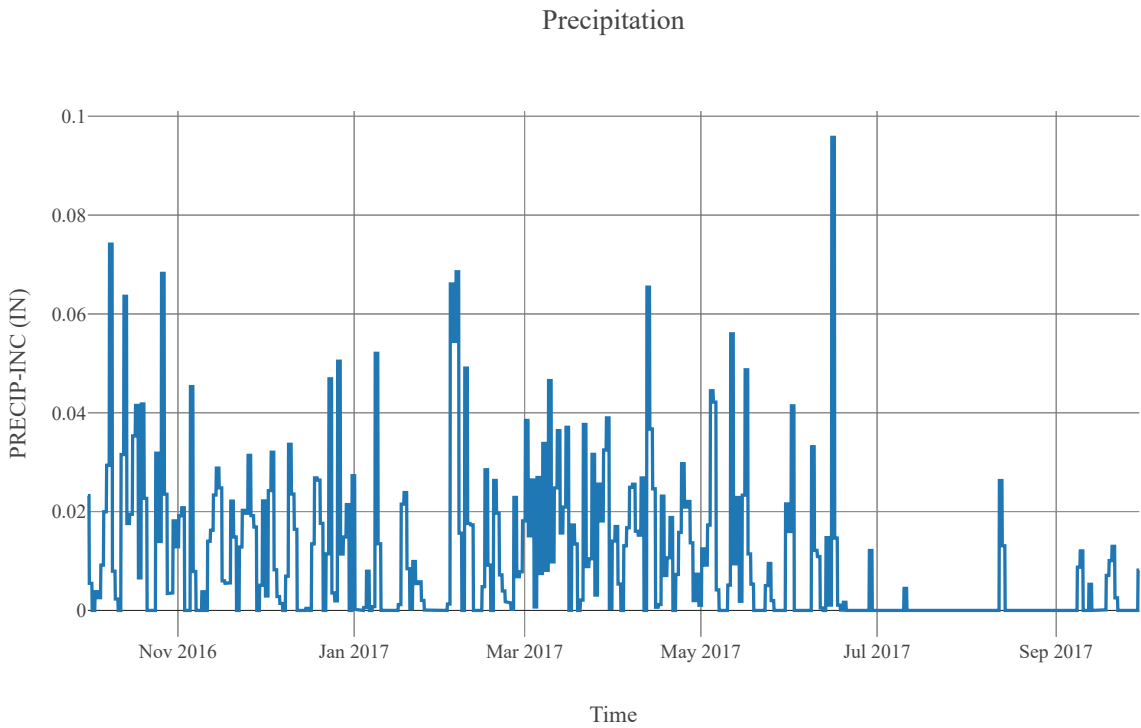
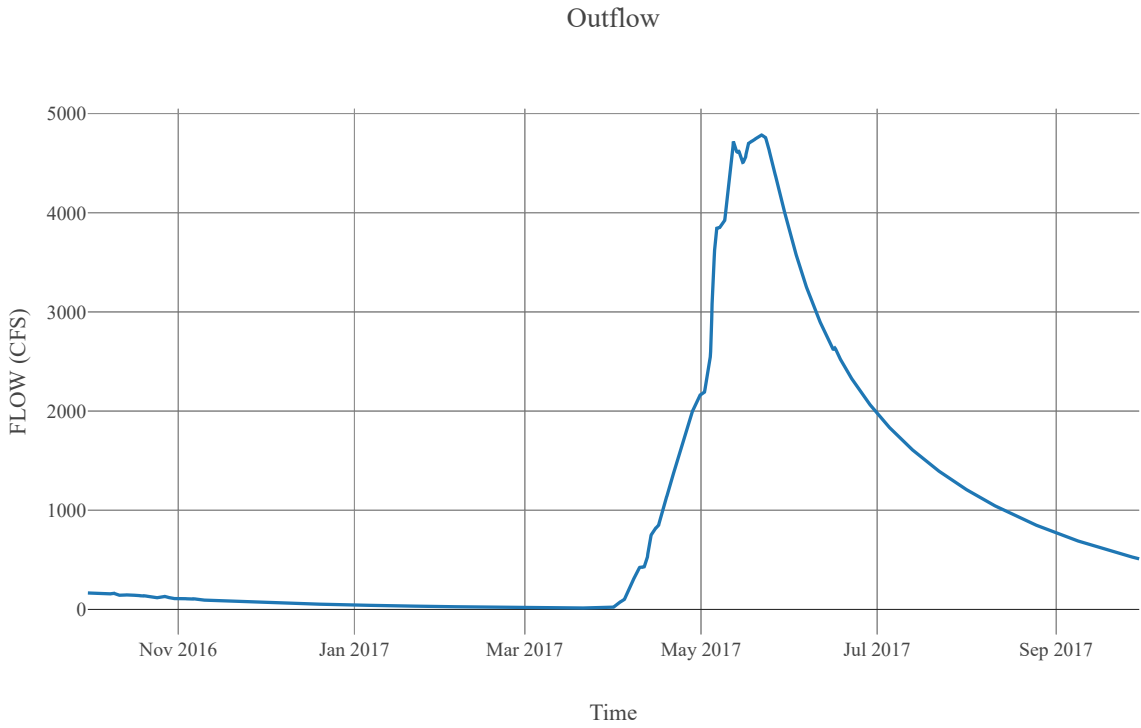
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	16.86
Storage Coefficient	16.86

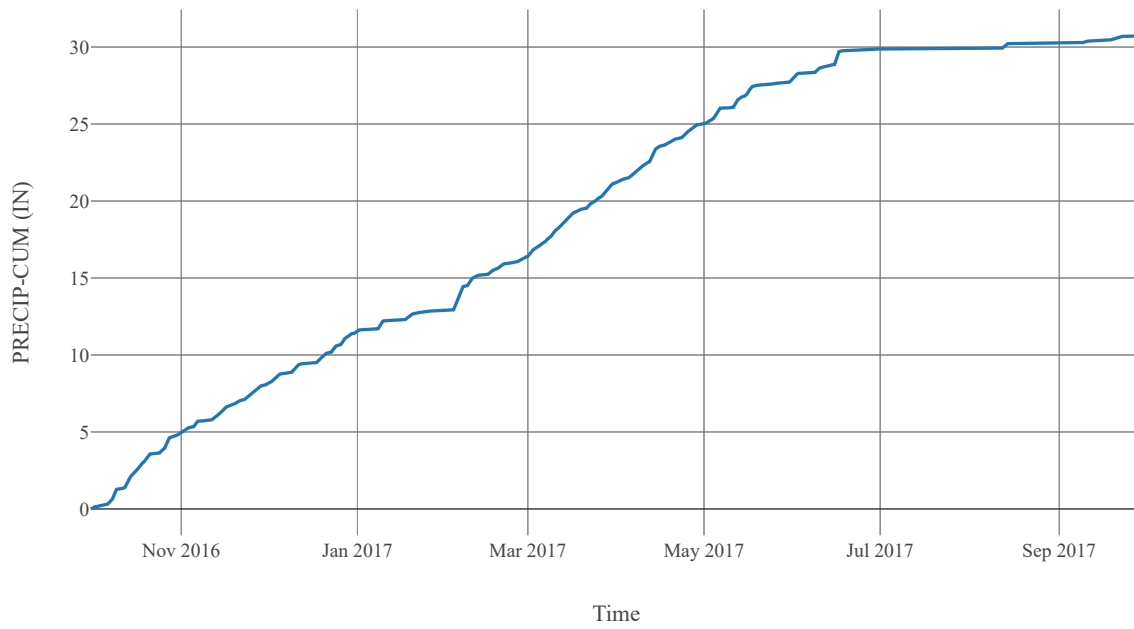
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	337.2
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	1686
		Number Steps	1

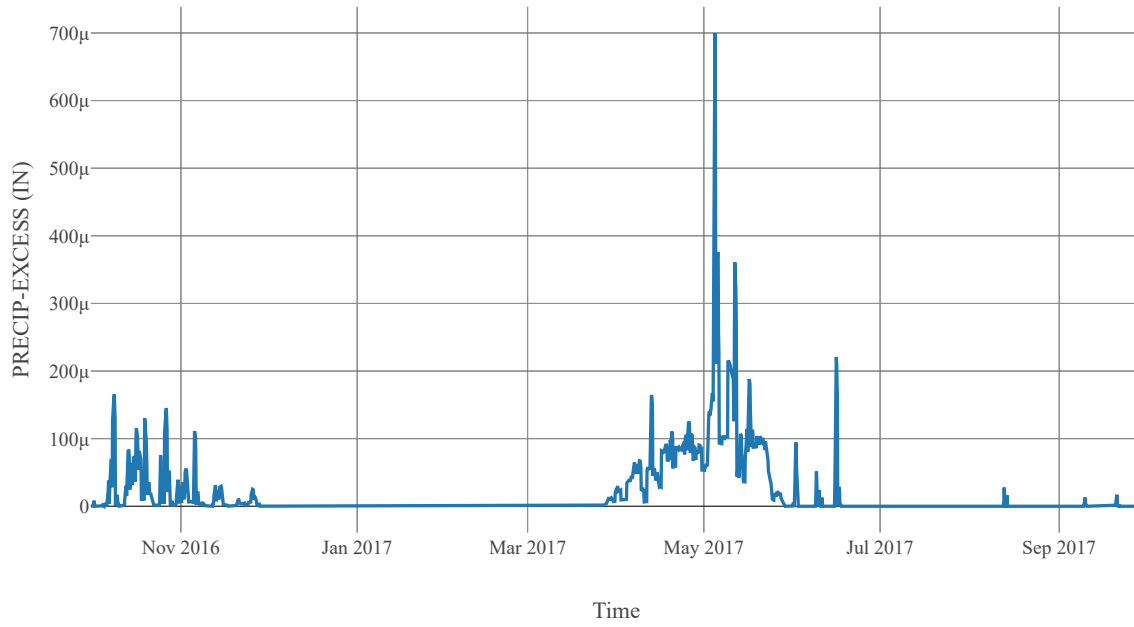
Statistics		
Name	Value	Unit
Baseflow Volume	681453.5	Ac-ft
Precipitation Volume	1359124.82	Ac-ft
Loss Volume	1050739.5	Ac-ft
Excess Volume	2422.27	Ac-ft



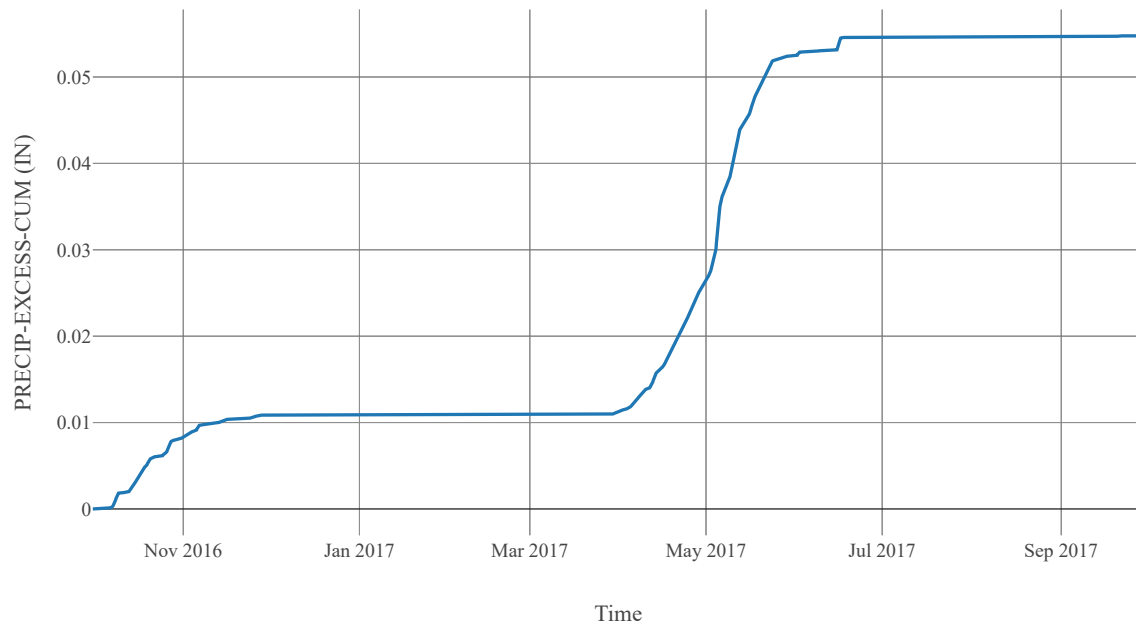
Cumulative Precipitation



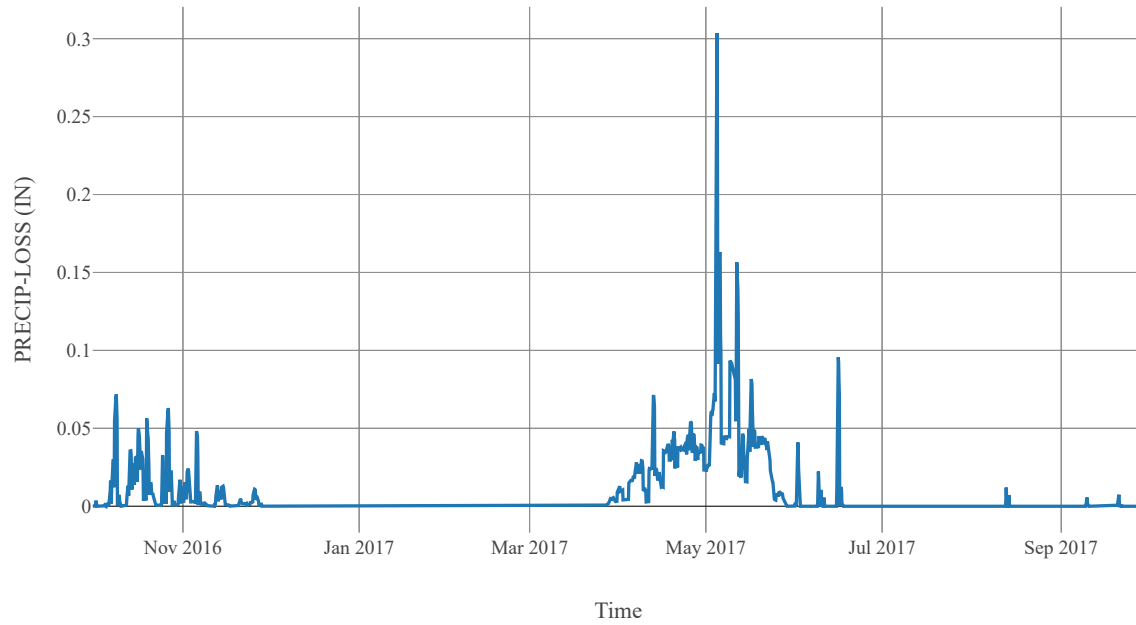
Excess Precipitation



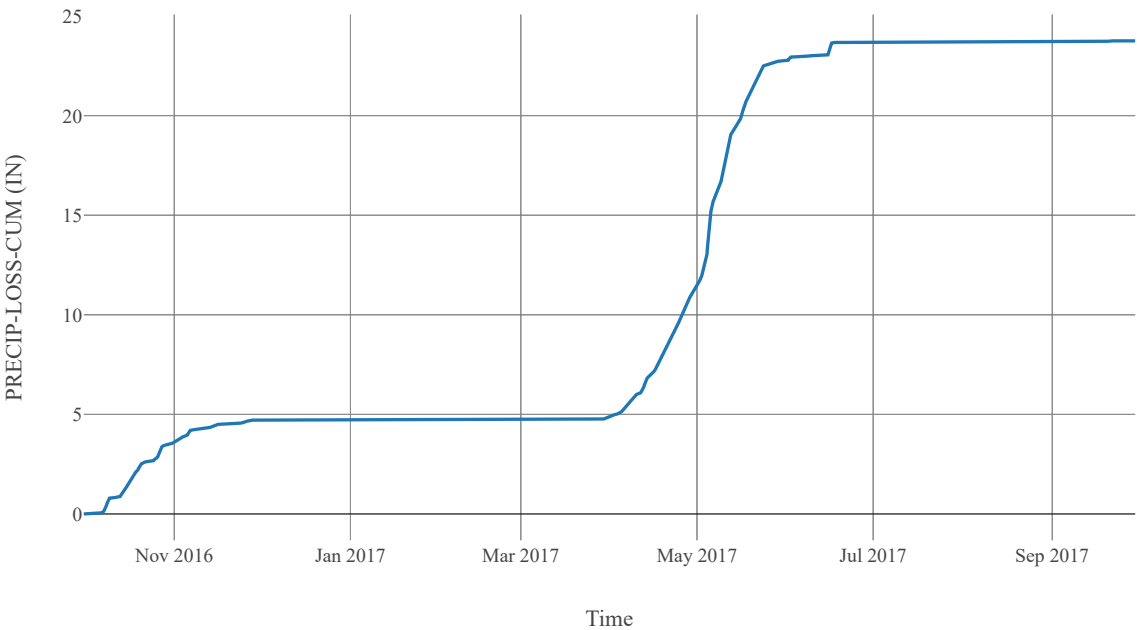
Cumulative Excess Precipitation



Precipitation Loss

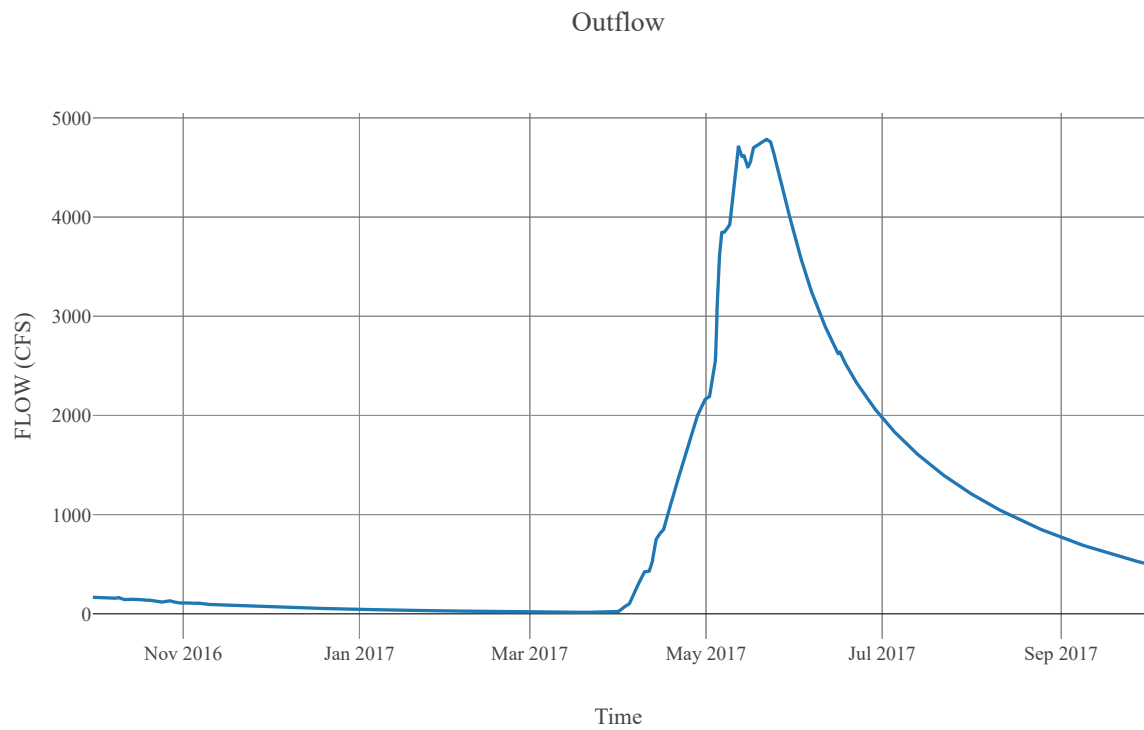


Cumulative Precipitation Loss



Junction : KettleNrWestBr

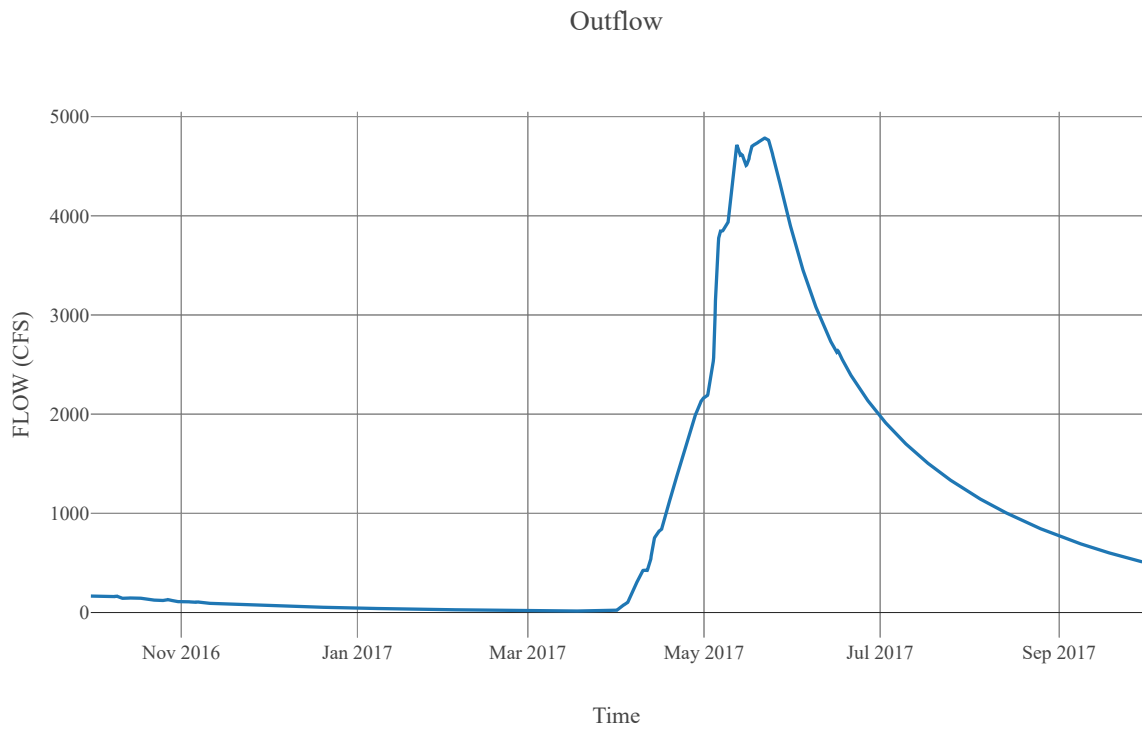
Observed Hydrograph : Kettle river near westbridge
Downstream : KettleRv_R035



Reach : KettleRv_R035

Loss Method : None
Downstream : WKettleRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	31978
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	KettleRv_R025
	Energy Slope
	0
	Right Mannings N
	0.15



Subbasin : WKettleRv_S010

Area : 732.73
Observed Hydrograph : West kettle river at westbri
Latitude : 49.54
Longitude : -119.1
Downstream : WKettleRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.39
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

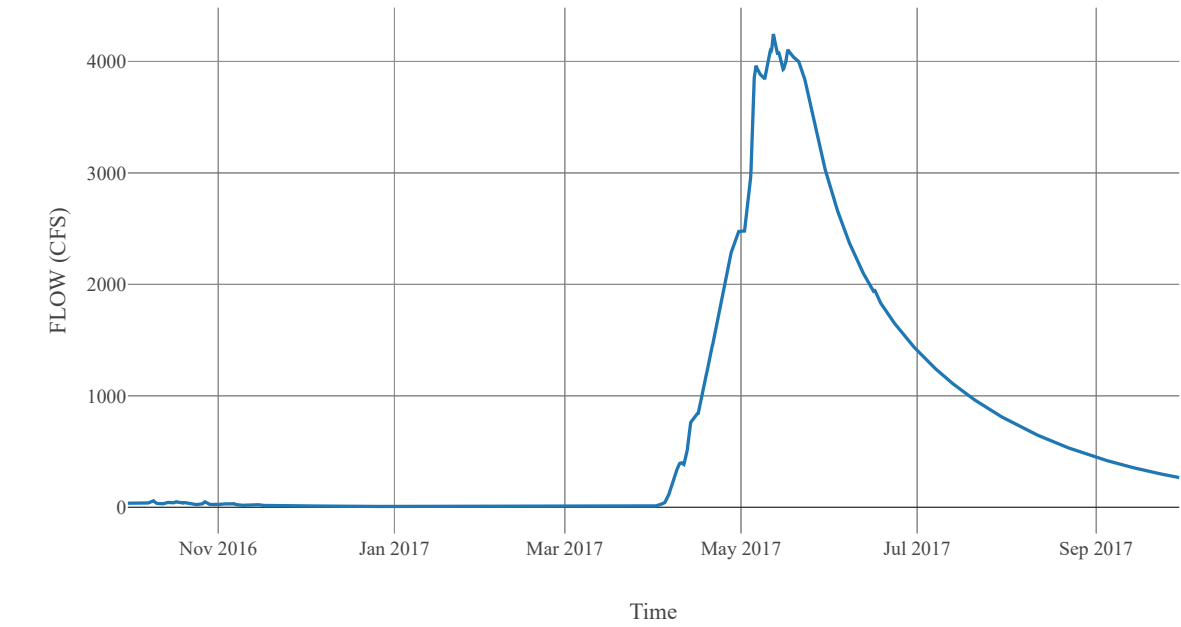
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	13.29
Storage Coefficient	13.29

Baseflow	
Method	Linear Reservoir

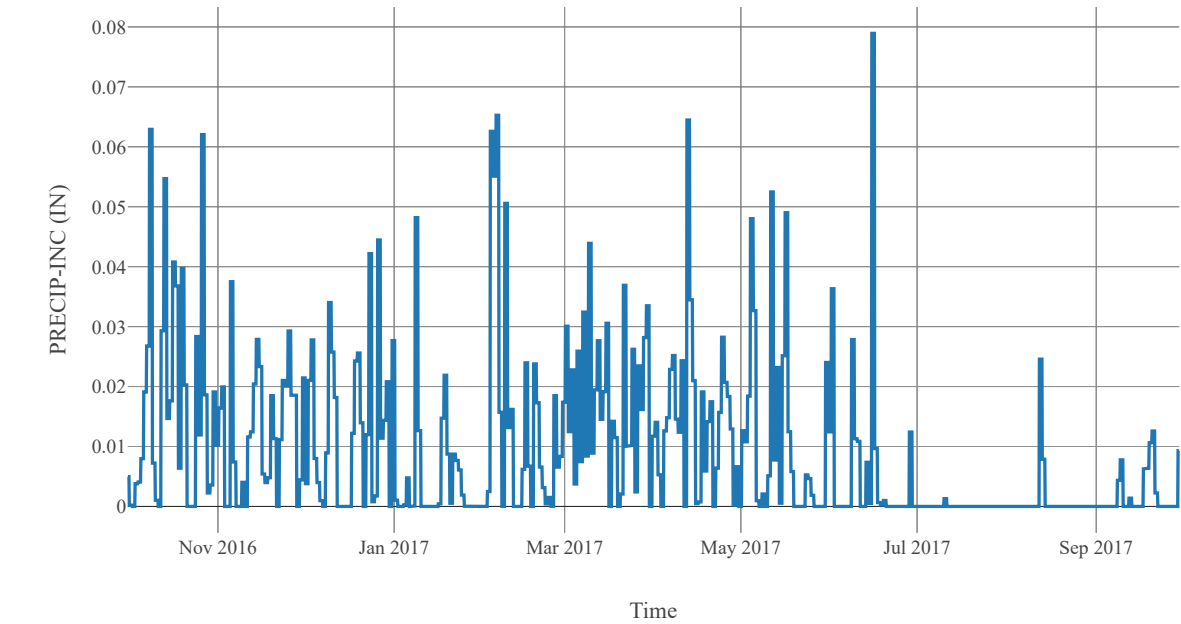
Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	265.8
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1329
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	527795.63	Ac-ft
Precipitation Volume	1092018.67	Ac-ft
Loss Volume	826102.52	Ac-ft
Excess Volume	3234.41	Ac-ft

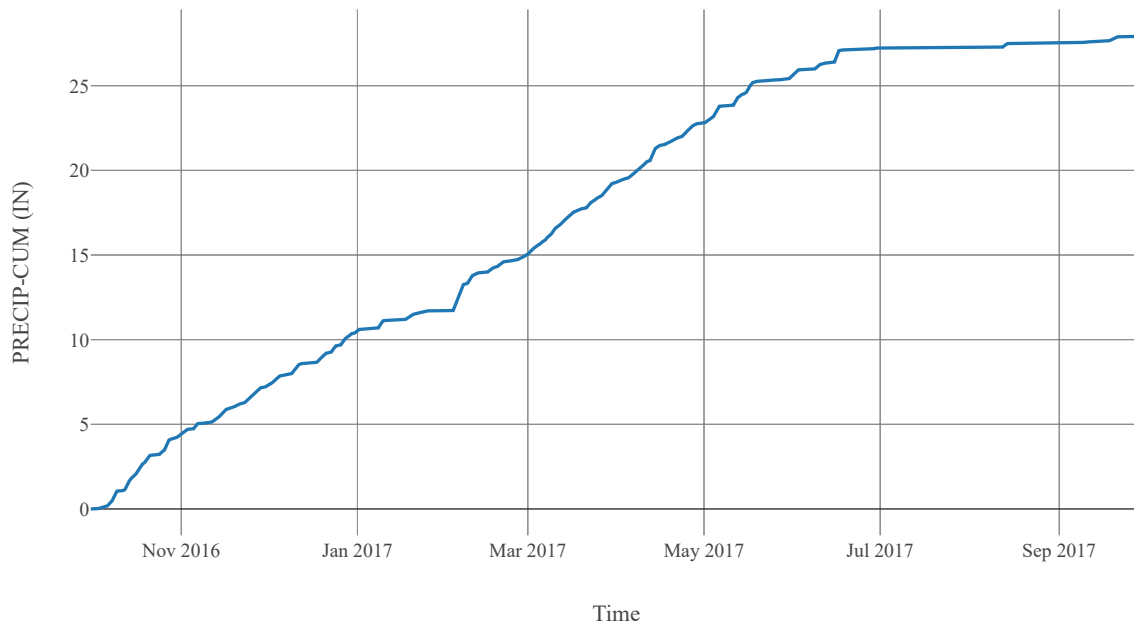
Outflow



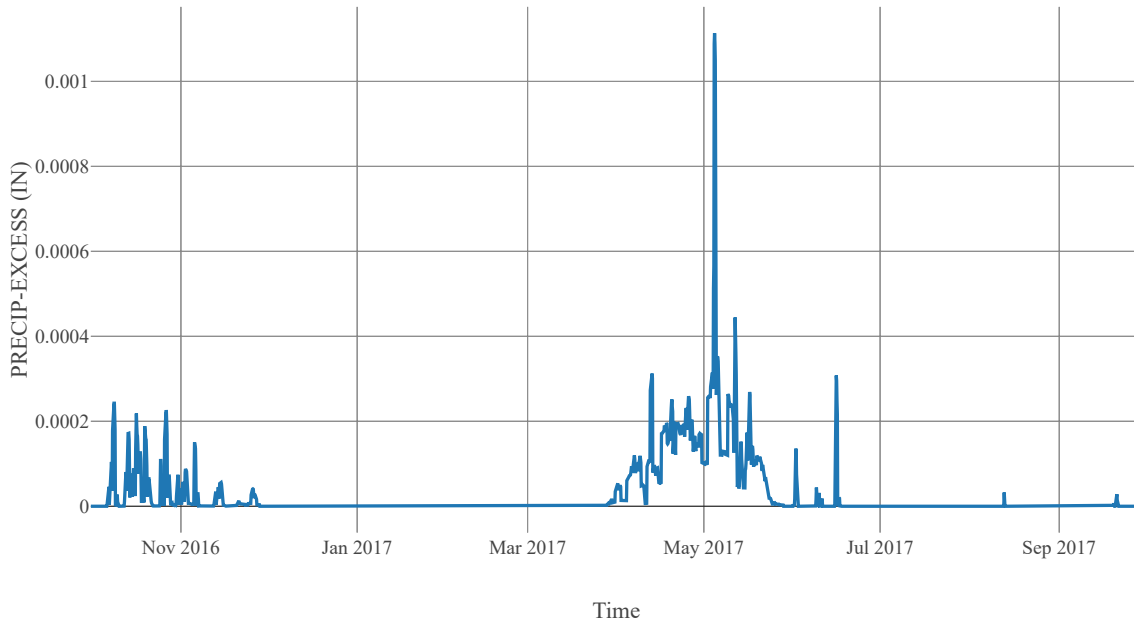
Precipitation



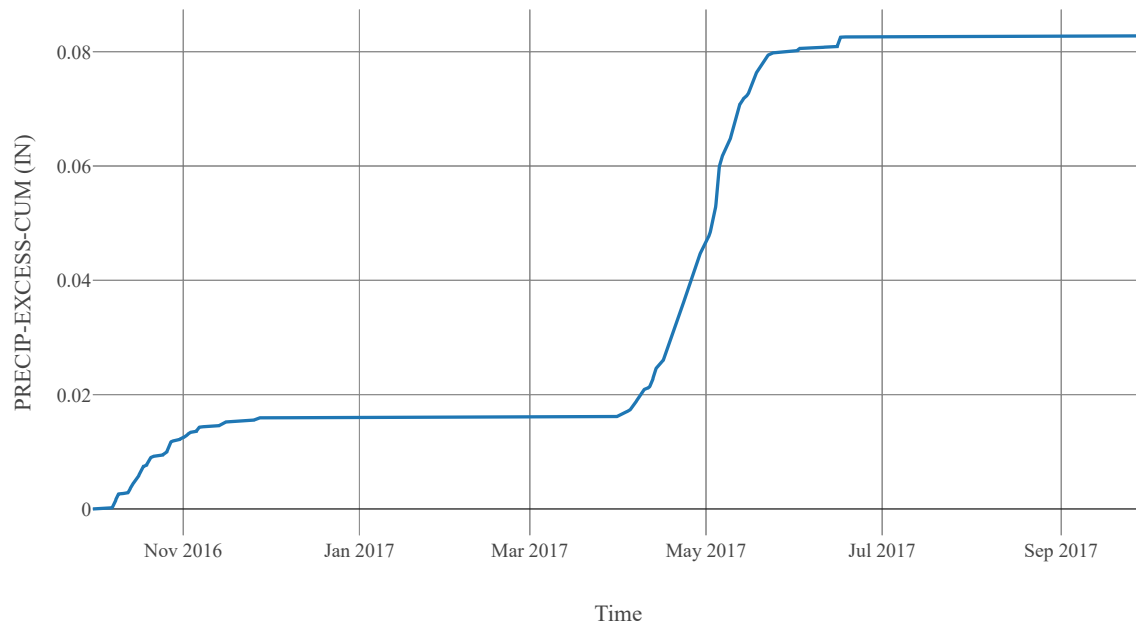
Cumulative Precipitation



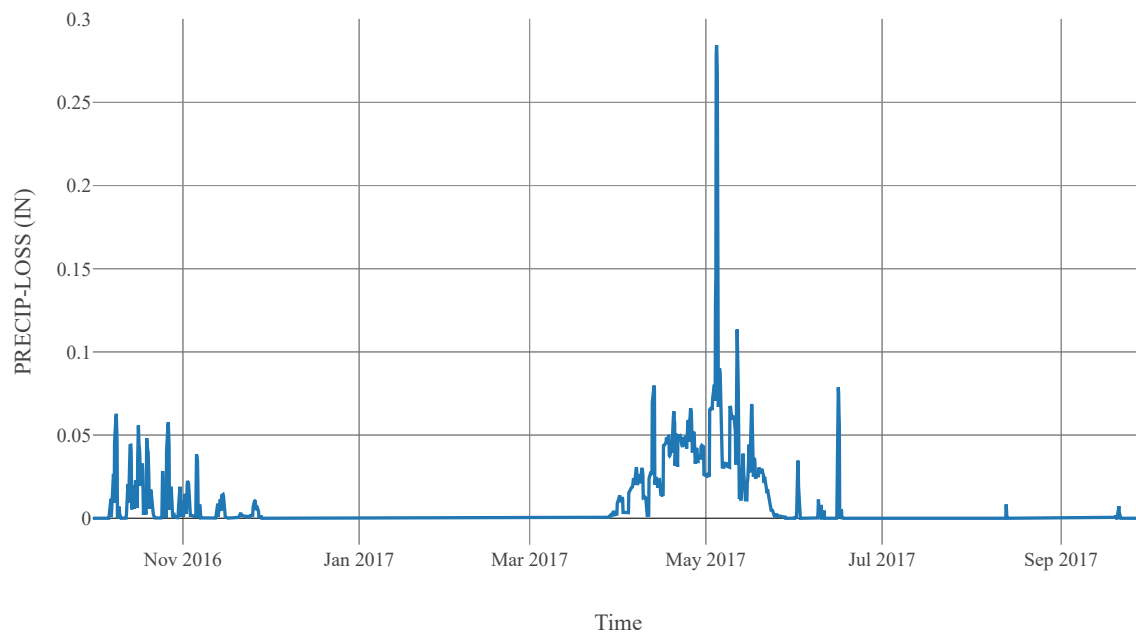
Excess Precipitation



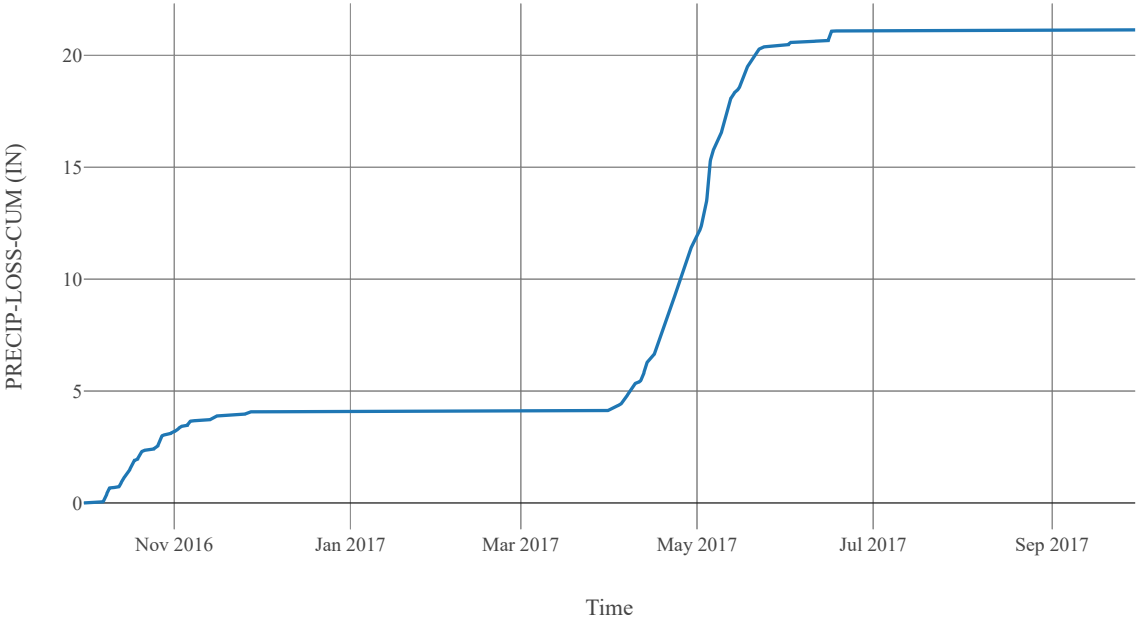
Cumulative Excess Precipitation



Precipitation Loss

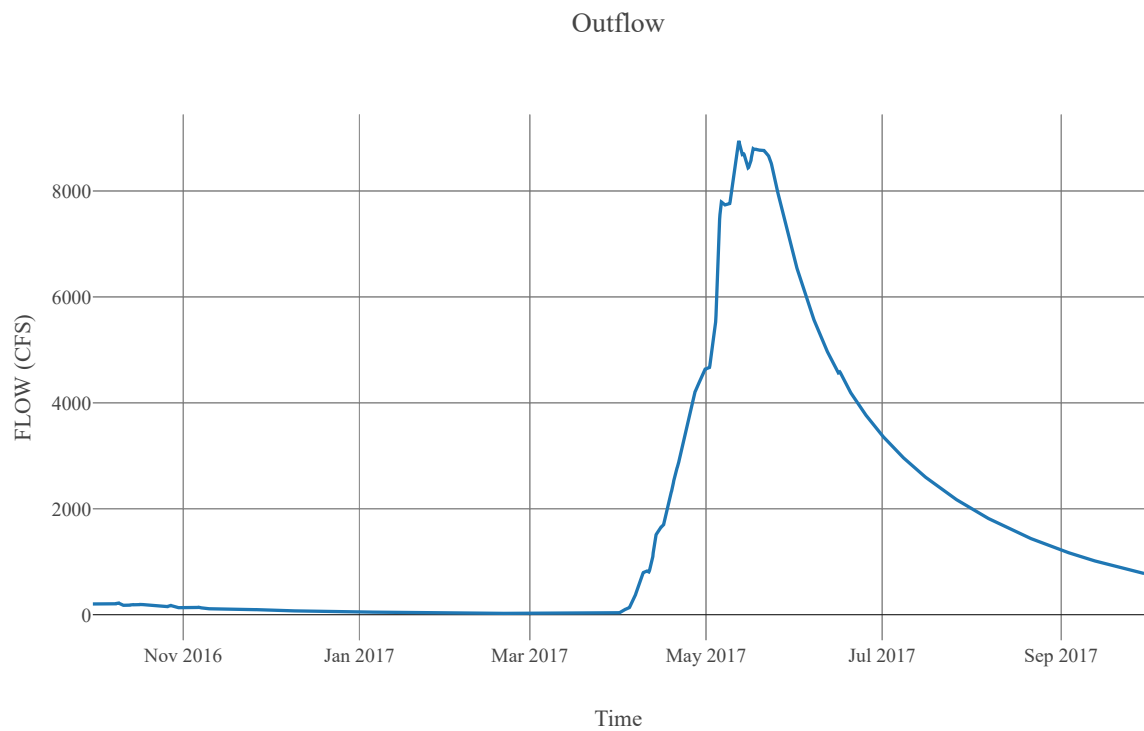


Cumulative Precipitation Loss



Junction : WKettleRv_CF

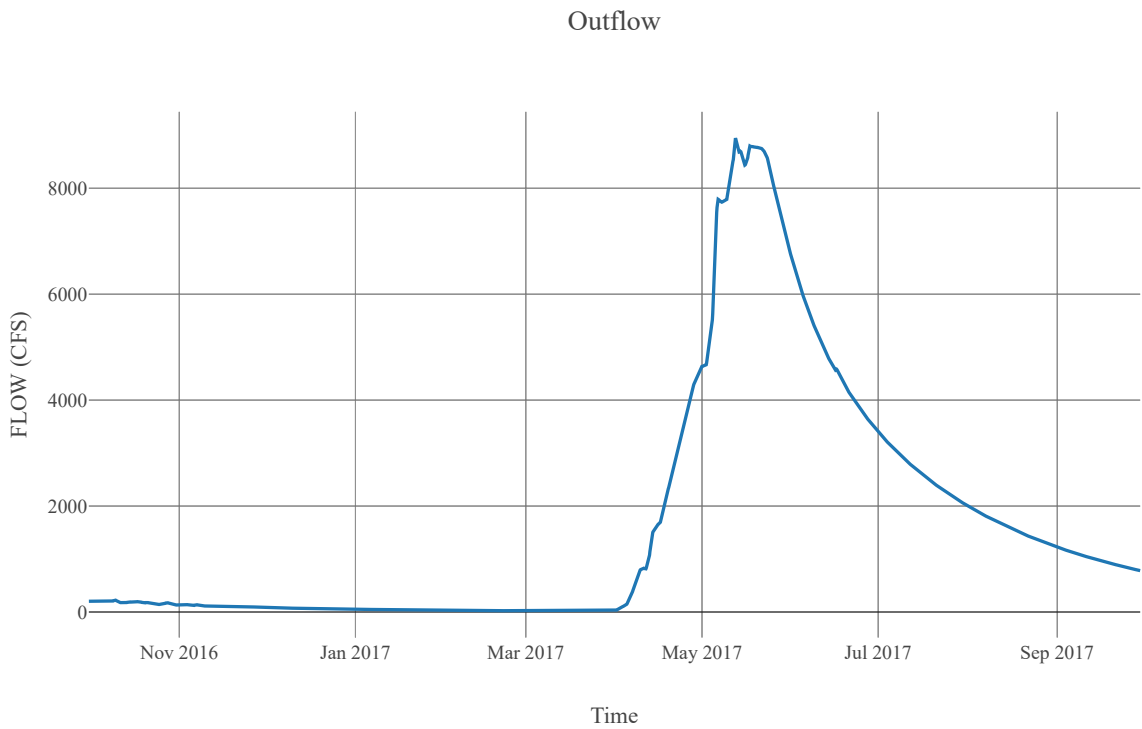
Downstream : KettleRv_R030



Reach : KettleRv_R030

Loss Method : None
Downstream : Kettle Nr Ferry

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	139454
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	KettleRv_R030
	Energy Slope
	0
	Right Mannings N
	0.15



Subbasin : KettleRv_S030

Area : 625.53
Latitude : 49.1
Longitude : -118.9
Downstream : Kettle Nr Ferry

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.25
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

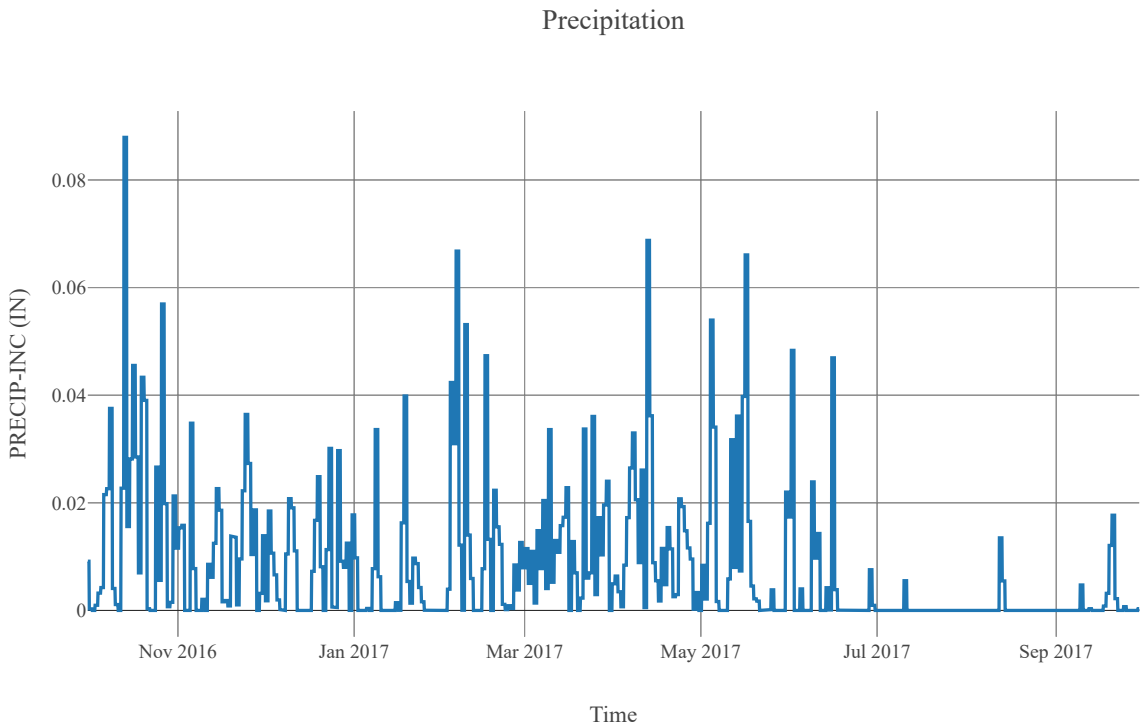
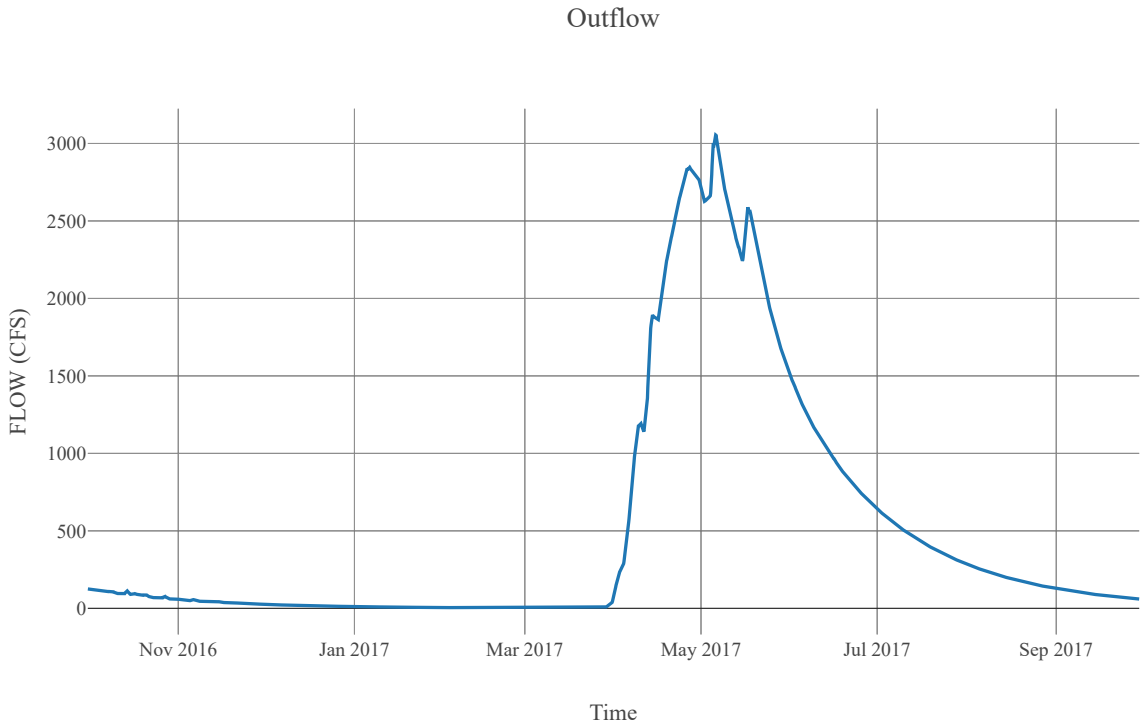
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.21
Storage Coefficient	9.21

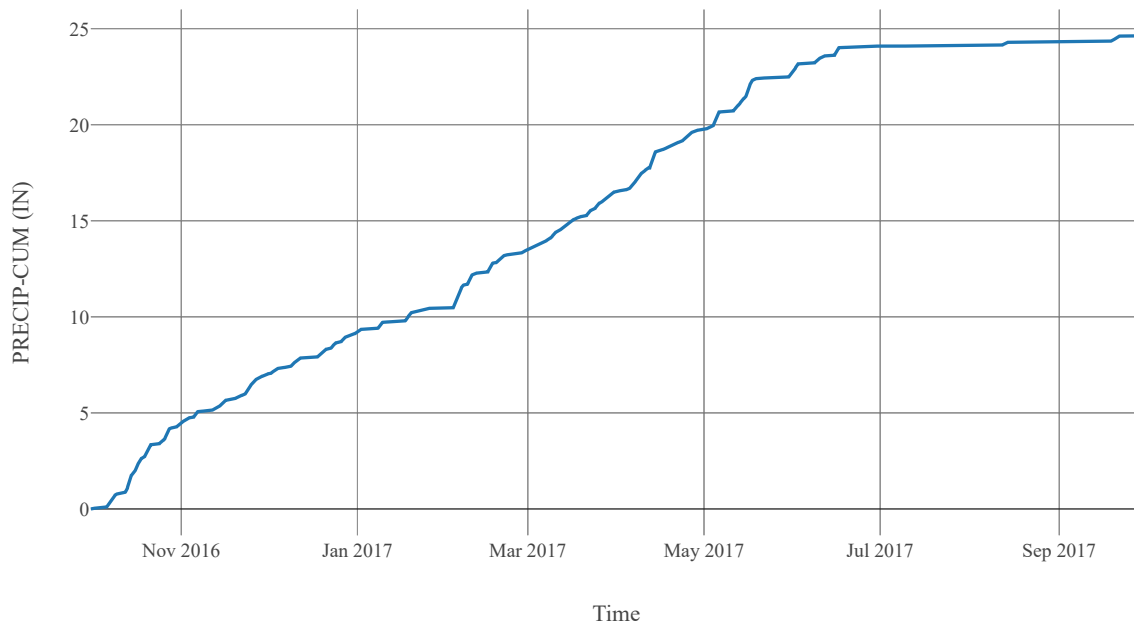
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	184.2
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	921
		Number Steps	1

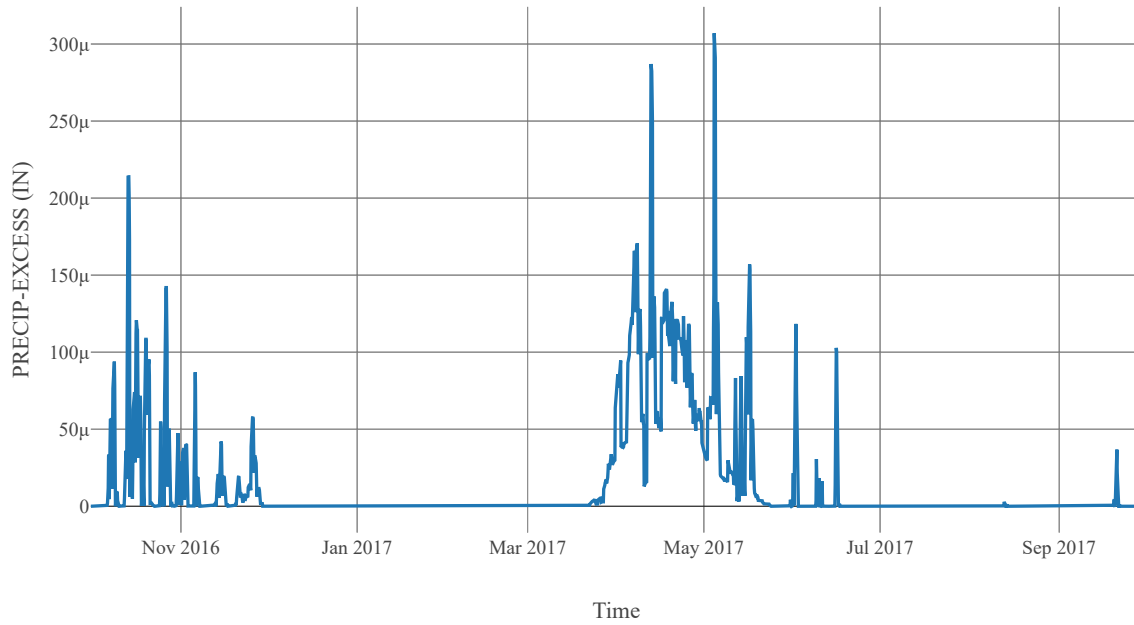
Statistics		
Name	Value	Unit
Baseflow Volume	358884.29	Ac-ft
Precipitation Volume	821509.23	Ac-ft
Loss Volume	591352.26	Ac-ft
Excess Volume	1482.09	Ac-ft



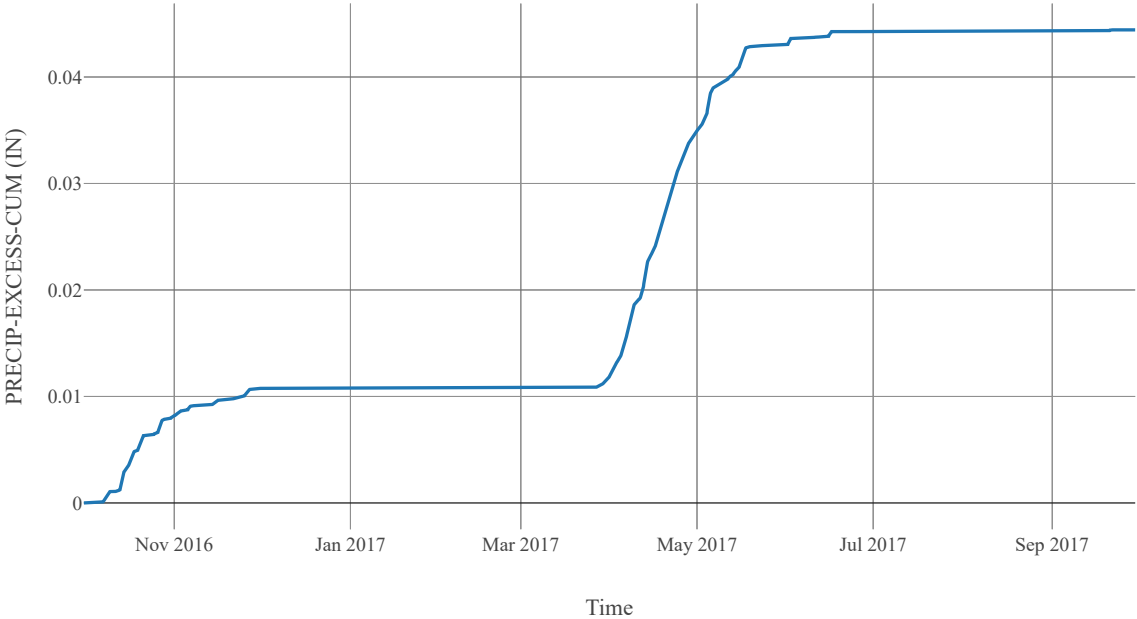
Cumulative Precipitation



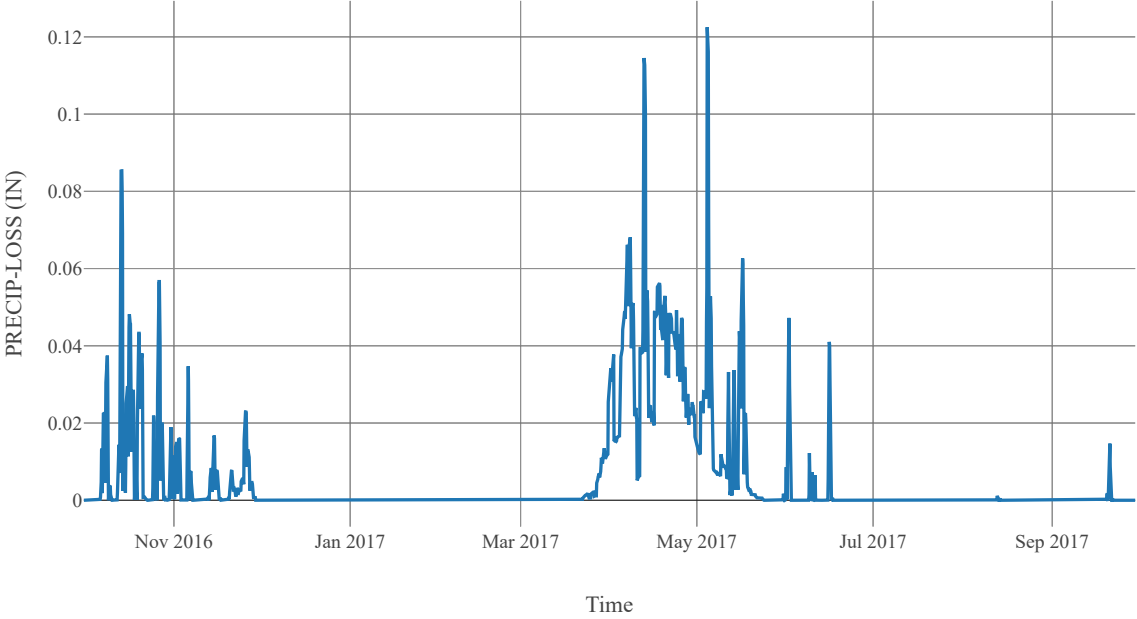
Excess Precipitation



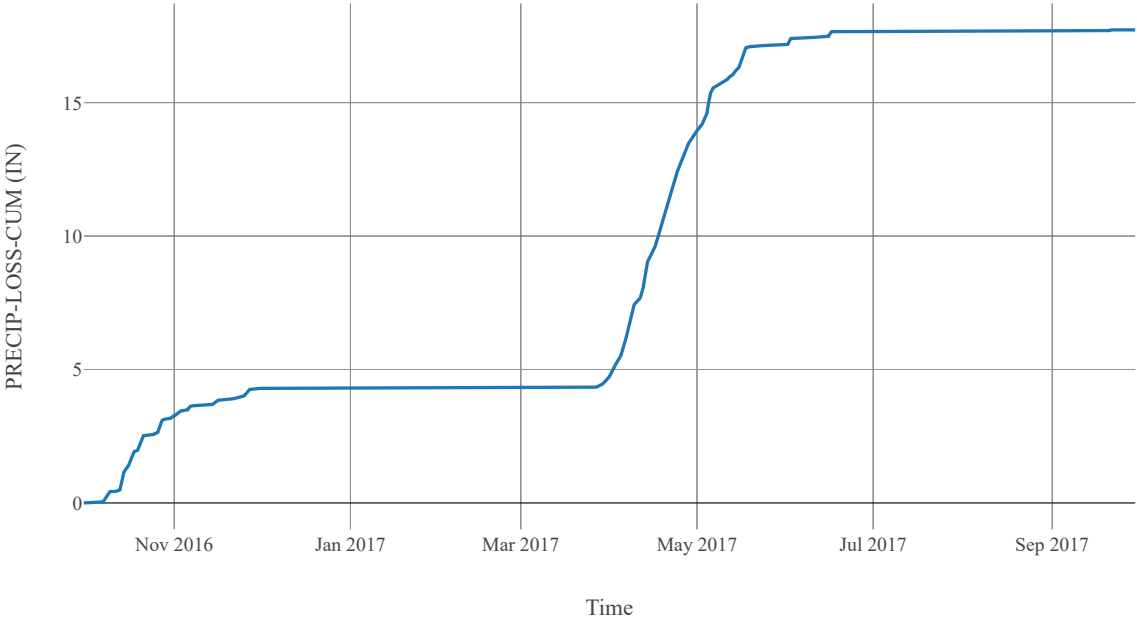
Cumulative Excess Precipitation



Precipitation Loss

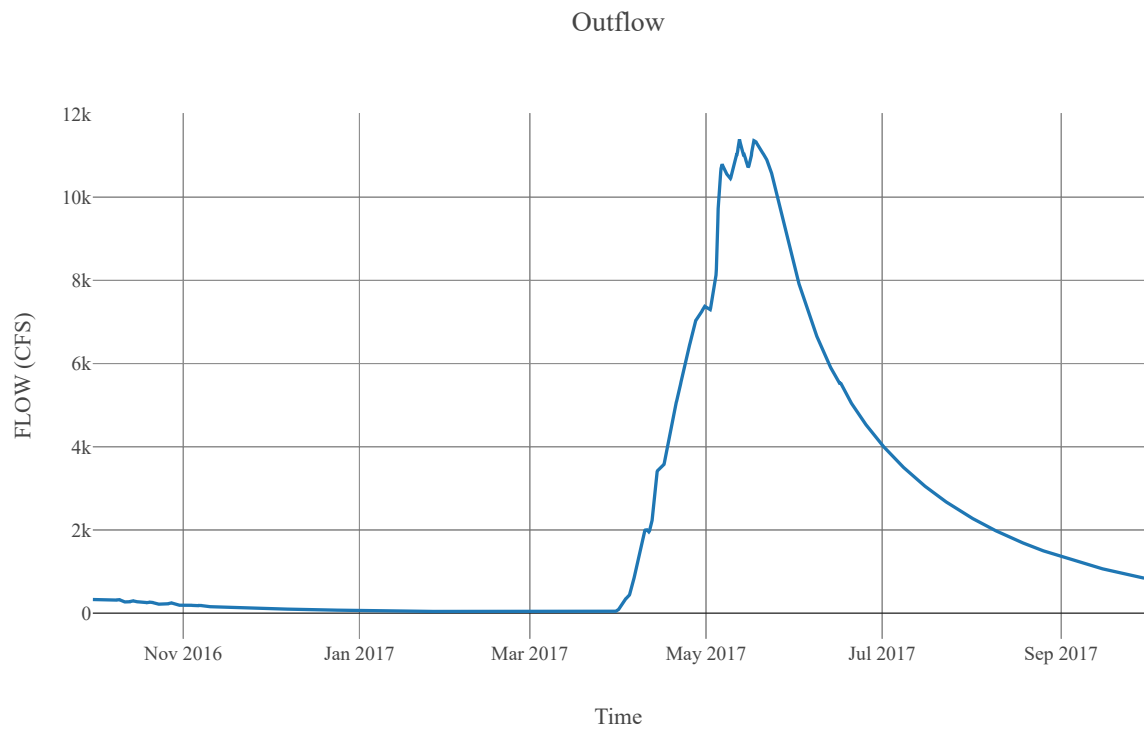


Cumulative Precipitation Loss



Junction : KettleNrFerry

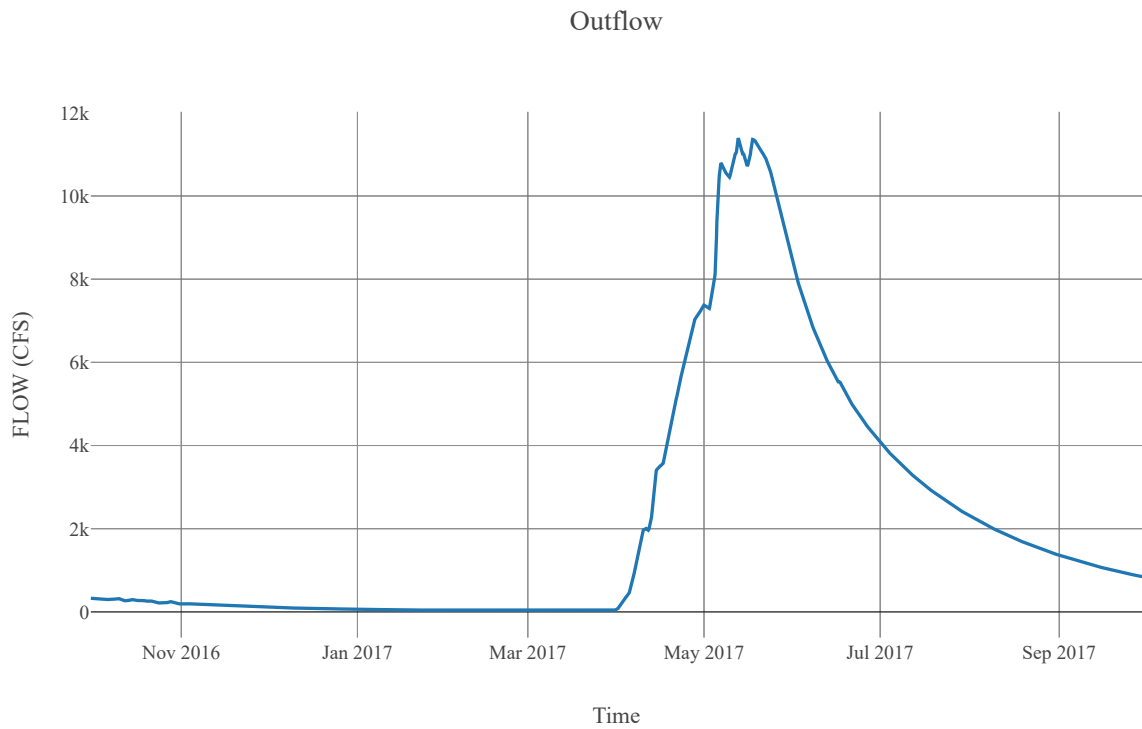
Observed Hydrograph : Kettle river near ferry
Downstream : KettleRv_R025



Reach : KettleRv_R025

Loss Method : None
Downstream : GranbyRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	172918
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	KettleRv_R025
	Energy Slope
	0
	Right Mannings N
	0.15



Subbasin : GranbyRv_S010

Area : 796.08
Observed Hydrograph : Granby river at grand forks
Latitude : 49.46
Longitude : -118.45
Downstream : GranbyRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.07
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

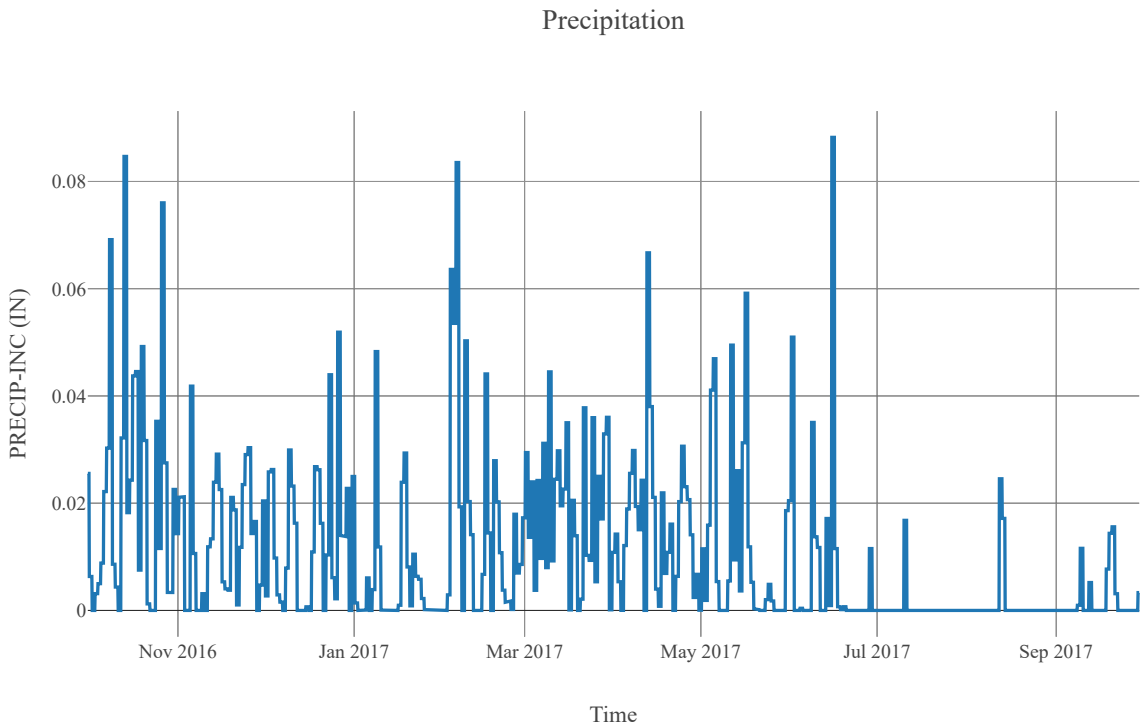
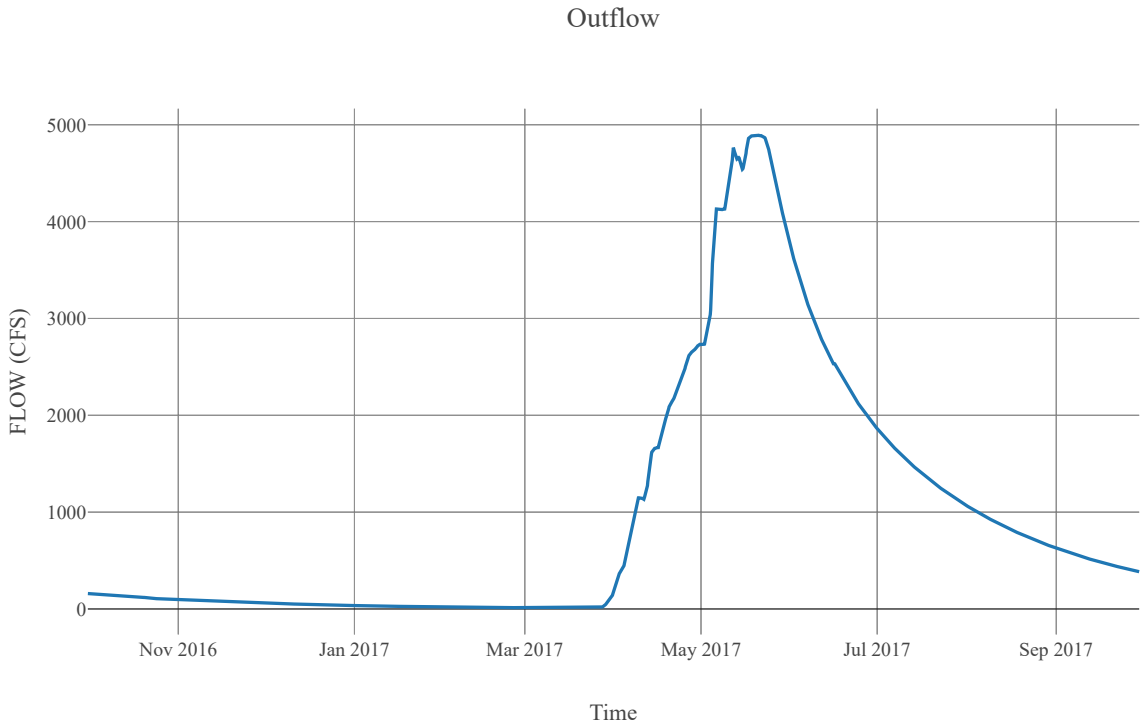
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	14.13
Storage Coefficient	14.13

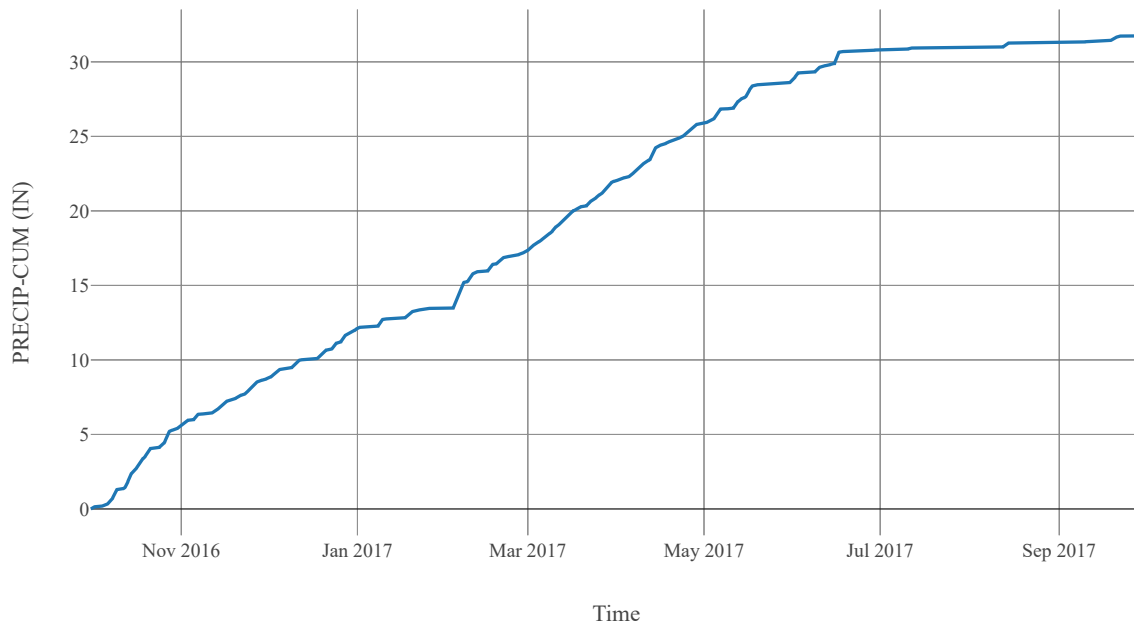
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	282.6
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	1413
		Number Steps	1

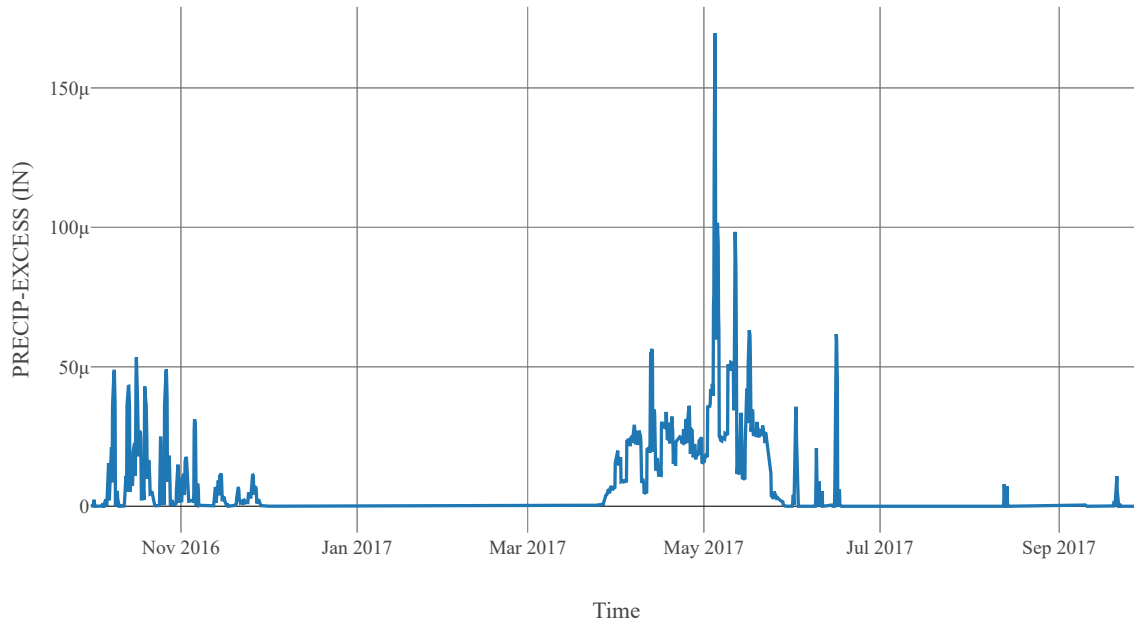
Statistics		
Name	Value	Unit
Baseflow Volume	700329.77	Ac-ft
Precipitation Volume	1347783.59	Ac-ft
Loss Volume	1041318.67	Ac-ft
Excess Volume	729.43	Ac-ft



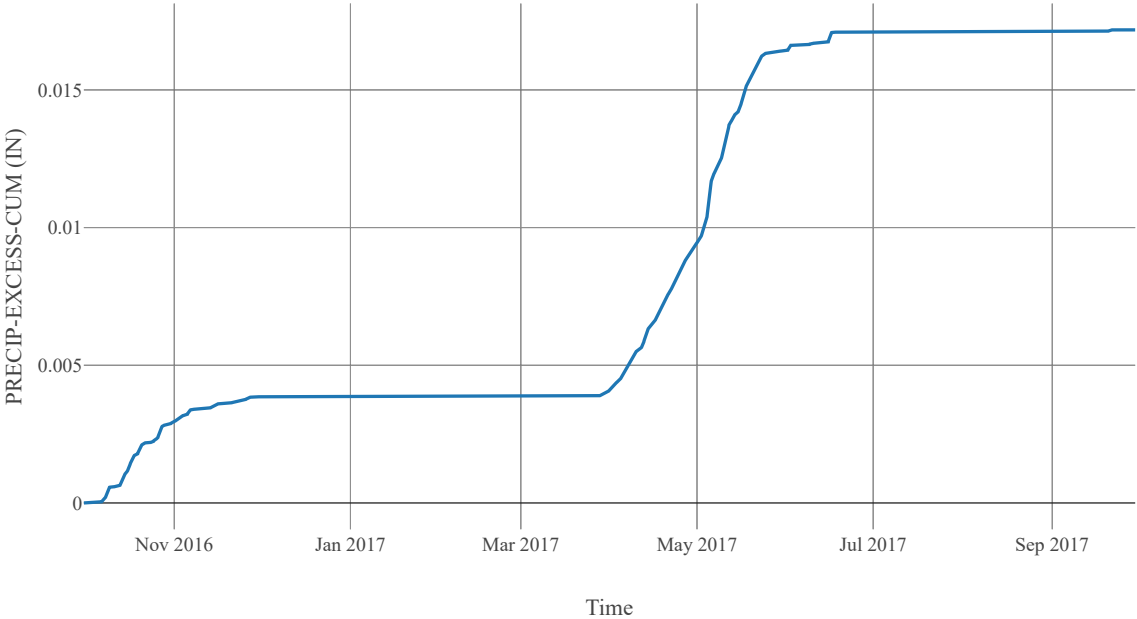
Cumulative Precipitation



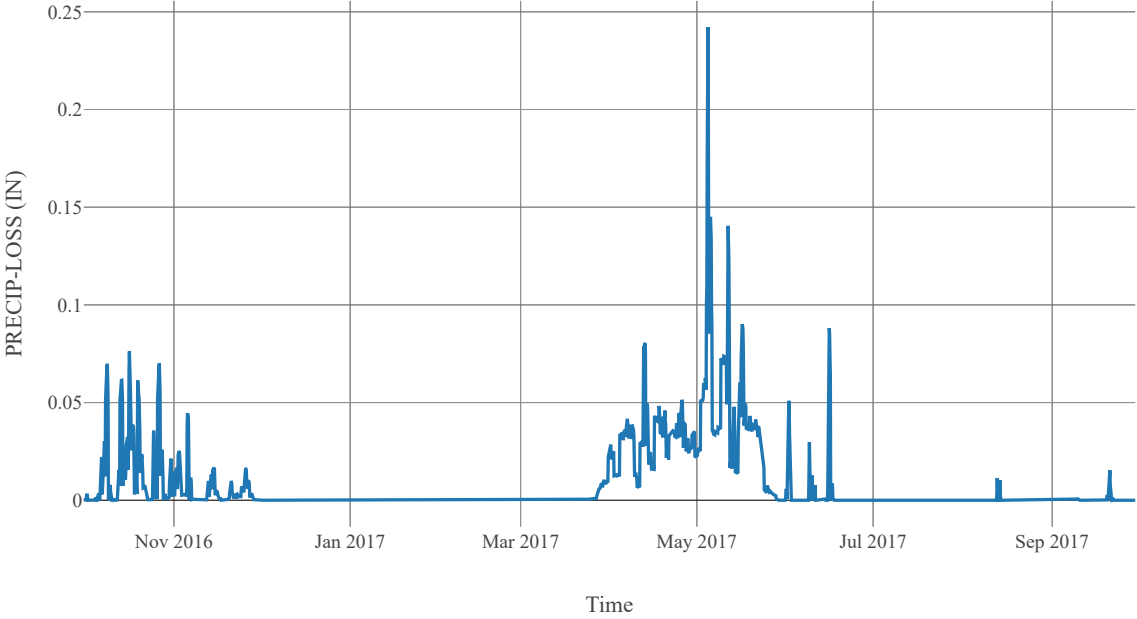
Excess Precipitation



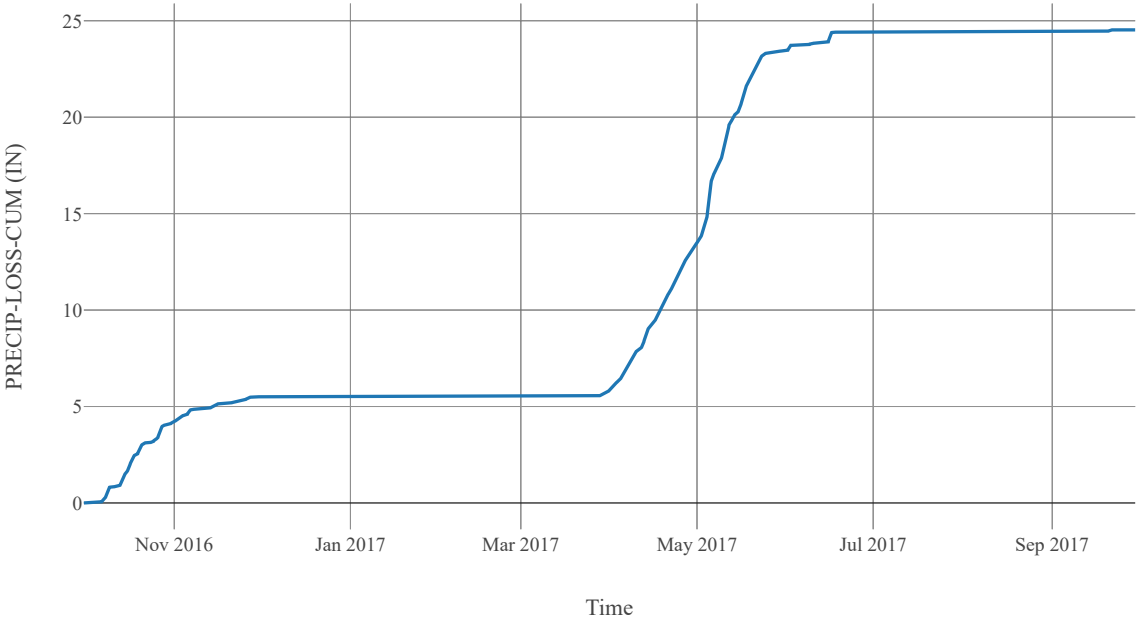
Cumulative Excess Precipitation



Precipitation Loss

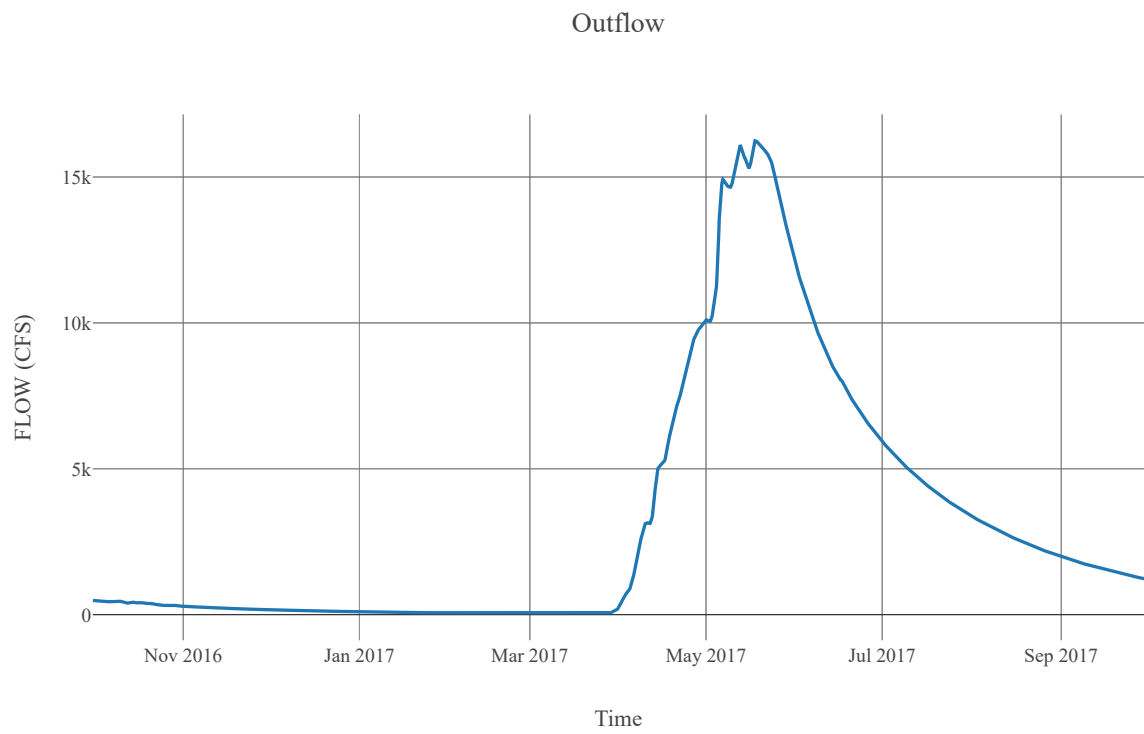


Cumulative Precipitation Loss



Junction : GranbyRv_CF

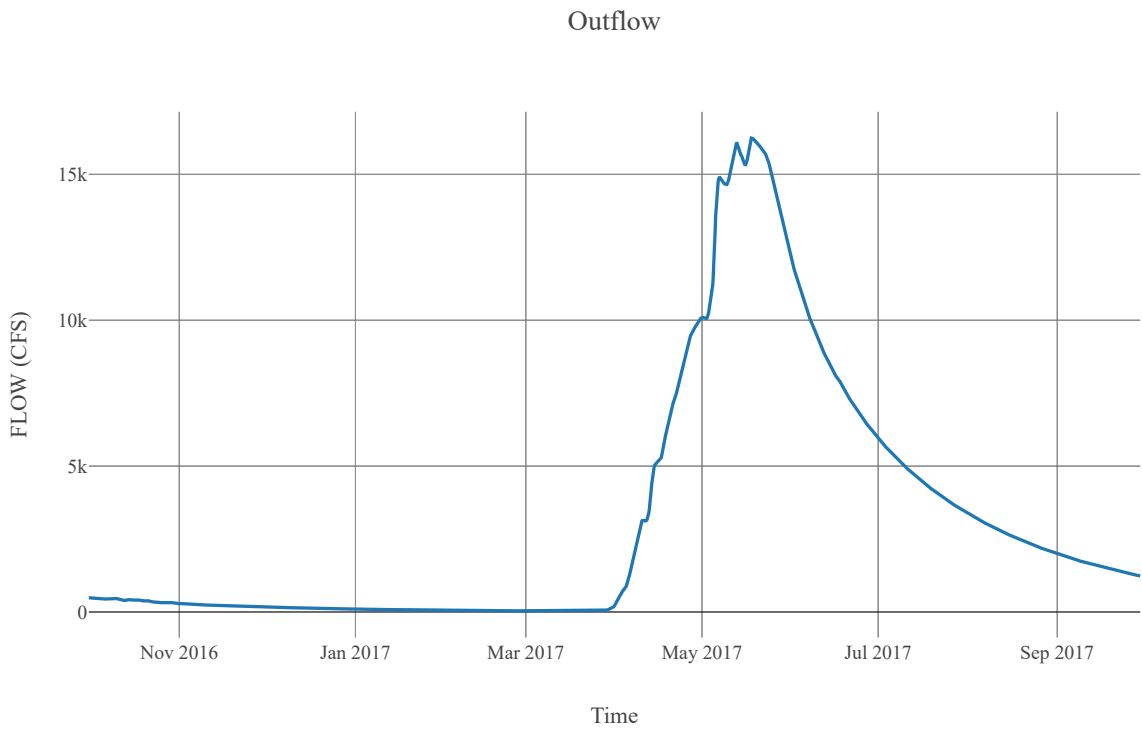
Downstream : KettleRv_R020



Reach : KettleRv_R020

Loss Method : None
Downstream : Kettle Nr Laurier

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	113985
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	KettleRv_R020
	Energy Slope
	0
	Right Mannings N
	0.15



Subbasin : ChristinaLk_S010

Area : 201.66
Latitude : 49.15
Longitude : -118.2
Downstream : ChristinaLk_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	4.94
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

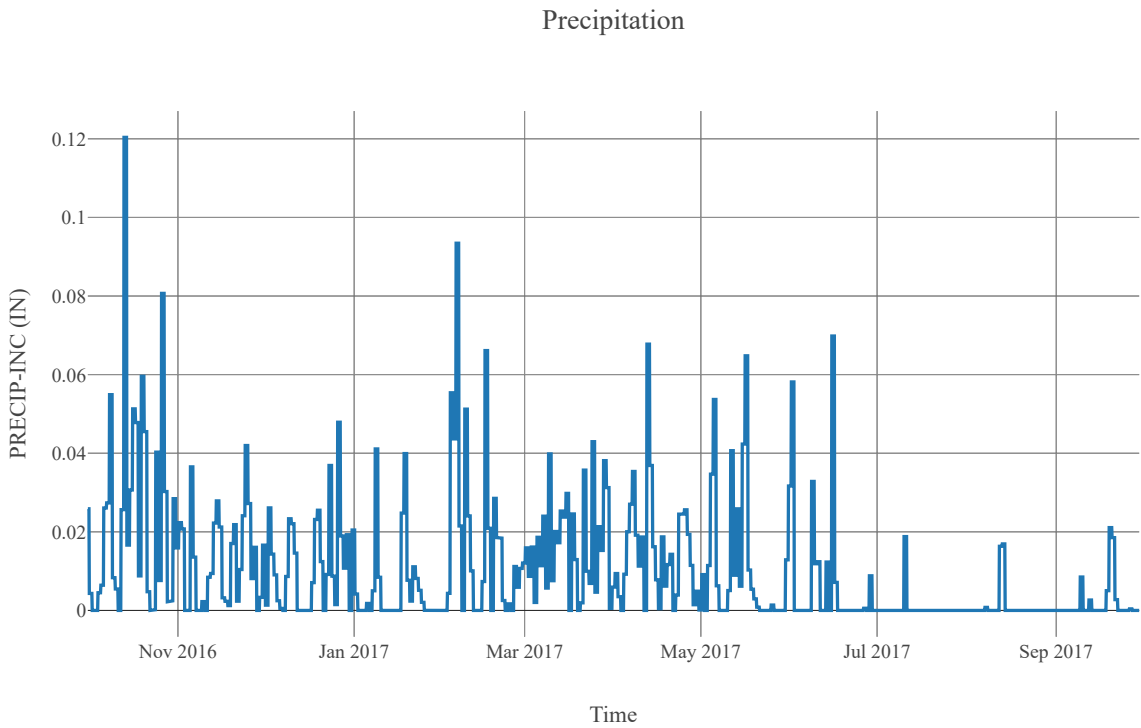
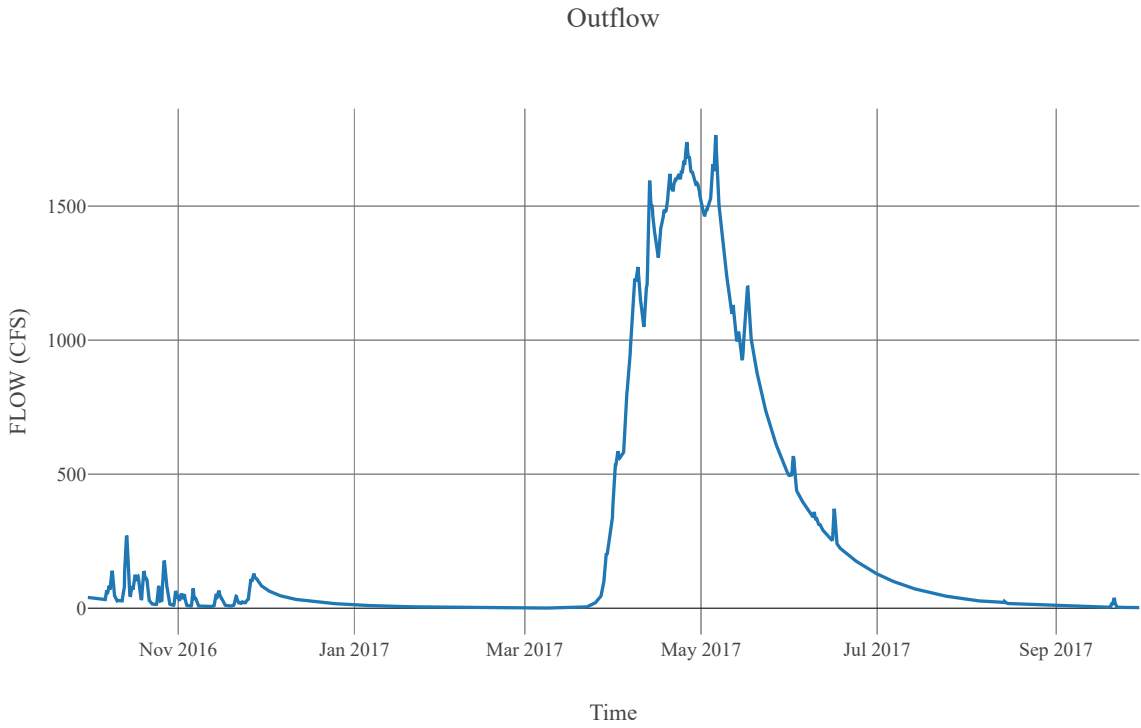
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.49
Storage Coefficient	5.49

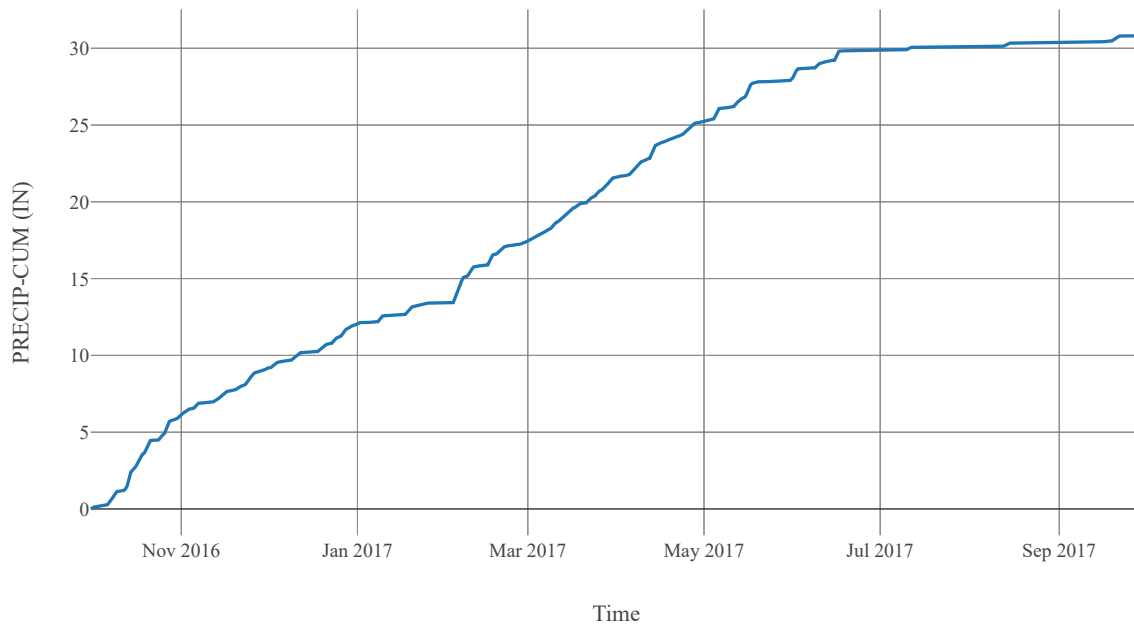
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	109.8
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	549
		Number Steps	1

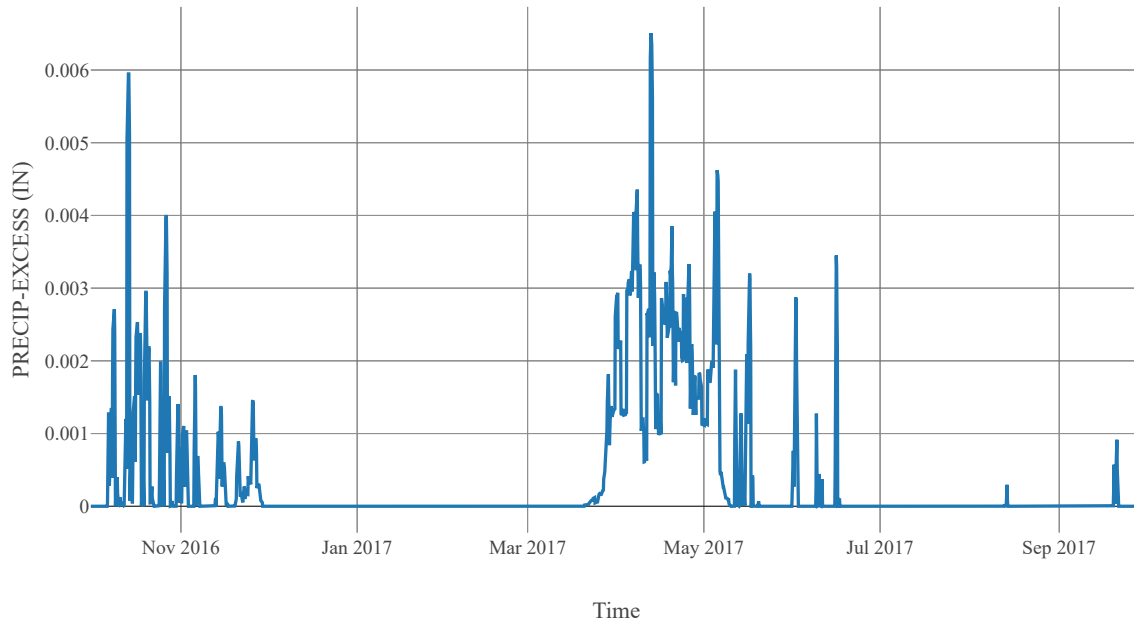
Statistics		
Name	Value	Unit
Baseflow Volume	161258.34	Ac-ft
Precipitation Volume	331322.4	Ac-ft
Loss Volume	235639.74	Ac-ft
Excess Volume	12245.53	Ac-ft



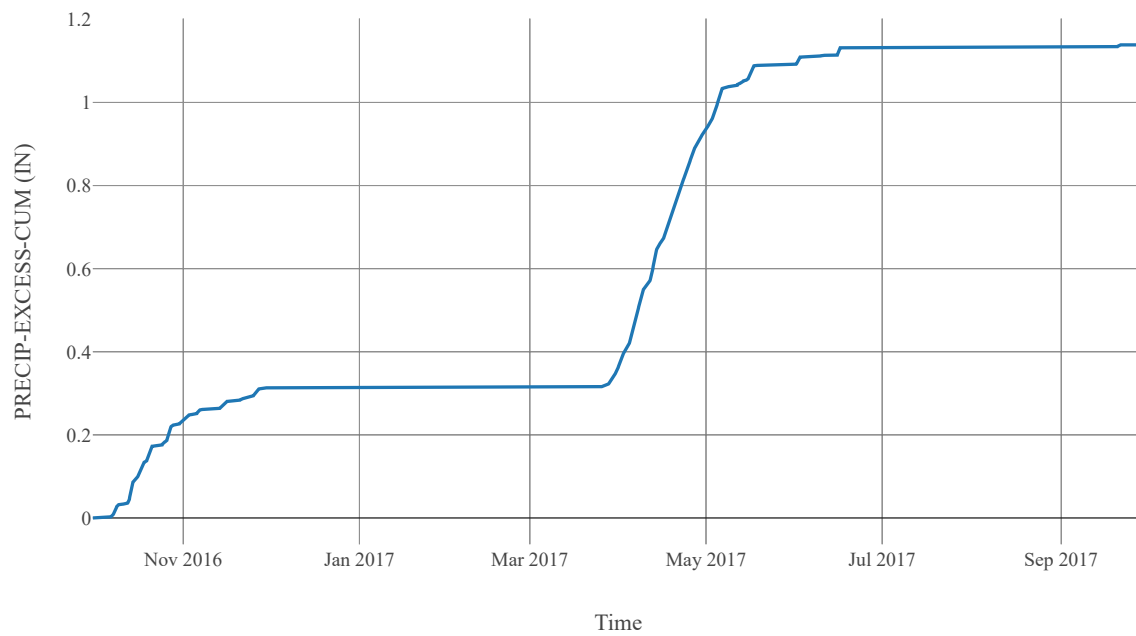
Cumulative Precipitation



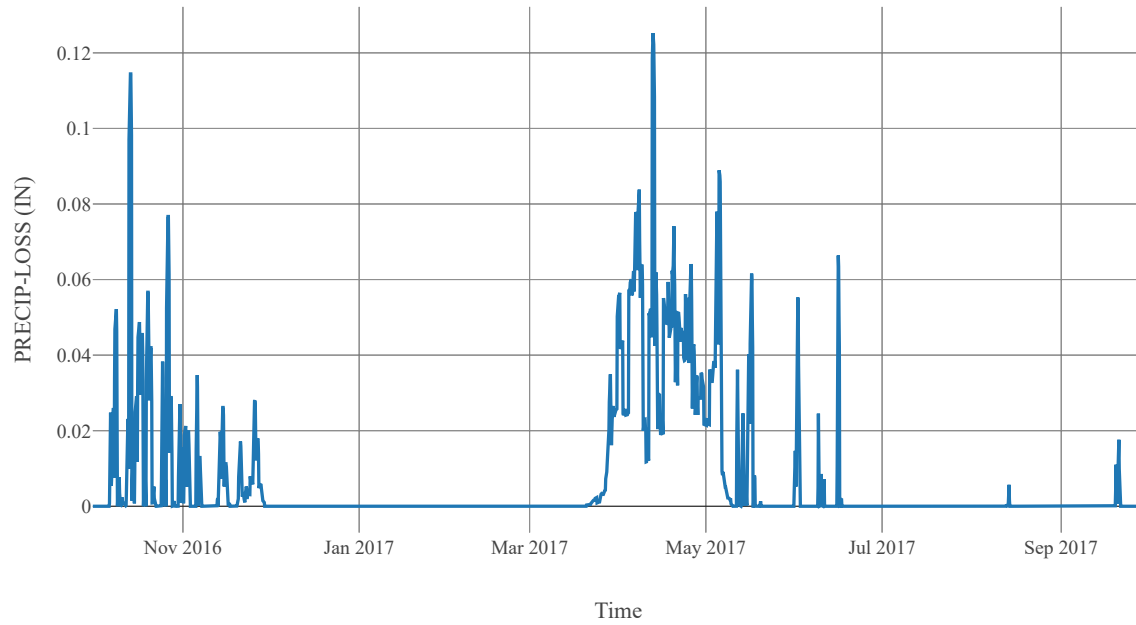
Excess Precipitation



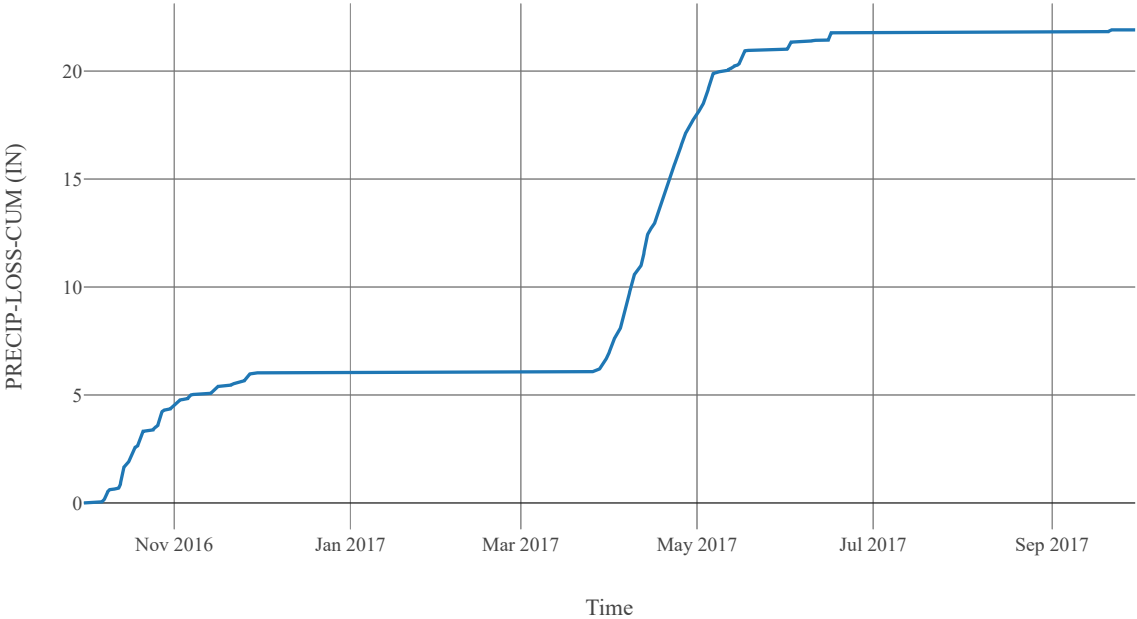
Cumulative Excess Precipitation



Precipitation Loss

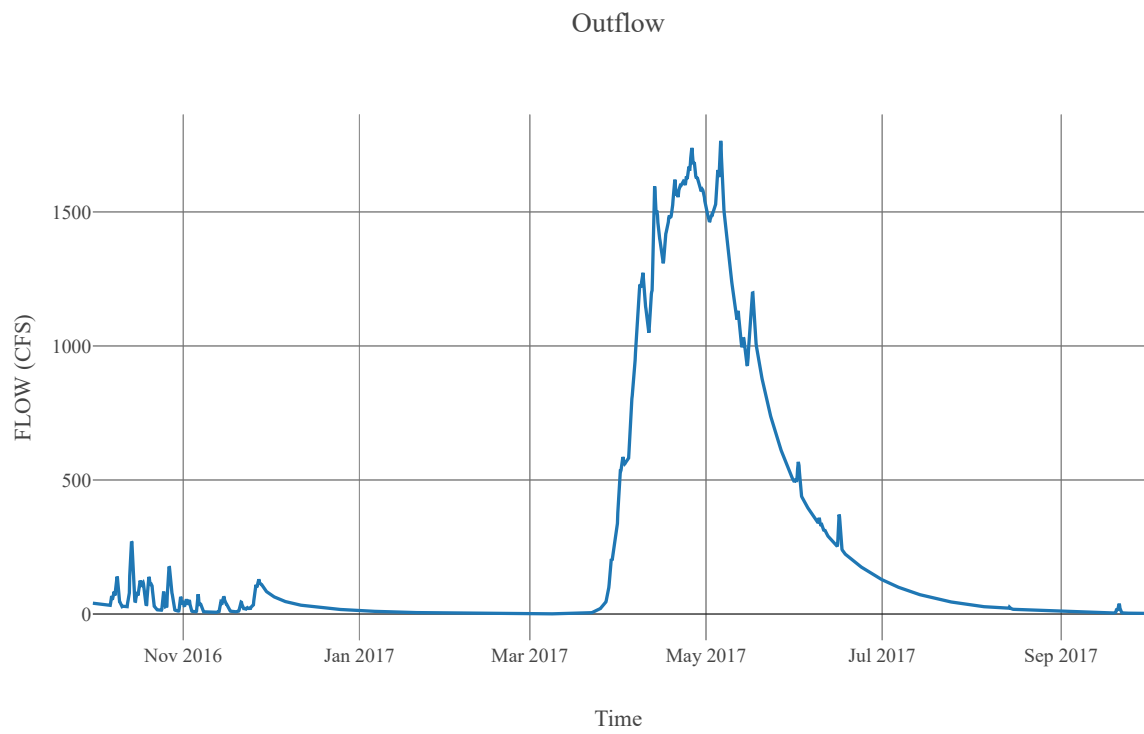


Cumulative Precipitation Loss



Junction : ChristinaLk_IN

Downstream : Christina Lk



Subbasin : BigSheepCk_S010

Area : 140.26
Latitude : 49.15
Longitude : -117.98
Downstream : Big Sheep Ck

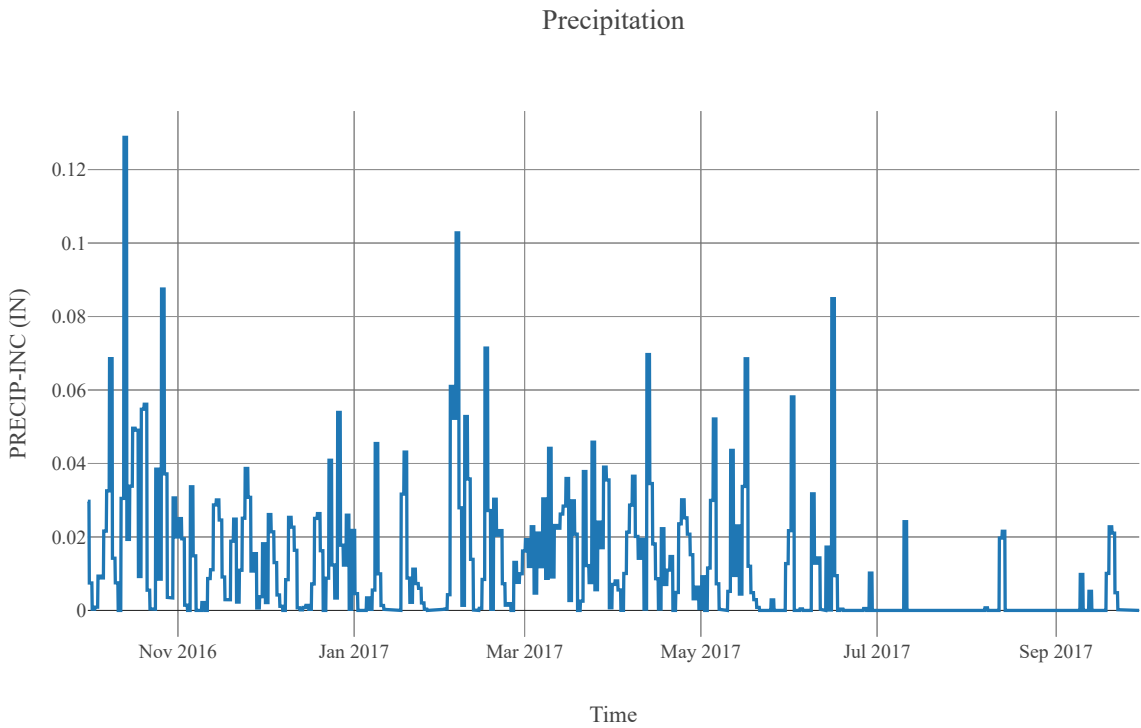
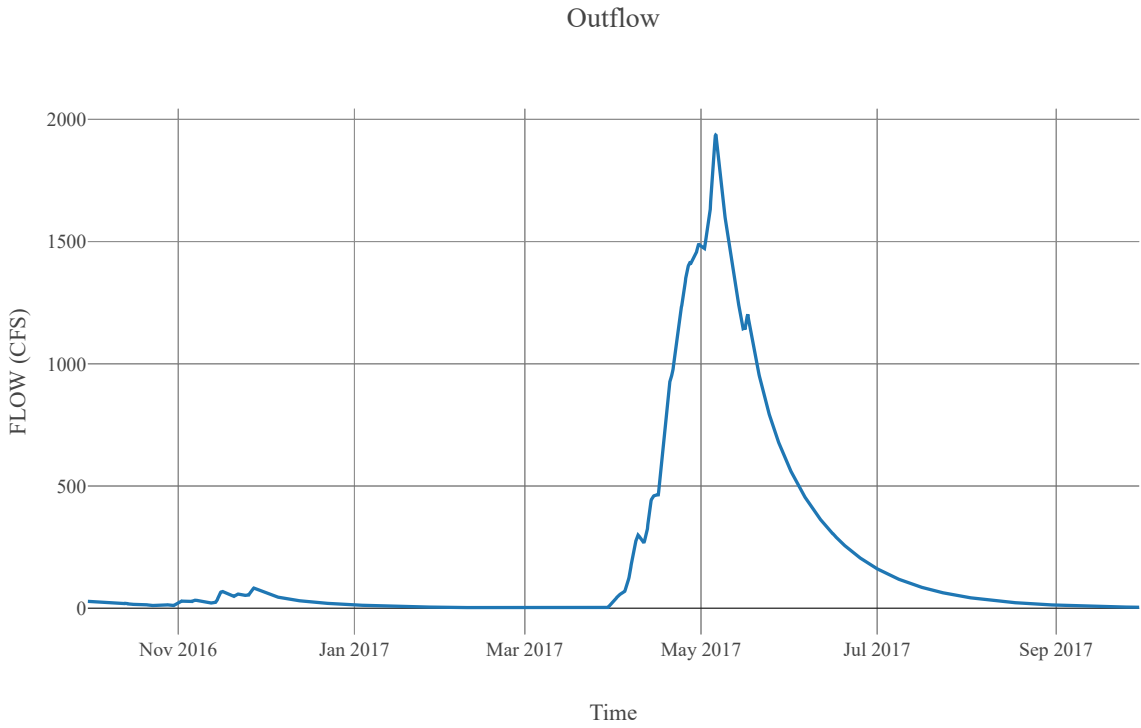
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.13
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

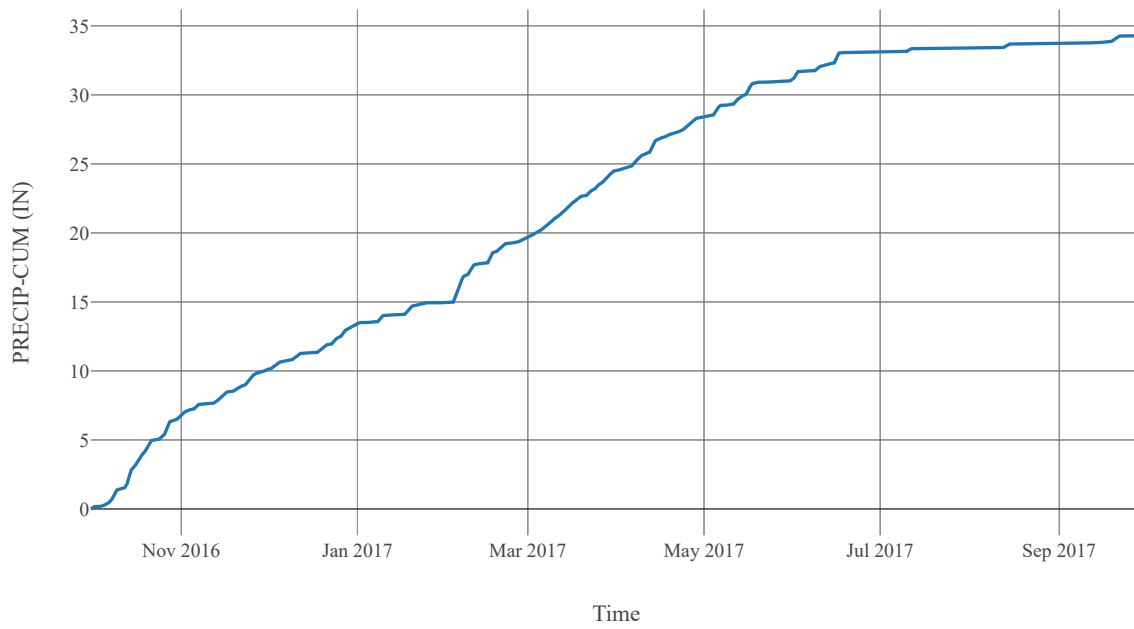
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.83
Storage Coefficient	5.83

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.2
		Initial Rate
		0
		Layer Number
	2	1
		Storage Coefficient
		116.6
		Number Steps
		1
		Baseflow Fraction
		0.8
		Initial Rate
		0.2
		Layer Number
		2
		Storage Coefficient
		583
		Number Steps
		1

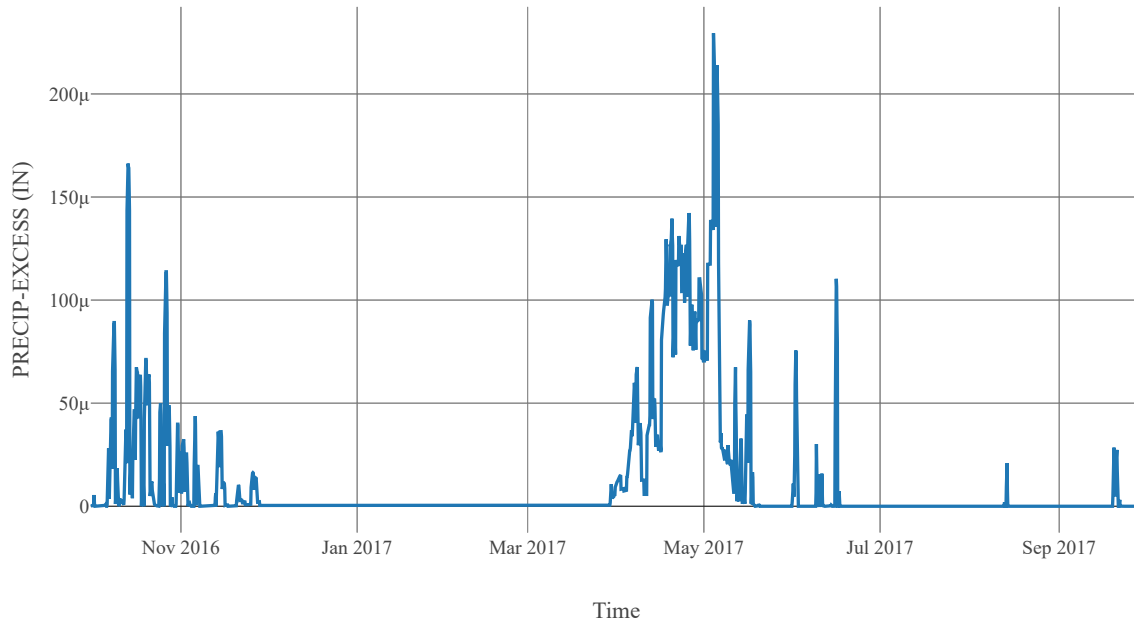
Statistics		
Name	Value	Unit
Baseflow Volume	145091.66	Ac-ft
Precipitation Volume	256385.14	Ac-ft
Loss Volume	200182.23	Ac-ft
Excess Volume	260.58	Ac-ft



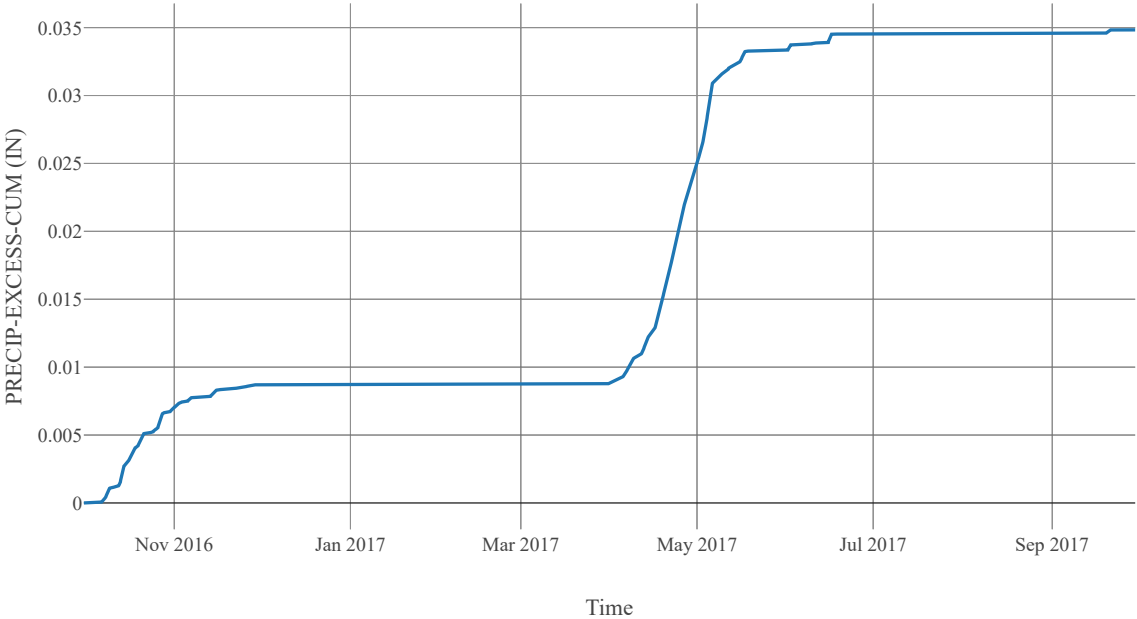
Cumulative Precipitation



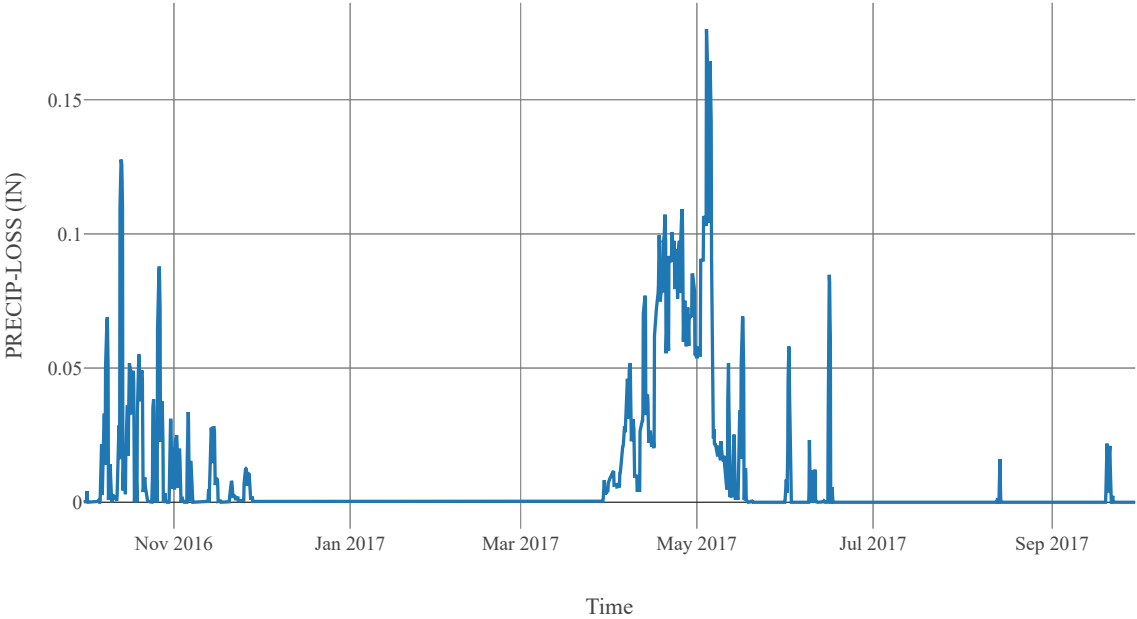
Excess Precipitation



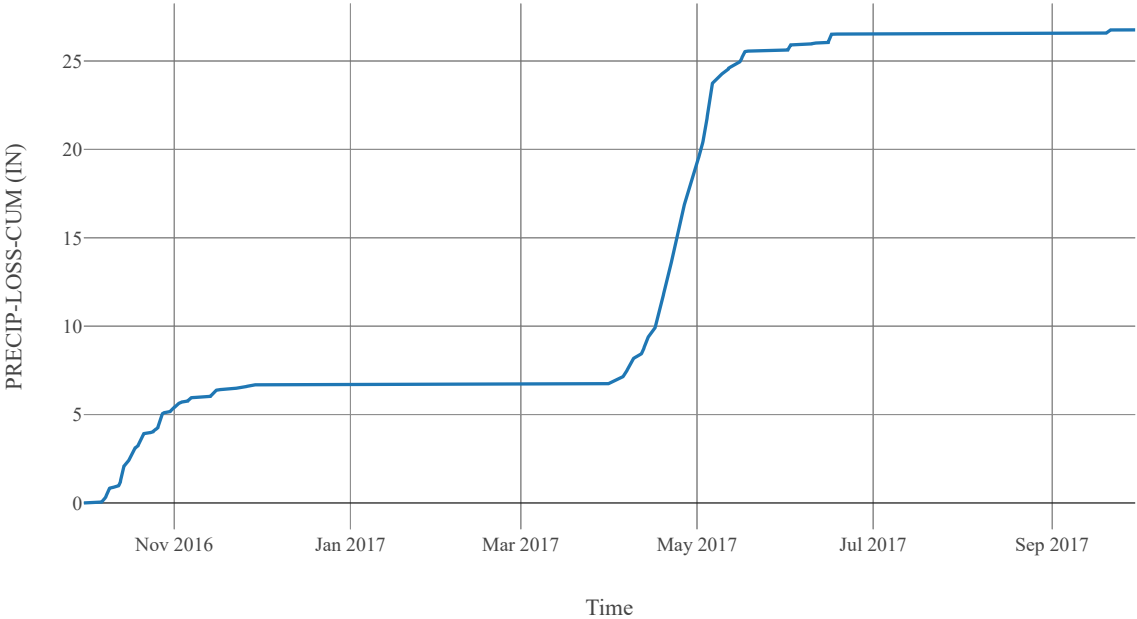
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss

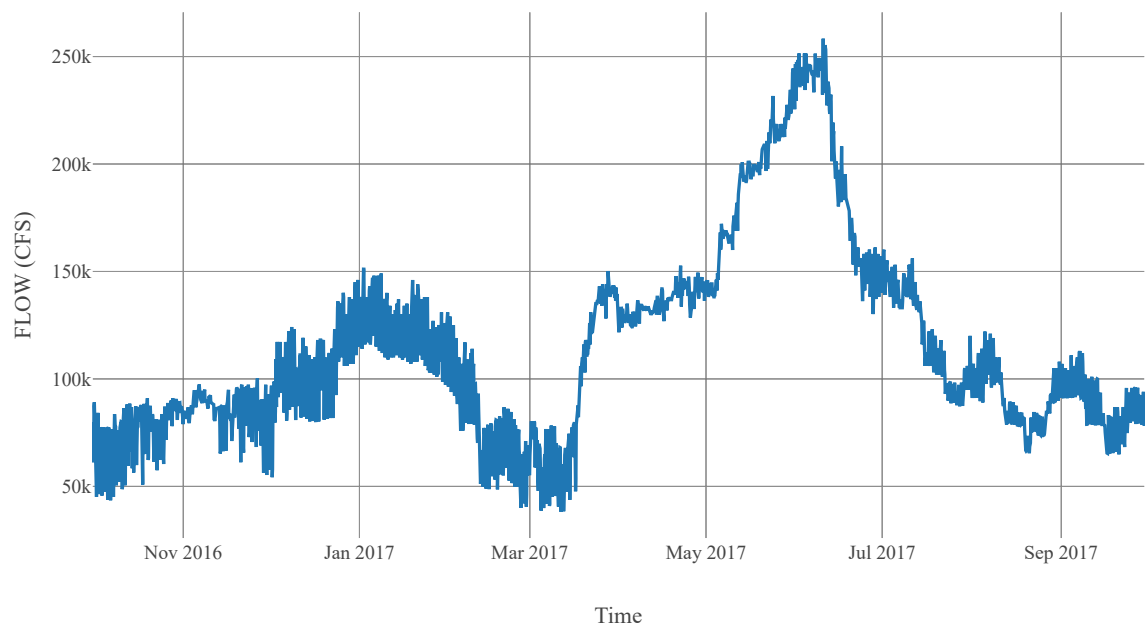


Reach : MidColumbia_R115

Loss Method : None
Downstream : BigSheepCk_CF

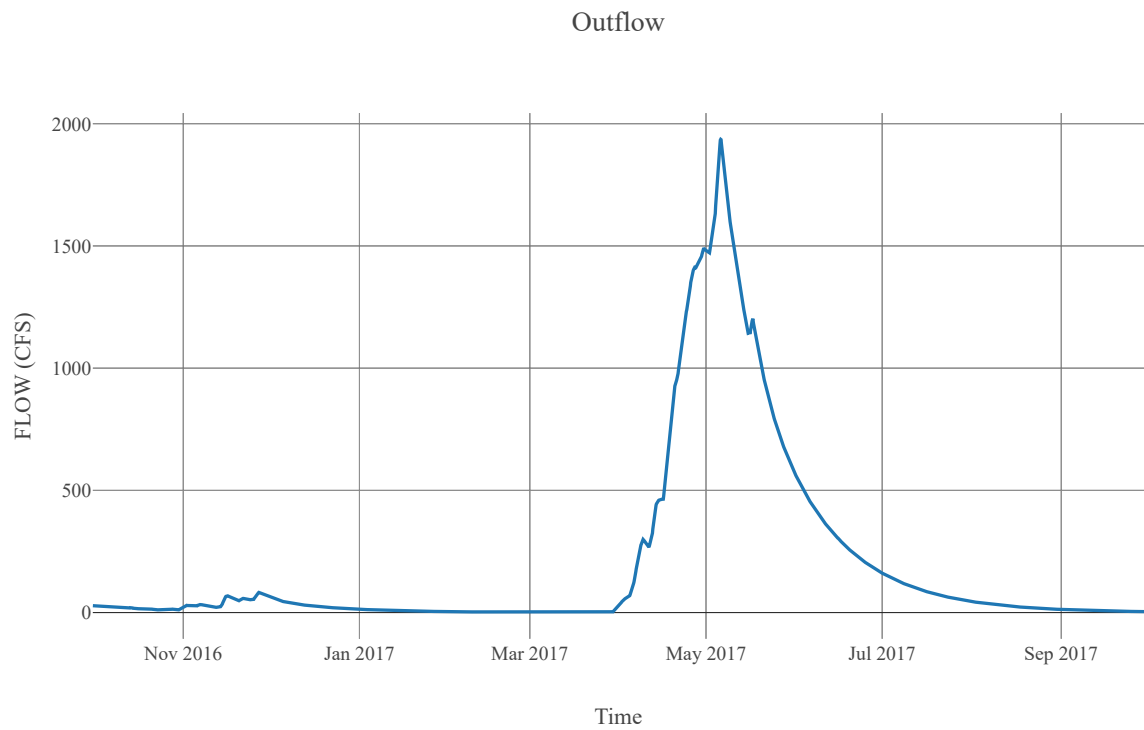
Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Junction : BigSheepCk

Observed Hydrograph : Big sheep creek near rosslan
Downstream : BigSheepCk_CF

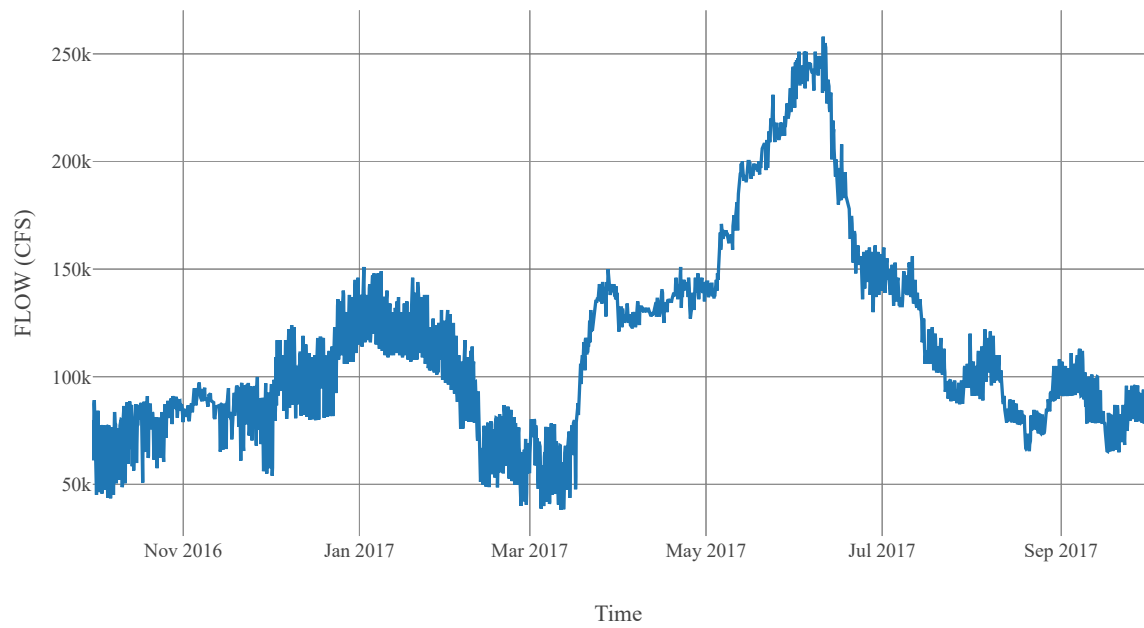


Reach : MidColumbia_R120

Loss Method : None
Downstream : ColumbiaRv_IntlB

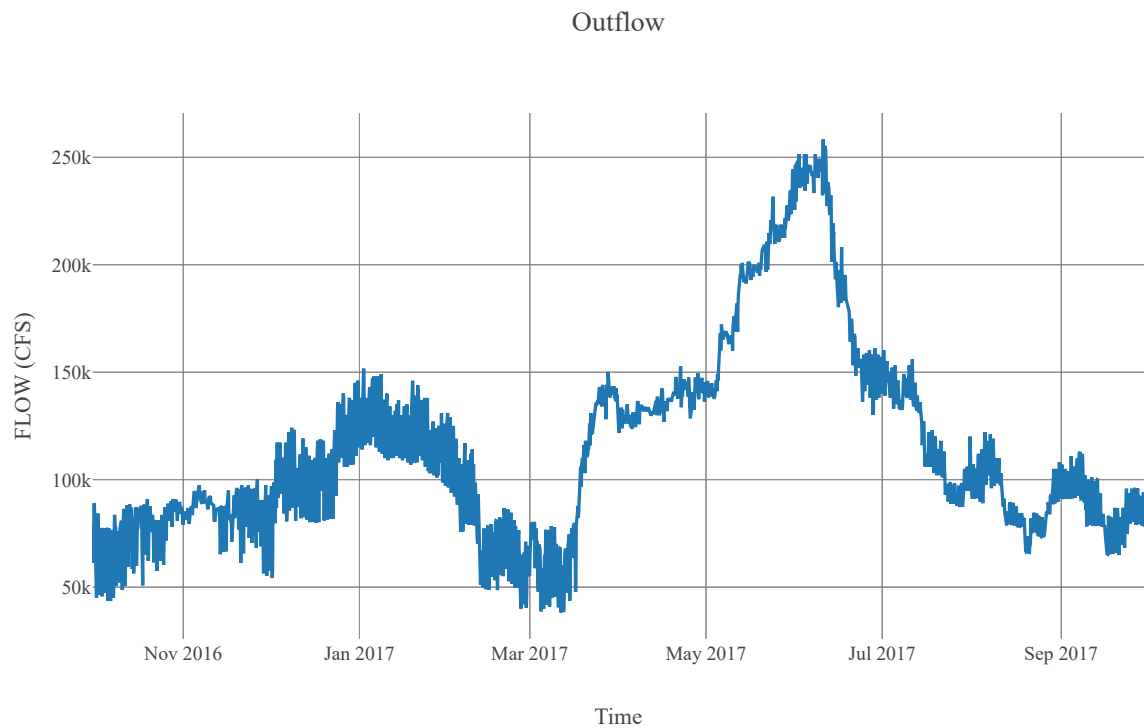
Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Junction : ColumbiaRv_IntlB

Observed Hydrograph : Columbia river at intl bound
Downstream : MidColumbia_R115



Subbasin : MidColumbia_S120

Area : 208.51
Latitude : 49.13
Longitude : -117.6
Downstream : ColumbiaRv_IntlB

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.11
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

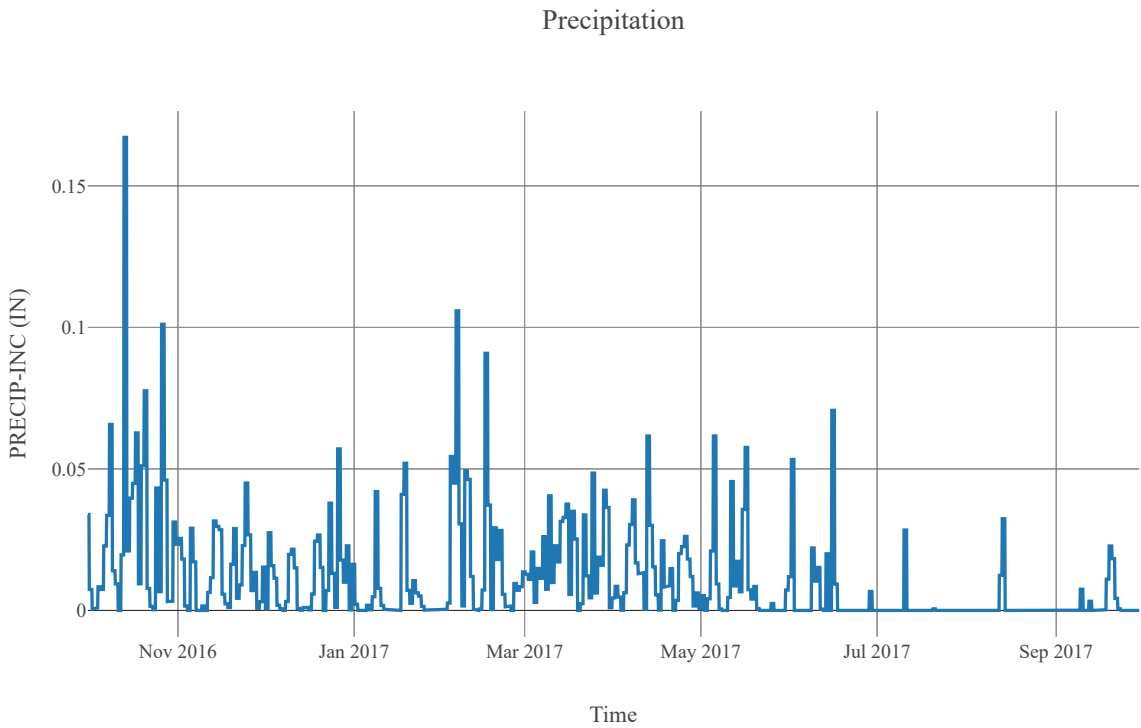
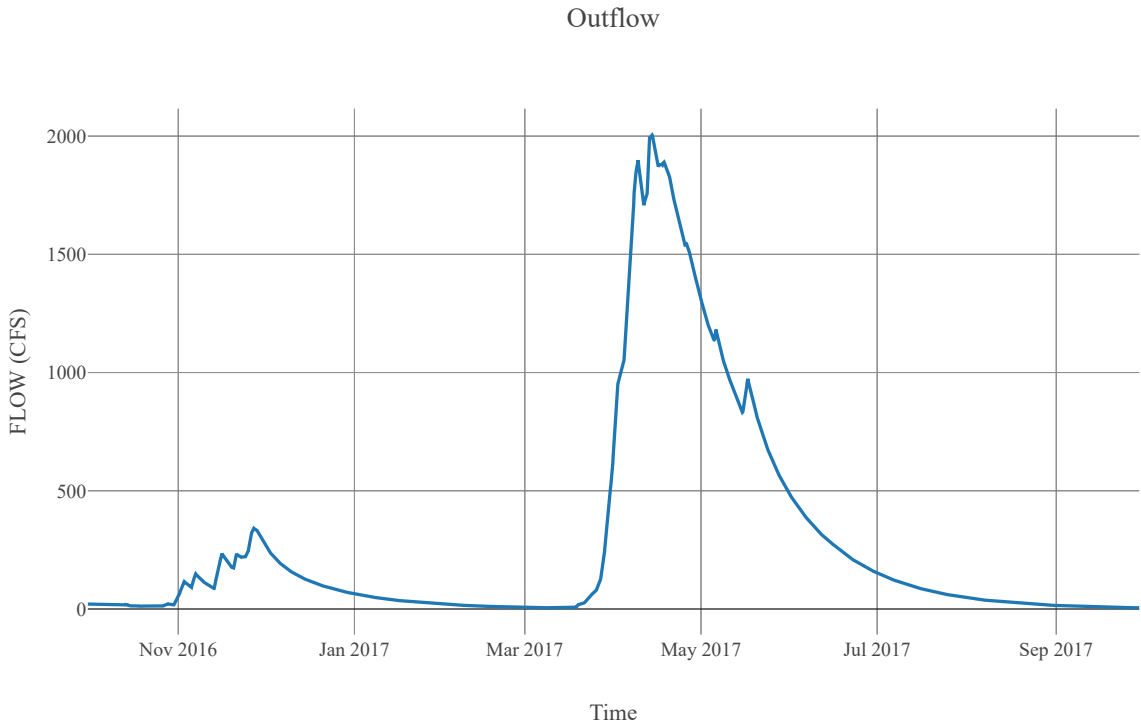
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.38
Storage Coefficient	6.38

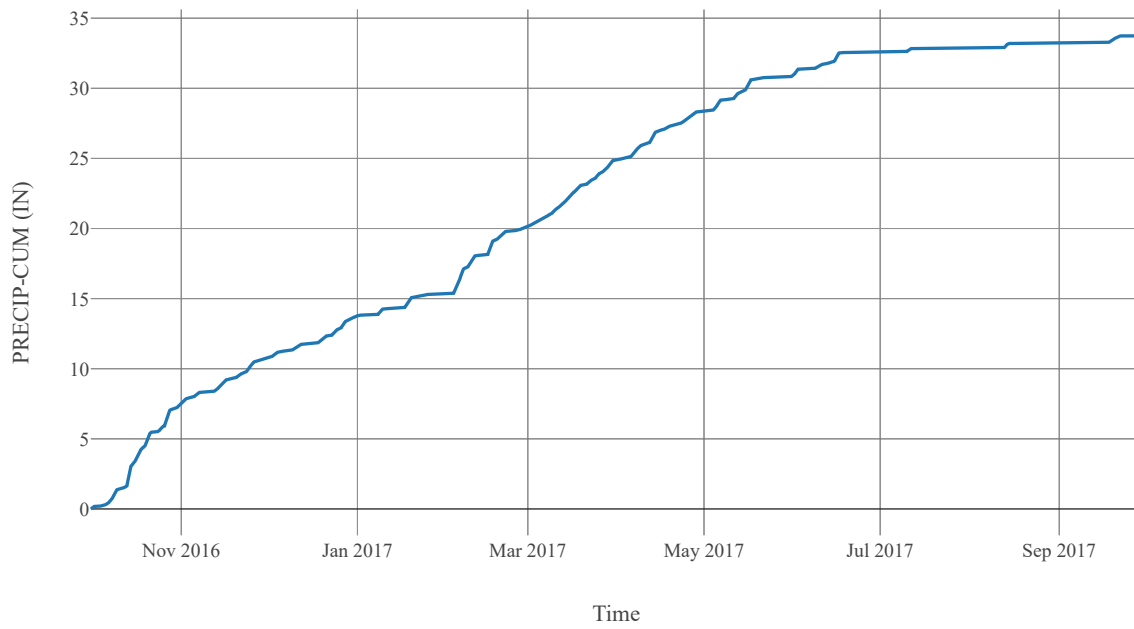
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	127.6
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	638
		Number Steps	1

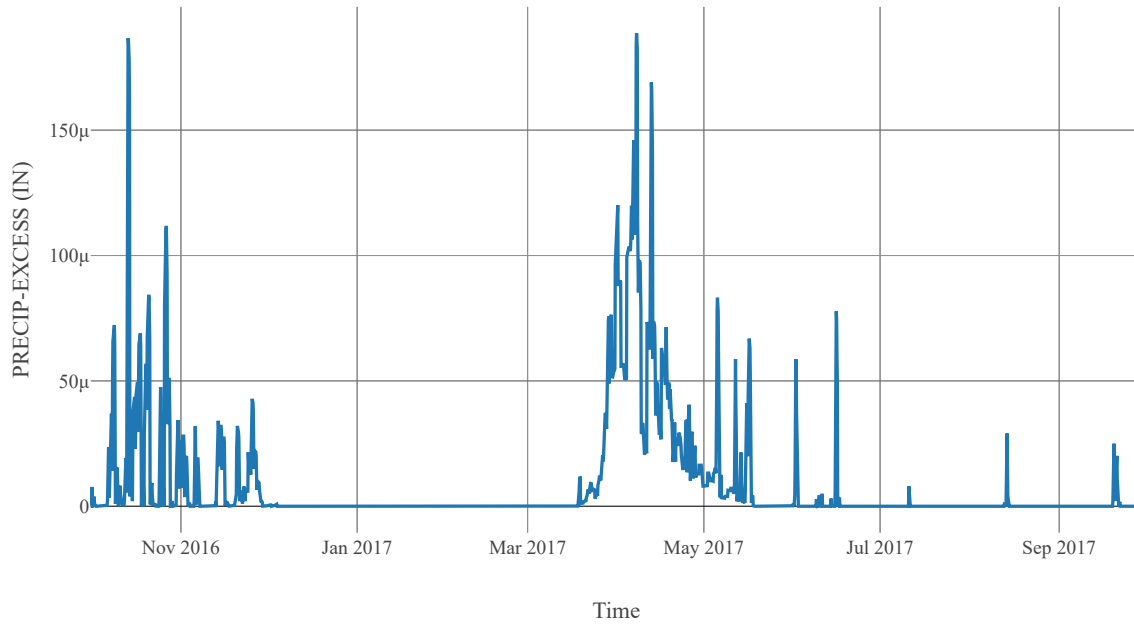
Statistics		
Name	Value	Unit
Baseflow Volume	200529.63	Ac-ft
Precipitation Volume	375203.24	Ac-ft
Loss Volume	282163.18	Ac-ft
Excess Volume	310.72	Ac-ft



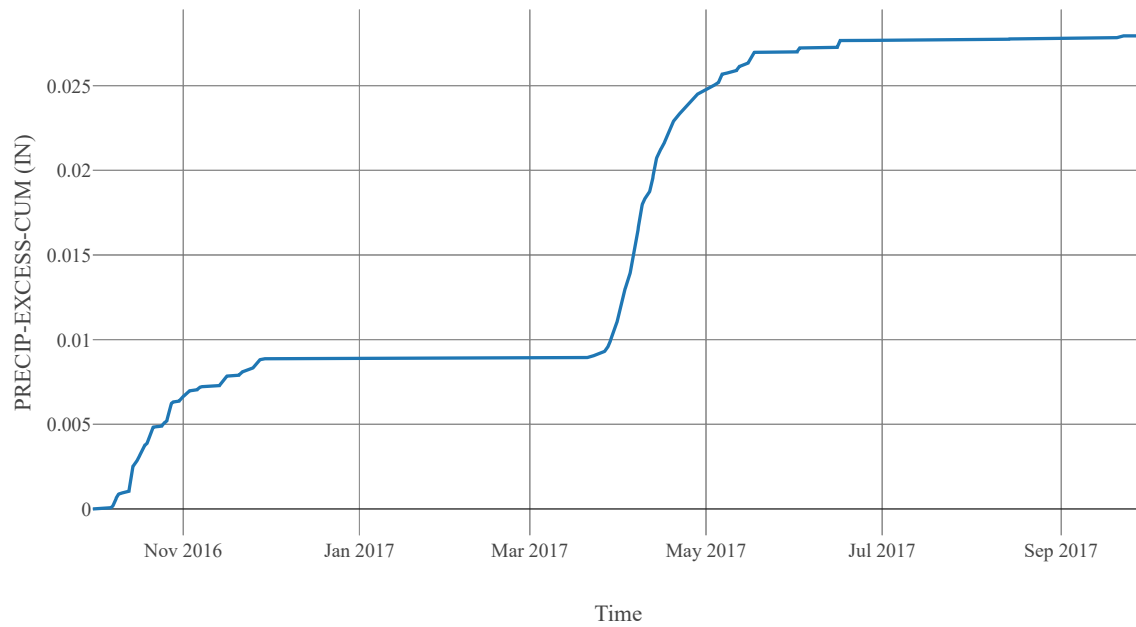
Cumulative Precipitation



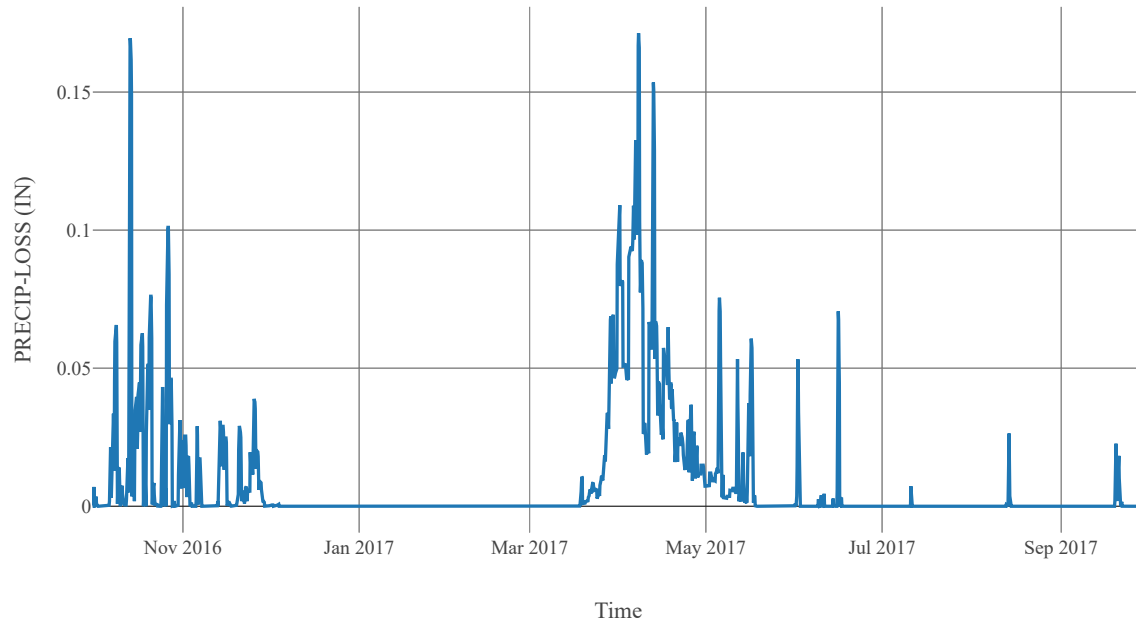
Excess Precipitation



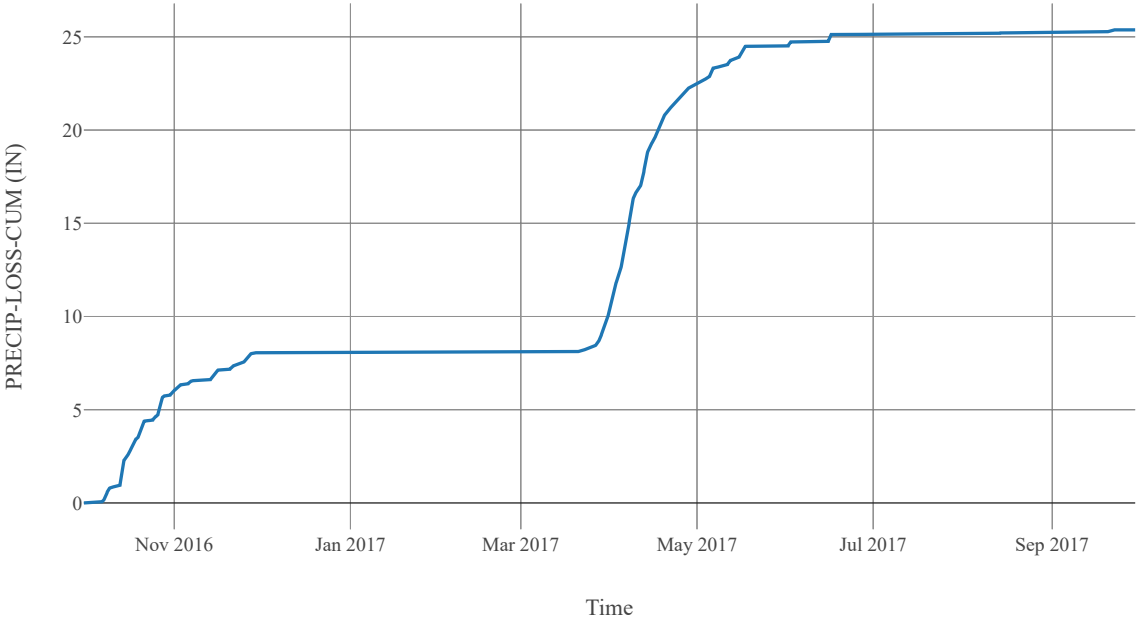
Cumulative Excess Precipitation



Precipitation Loss

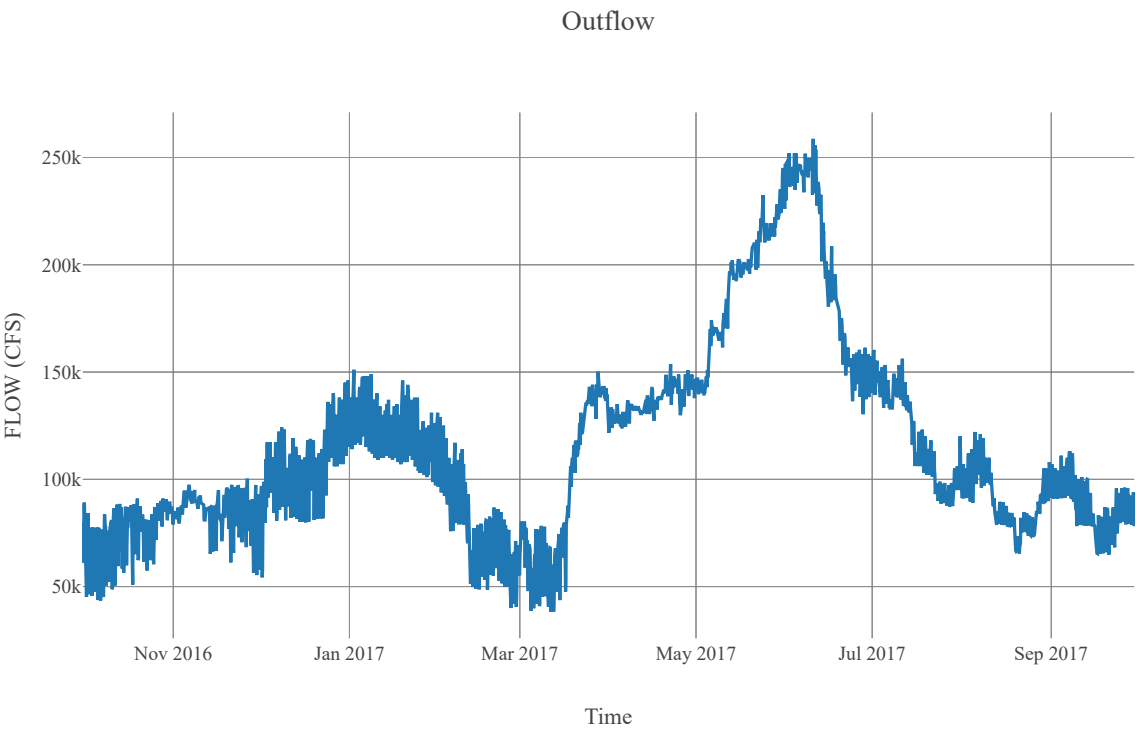


Cumulative Precipitation Loss



Junction : BigSheepCk_CF

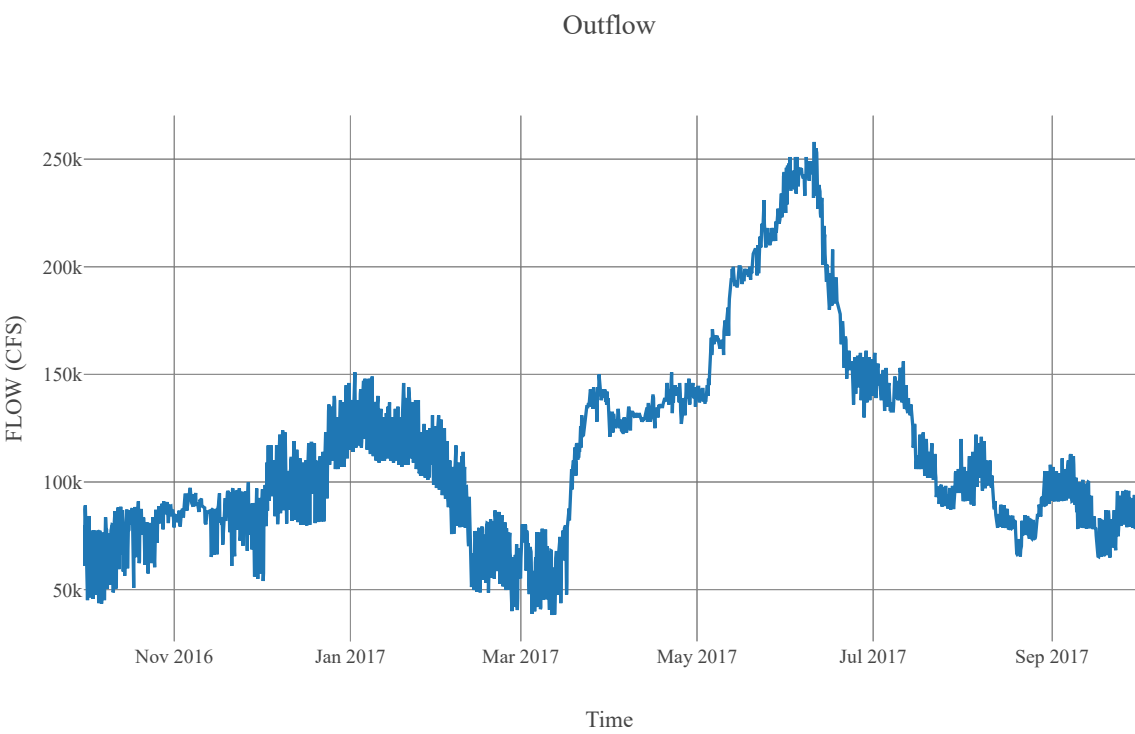
Downstream : MidColumbia_R110



Source : FromUpperColumbia

Downstream : MidColumbia_R120

Flow Source	
Flow Ratio	-3402823466385288600000000000000000000000
Period Outflow	0

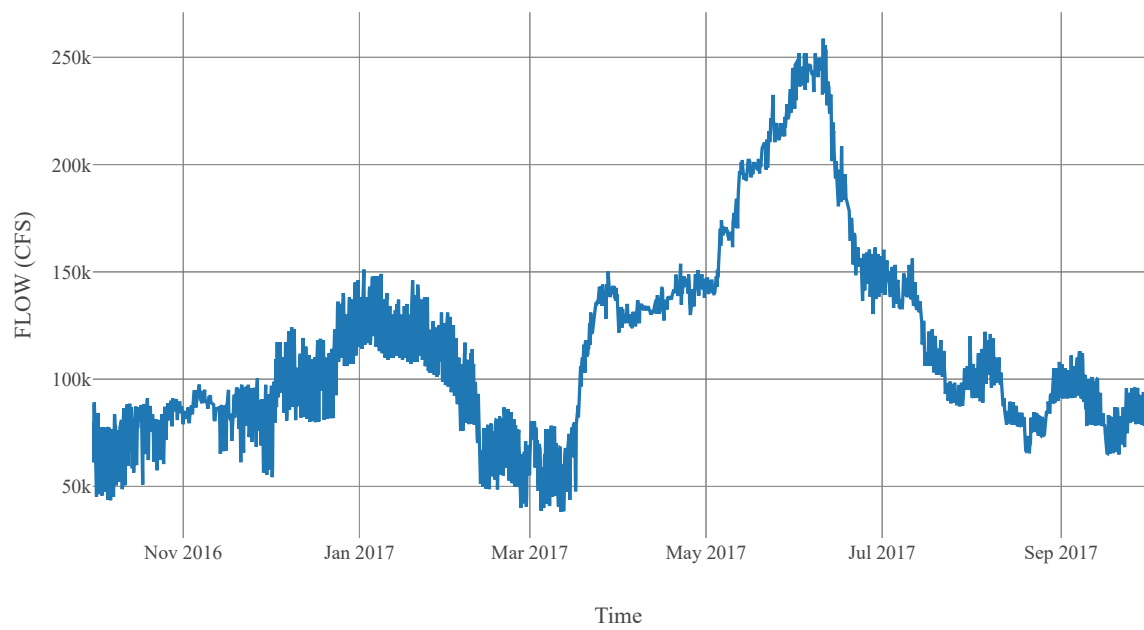


Reach : MidColumbia_R110

Loss Method : None
Downstream : KettleRv_CF

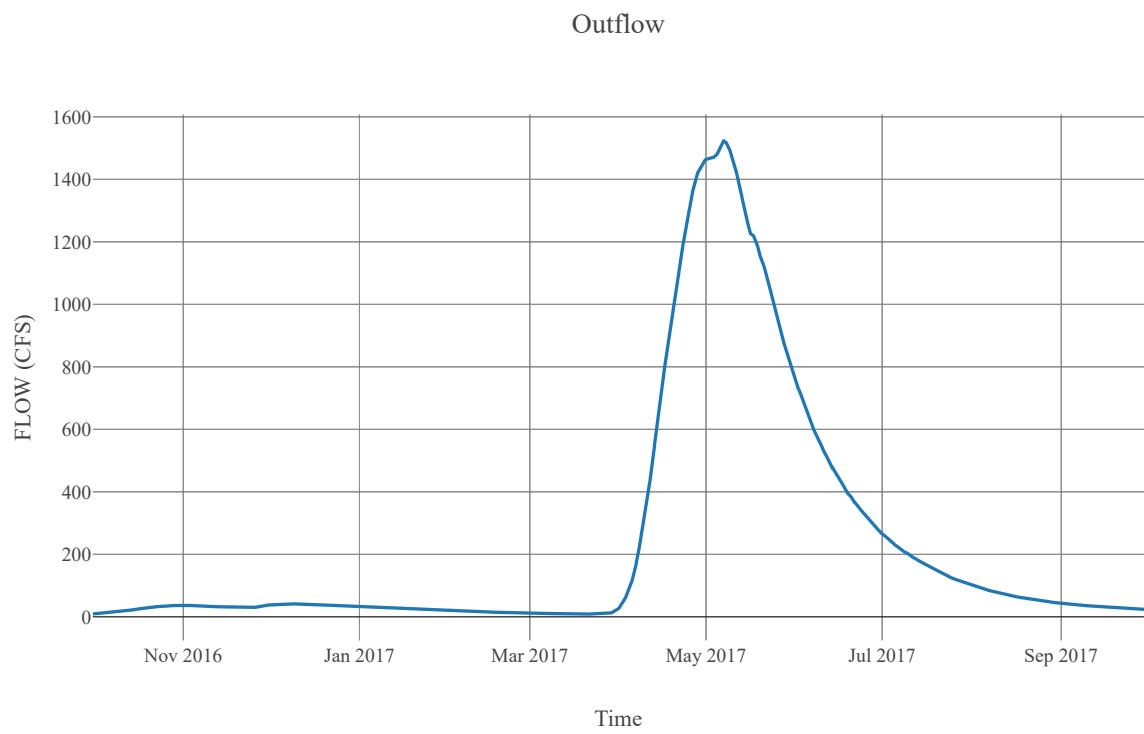
Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



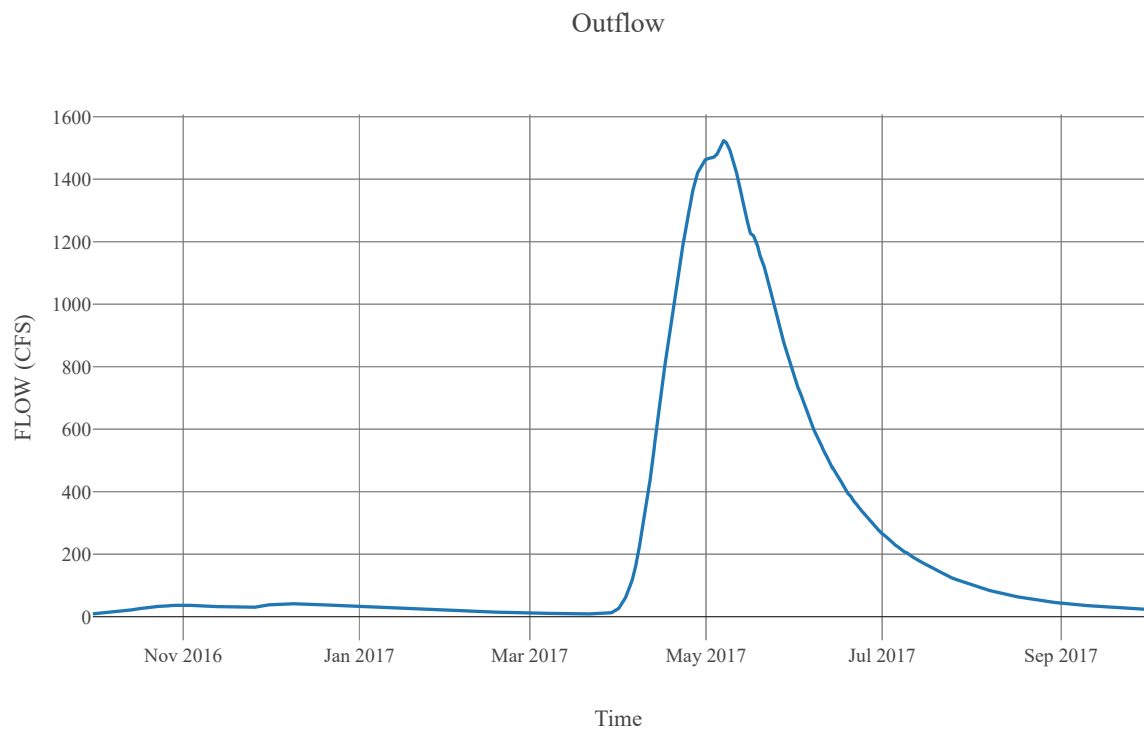
Reservoir : ChristinaLk

Quality Method : Unspecified
Method : Modified Puls
Downstream : ChristinaLk_OUT



Junction : ChristinaLk_OUT

Downstream : Kettle Nr Laurier



Subbasin : KettleRv_S020

Area : 652.33
Latitude : 48.88
Longitude : -118.63
Downstream : Kettle Nr Laurier

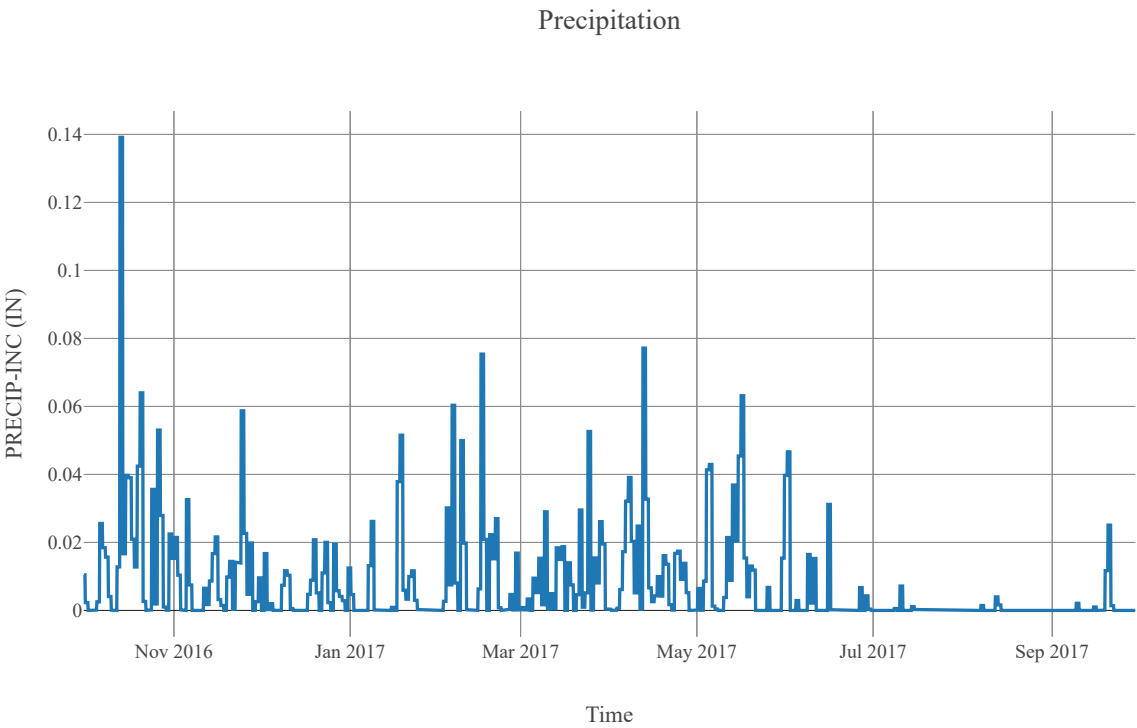
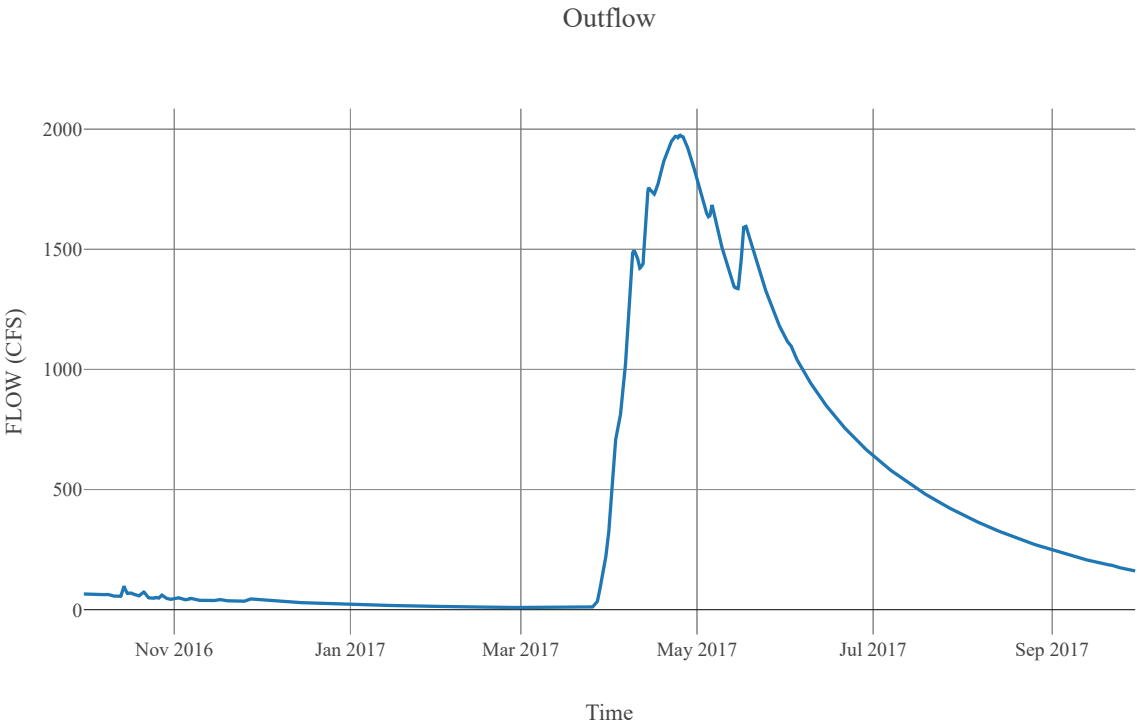
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.36
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

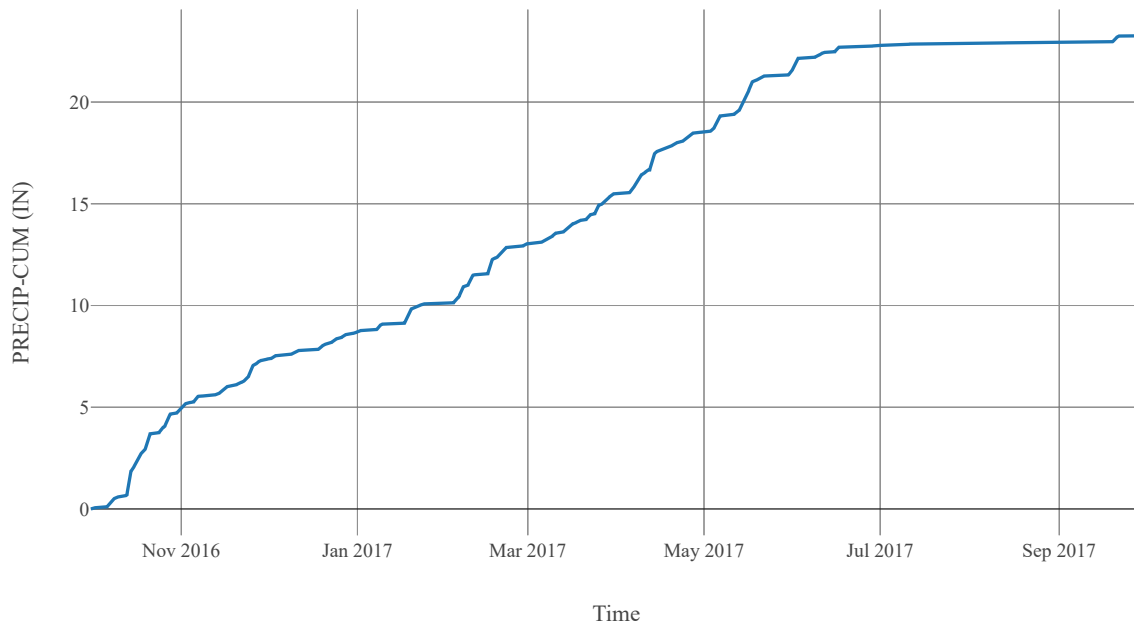
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	16.08
Storage Coefficient	16.08

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.2
		Initial Rate
		0
		Layer Number
		1
	2	Storage Coefficient
		321.6
		Number Steps
		1
		Baseflow Fraction
		0.8
		Initial Rate
		0.1
		Layer Number
		2
		Storage Coefficient
		1608
		Number Steps
		1

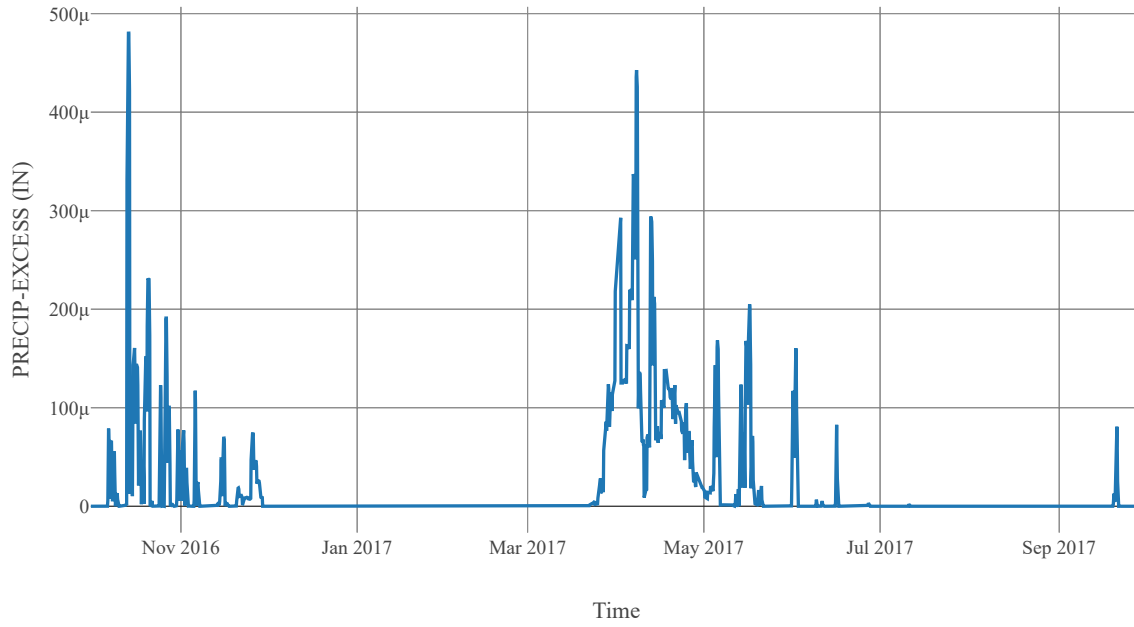
Statistics		
Name	Value	Unit
Baseflow Volume	304171.89	Ac-ft
Precipitation Volume	809003.14	Ac-ft
Loss Volume	571758.76	Ac-ft
Excess Volume	2065.77	Ac-ft



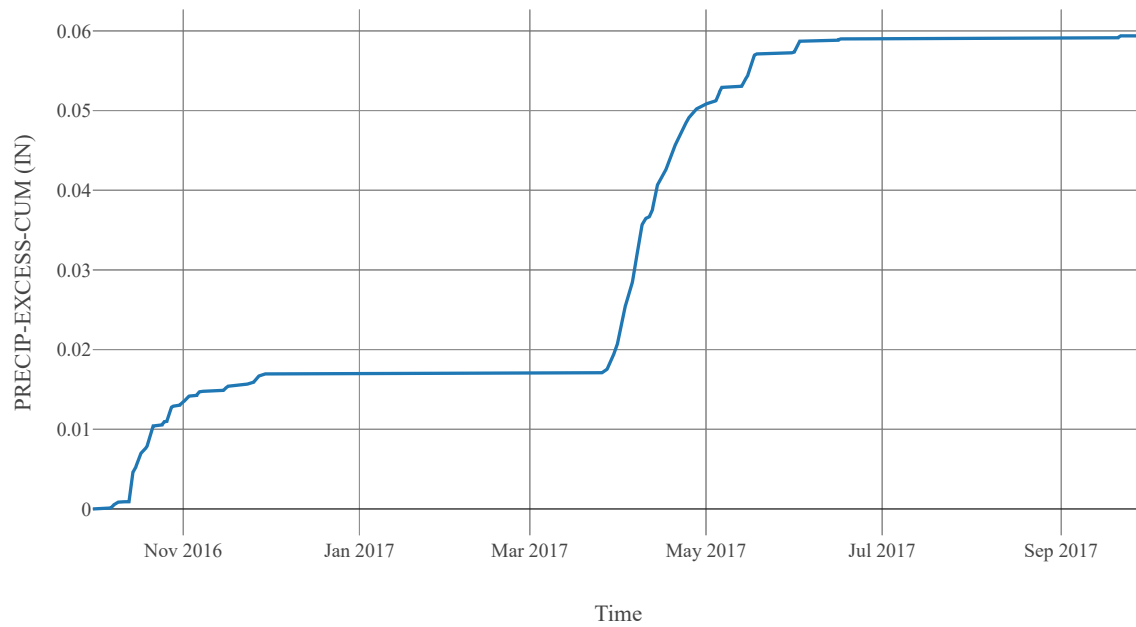
Cumulative Precipitation



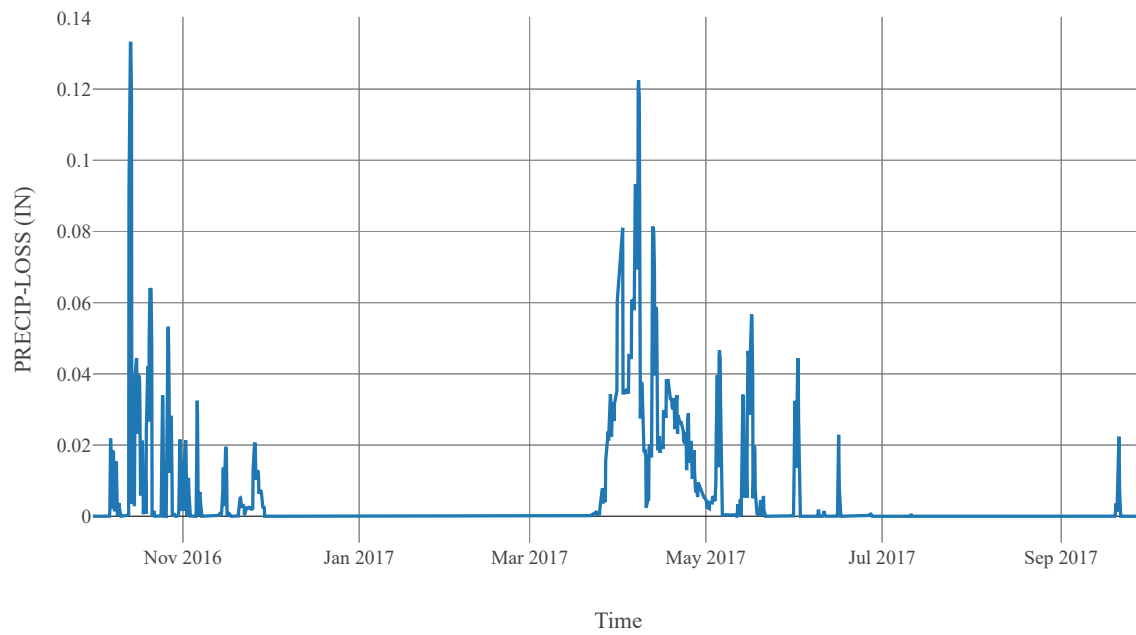
Excess Precipitation



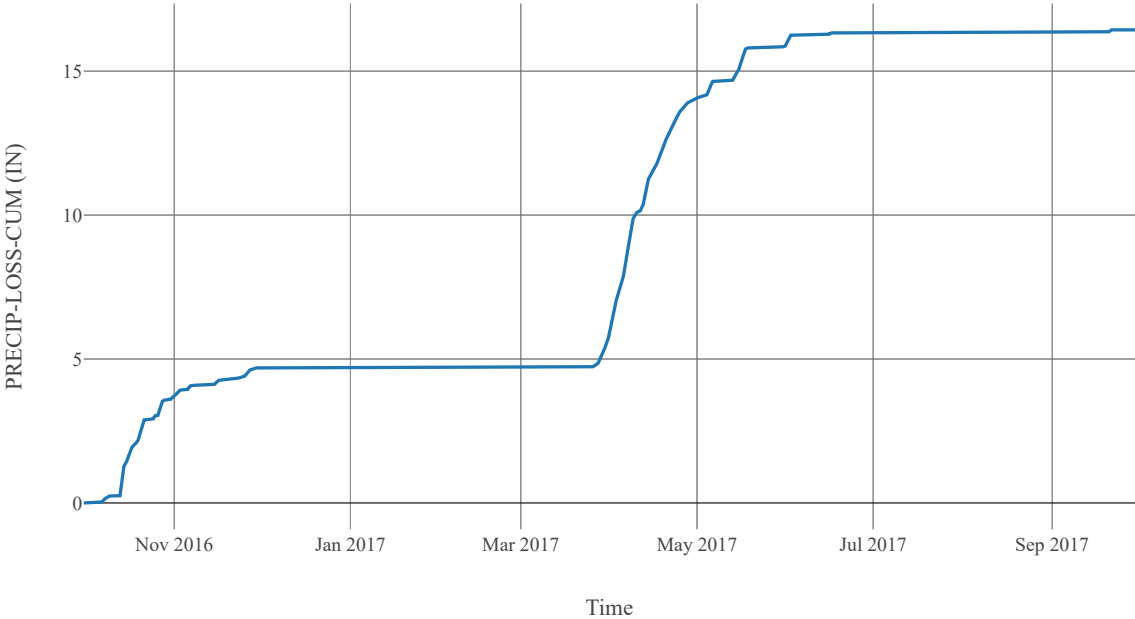
Cumulative Excess Precipitation



Precipitation Loss

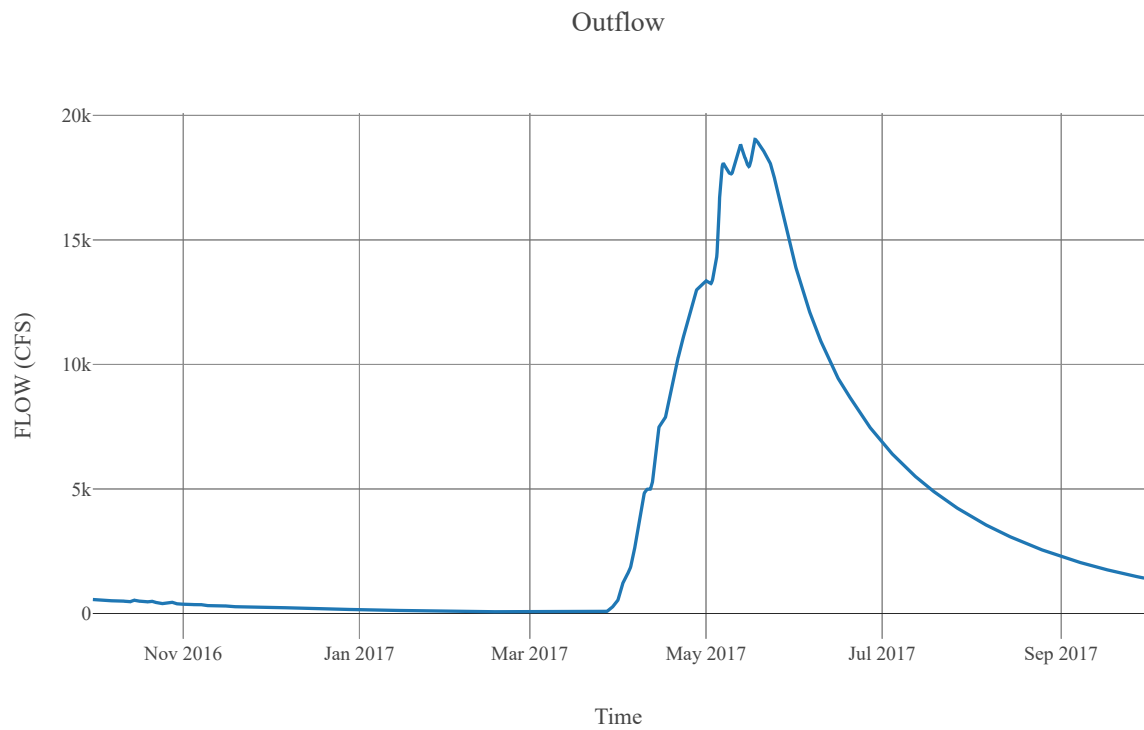


Cumulative Precipitation Loss



Junction : KettleNrLaurier

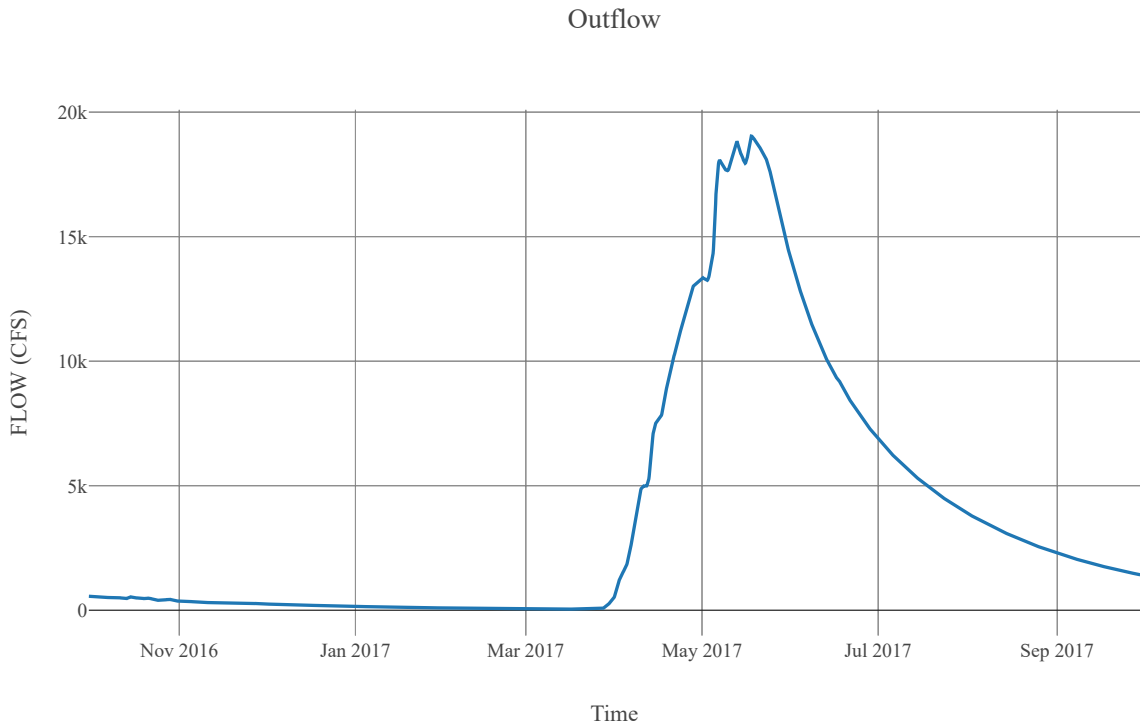
Observed Hydrograph : Kettle river near laurier
Downstream : KettleRv_R010



Reach : KettleRv_R010

Loss Method : None
Downstream : Kettle Nr Barstow

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	98516
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	KettleRv_R010
	Energy Slope
	0
	Right Mannings N
	0.15



Subbasin : KettleRv_S010

Area : 240.84
Latitude : 48.85
Longitude : -118.26
Downstream : Kettle Nr Barstow

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.14
Deficit Constant	
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

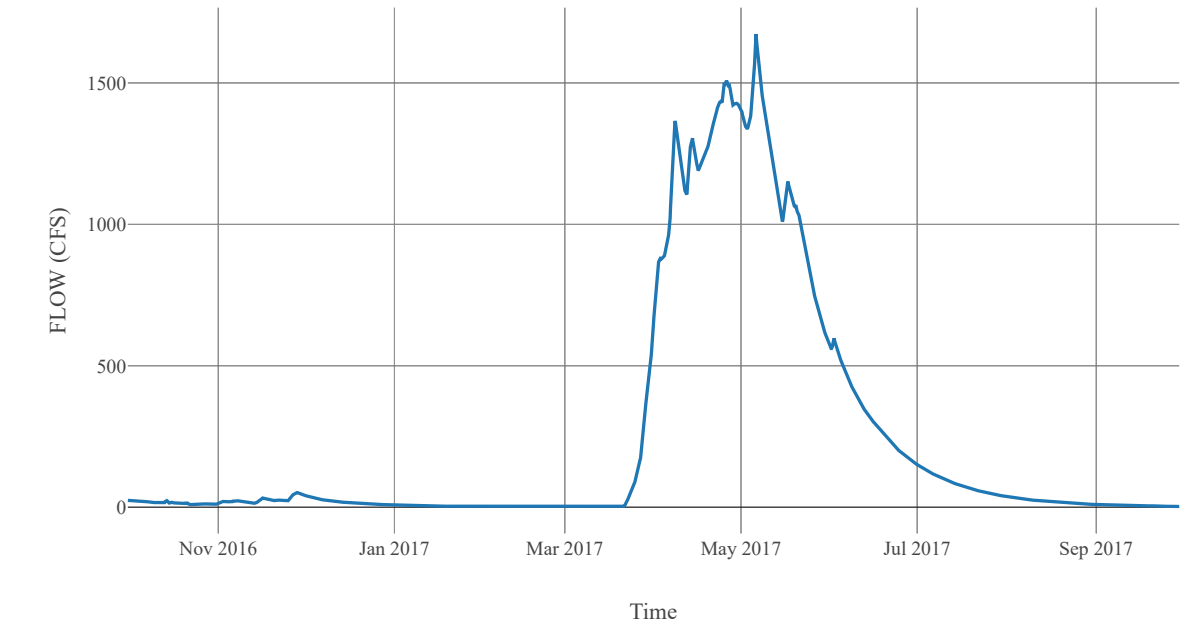
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.34
Storage Coefficient	5.34

Baseflow	
Method	Linear Reservoir

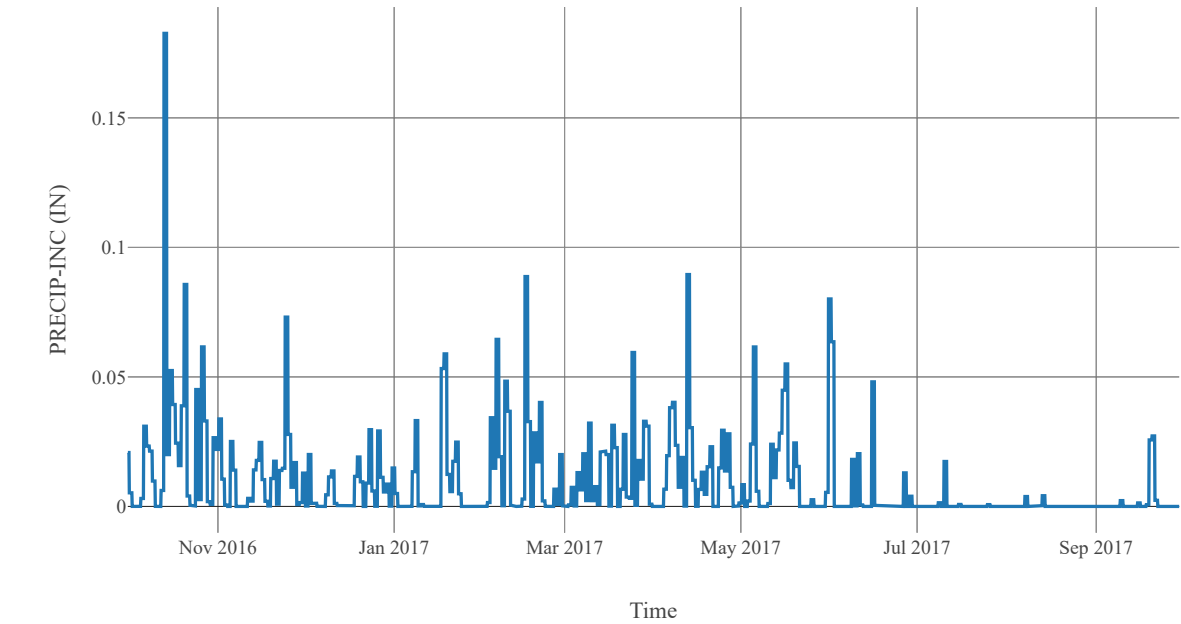
Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	106.8
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	534
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	174832.83	Ac-ft
Precipitation Volume	365723.12	Ac-ft
Loss Volume	275561.24	Ac-ft
Excess Volume	386.33	Ac-ft

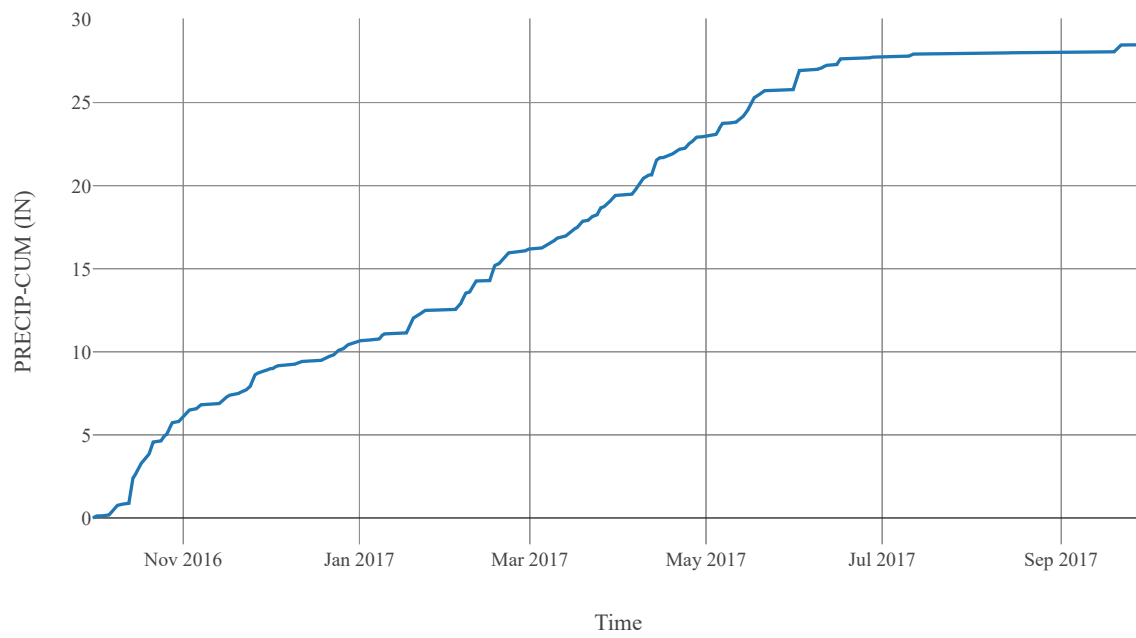
Outflow



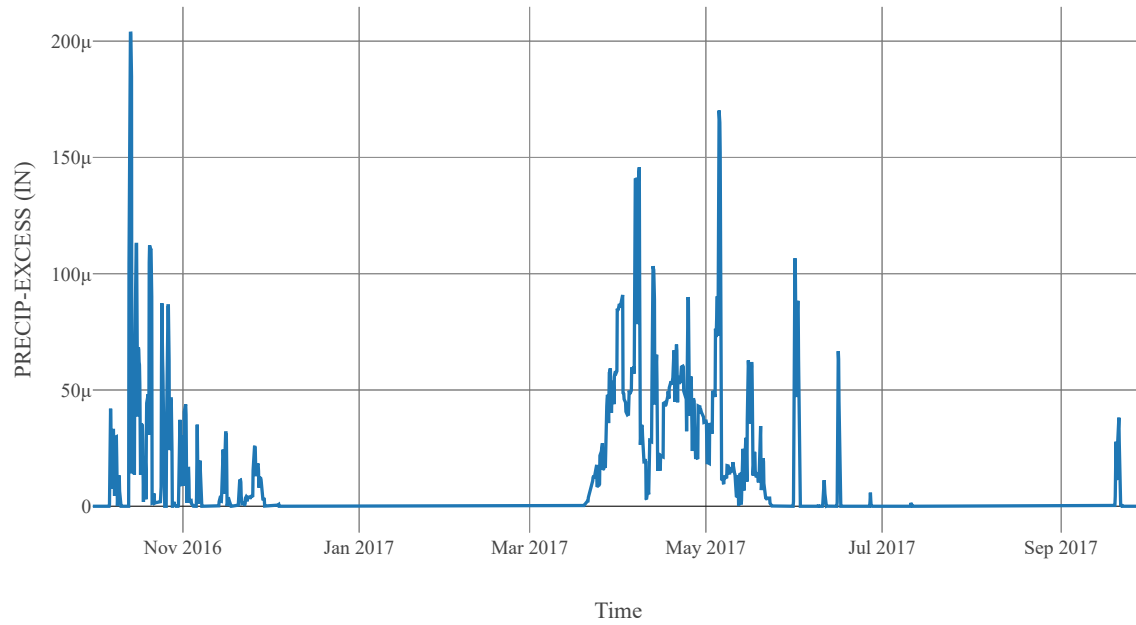
Precipitation



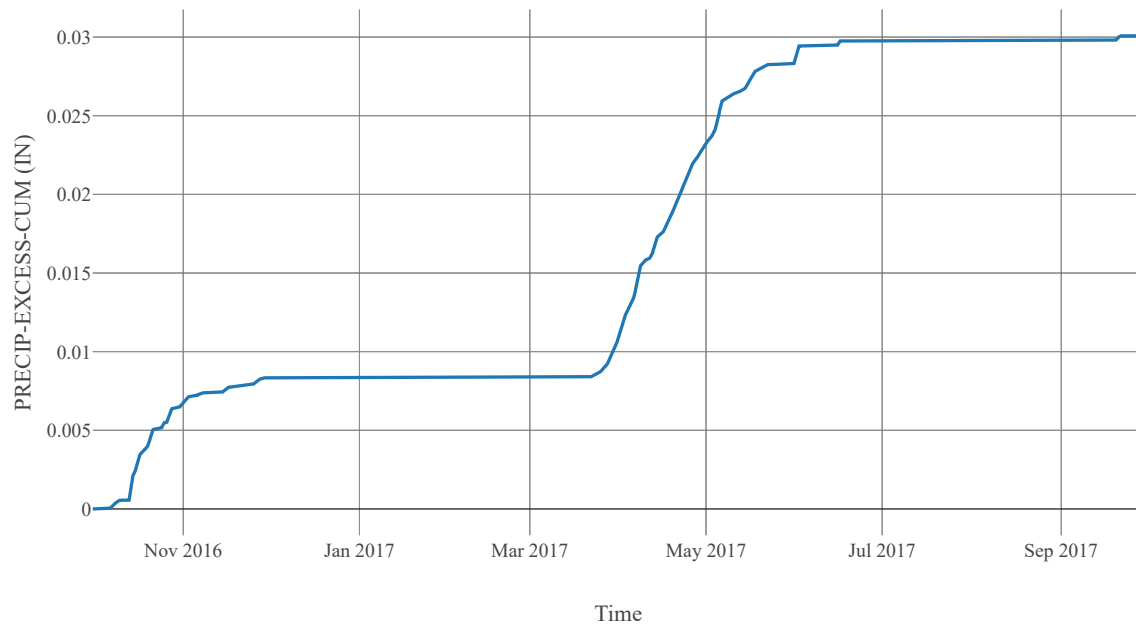
Cumulative Precipitation



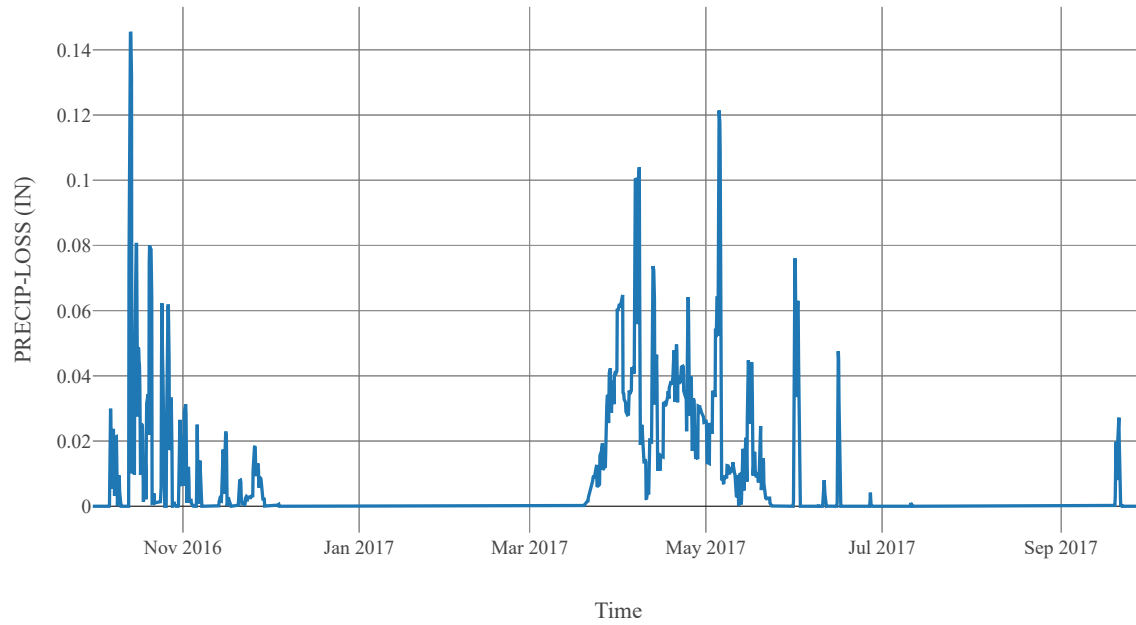
Excess Precipitation



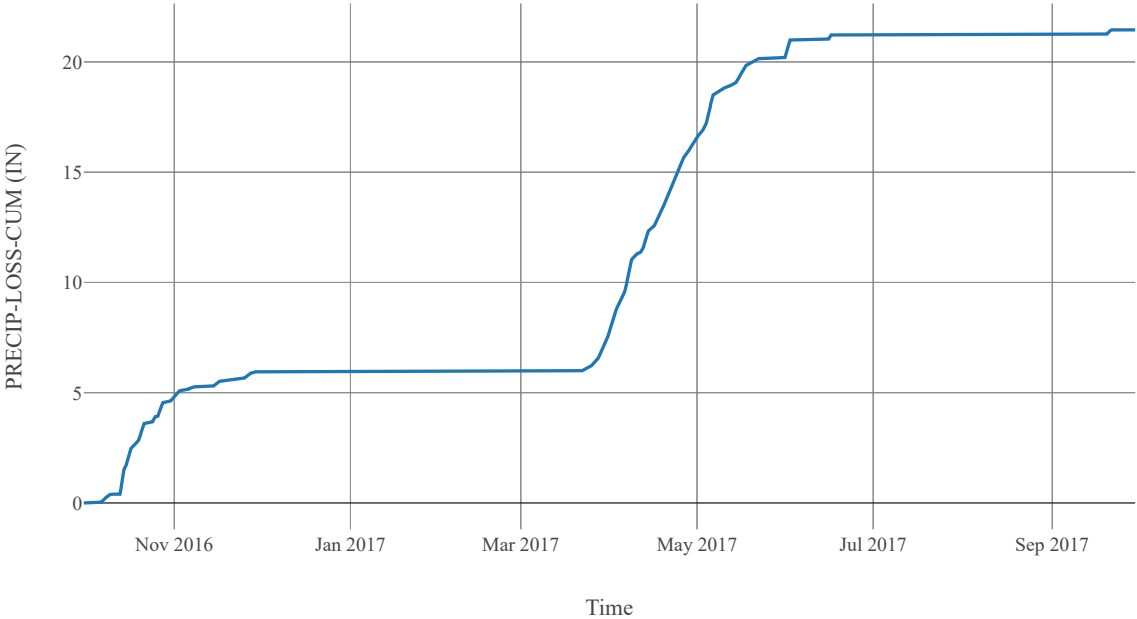
Cumulative Excess Precipitation



Precipitation Loss



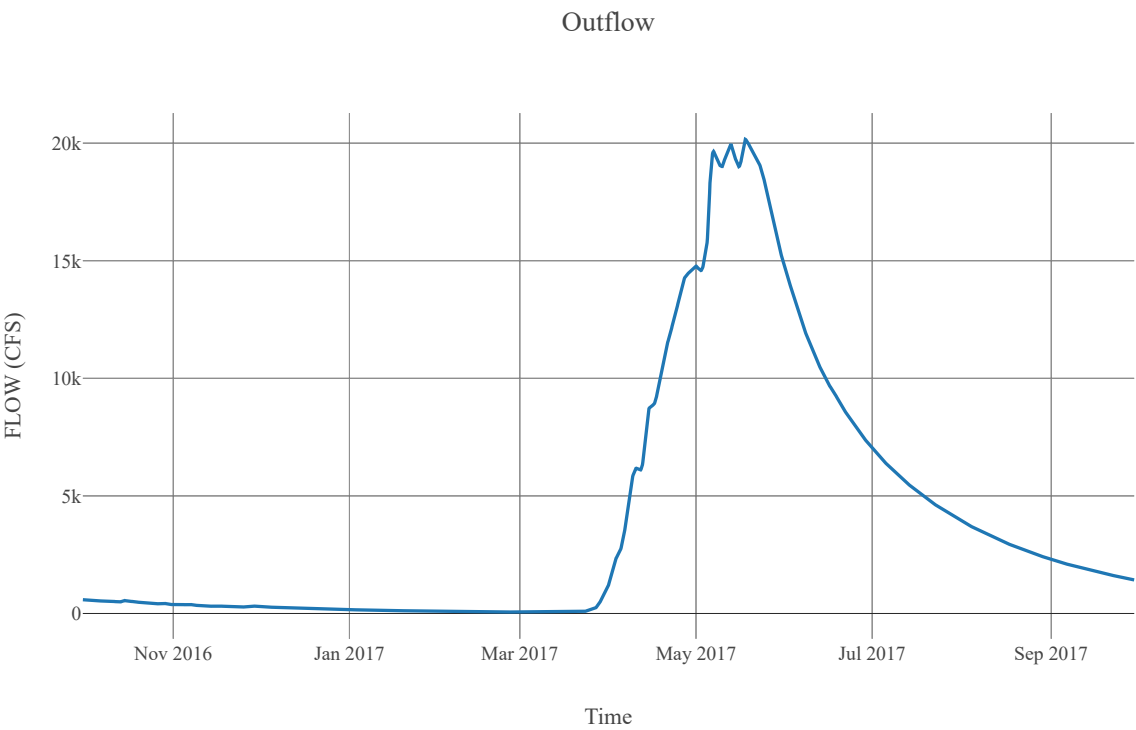
Cumulative Precipitation Loss



Junction : KettleNrBarstow

Observed Hydrograph : Kettle river near barstow

Downstream : KettleRv_CF



Subbasin : MidColumbia_S110

Area : 674.8
Latitude : 48.83
Longitude : -117.87
Downstream : KettleRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	2.34
Method	Deficit Constant
Initial Deficit	12
Maximum Deficit	12
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

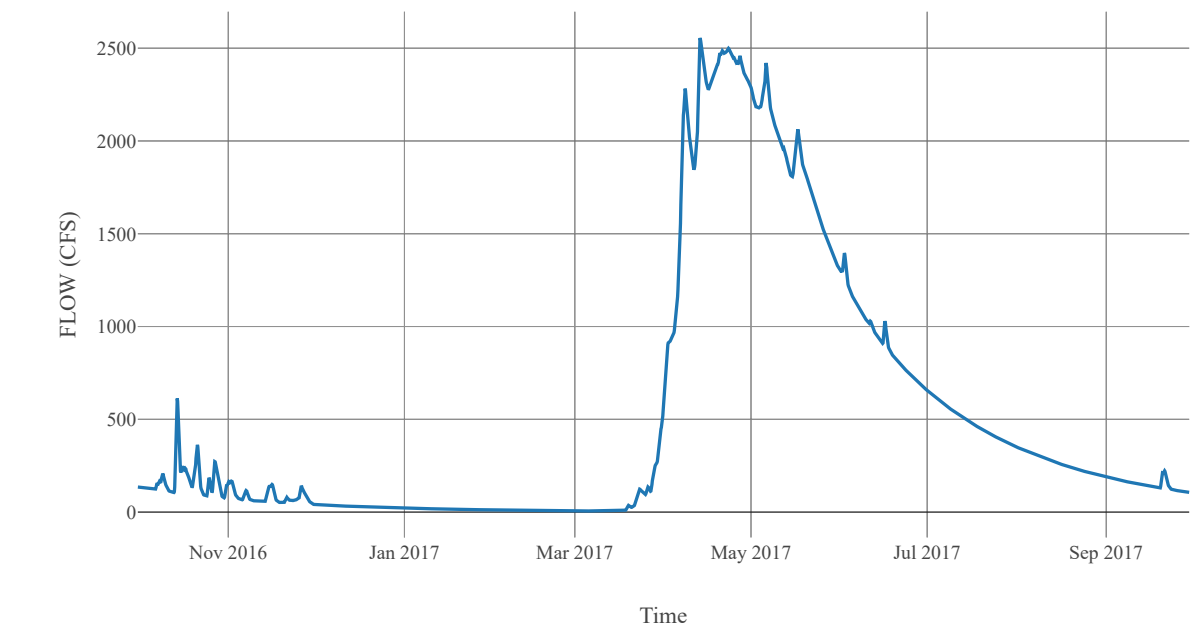
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	12.04
Storage Coefficient	12.04

Baseflow	
Method	Linear Reservoir

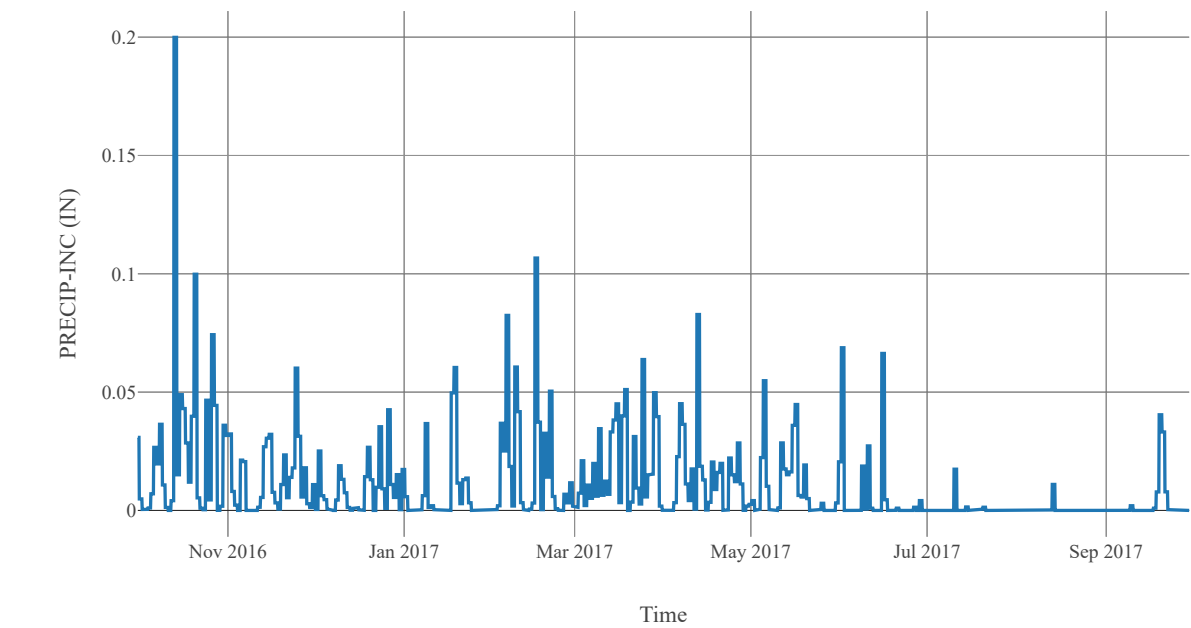
Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	240.8
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	1204
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	350721.32	Ac-ft
Precipitation Volume	1132001.67	Ac-ft
Loss Volume	842802.43	Ac-ft
Excess Volume	20194.12	Ac-ft

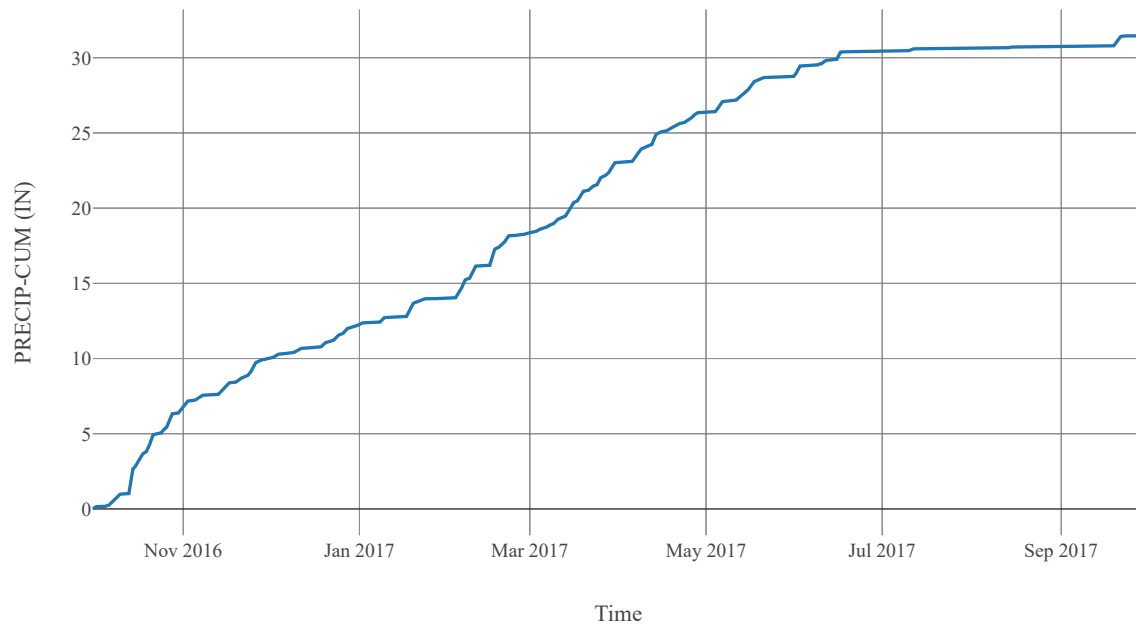
Outflow



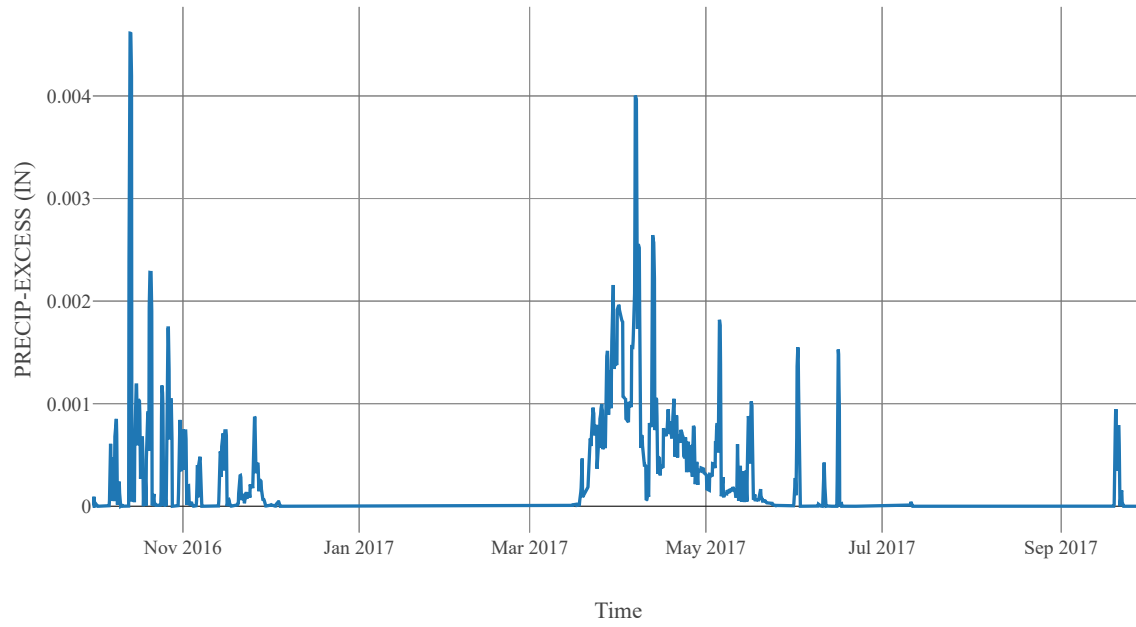
Precipitation



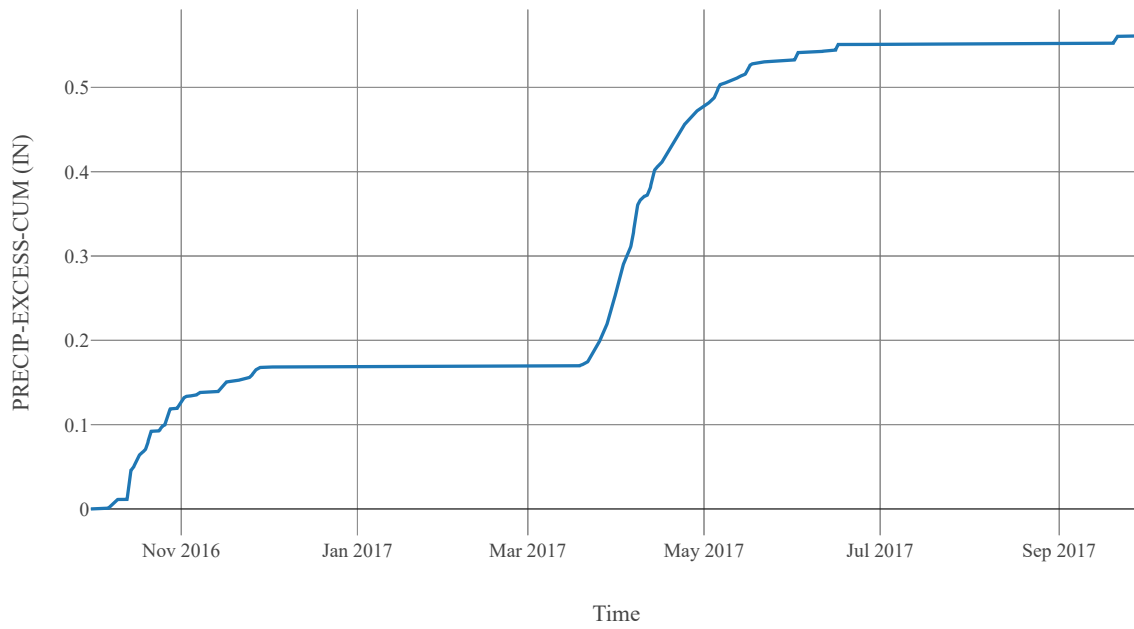
Cumulative Precipitation



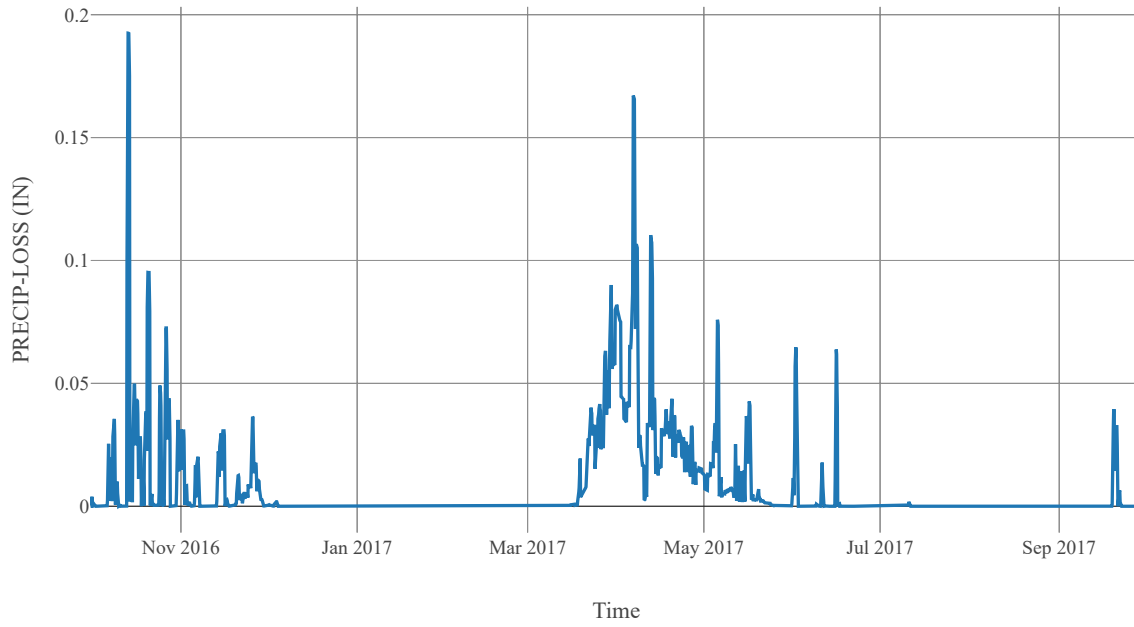
Excess Precipitation



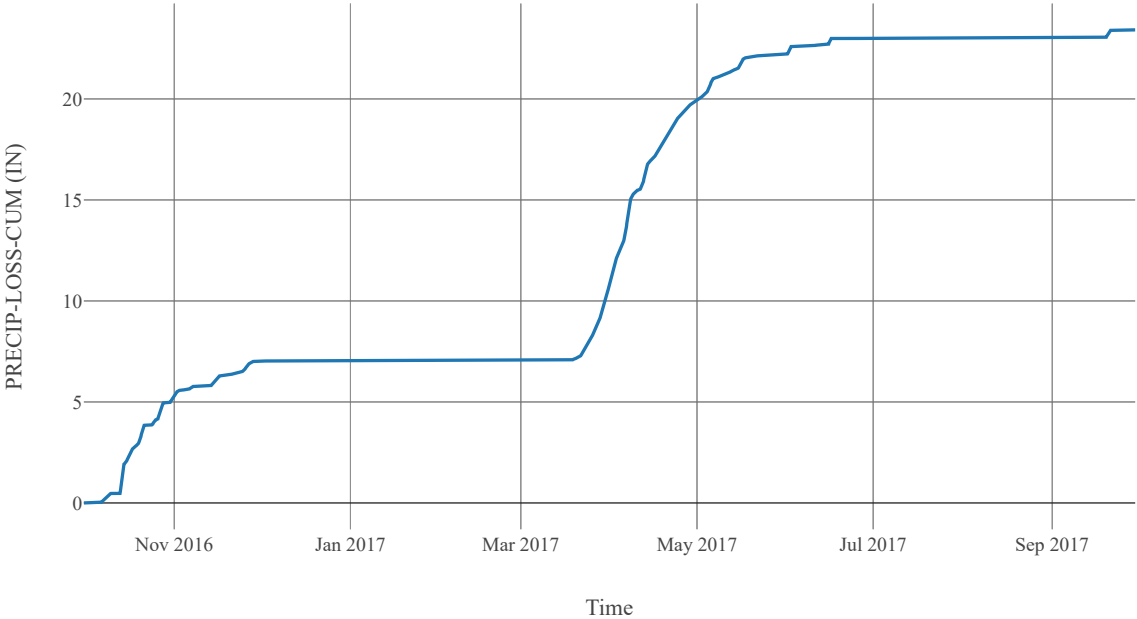
Cumulative Excess Precipitation



Precipitation Loss

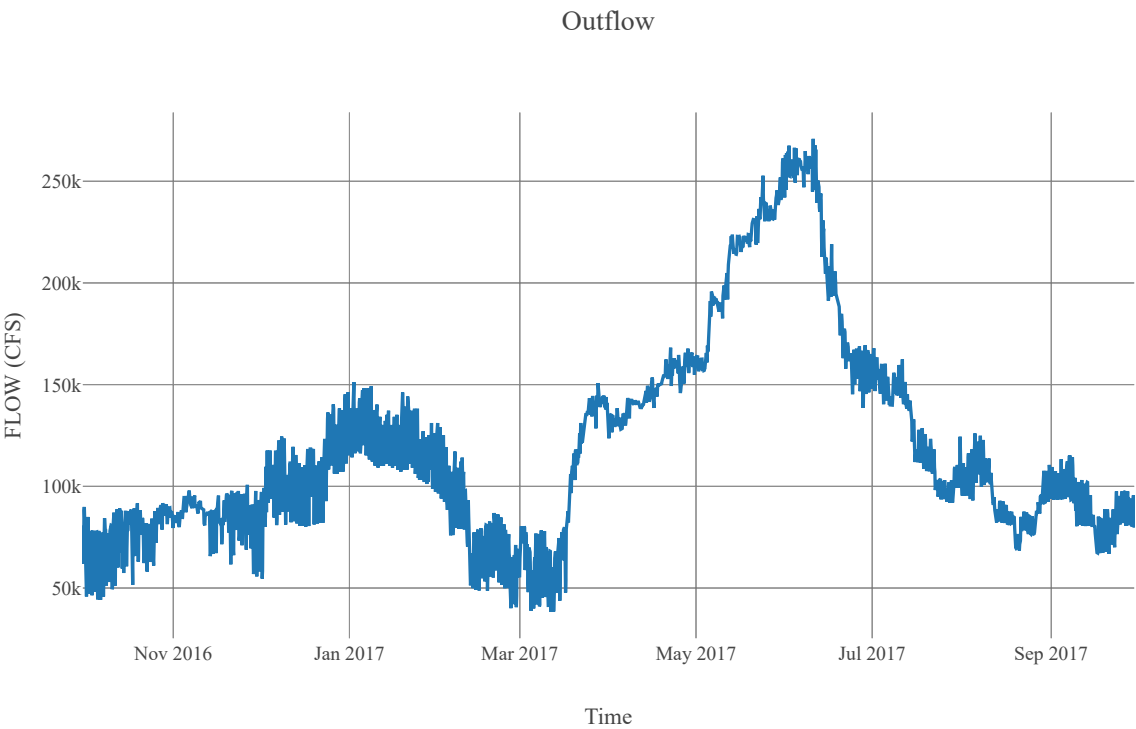


Cumulative Precipitation Loss



Junction : KettleRv_CF

Downstream : MidColumbia_R105

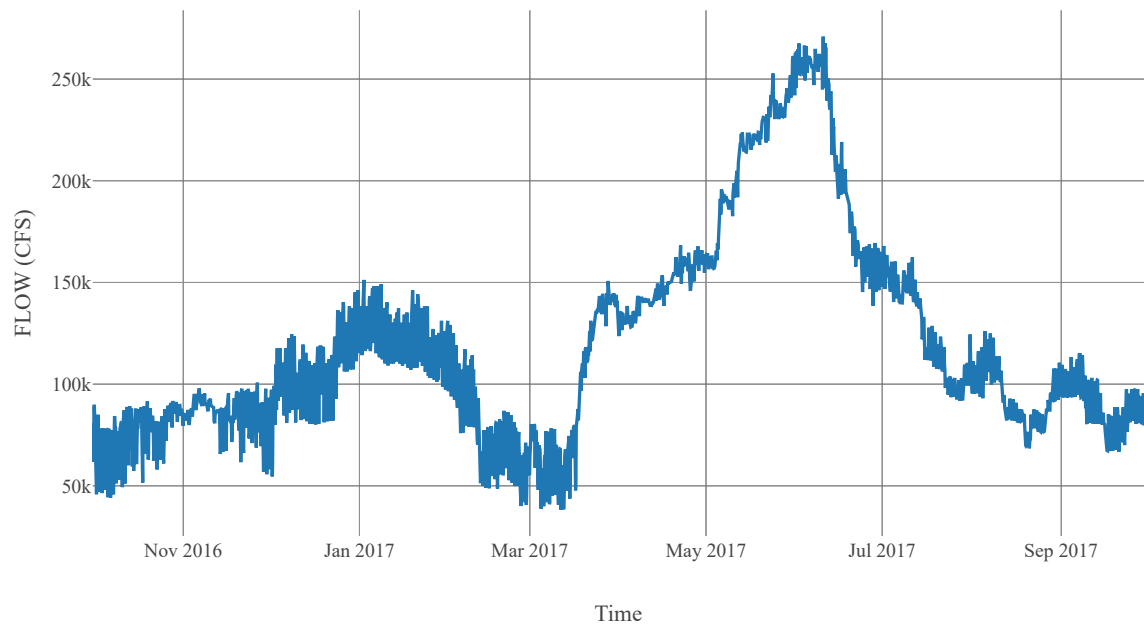


Reach : MidColumbia_R105

Loss Method : None
Downstream : ColvilleRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : ColvilleRv_S010

Area : 1005.2
Latitude : 48.39
Longitude : -117.77
Downstream : Colville Rv At Kettle Falls

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.86
Method	Deficit Constant
Initial Deficit	12
Maximum Deficit	12
Recovery Factor	1

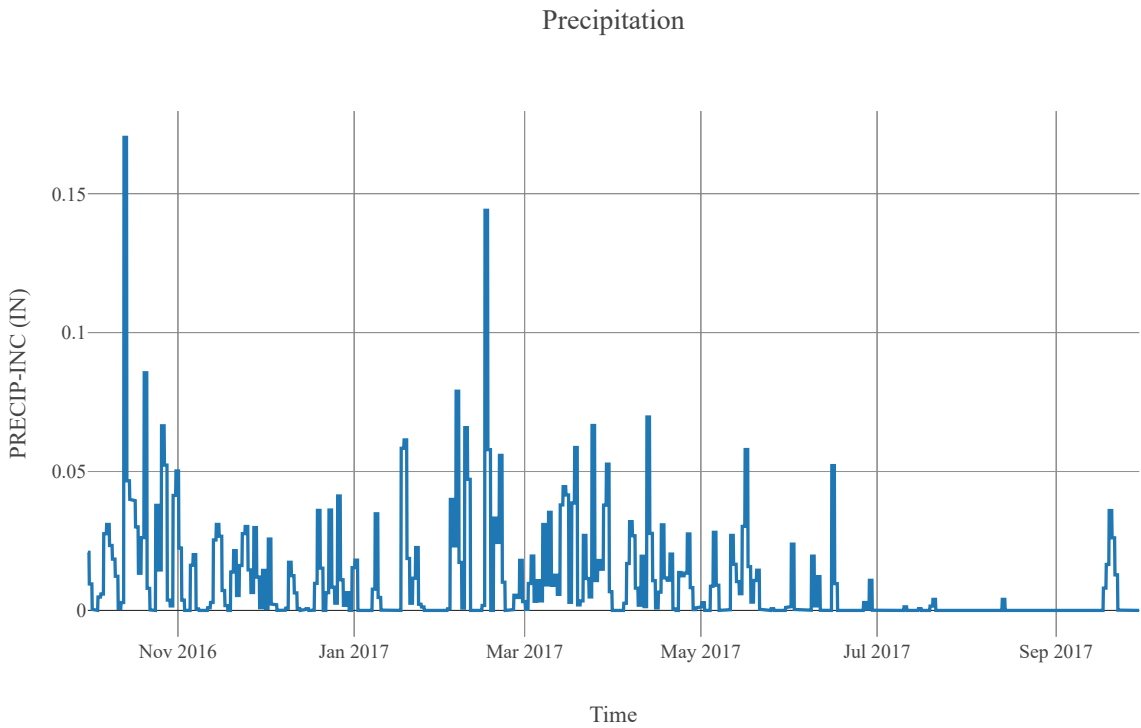
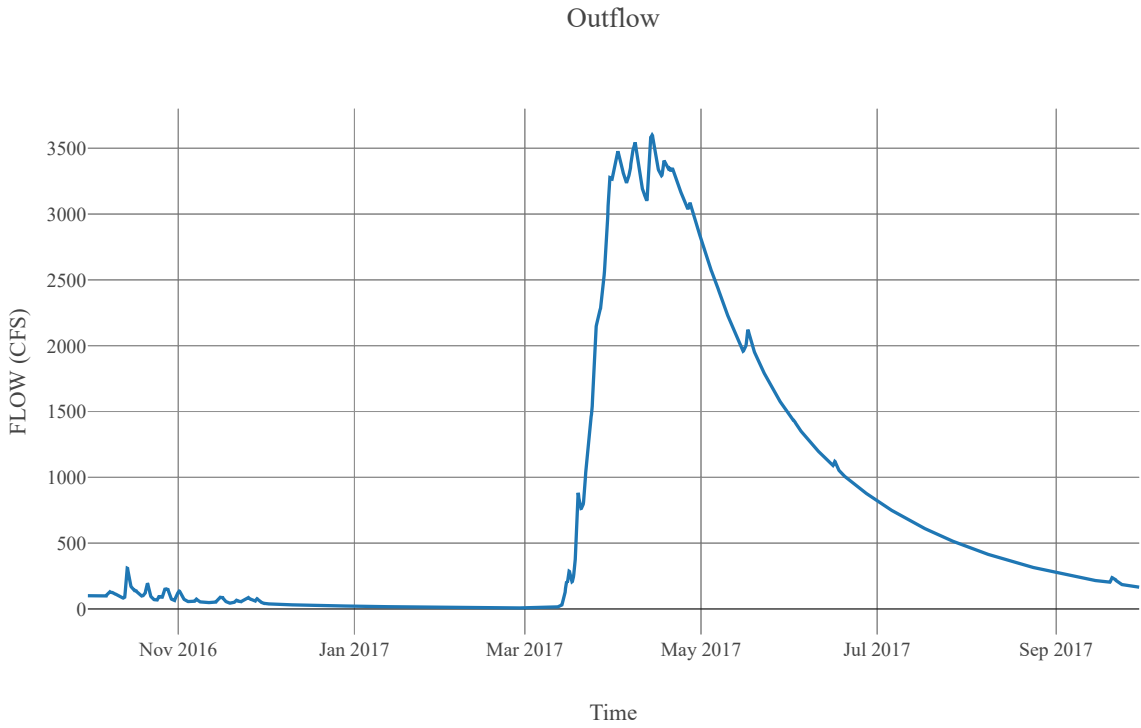
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	13.66
Storage Coefficient	13.66

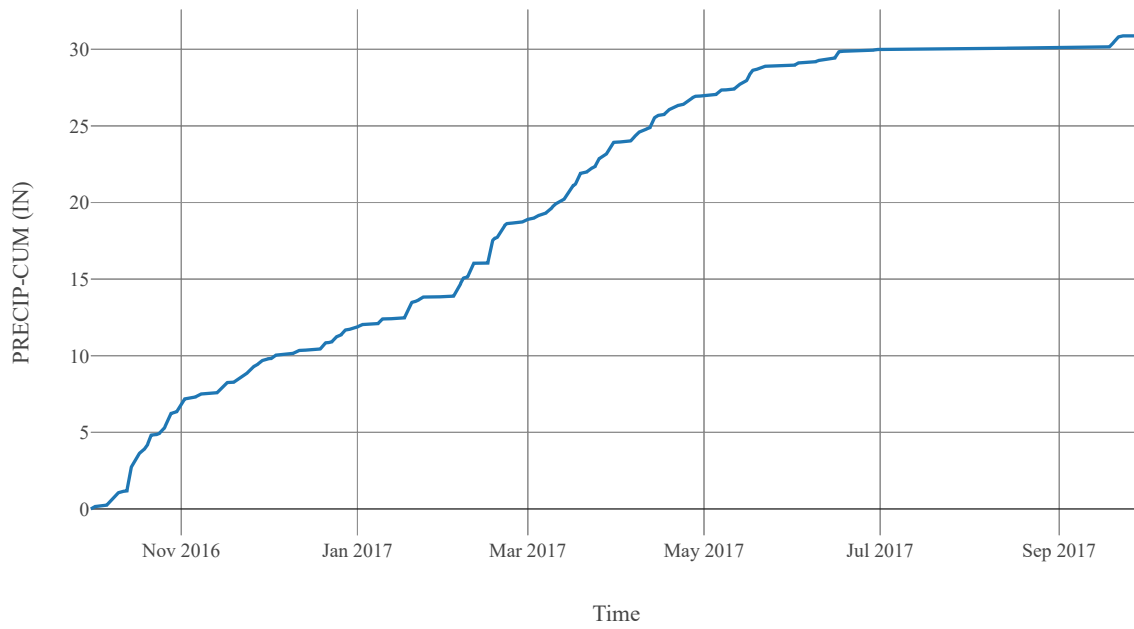
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	273.2
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	1366
		Number Steps	1

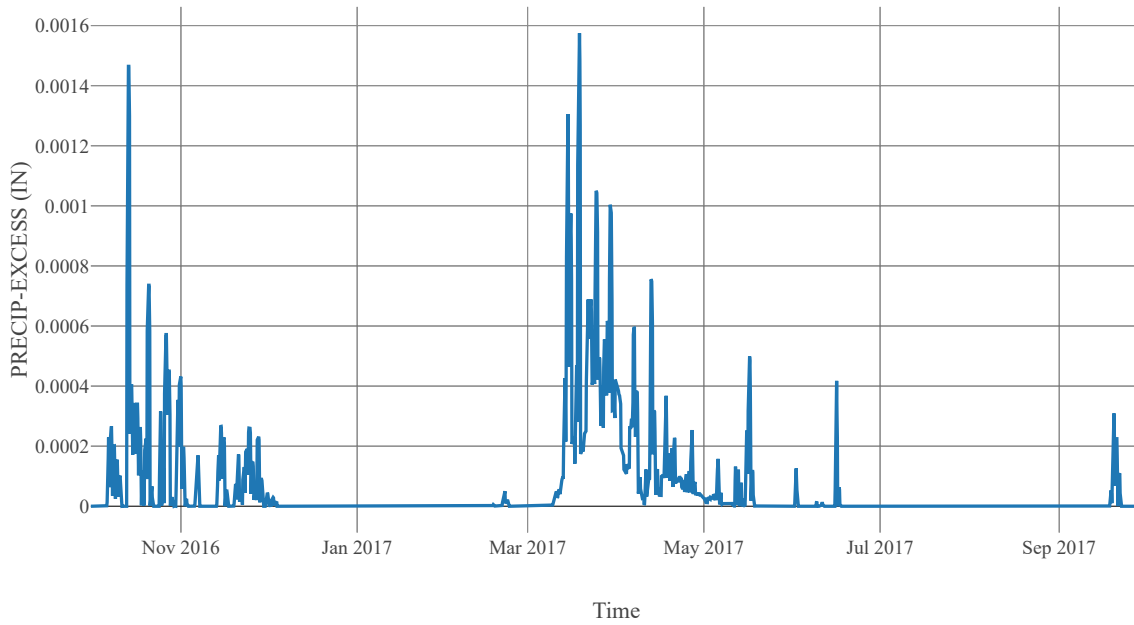
Statistics		
Name	Value	Unit
Baseflow Volume	515822.46	Ac-ft
Precipitation Volume	1655273.6	Ac-ft
Loss Volume	1250482.49	Ac-ft
Excess Volume	10847.44	Ac-ft



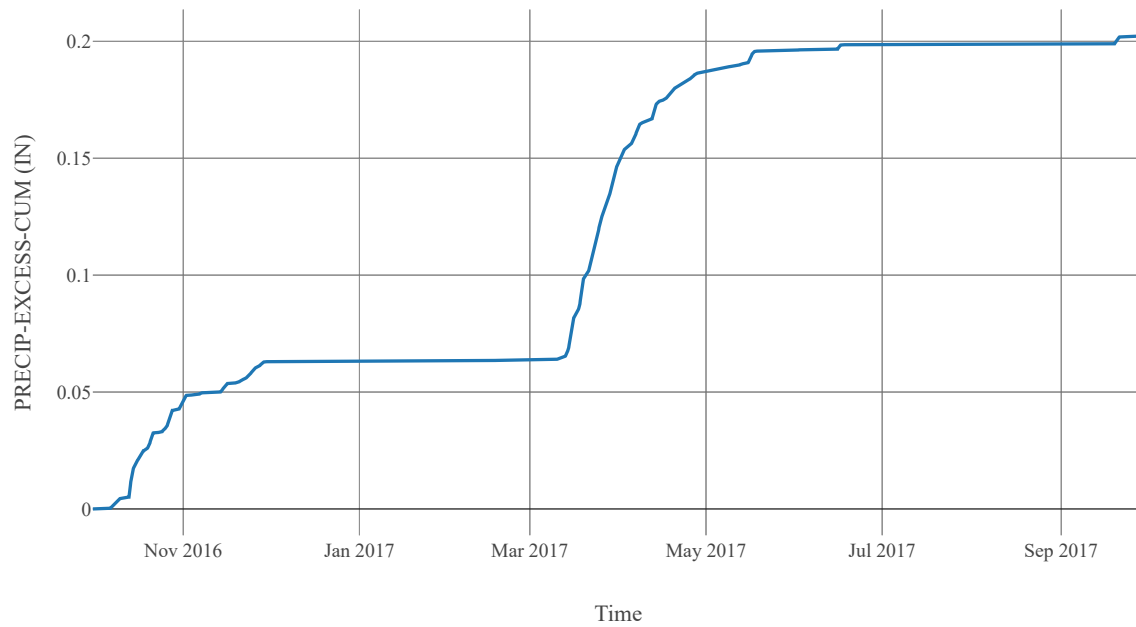
Cumulative Precipitation



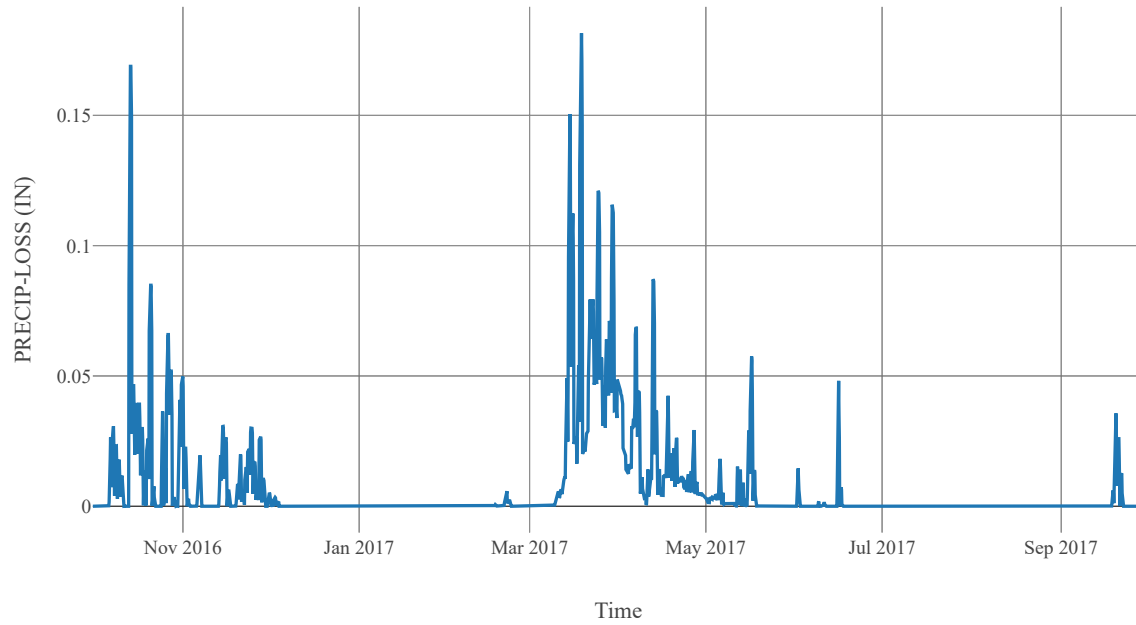
Excess Precipitation



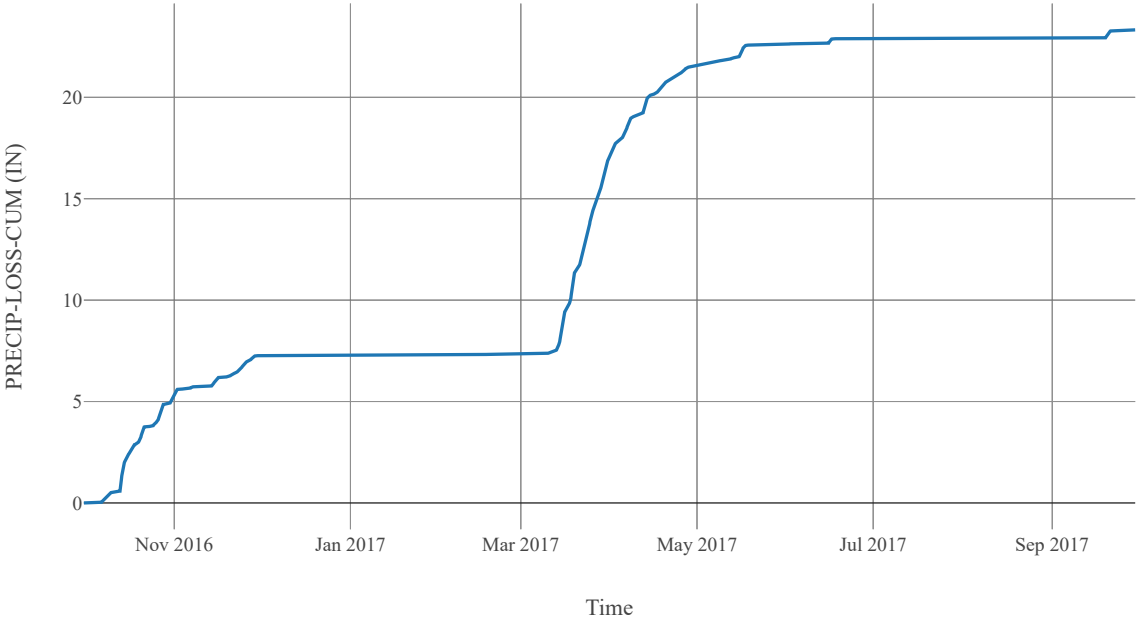
Cumulative Excess Precipitation



Precipitation Loss



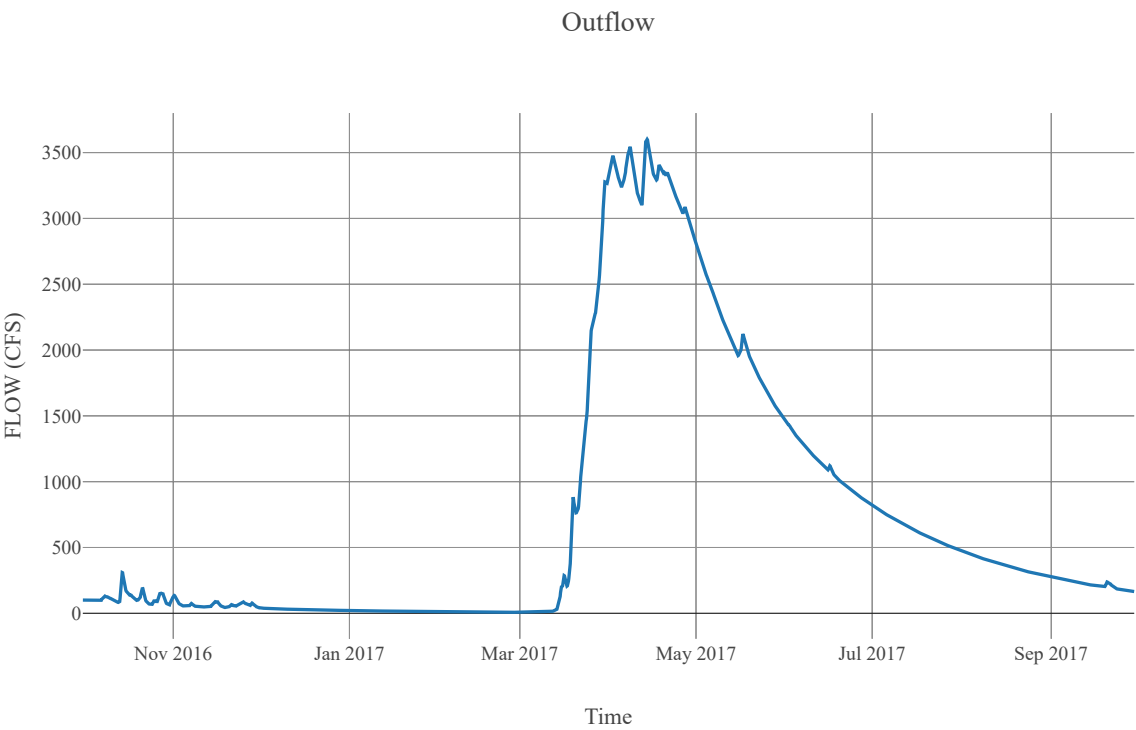
Cumulative Precipitation Loss



Junction : ColvilleRvAtKettleFalls

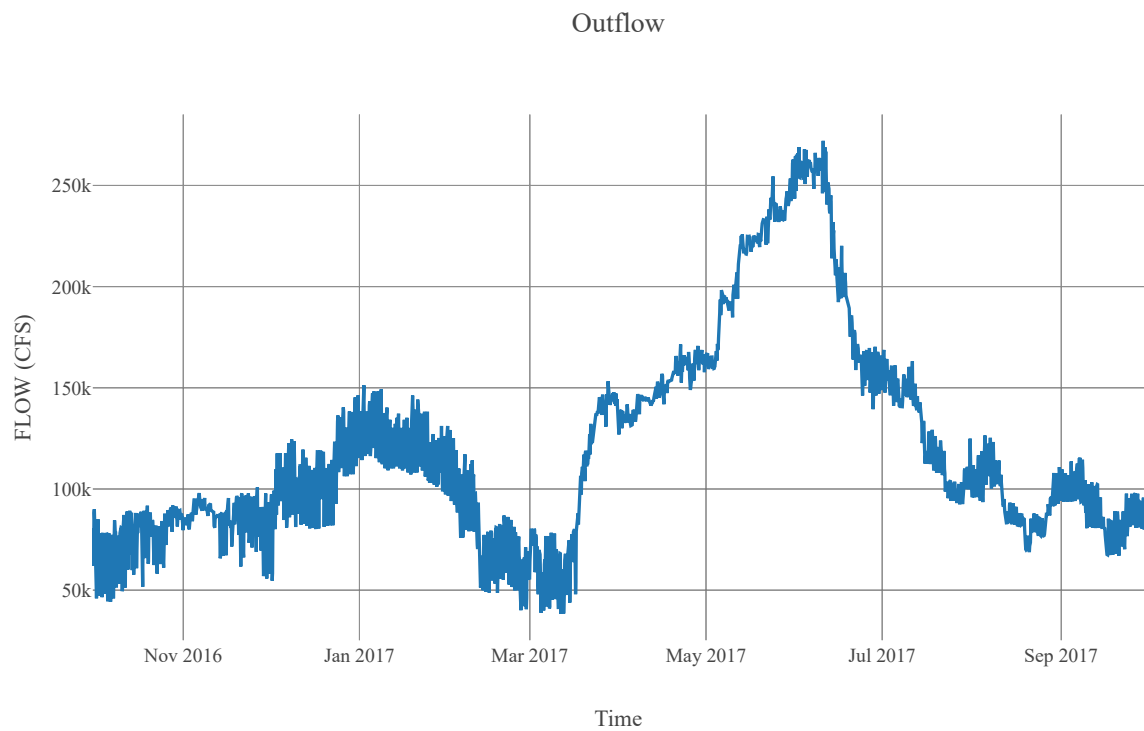
Observed Hydrograph : Colville river at kettle fal

Downstream : ColvilleRv_CF



Junction : ColvilleRv_CF

Downstream : MidColumbia_R100

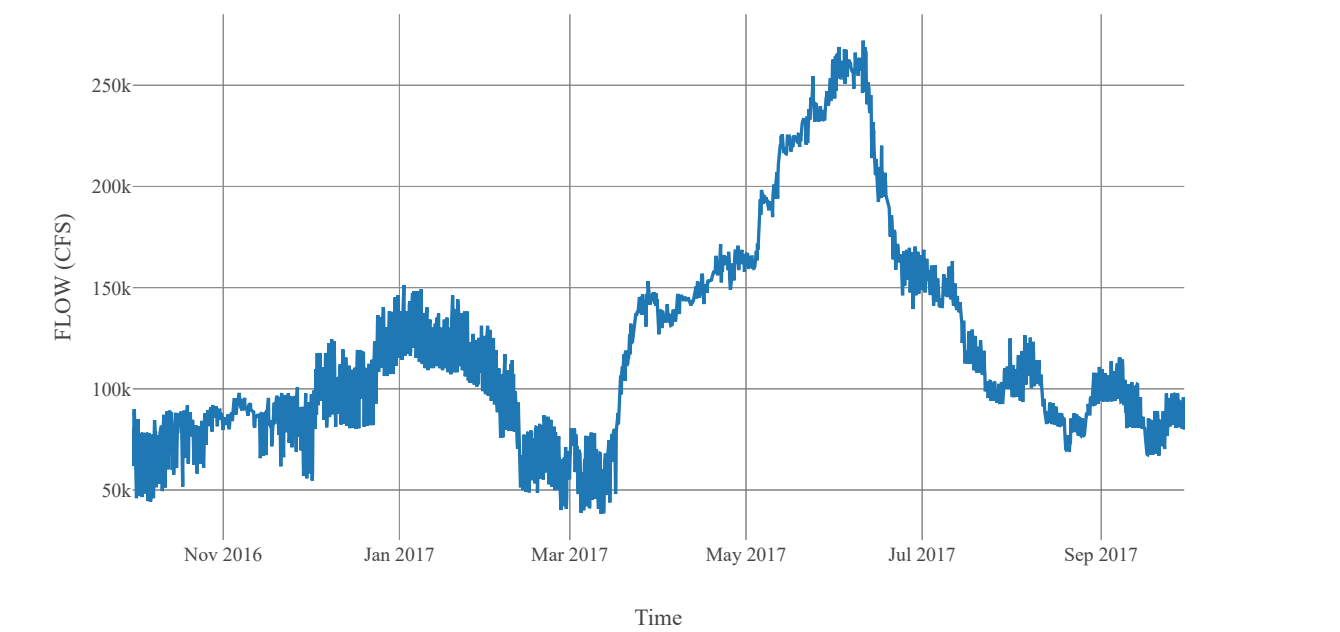


Reach : MidColumbia_R100

Loss Method : None
Downstream : SpokaneRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

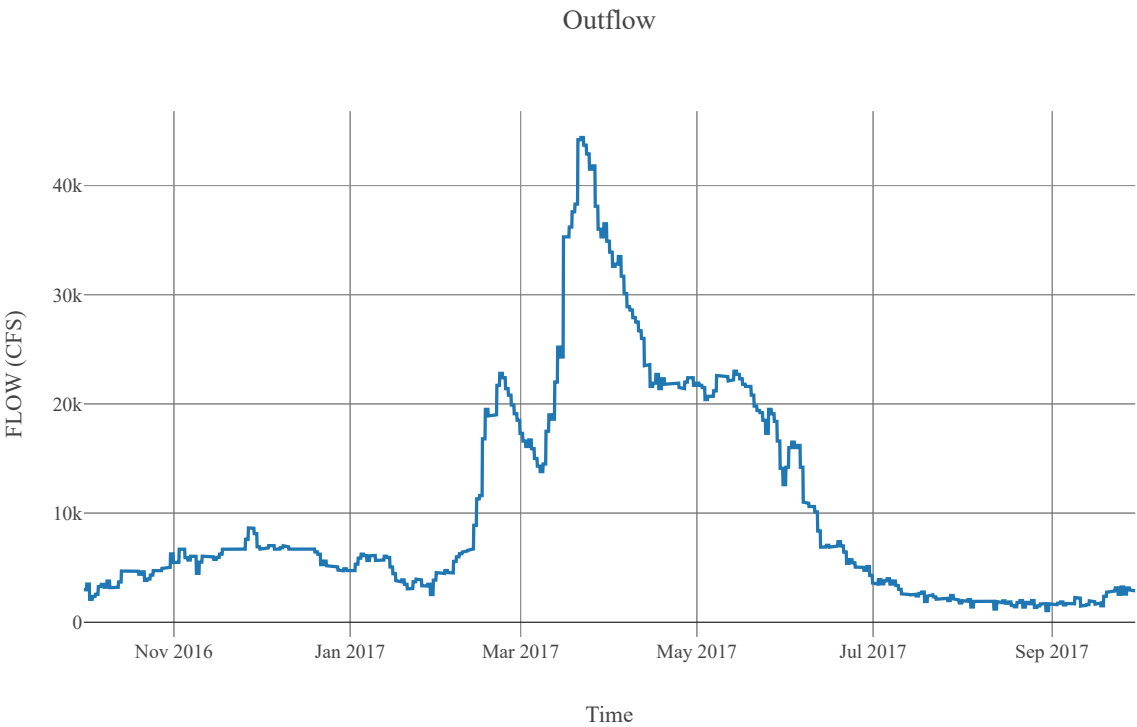
Outflow



Source : SpokaneRv

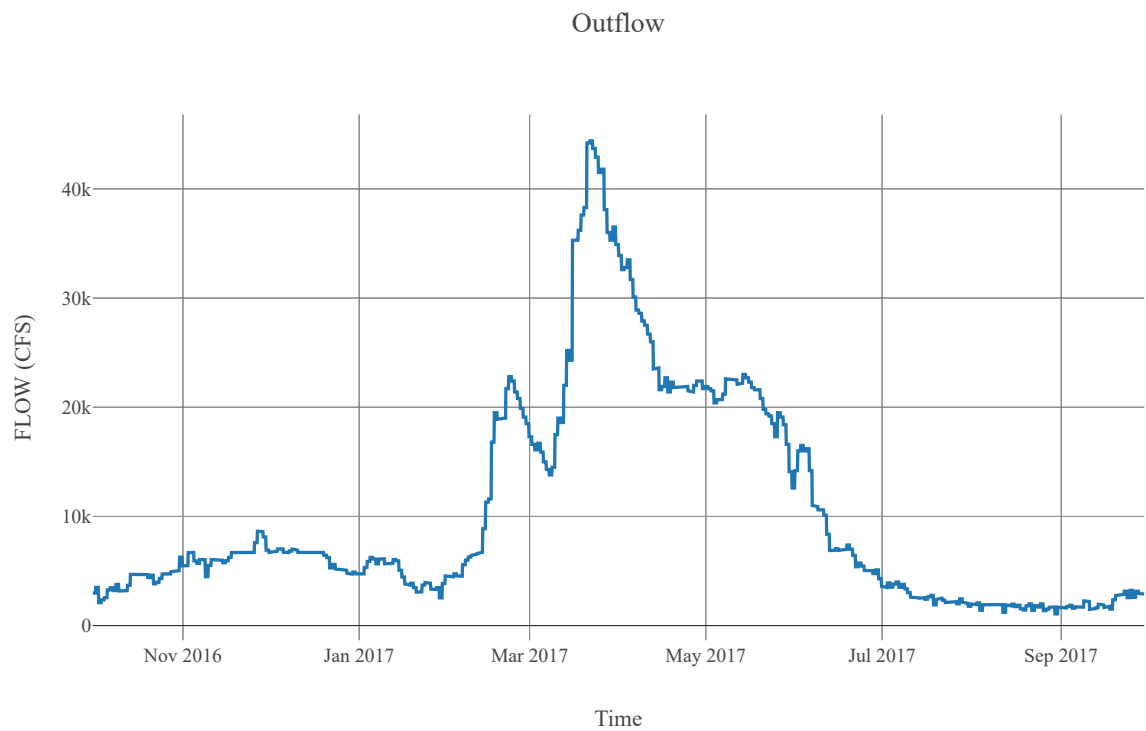
Area : 6020
Downstream : Spokane In

Flow Source	
Flow Ratio	-3402823466385288600000000000000000000000
Period Outflow	0



Junction : SpokaneIn

Downstream : SpokaneRv_CF



Subbasin : MidColumbia_S100

Area : 1130.4
Latitude : 48.3
Longitude : -118.3
Downstream : SpokaneRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	5.86
Method	Deficit Constant
Initial Deficit	12
Maximum Deficit	12
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

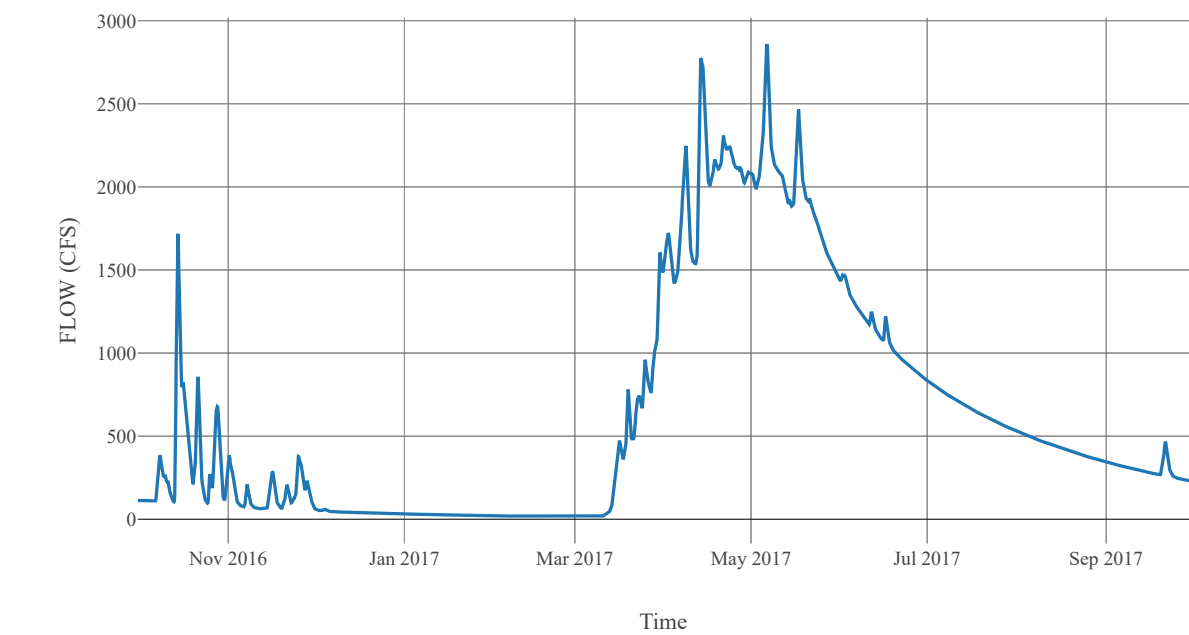
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	17.53
Storage Coefficient	17.53

Baseflow	
Method	Linear Reservoir

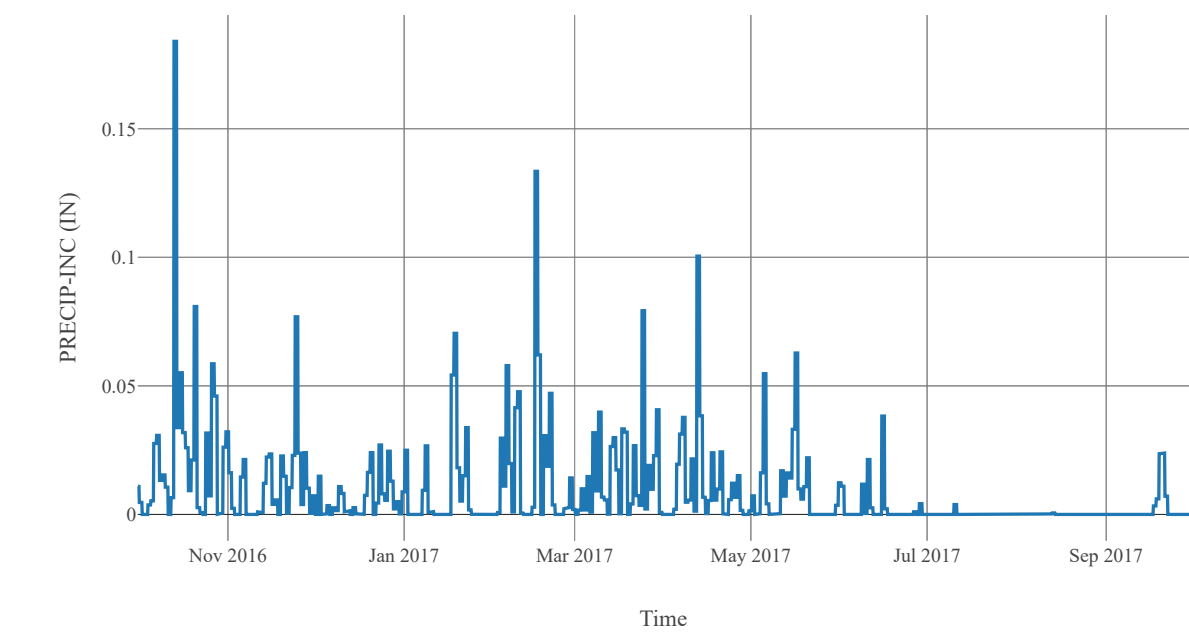
Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	350.6
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	1753
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	380126.56	Ac-ft
Precipitation Volume	1647335.4	Ac-ft
Loss Volume	1162145.42	Ac-ft
Excess Volume	72340.9	Ac-ft

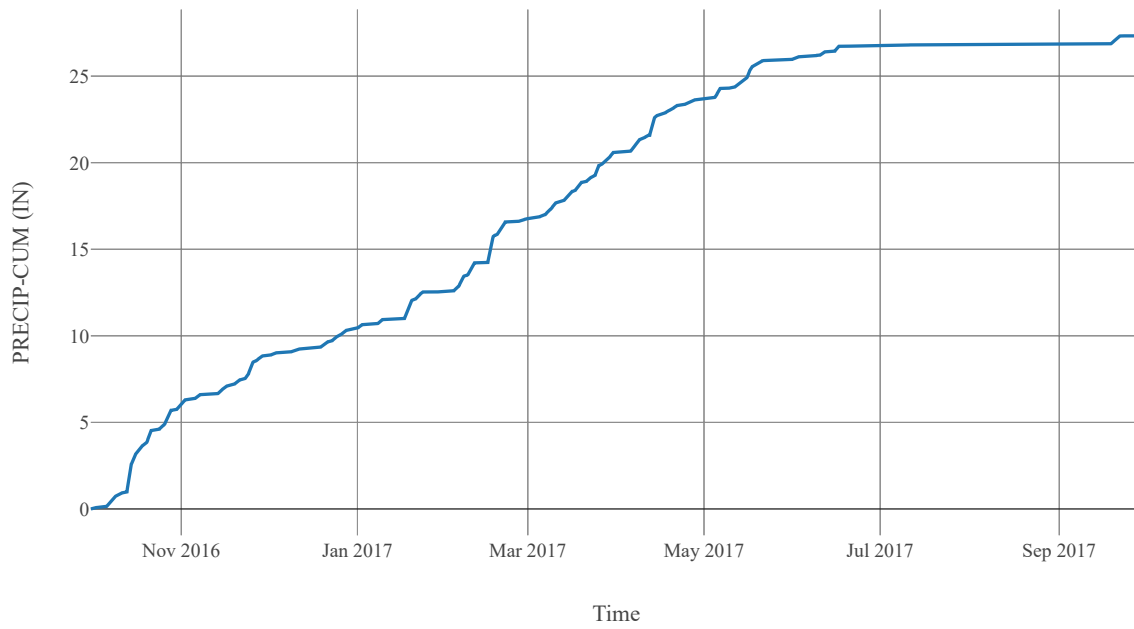
Outflow



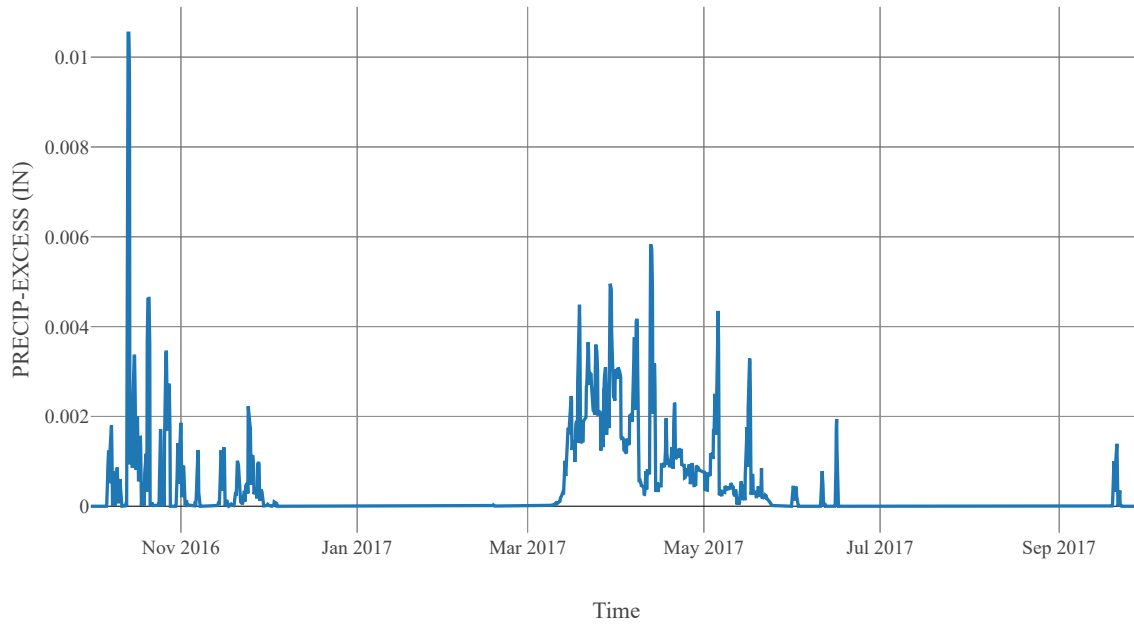
Precipitation



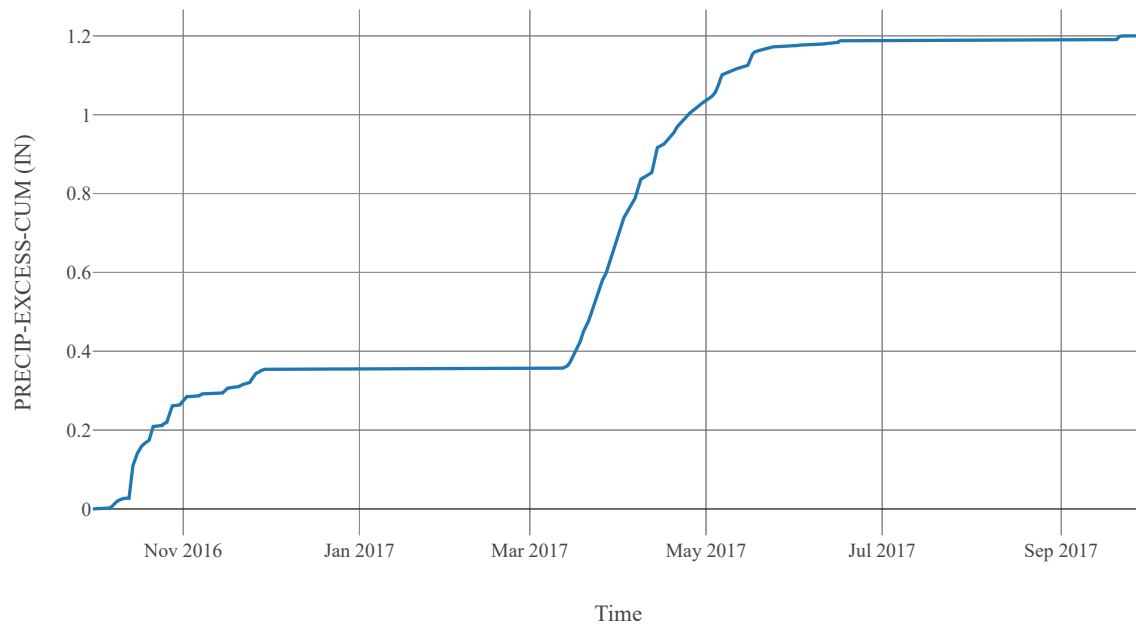
Cumulative Precipitation



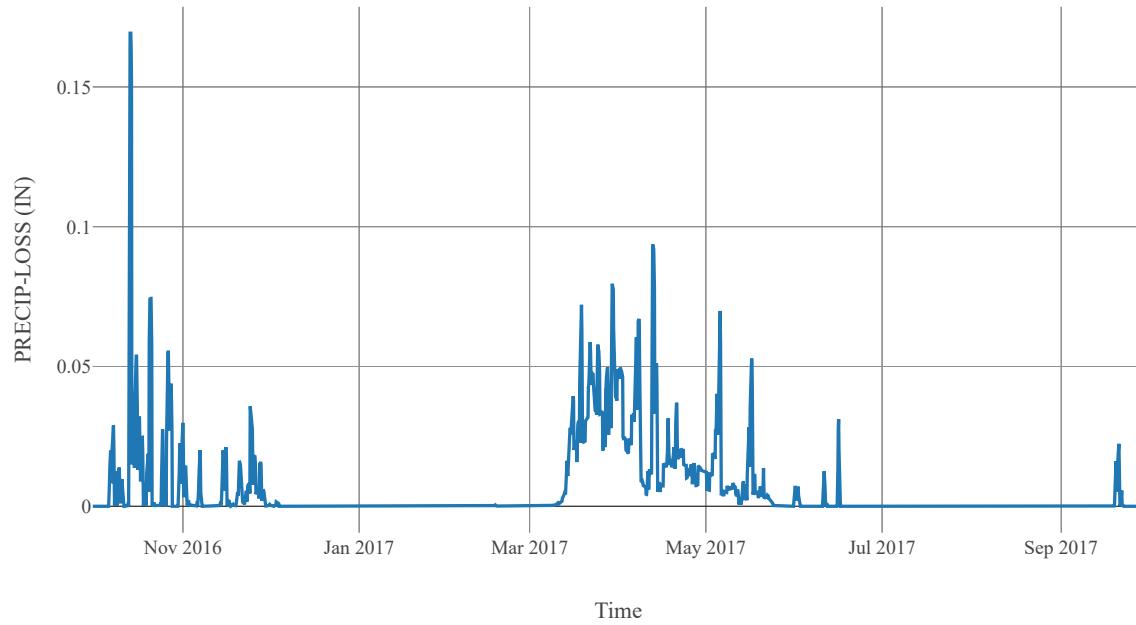
Excess Precipitation



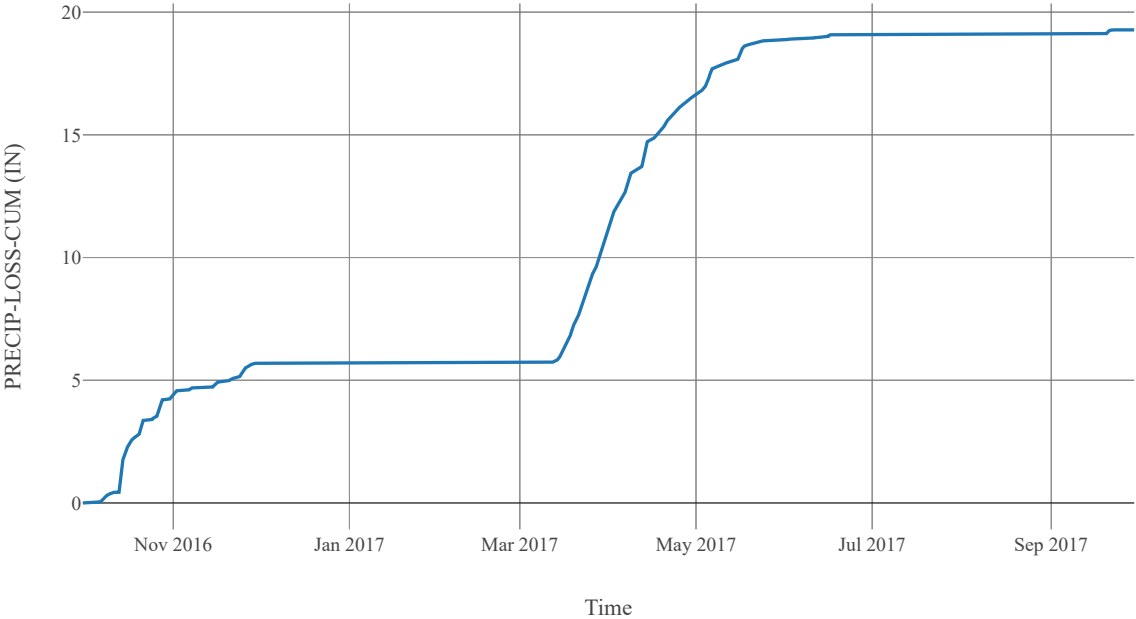
Cumulative Excess Precipitation



Precipitation Loss

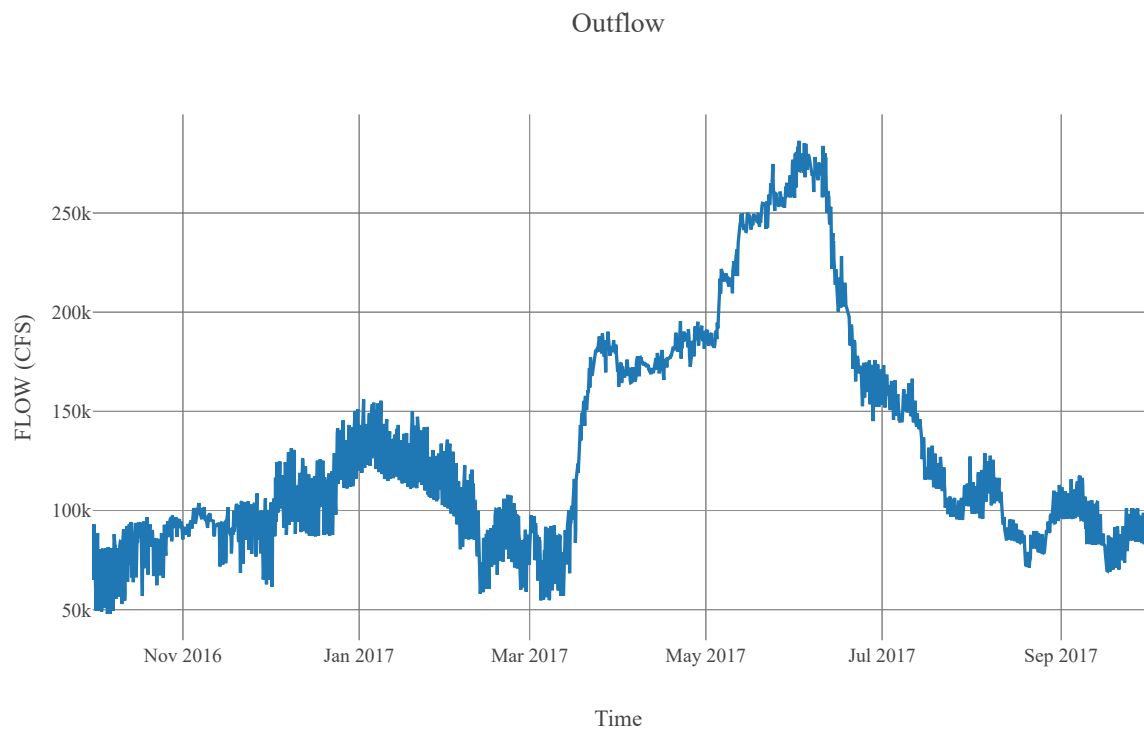


Cumulative Precipitation Loss



Junction : SpokaneRv_CF

Downstream : MidColumbia_R095



Reach : MidColumbia_R095

Loss Method : None
Downstream : SanpoilRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : SanpoilRv_S010

Area : 890.88
Latitude : 48.47
Longitude : -118.81
Downstream : Sanpoil Rv

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.25
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

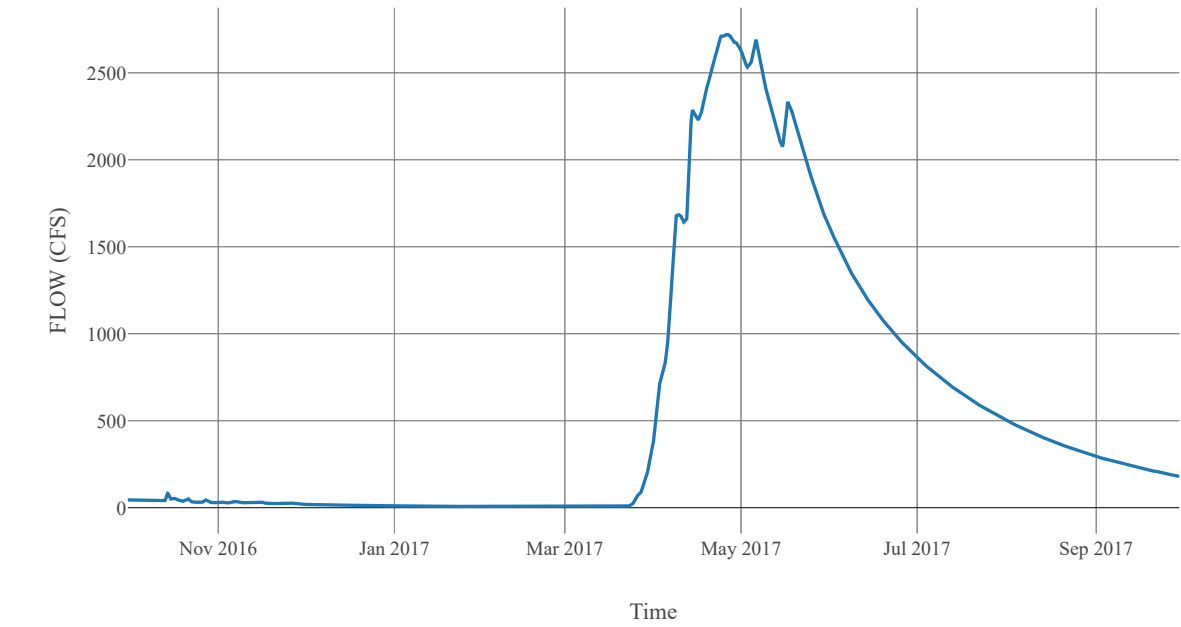
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	14.06
Storage Coefficient	14.06

Baseflow	
Method	Linear Reservoir

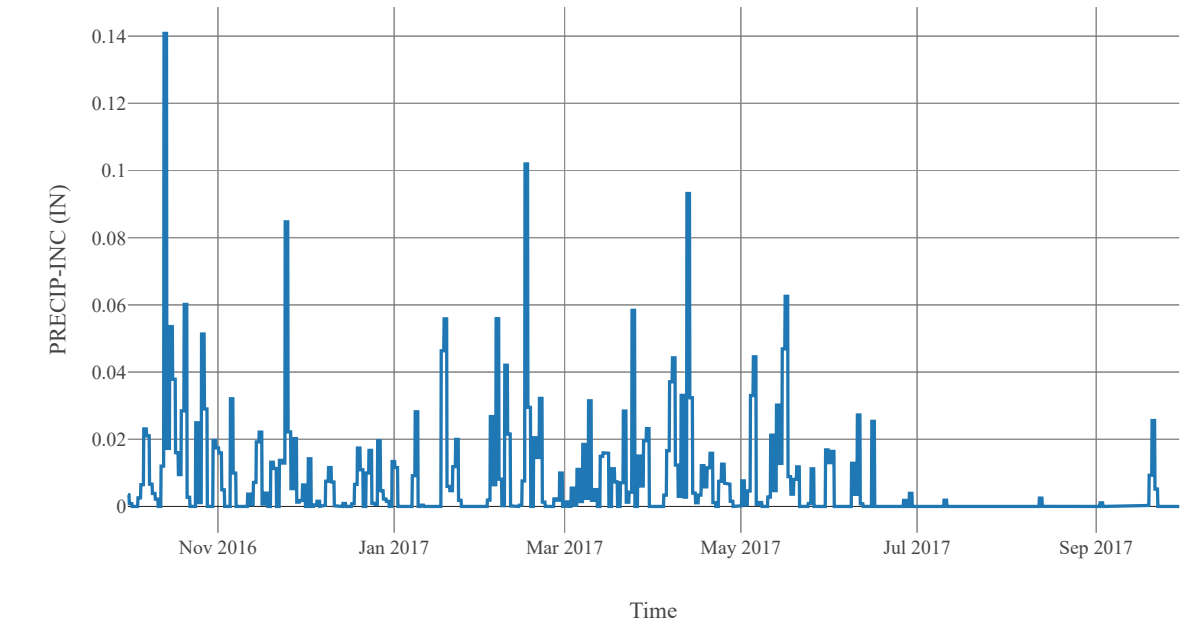
Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	281.2
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1406
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	407582.96	Ac-ft
Precipitation Volume	1062535.83	Ac-ft
Loss Volume	763618.15	Ac-ft
Excess Volume	1913.83	Ac-ft

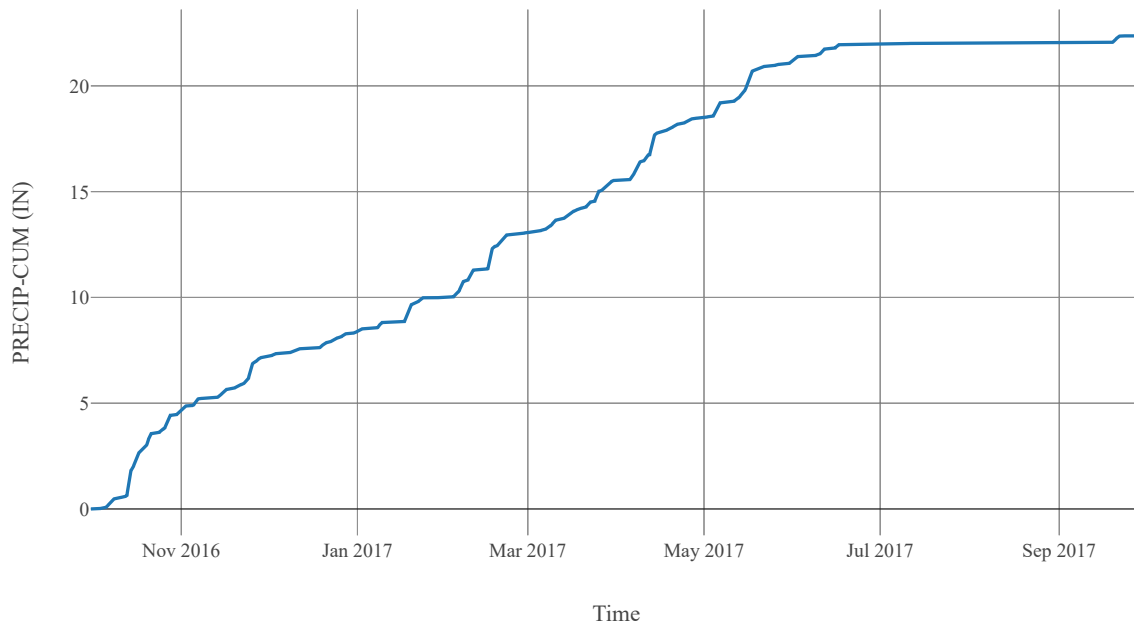
Outflow



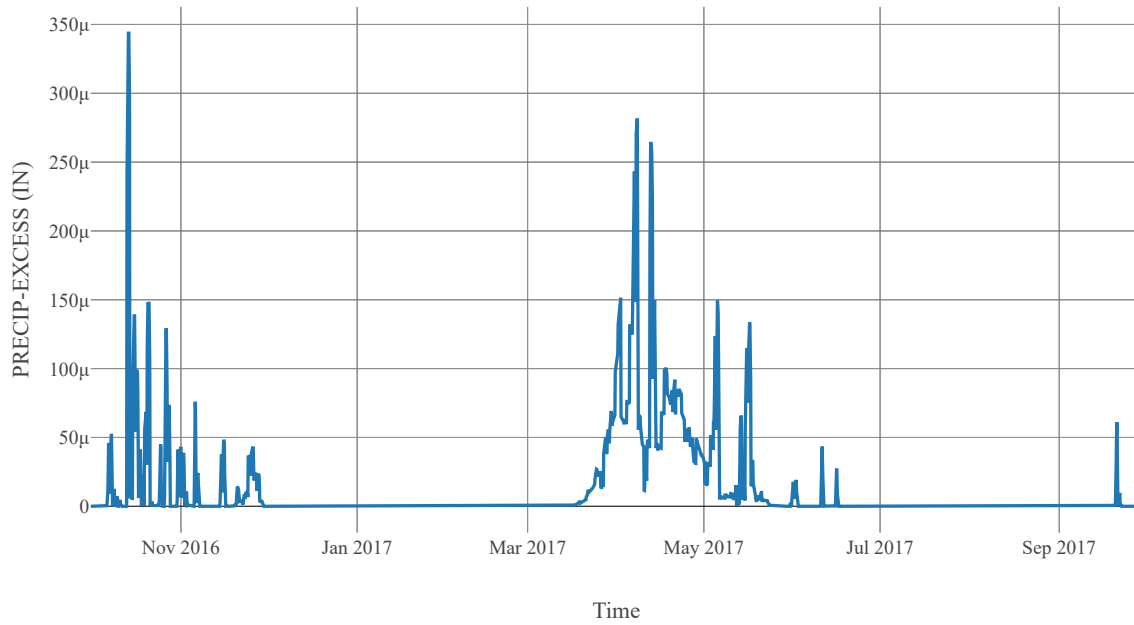
Precipitation



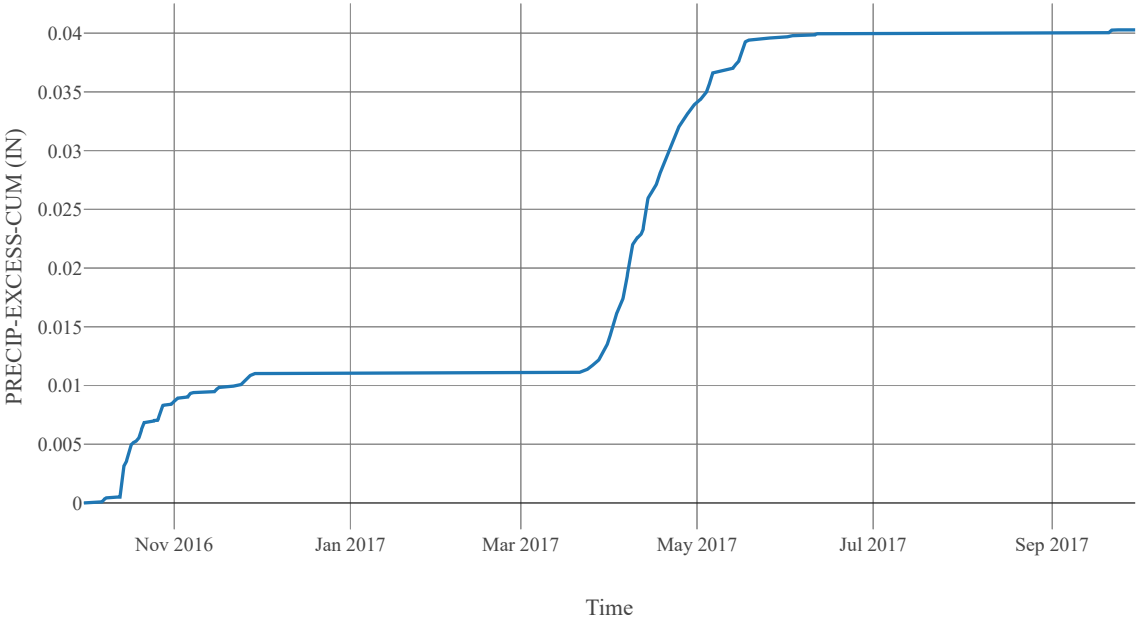
Cumulative Precipitation



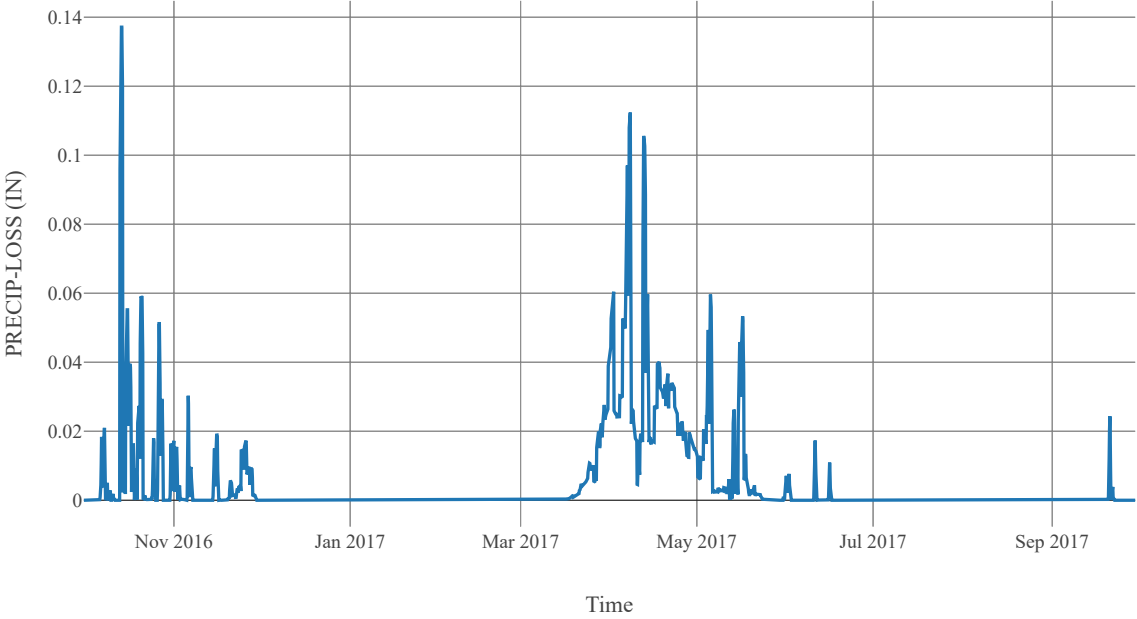
Excess Precipitation



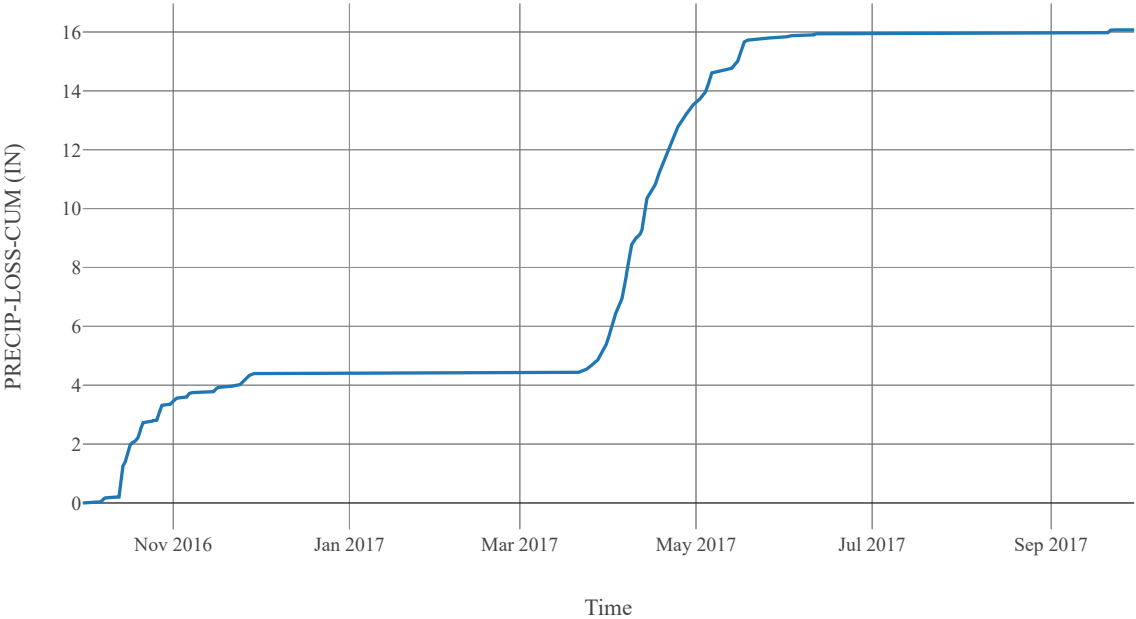
Cumulative Excess Precipitation



Precipitation Loss

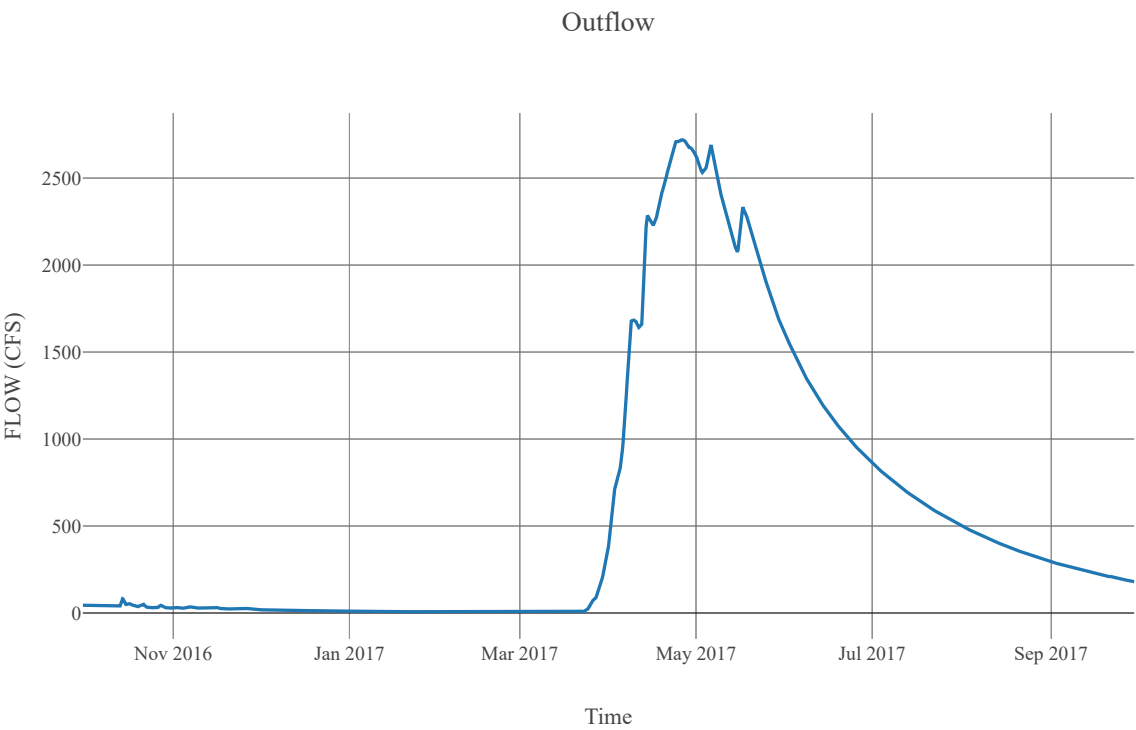


Cumulative Precipitation Loss



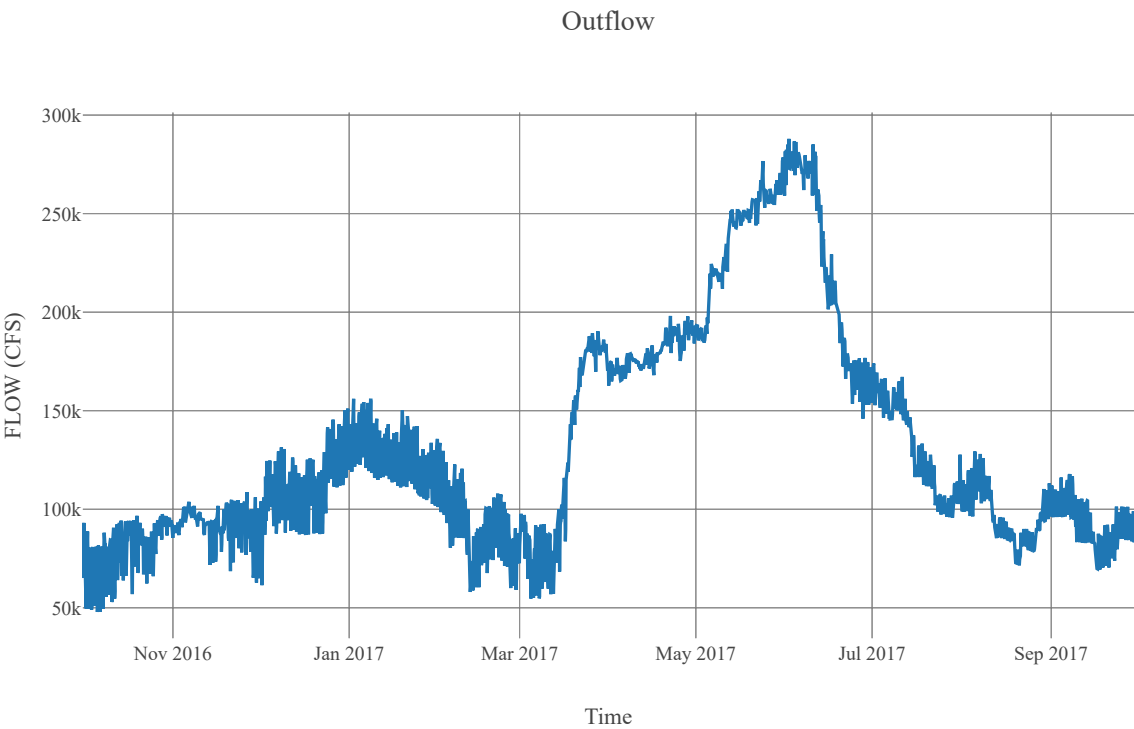
Junction : SanpoilRv

Observed Hydrograph : Sanpoil river above jack cre
Downstream : SanpoilRv_CF



Junction : SanpoilRv_CF

Downstream : MidColumbia_R090

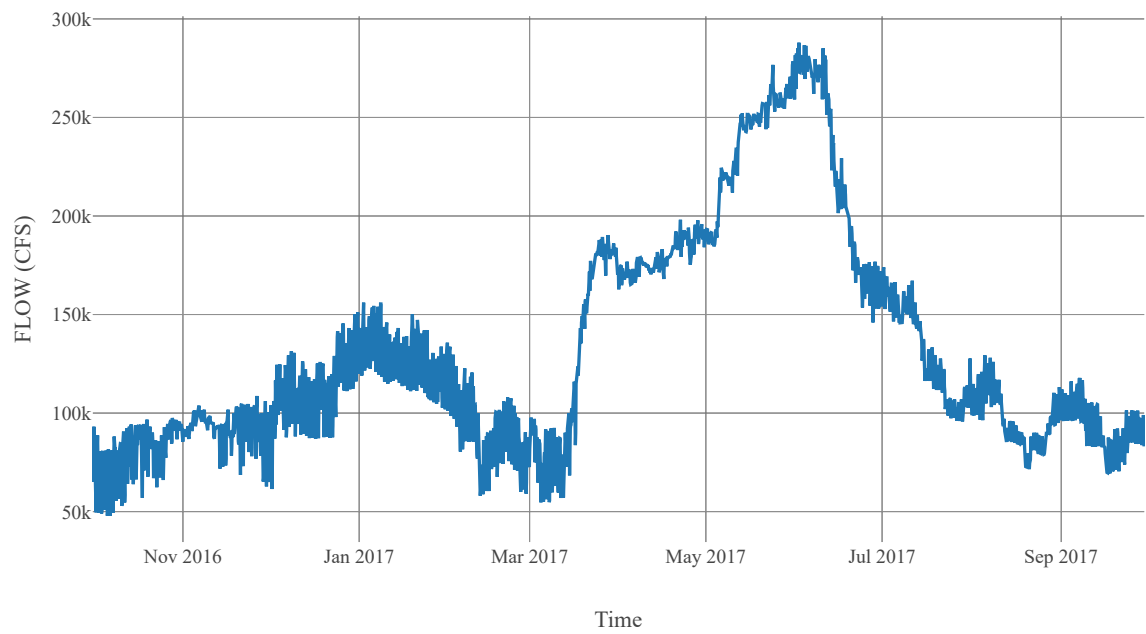


Reach : MidColumbia_R090

Loss Method : None
Downstream : GrandCoulee_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : MidColumbia_S090

Area : 527.13
Latitude : 47.87
Longitude : -118.51
Downstream : GrandCoulee_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	7.97
Method	Deficit Constant
Initial Deficit	12
Maximum Deficit	12
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

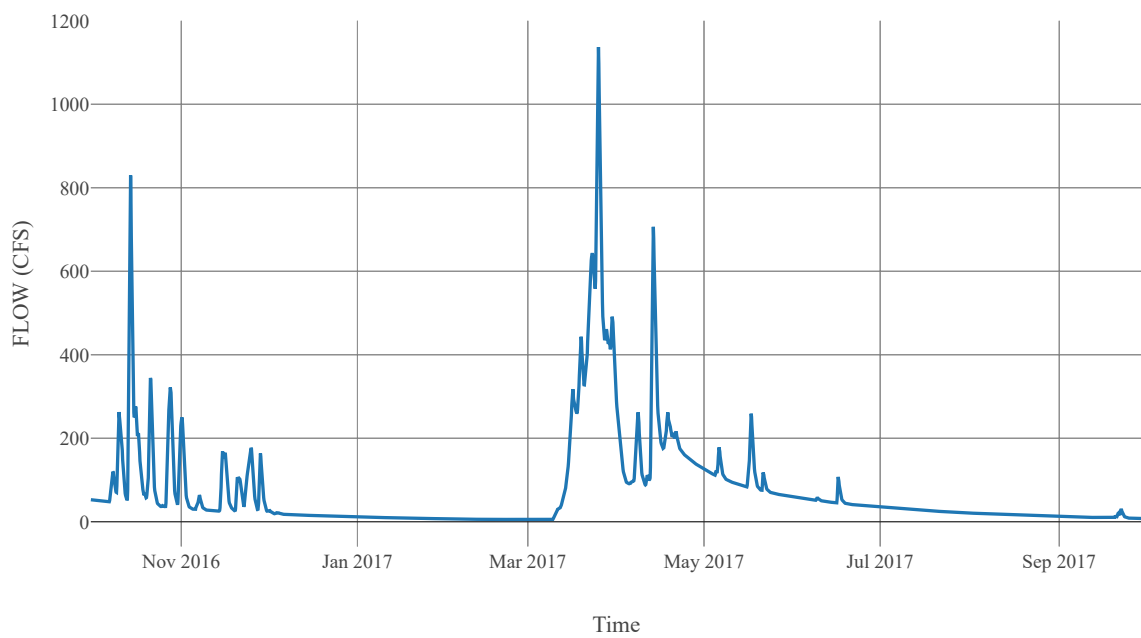
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	14.61
Storage Coefficient	14.61

Baseflow	
Method	Linear Reservoir

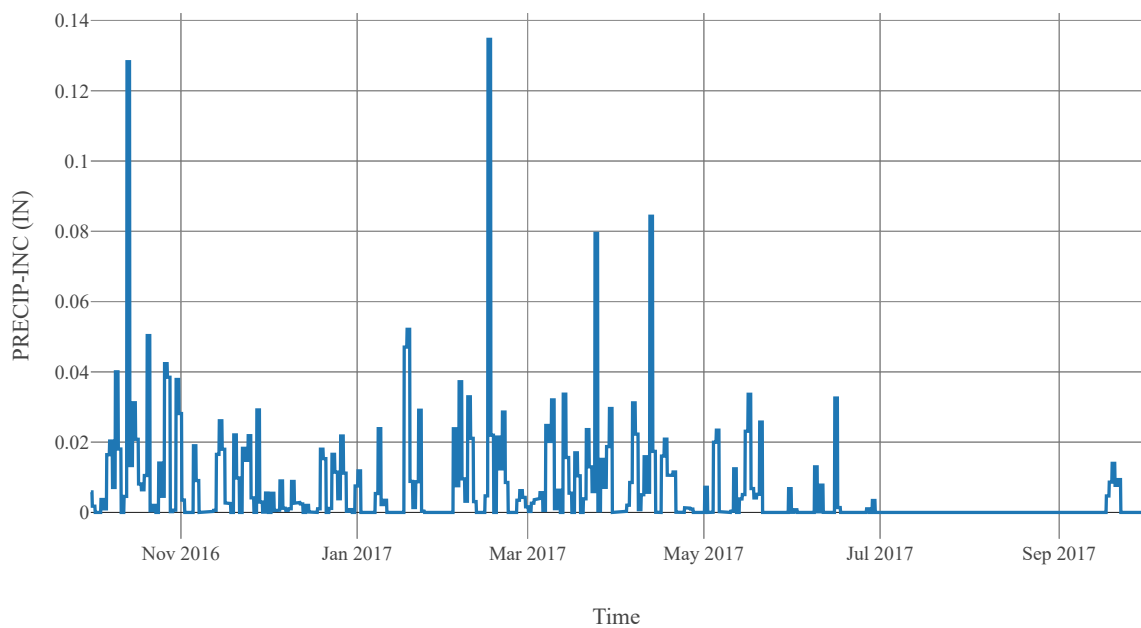
Baseflow Layer List	1	Baseflow Fraction	0.2
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	292.2
		Number Steps	1
	2	Baseflow Fraction	0.8
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	1461
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	25560.63	Ac-ft
Precipitation Volume	547943.65	Ac-ft
Loss Volume	328327.33	Ac-ft
Excess Volume	28433.87	Ac-ft

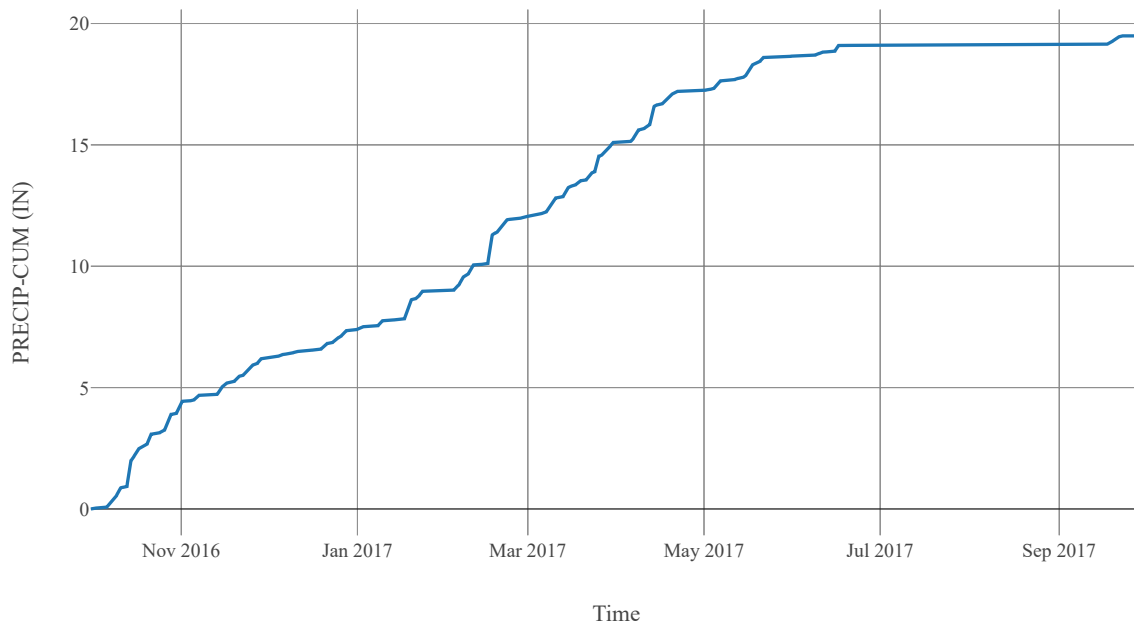
Outflow



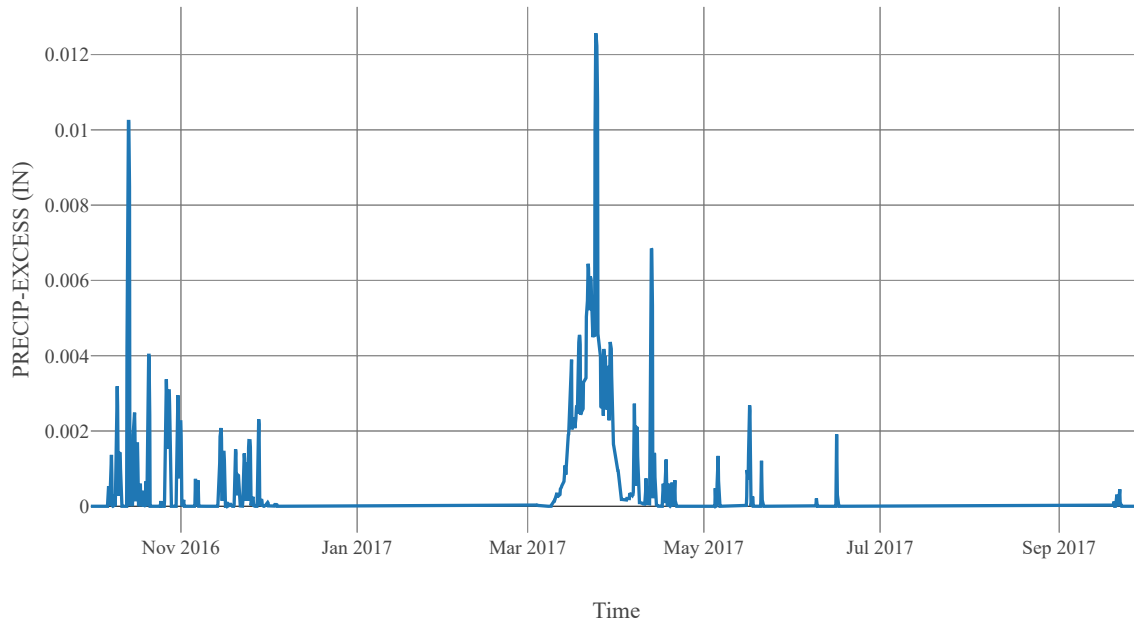
Precipitation



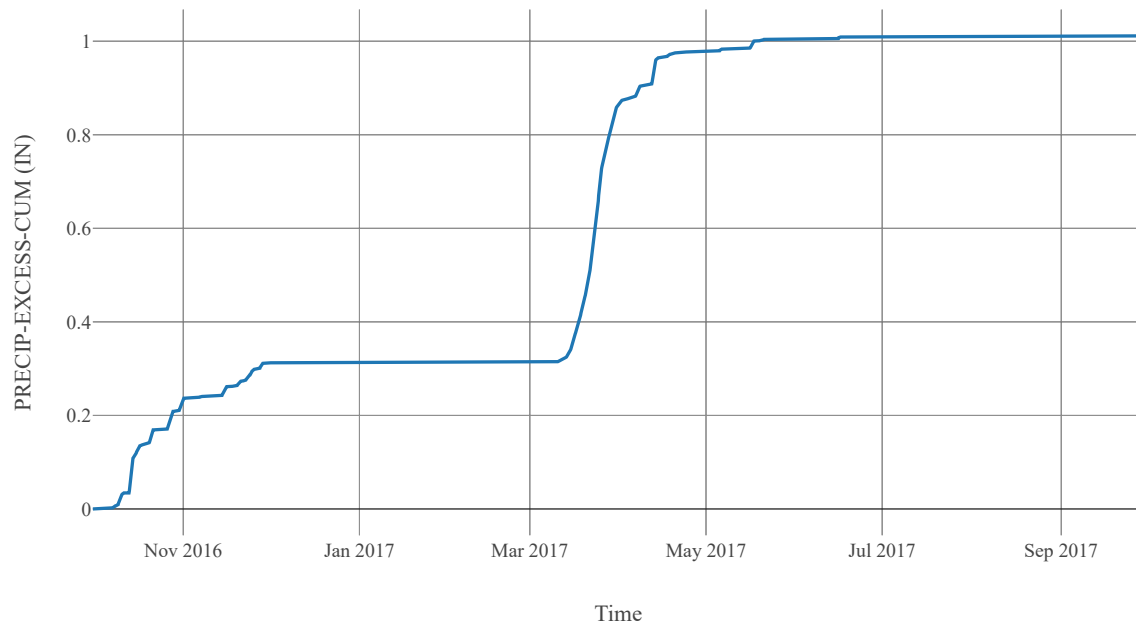
Cumulative Precipitation



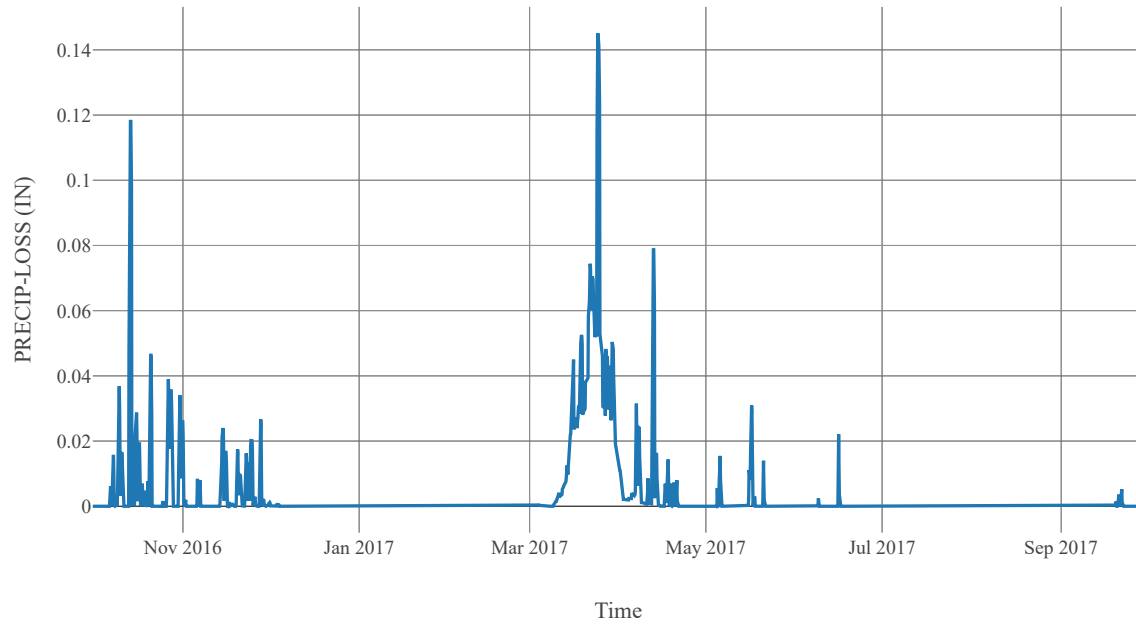
Excess Precipitation



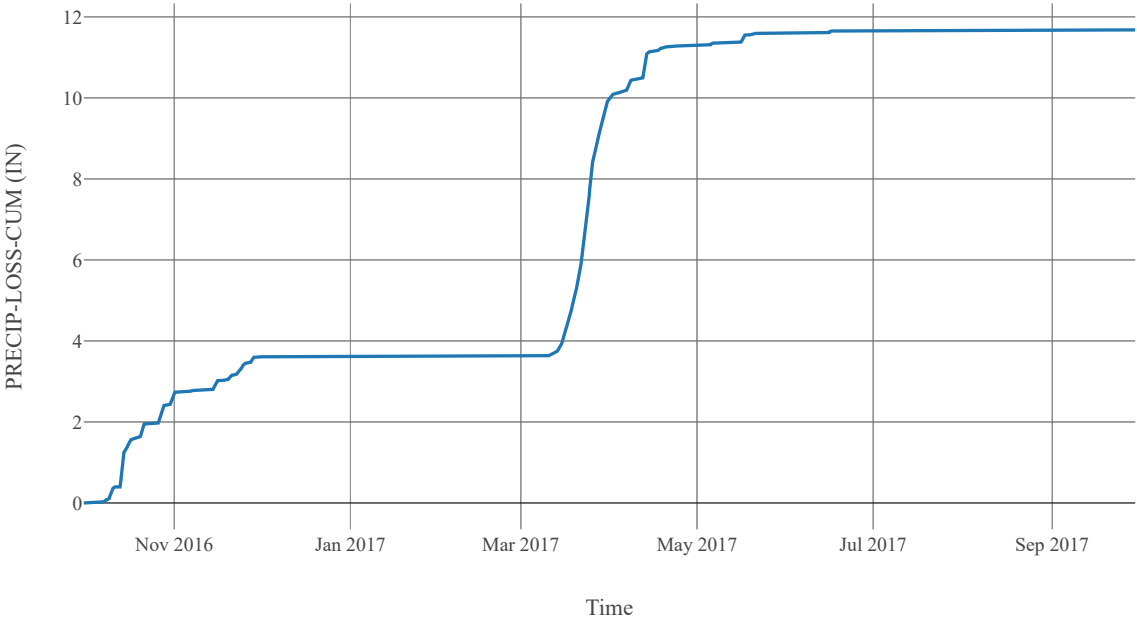
Cumulative Excess Precipitation



Precipitation Loss

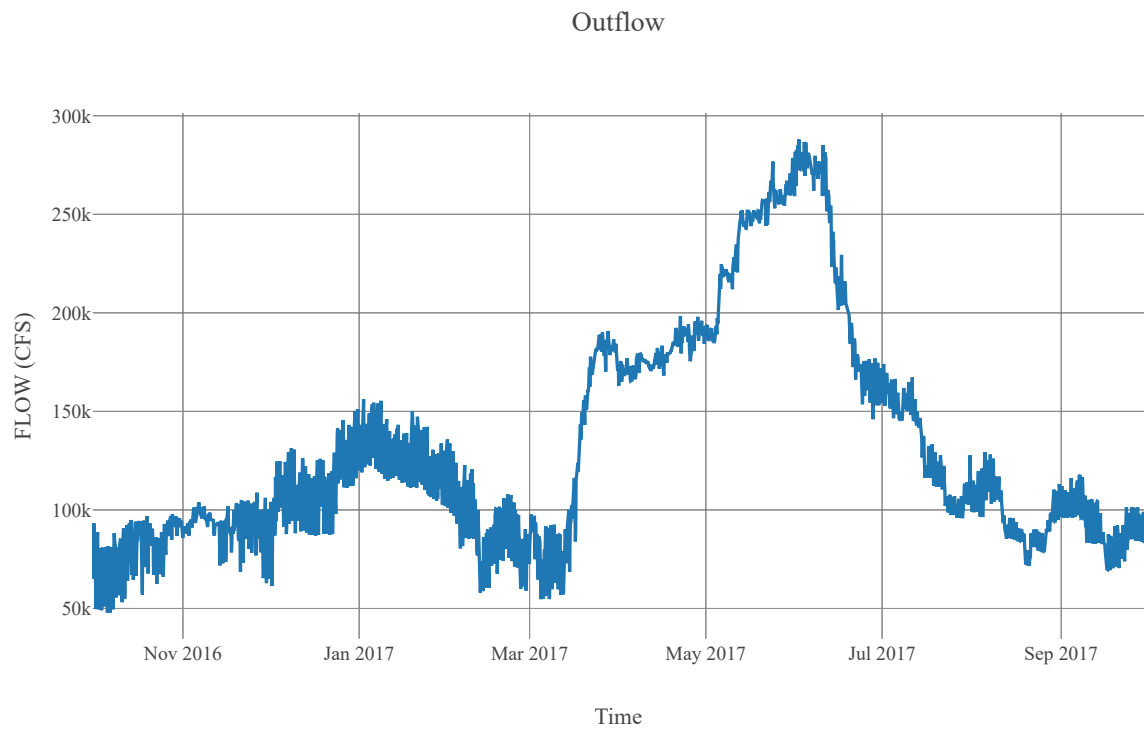


Cumulative Precipitation Loss



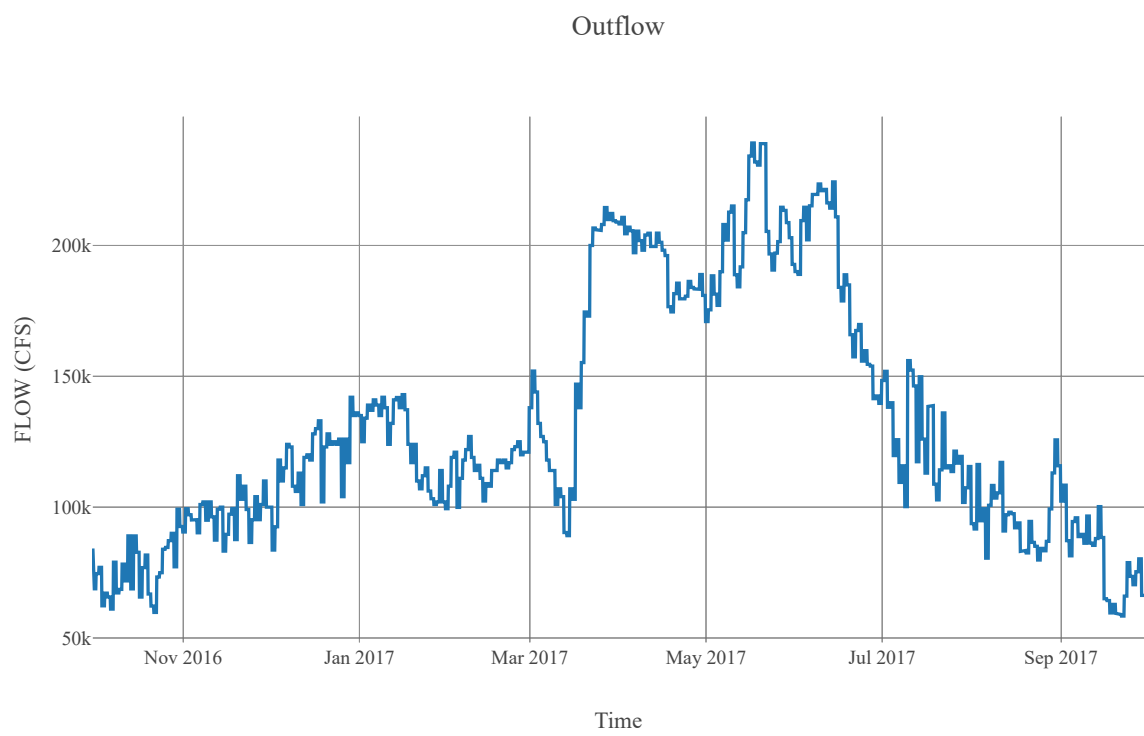
Junction : GrandCoulee_IN

Observed Hydrograph : Grand Coulee In
Downstream : Grand Coulee



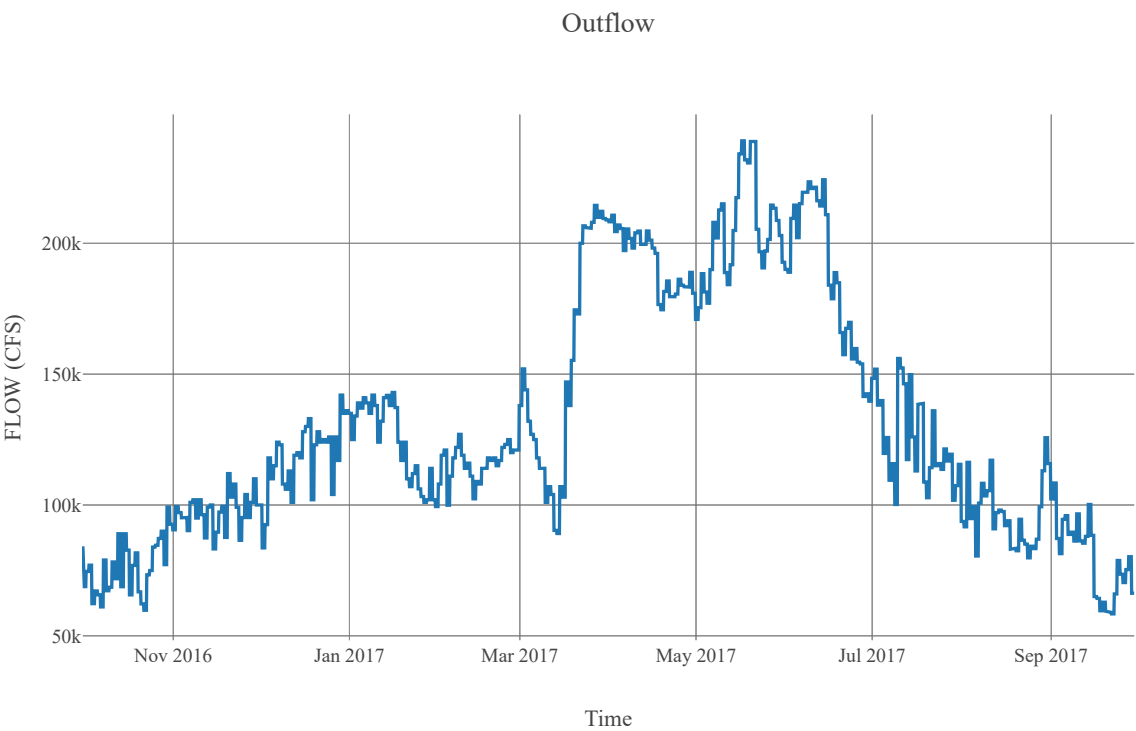
Reservoir : GrandCoulee

Quality Method : Unspecified
Method : Specified Outflow
Downstream : GrandCoulee_OUT



Junction : GrandCoulee_OUT

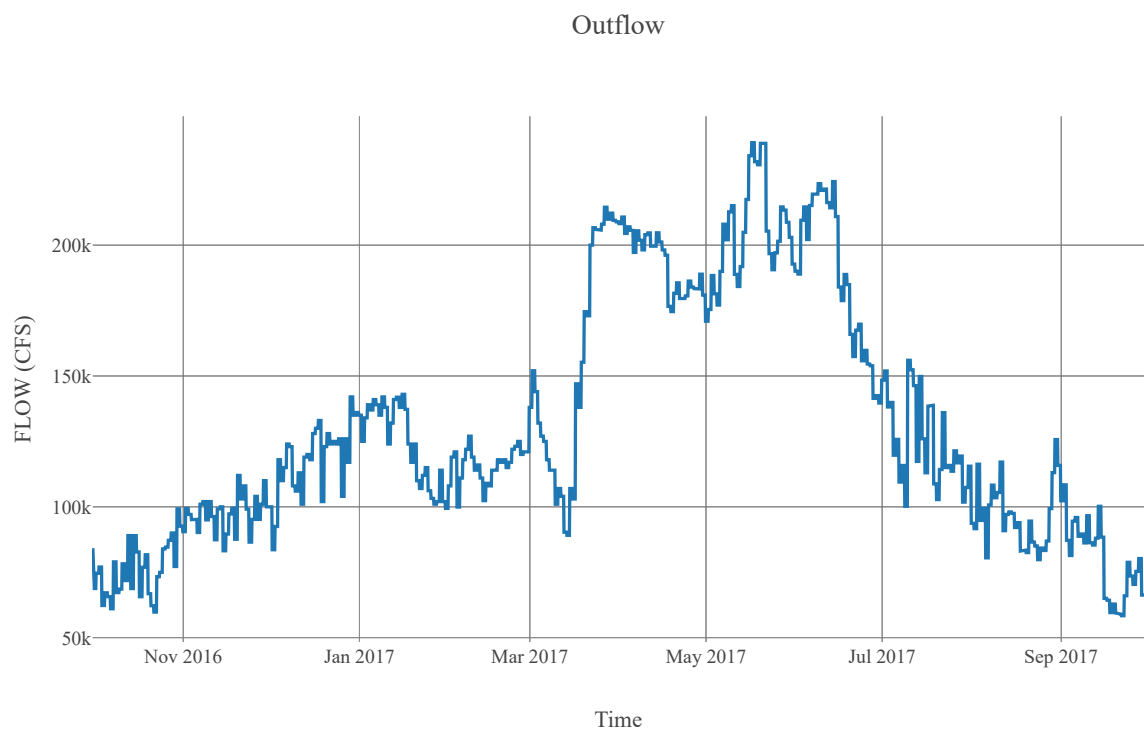
Downstream : MidColumbia_R080



Reach : MidColumbia_R080

Loss Method : None
Downstream : ChiefJoseph_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : MidColumbia_S080

Area : 672.17
Latitude : 48.14
Longitude : -119.13
Downstream : ChiefJoseph_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.91
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

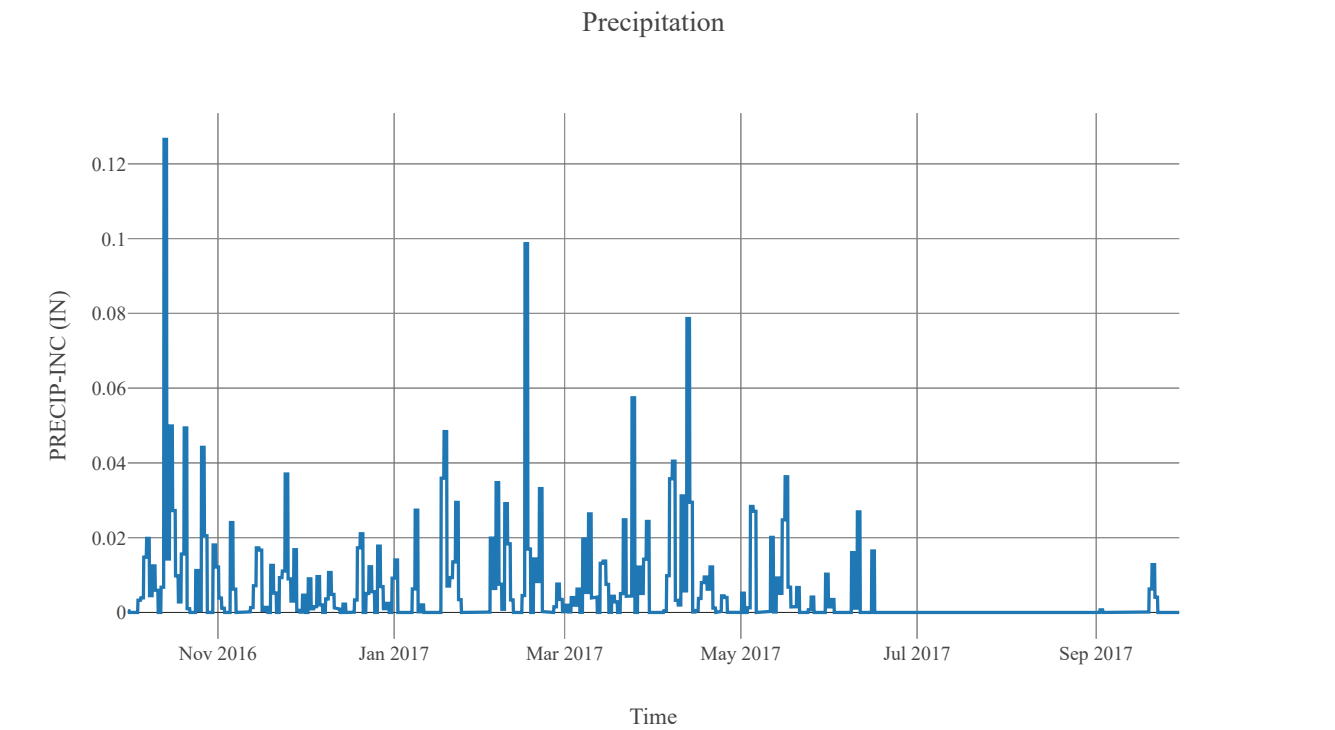
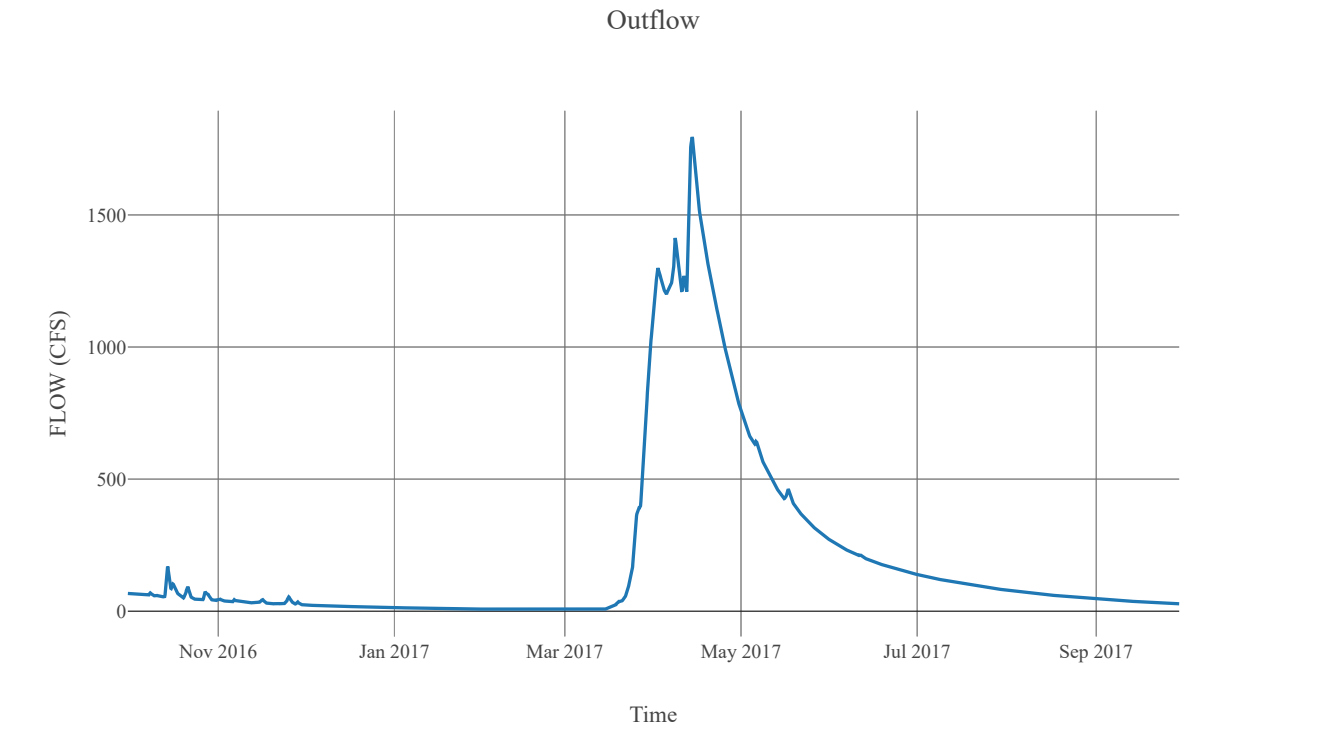
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	13.84
Storage Coefficient	13.84

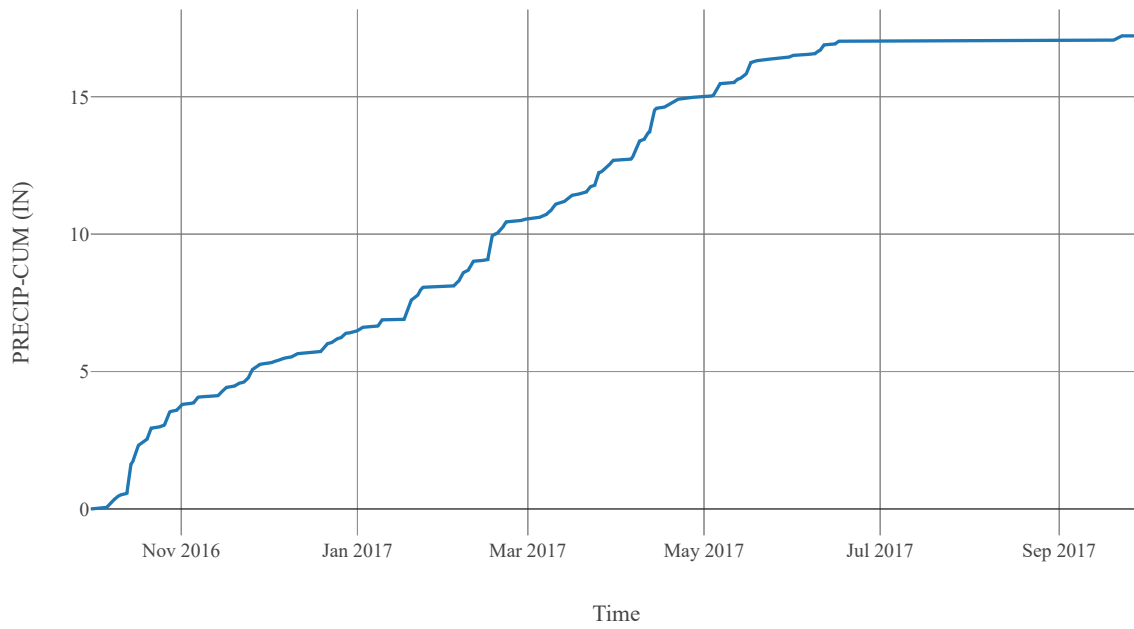
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	276.8
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	1384
		Number Steps	1

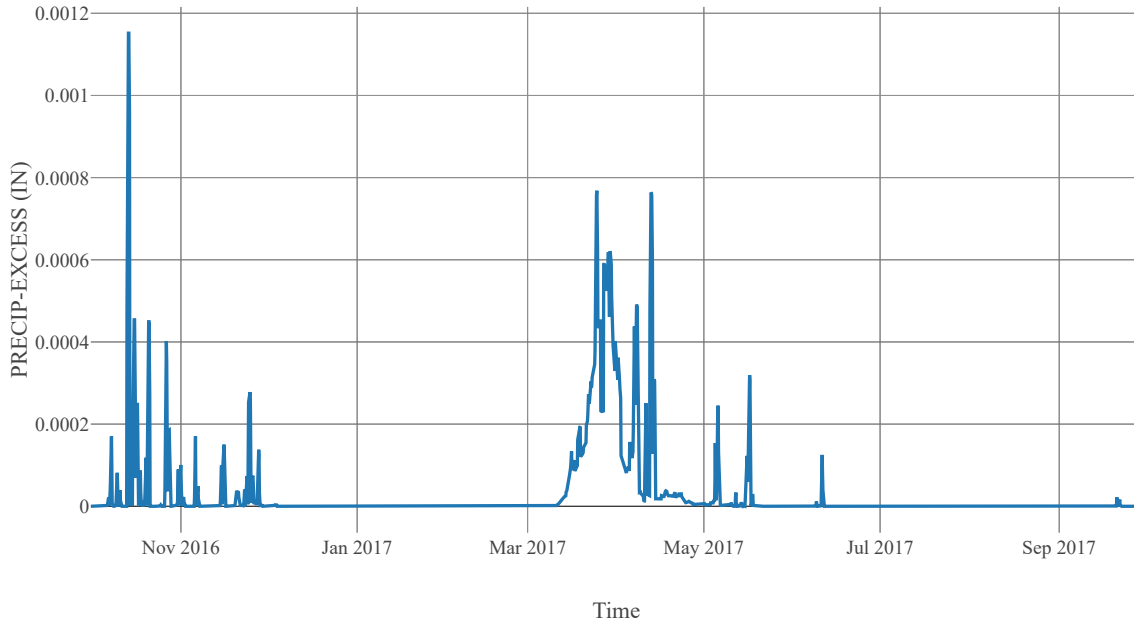
Statistics		
Name	Value	Unit
Baseflow Volume	140681.02	Ac-ft
Precipitation Volume	617067.44	Ac-ft
Loss Volume	387344.26	Ac-ft
Excess Volume	3557.2	Ac-ft



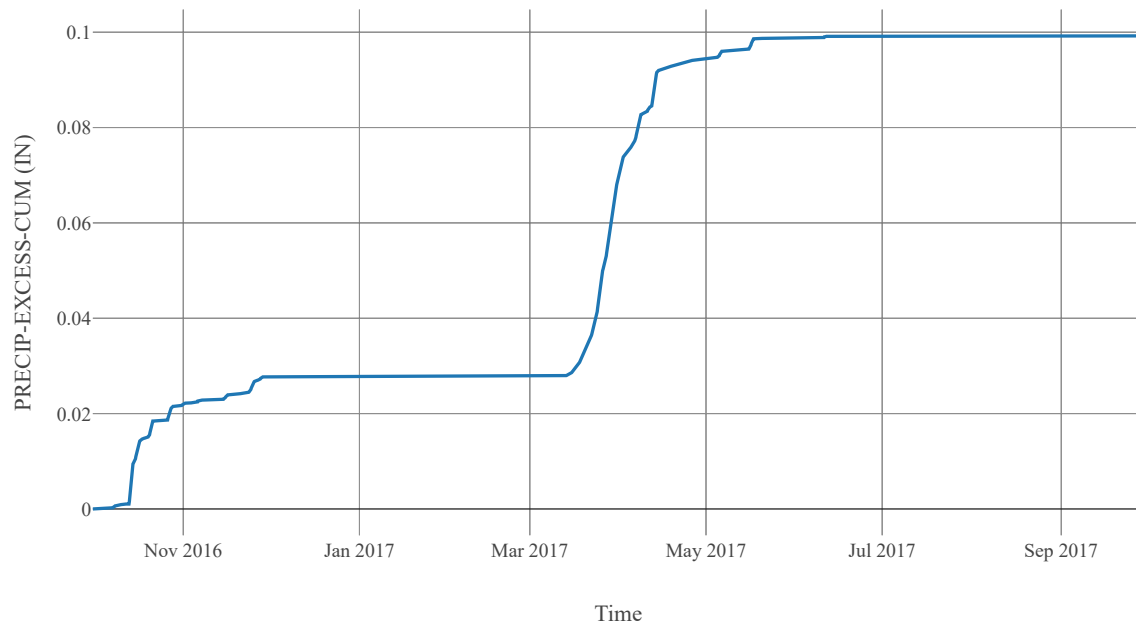
Cumulative Precipitation



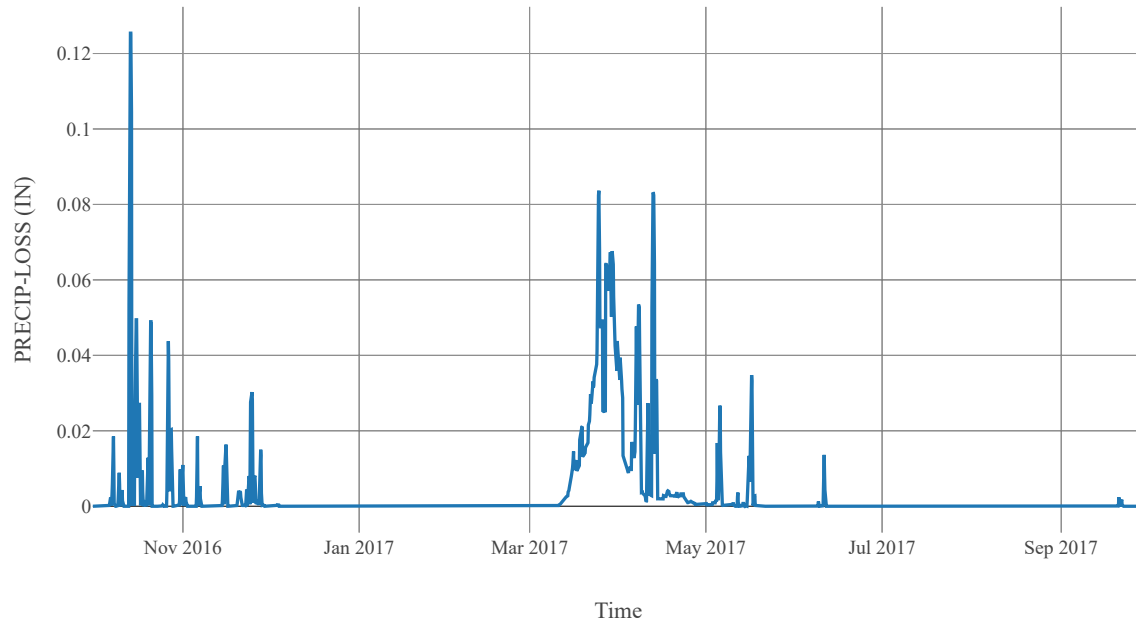
Excess Precipitation



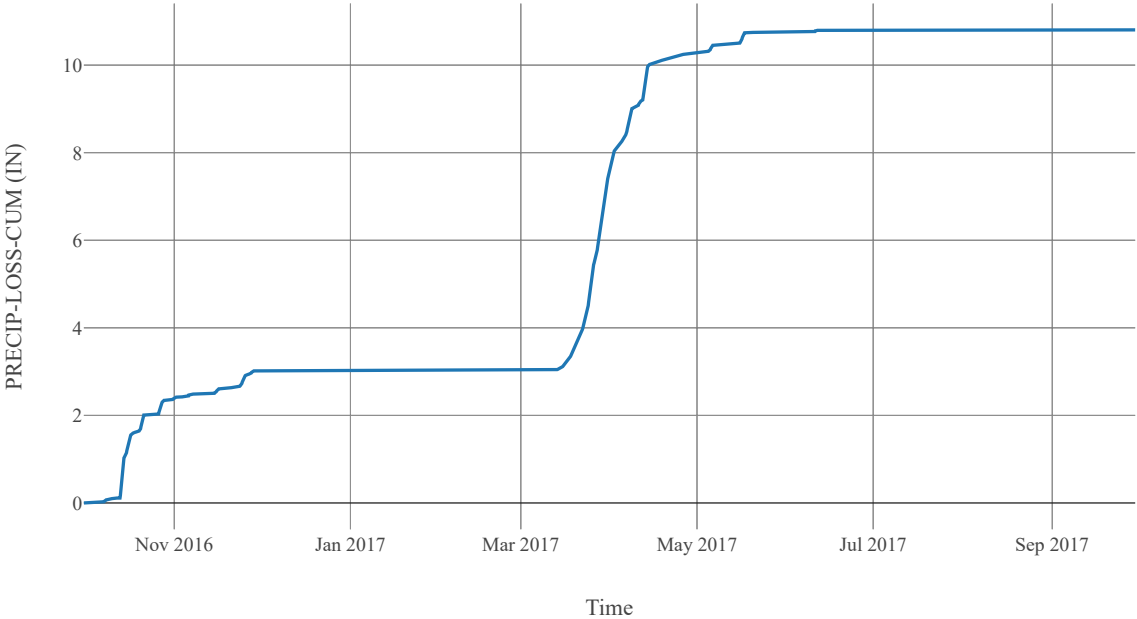
Cumulative Excess Precipitation



Precipitation Loss

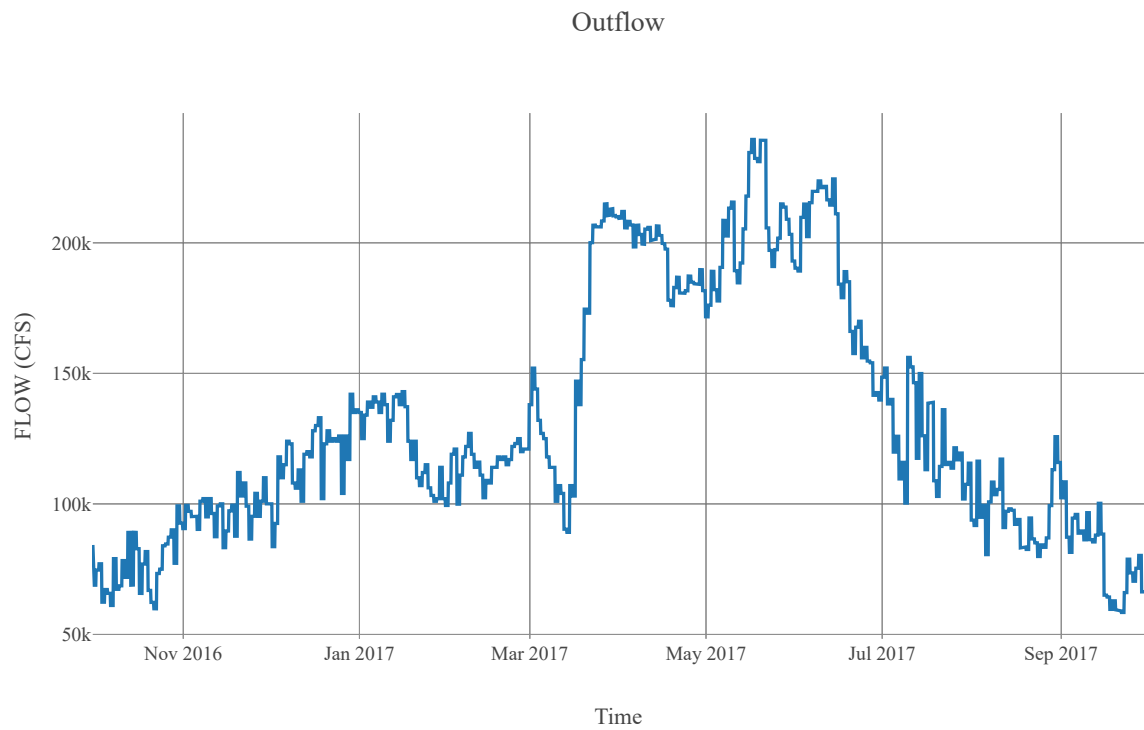


Cumulative Precipitation Loss



Junction : ChiefJoseph_IN

Observed Hydrograph : Chief Joseph In
Downstream : Chief Joseph



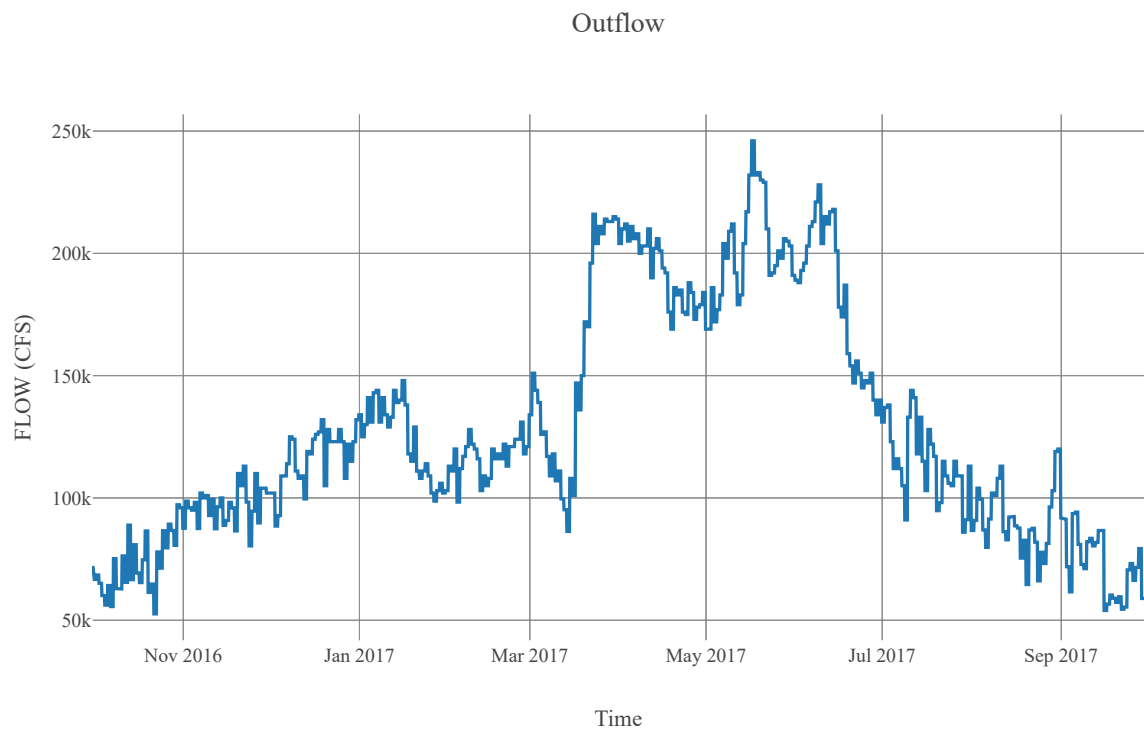
Reservoir : ChiefJoseph

Quality Method : Unspecified
Method : Specified Outflow
Downstream : ChiefJoseph_OUT



Junction : ChiefJoseph_OUT

Downstream : MidColumbia_R075



Reach : MidColumbia_R075

Loss Method : None
Downstream : OkanoganRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : PasaytenRv_S010

Area : 218.39
Latitude : 48.93
Longitude : -120.57
Downstream : Pasayten Ab Calcite

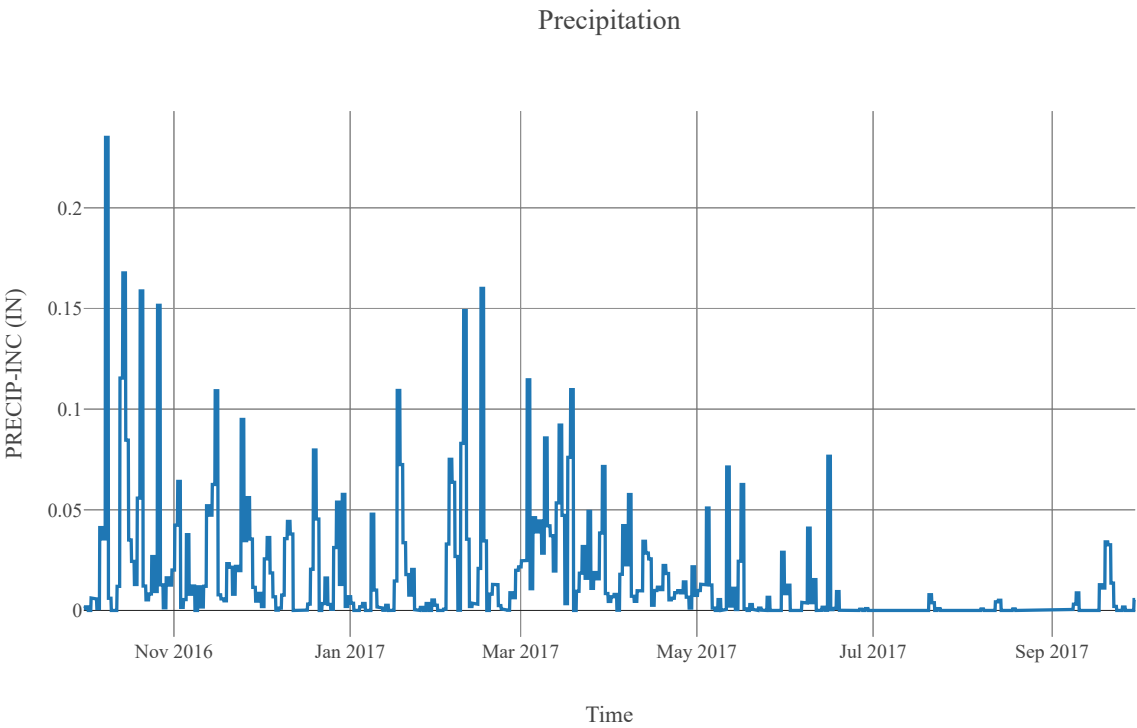
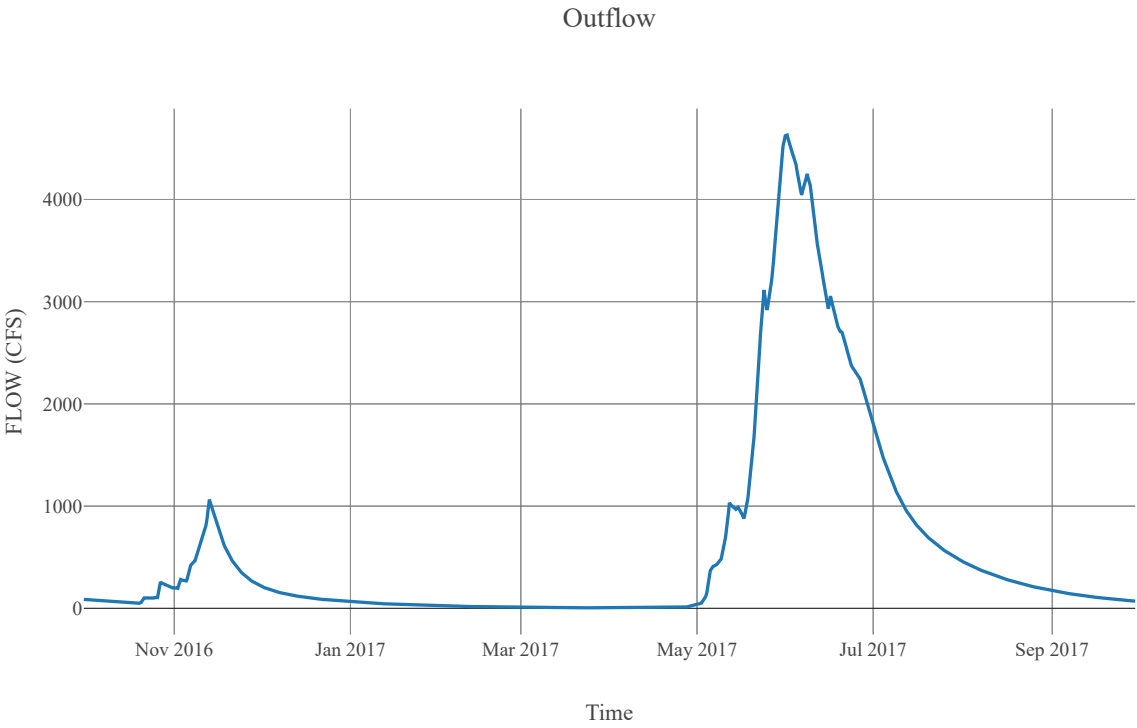
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.11
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

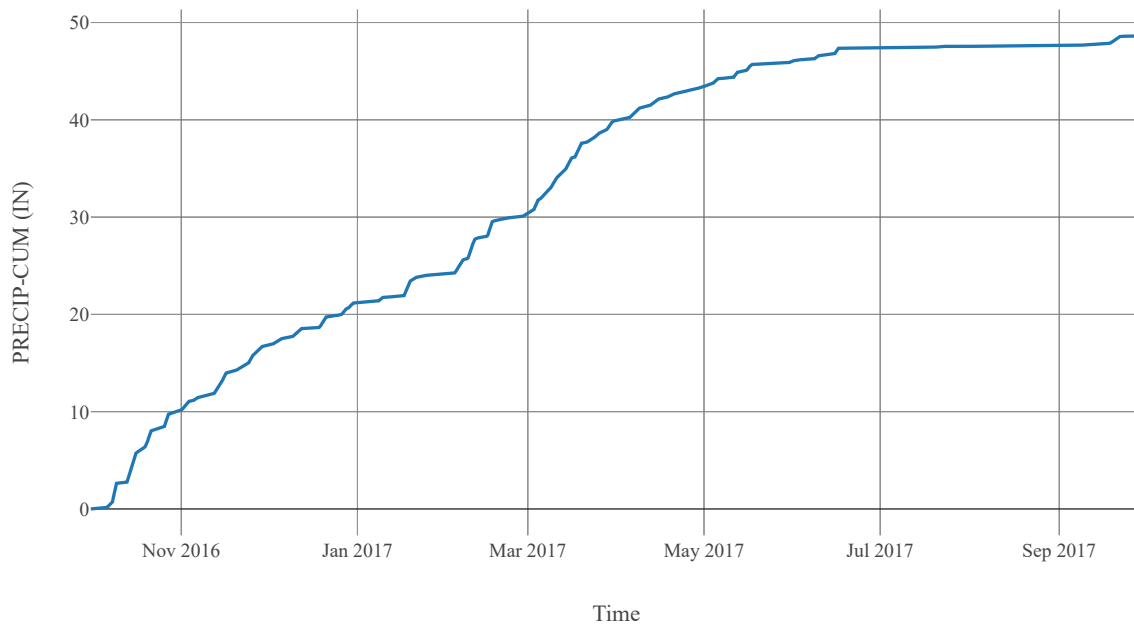
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.73
Storage Coefficient	7.73

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.5
		Initial Rate
		0
		Layer Number
		1
	2	Storage Coefficient
		154.6
		Number Steps
		1
		Baseflow Fraction
		0.5
		Initial Rate
		0.4
		Layer Number
		2
		Storage Coefficient
		773
		Number Steps
		1

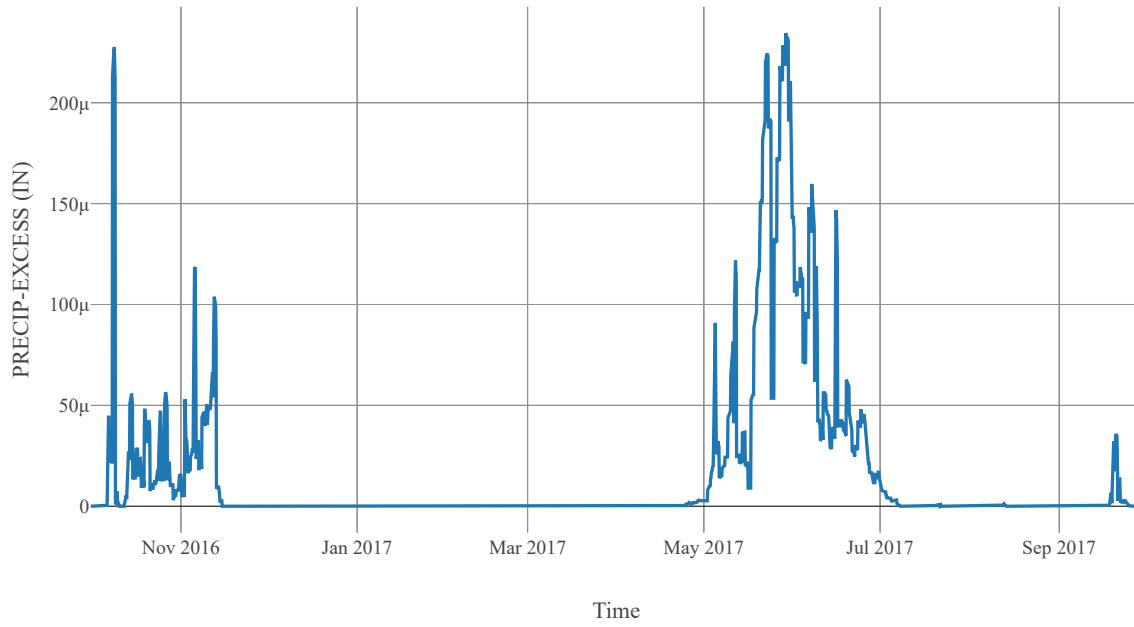
Statistics		
Name	Value	Unit
Baseflow Volume	414023.81	Ac-ft
Precipitation Volume	566392.68	Ac-ft
Loss Volume	506734.64	Ac-ft
Excess Volume	558.02	Ac-ft



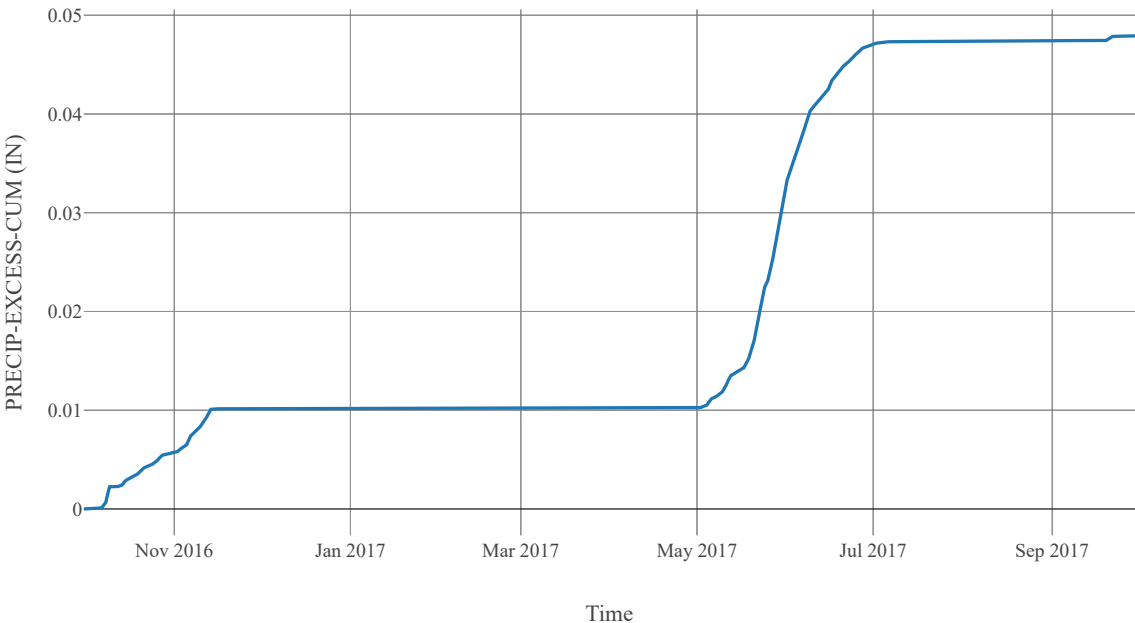
Cumulative Precipitation



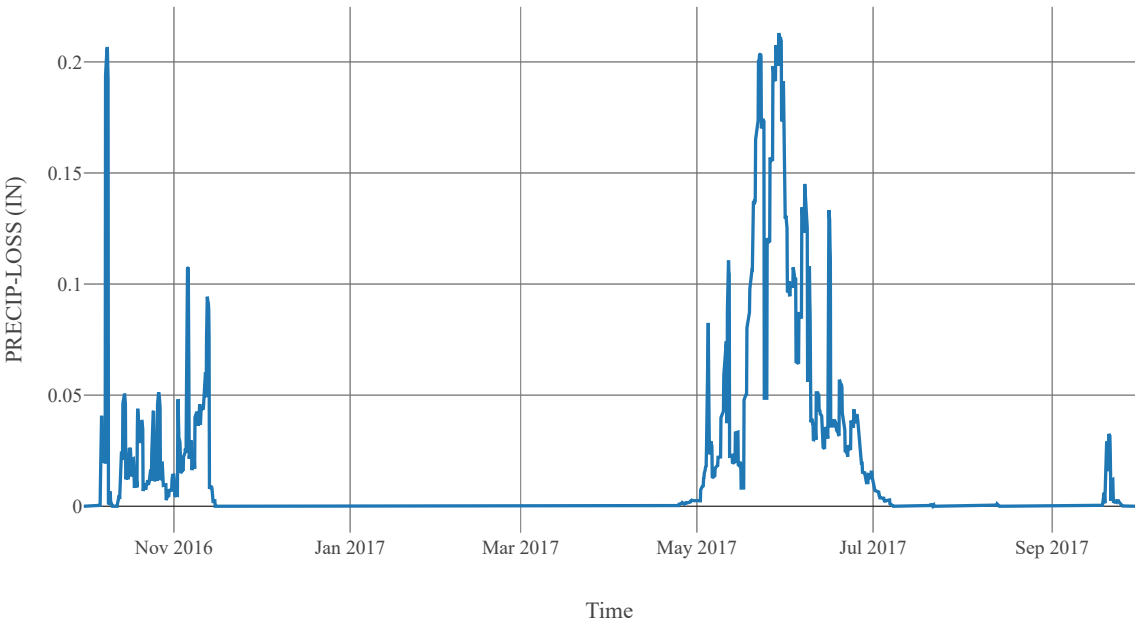
Excess Precipitation



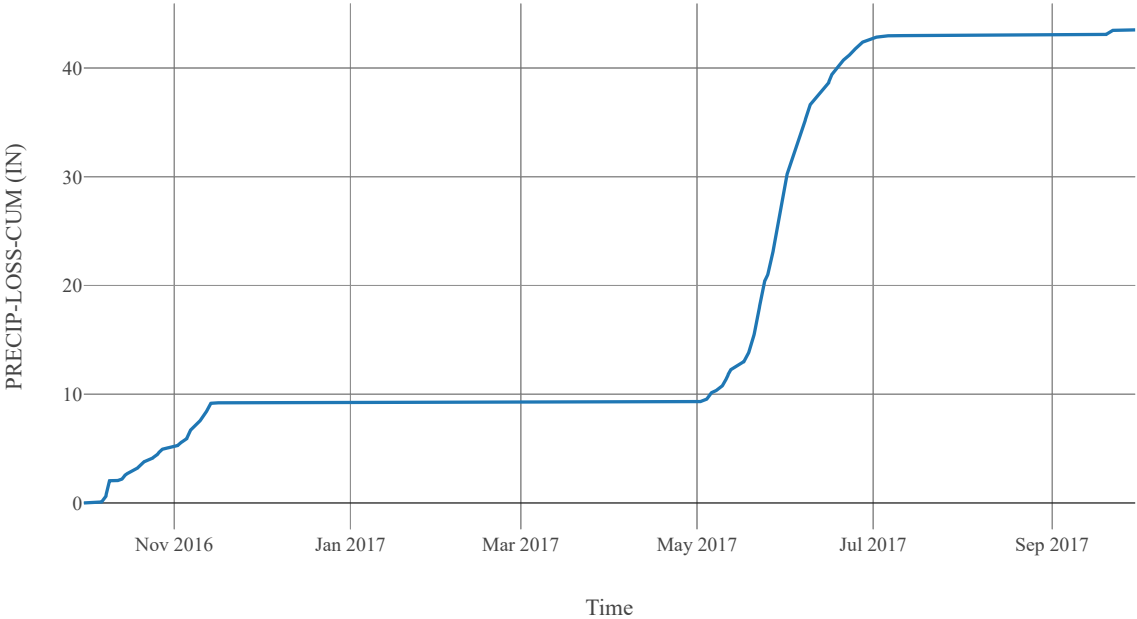
Cumulative Excess Precipitation



Precipitation Loss

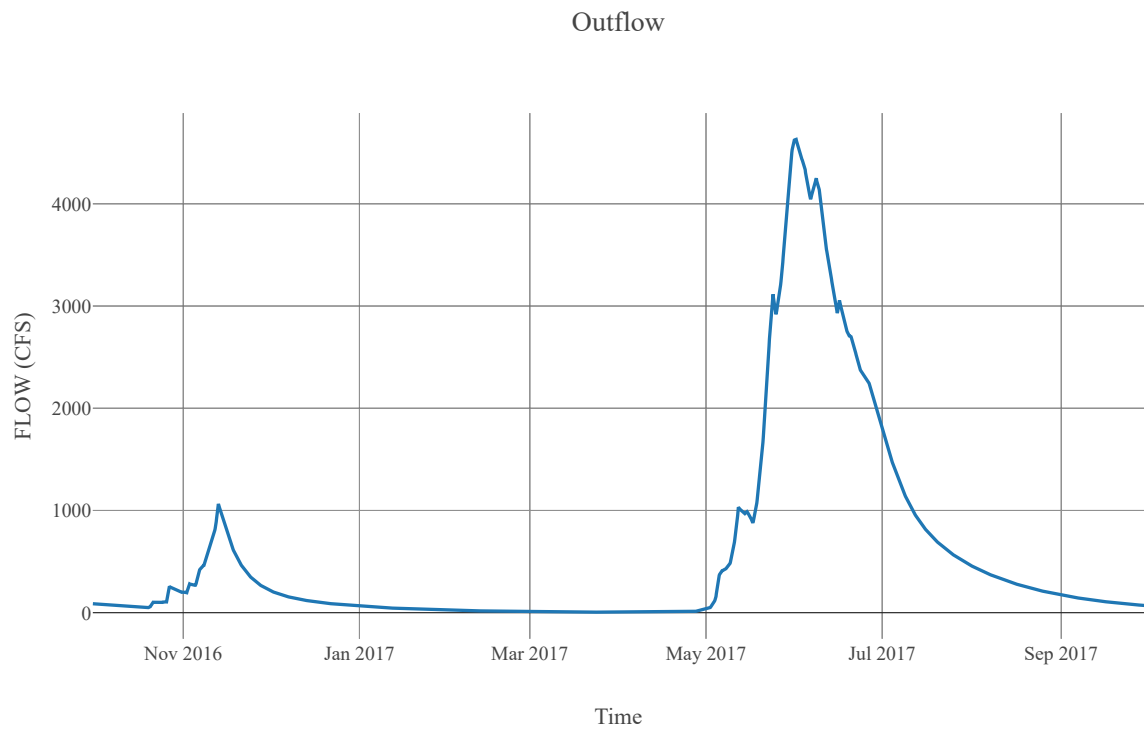


Cumulative Precipitation Loss



Junction : PasaytenAbCalcite

Observed Hydrograph : Pasayten river above calcite
Downstream : PasaytenRv_R010

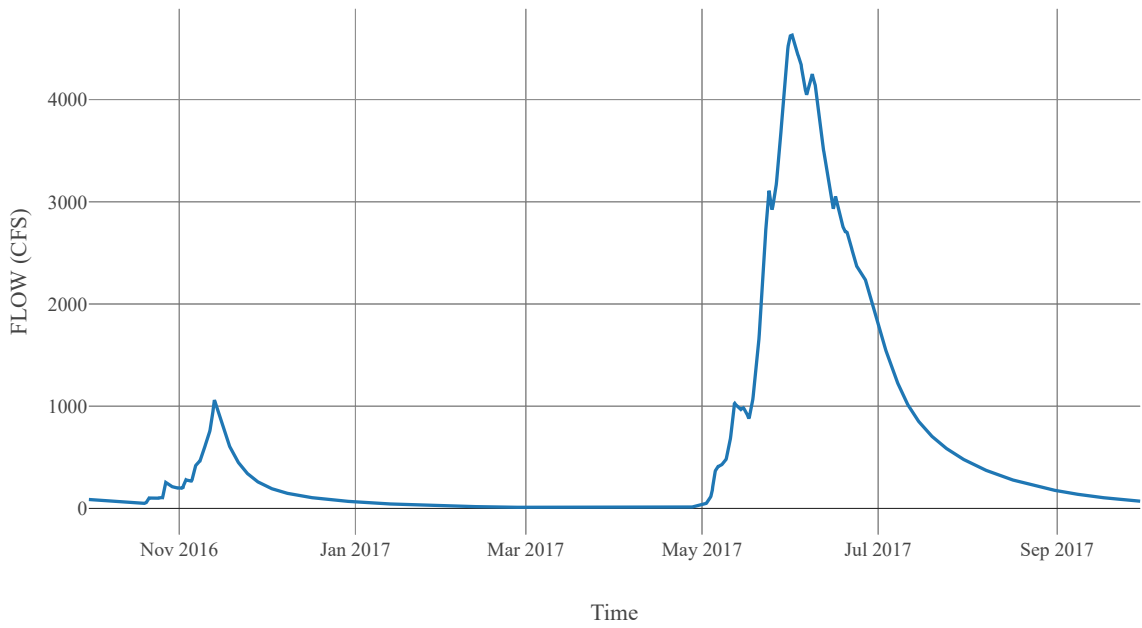


Reach : PasaytenRv_R010

Loss Method : None
Downstream : PasaytenRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N

Outflow



Subbasin : Similkameen_S050

Area : 157.67
Latitude : 49.05
Longitude : -120.77
Downstream : Sim Ab Goodfellow

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.13
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

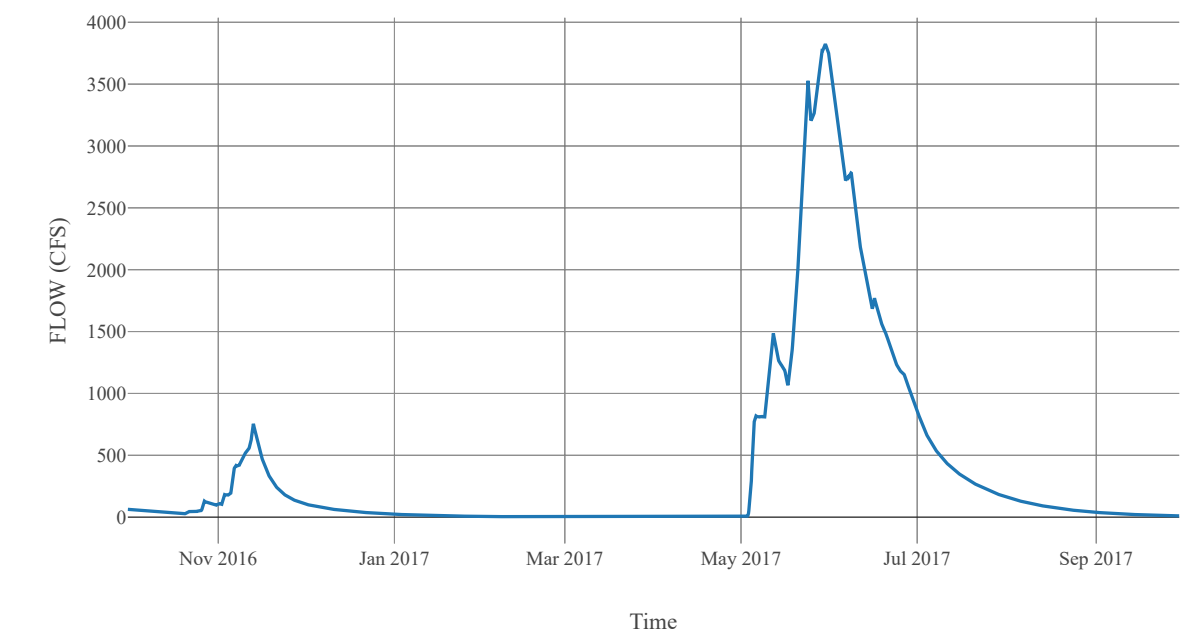
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.22
Storage Coefficient	5.22

Baseflow	
Method	Linear Reservoir

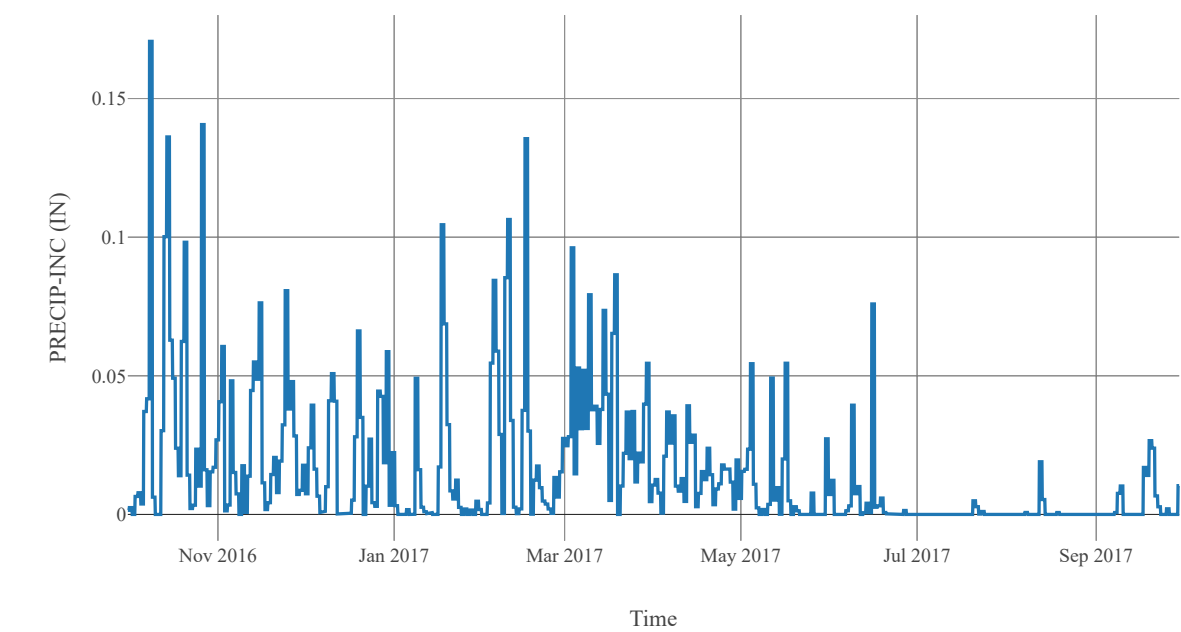
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	104.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.4
		Layer Number	2
		Storage Coefficient	522
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	282236.88	Ac-ft
Precipitation Volume	392447.07	Ac-ft
Loss Volume	347215.89	Ac-ft
Excess Volume	451.97	Ac-ft

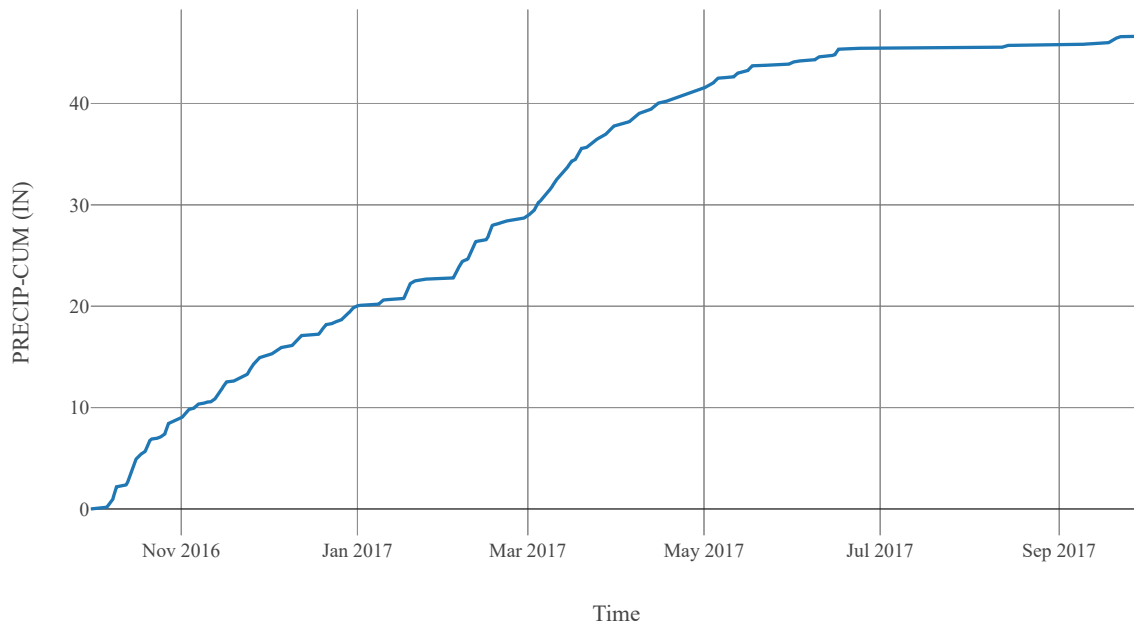
Outflow



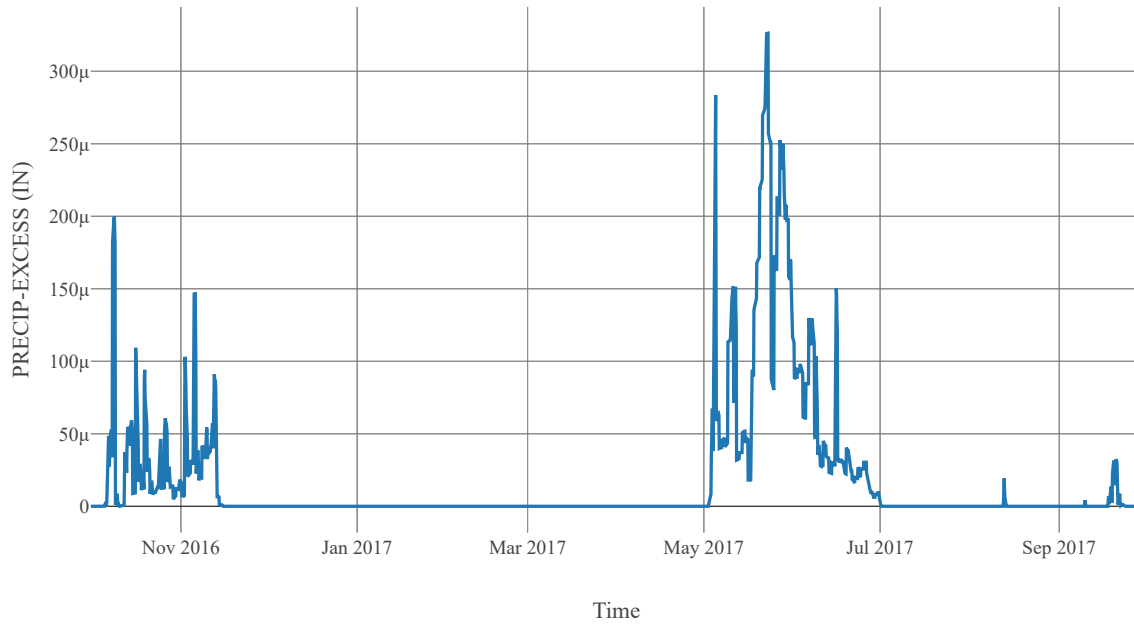
Precipitation



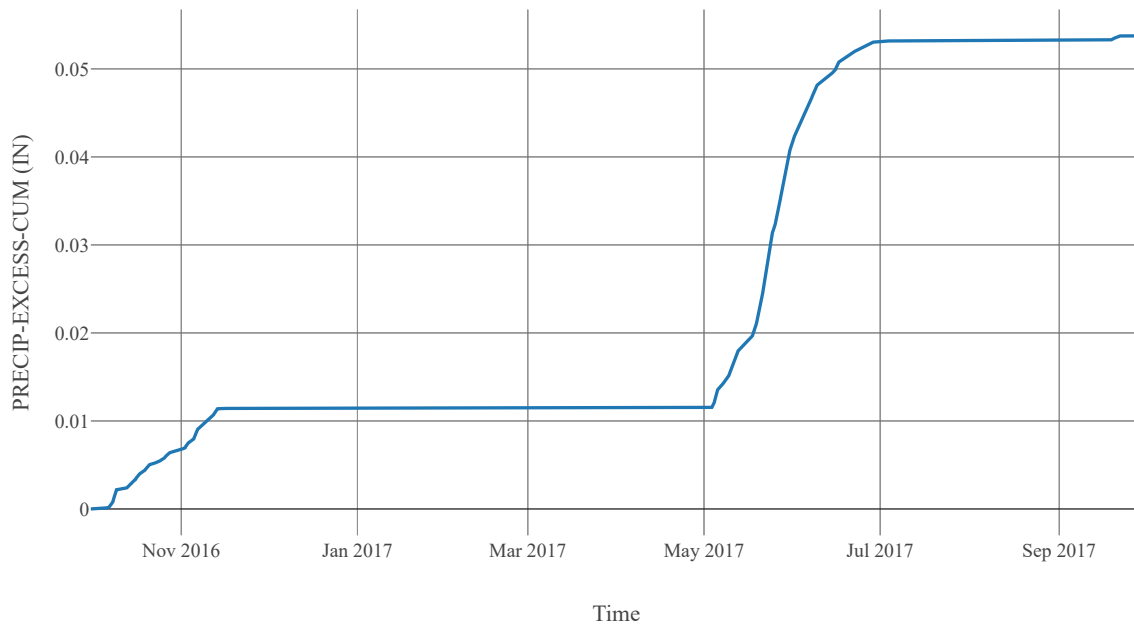
Cumulative Precipitation



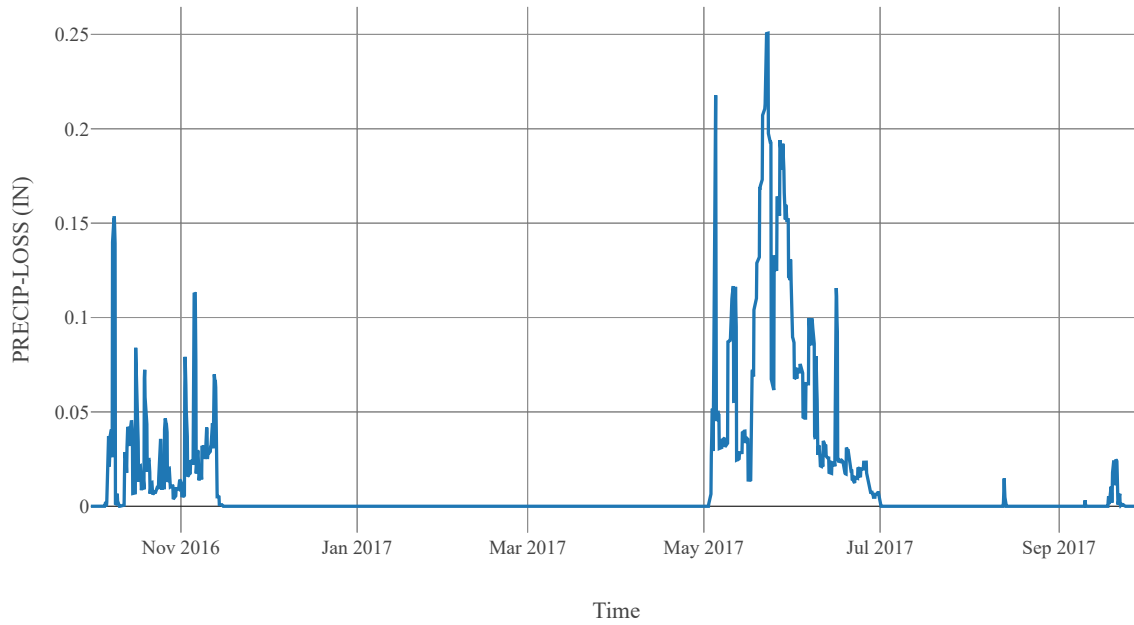
Excess Precipitation



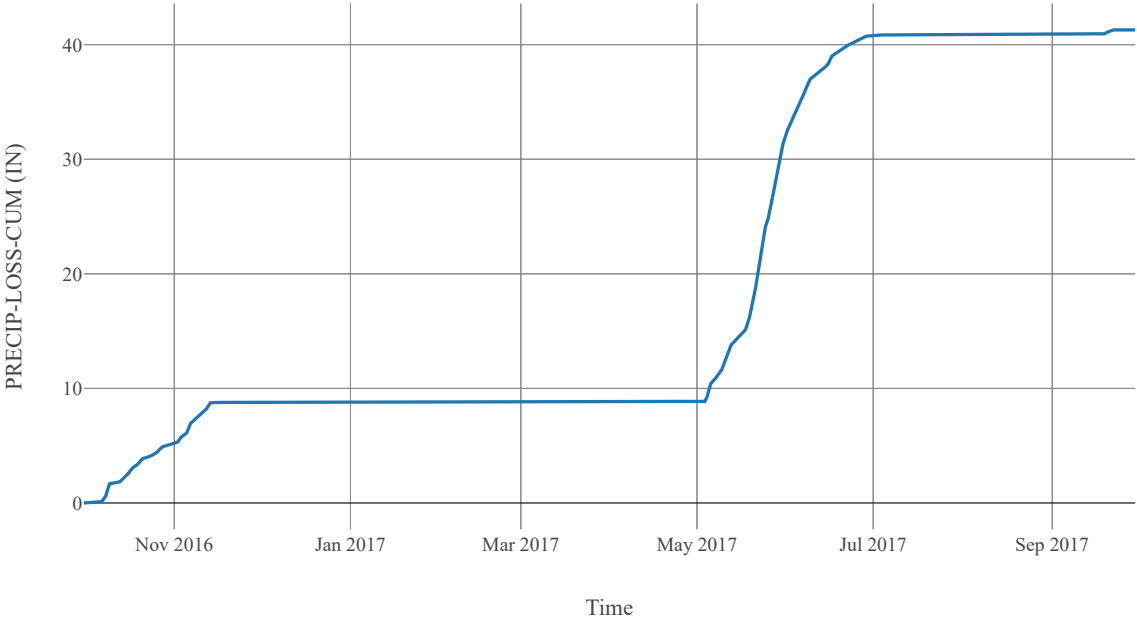
Cumulative Excess Precipitation



Precipitation Loss

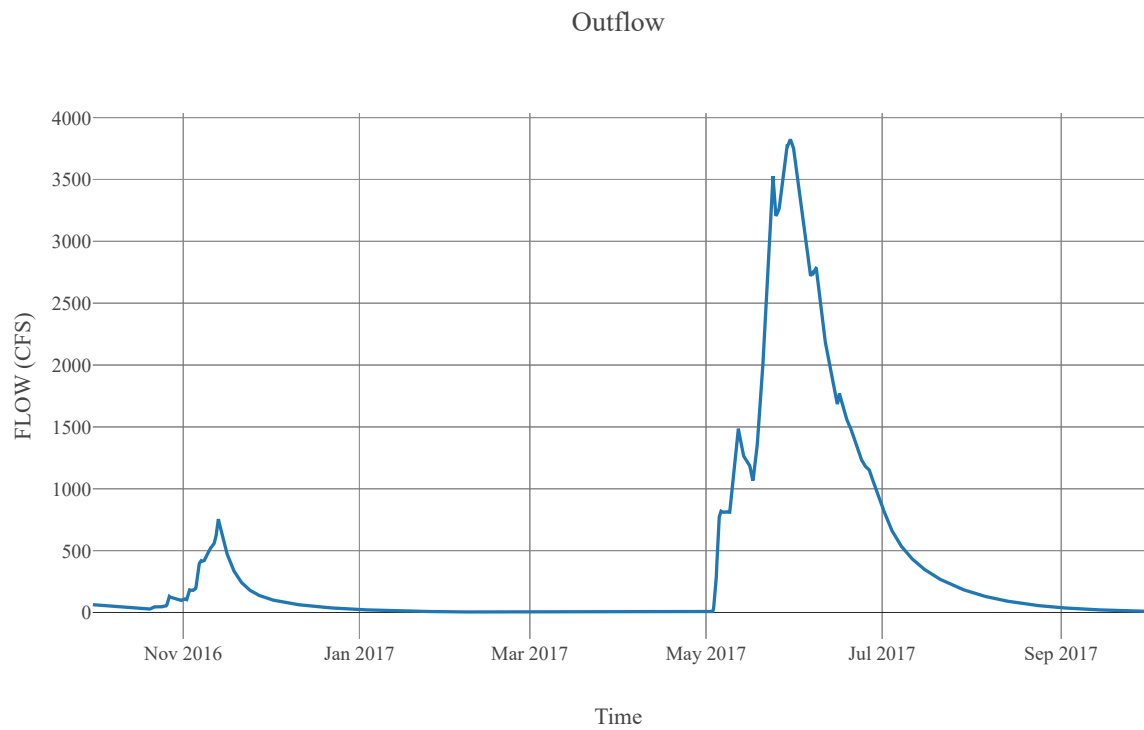


Cumulative Precipitation Loss



Junction : SimAbGoodfellow

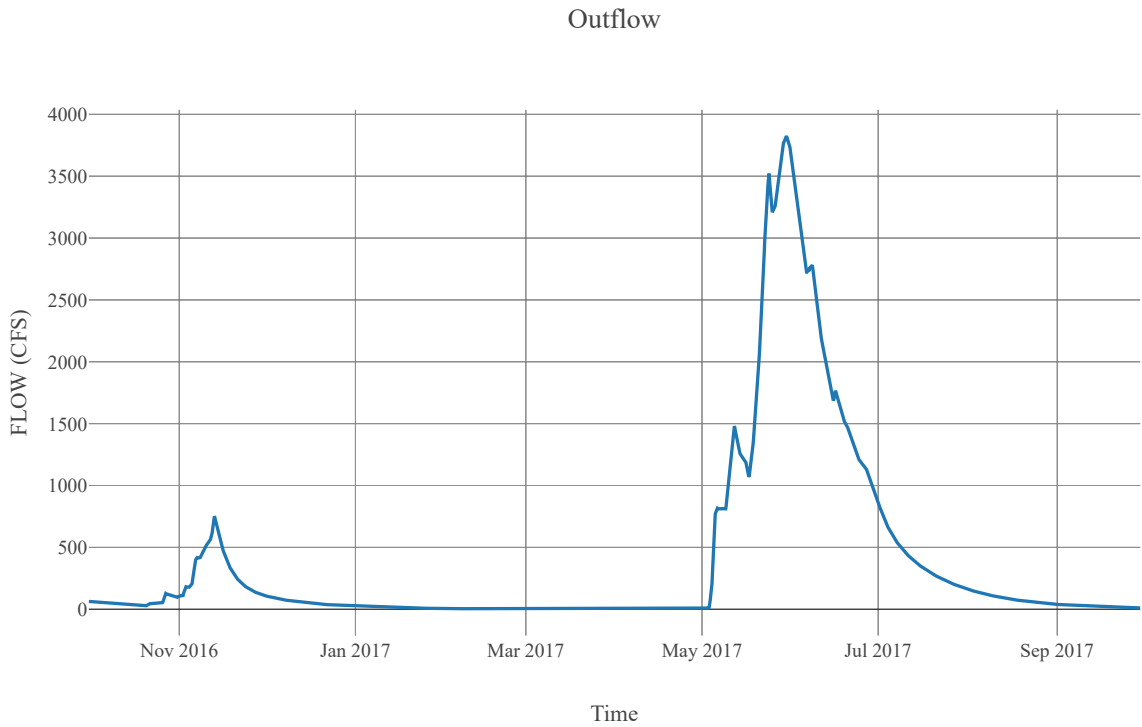
Observed Hydrograph : Similkameen river above good
Downstream : Similkameen_R045



Reach : Similkameen_R045

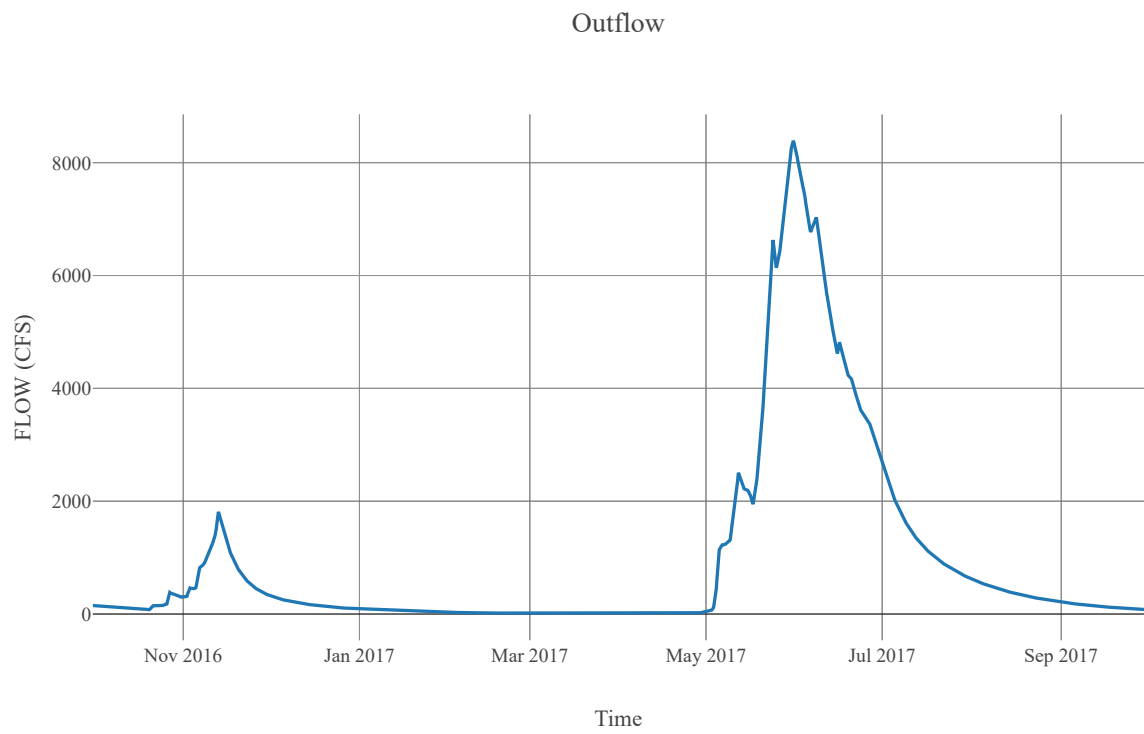
Loss Method : None
Downstream : PasaytenRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Junction : PasaytenRv_CF

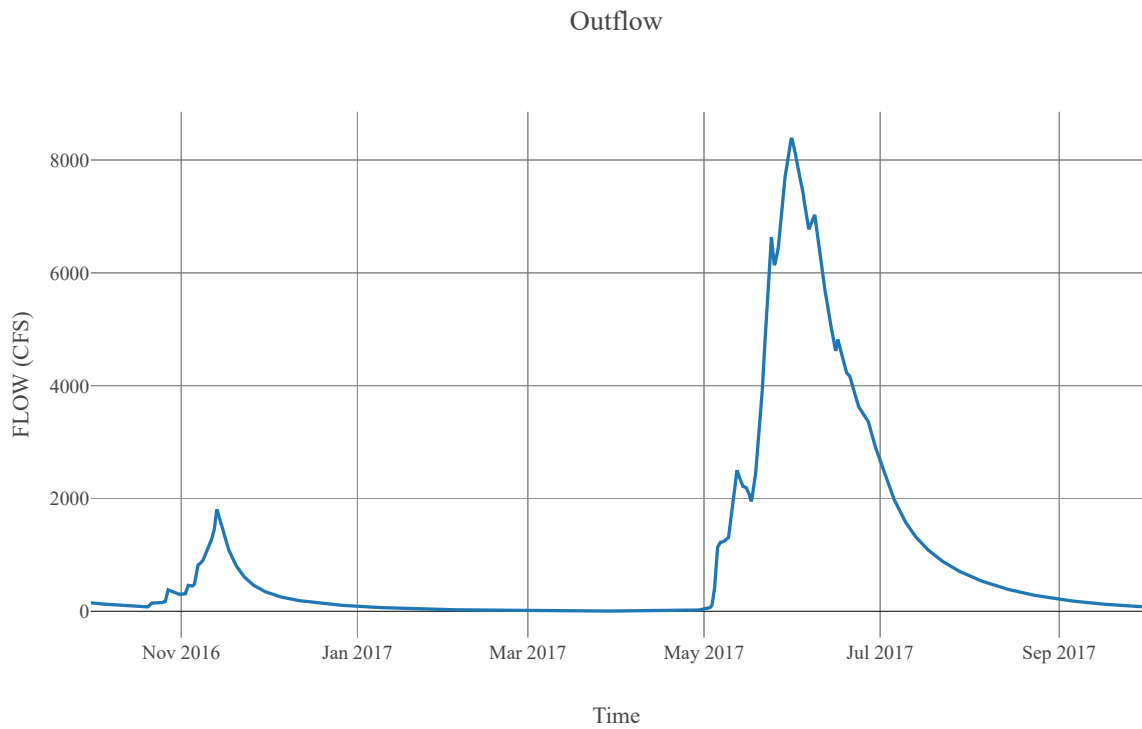
Downstream : Similkameen_R040



Reach : Similkameen_R040

Loss Method : None
Downstream : Similkameen Nr Princeton

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : Similkameen_S040

Area : 323.71
Latitude : 49.24
Longitude : -120.61
Downstream : Similkameen Nr Princeton

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.1
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

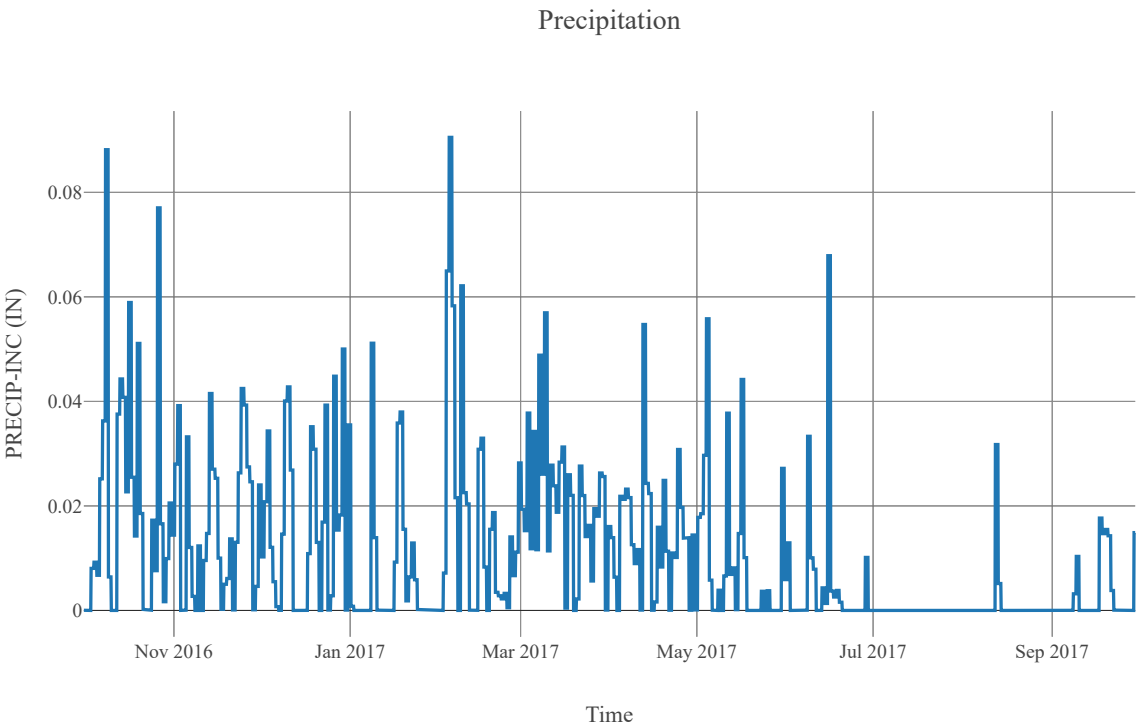
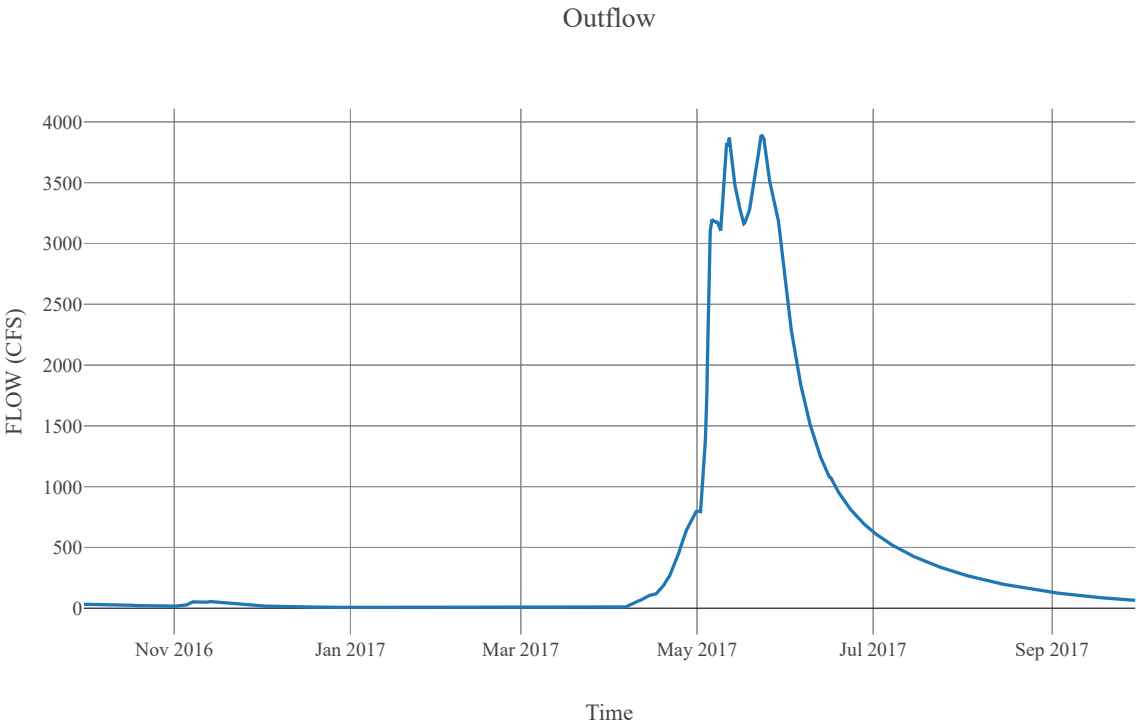
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.86
Storage Coefficient	9.86

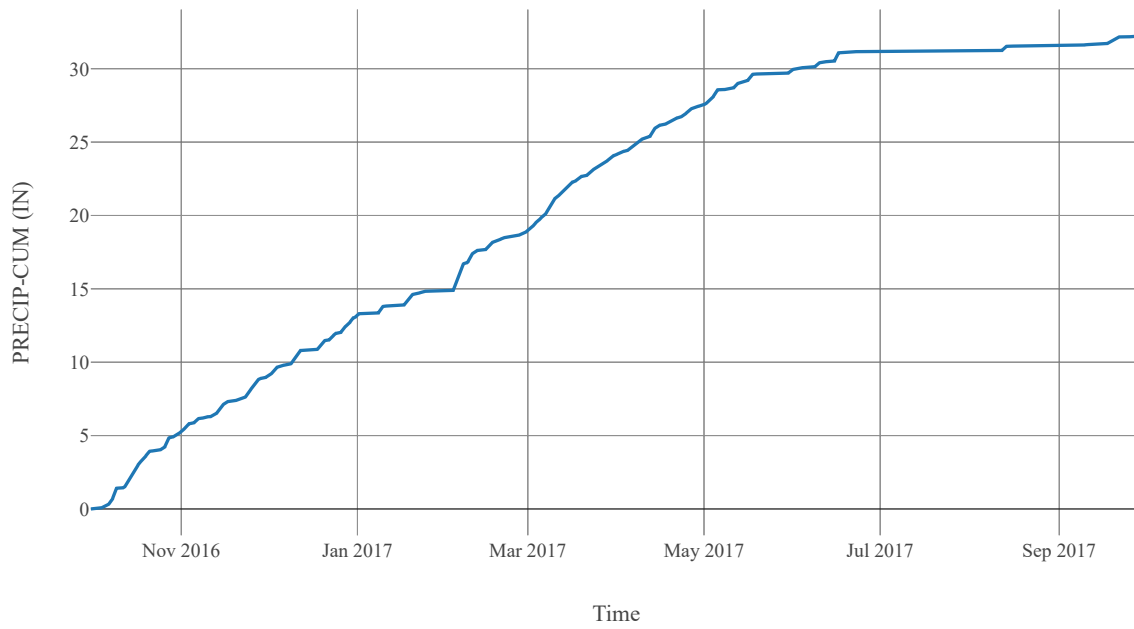
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	197.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	986
		Number Steps	1

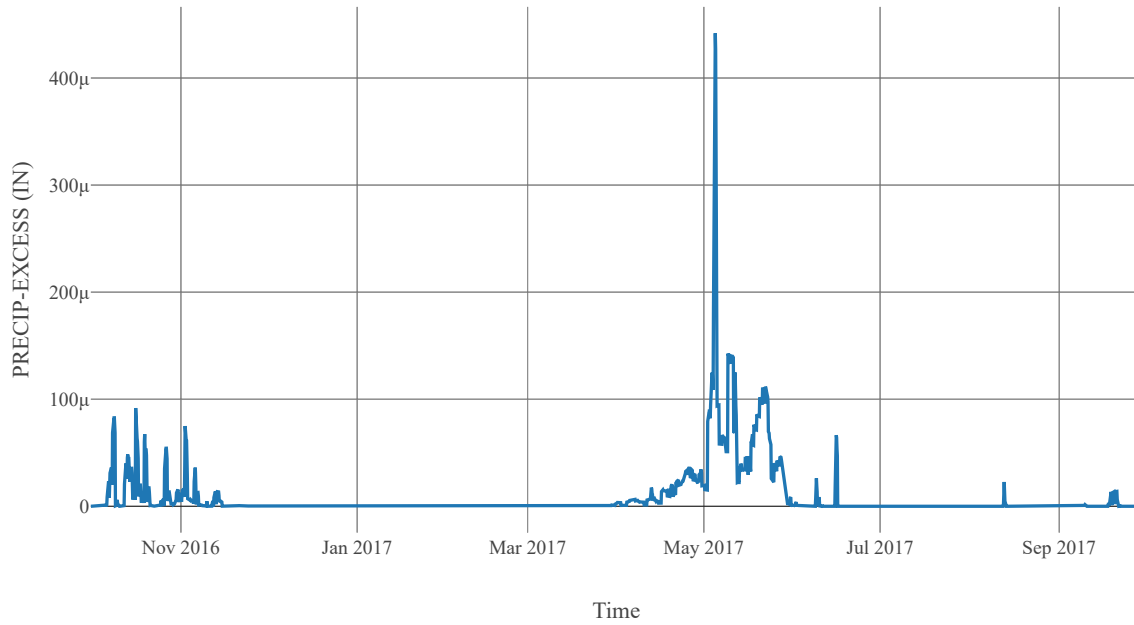
Statistics		
Name	Value	Unit
Baseflow Volume	325375.06	Ac-ft
Precipitation Volume	556566.08	Ac-ft
Loss Volume	452202.65	Ac-ft
Excess Volume	452.66	Ac-ft



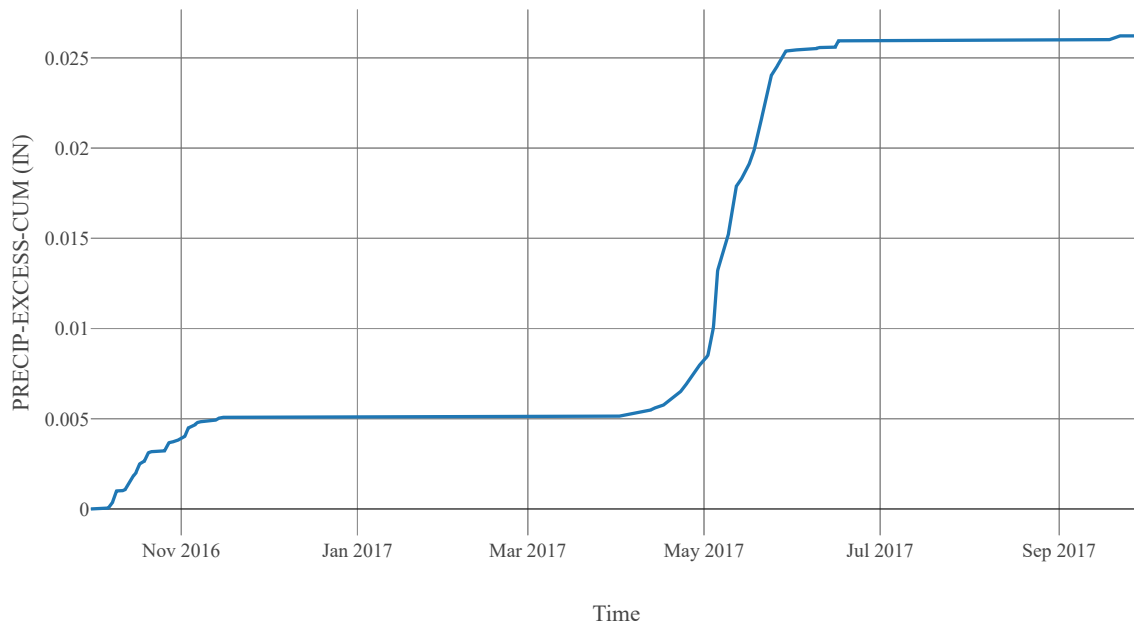
Cumulative Precipitation



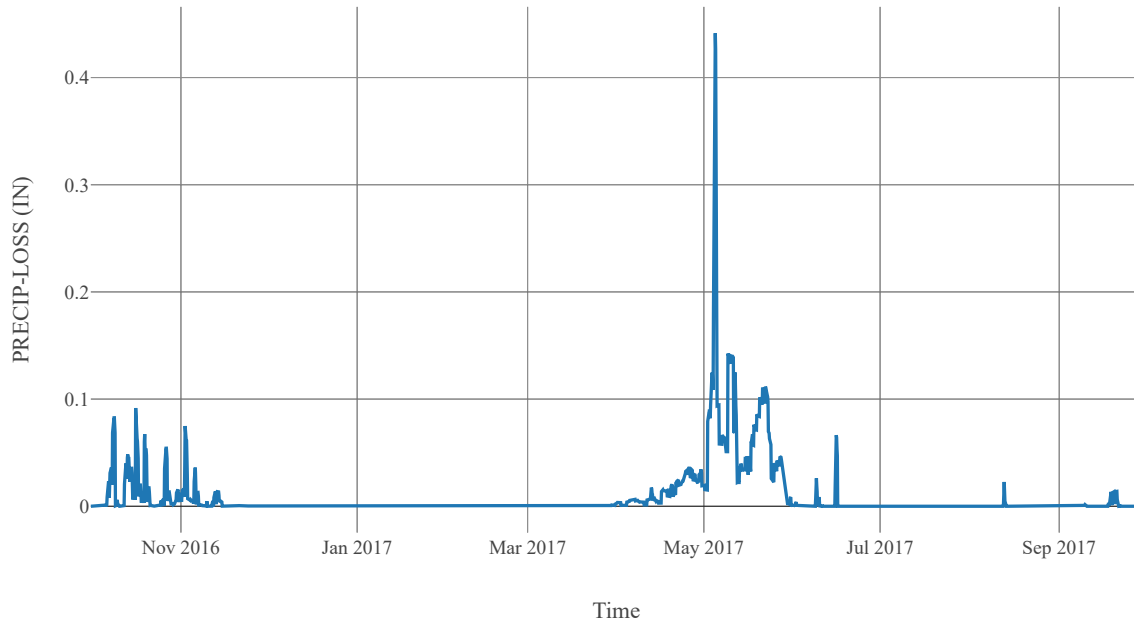
Excess Precipitation



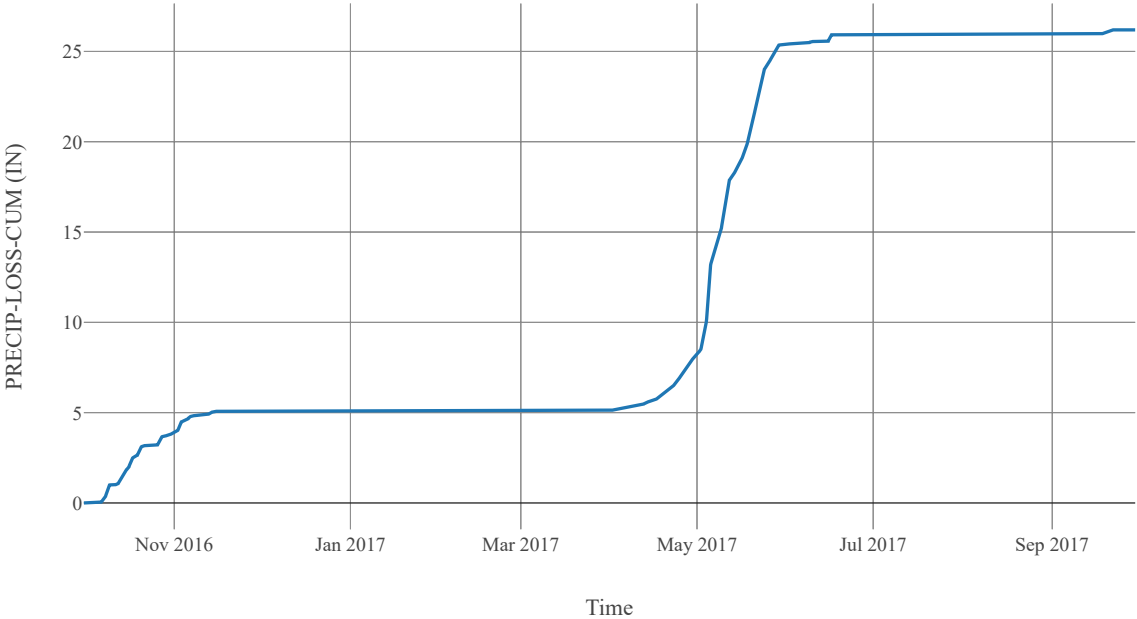
Cumulative Excess Precipitation



Precipitation Loss

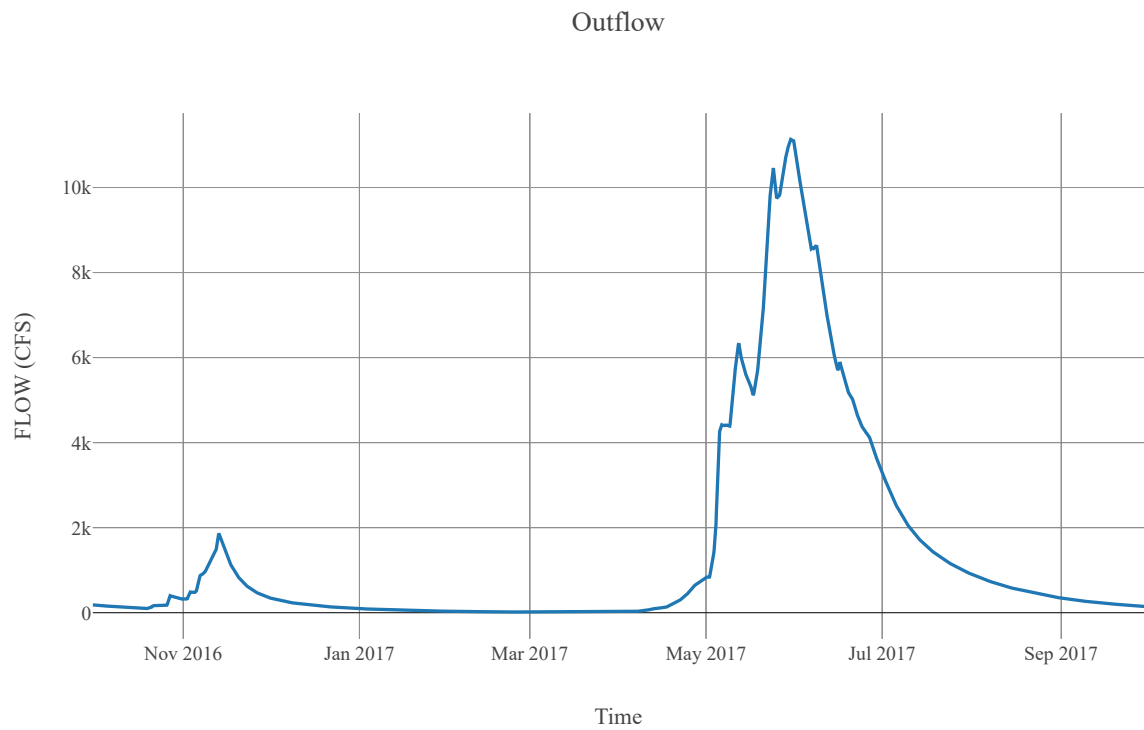


Cumulative Precipitation Loss



Junction : SimilkameenNrPrinceton

Observed Hydrograph : Similkameen river at princet
Downstream : Tulameen_CF



Subbasin : TulameenRv_S020

Area : 99.36
Latitude : 49.38
Longitude : -120.99
Downstream : Tulameen Bl Vultch

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.17
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

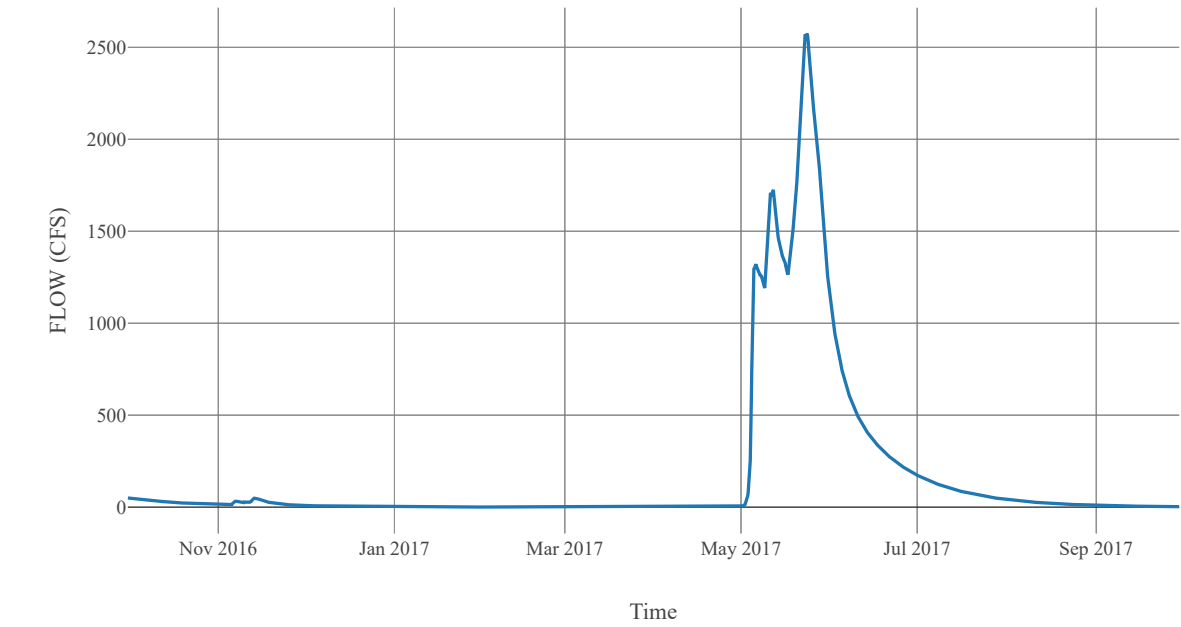
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.19
Storage Coefficient	5.19

Baseflow	
Method	Linear Reservoir

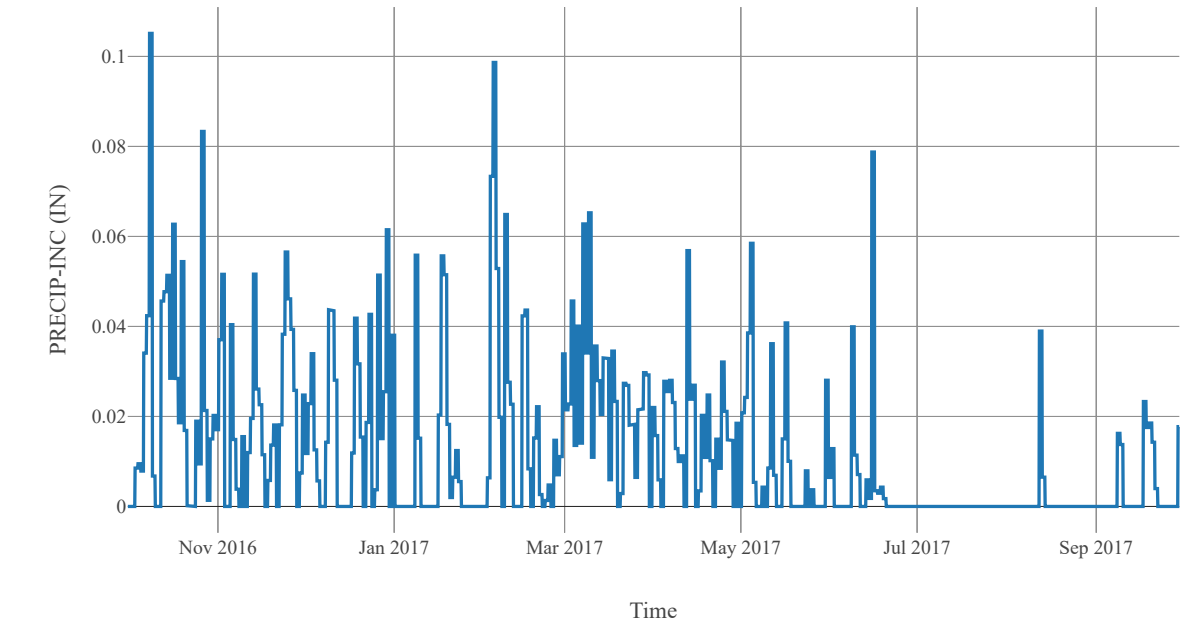
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	103.8
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.5
		Layer Number	2
		Storage Coefficient	519
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	126314.91	Ac-ft
Precipitation Volume	196021.74	Ac-ft
Loss Volume	165065.59	Ac-ft
Excess Volume	281.09	Ac-ft

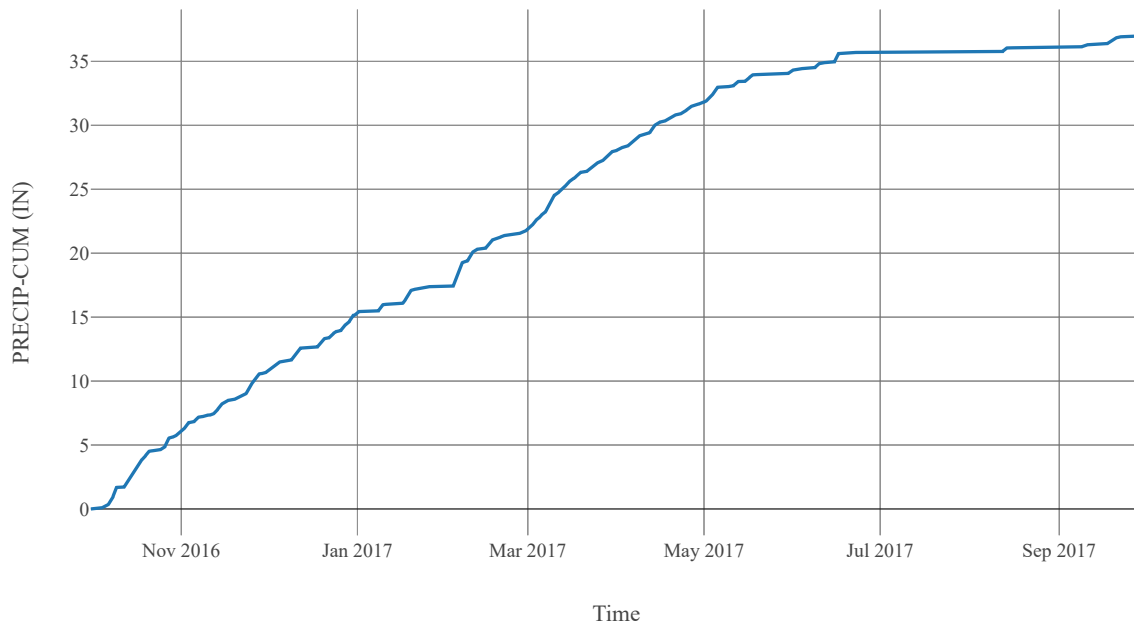
Outflow



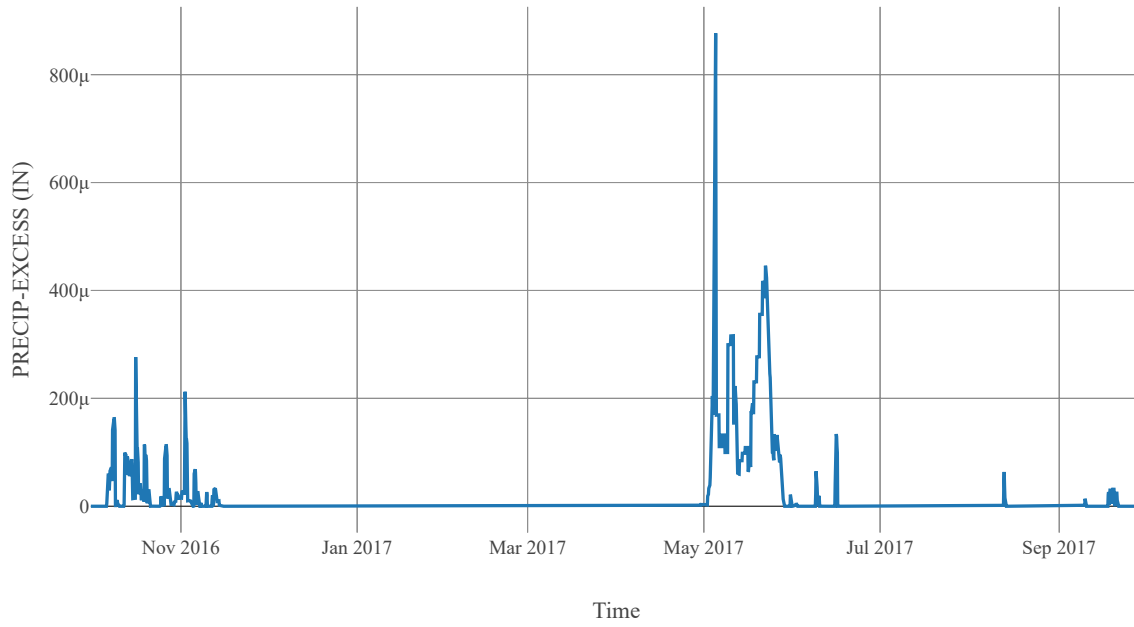
Precipitation



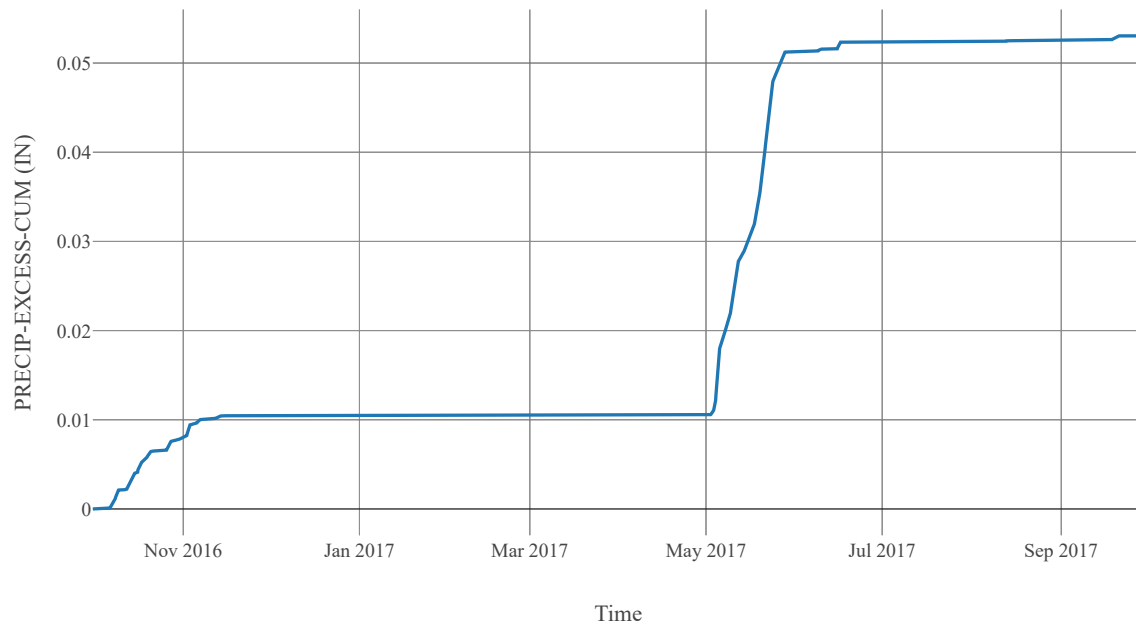
Cumulative Precipitation



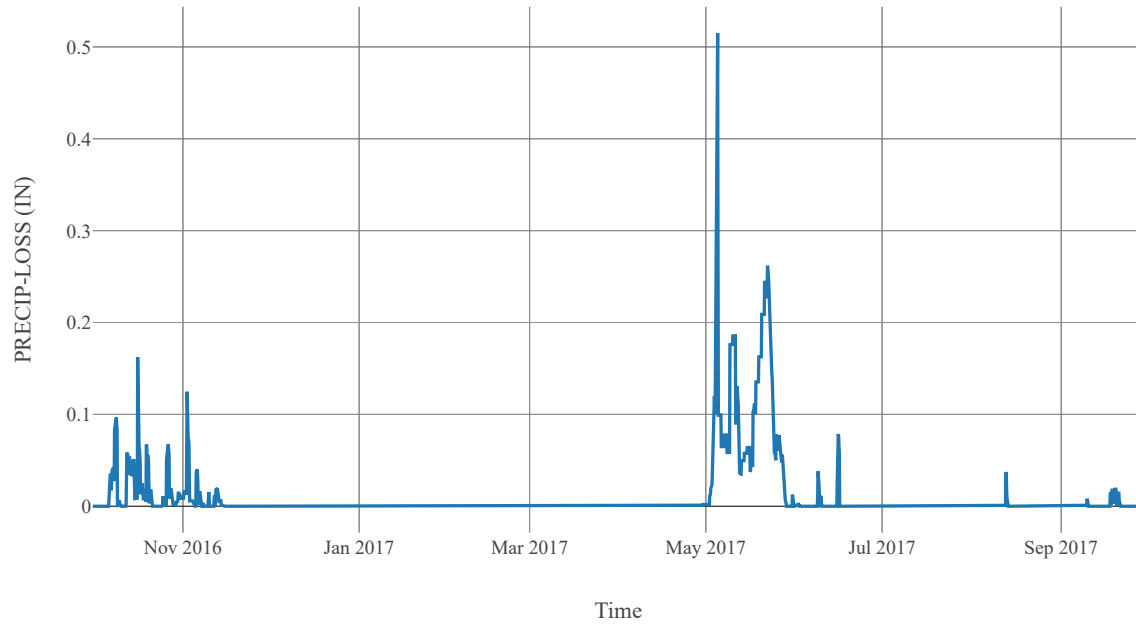
Excess Precipitation



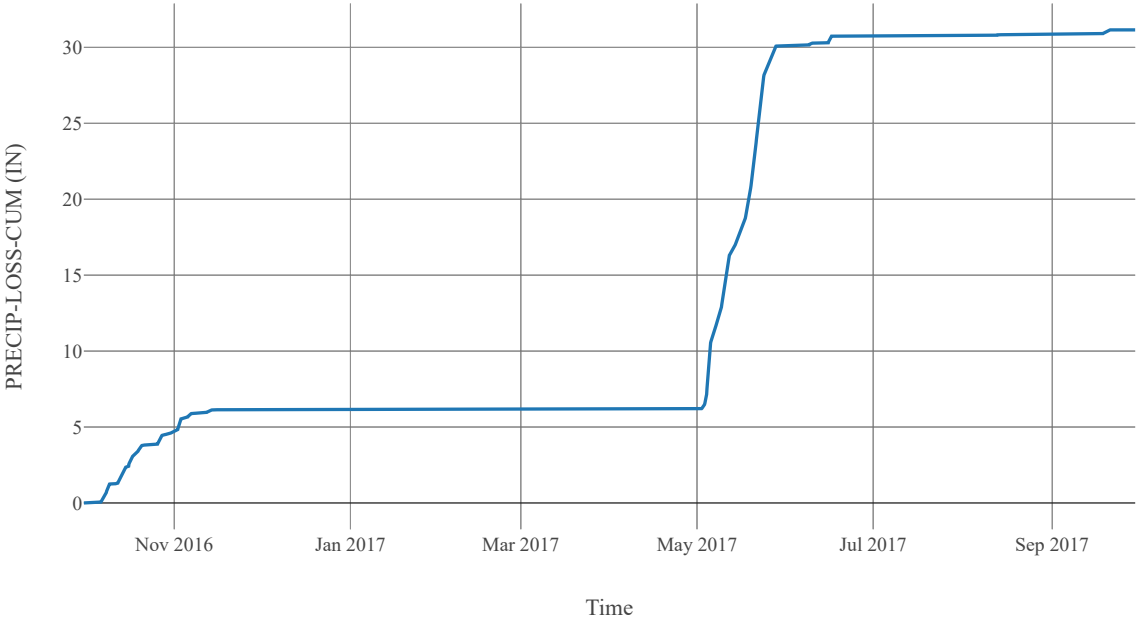
Cumulative Excess Precipitation



Precipitation Loss

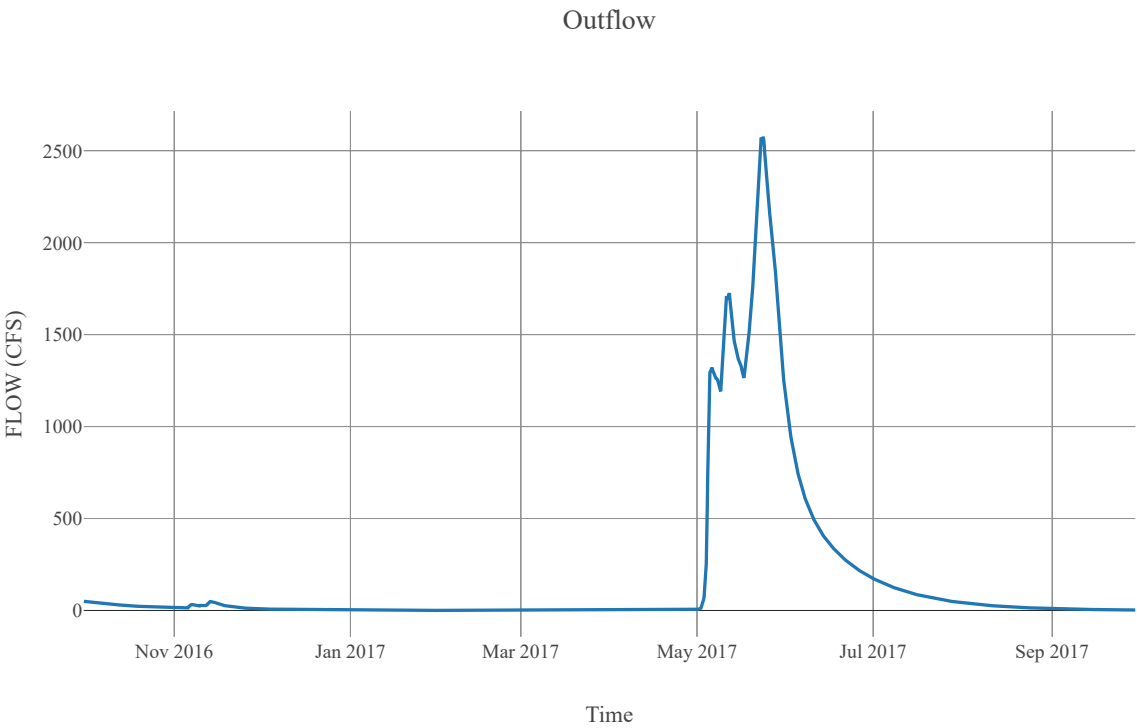


Cumulative Precipitation Loss



Junction : TulameenBIVultch

Observed Hydrograph : Tulameen river below vuich c
Downstream : TulameenRv_R010

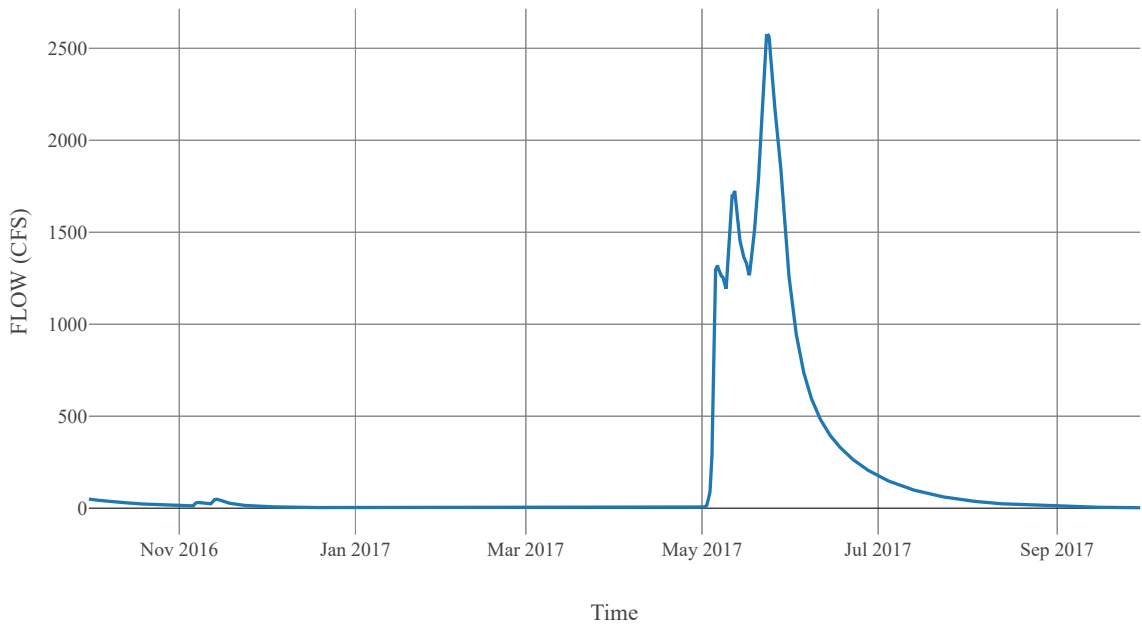


Reach : TulameenRv_R010

Loss Method : None
Downstream : Tulameen

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	169272
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	TulameenRv_R010
	Energy Slope
	0.01
	Right Mannings N
	0.15

Outflow



Subbasin : TulameenRv_S010

Area : 586.83
Latitude : 49.61
Longitude : -120.78
Downstream : Tulameen

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.52
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

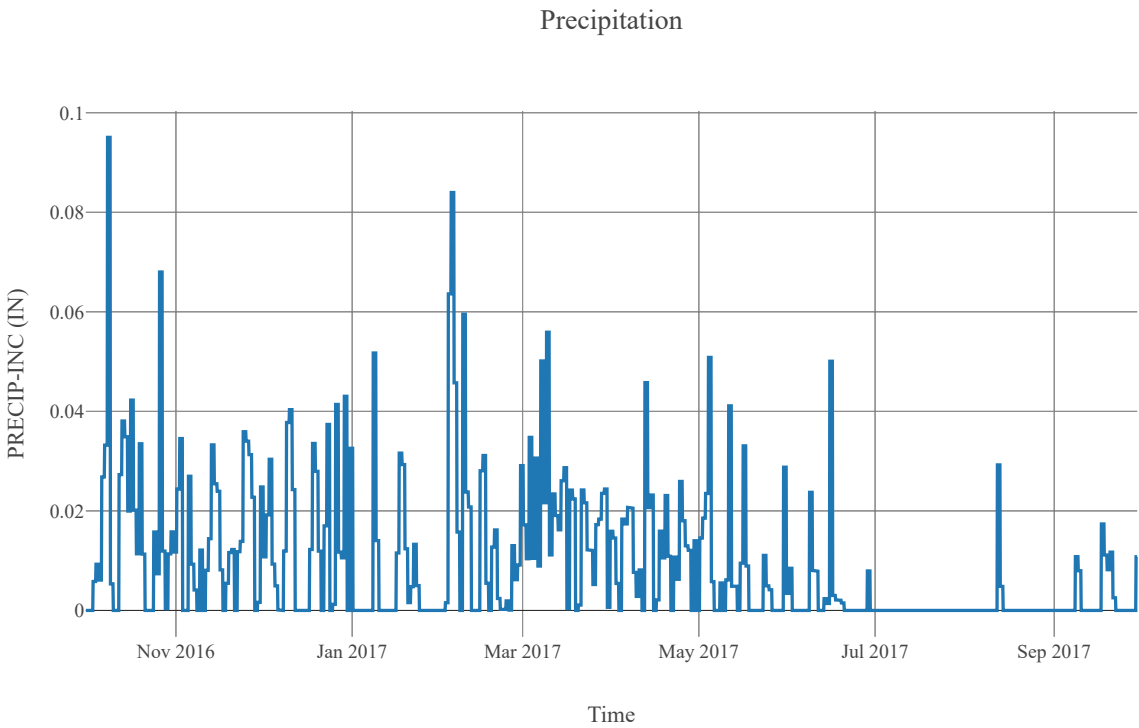
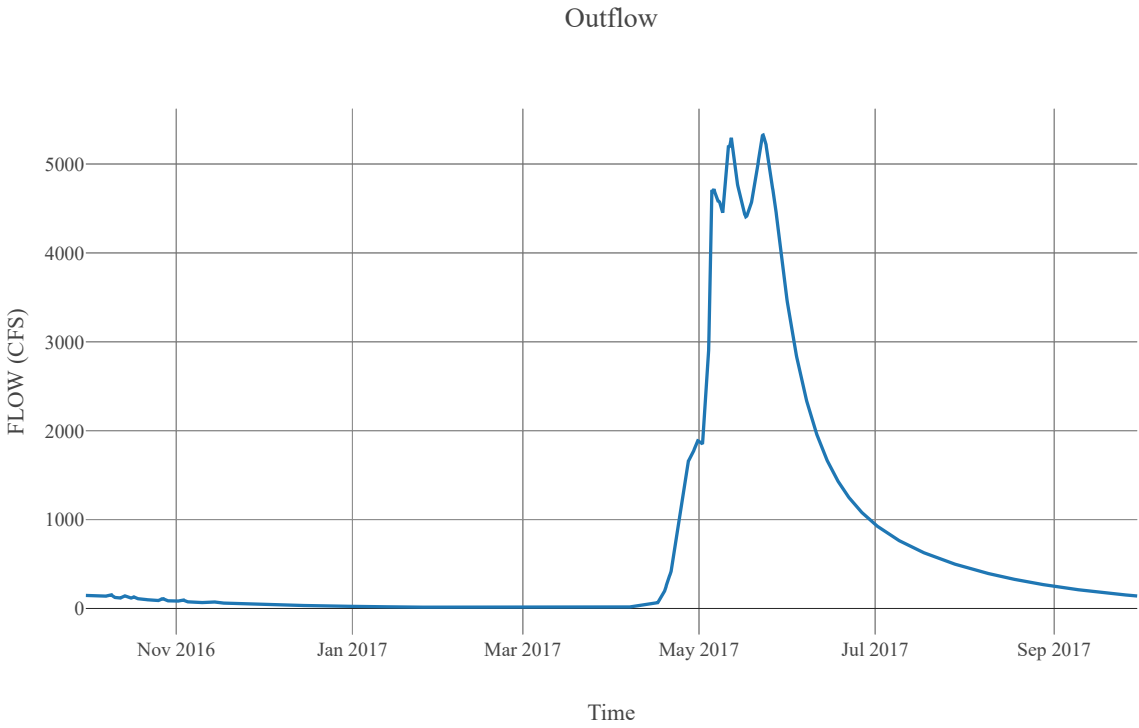
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	12.07
Storage Coefficient	12.07

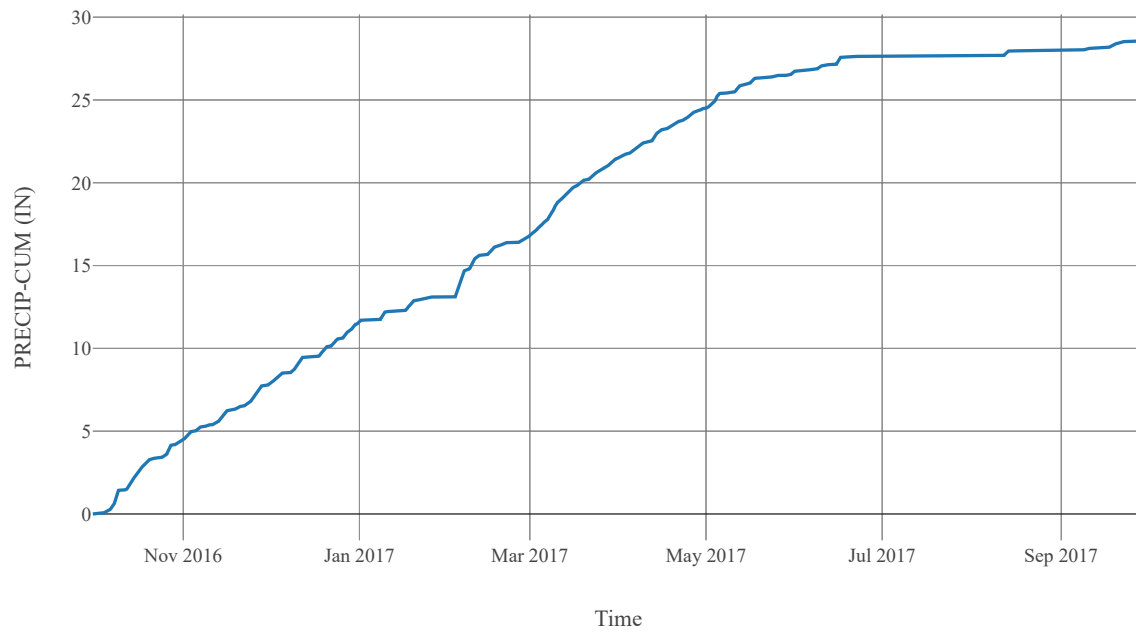
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	241.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.25
		Layer Number	2
		Storage Coefficient	1207
		Number Steps	1

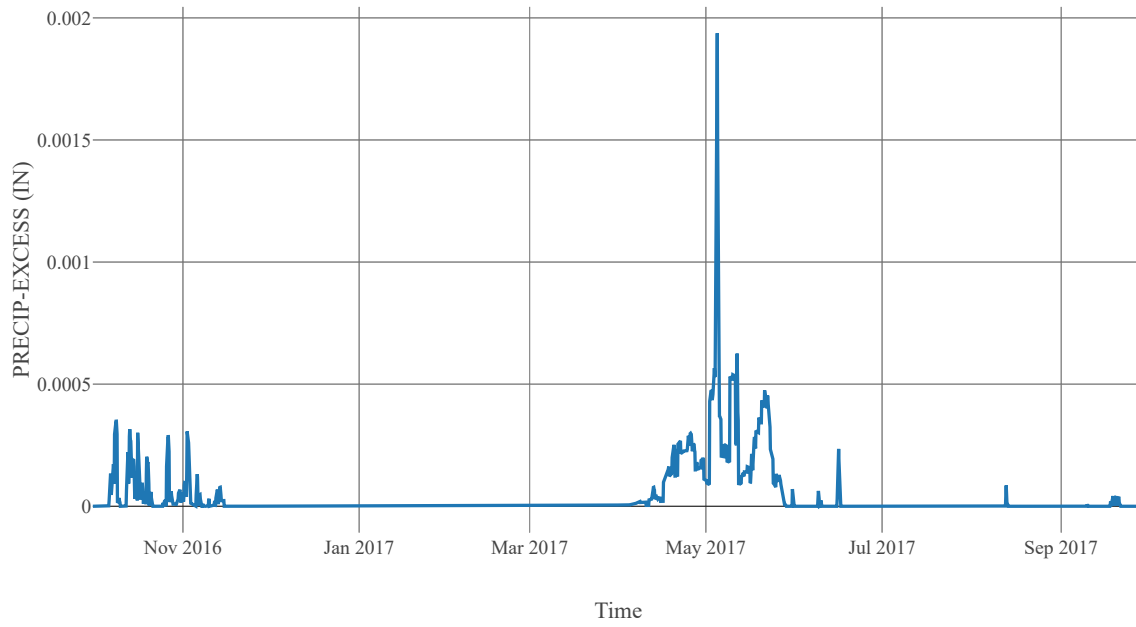
Statistics		
Name	Value	Unit
Baseflow Volume	484865.89	Ac-ft
Precipitation Volume	894108.71	Ac-ft
Loss Volume	696326.49	Ac-ft
Excess Volume	3639.82	Ac-ft



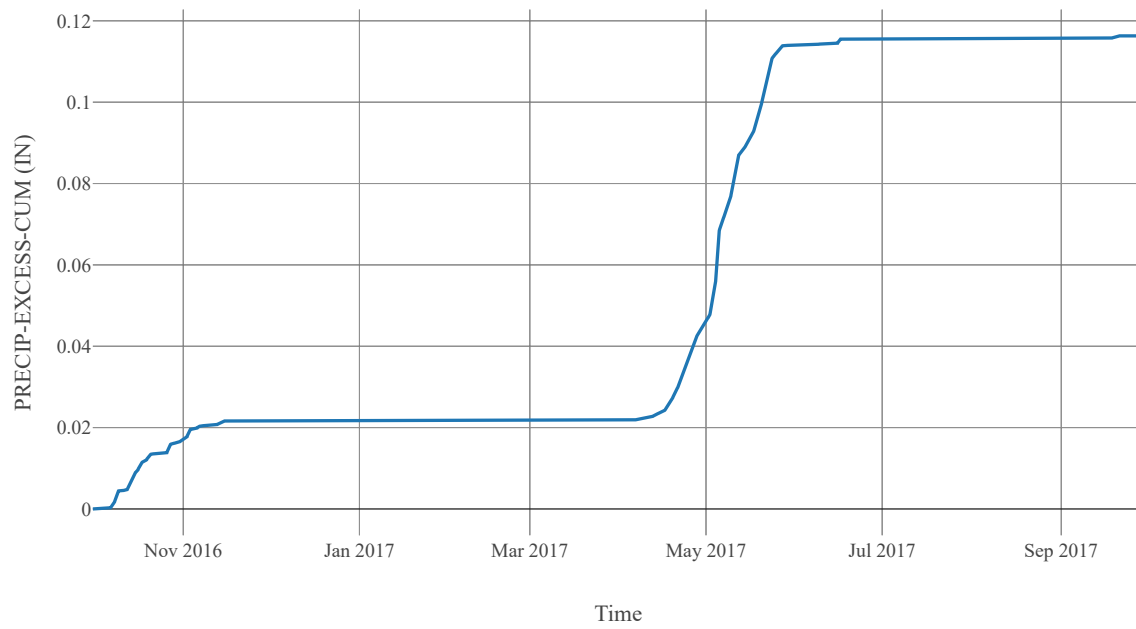
Cumulative Precipitation



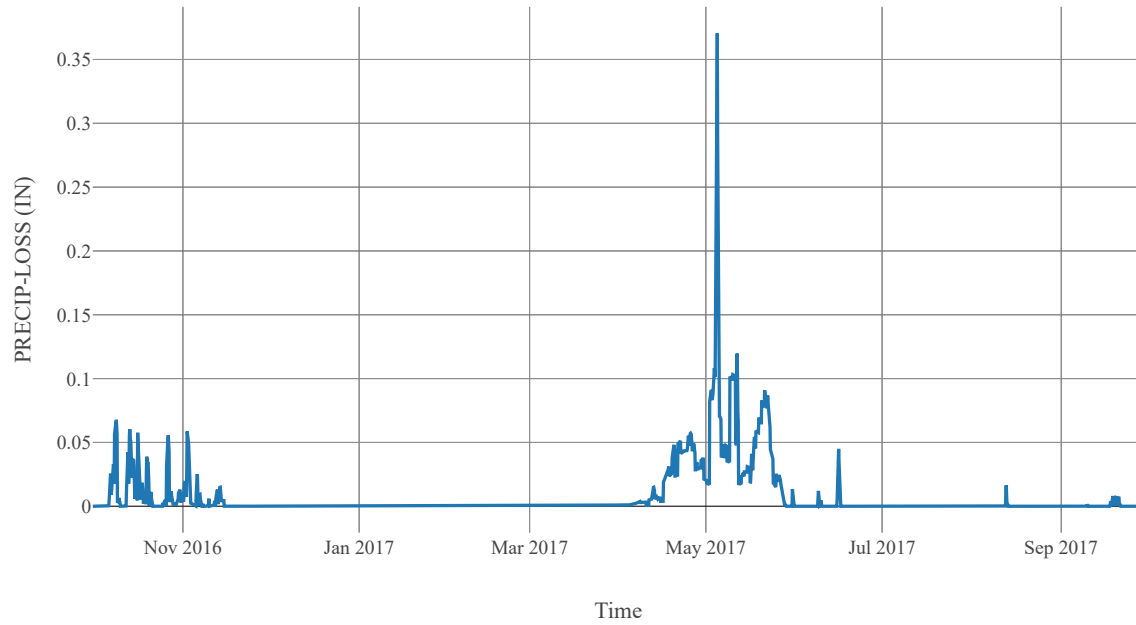
Excess Precipitation



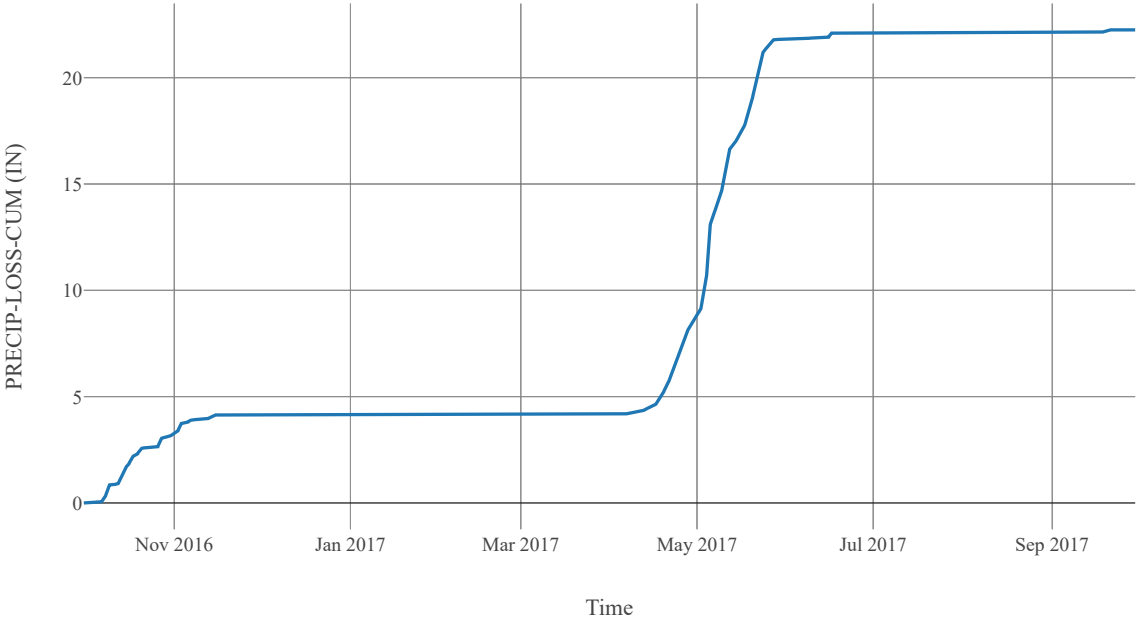
Cumulative Excess Precipitation



Precipitation Loss

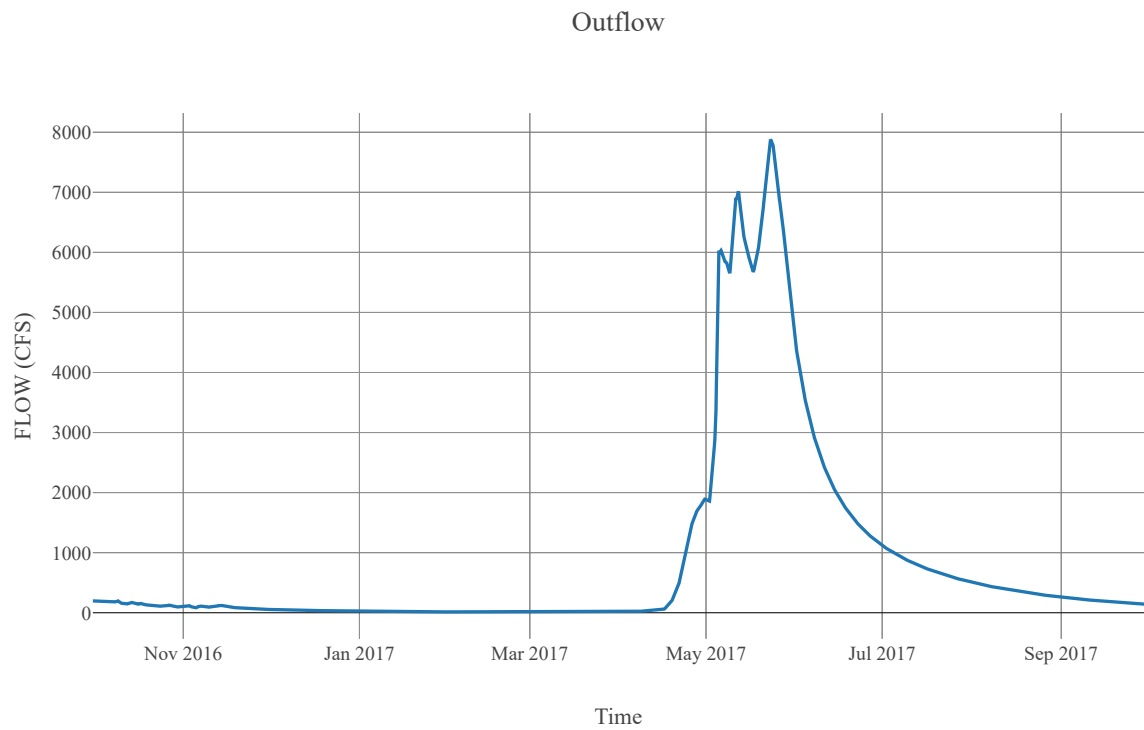


Cumulative Precipitation Loss



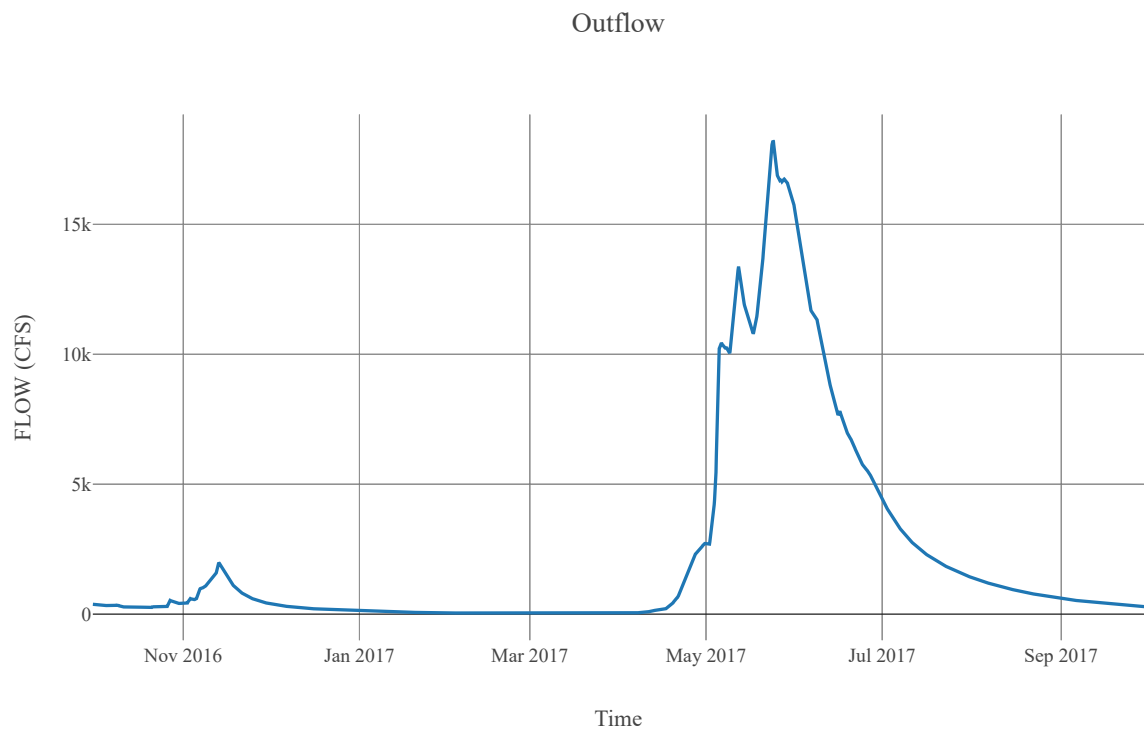
Junction : Tulameen

Observed Hydrograph : Tulameen river at princeton
Downstream : Tulameen_CF



Junction : Tulameen_CF

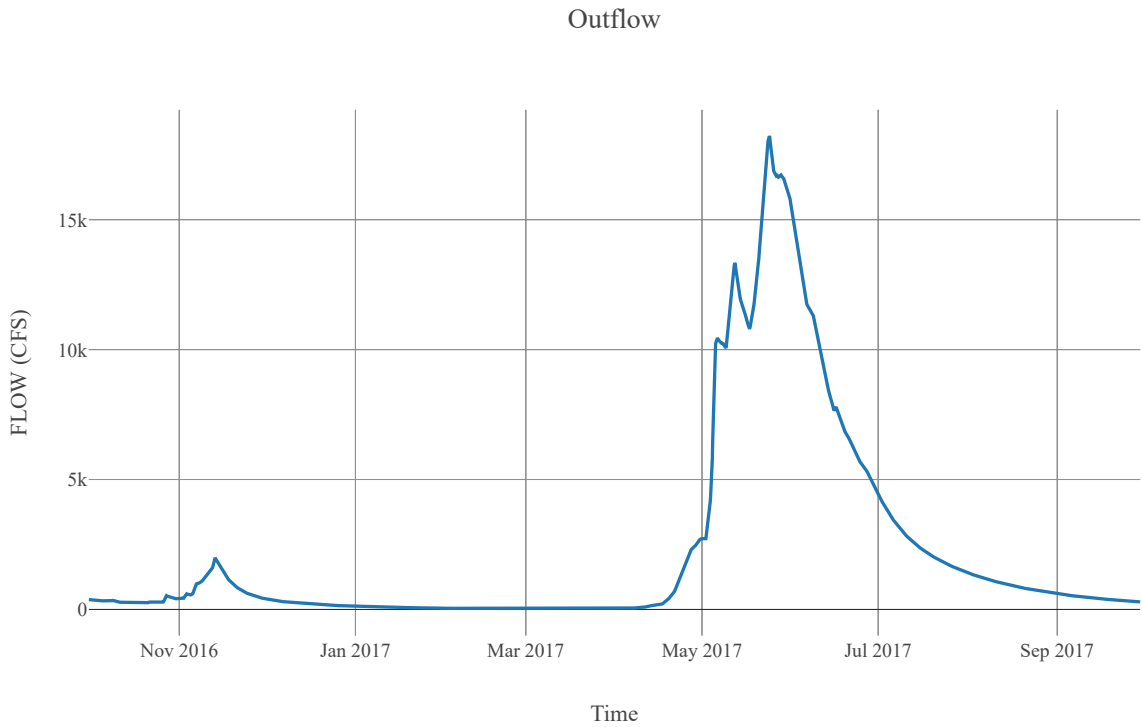
Downstream : Similkameen_R035



Reach : Similkameen_R035

Loss Method : None
Downstream : HayesCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : SiwashCk_S010

Area : 97.92
Latitude : 49.8
Longitude : -120.31
Downstream : Siwash Ck

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.8
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

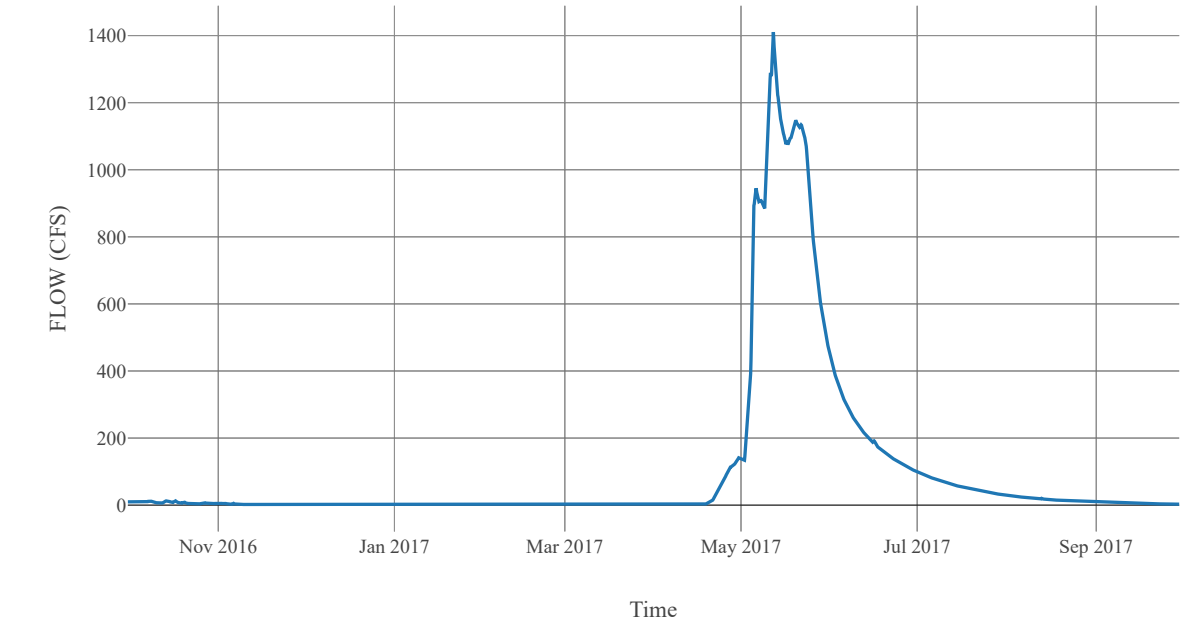
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.13
Storage Coefficient	6.13

Baseflow	
Method	Linear Reservoir

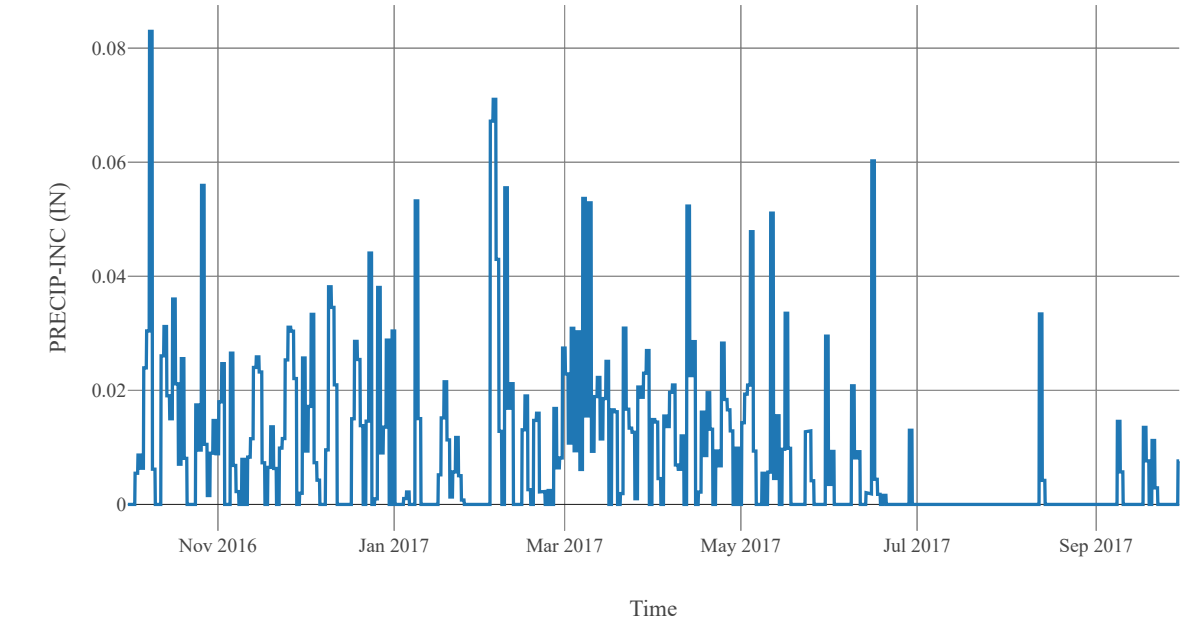
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	122.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	613
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	72737.16	Ac-ft
Precipitation Volume	138978.4	Ac-ft
Loss Volume	106903.24	Ac-ft
Excess Volume	862.12	Ac-ft

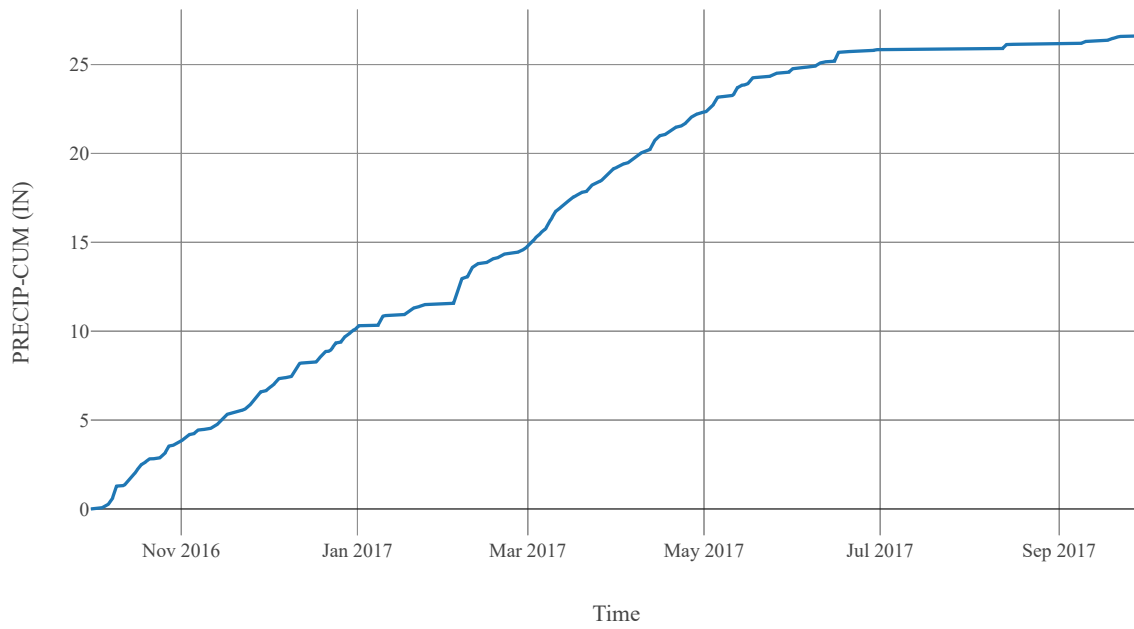
Outflow



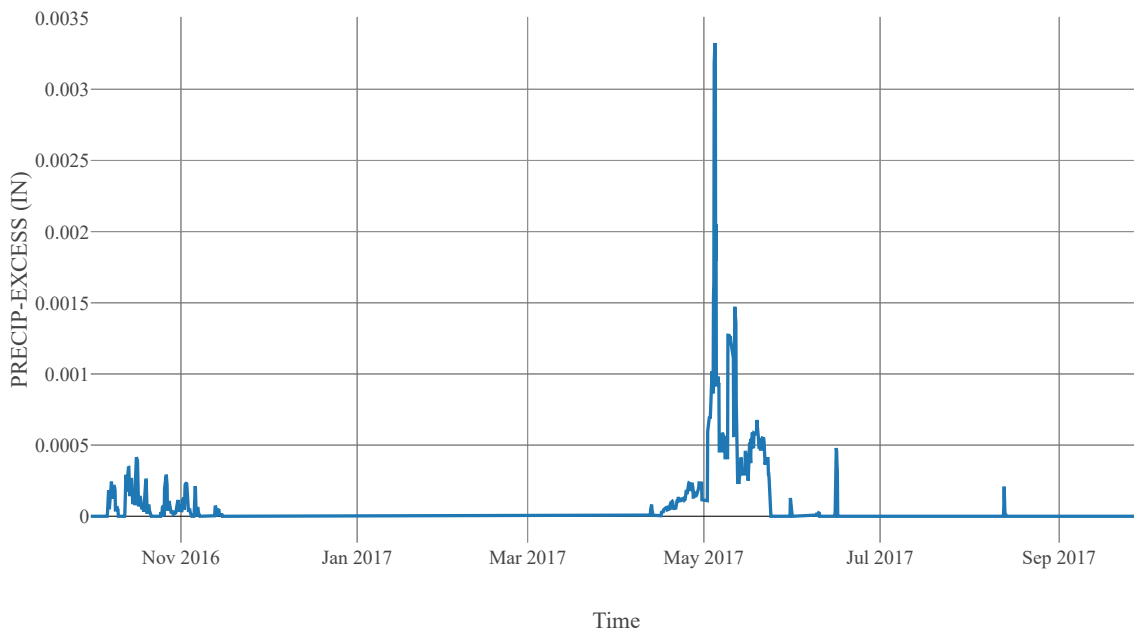
Precipitation



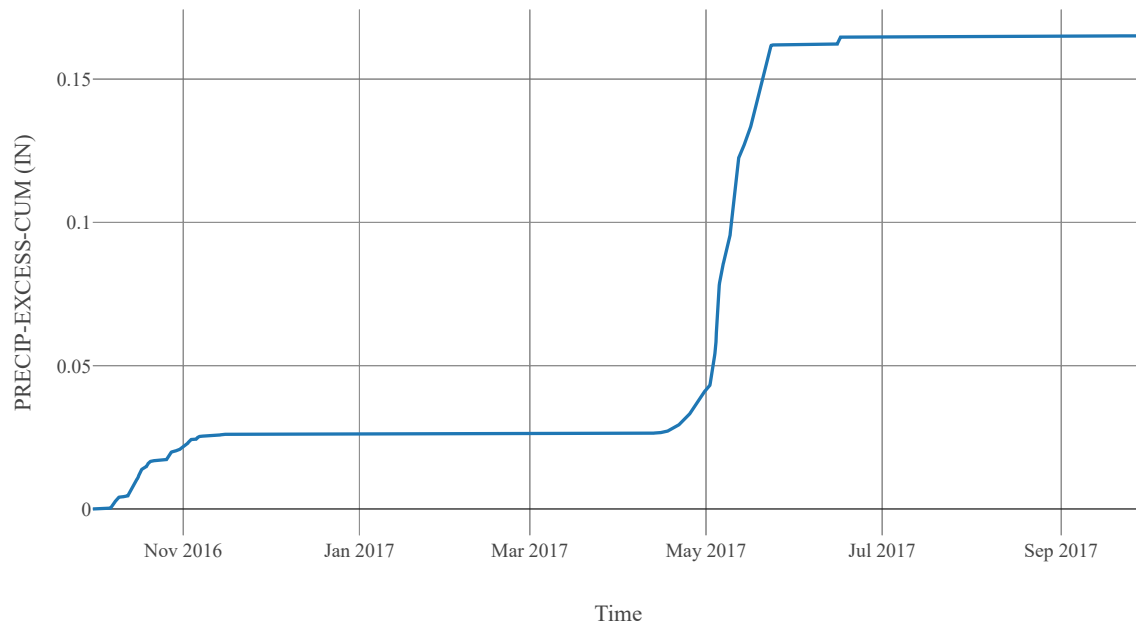
Cumulative Precipitation



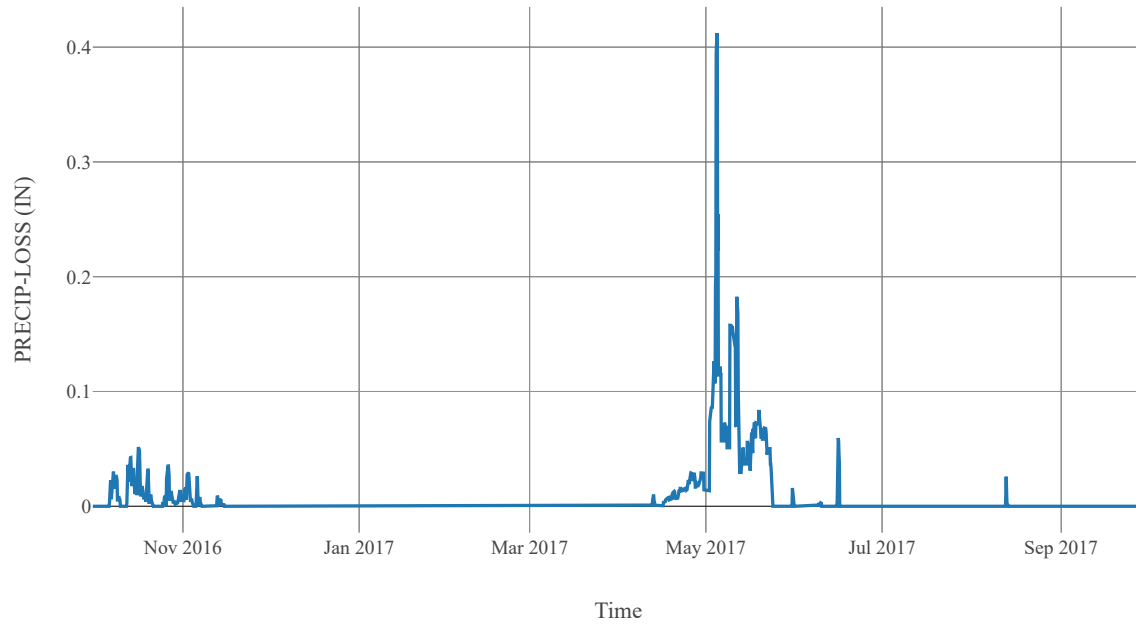
Excess Precipitation



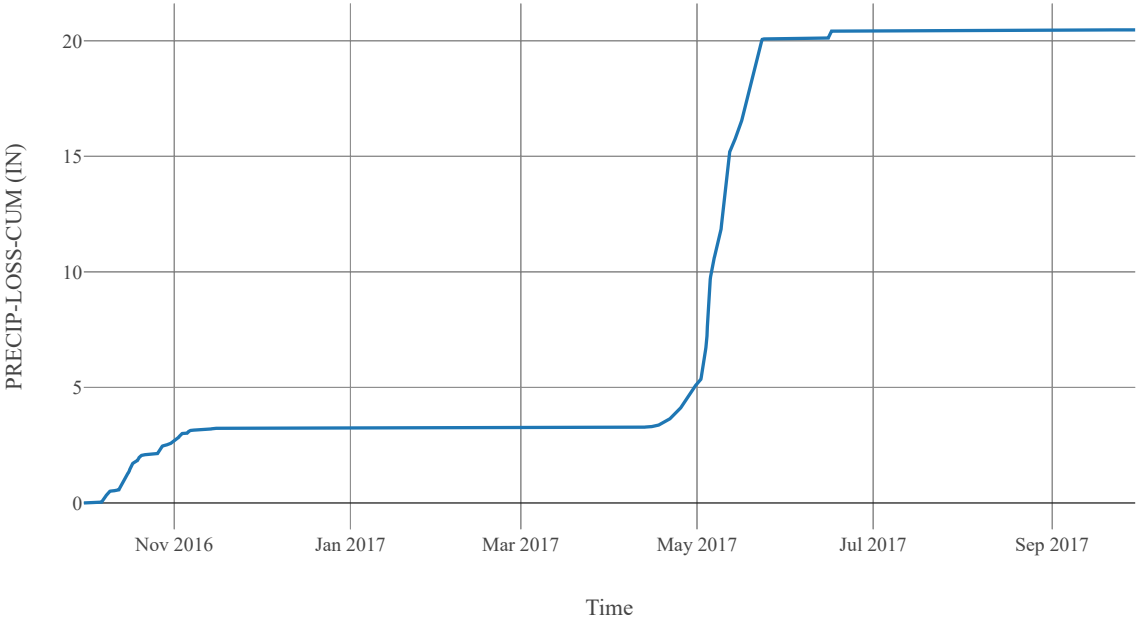
Cumulative Excess Precipitation



Precipitation Loss

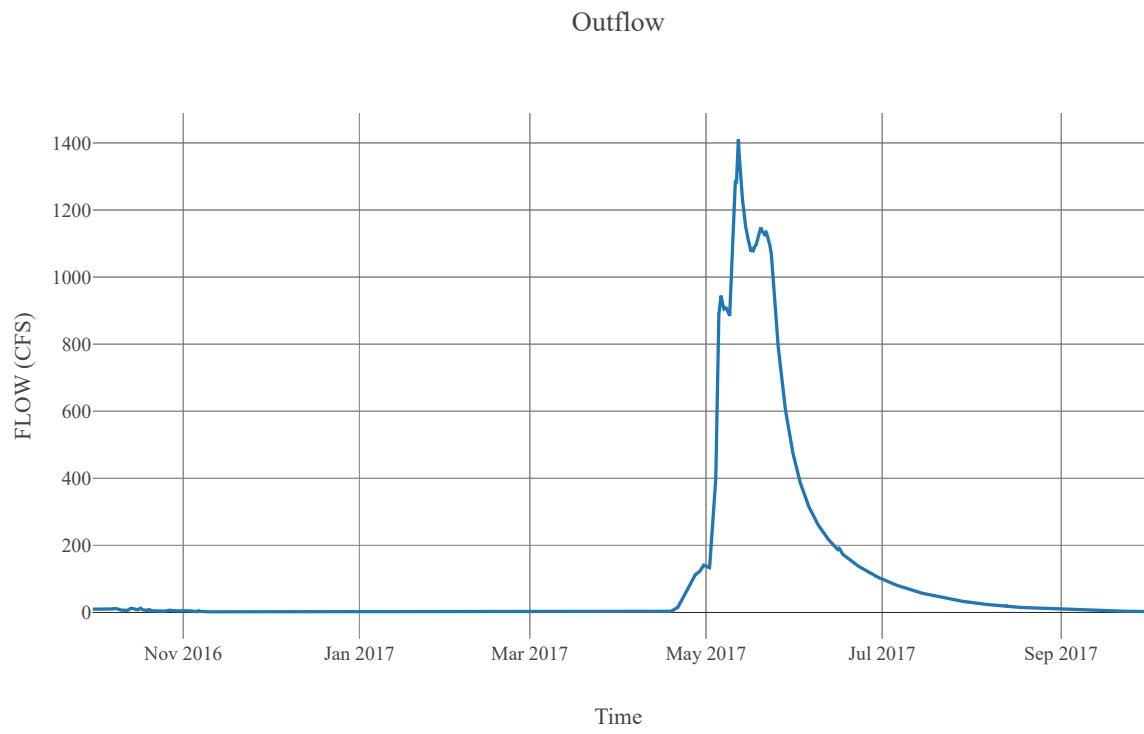


Cumulative Precipitation Loss



Junction : SiwashCk

Observed Hydrograph : Siwash creek near princeton
Downstream : HayesCk_R010

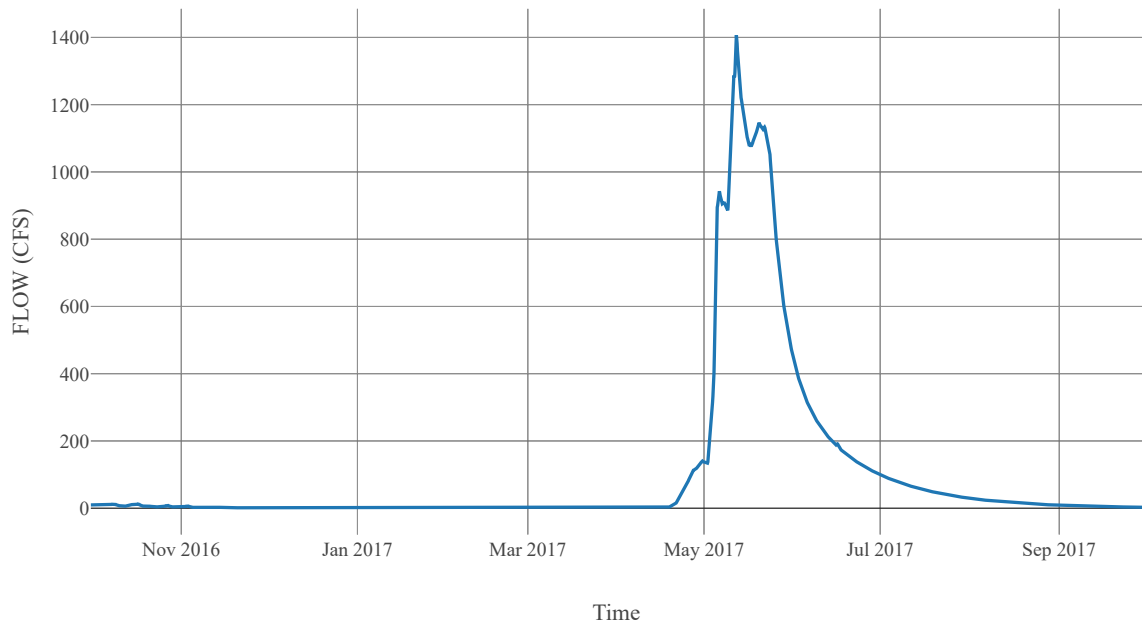


Reach : HayesCk_R010

Loss Method : None
Downstream : HayesCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	97786
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	HayesCk_R010
	Energy Slope
	0.01
	Right Mannings N
	0.15

Outflow



Subbasin : Similkameen_S030

Area : 464.97
Latitude : 49.54
Longitude : -120.44
Downstream : HayesCk_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.78
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

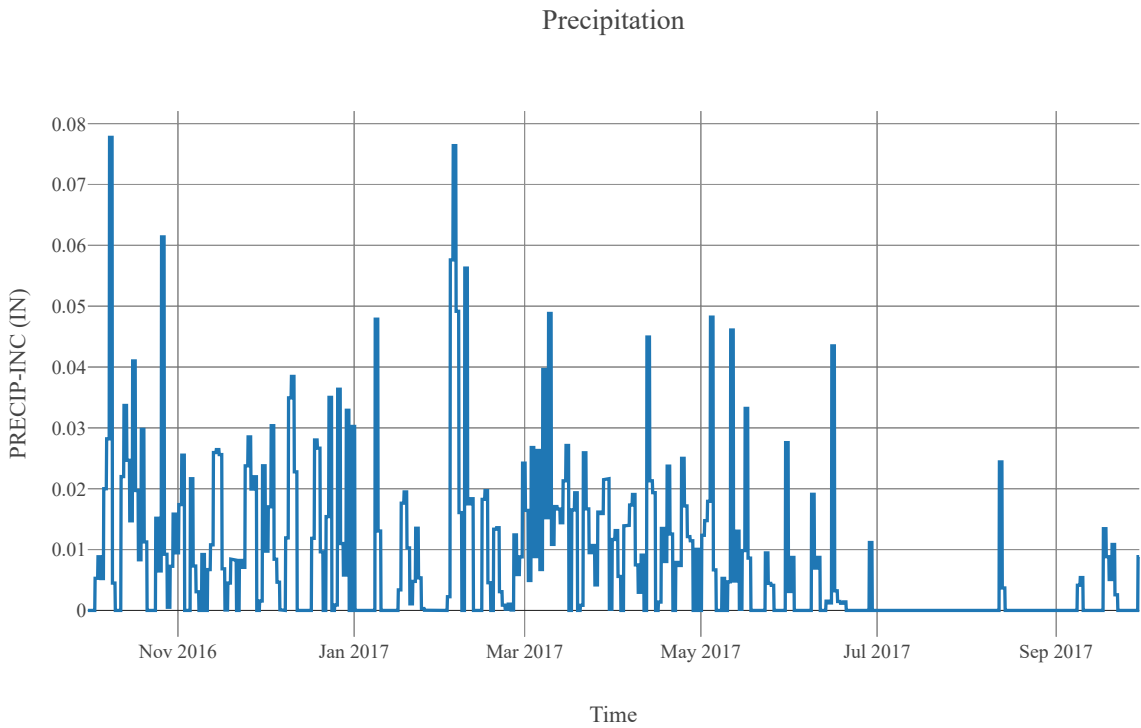
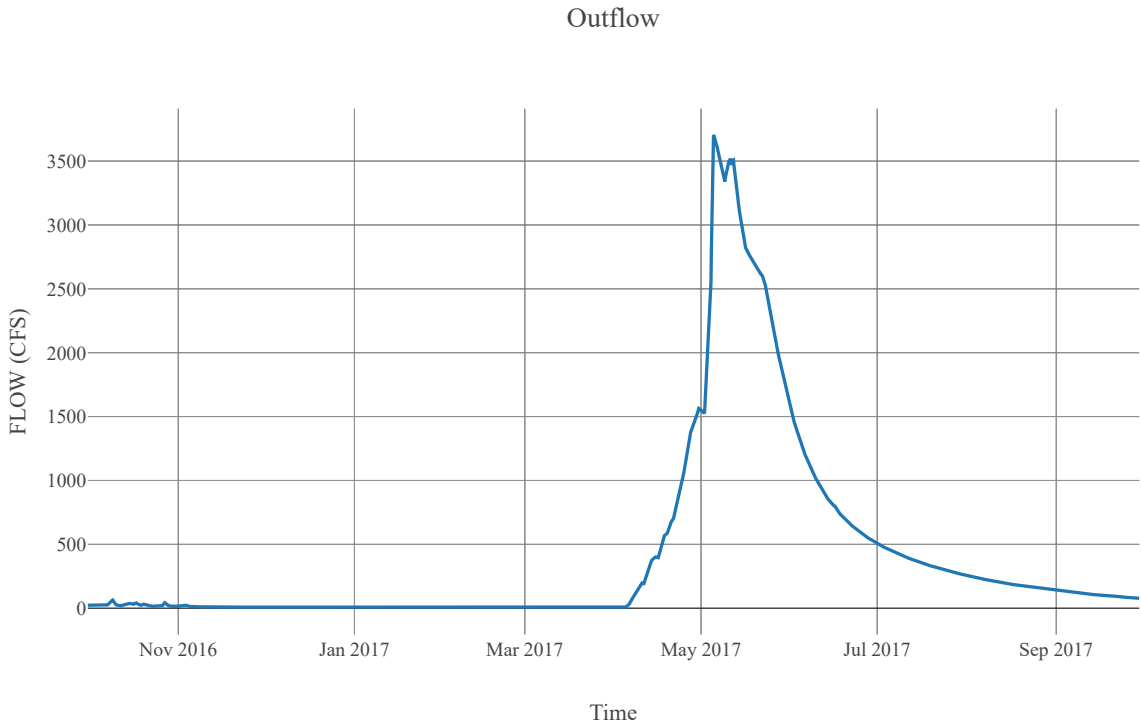
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	12.1
Storage Coefficient	12.1

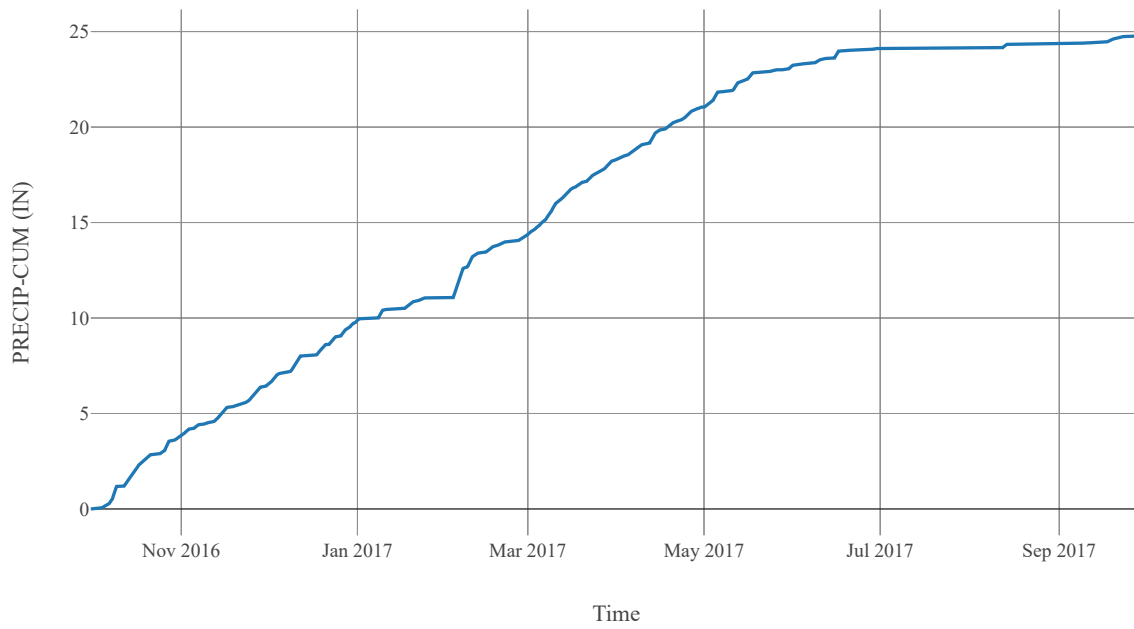
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	242
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1210
		Number Steps	1

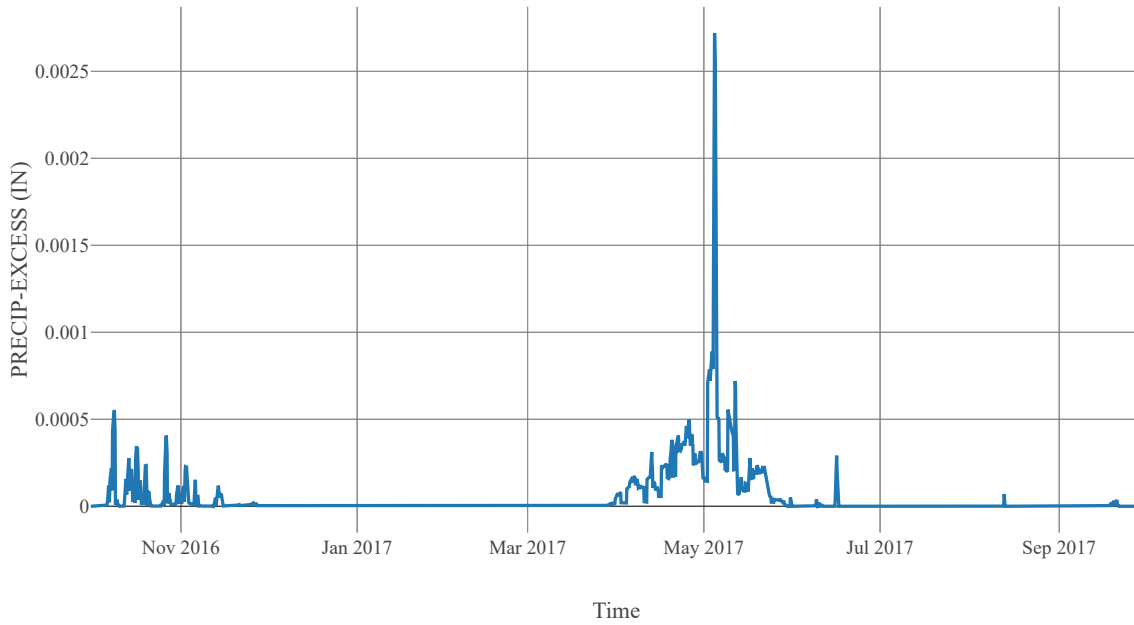
Statistics		
Name	Value	Unit
Baseflow Volume	287743.65	Ac-ft
Precipitation Volume	614373.9	Ac-ft
Loss Volume	454716.35	Ac-ft
Excess Volume	3574.67	Ac-ft



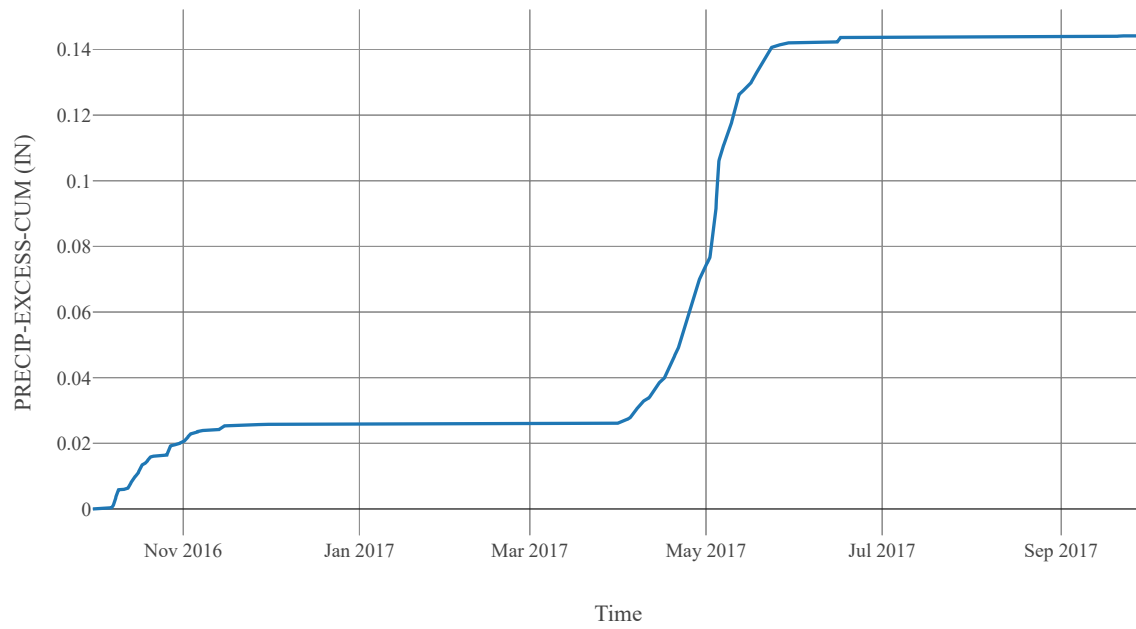
Cumulative Precipitation



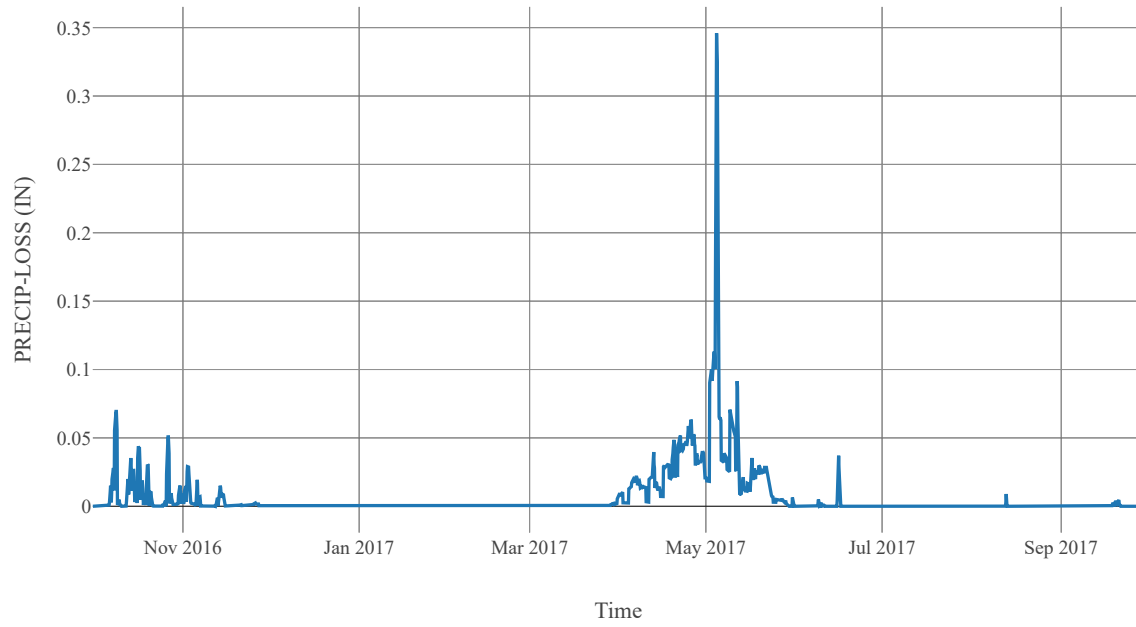
Excess Precipitation



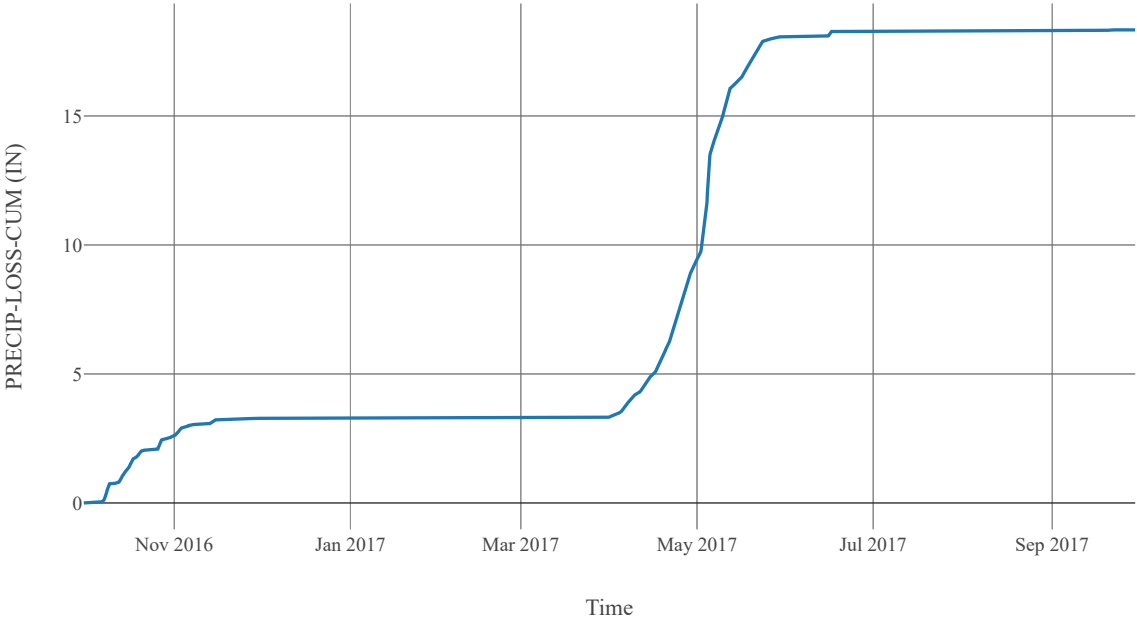
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : HayesCk_S010

Area : 202.67
Latitude : 49.61
Longitude : -120.31
Downstream : HayesCk_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.27
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

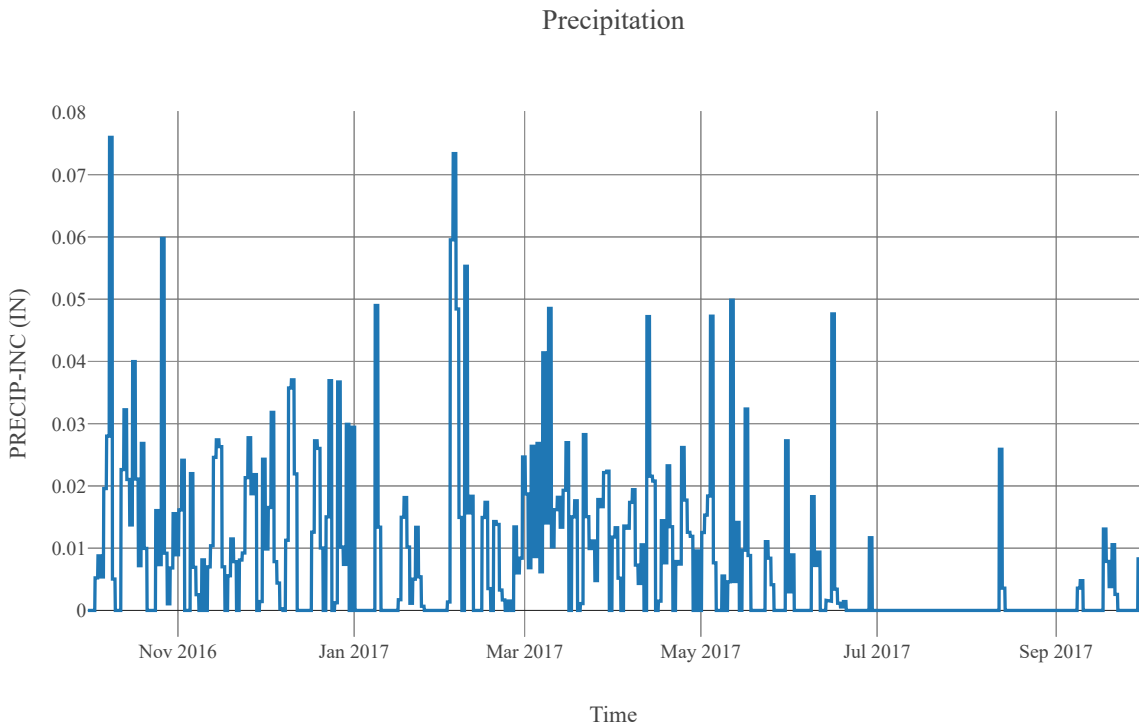
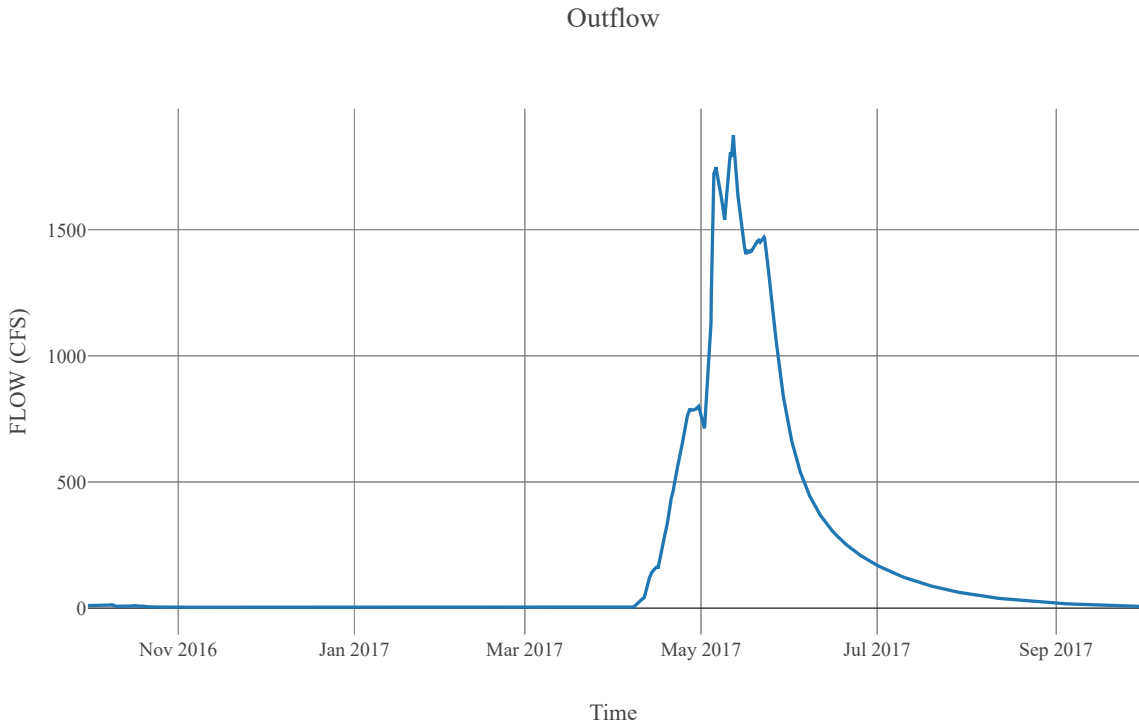
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.87
Storage Coefficient	6.87

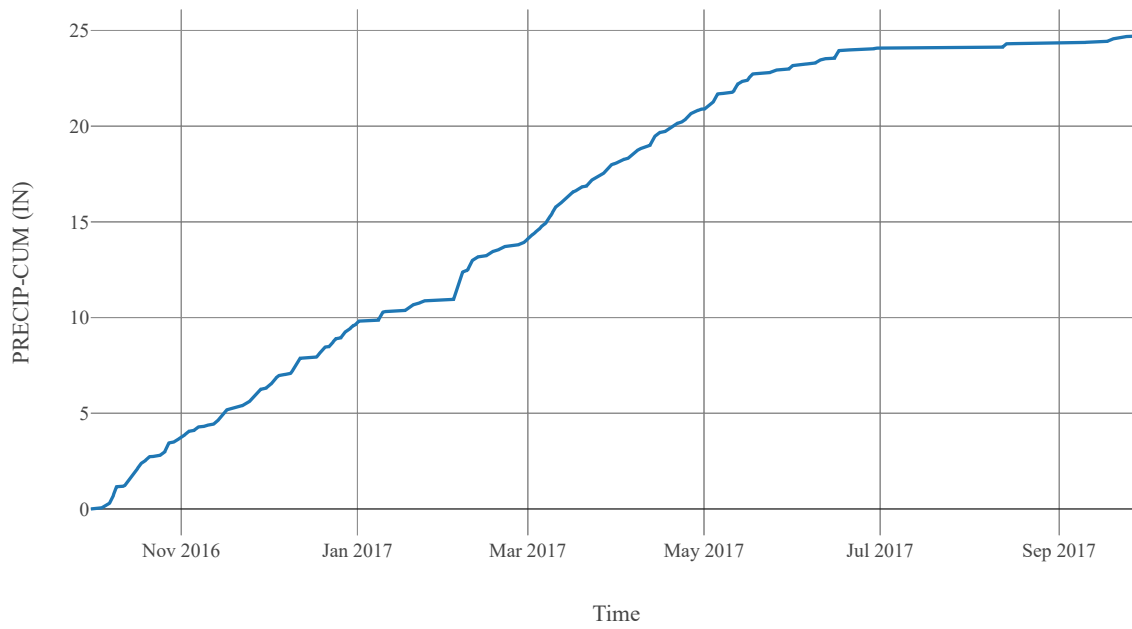
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	137.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	687
		Number Steps	1

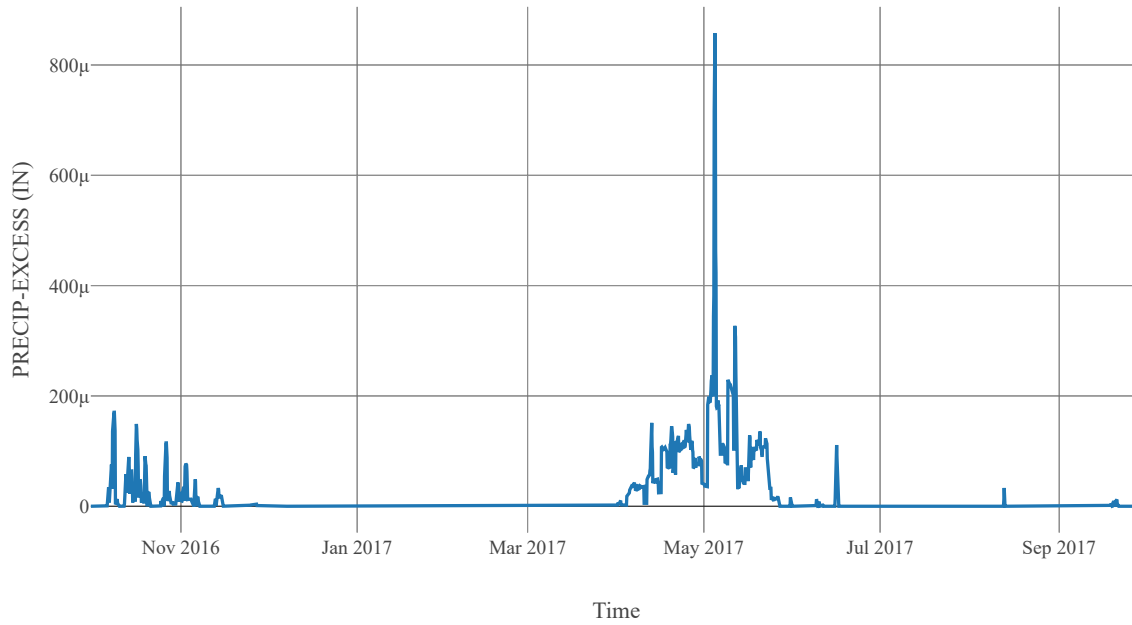
Statistics		
Name	Value	Unit
Baseflow Volume	129246.84	Ac-ft
Precipitation Volume	267178.09	Ac-ft
Loss Volume	199986.23	Ac-ft
Excess Volume	541.42	Ac-ft



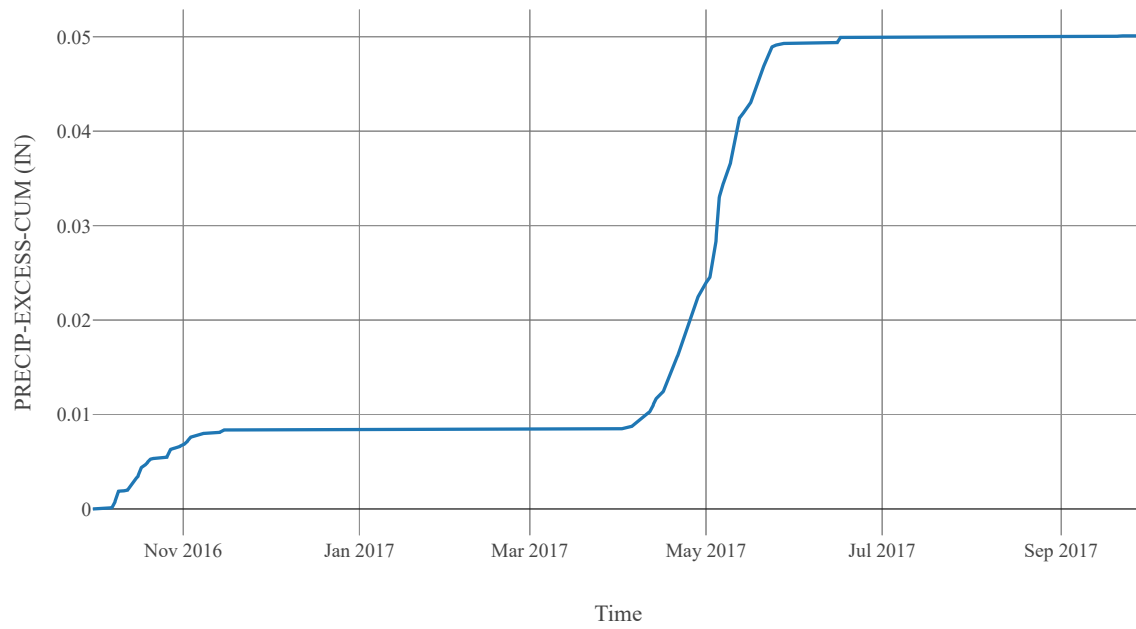
Cumulative Precipitation



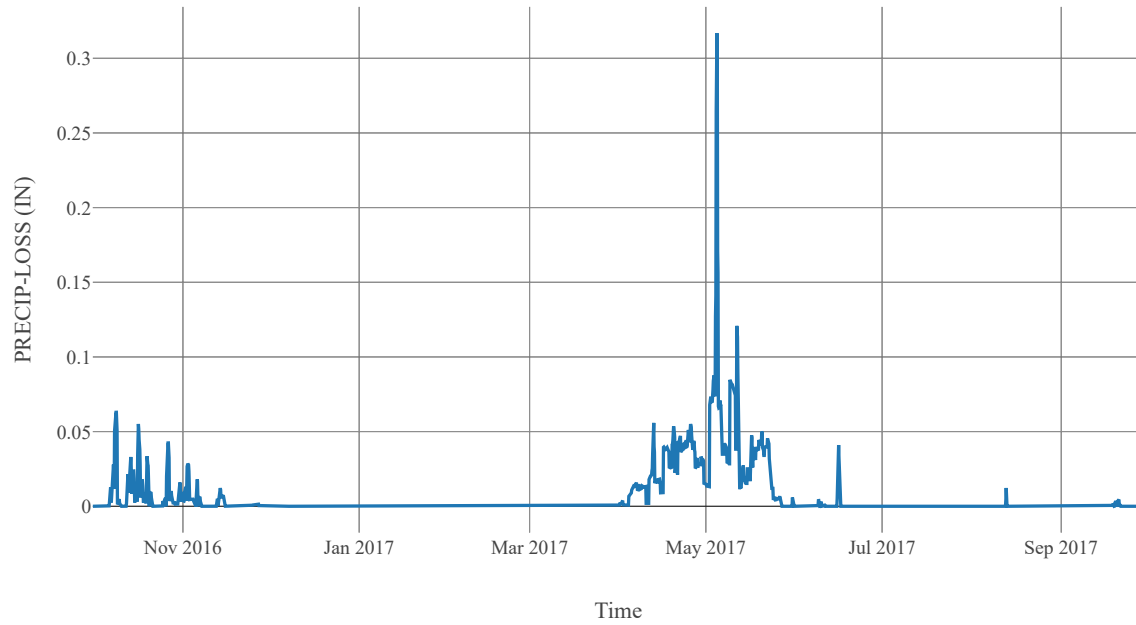
Excess Precipitation



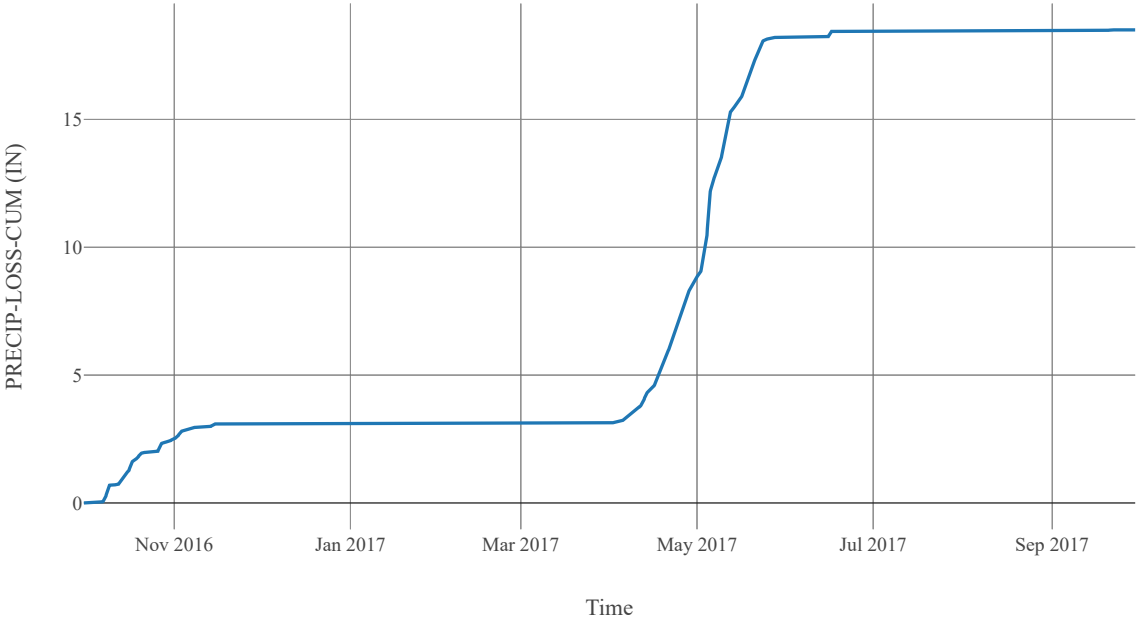
Cumulative Excess Precipitation



Precipitation Loss

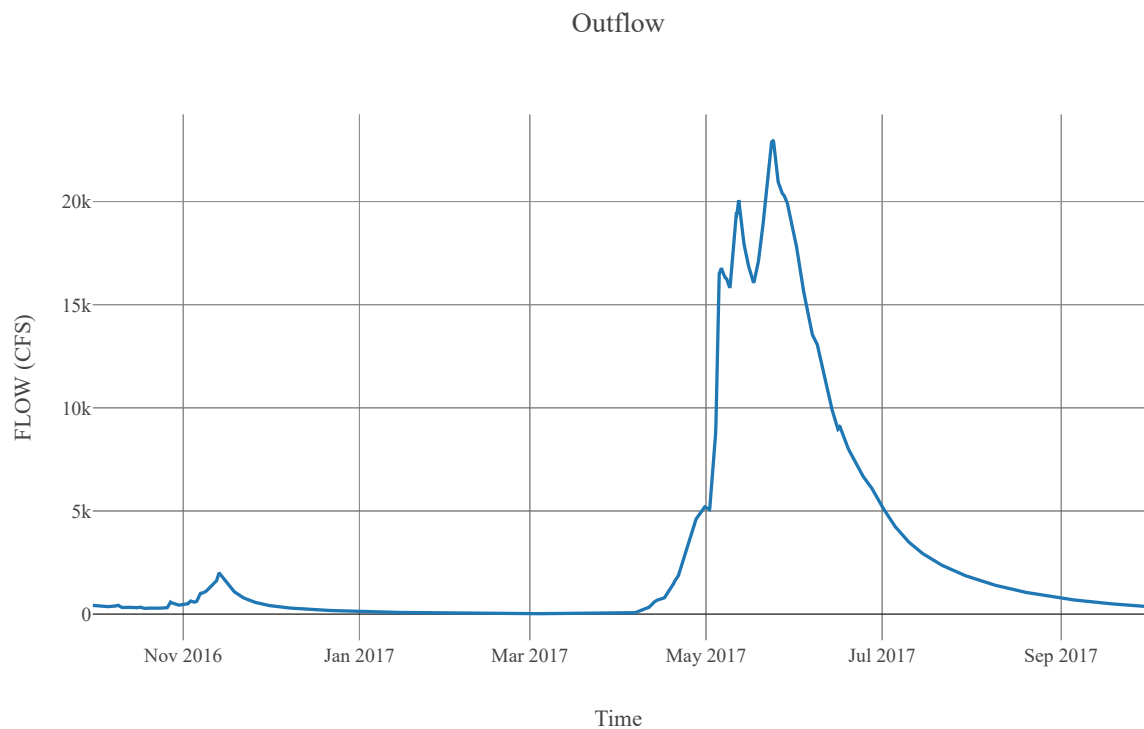


Cumulative Precipitation Loss



Junction : HayesCk_CF

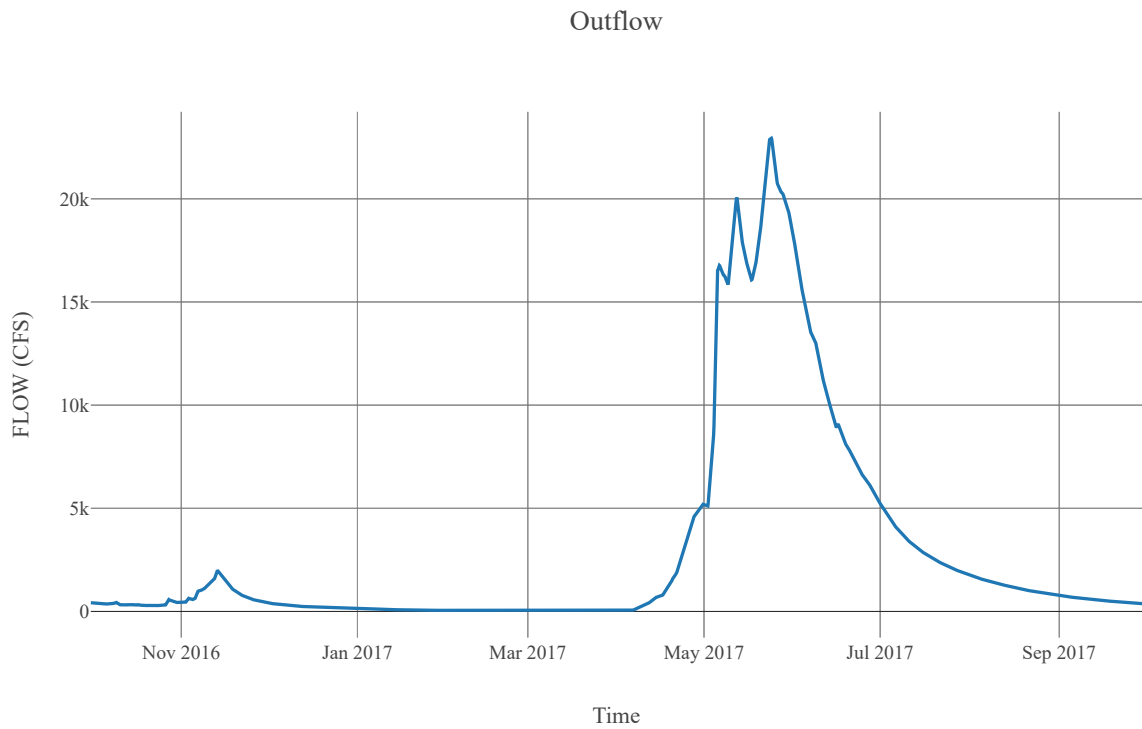
Downstream : Similkameen_R030



Reach : Similkameen_R030

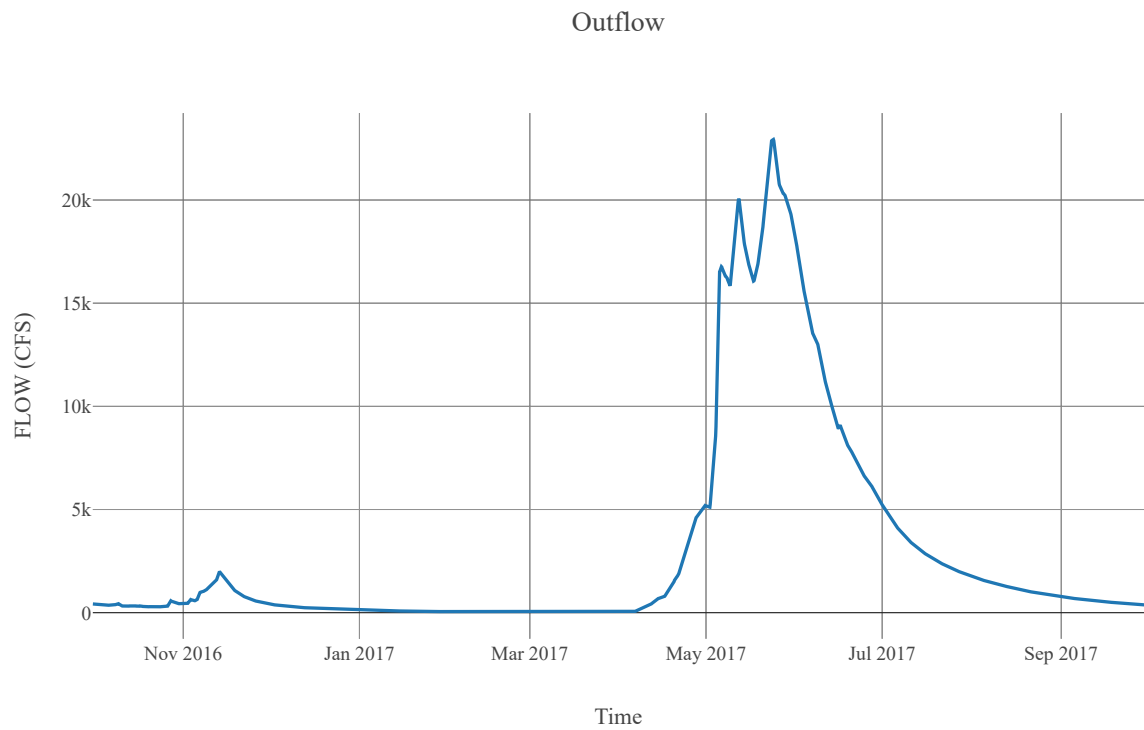
Loss Method : None
Downstream : Sim Nr Hedley

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Junction : SimNrHedley

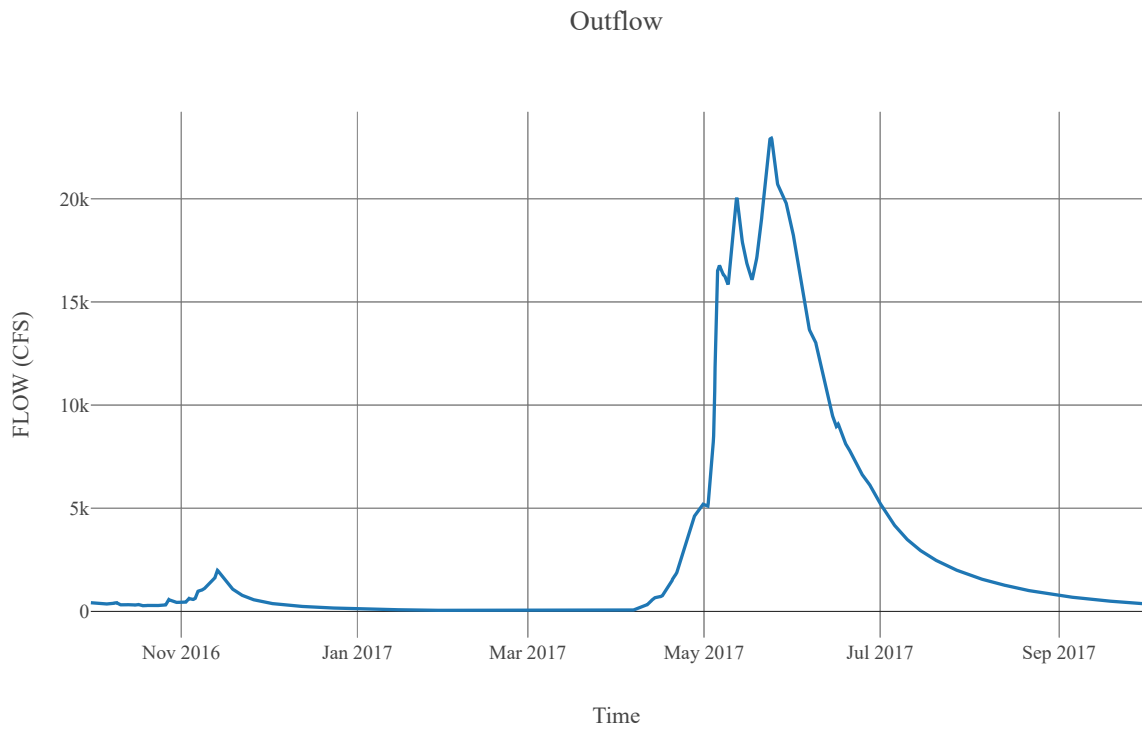
Observed Hydrograph : Similkameen river near hedle
Downstream : Similkameen_R025



Reach : Similkameen_R025

Loss Method : None
Downstream : HedleyCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : HedleyCk_S010

Area : 152.49
Observed Hydrograph : Hedley creek near the mouth
Latitude : 49.49
Longitude : -120.06
Downstream : HedleyCk_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.27
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

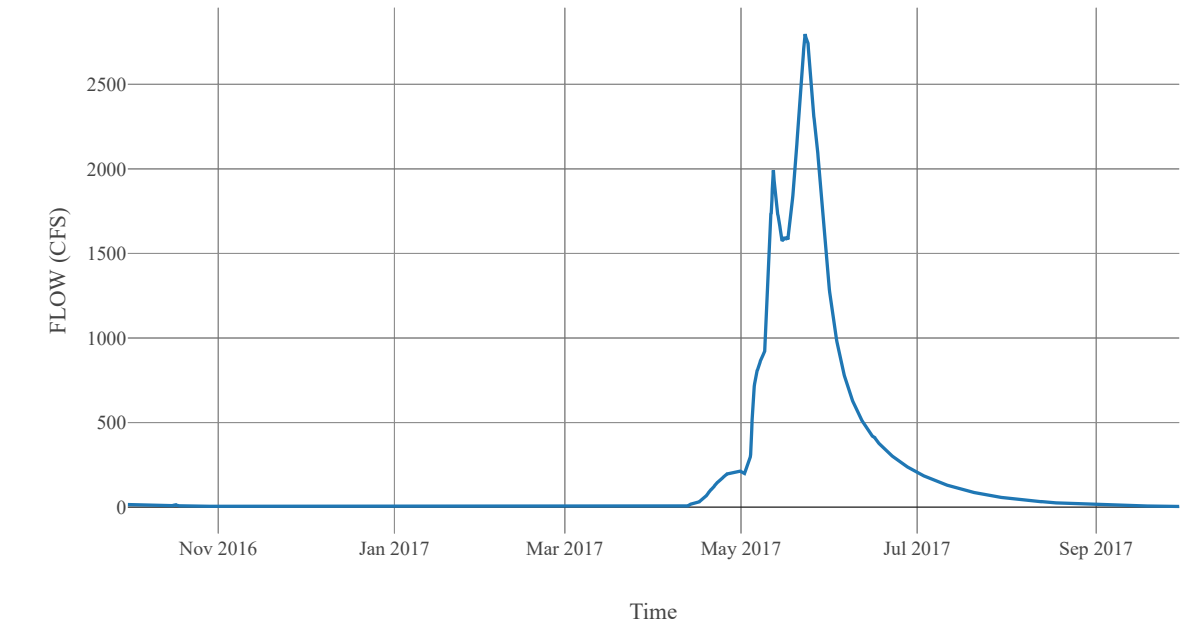
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.52
Storage Coefficient	5.52

Baseflow	
Method	Linear Reservoir

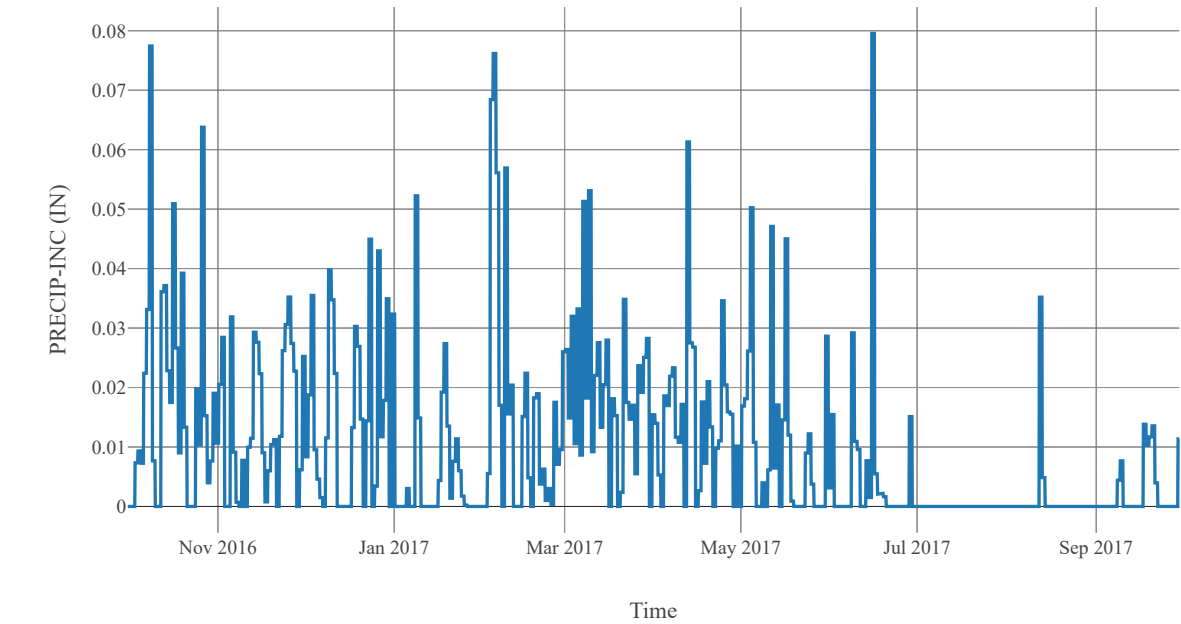
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	110.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	552
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	138939.2	Ac-ft
Precipitation Volume	244705	Ac-ft
Loss Volume	196681.62	Ac-ft
Excess Volume	532.48	Ac-ft

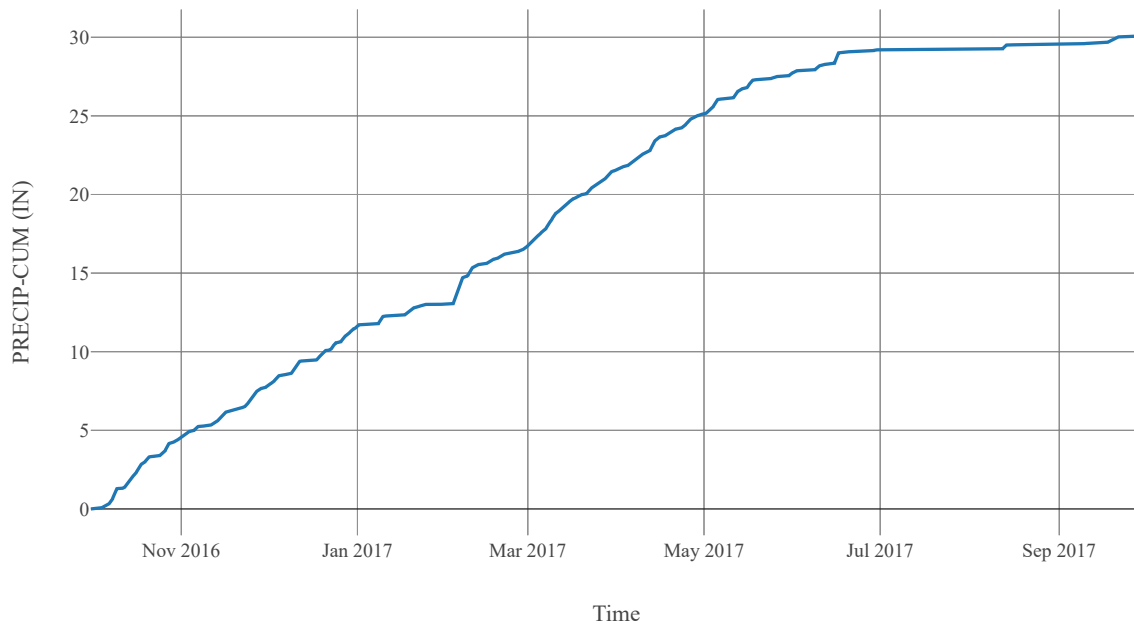
Outflow



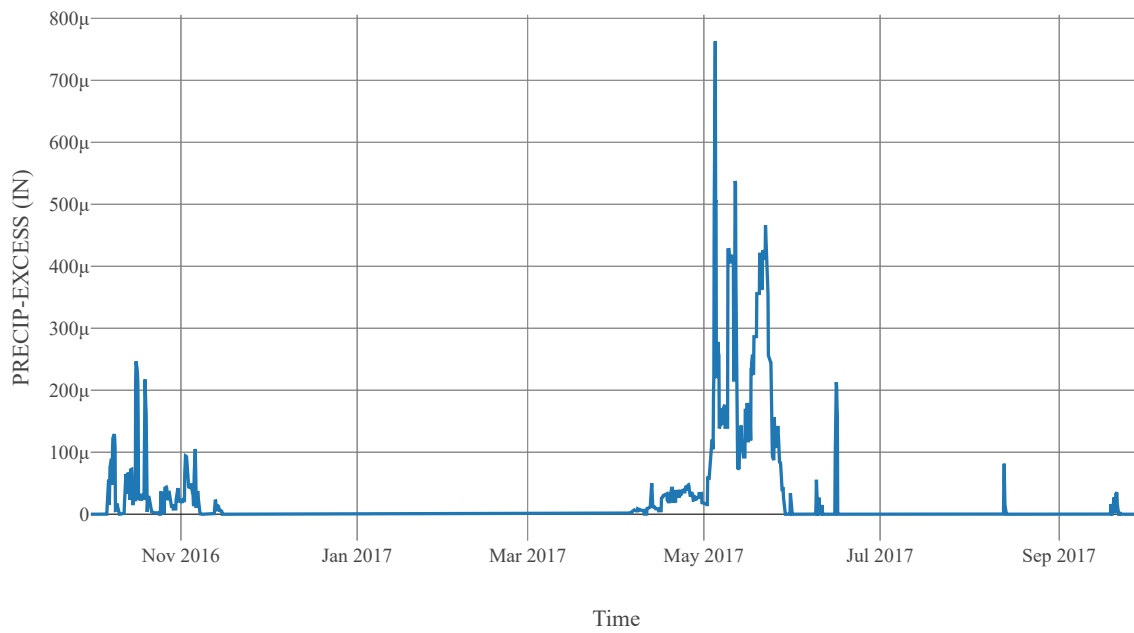
Precipitation



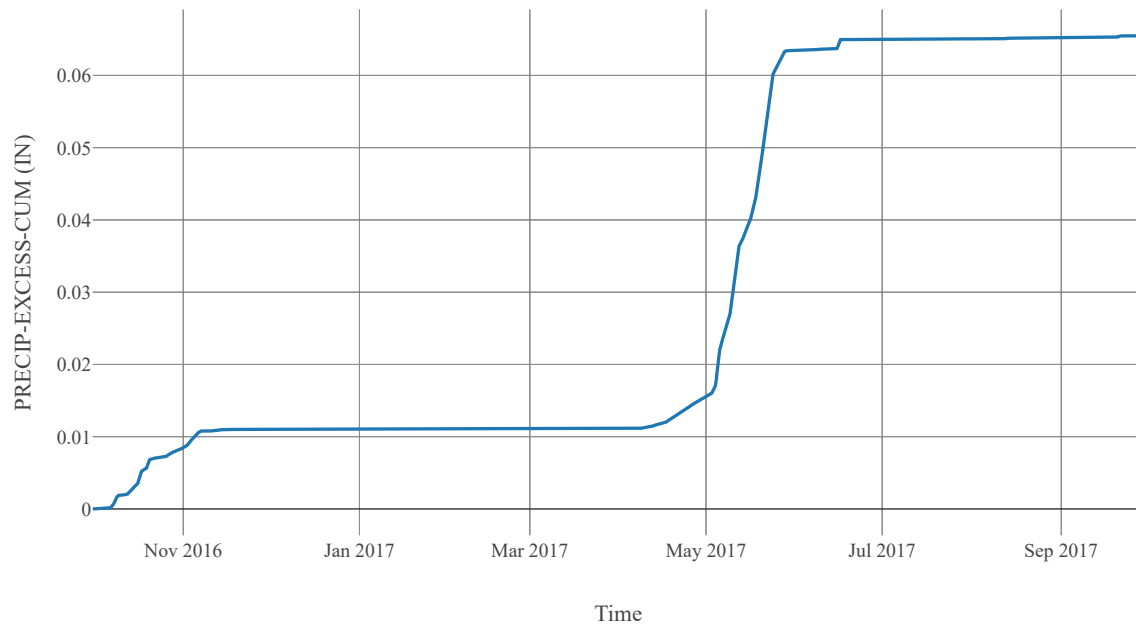
Cumulative Precipitation



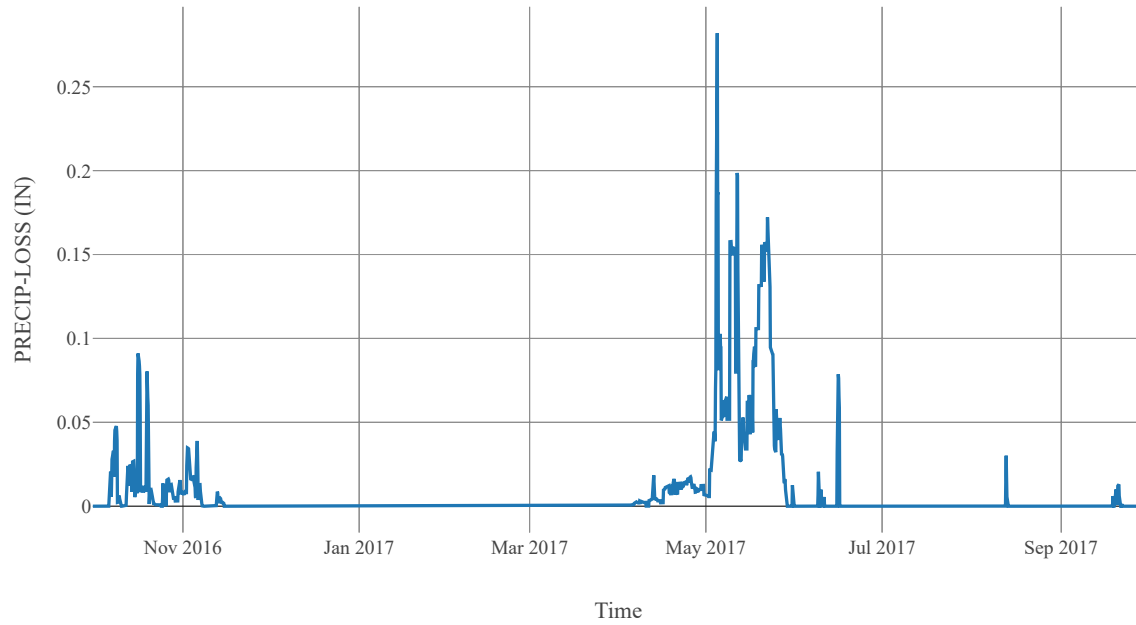
Excess Precipitation



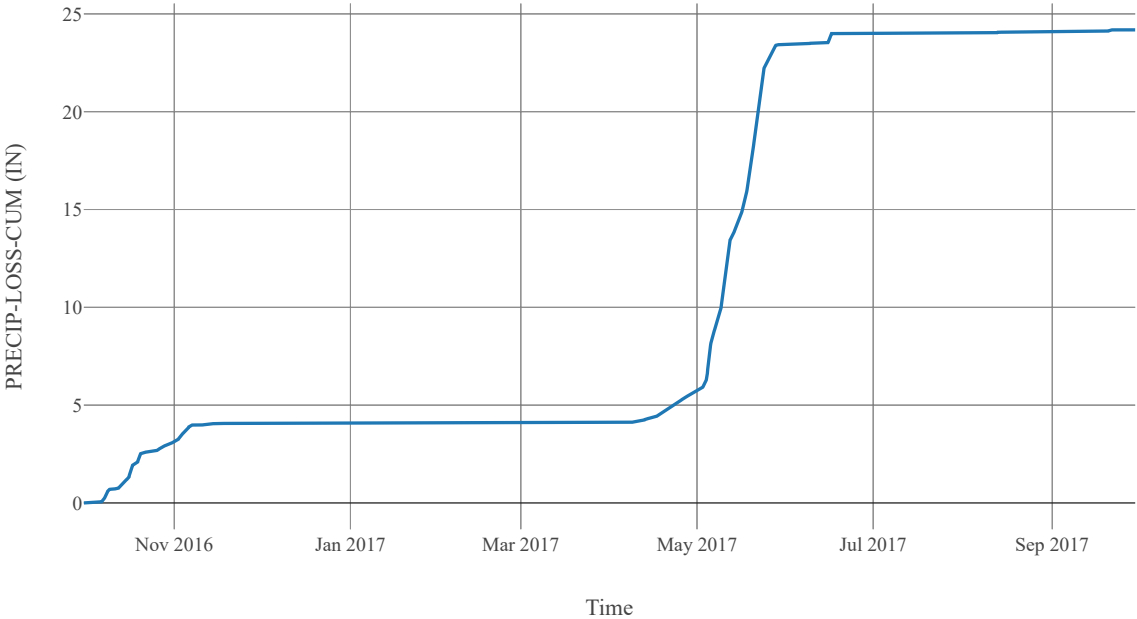
Cumulative Excess Precipitation



Precipitation Loss

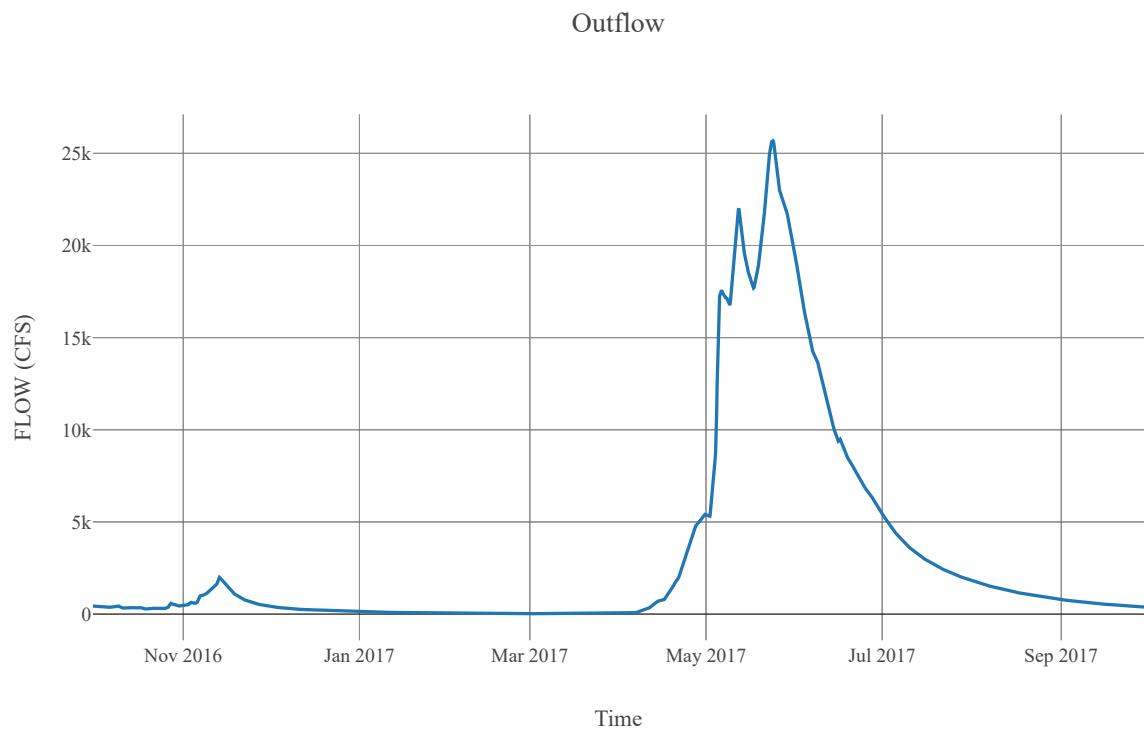


Cumulative Precipitation Loss



Junction : HedleyCk_CF

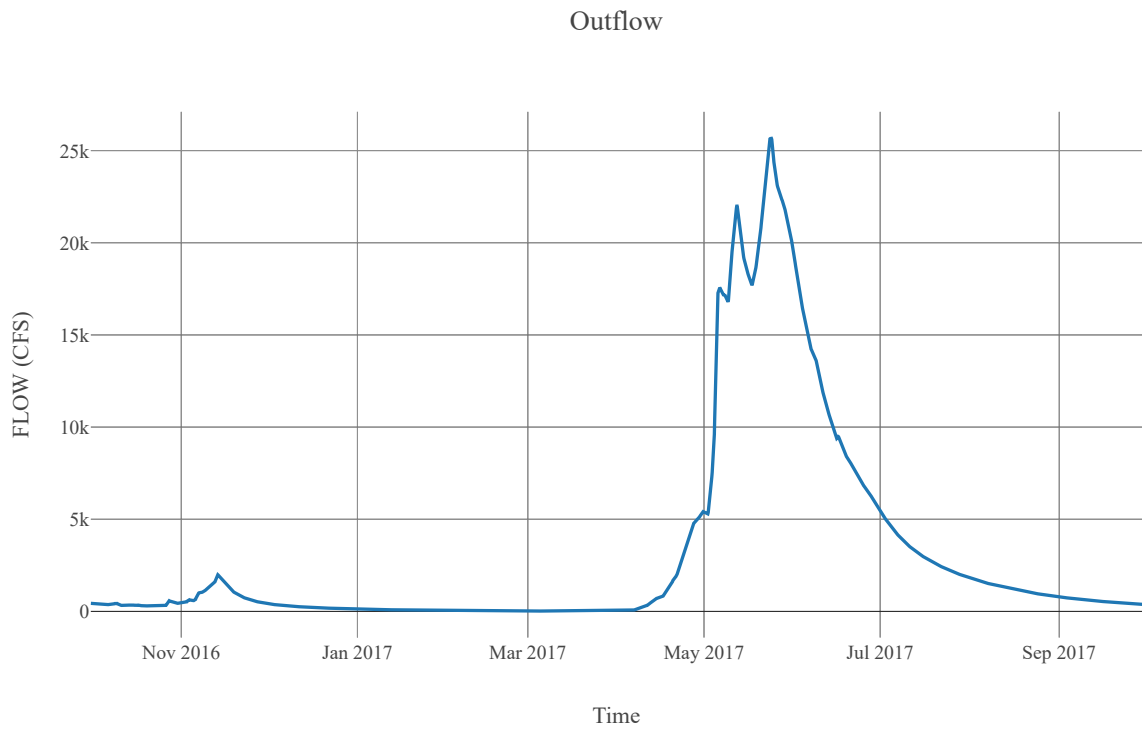
Downstream : Similkameen_R020



Reach : Similkameen_R020

Loss Method : None
Downstream : AshnolaRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : EwartCk_S010

Area : 97.12
Latitude : 49.05
Longitude : -120.03
Downstream : Ewart Ck

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.2
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

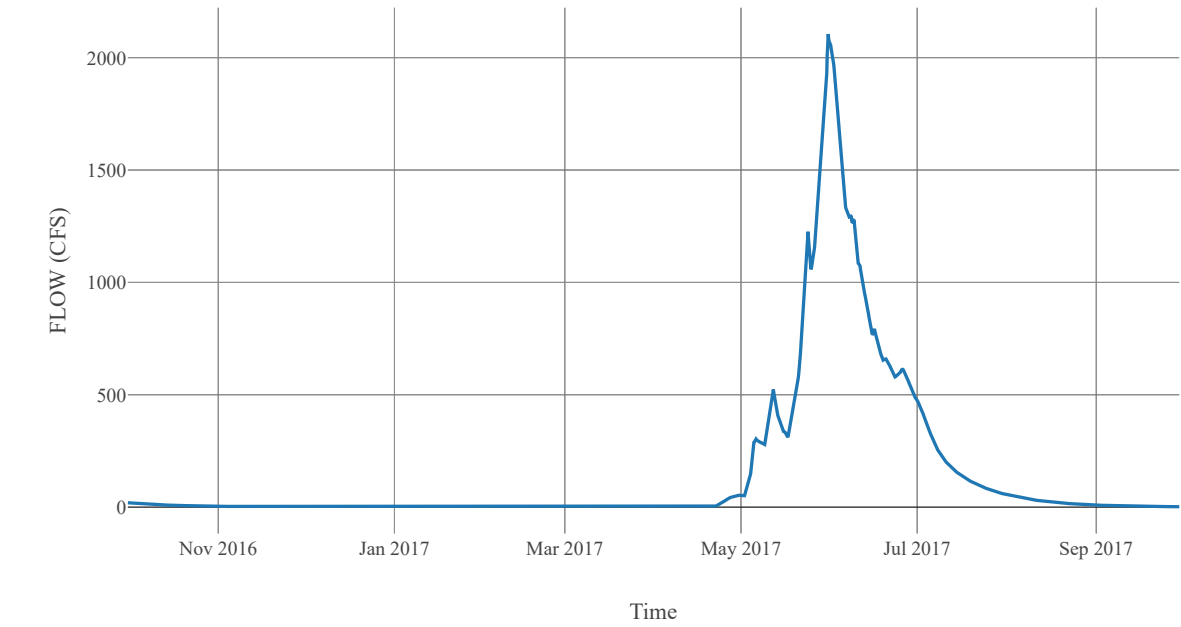
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	4.14
Storage Coefficient	4.14

Baseflow	
Method	Linear Reservoir

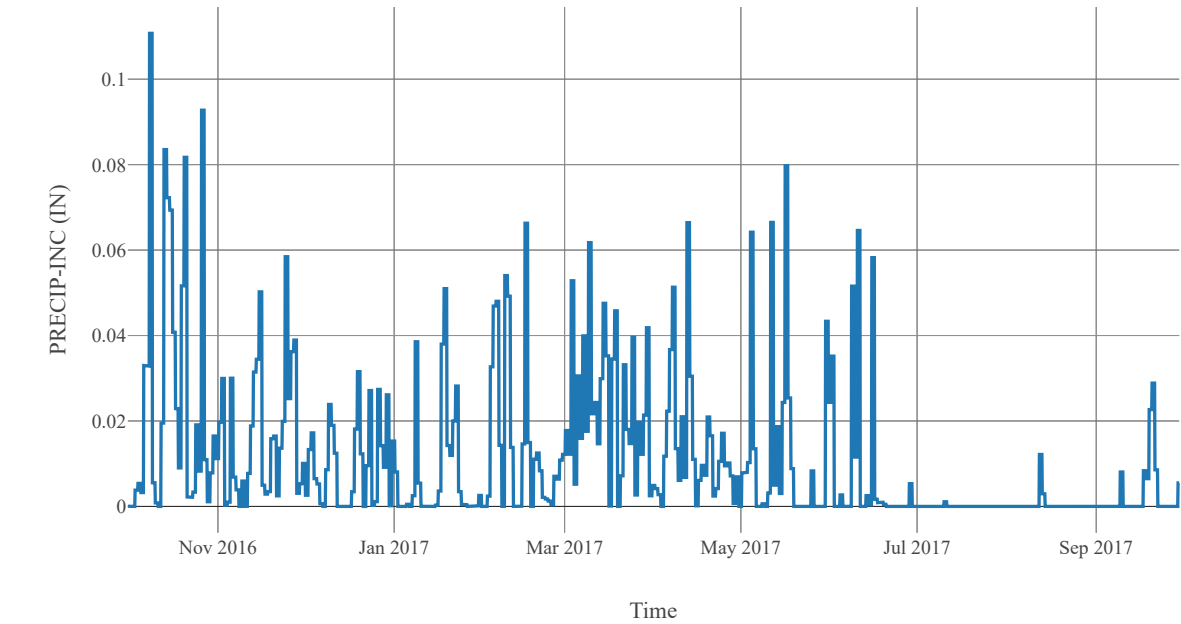
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	82.8
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	414
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	112441.83	Ac-ft
Precipitation Volume	173077.95	Ac-ft
Loss Volume	152037.98	Ac-ft
Excess Volume	304.69	Ac-ft

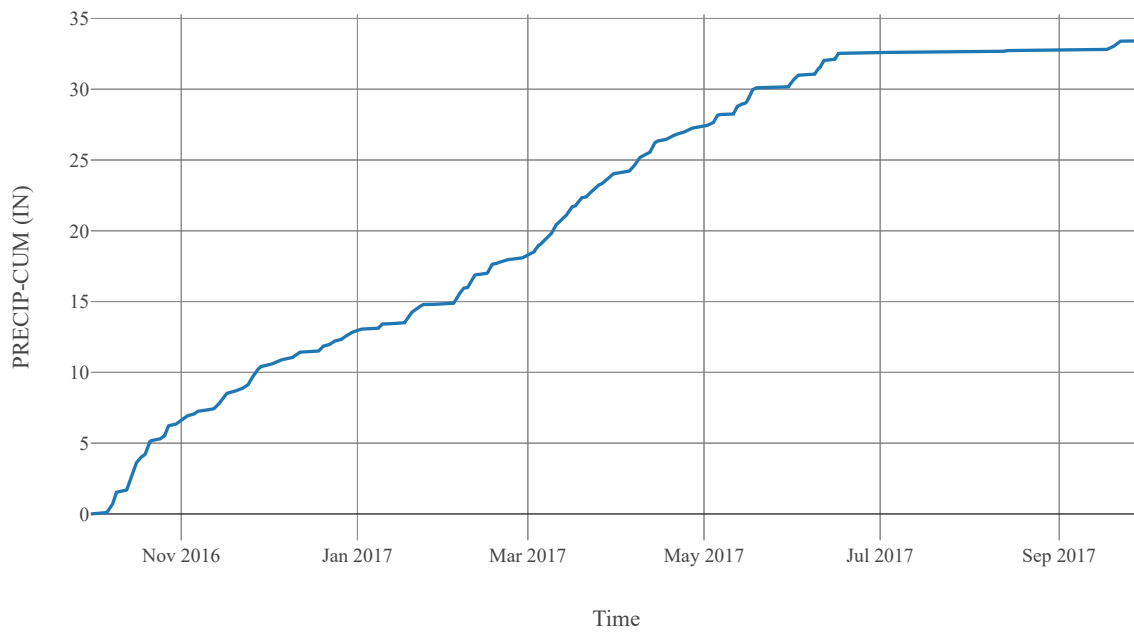
Outflow



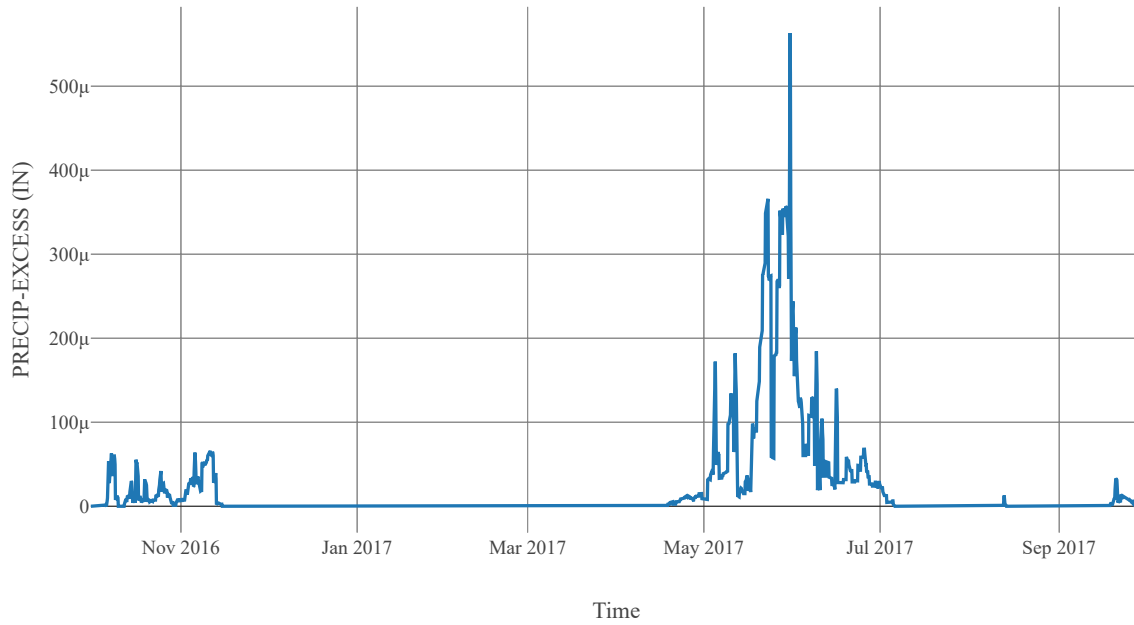
Precipitation



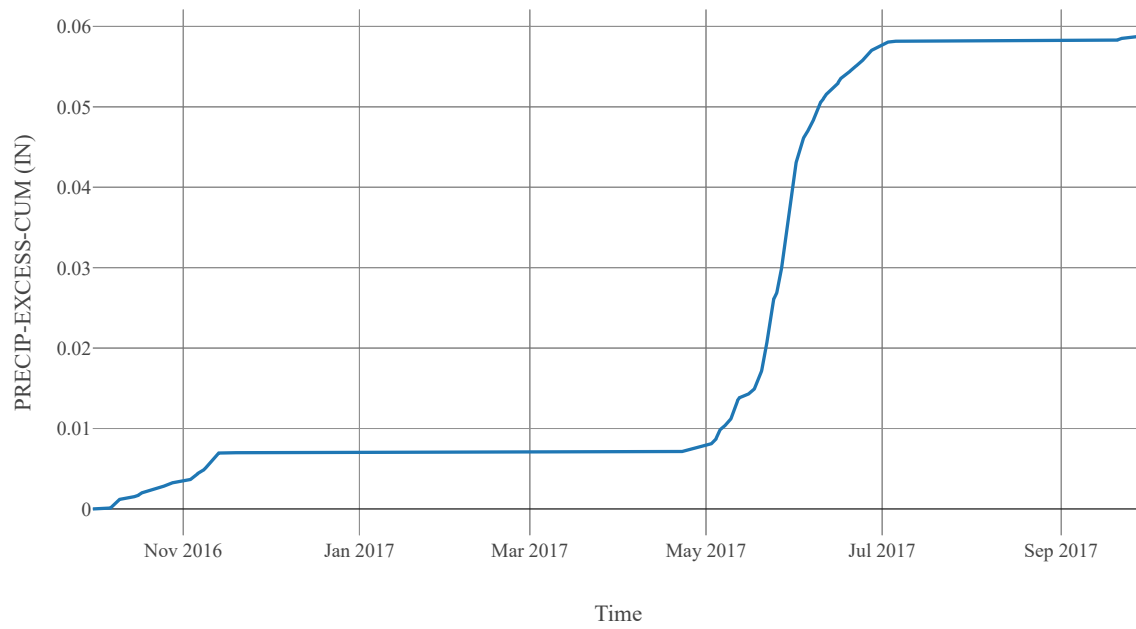
Cumulative Precipitation



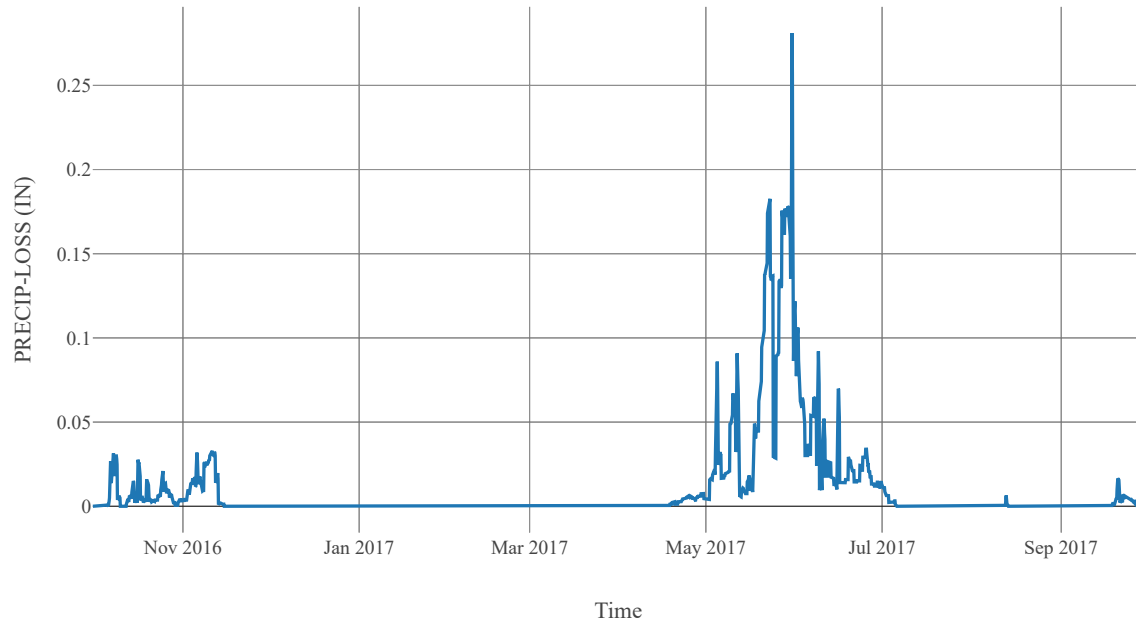
Excess Precipitation



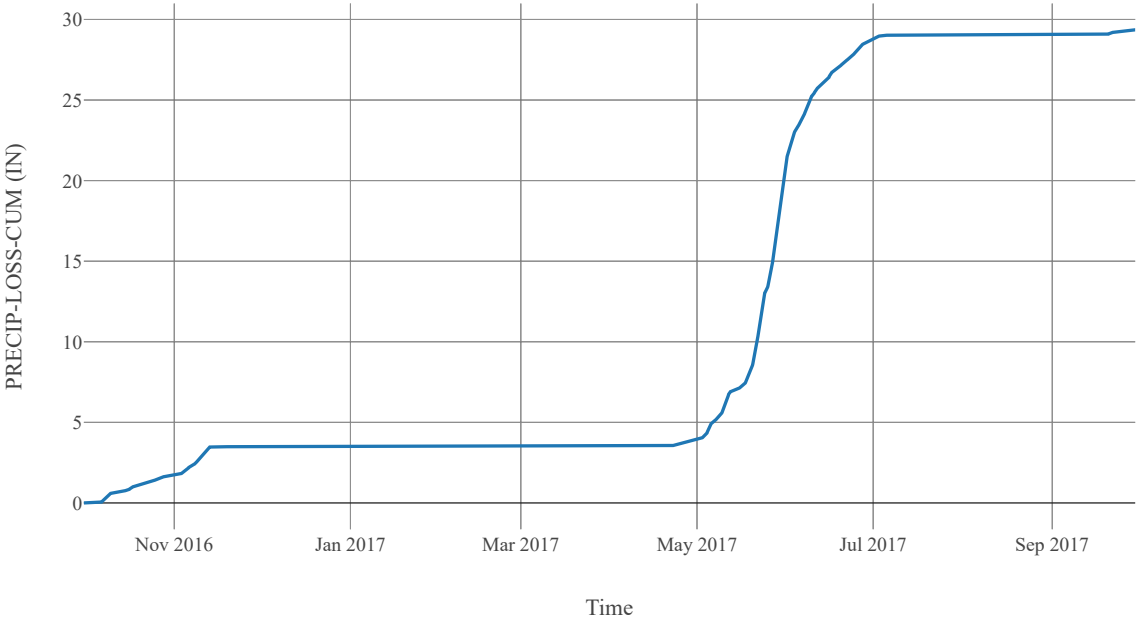
Cumulative Excess Precipitation



Precipitation Loss

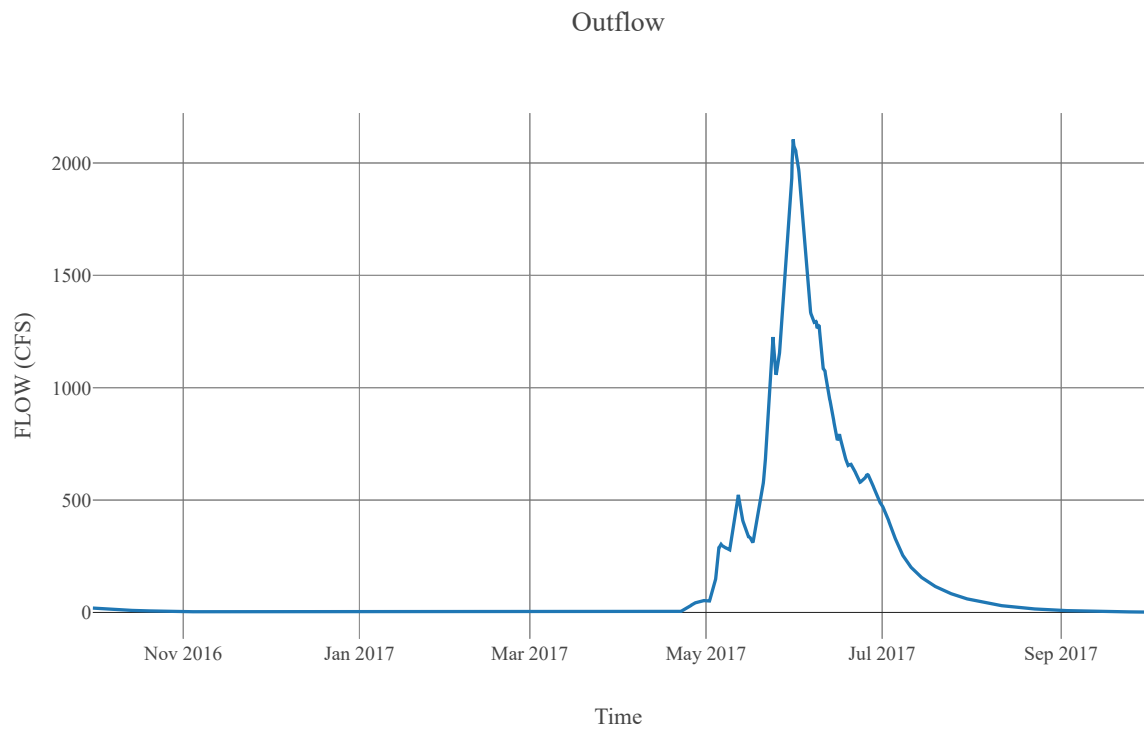


Cumulative Precipitation Loss



Junction : EwartCk

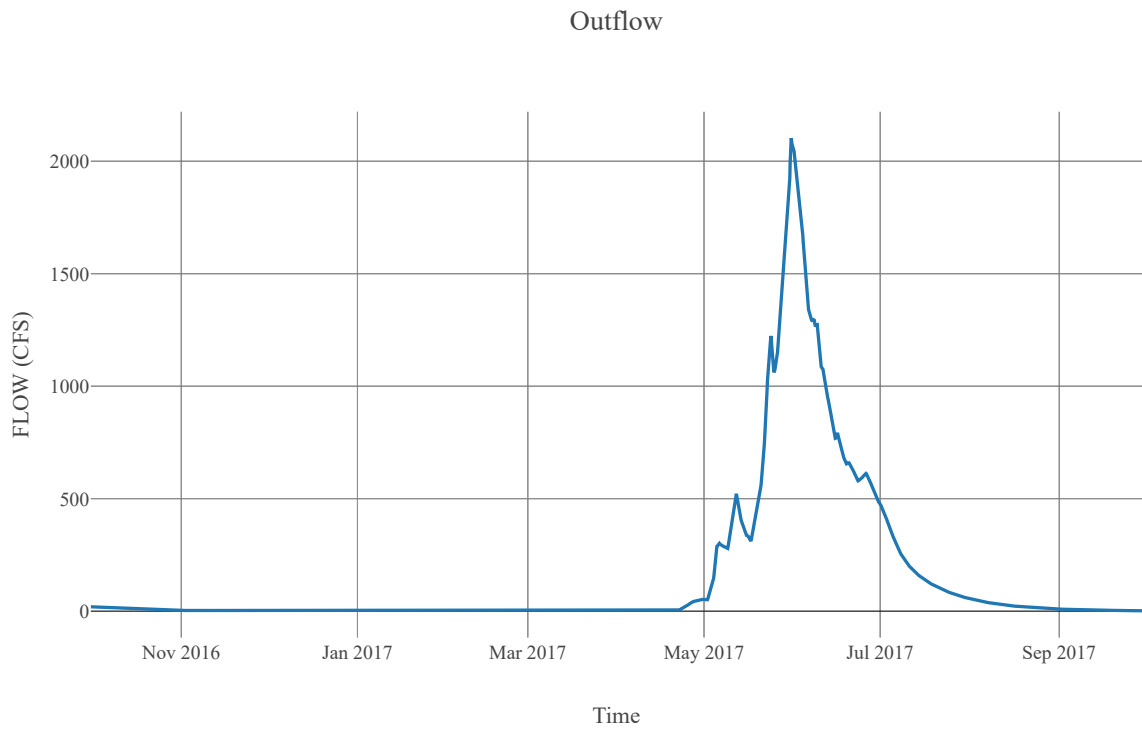
Observed Hydrograph : Ewart creek nr cathedral
Downstream : EwartCk_R005



Reach : EwartCk_R005

Loss Method : None
Downstream : Ashnola Rv

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	42705
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	EwartCk_R005
	Energy Slope
	0.02
	Right Mannings N
	0.15



Subbasin : AshnolaRv_S010

Area : 312.39
Latitude : 49.09
Longitude : -120.24
Downstream : Ashnola Rv

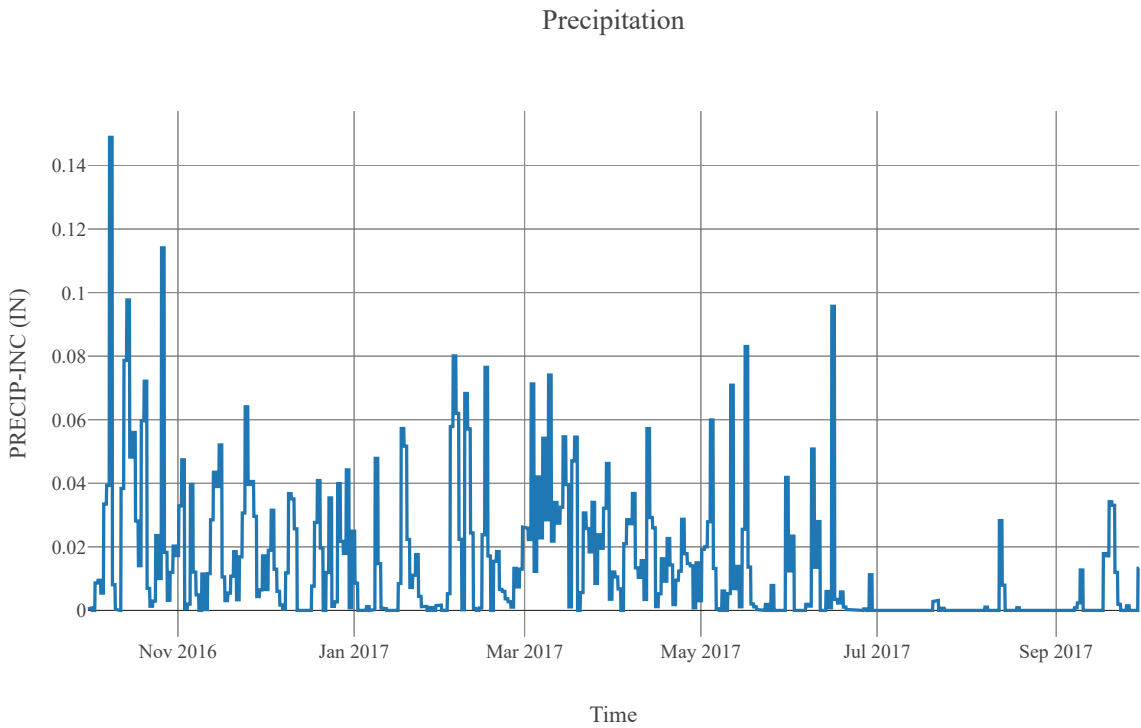
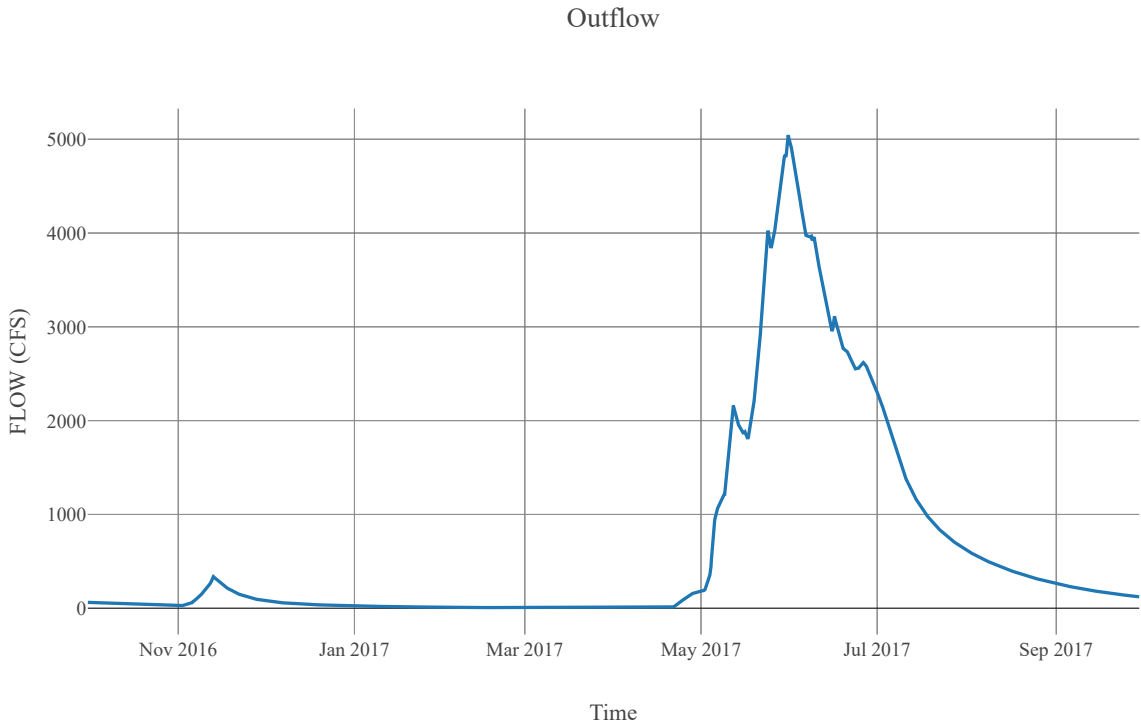
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.12
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

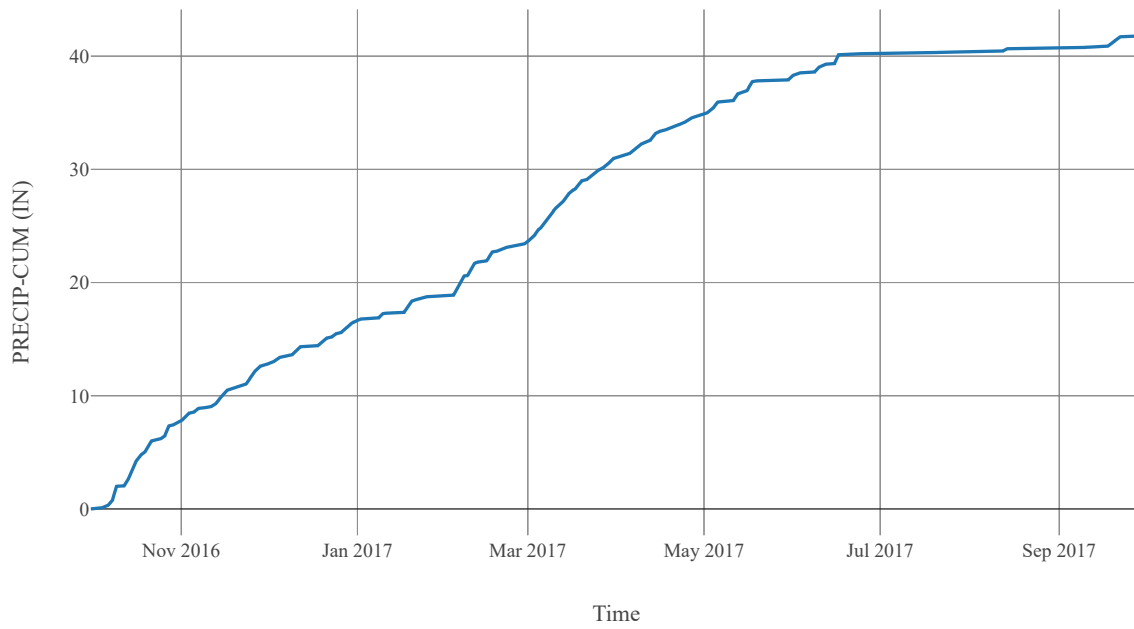
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.03
Storage Coefficient	9.03

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.5
		Initial Rate
		0
		Layer Number
		1
	2	Storage Coefficient
		180.6
		Number Steps
		1
		Baseflow Fraction
		0.5
		Initial Rate
		0.2
		Layer Number
		2
		Storage Coefficient
		903
		Number Steps
		1

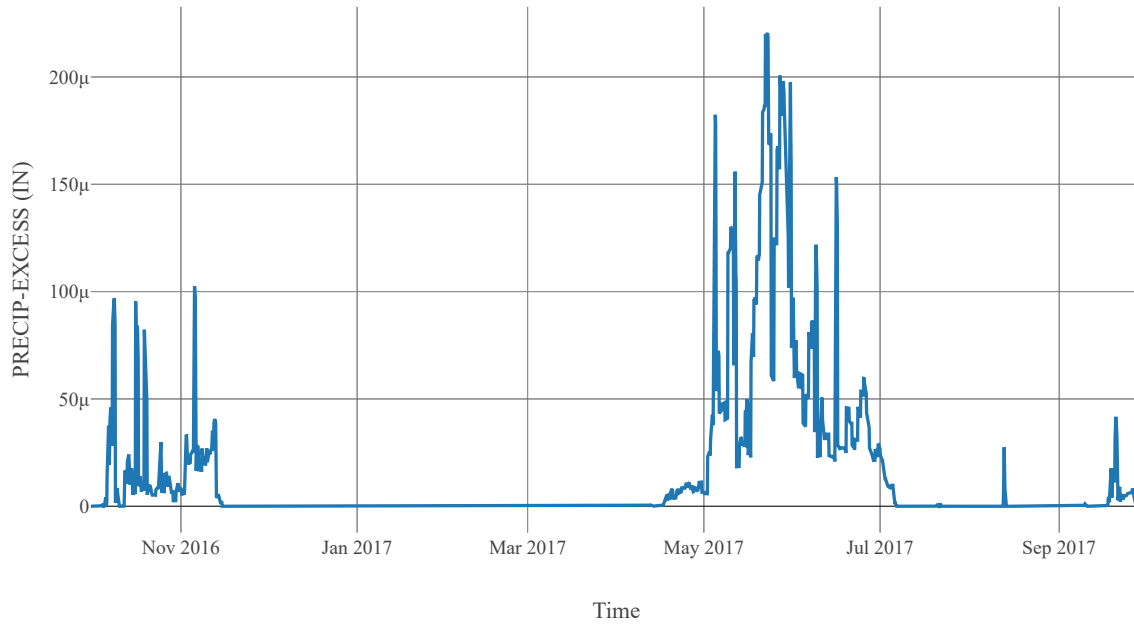
Statistics		
Name	Value	Unit
Baseflow Volume	468933.87	Ac-ft
Precipitation Volume	696300.01	Ac-ft
Loss Volume	609011.2	Ac-ft
Excess Volume	731.69	Ac-ft



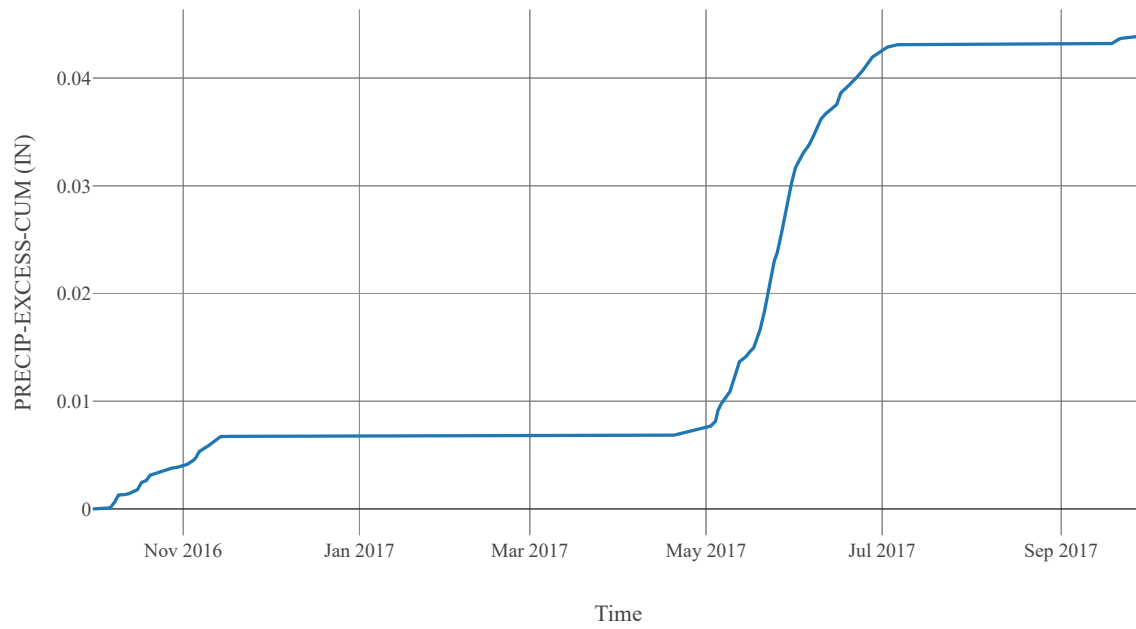
Cumulative Precipitation



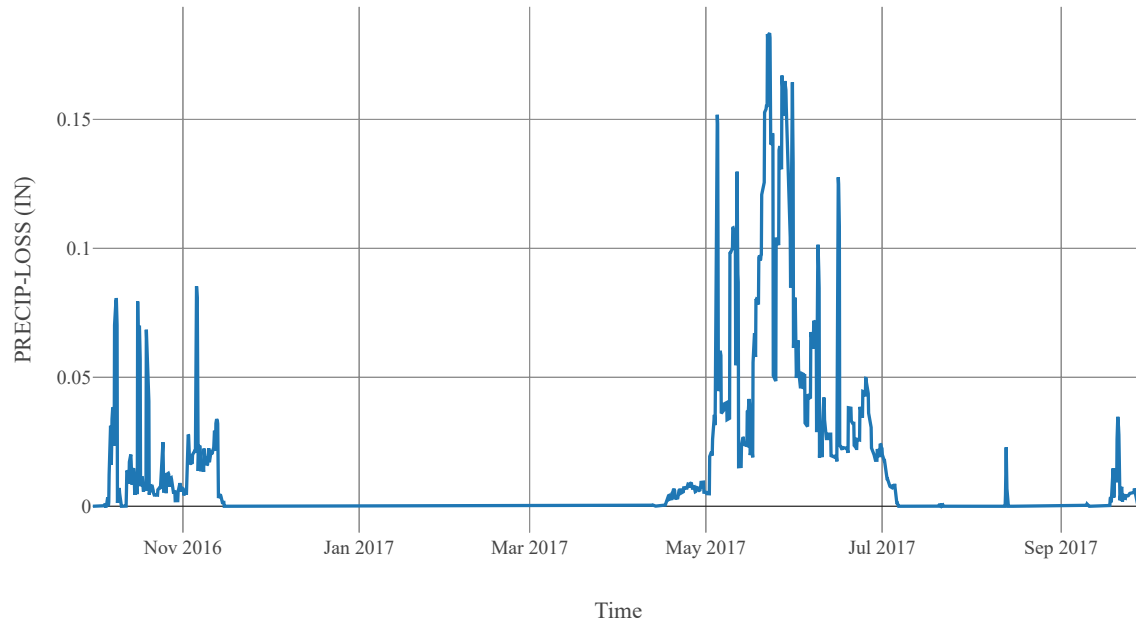
Excess Precipitation



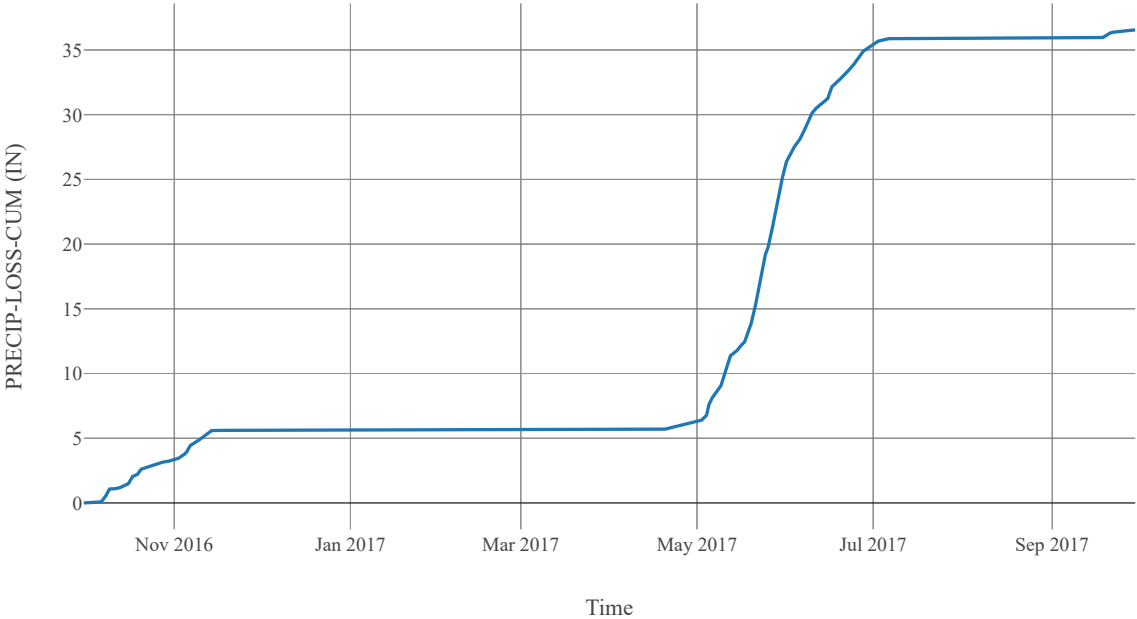
Cumulative Excess Precipitation



Precipitation Loss



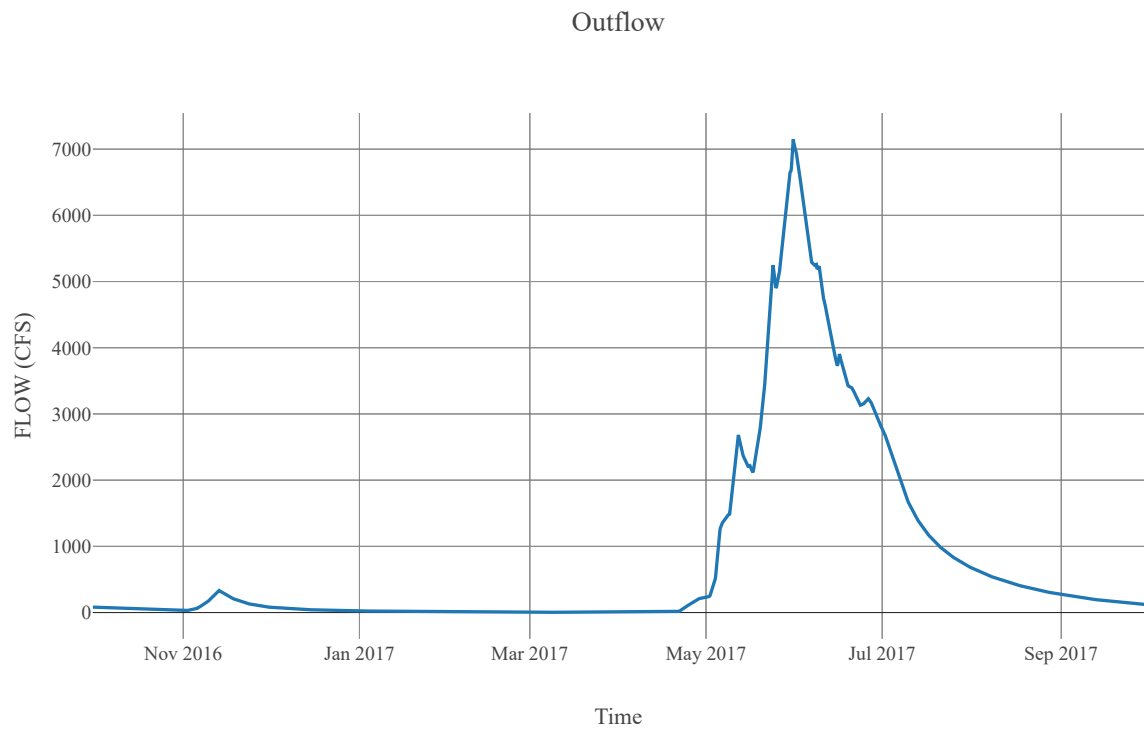
Cumulative Precipitation Loss



Junction : AshnolaRv

Observed Hydrograph : Ashnola river near keremeos

Downstream : AshnolaRv_CF



Subbasin : Similkameen_S020

Area : 172.59
Latitude : 49.29
Longitude : -120.09
Downstream : AshnolaRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.01
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

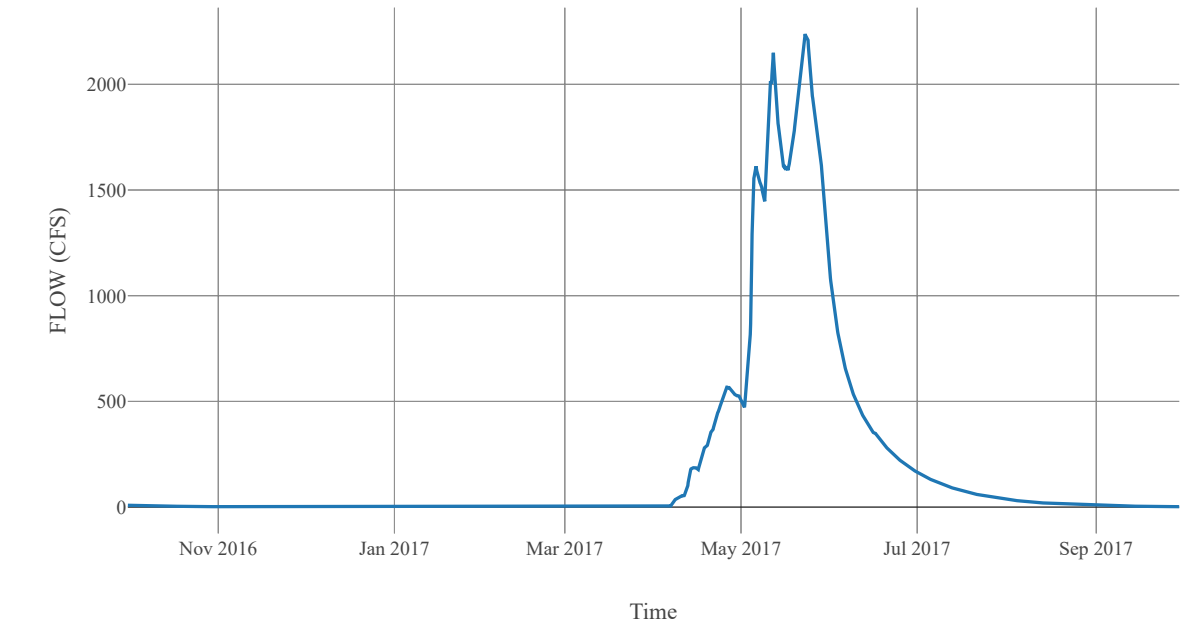
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	4.92
Storage Coefficient	4.92

Baseflow	
Method	Linear Reservoir

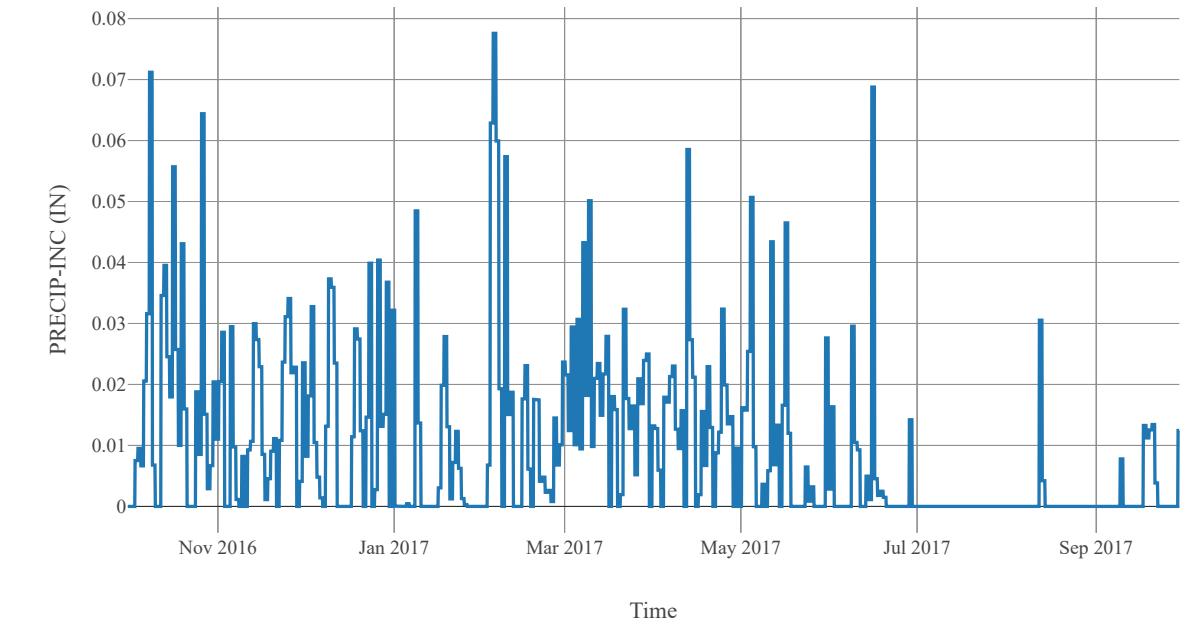
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	98.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	492
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	145560.9	Ac-ft
Precipitation Volume	265949.73	Ac-ft
Loss Volume	210204.97	Ac-ft
Excess Volume	21.02	Ac-ft

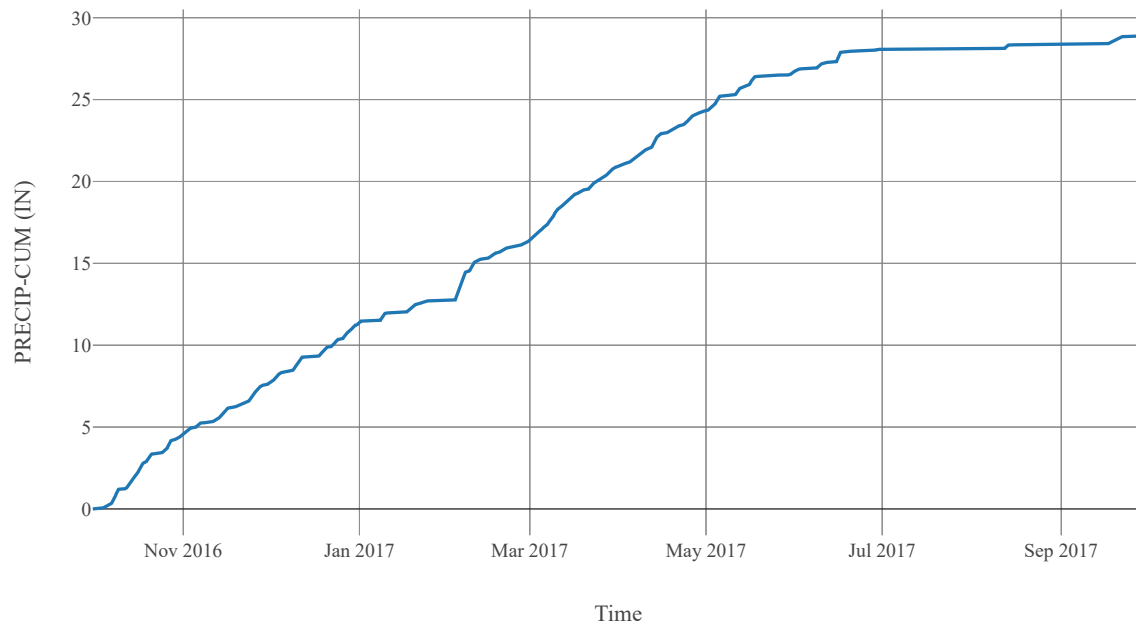
Outflow



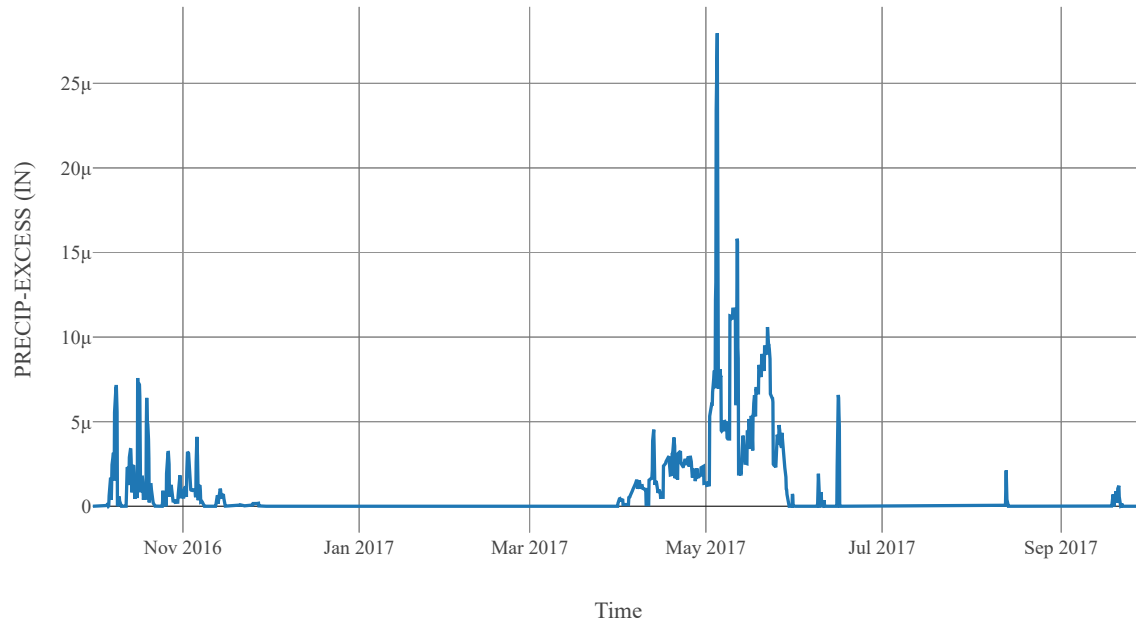
Precipitation



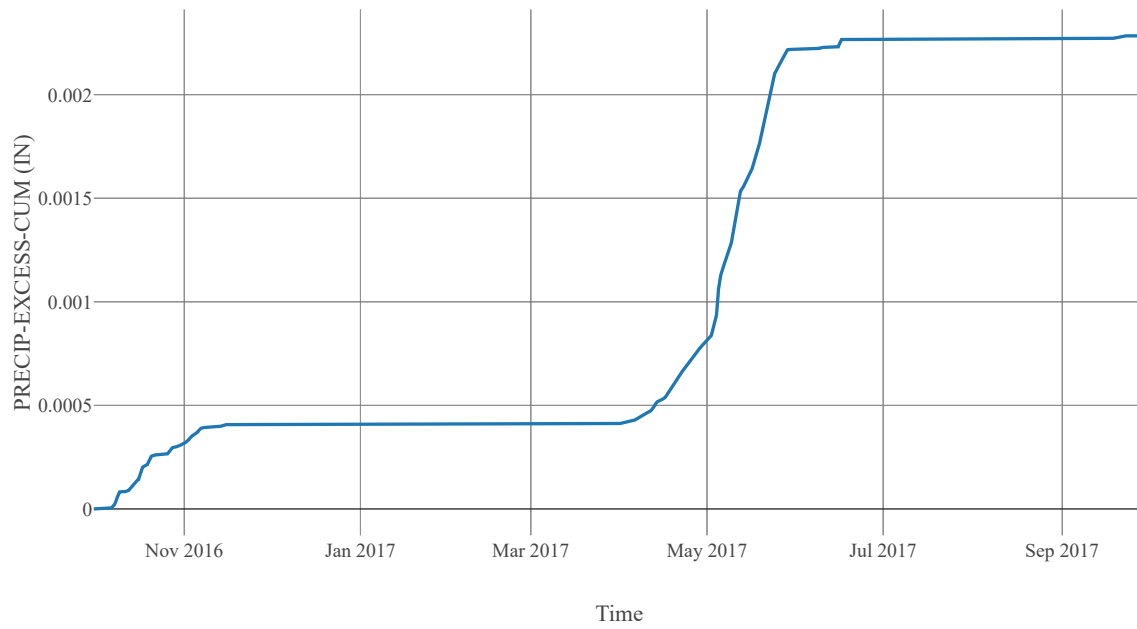
Cumulative Precipitation



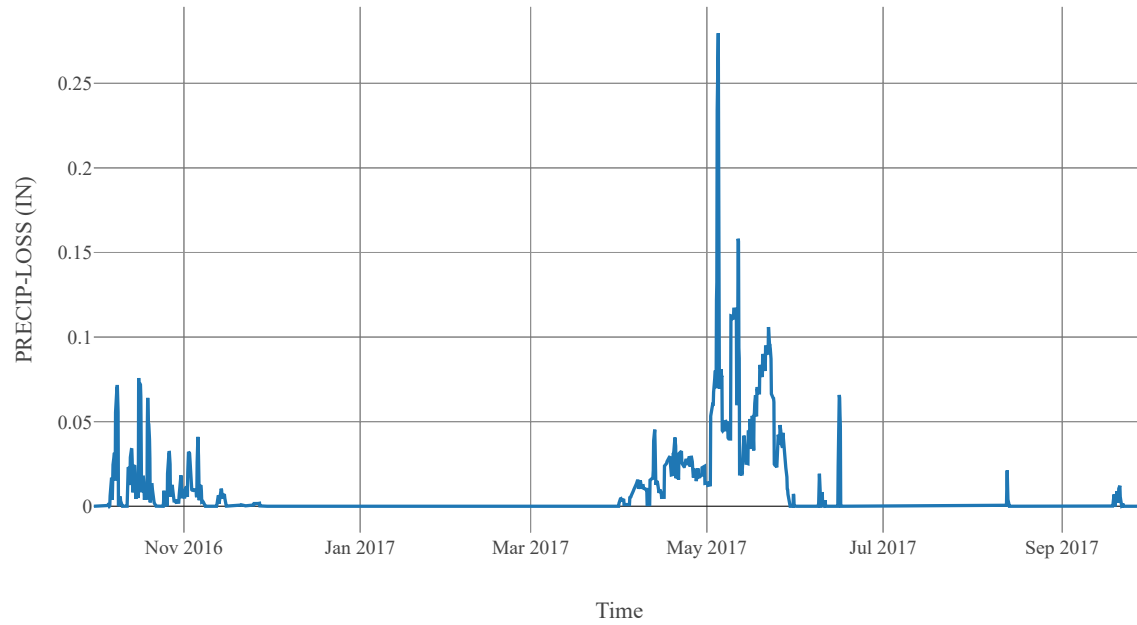
Excess Precipitation



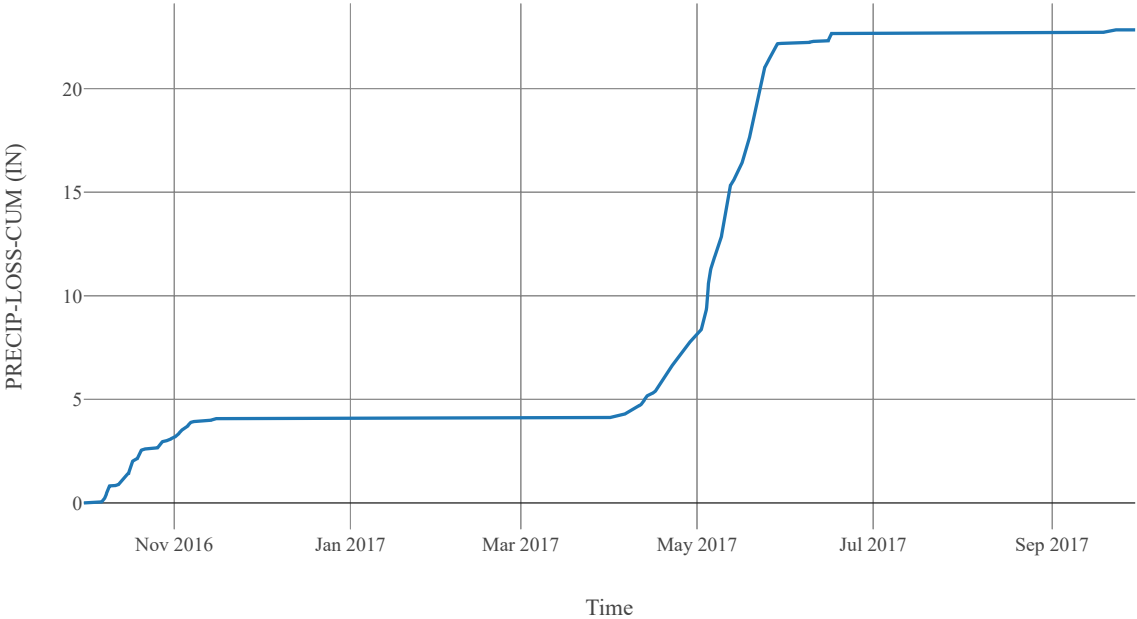
Cumulative Excess Precipitation



Precipitation Loss

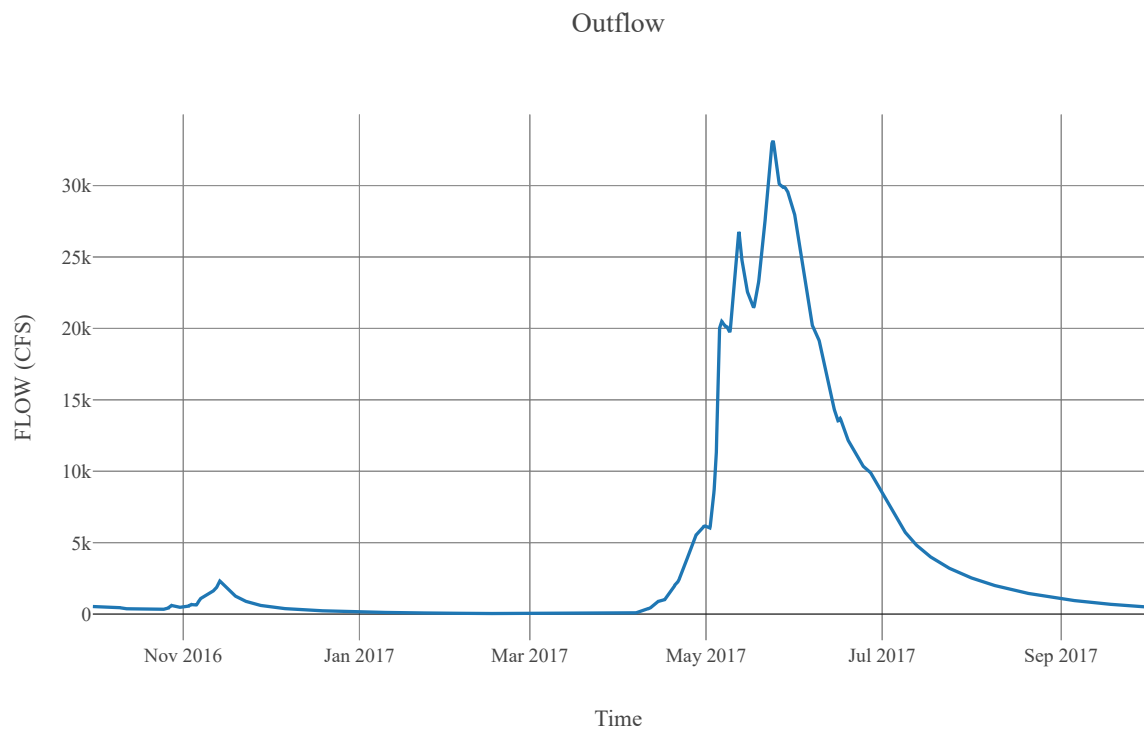


Cumulative Precipitation Loss



Junction : AshnolaRv_CF

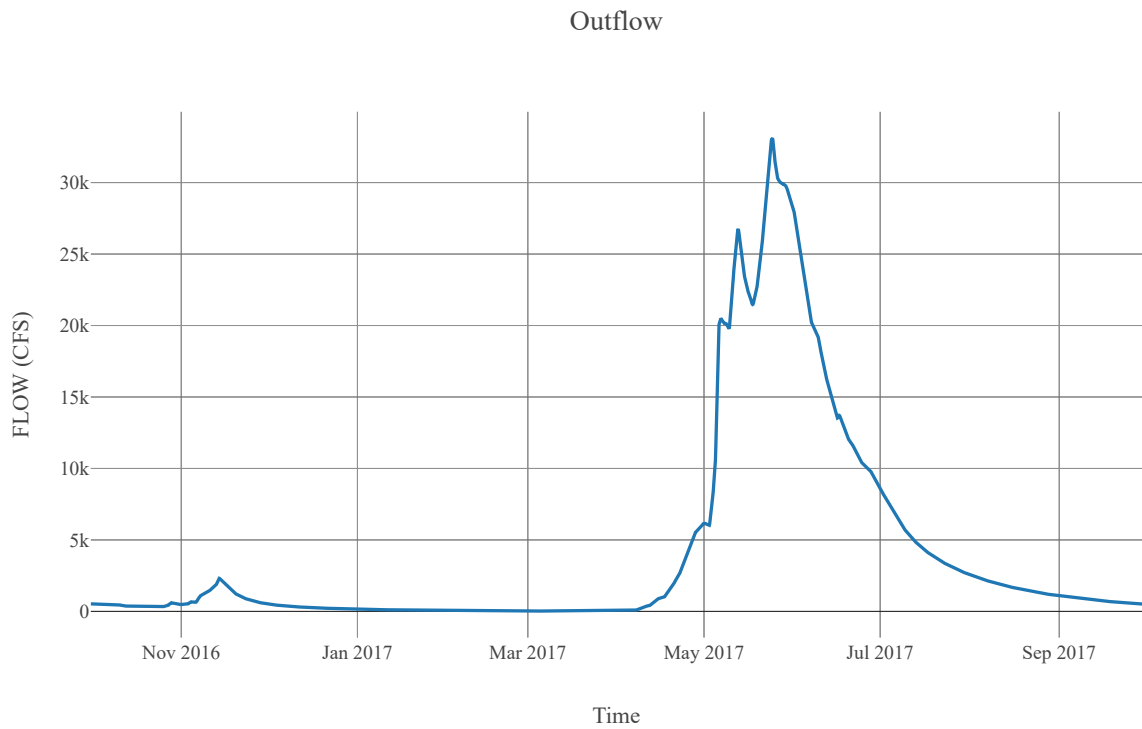
Downstream : Similkameen_R015



Reach : Similkameen_R015

Loss Method : None
Downstream : PalmerCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : PalmerCk_S010

Area : 298.08
Latitude : 48.82
Longitude : -119.78
Downstream : PalmerCk_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	1.74
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

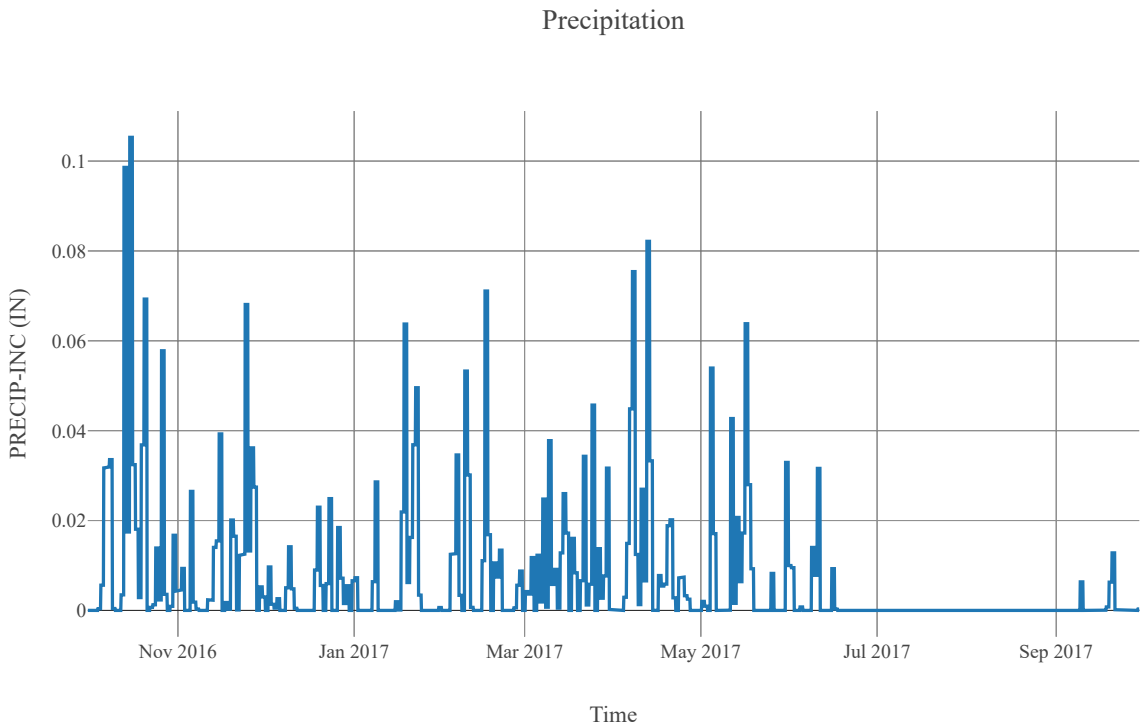
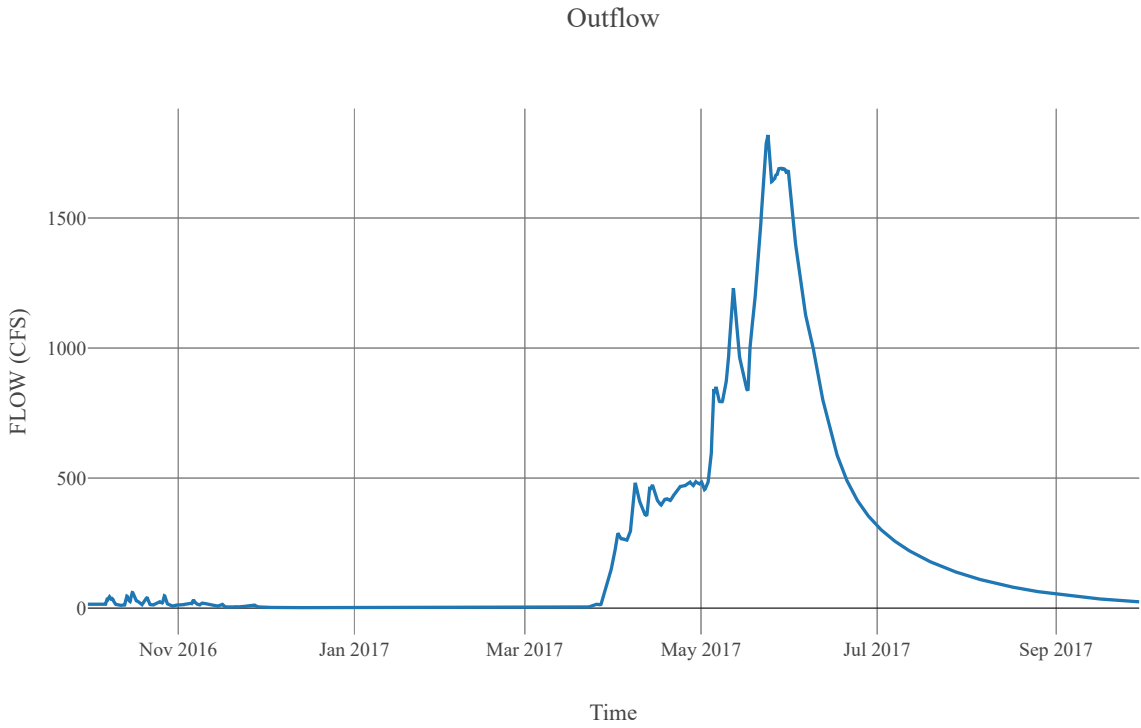
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	8.75
Storage Coefficient	8.75

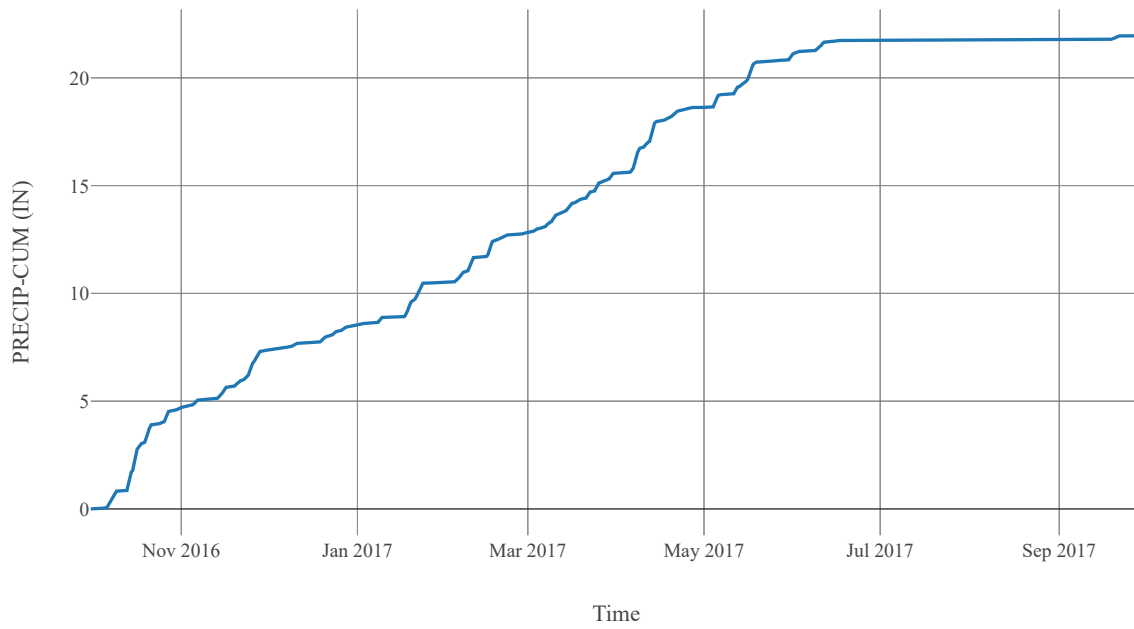
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	175
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	875
		Number Steps	1

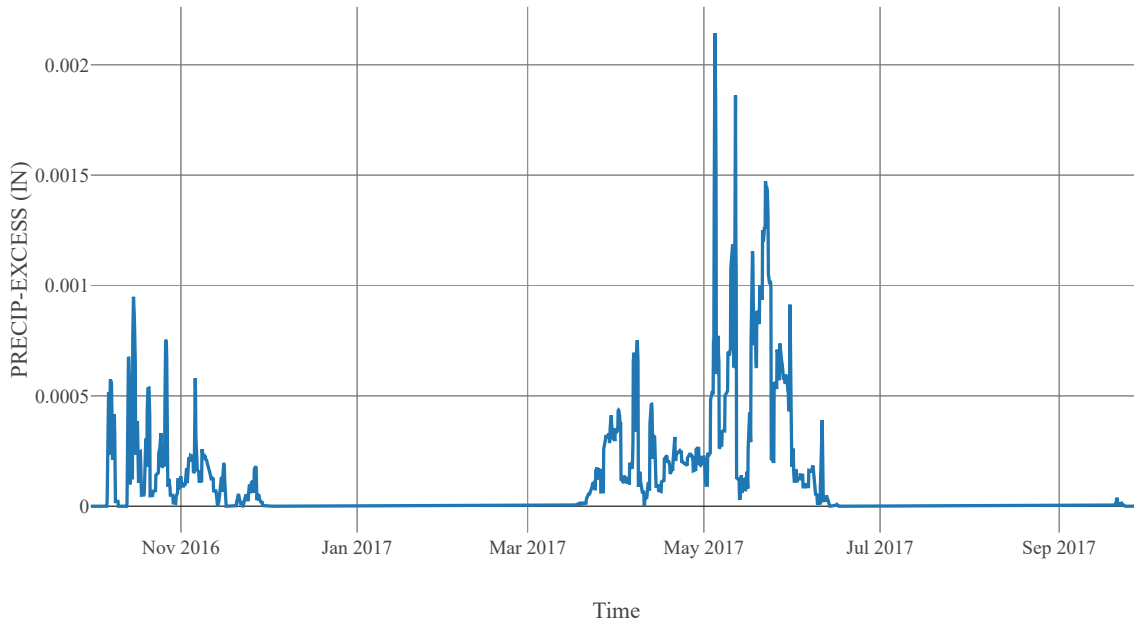
Statistics		
Name	Value	Unit
Baseflow Volume	157208.42	Ac-ft
Precipitation Volume	348902.21	Ac-ft
Loss Volume	271304.3	Ac-ft
Excess Volume	4804.29	Ac-ft



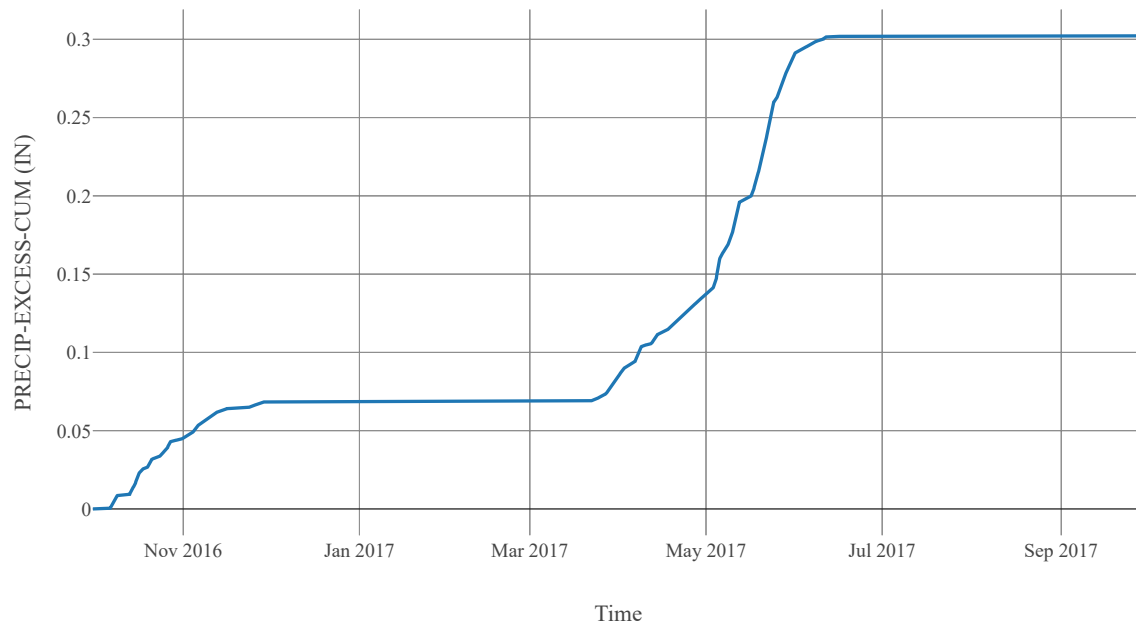
Cumulative Precipitation



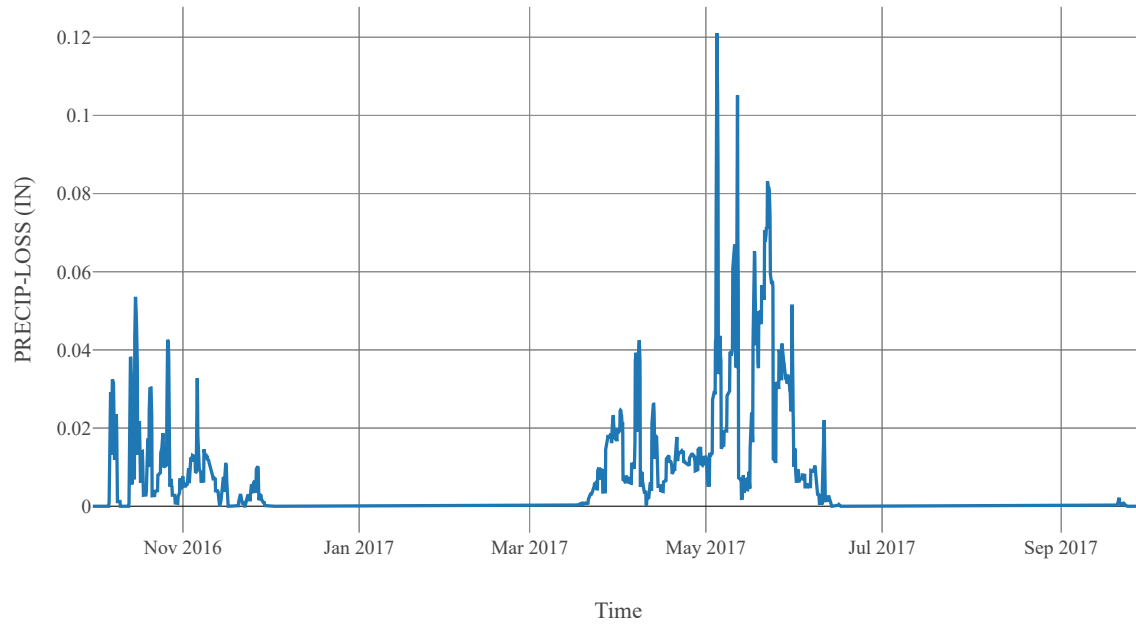
Excess Precipitation



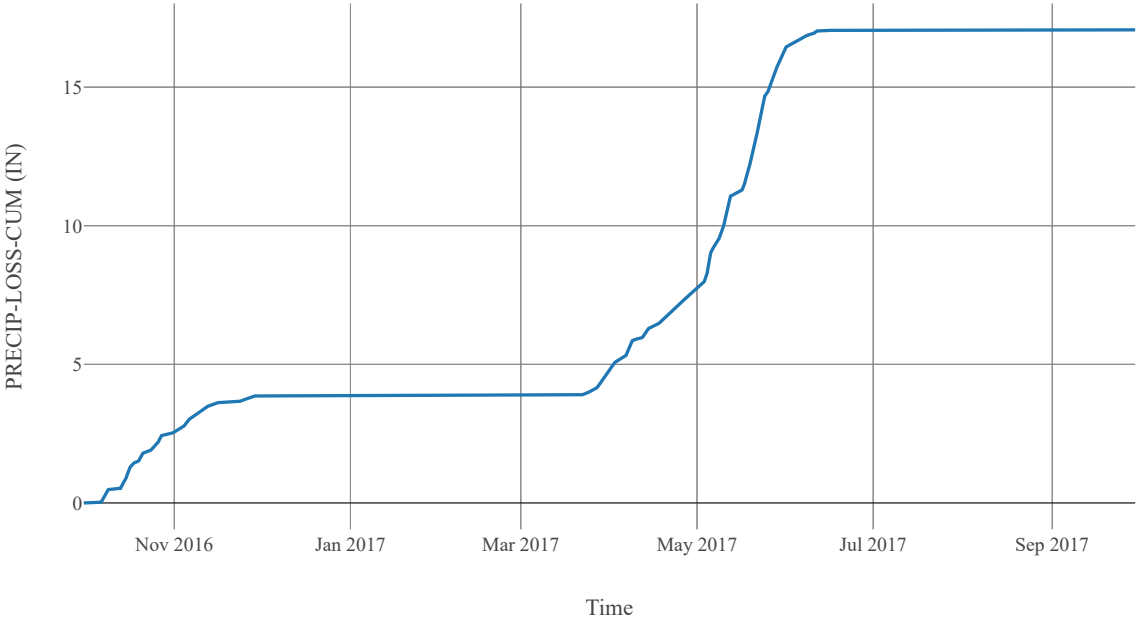
Cumulative Excess Precipitation



Precipitation Loss

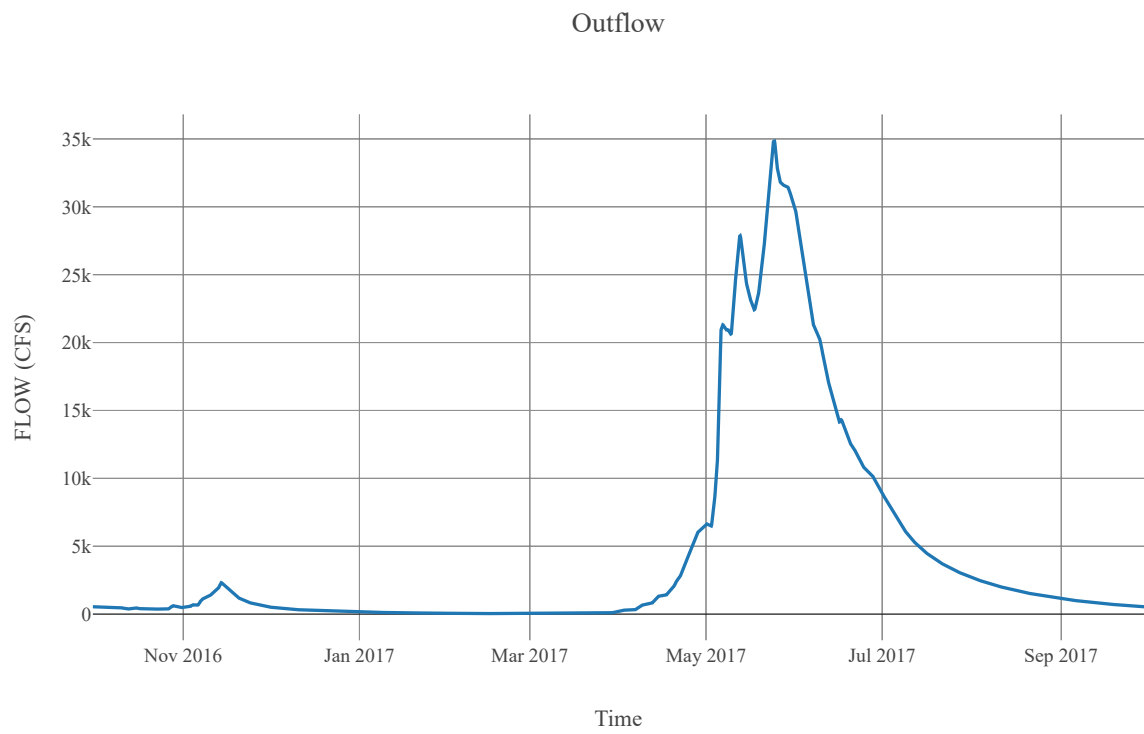


Cumulative Precipitation Loss



Junction : PalmerCk_CF

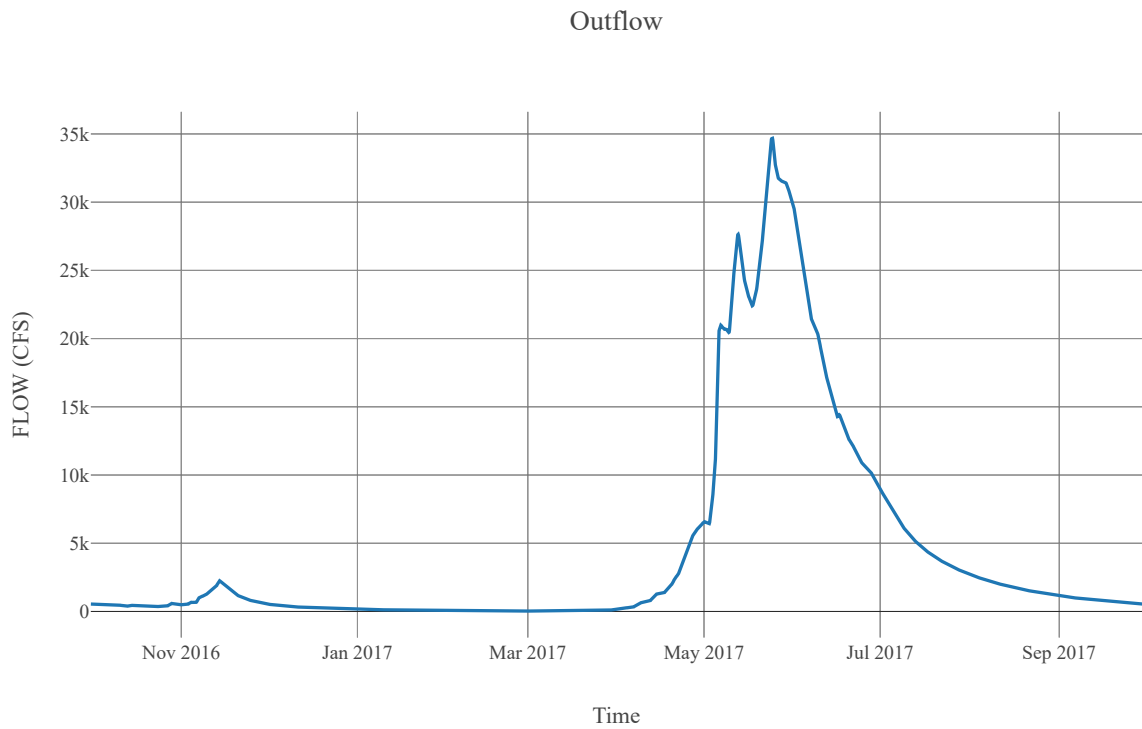
Downstream : Similkameen_R010



Reach : Similkameen_R010

Loss Method : None
Downstream : Similkameen Rv

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : Similkameen_S010

Area : 343.09
Latitude : 49.15
Longitude : -119.79
Downstream : Similkameen Rv

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.26
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

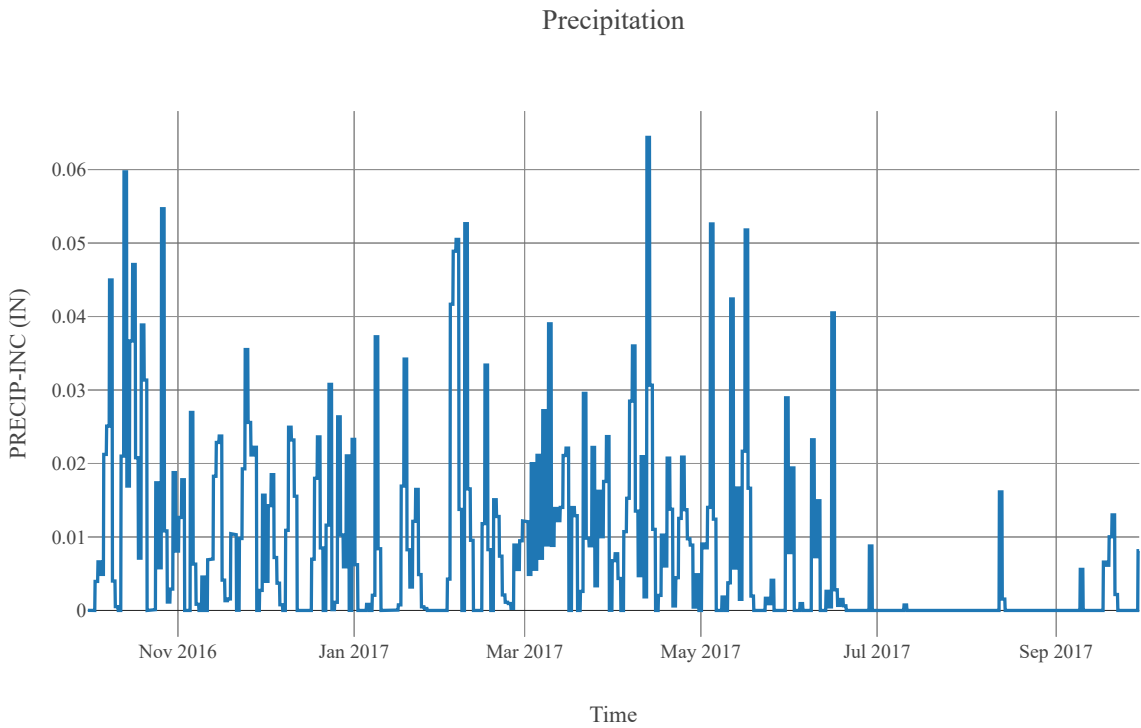
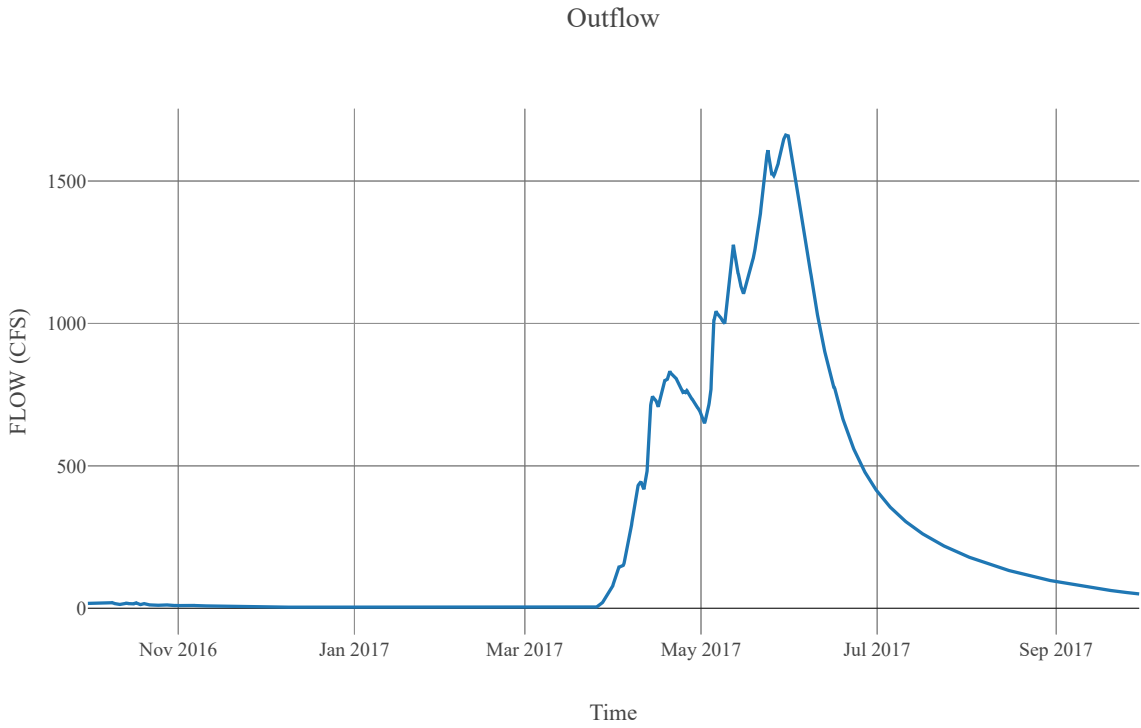
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	11.23
Storage Coefficient	11.23

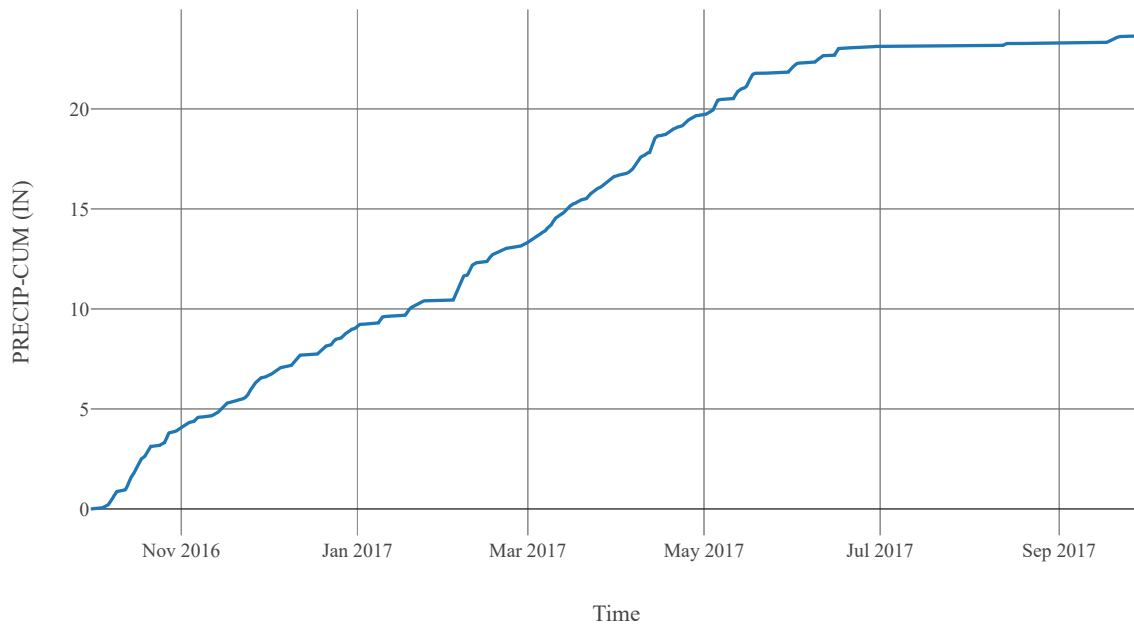
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	224.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1123
		Number Steps	1

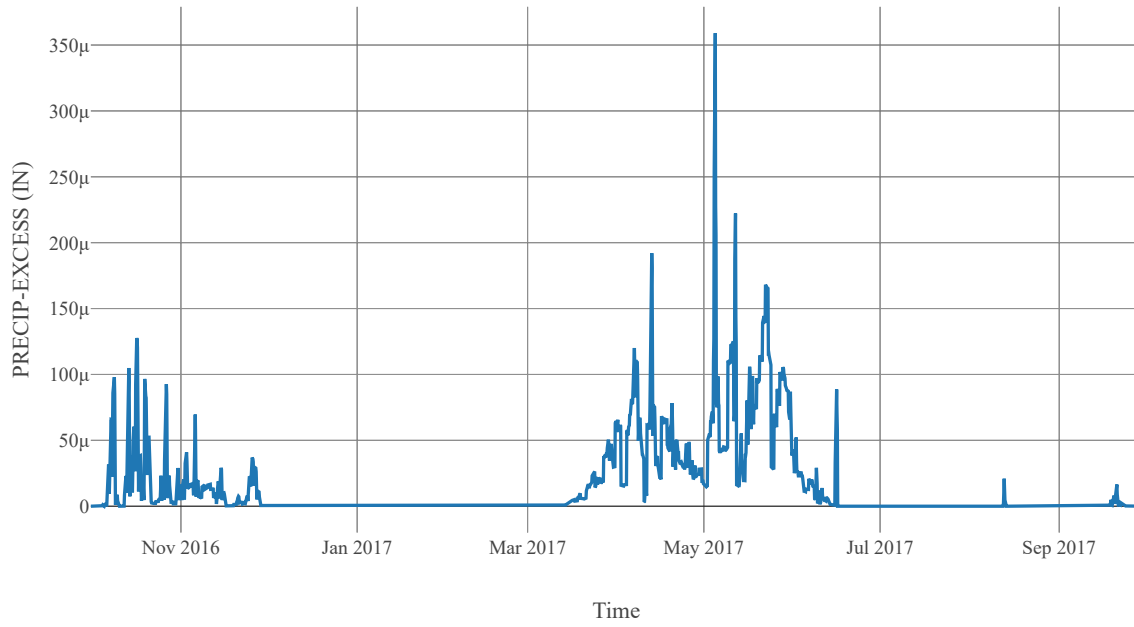
Statistics		
Name	Value	Unit
Baseflow Volume	191457.05	Ac-ft
Precipitation Volume	432783.2	Ac-ft
Loss Volume	322161.69	Ac-ft
Excess Volume	839.8	Ac-ft



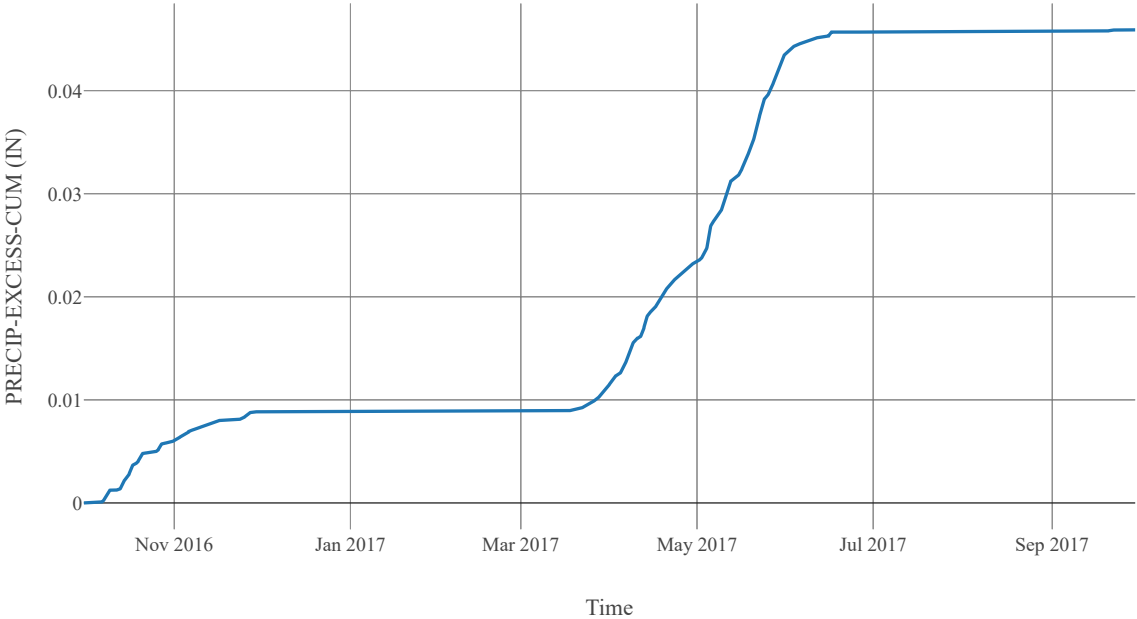
Cumulative Precipitation



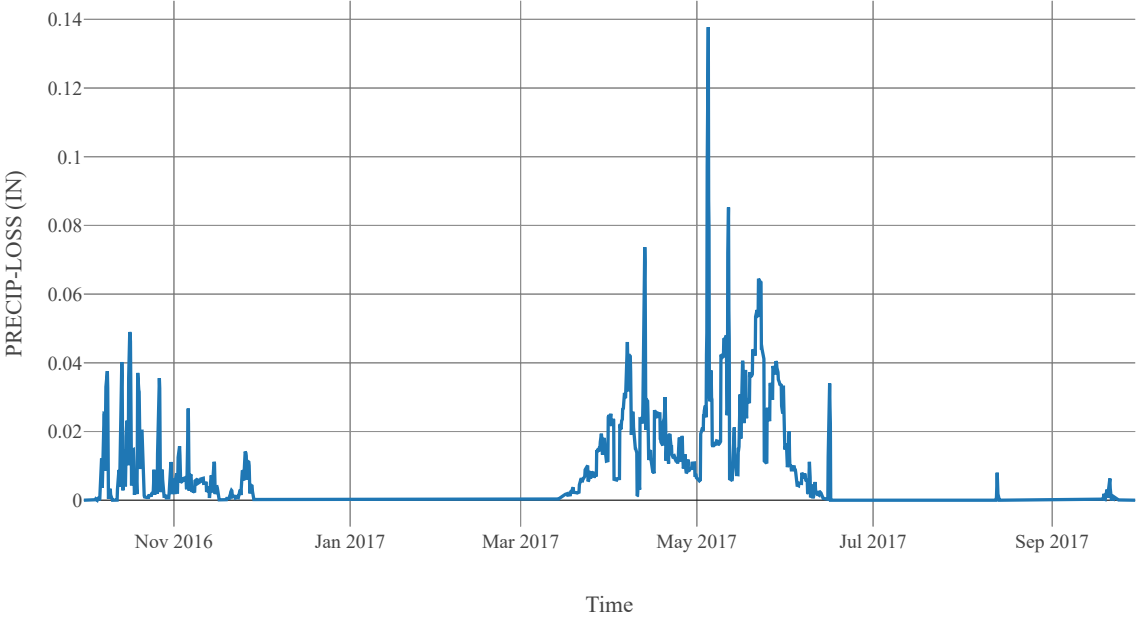
Excess Precipitation



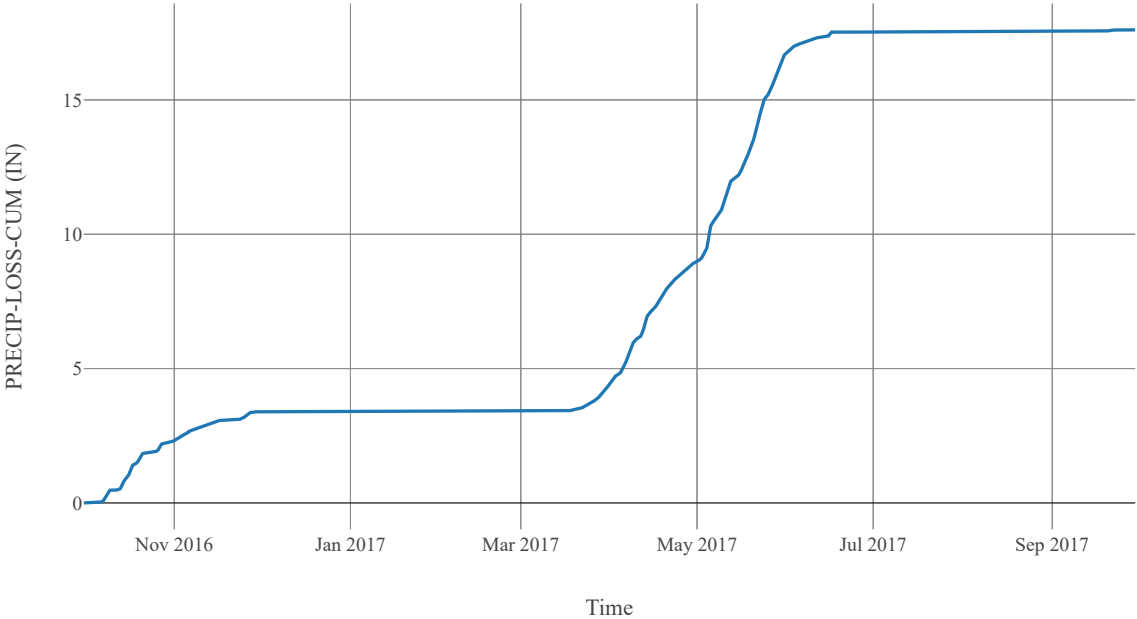
Cumulative Excess Precipitation



Precipitation Loss

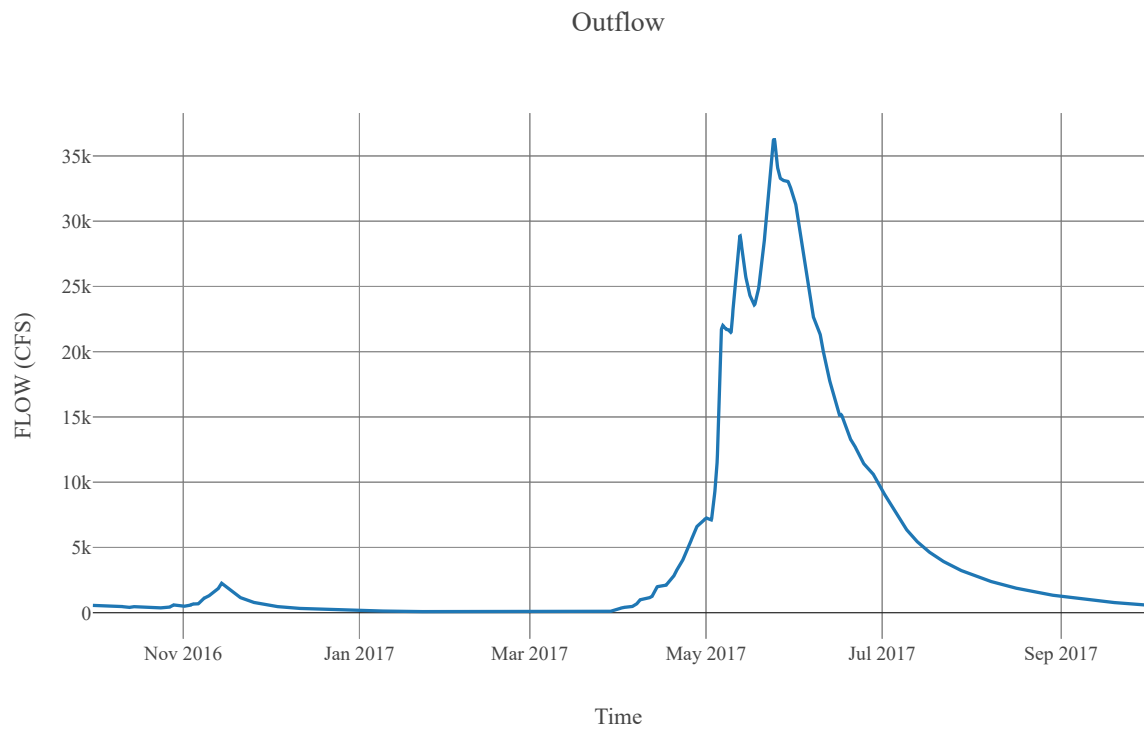


Cumulative Precipitation Loss



Junction : SimilkameenRv

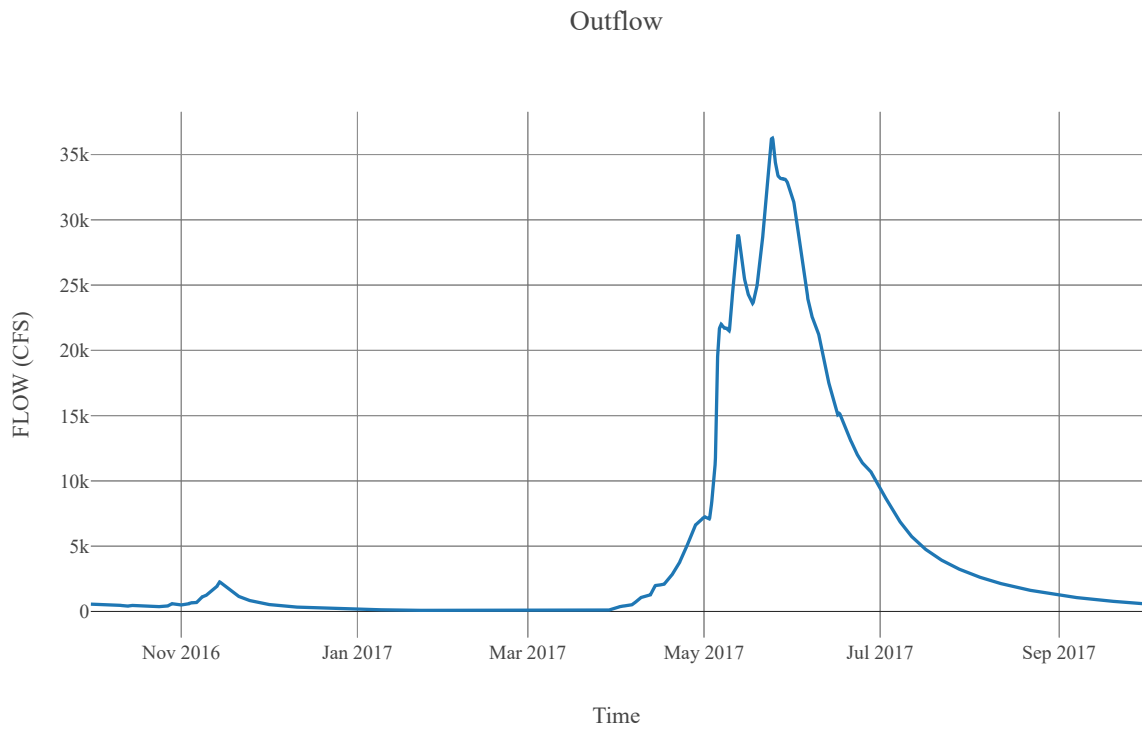
Observed Hydrograph : Similkameen river near night
Downstream : Similkameen_R005



Reach : Similkameen_R005

Loss Method : None
Downstream : Similkameen_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : VernonCk_S010

Area : 221.17
Latitude : 50.15
Longitude : -119.24
Downstream : KalamalkaLk_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	8.3
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

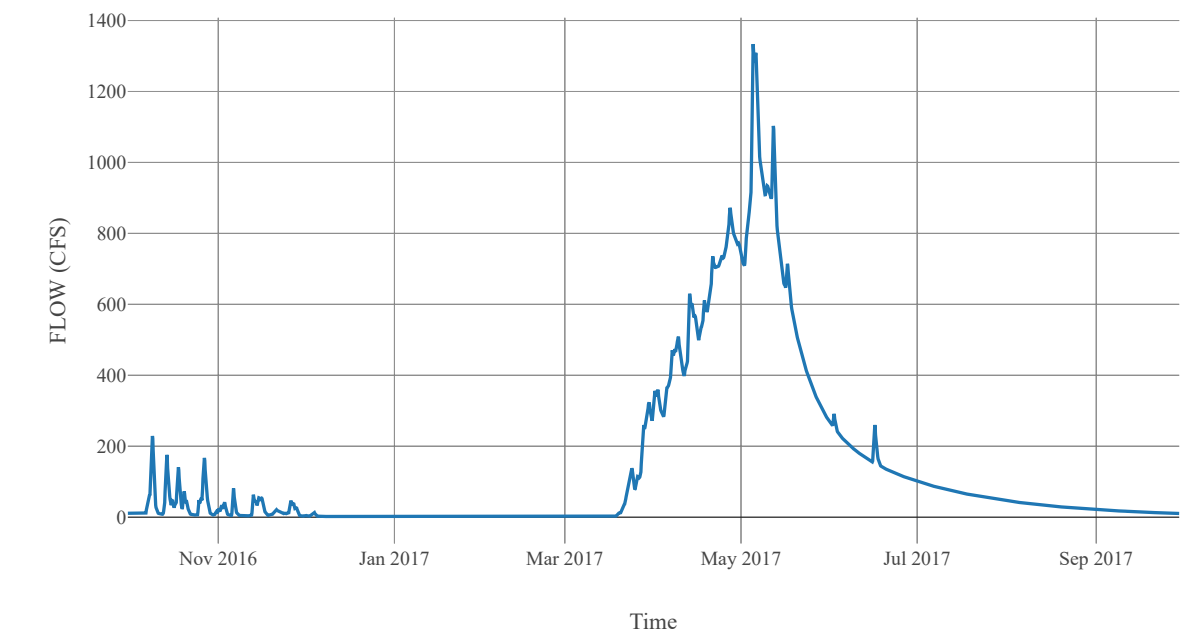
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.67
Storage Coefficient	9.67

Baseflow	
Method	Linear Reservoir

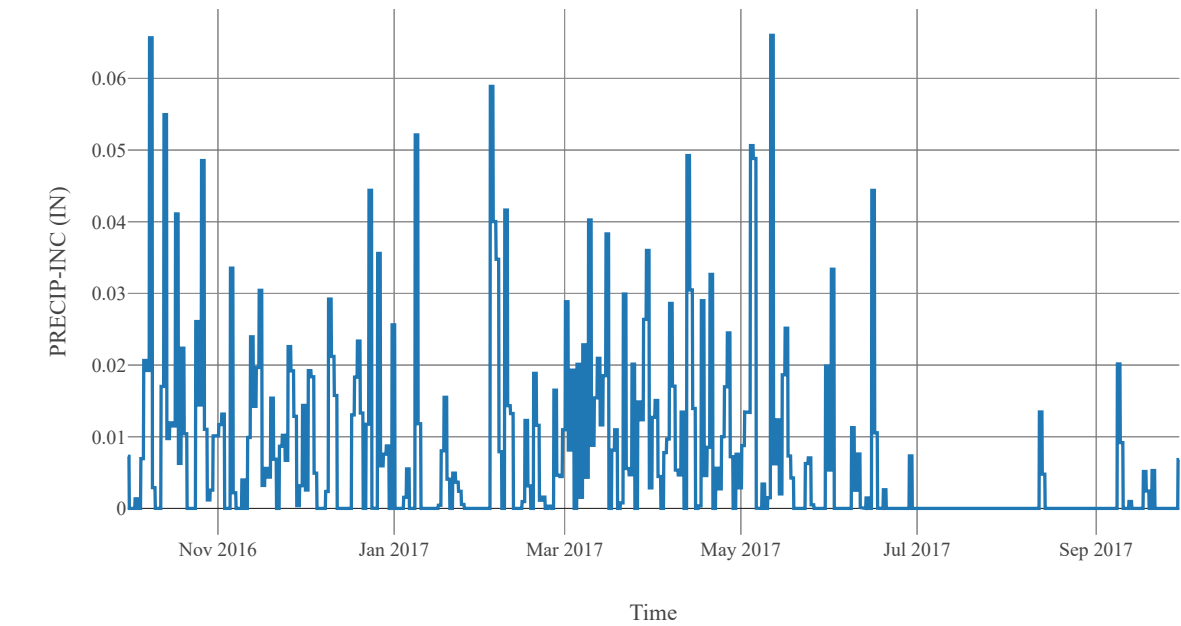
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	193.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	967
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	85255.07	Ac-ft
Precipitation Volume	260341.33	Ac-ft
Loss Volume	160029.28	Ac-ft
Excess Volume	14484.66	Ac-ft

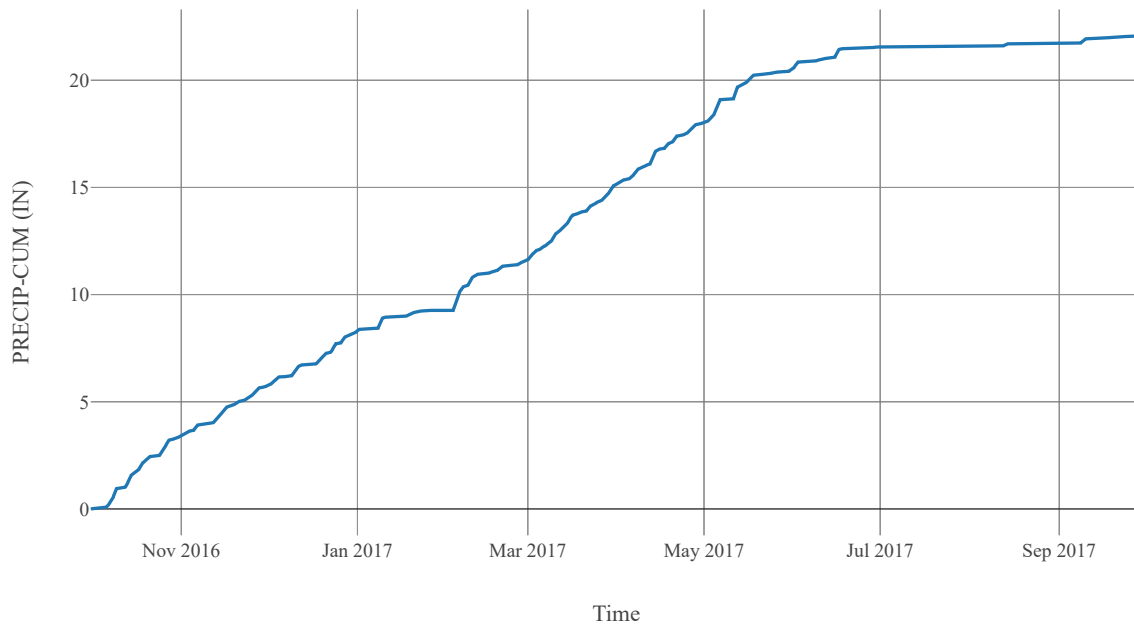
Outflow



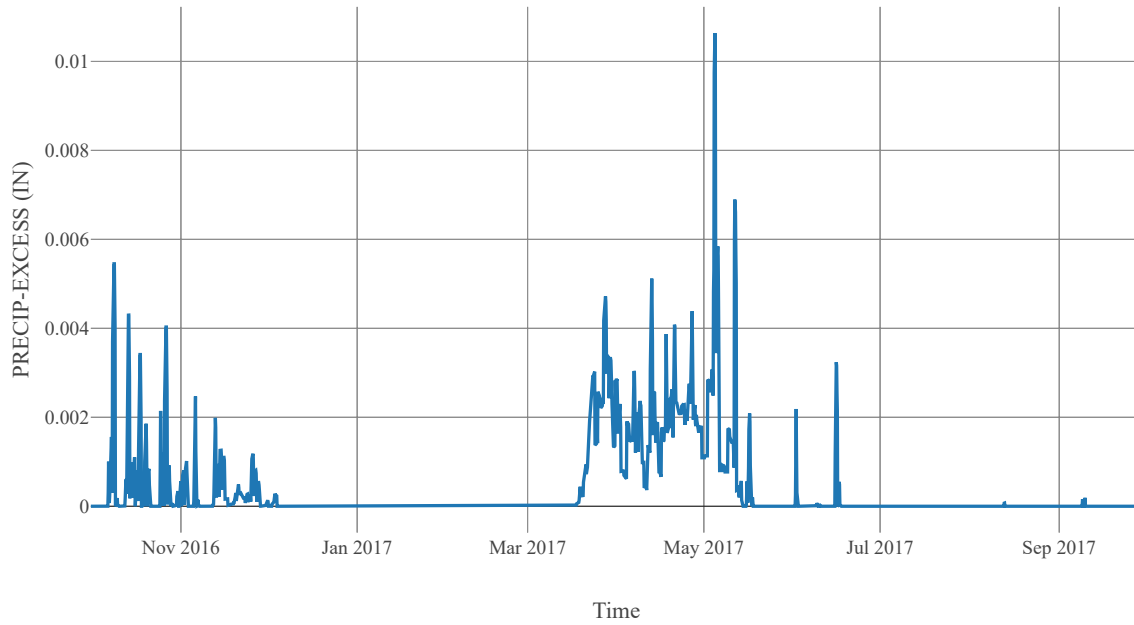
Precipitation



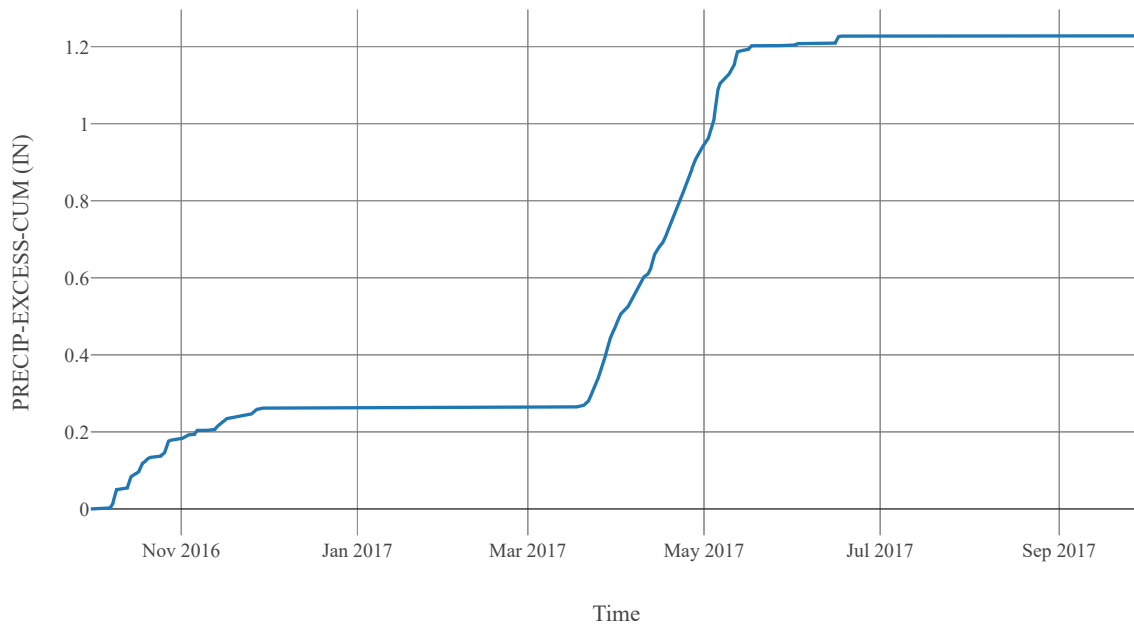
Cumulative Precipitation



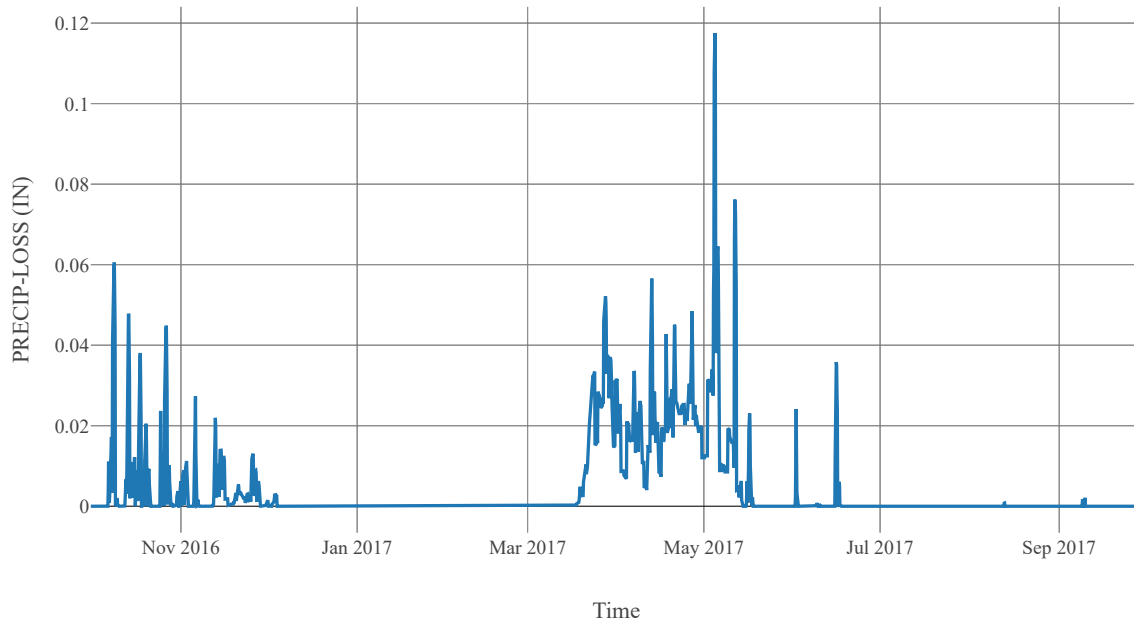
Excess Precipitation



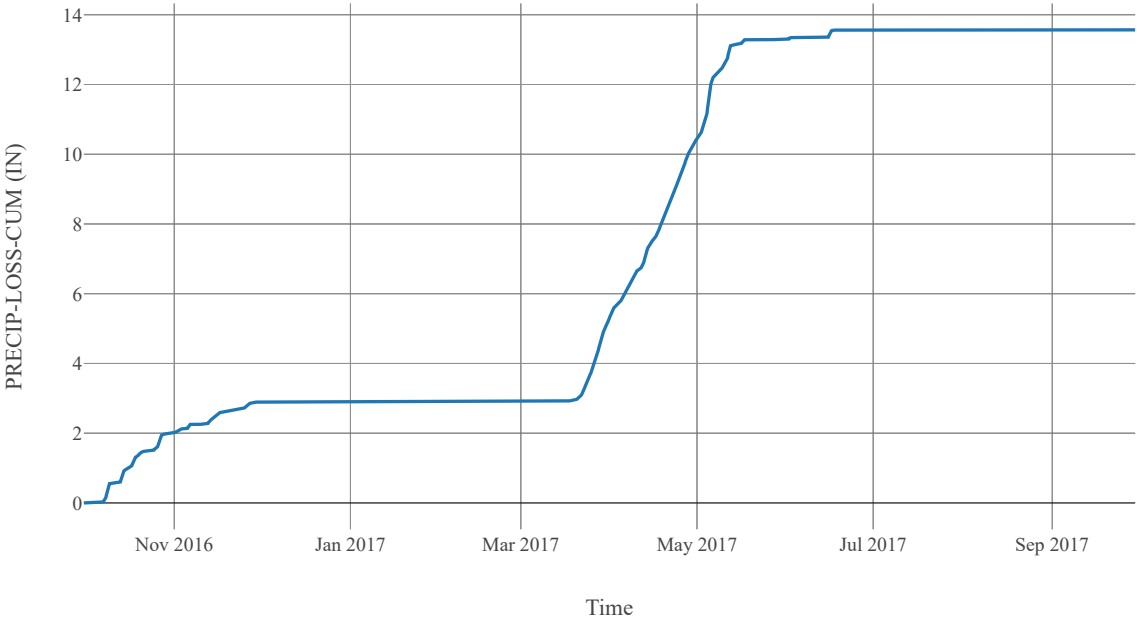
Cumulative Excess Precipitation



Precipitation Loss

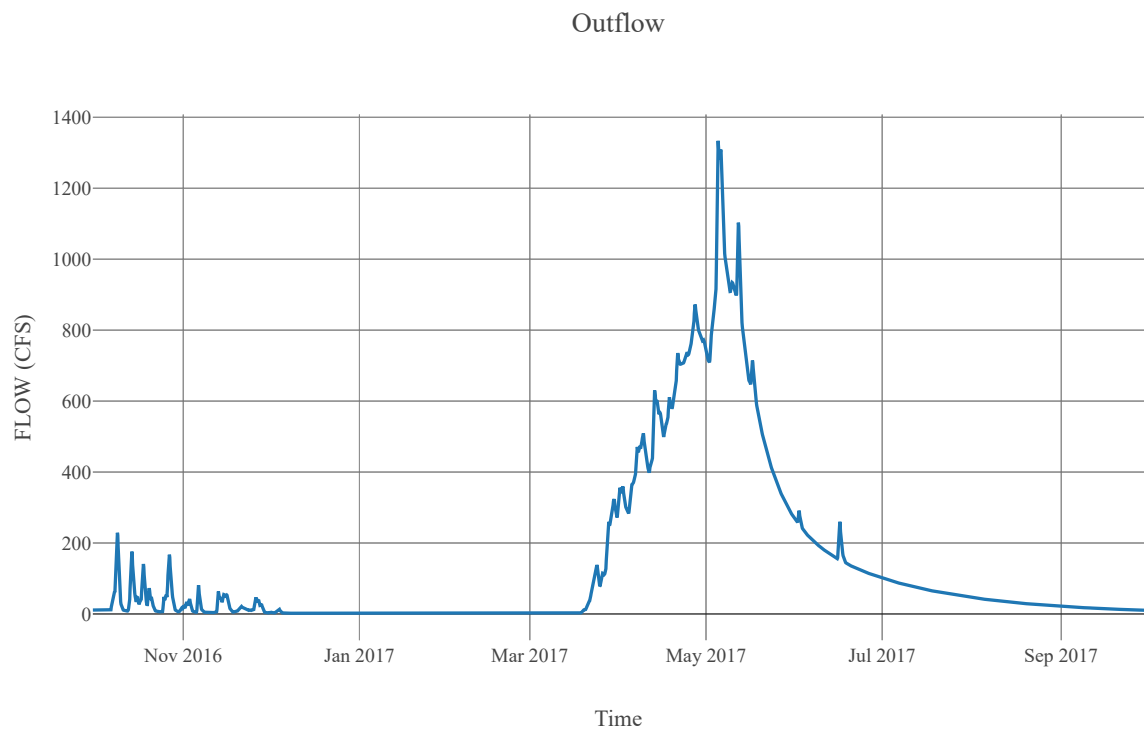


Cumulative Precipitation Loss



Junction : KalamalkaLk_IN

Downstream : Kalamalka Lk

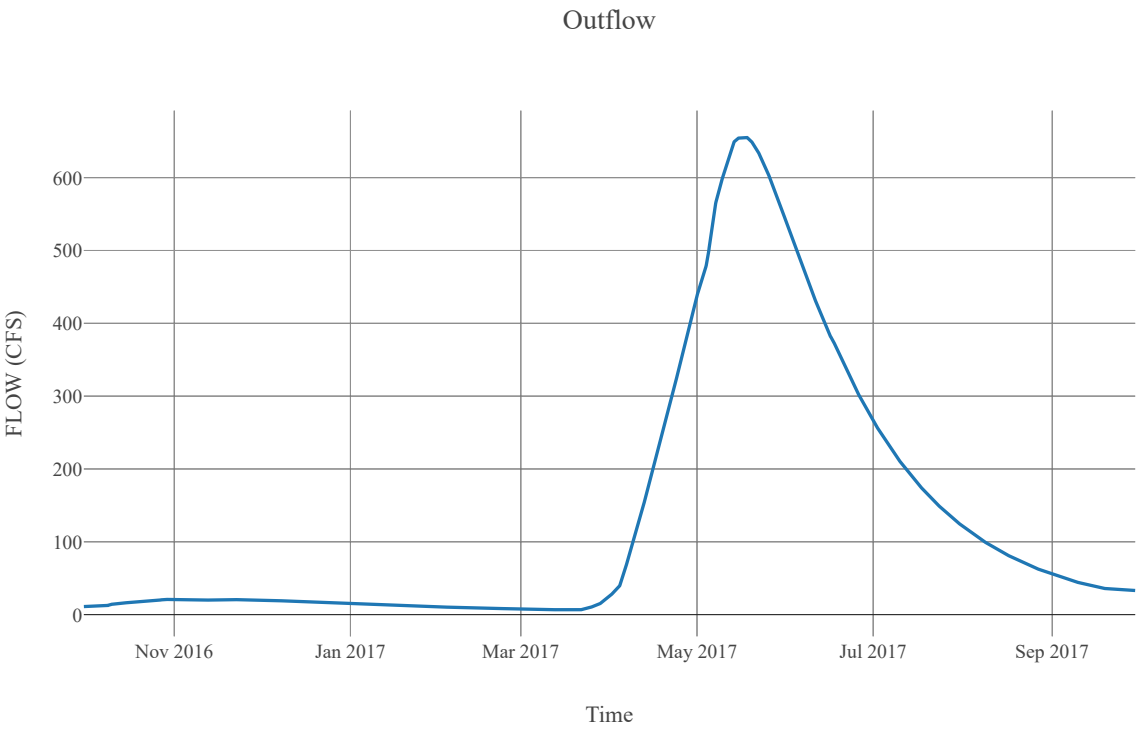


Reservoir : KalamalkaLk

Quality Method : Unspecified

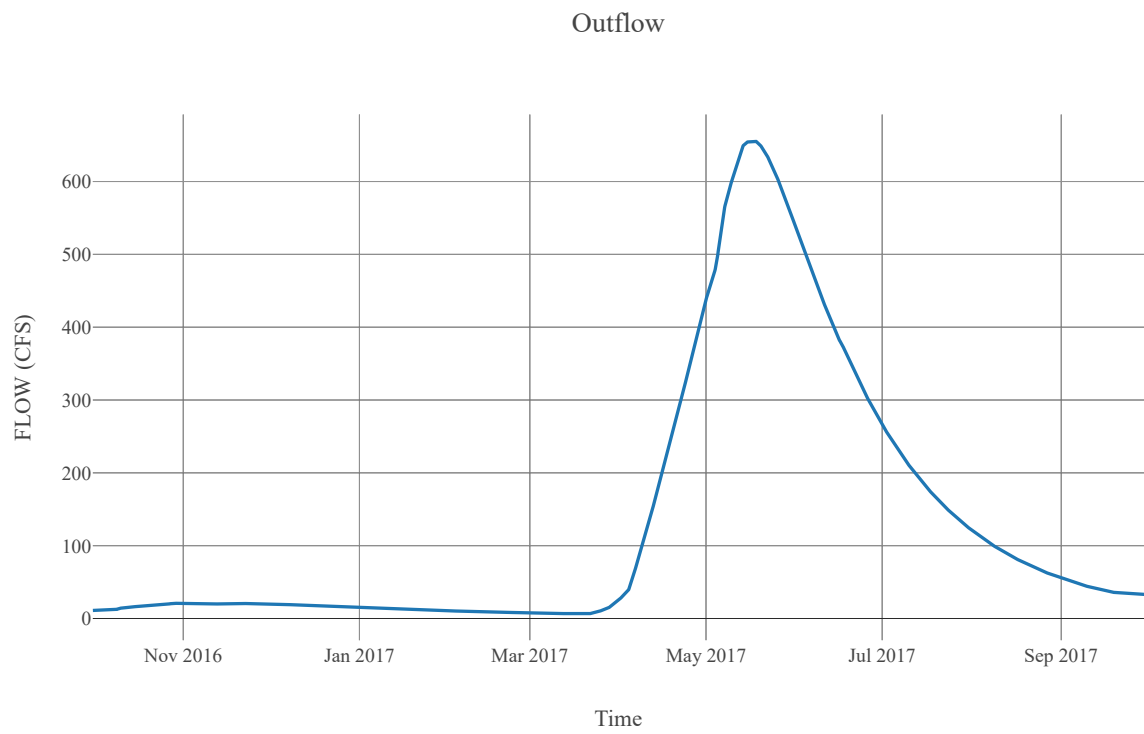
Method : Modified Puls

Downstream : Vernon Ck



Junction : VernonCk

Downstream : Okanagan_IN



Subbasin : OkanaganRv_S070

Area : 652.9
Latitude : 49.75
Longitude : -119.66
Downstream : Okanagan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	11.53
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

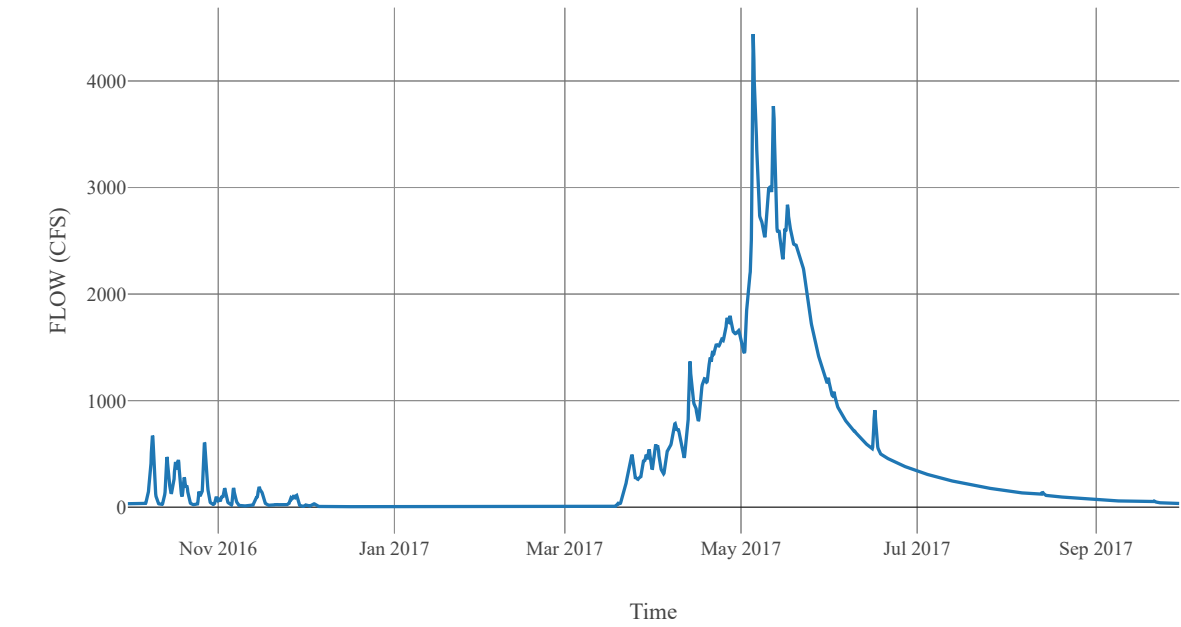
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.7
Storage Coefficient	9.7

Baseflow	
Method	Linear Reservoir

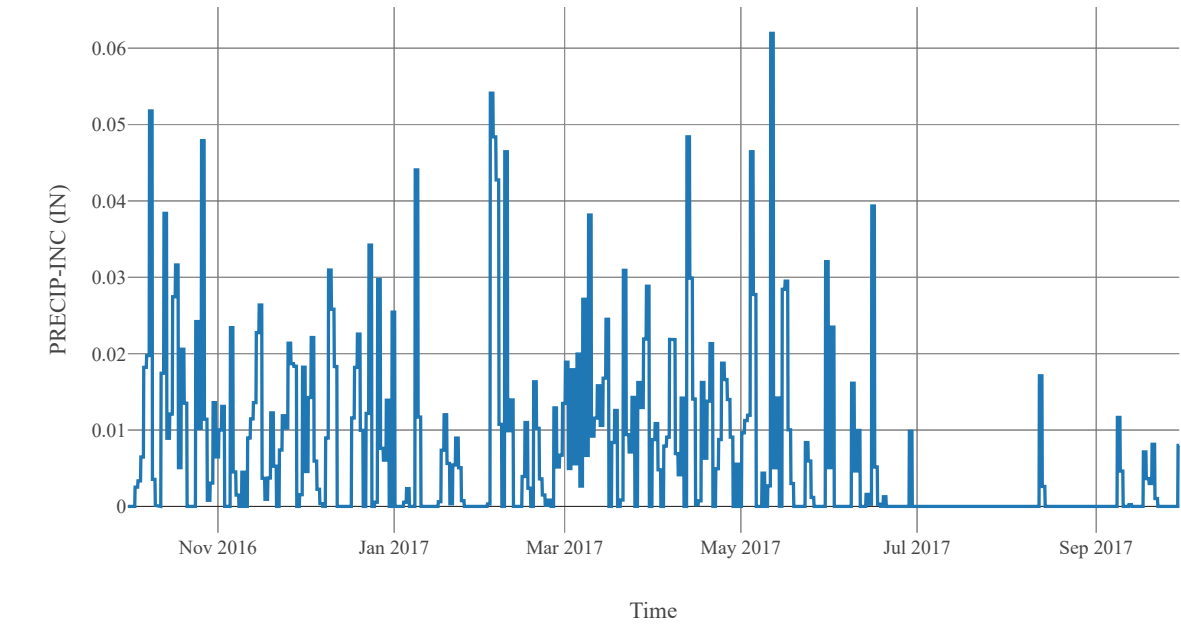
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	194
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	970
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	228389.76	Ac-ft
Precipitation Volume	736483.02	Ac-ft
Loss Volume	439514.1	Ac-ft
Excess Volume	57280.41	Ac-ft

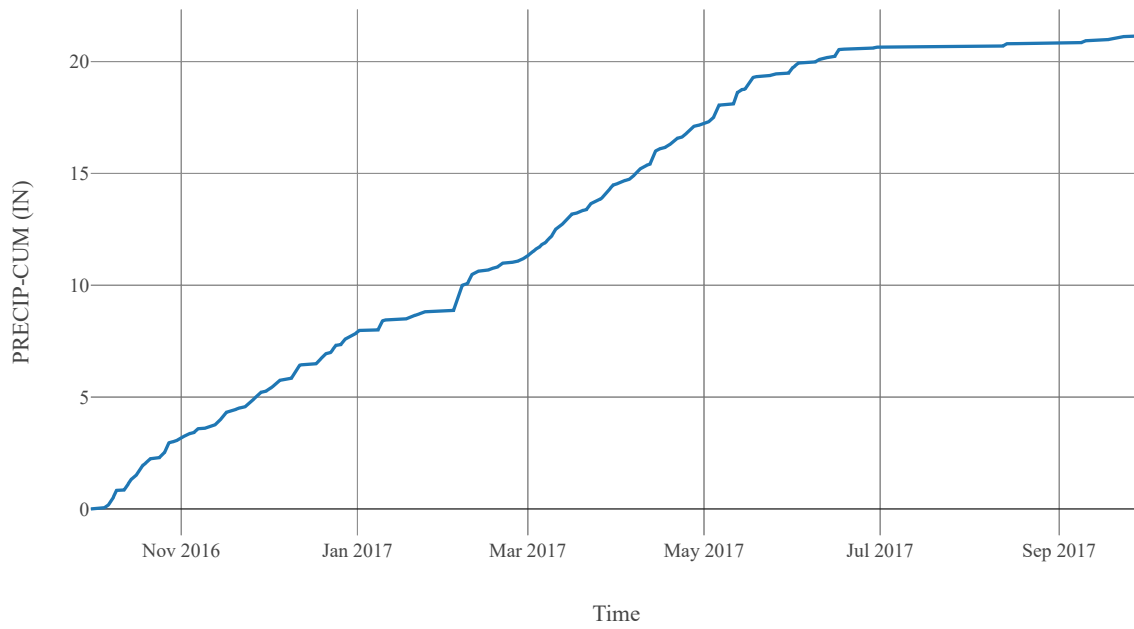
Outflow



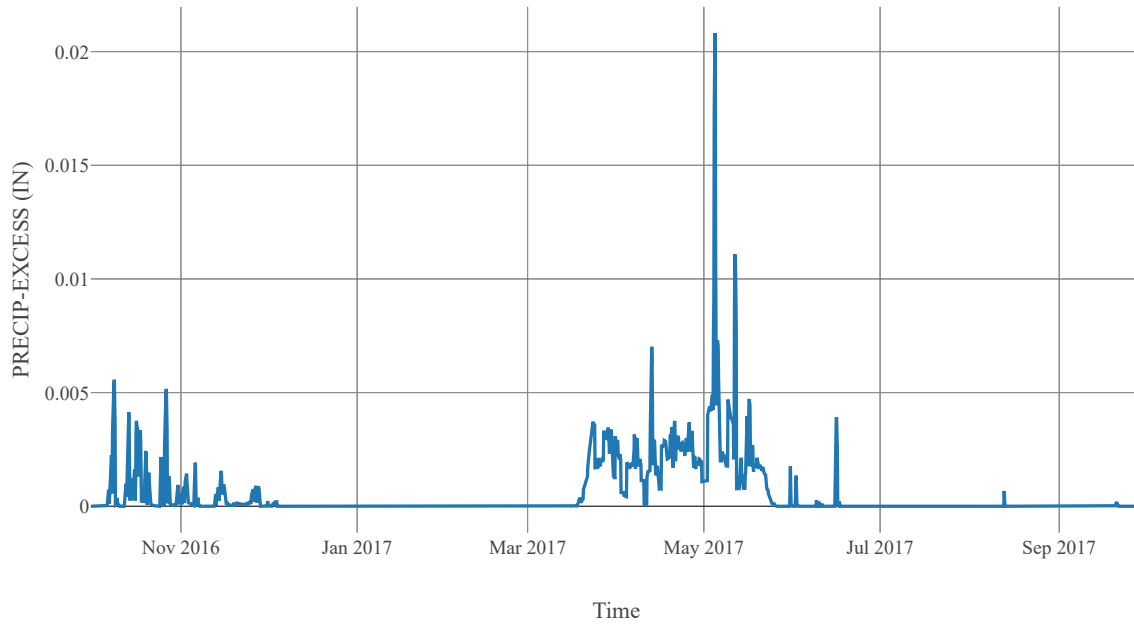
Precipitation



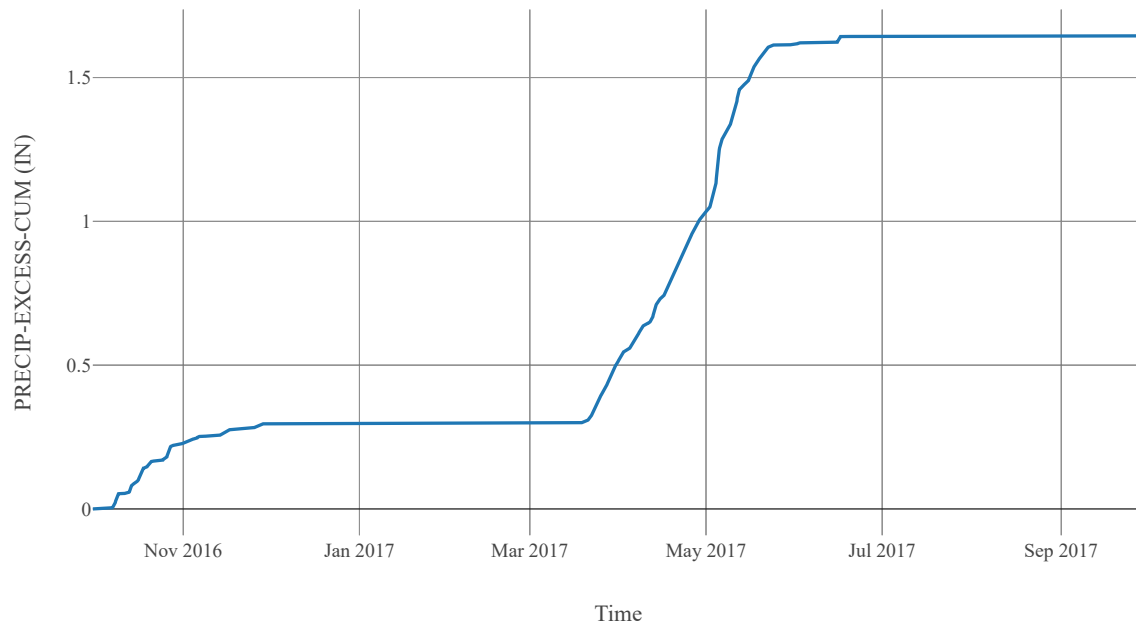
Cumulative Precipitation



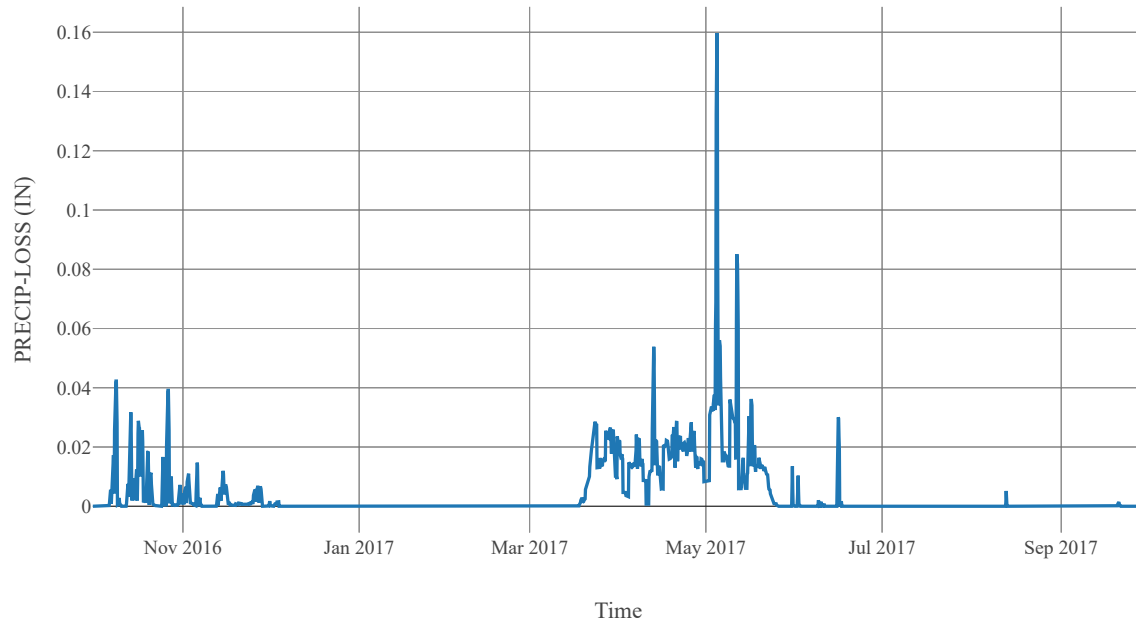
Excess Precipitation



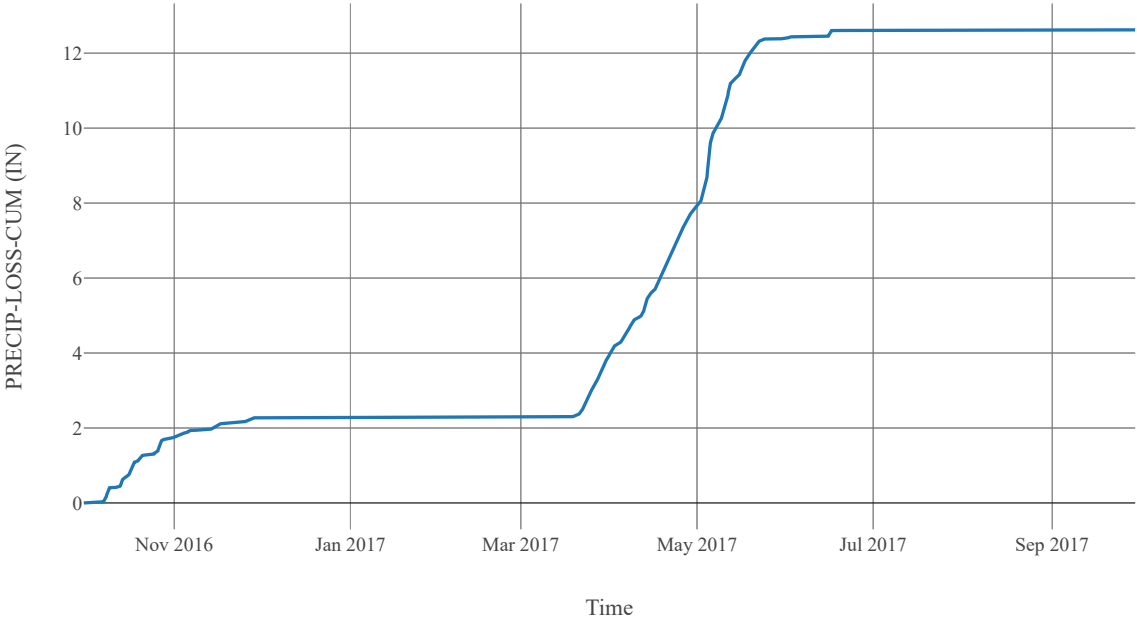
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : OkanaganRv_S090

Area : 424.32
Latitude : 50.34
Longitude : -119.41
Downstream : Okanagan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	4.6
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

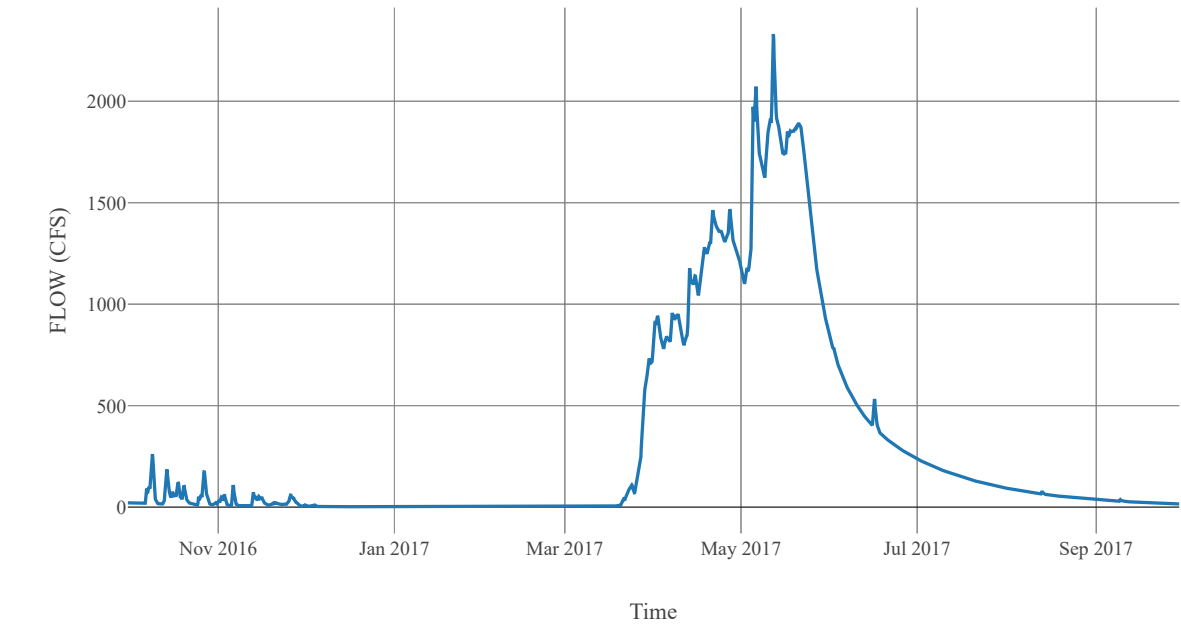
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	8.03
Storage Coefficient	8.03

Baseflow	
Method	Linear Reservoir

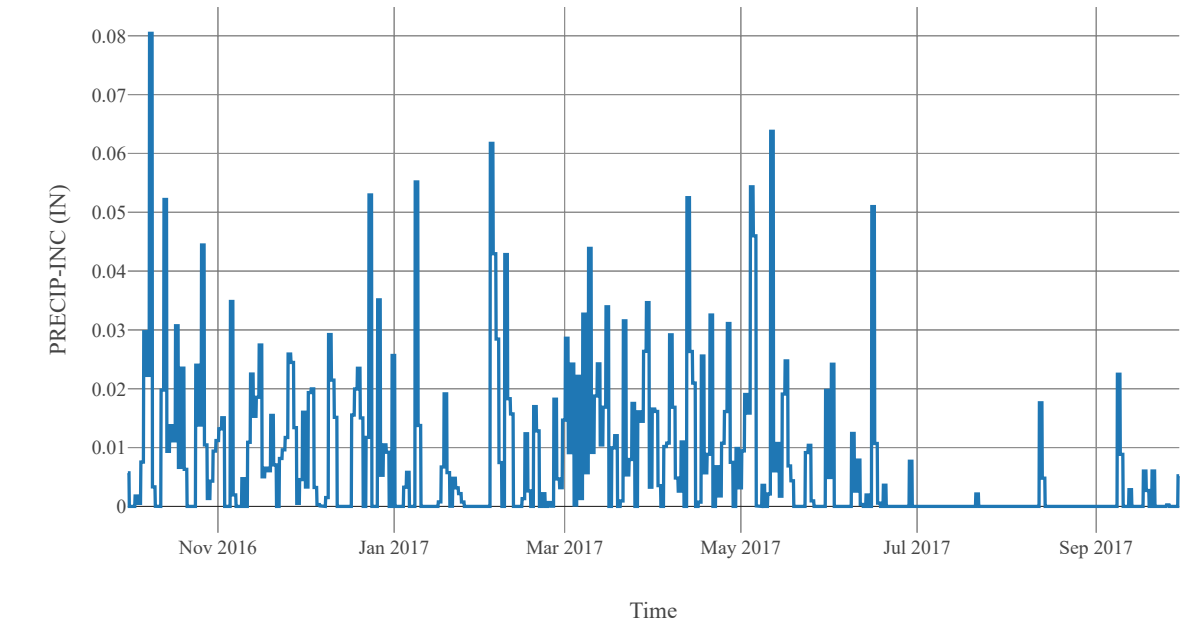
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	160.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	803
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	199271.27	Ac-ft
Precipitation Volume	525241.1	Ac-ft
Loss Volume	347813.94	Ac-ft
Excess Volume	16770.9	Ac-ft

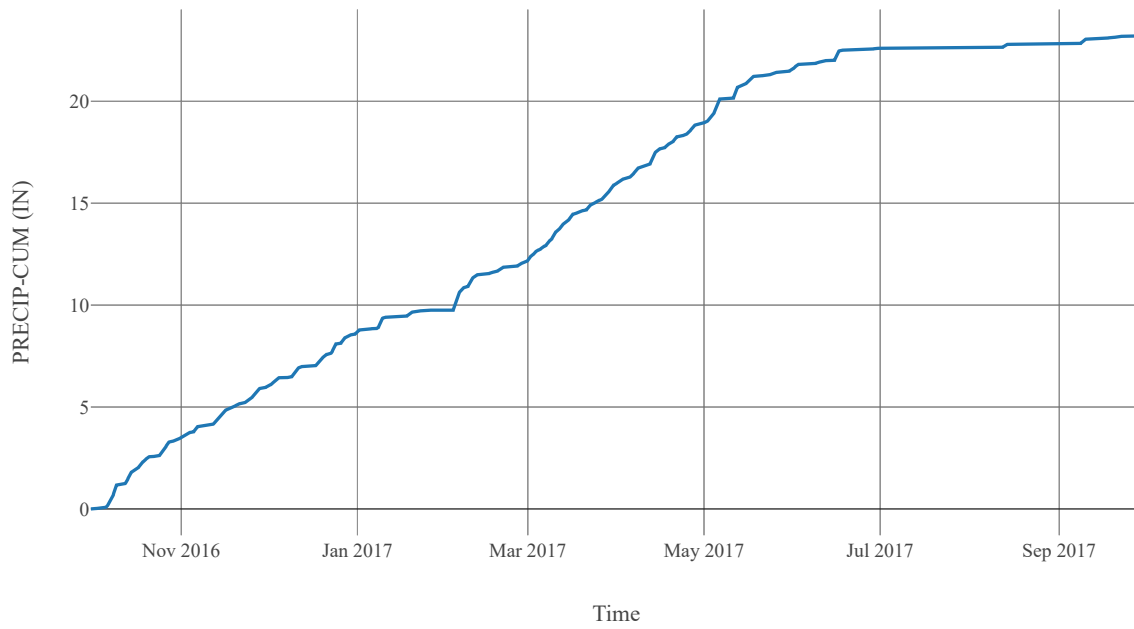
Outflow



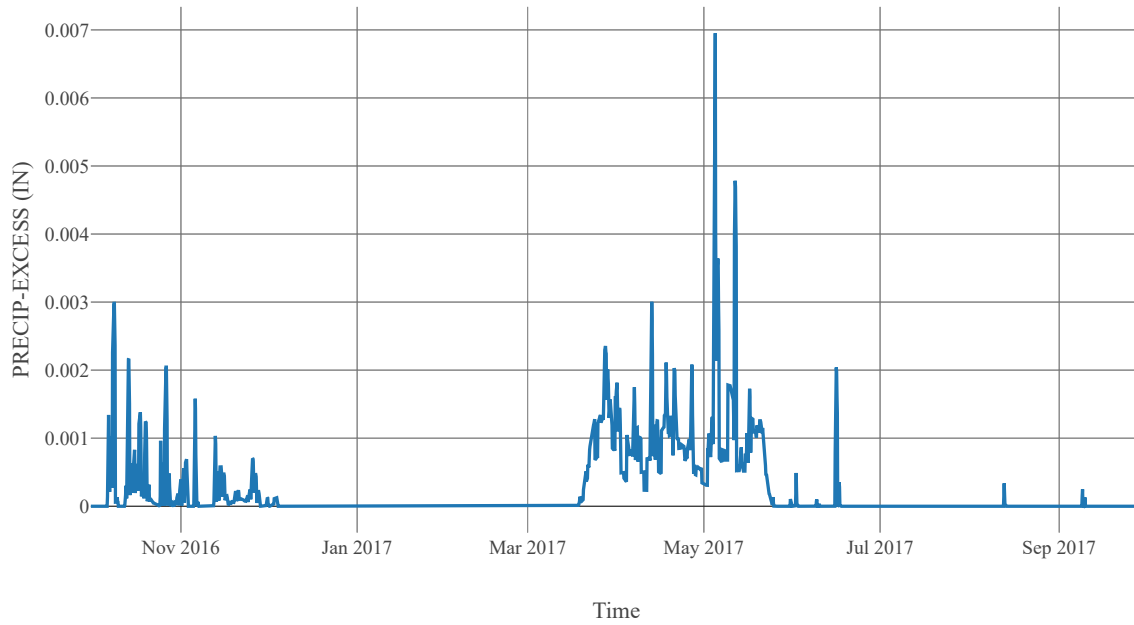
Precipitation



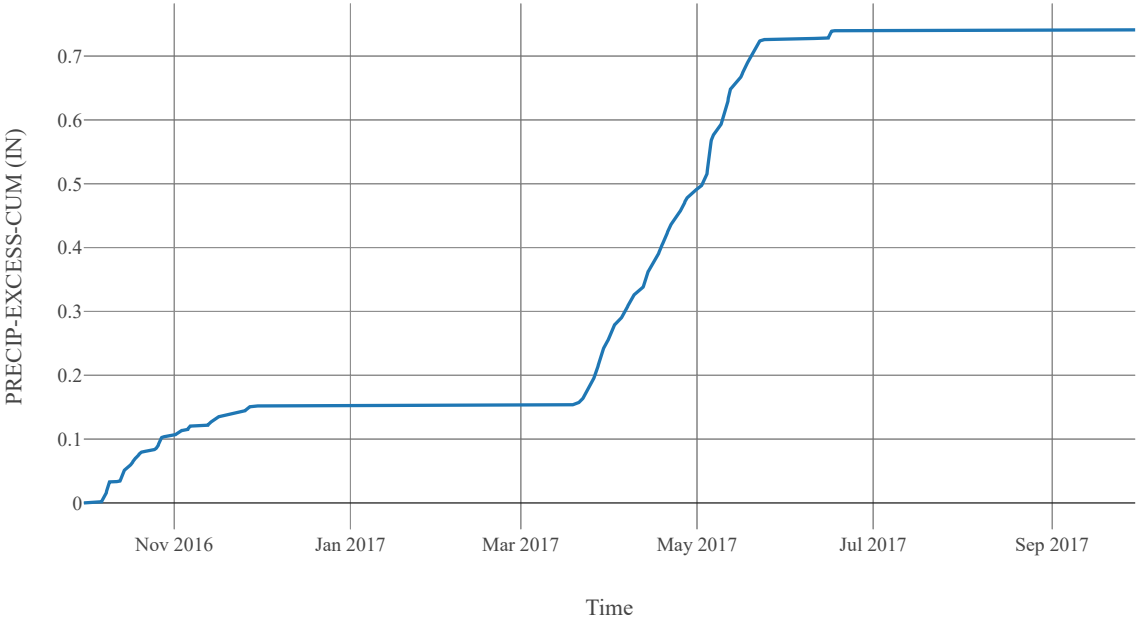
Cumulative Precipitation



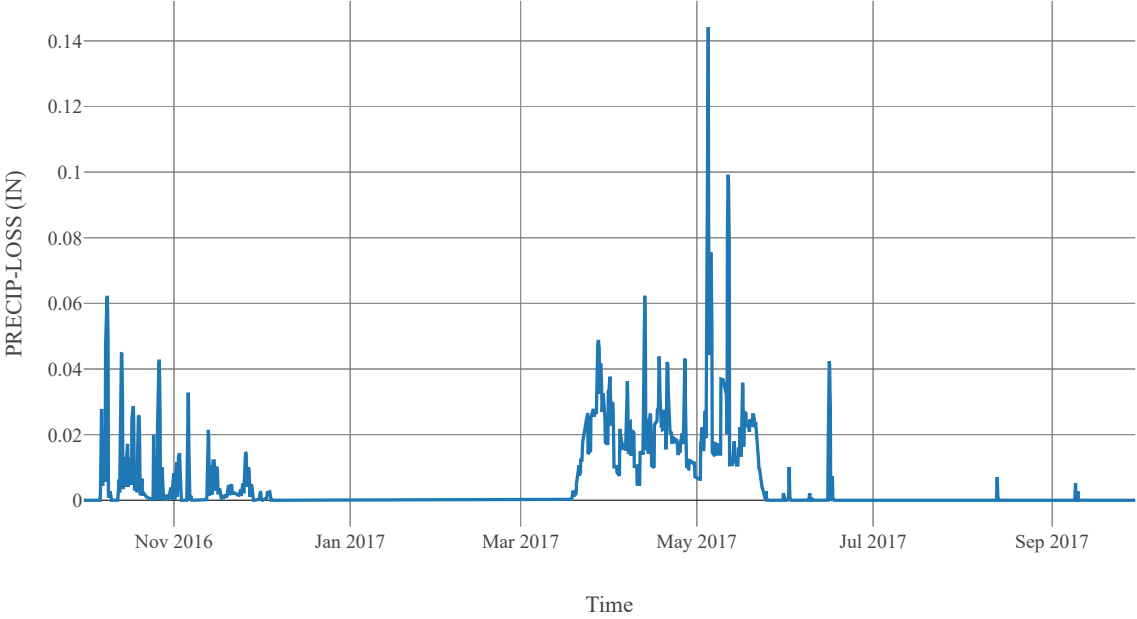
Excess Precipitation



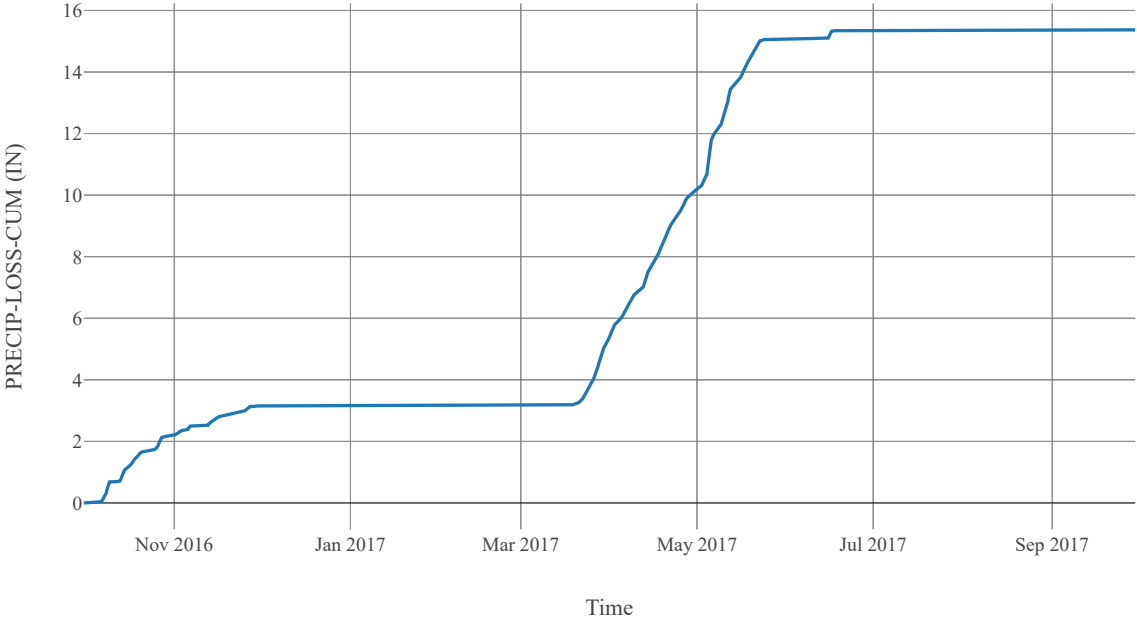
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : OkanaganRv_S080

Area : 383.17
Latitude : 50.04
Longitude : -119.51
Downstream : Okanagan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	12.9
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

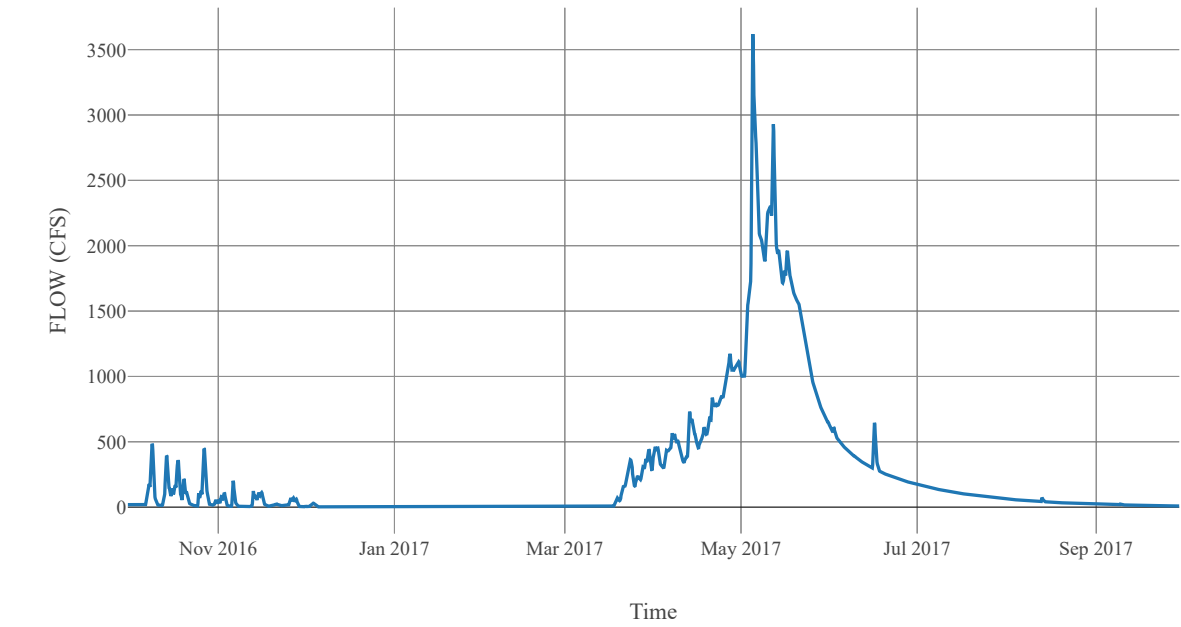
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.32
Storage Coefficient	7.32

Baseflow	
Method	Linear Reservoir

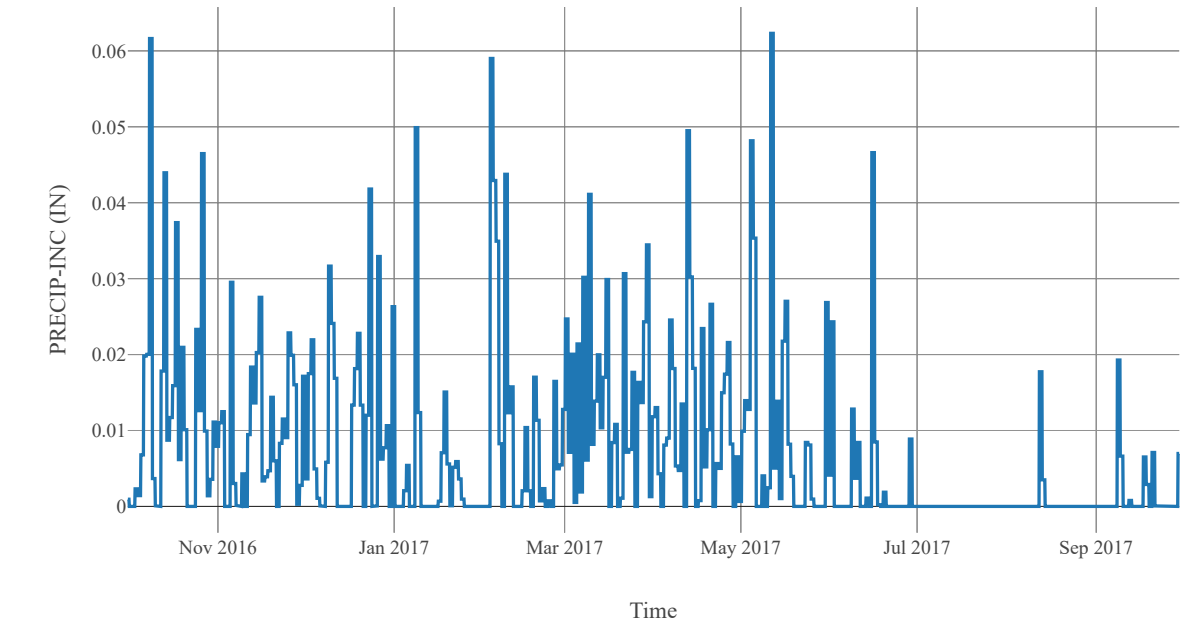
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	146.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	732
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	142641.32	Ac-ft
Precipitation Volume	446308.76	Ac-ft
Loss Volume	264851.31	Ac-ft
Excess Volume	39225.97	Ac-ft

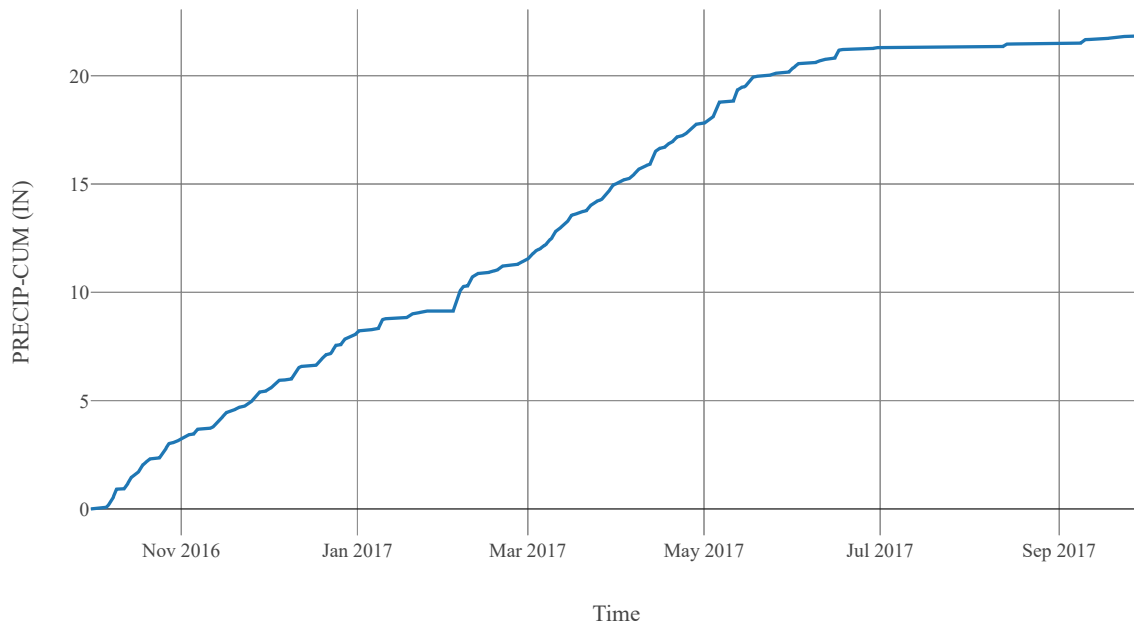
Outflow



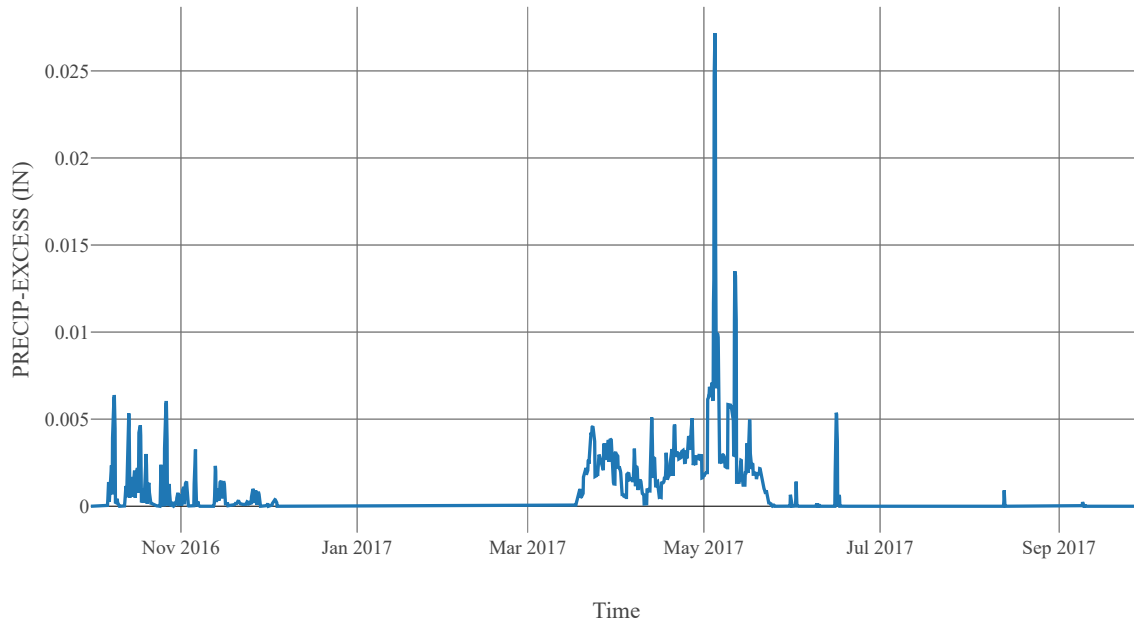
Precipitation



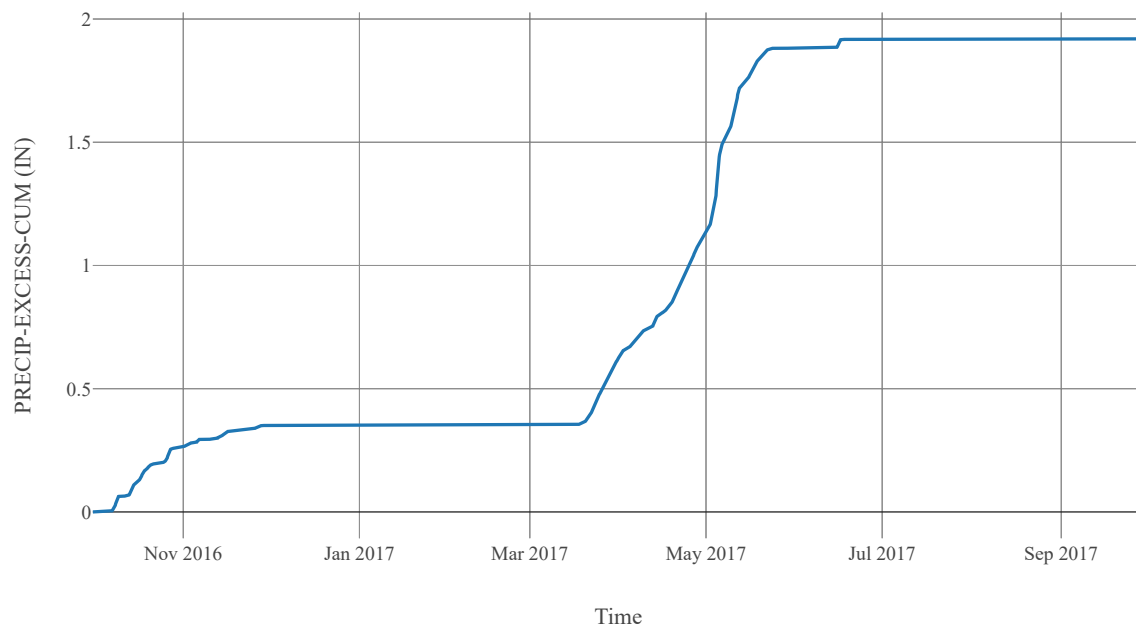
Cumulative Precipitation



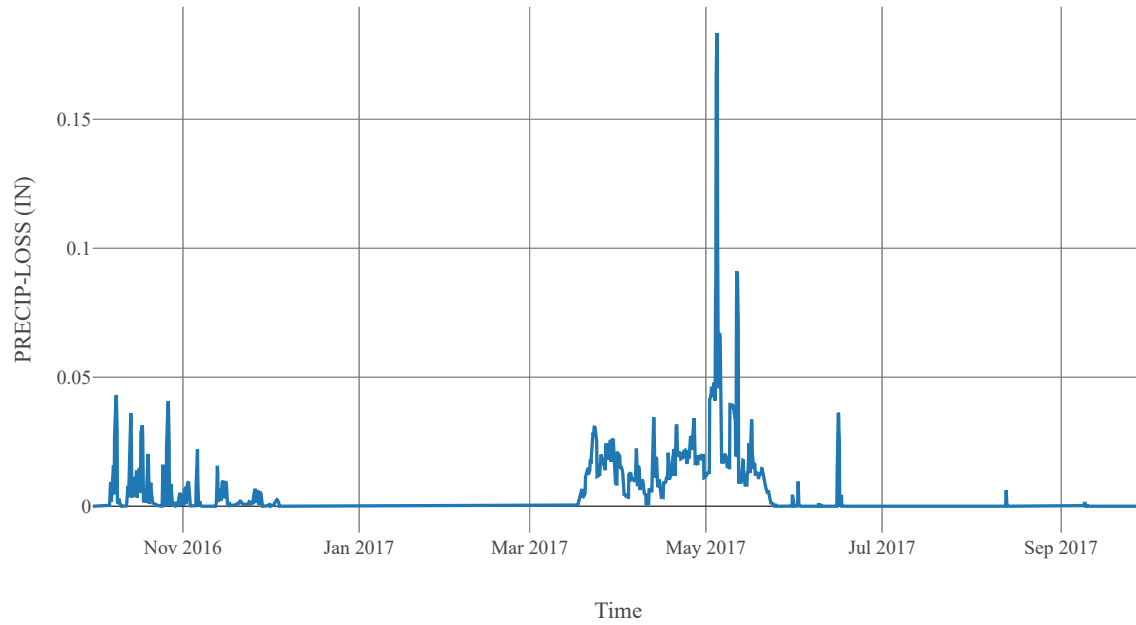
Excess Precipitation



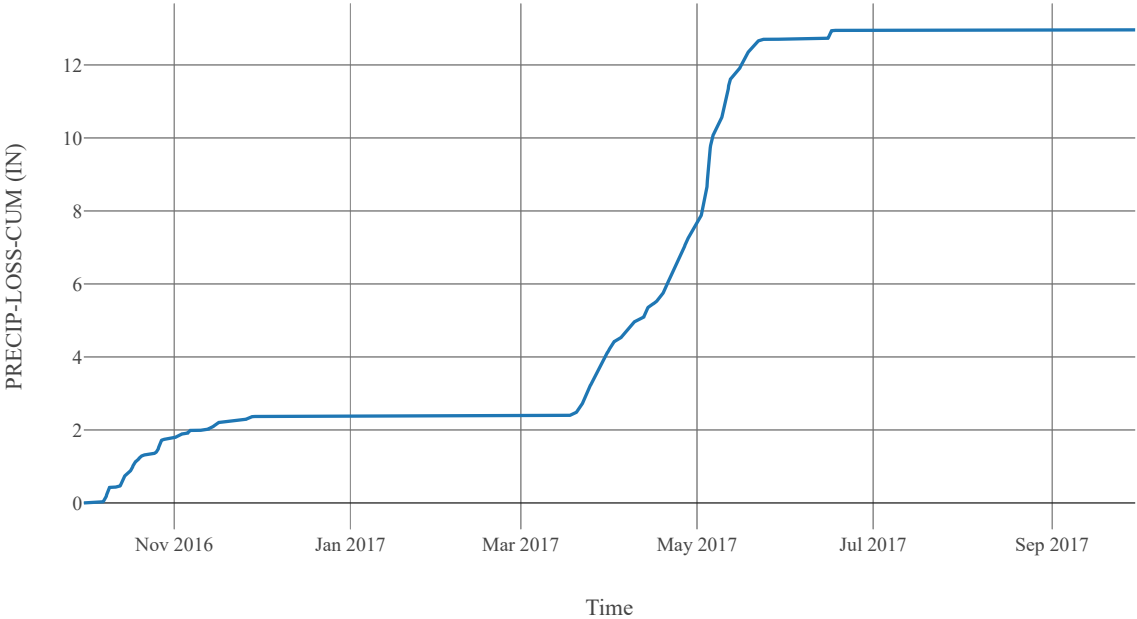
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : MissionCk_S010

Area : 326.81
Observed Hydrograph : Mission creek near east kelo
Latitude : 49.9
Longitude : -119.13
Downstream : Okanagan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.94
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

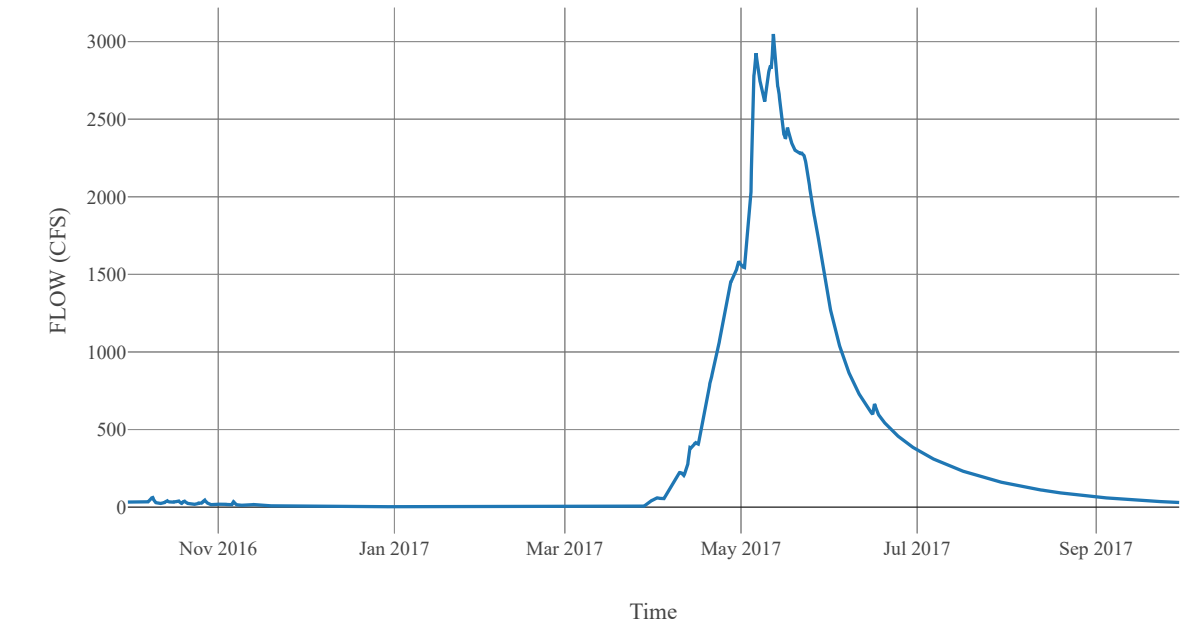
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	8.81
Storage Coefficient	8.81

Baseflow	
Method	Linear Reservoir

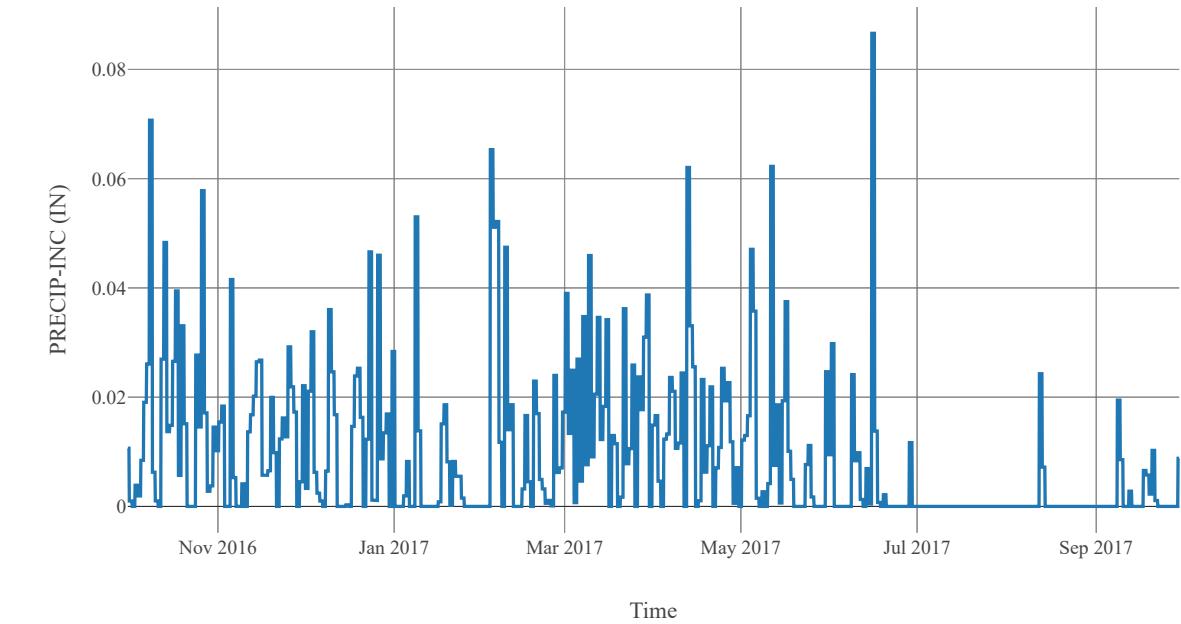
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	176.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	881
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	238430.64	Ac-ft
Precipitation Volume	480574.88	Ac-ft
Loss Volume	359219.03	Ac-ft
Excess Volume	3408.7	Ac-ft

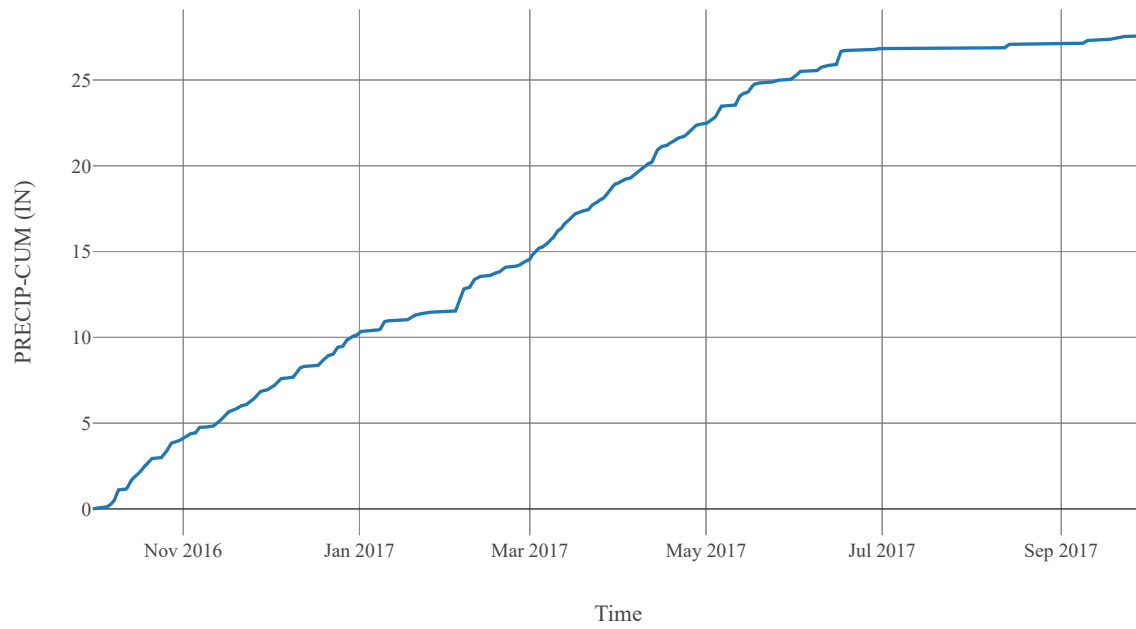
Outflow



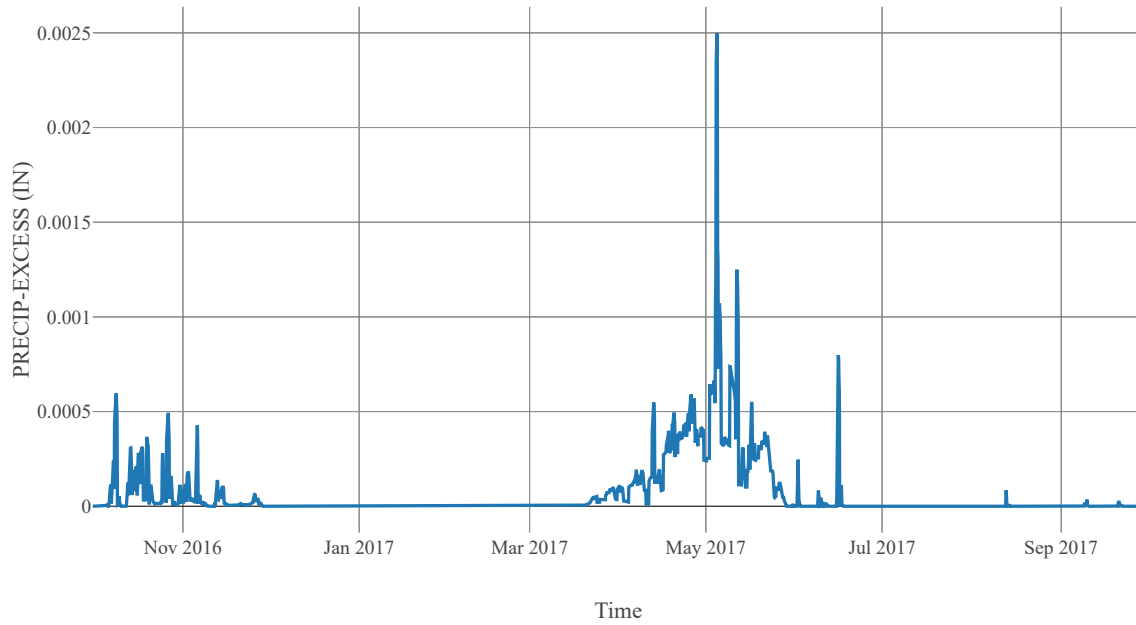
Precipitation



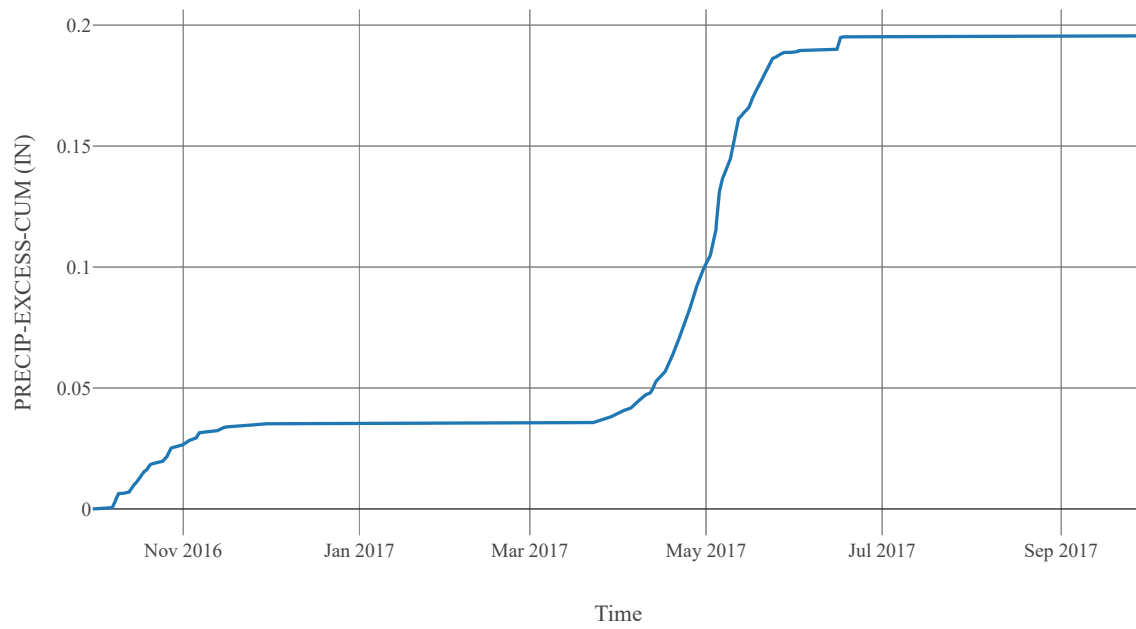
Cumulative Precipitation



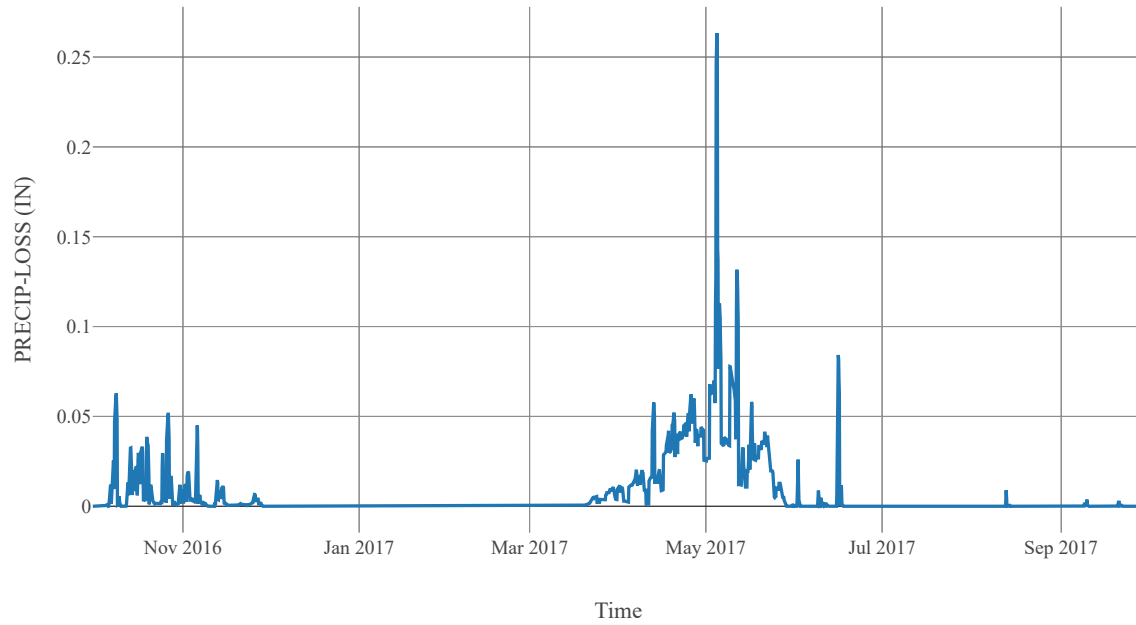
Excess Precipitation



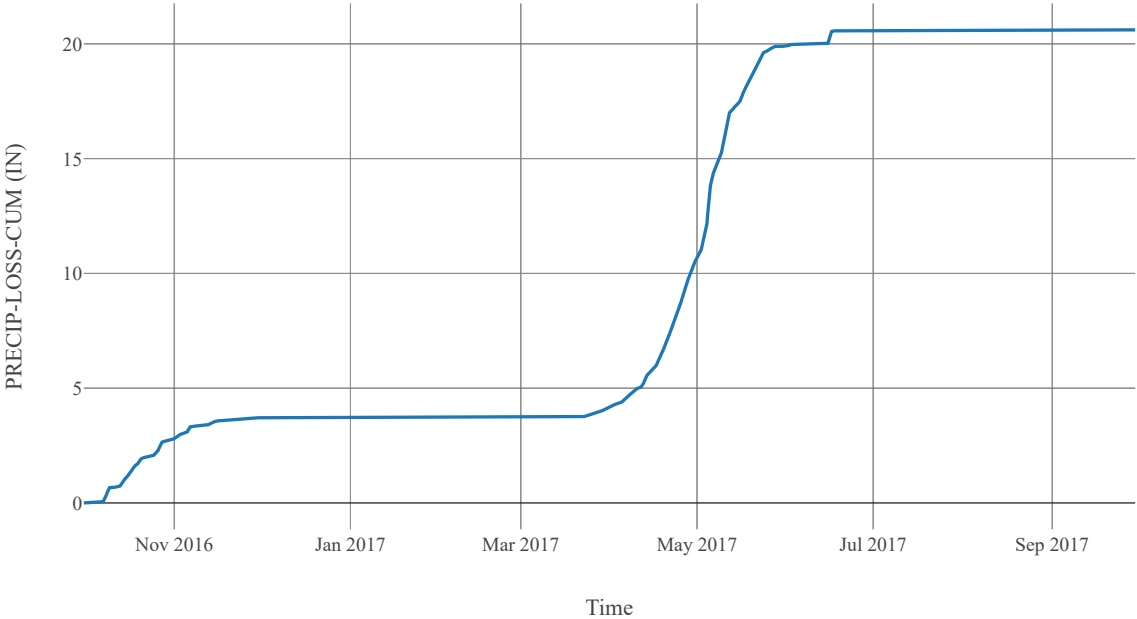
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : TroutCk_010

Area : 288.59
Latitude : 49.68
Longitude : -119.98
Downstream : Okanagan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.5
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

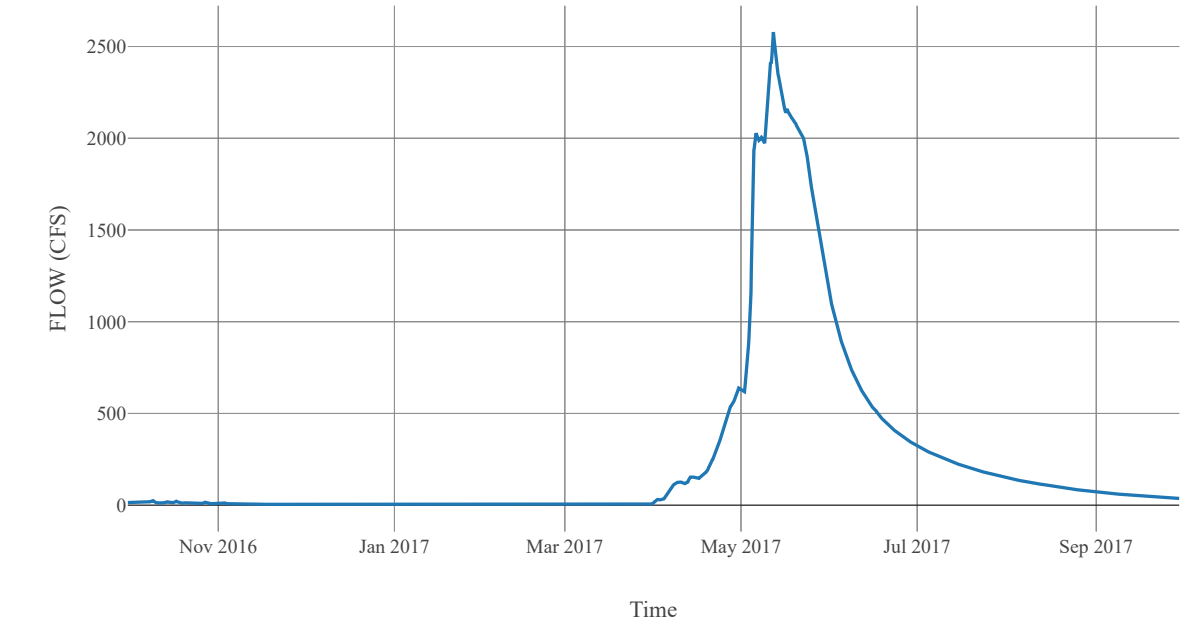
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	10.24
Storage Coefficient	10.24

Baseflow	
Method	Linear Reservoir

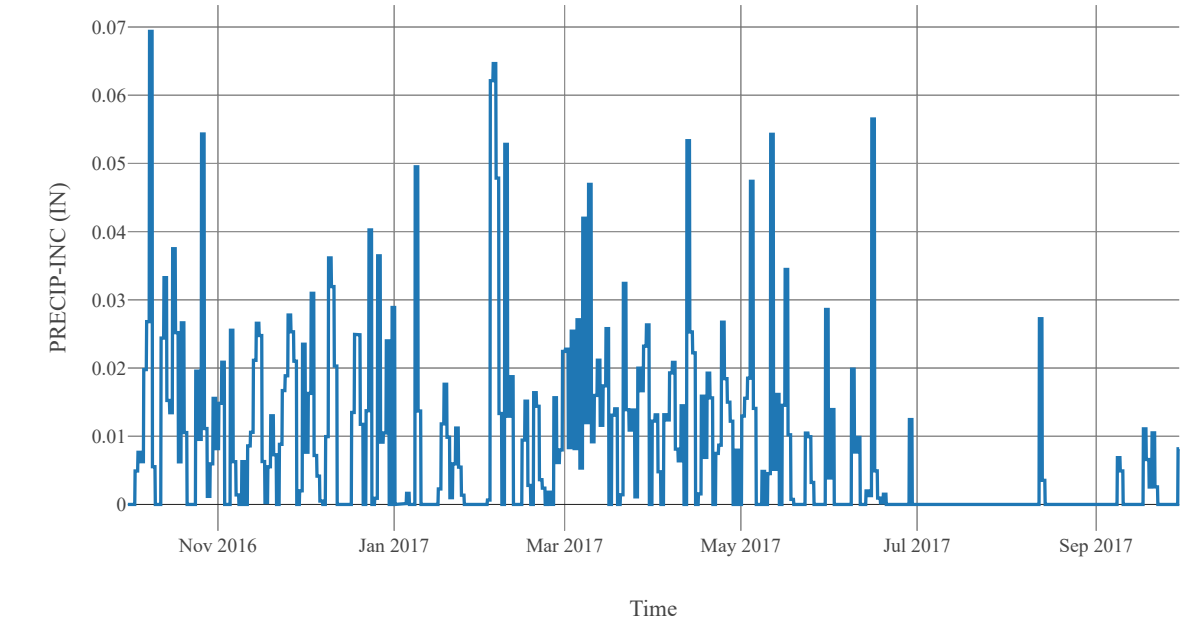
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	204.8
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1024
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	182837.96	Ac-ft
Precipitation Volume	383660.25	Ac-ft
Loss Volume	286675.77	Ac-ft
Excess Volume	1440.58	Ac-ft

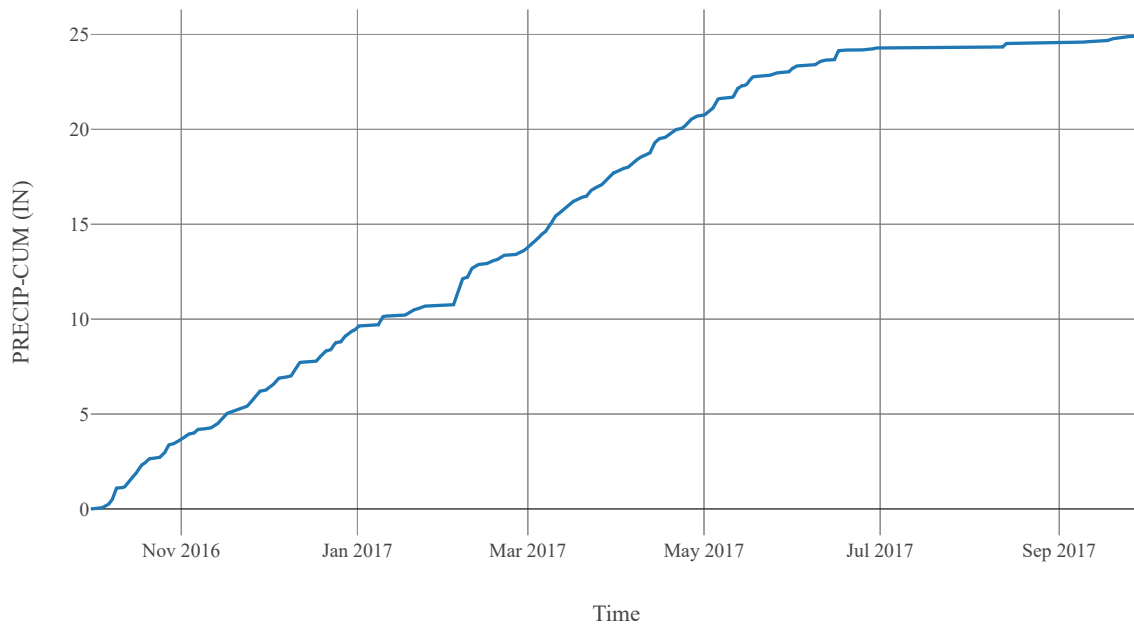
Outflow



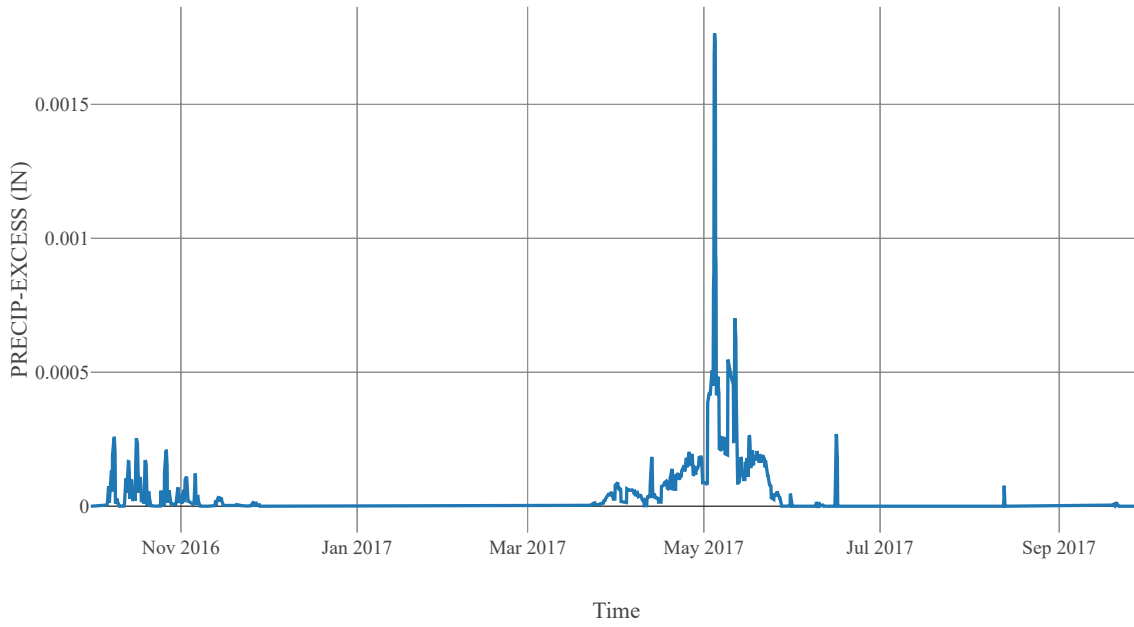
Precipitation



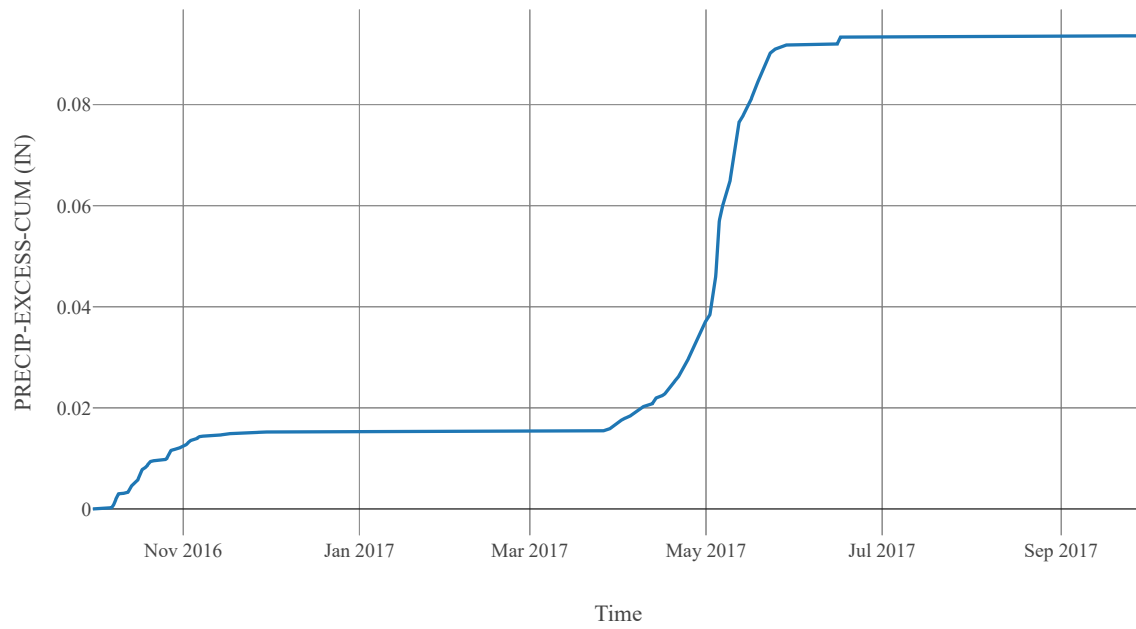
Cumulative Precipitation



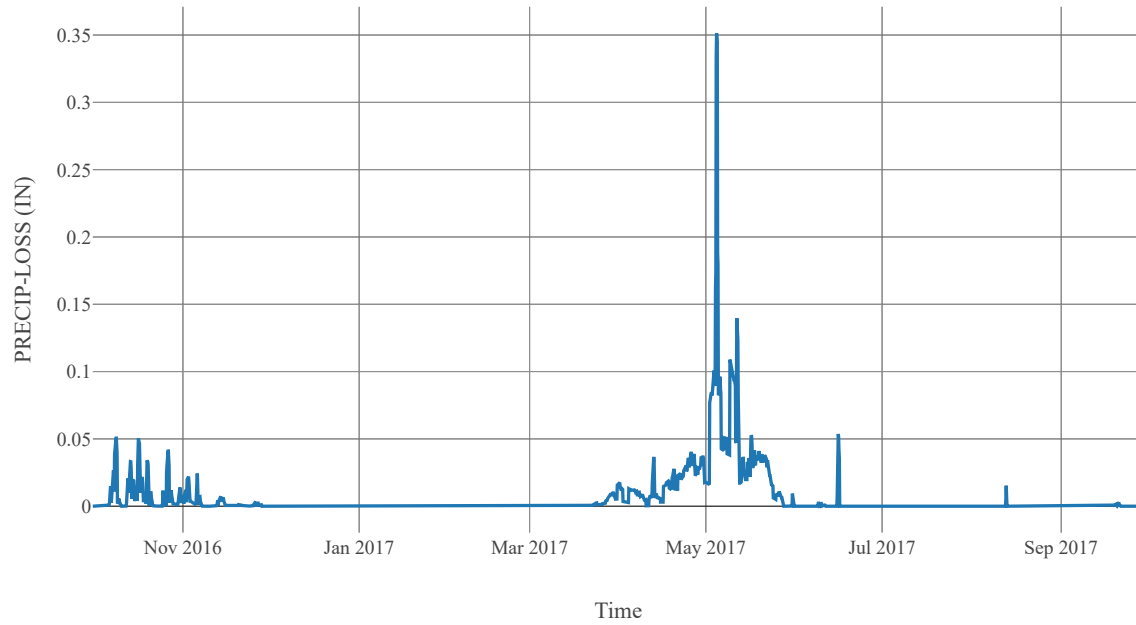
Excess Precipitation



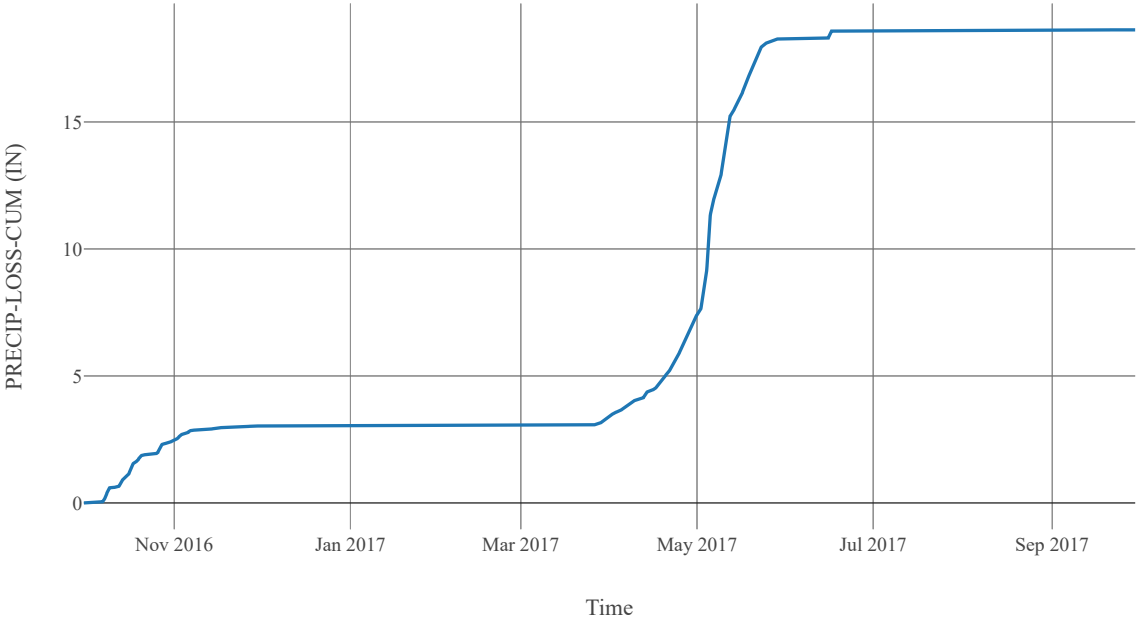
Cumulative Excess Precipitation



Precipitation Loss

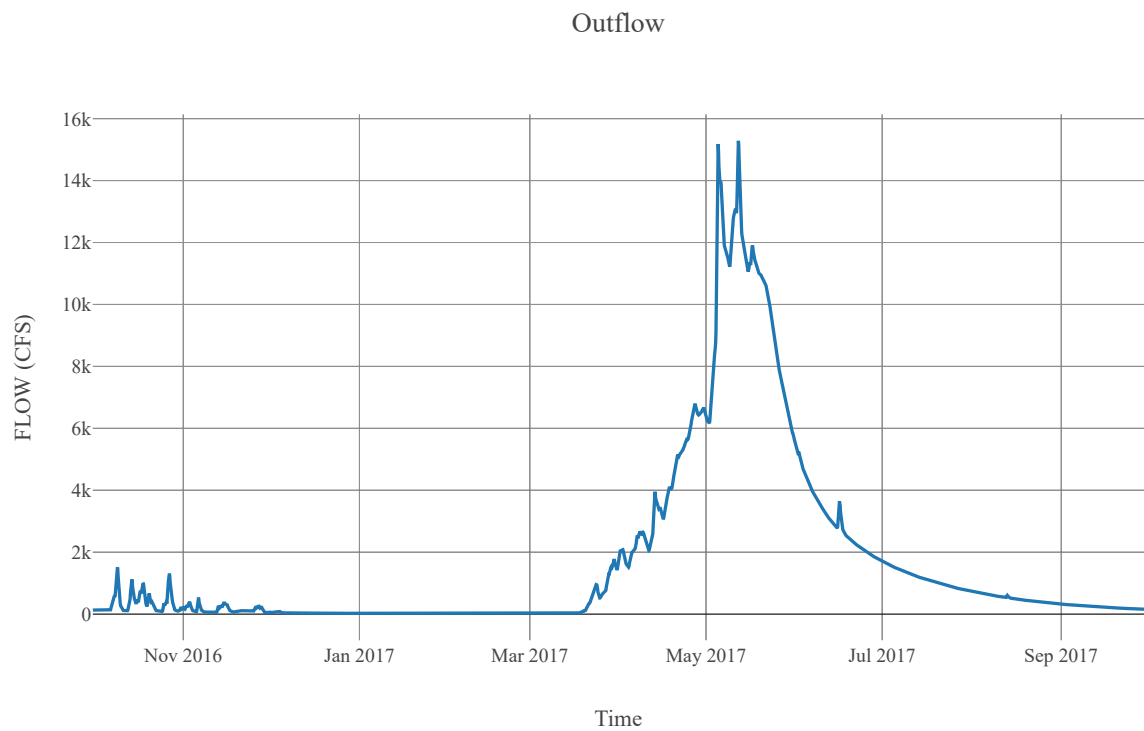


Cumulative Precipitation Loss



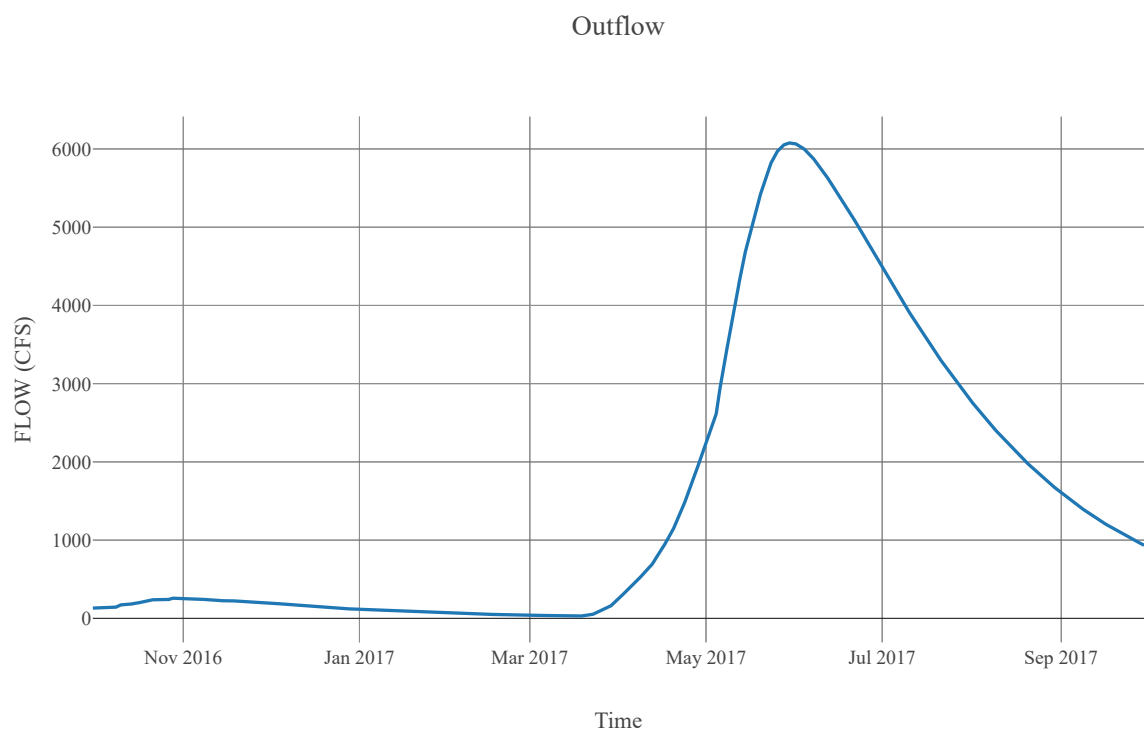
Junction : Okanagan_IN

Downstream : Okanagan



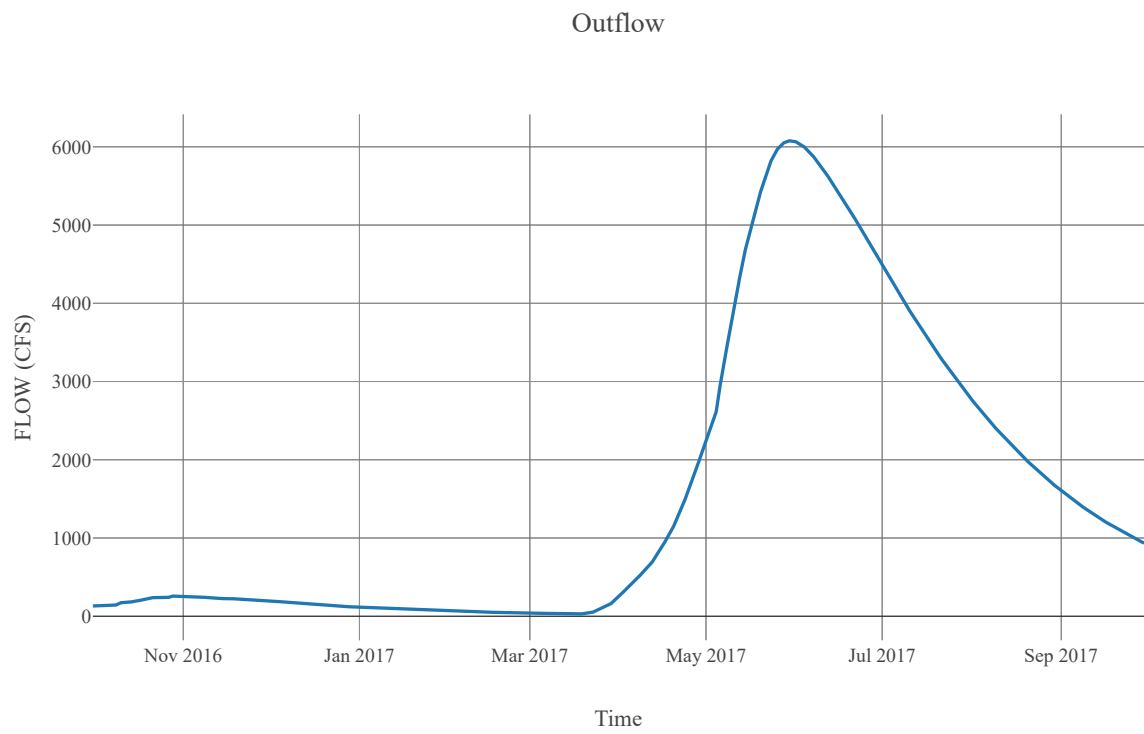
Reservoir : Okanagan

Quality Method : Unspecified
Method : Modified Puls
Downstream : Okanagan Nr Penticon



Junction : OkanaganNrPenticon

Downstream : SkahaLake_IN



Subbasin : OkanaganRv_S060

Area : 317.21
Latitude : 49.44
Longitude : -119.61
Downstream : SkahaLake_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	2.64
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

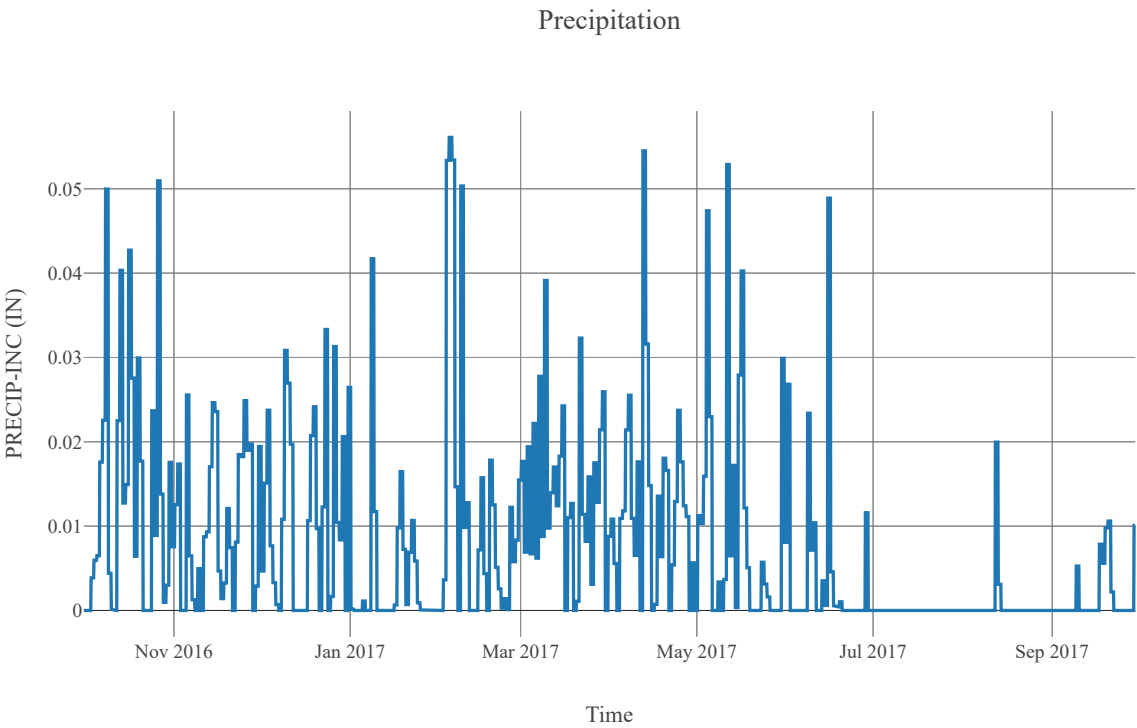
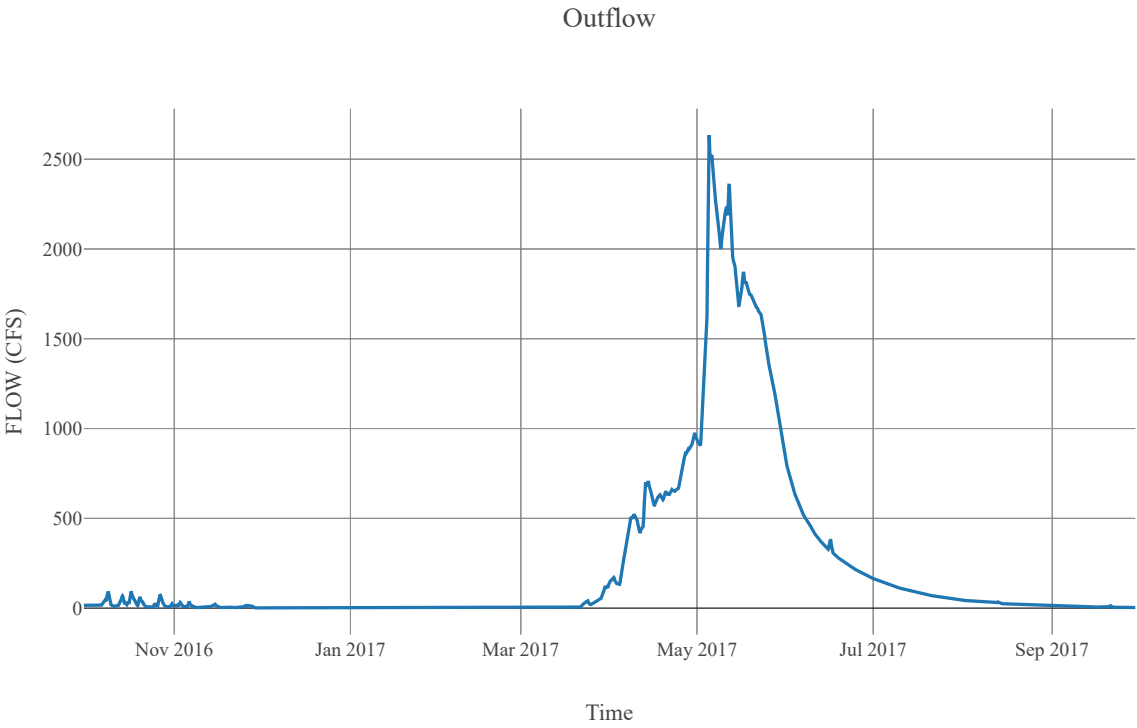
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.66
Storage Coefficient	5.66

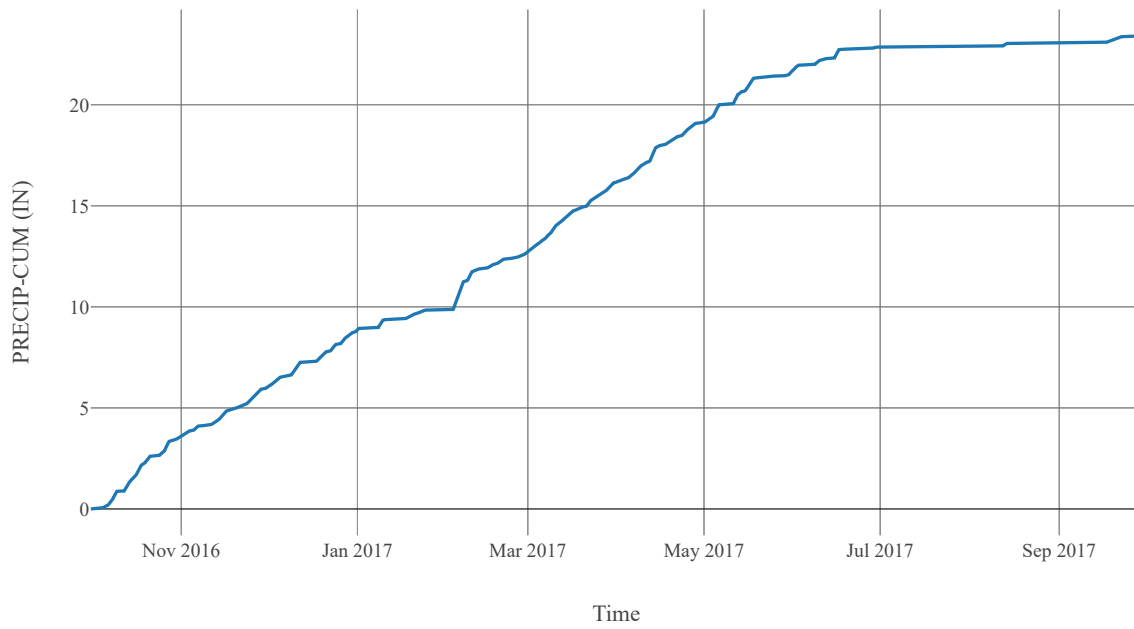
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	113.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	566
		Number Steps	1

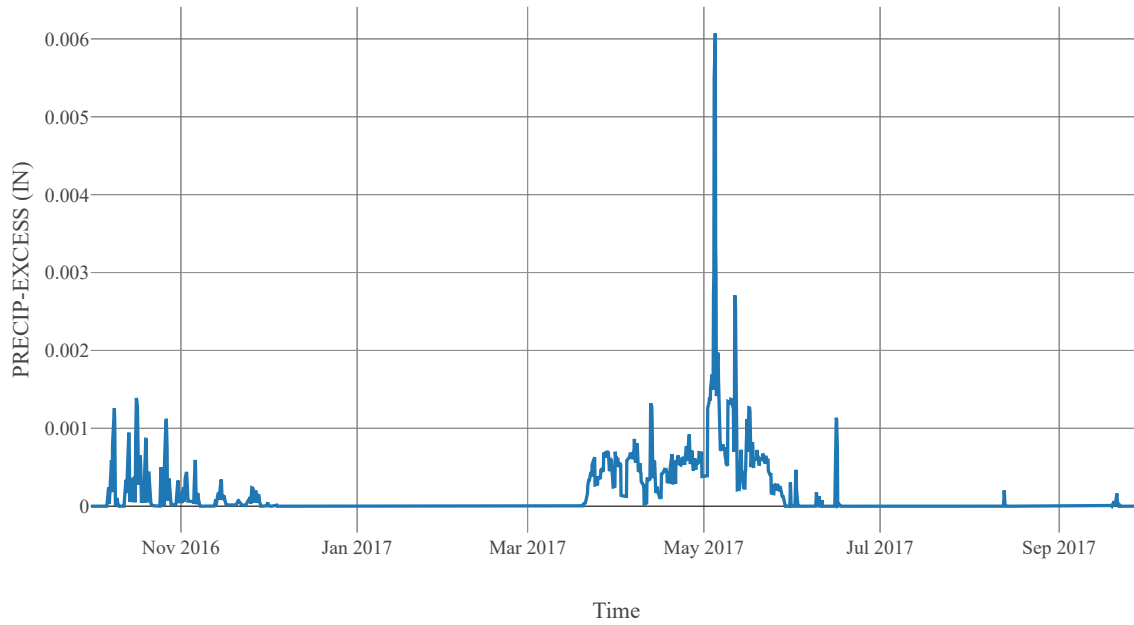
Statistics		
Name	Value	Unit
Baseflow Volume	161484.26	Ac-ft
Precipitation Volume	396034.96	Ac-ft
Loss Volume	274136.24	Ac-ft
Excess Volume	7433.44	Ac-ft



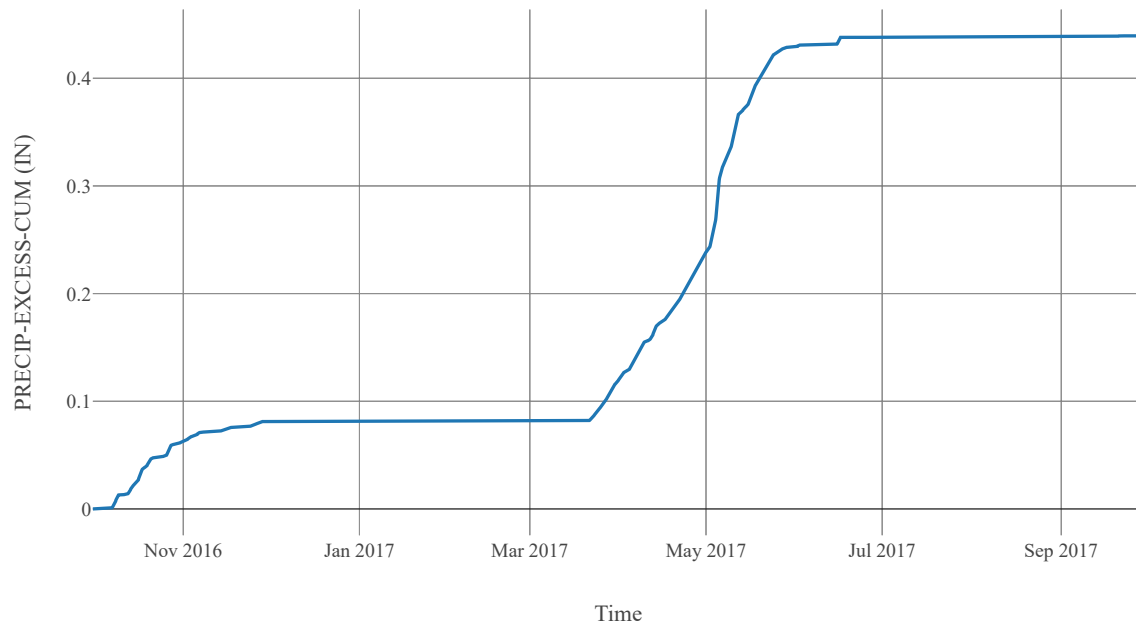
Cumulative Precipitation



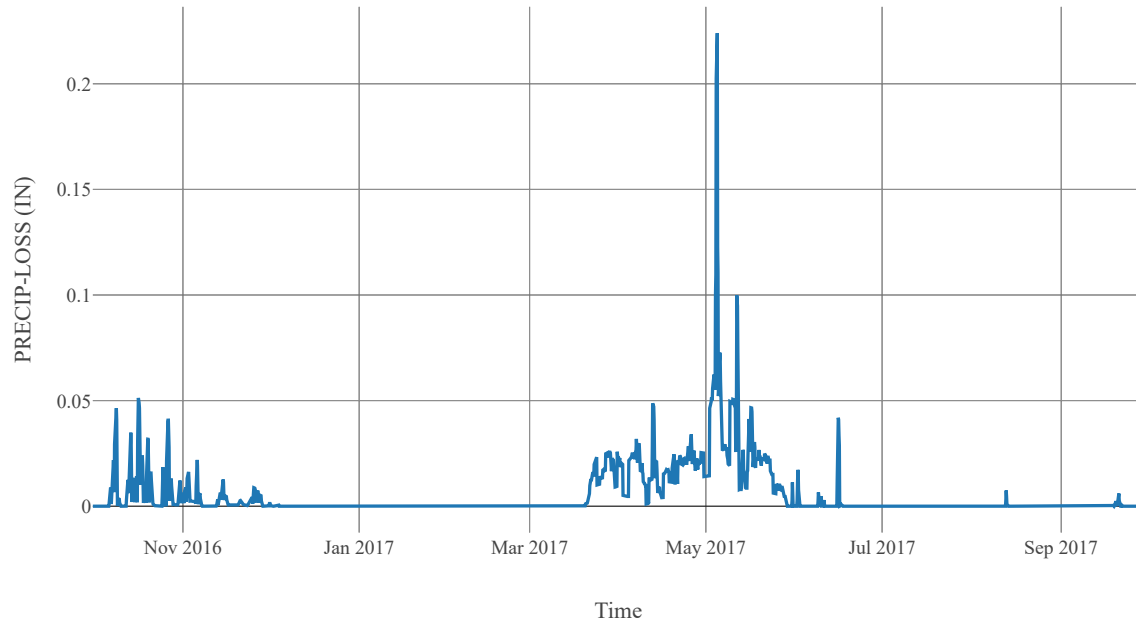
Excess Precipitation



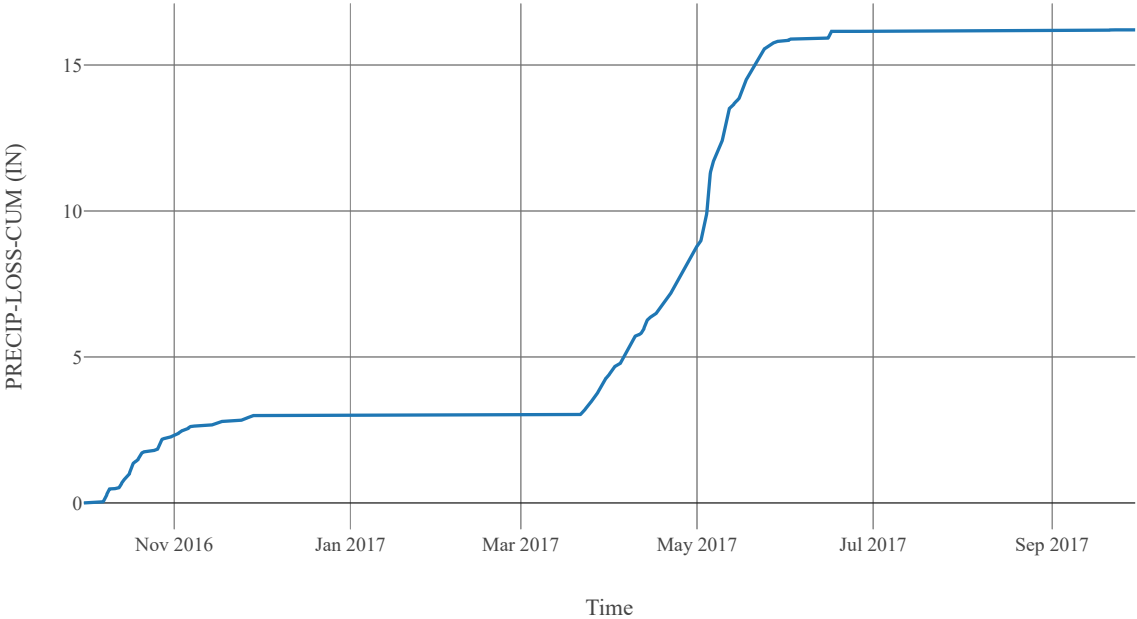
Cumulative Excess Precipitation



Precipitation Loss

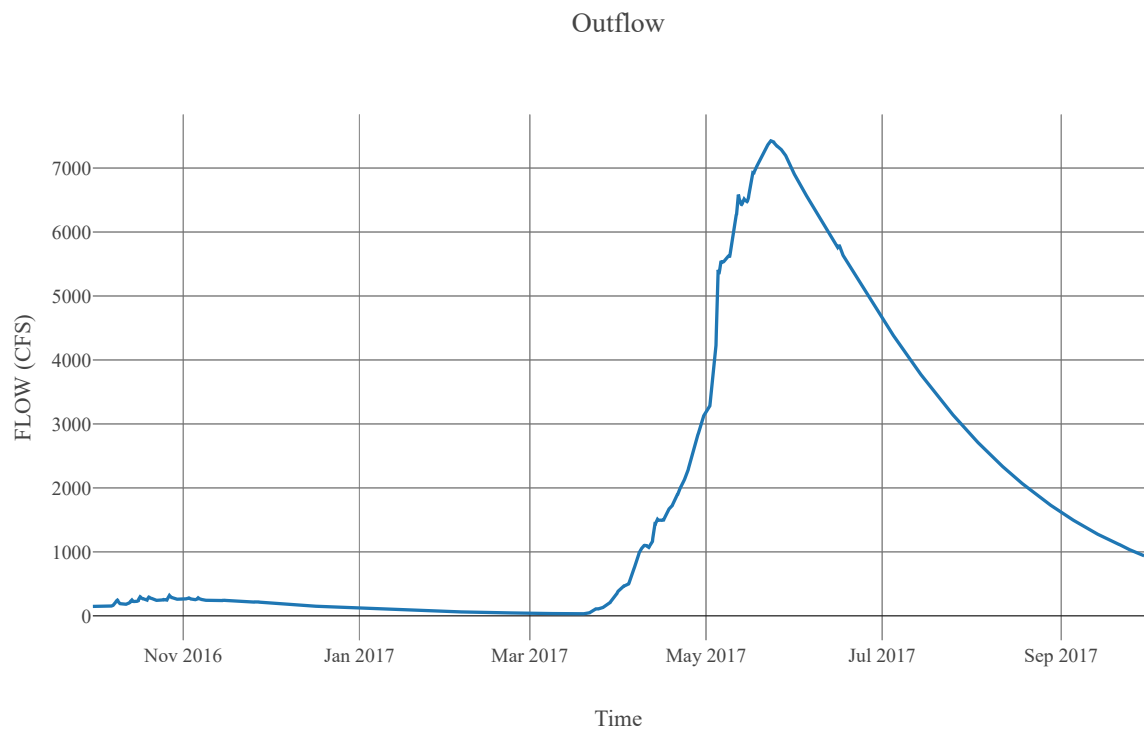


Cumulative Precipitation Loss



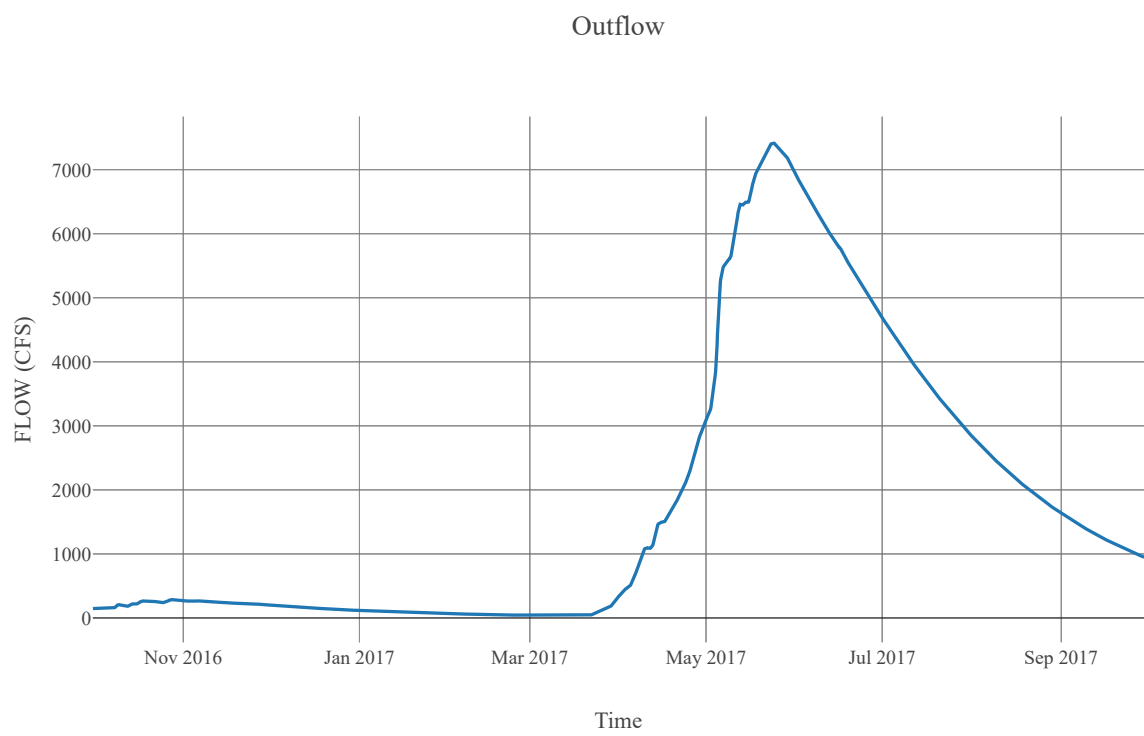
Junction : SkahaLake_IN

Downstream : Skaha Lake



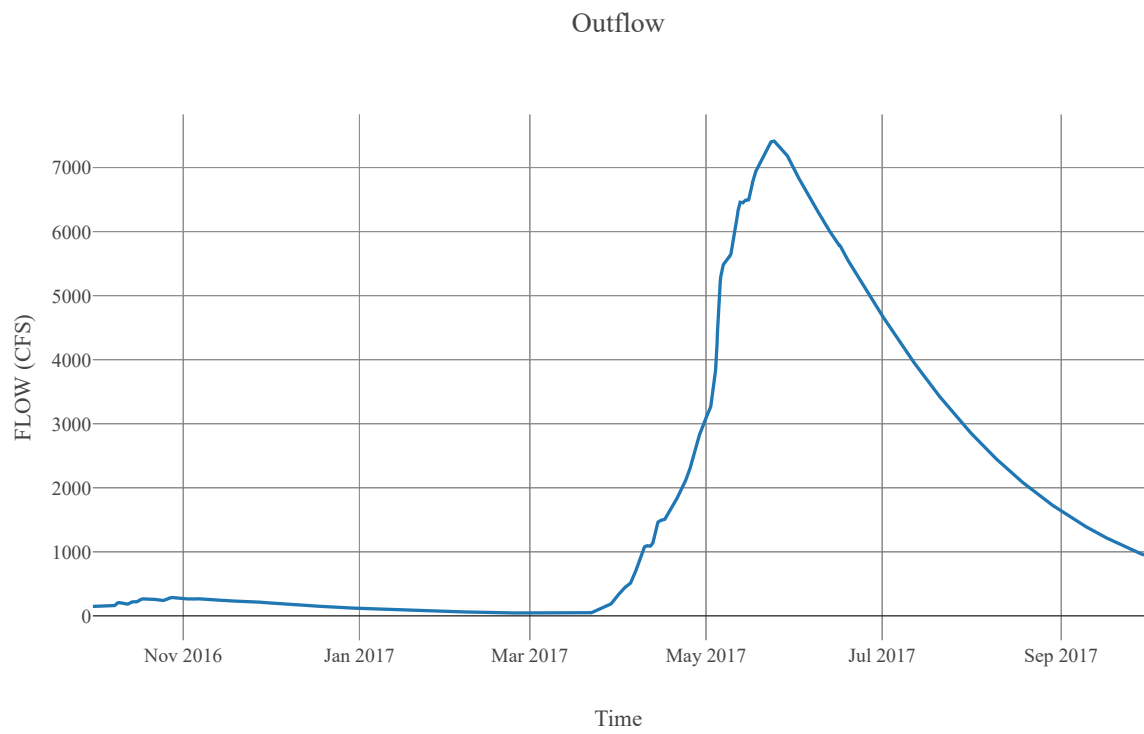
Reservoir : SkahaLake

Quality Method : Unspecified
Method : Modified Puls
Downstream : Okanagan Nr Okanagan Falls



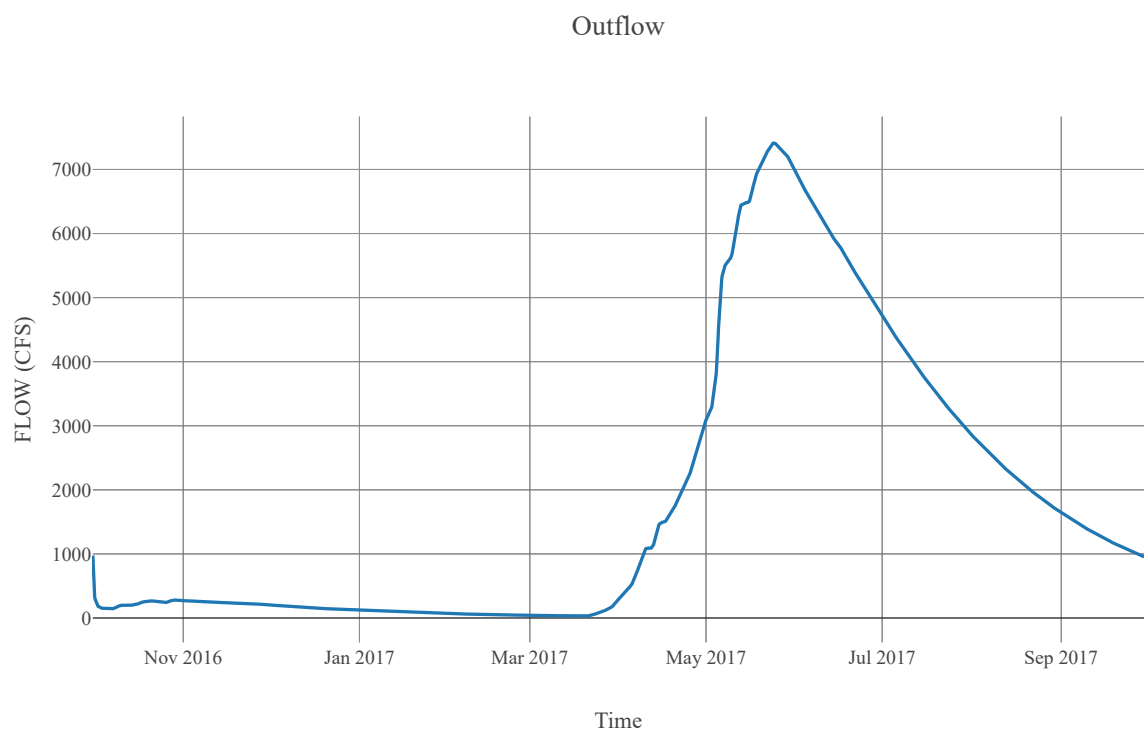
Junction : OkanaganNrOkanaganFalls

Downstream : Vaseux Lake



Reservoir : VaseuxLake

Quality Method : Unspecified
Method : Modified Puls
Downstream : VaseuxCk_CF



Subbasin : VaseuxCk_S010

Area : 113.61
Latitude : 49.27
Longitude : -119.32
Downstream : VaseuxCk_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.09
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

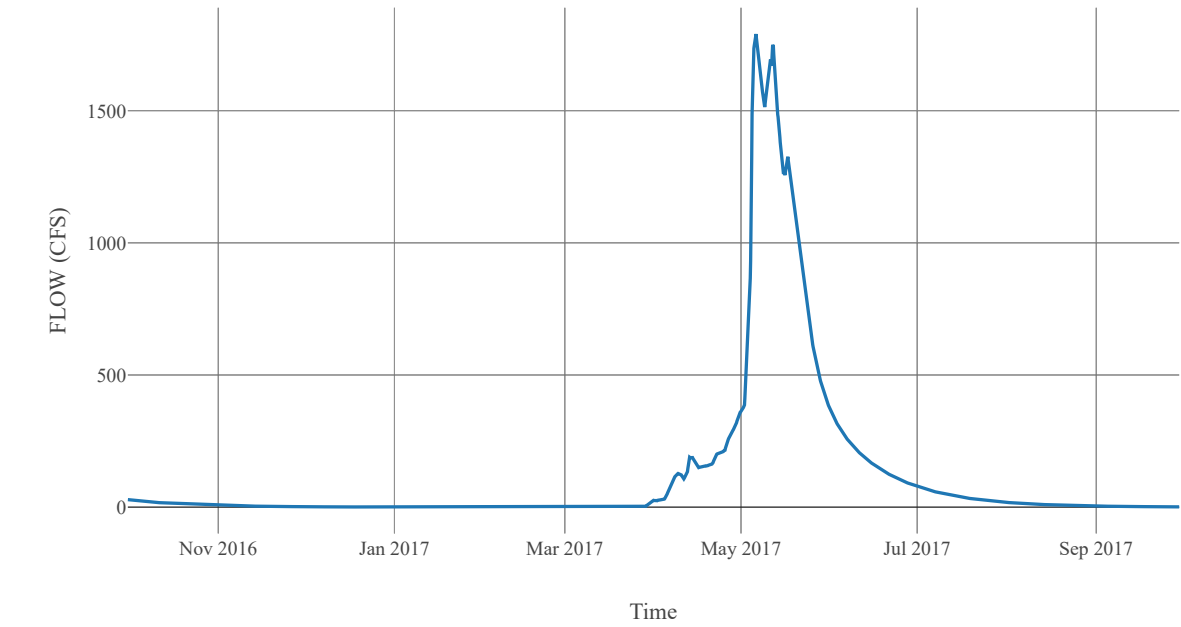
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.05
Storage Coefficient	5.05

Baseflow	
Method	Linear Reservoir

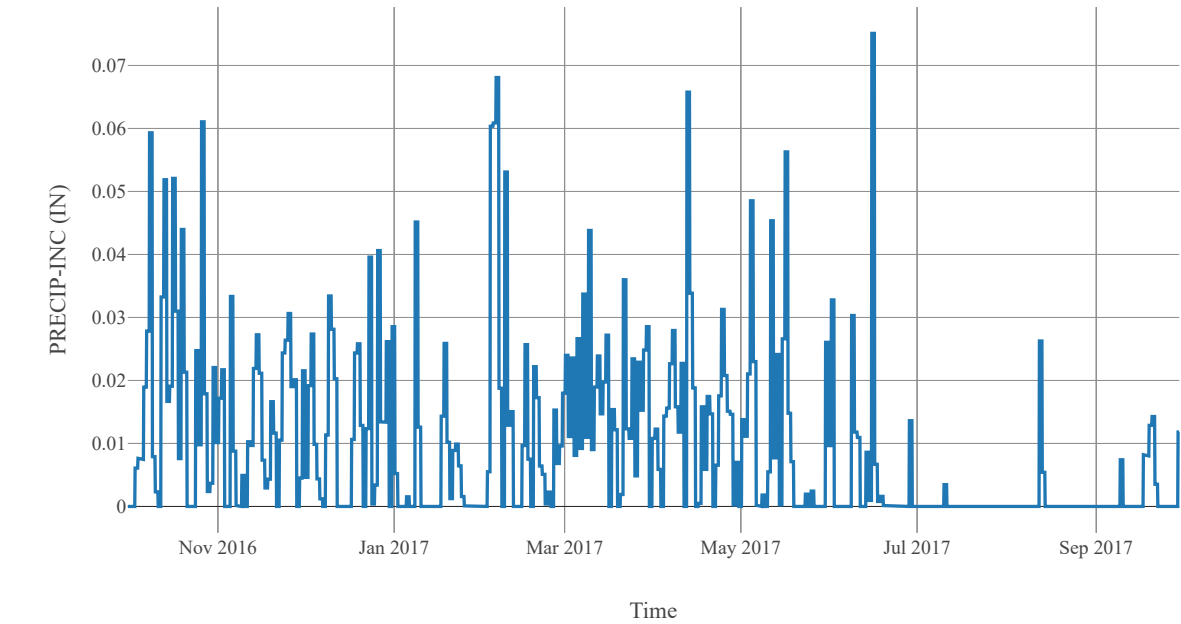
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	101
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.25
		Layer Number	2
		Storage Coefficient	505
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	89917.04	Ac-ft
Precipitation Volume	171228.87	Ac-ft
Loss Volume	131506.15	Ac-ft
Excess Volume	118.46	Ac-ft

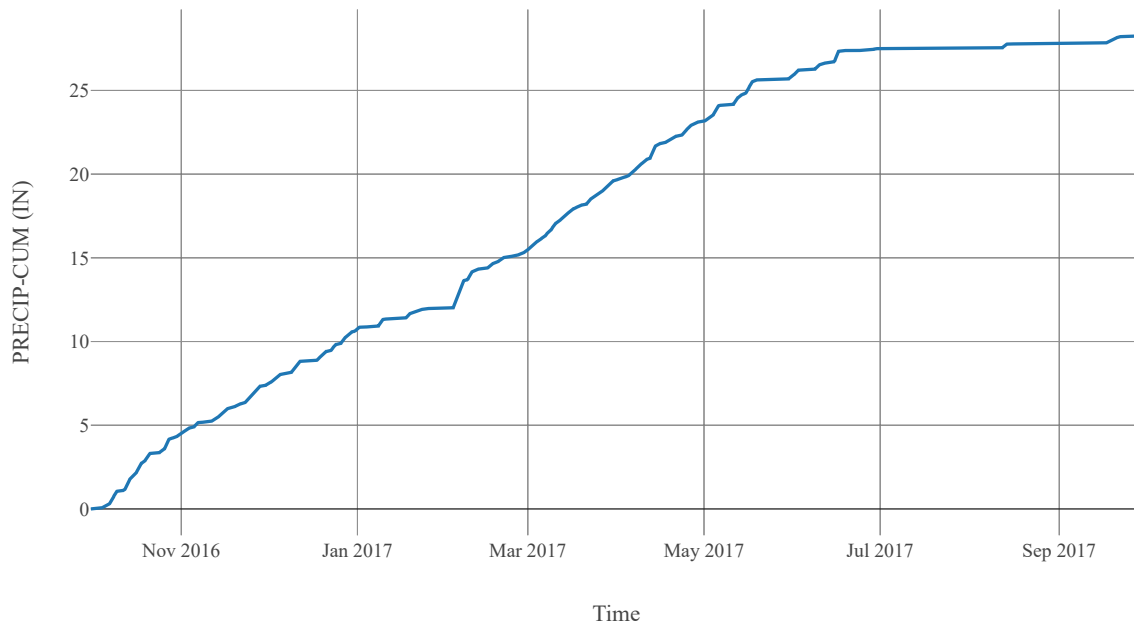
Outflow



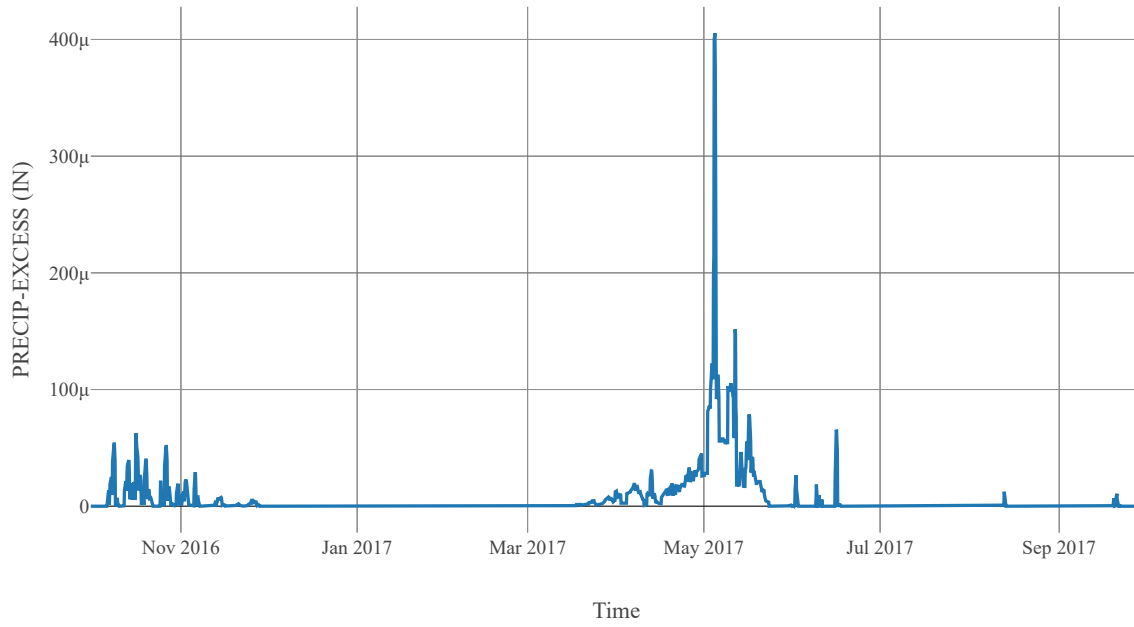
Precipitation



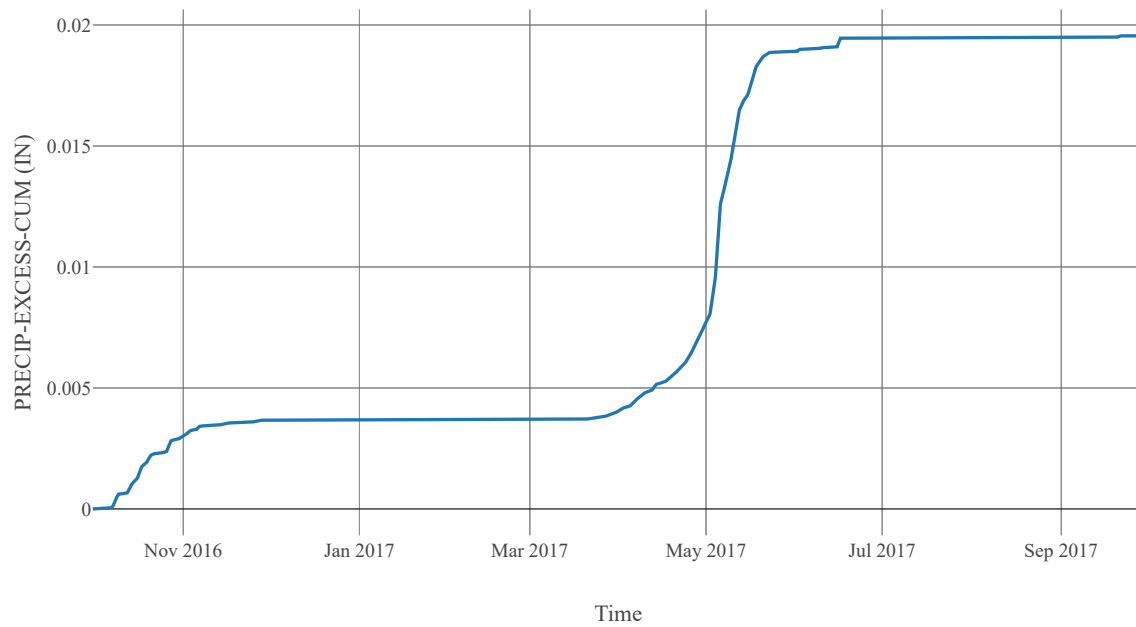
Cumulative Precipitation



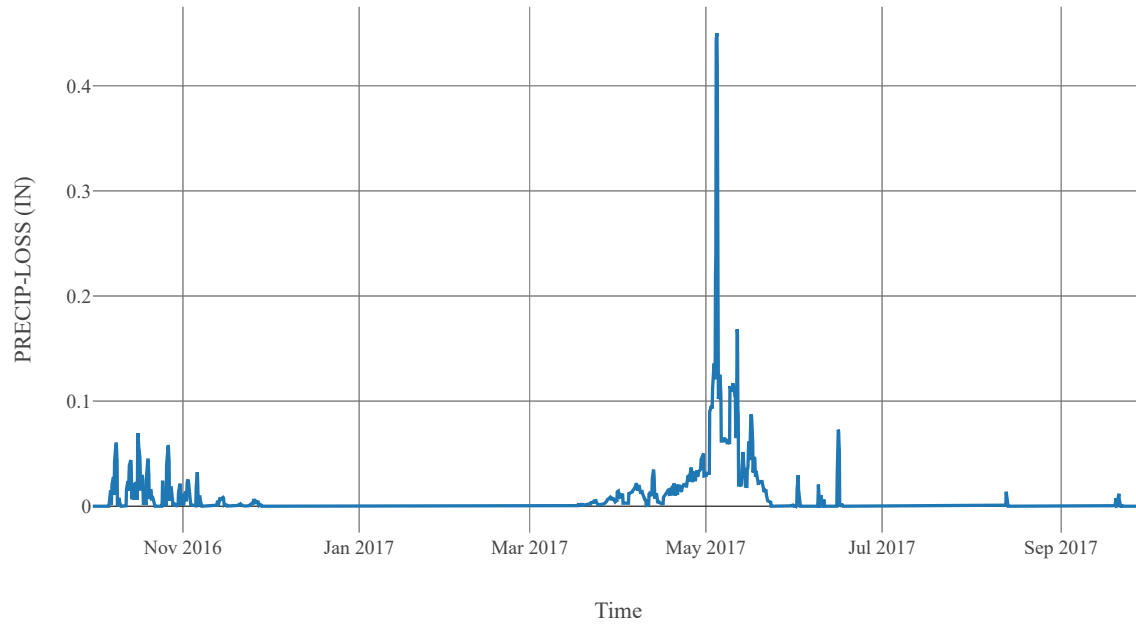
Excess Precipitation



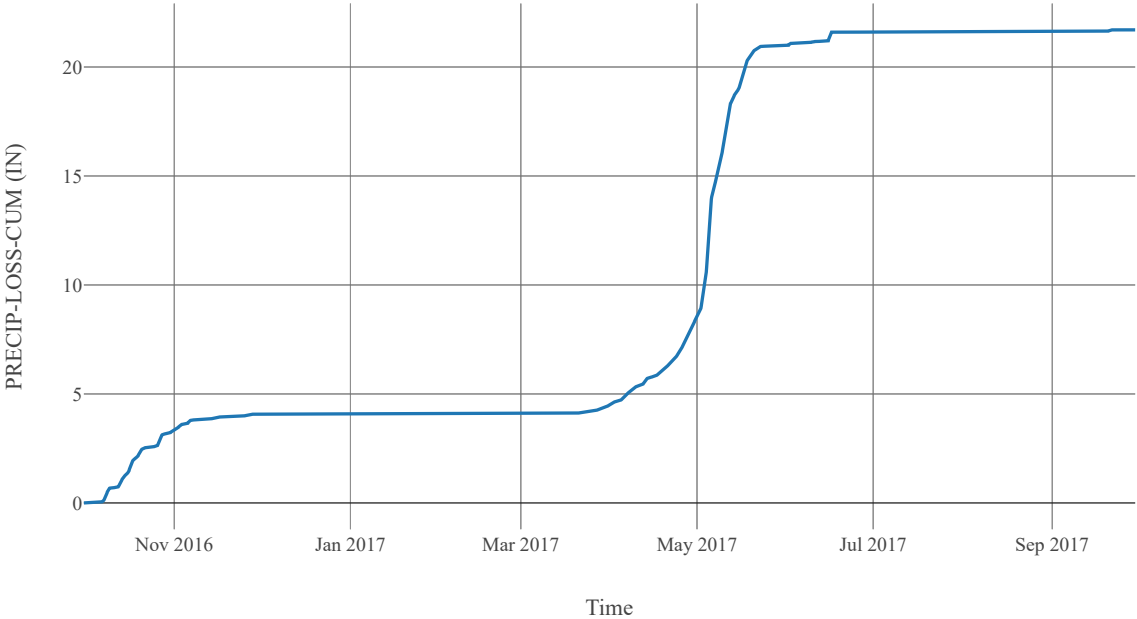
Cumulative Excess Precipitation



Precipitation Loss

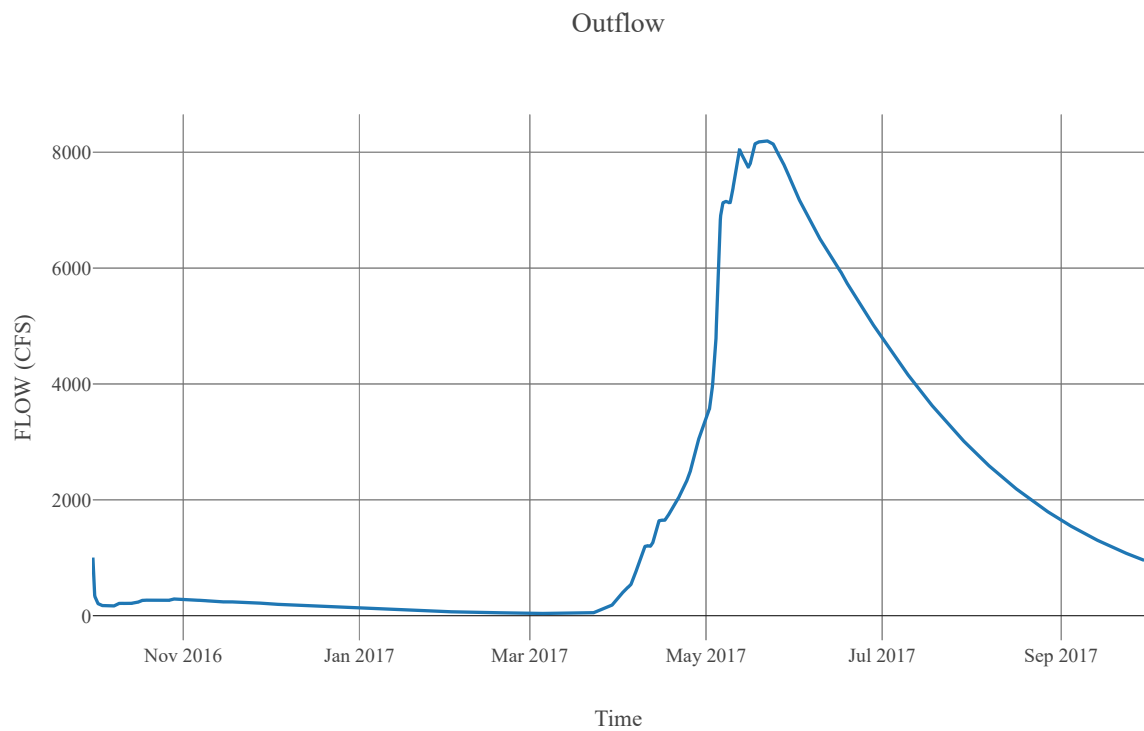


Cumulative Precipitation Loss



Junction : VaseuxCk_CF

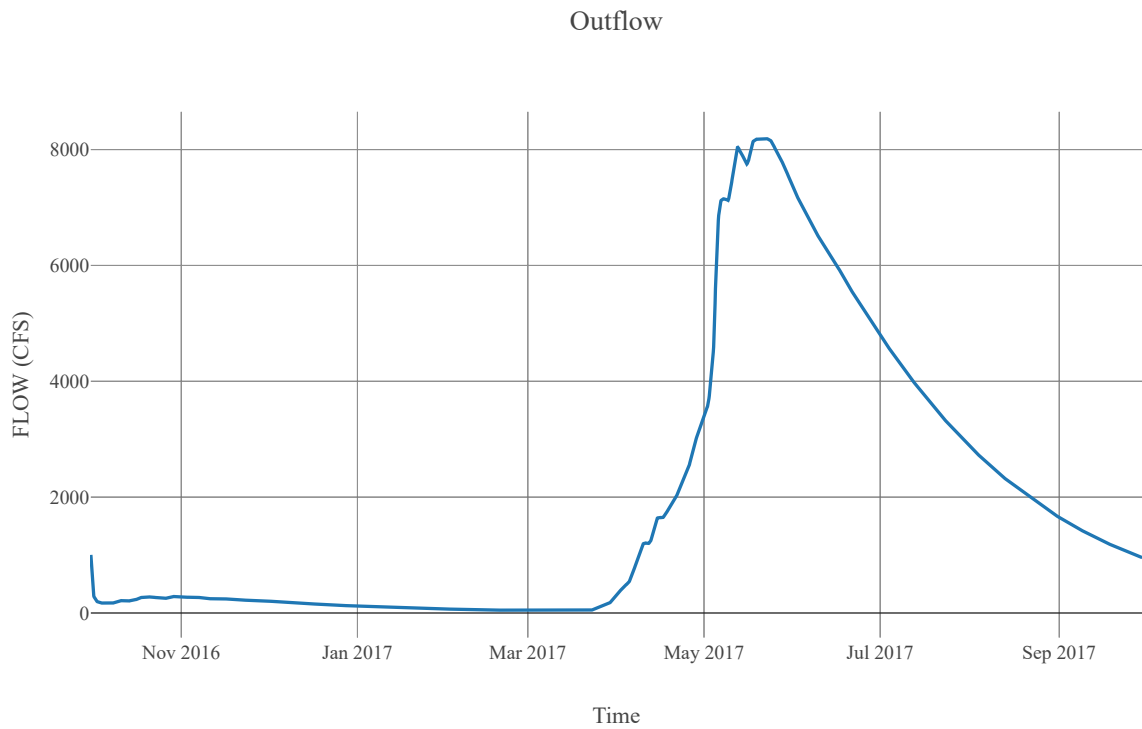
Downstream : OkanaganRv_R050



Reach : OkanaganRv_R050

Loss Method : None
Downstream : Okanagan Nr Oliver

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : OkanaganRv_S050

Area : 178.22
Latitude : 49.23
Longitude : -119.59
Downstream : Okanagan Nr Oliver

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	1.18
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

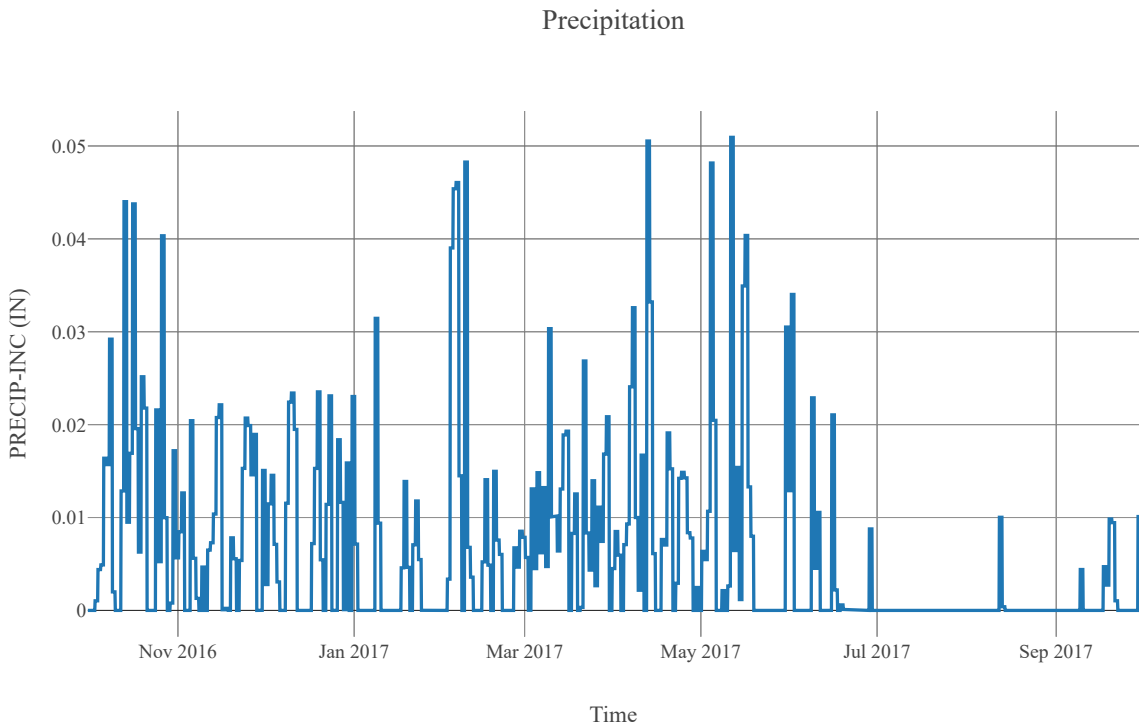
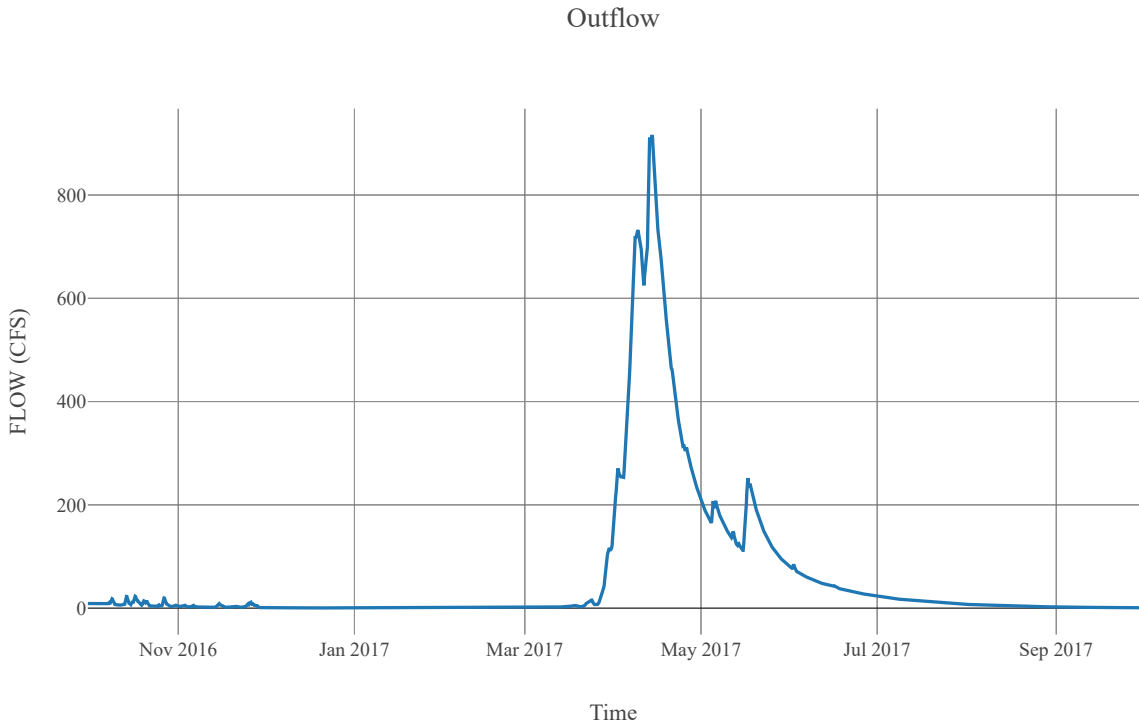
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.46
Storage Coefficient	6.46

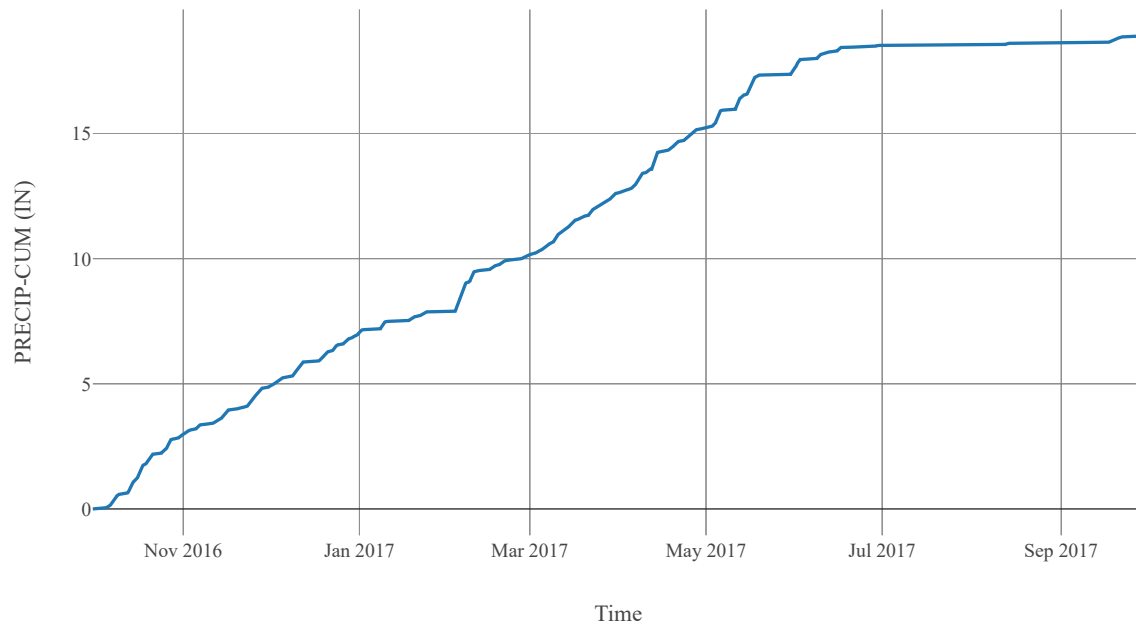
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	129.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	646
		Number Steps	1

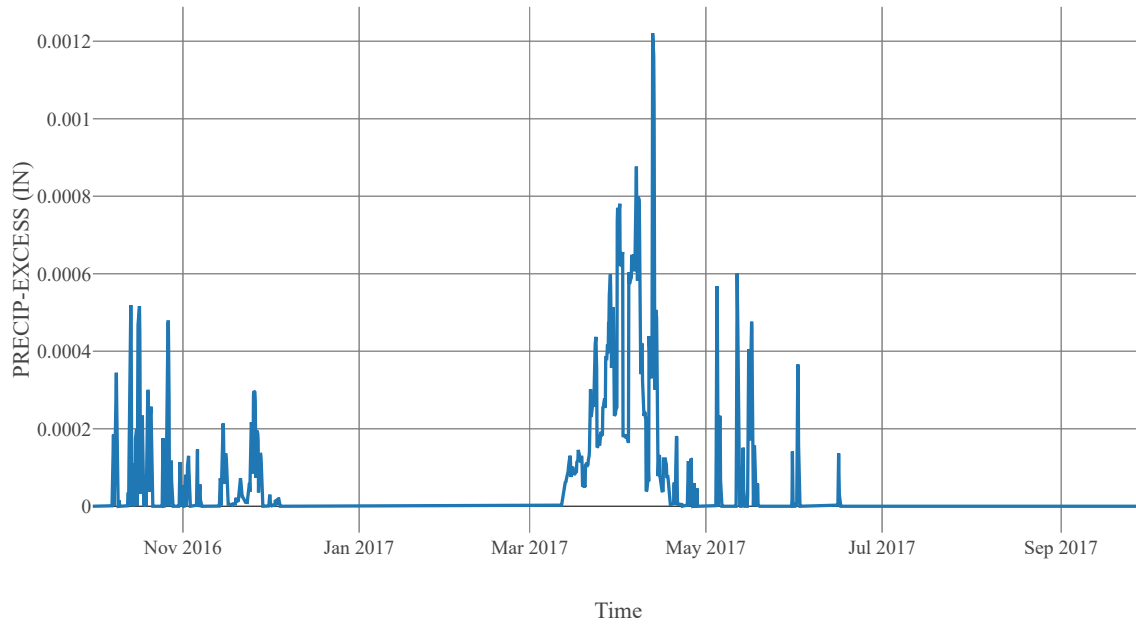
Statistics		
Name	Value	Unit
Baseflow Volume	42739.9	Ac-ft
Precipitation Volume	179653.82	Ac-ft
Loss Volume	107116.86	Ac-ft
Excess Volume	1279.07	Ac-ft



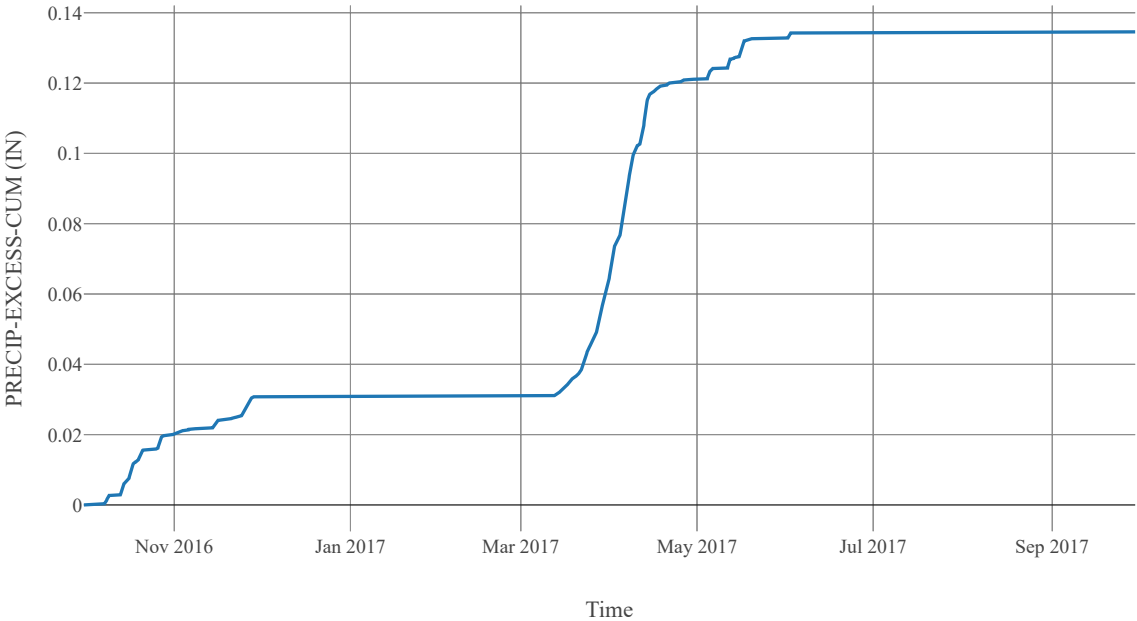
Cumulative Precipitation



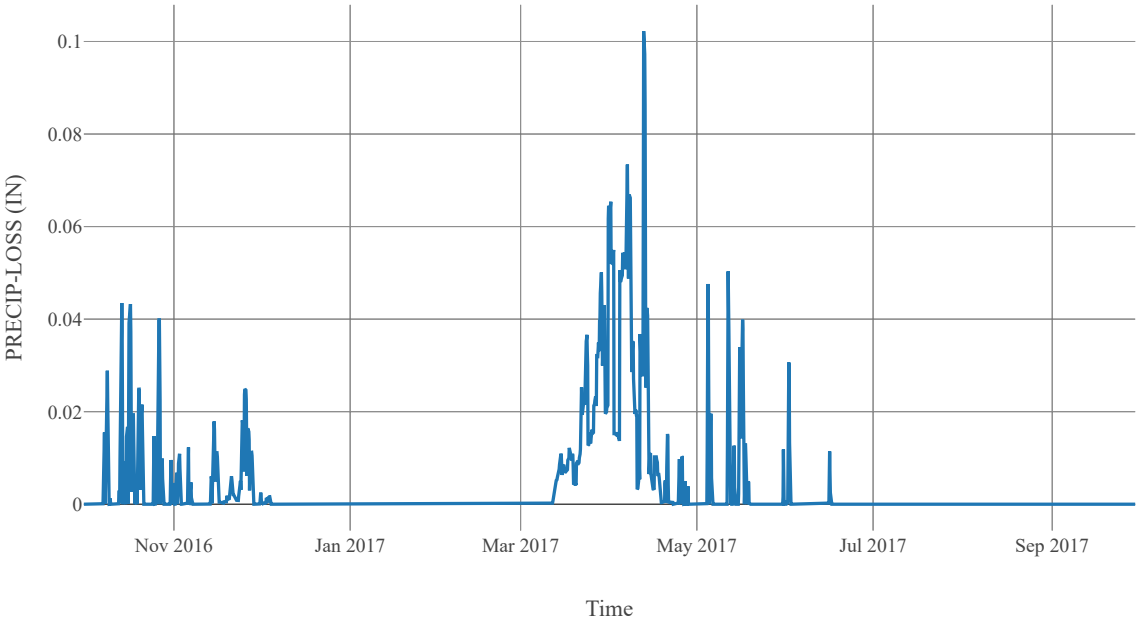
Excess Precipitation



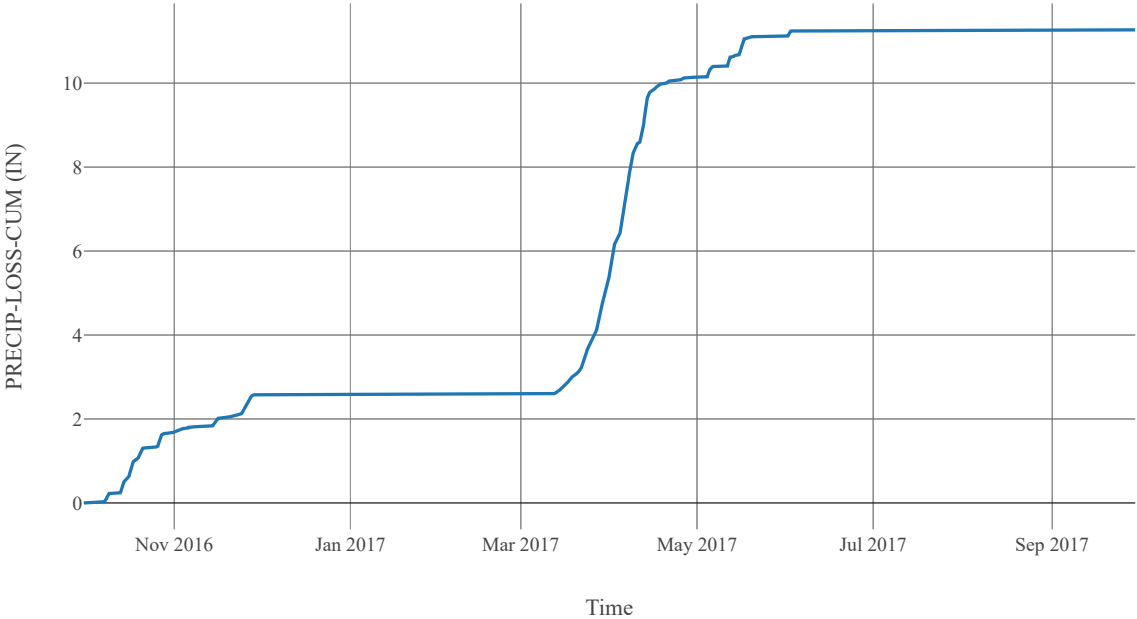
Cumulative Excess Precipitation



Precipitation Loss

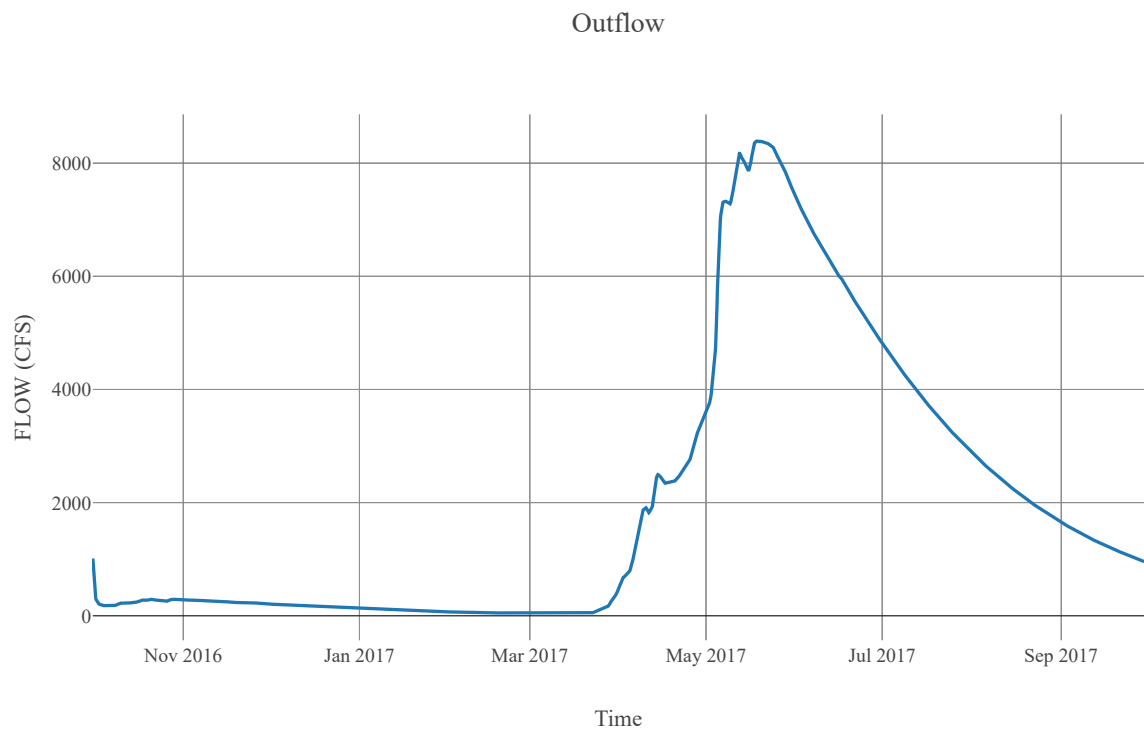


Cumulative Precipitation Loss



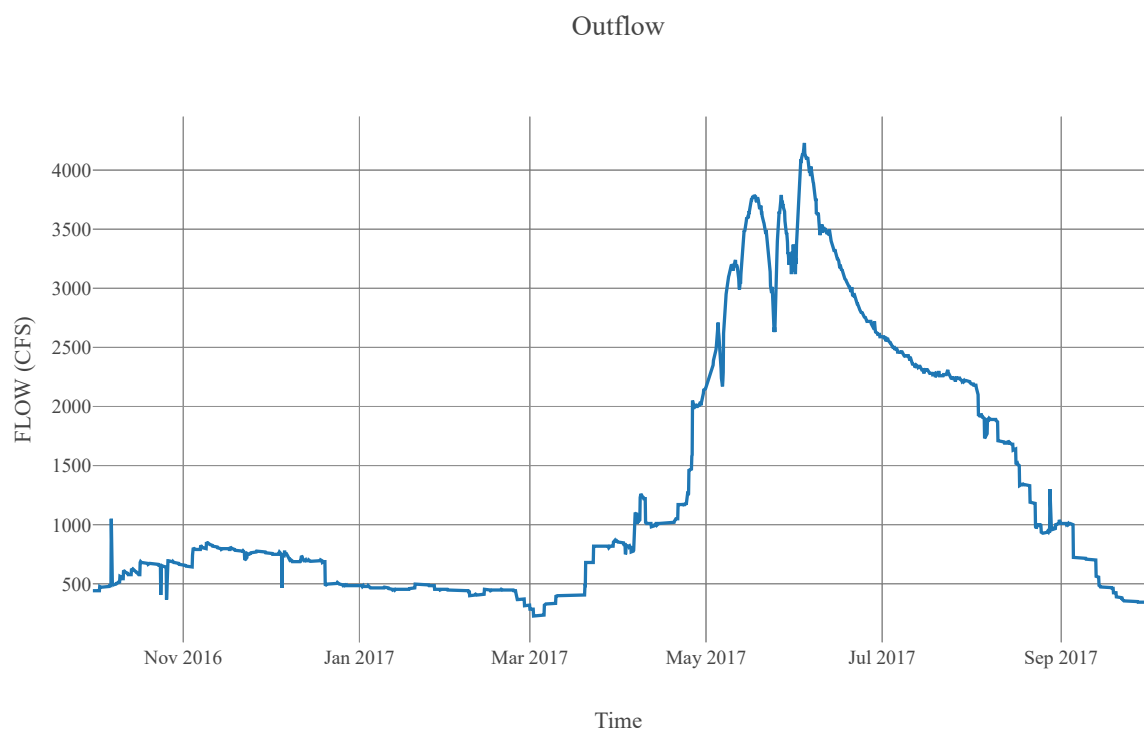
Junction : OkanaganNrOliver

Downstream : Osoyoos Lake



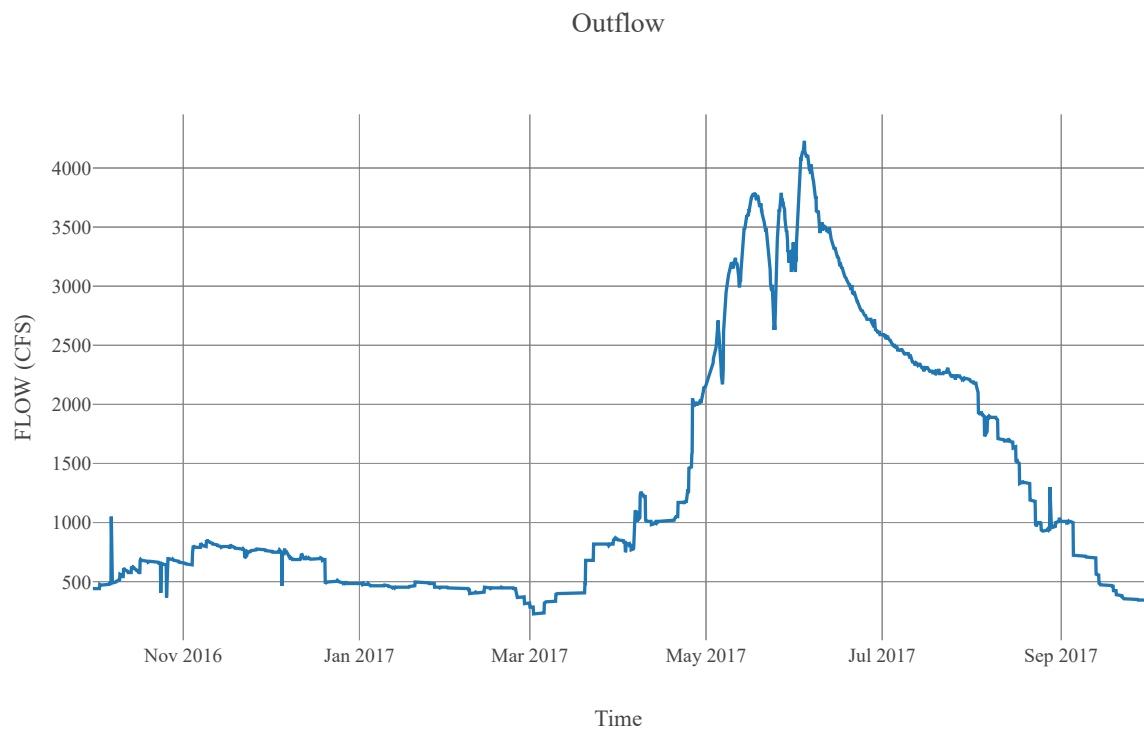
Reservoir : OsoyoosLake

Quality Method : Unspecified
Method : Specified Outflow
Downstream : Okanagan Nr Oroville



Junction : OkanaganNrOroville

Downstream : Similkameen_CF



Subbasin : OkanaganRv_S040

Area : 267.05
Latitude : 49.03
Longitude : -119.36
Downstream : Similkameen_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	3.87
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

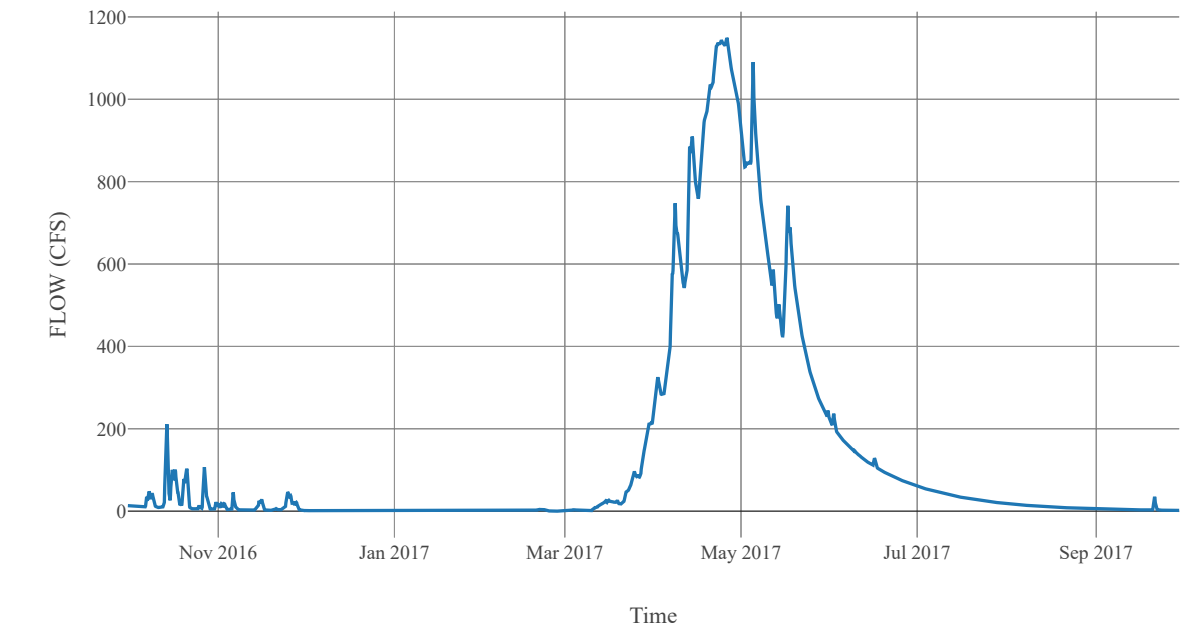
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.22
Storage Coefficient	6.22

Baseflow	
Method	Linear Reservoir

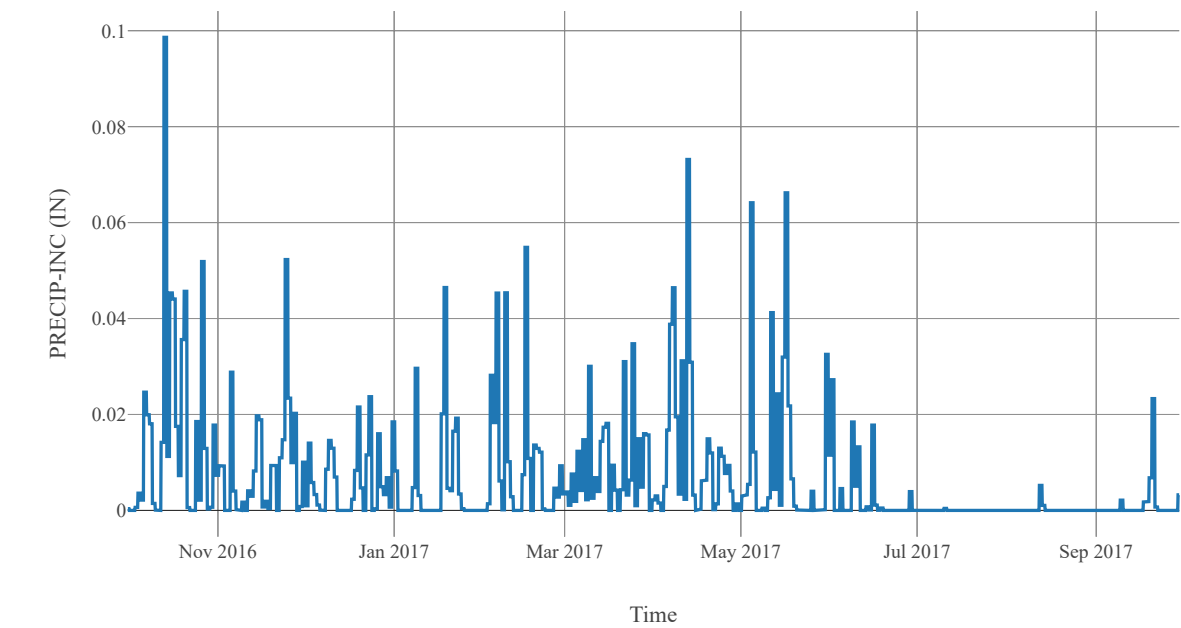
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	124.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	622
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	88969.12	Ac-ft
Precipitation Volume	289764.22	Ac-ft
Loss Volume	189359.08	Ac-ft
Excess Volume	7623.21	Ac-ft

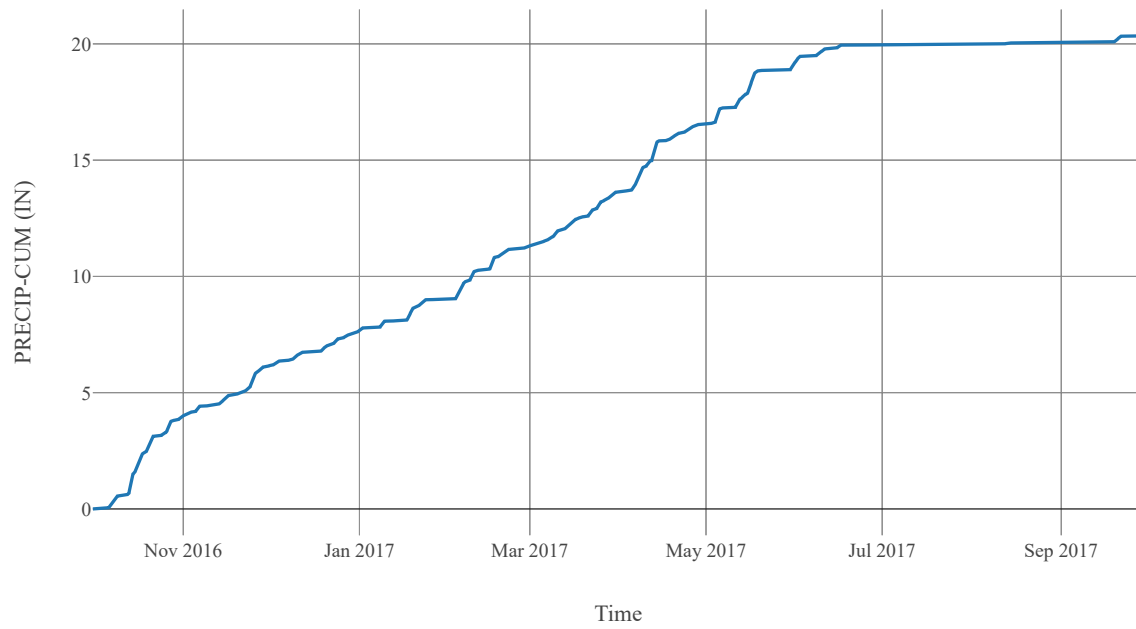
Outflow



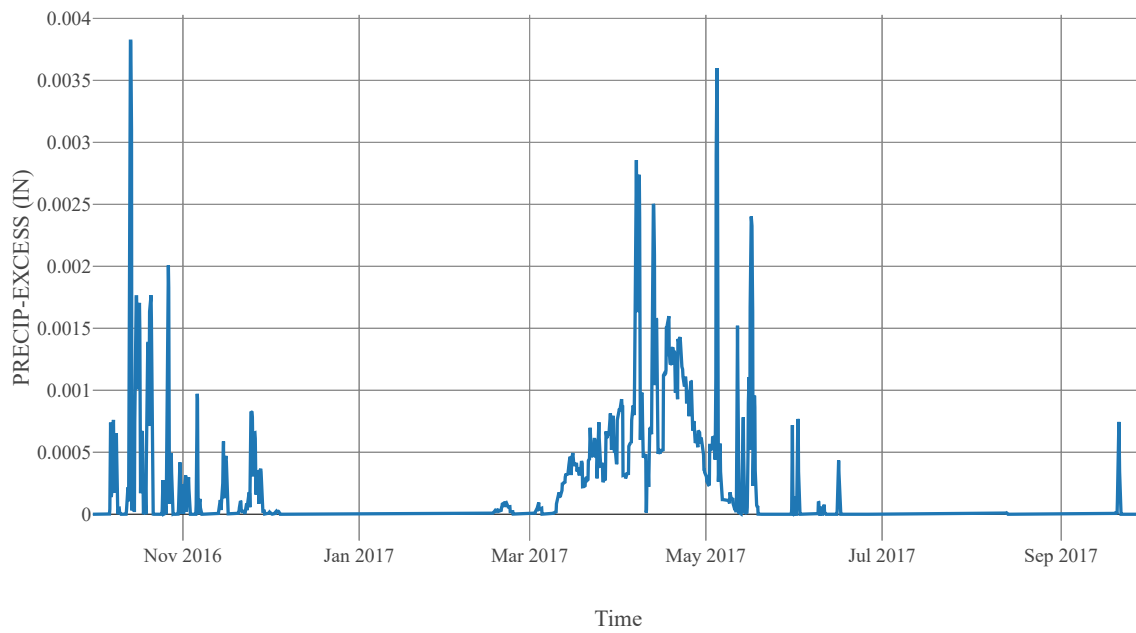
Precipitation



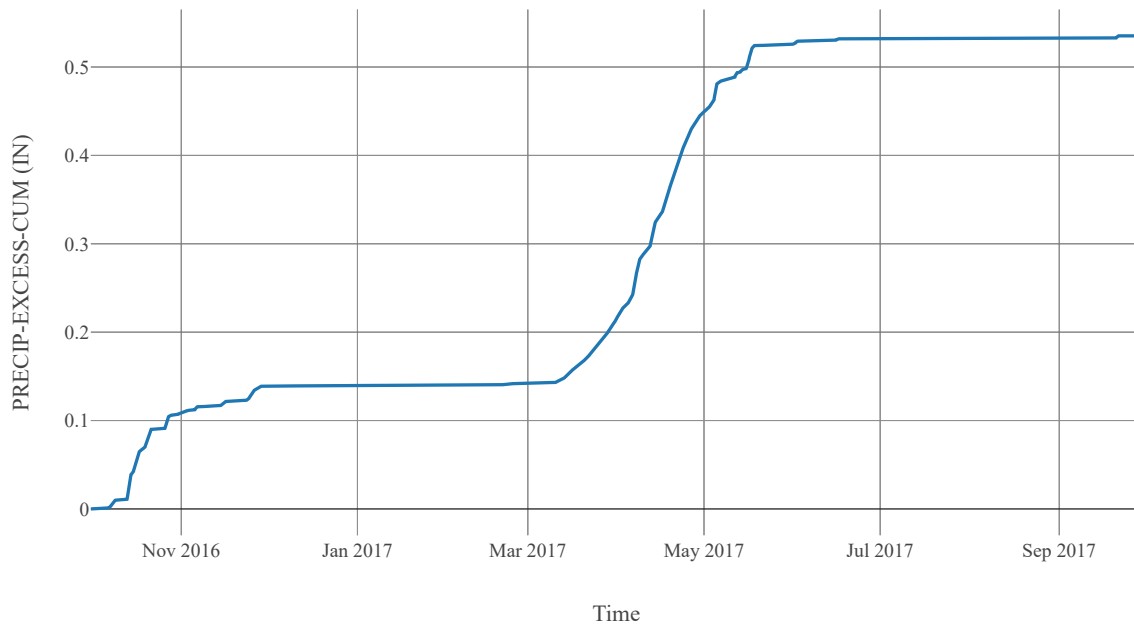
Cumulative Precipitation



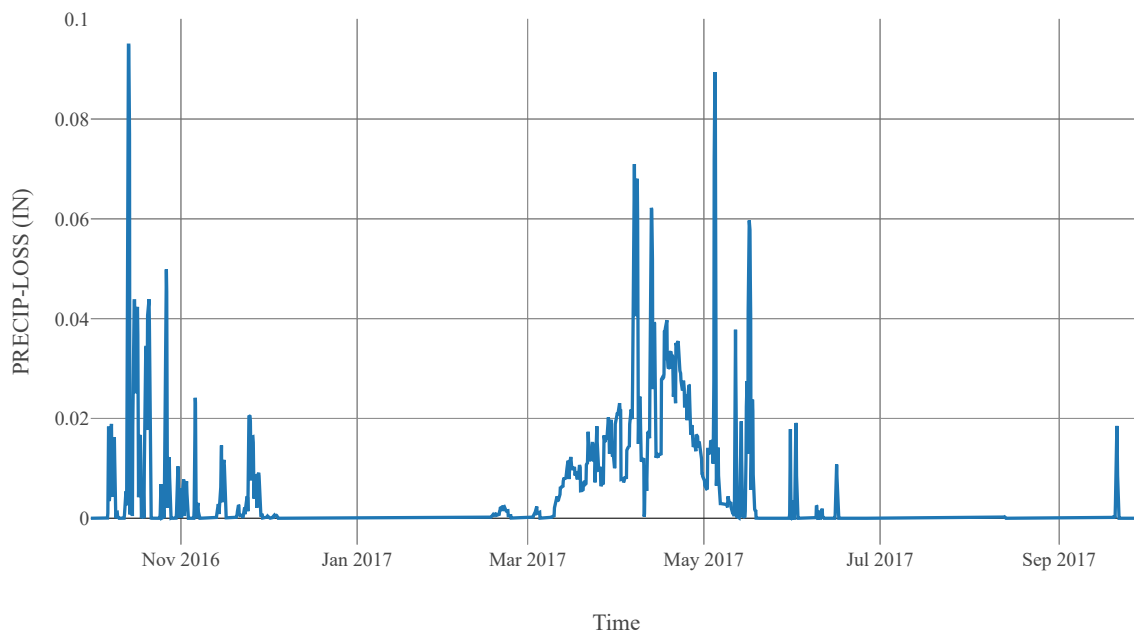
Excess Precipitation



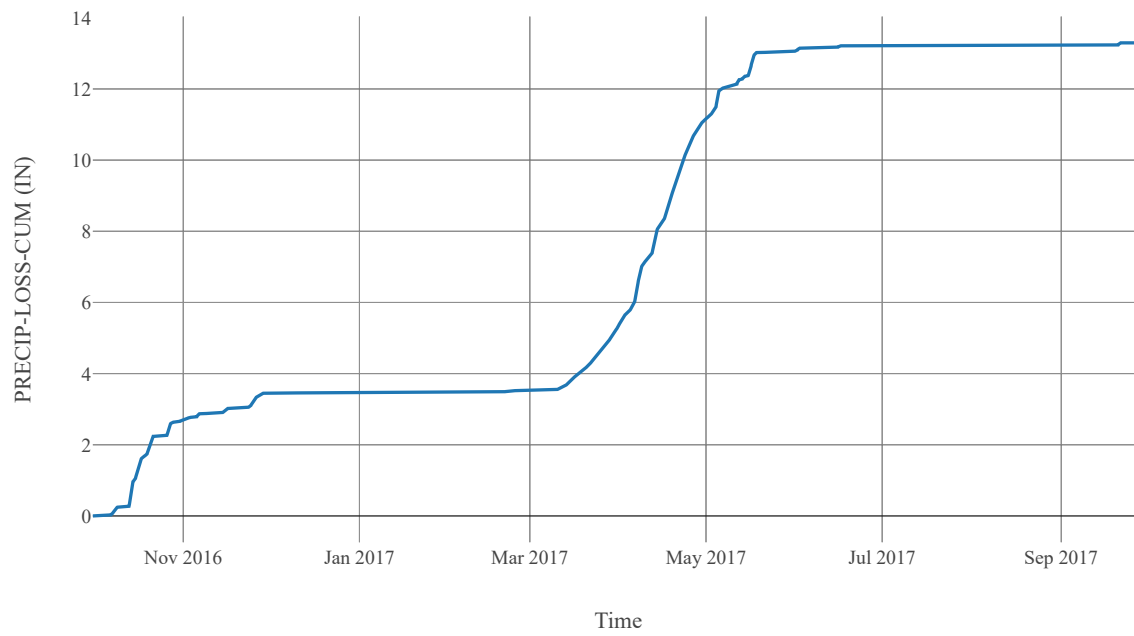
Cumulative Excess Precipitation



Precipitation Loss

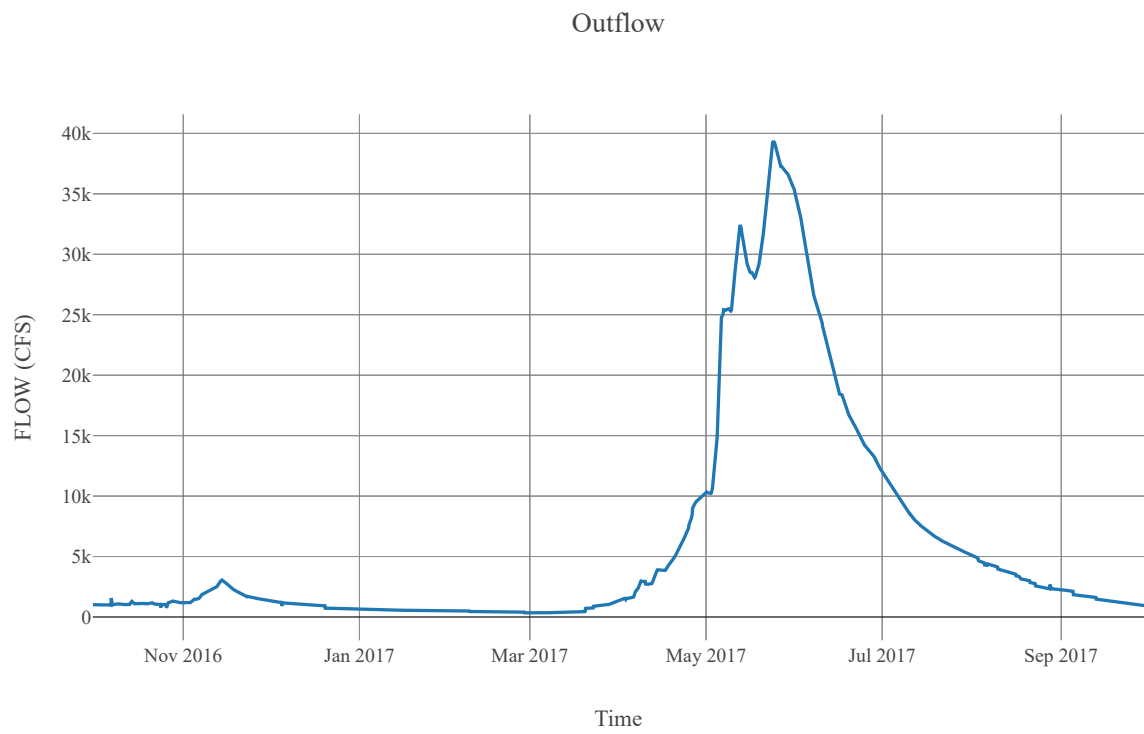


Cumulative Precipitation Loss



Junction : Similkameen_CF

Downstream : OkanaganRv_R035

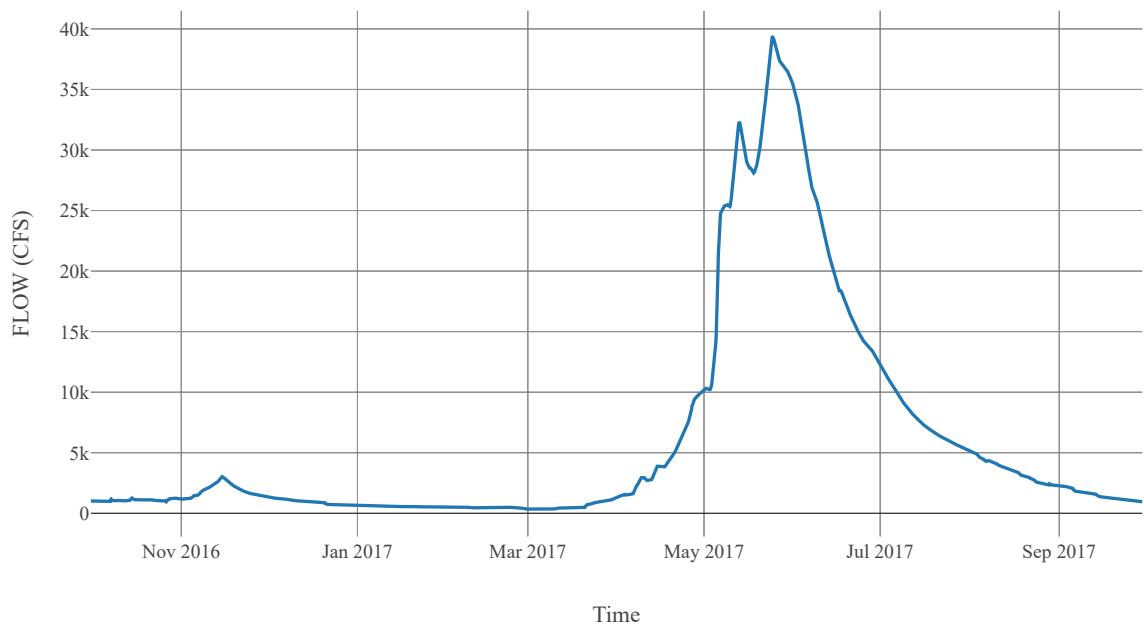


Reach : OkanaganRv_R035

Loss Method : None
Downstream : BonaparteCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N

Outflow



Subbasin : BonaparteCk_S010

Area : 143.3
Observed Hydrograph : Bonaparte creek at tonasket
Latitude : 48.68
Longitude : -119.19
Downstream : BonaparteCk_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.48
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

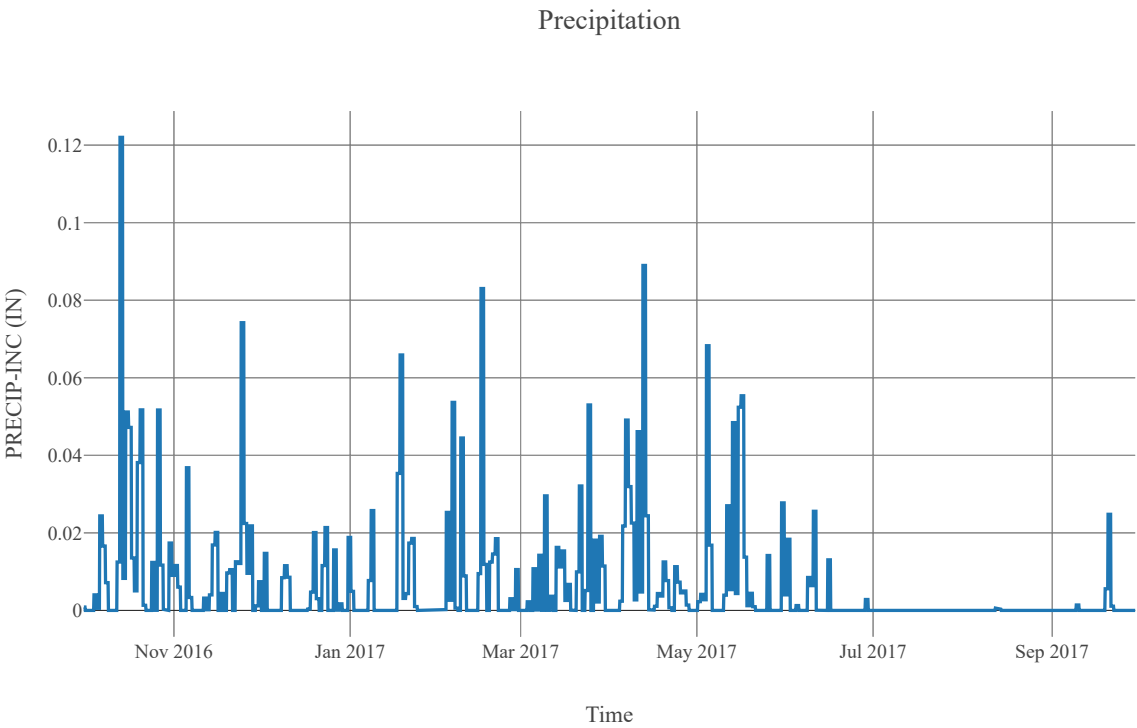
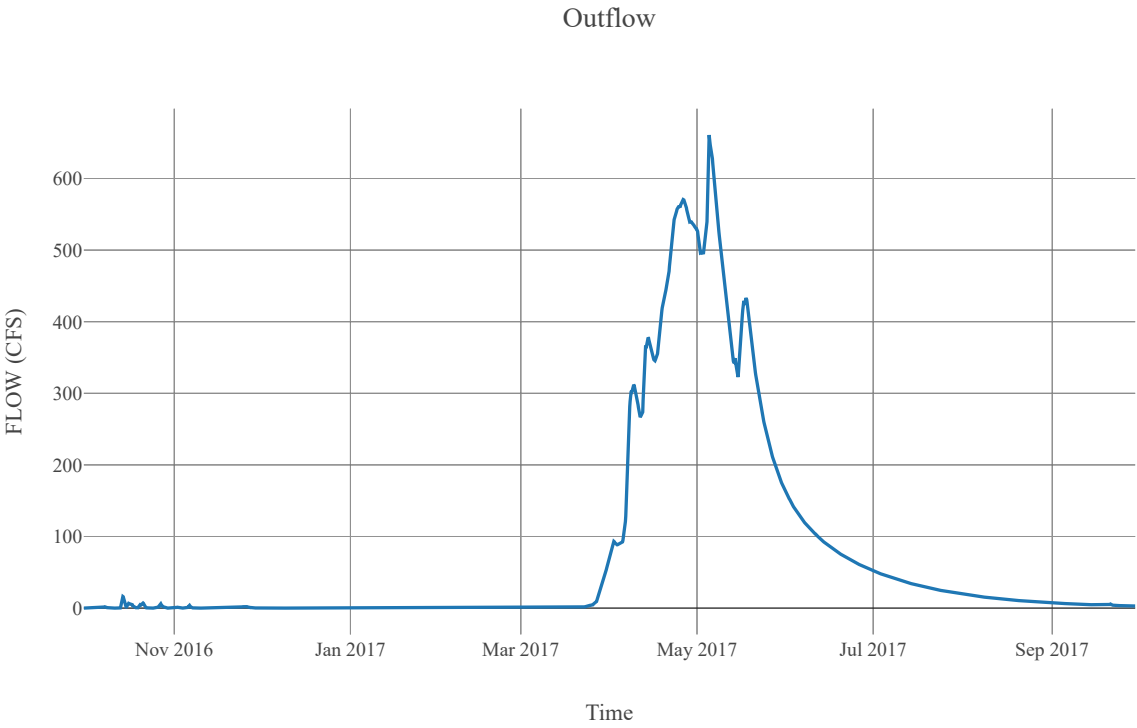
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.57
Storage Coefficient	7.57

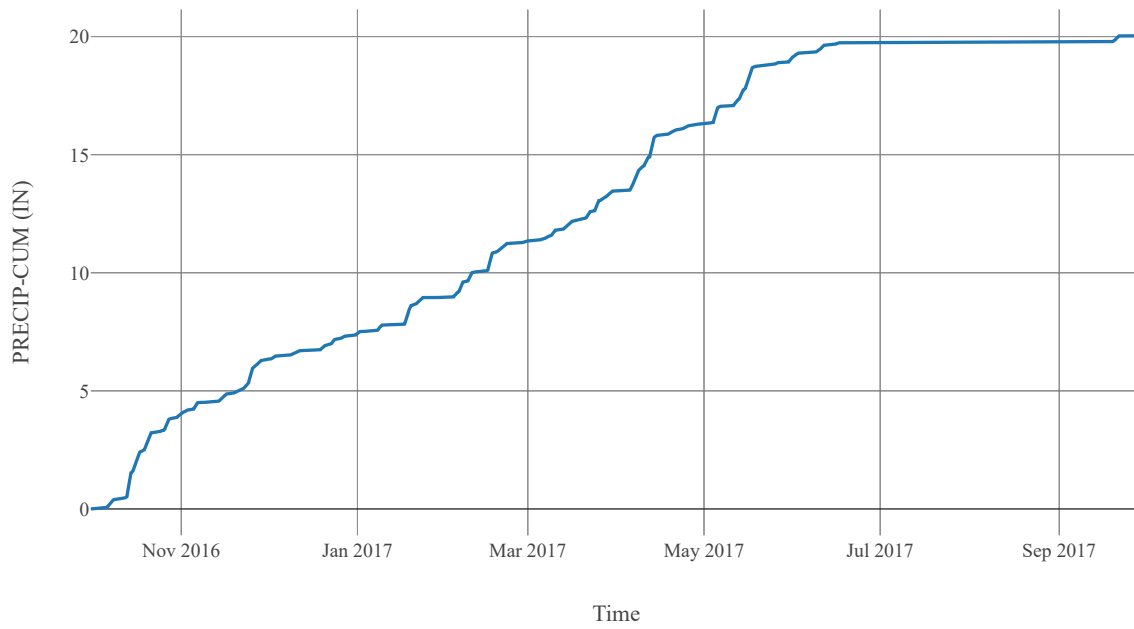
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	151.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	2
		Storage Coefficient	757
		Number Steps	1

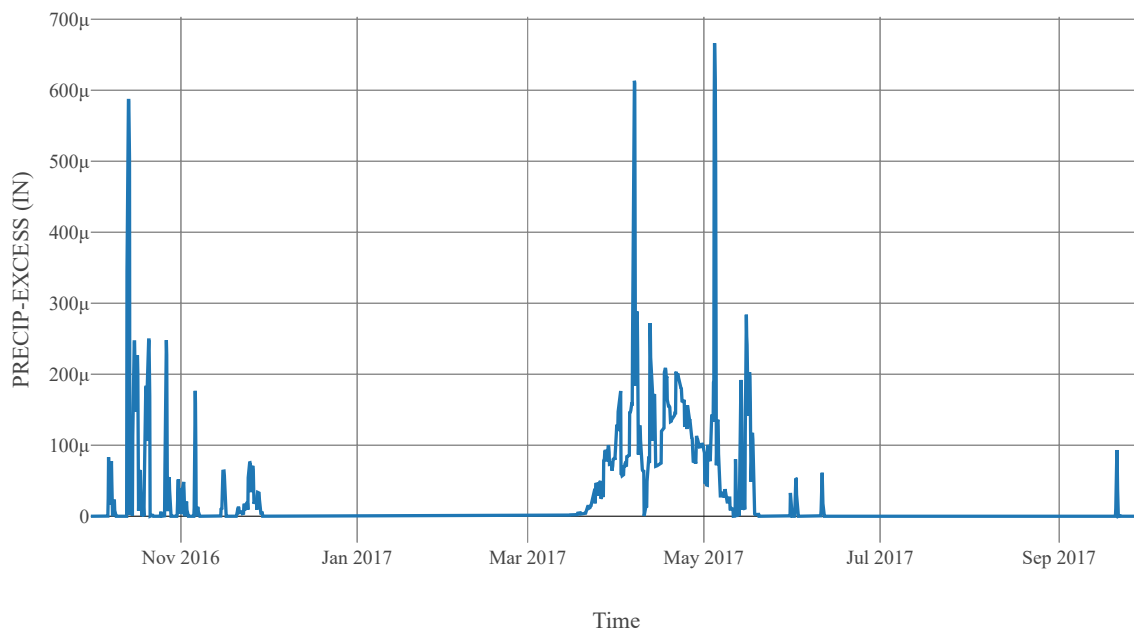
Statistics		
Name	Value	Unit
Baseflow Volume	53349.89	Ac-ft
Precipitation Volume	153085.56	Ac-ft
Loss Volume	109470.43	Ac-ft
Excess Volume	527.99	Ac-ft



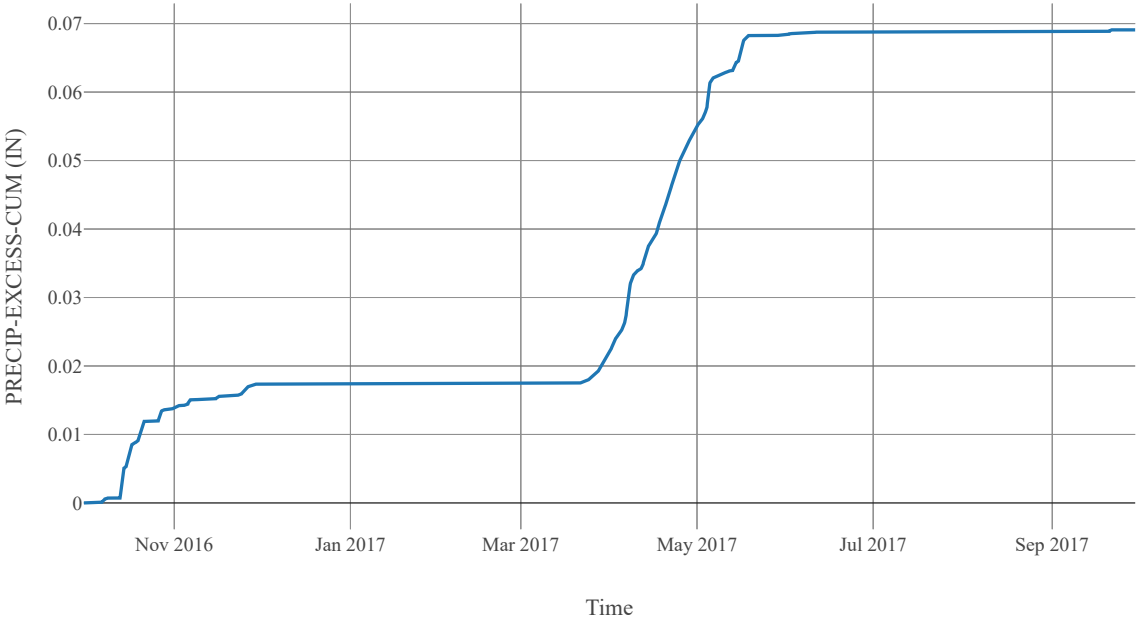
Cumulative Precipitation



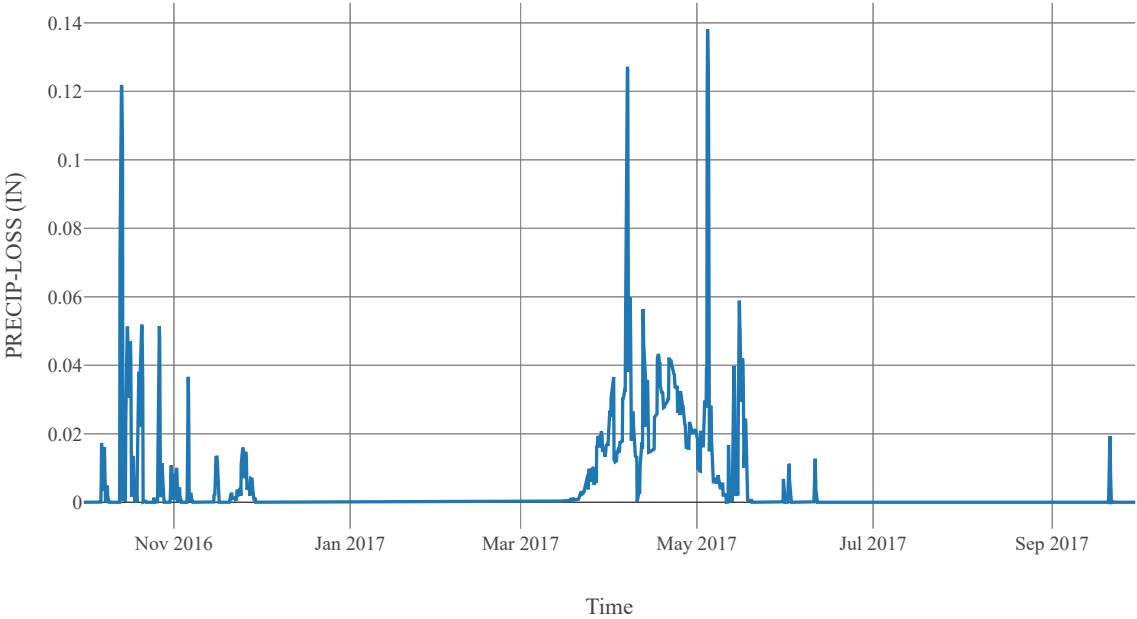
Excess Precipitation



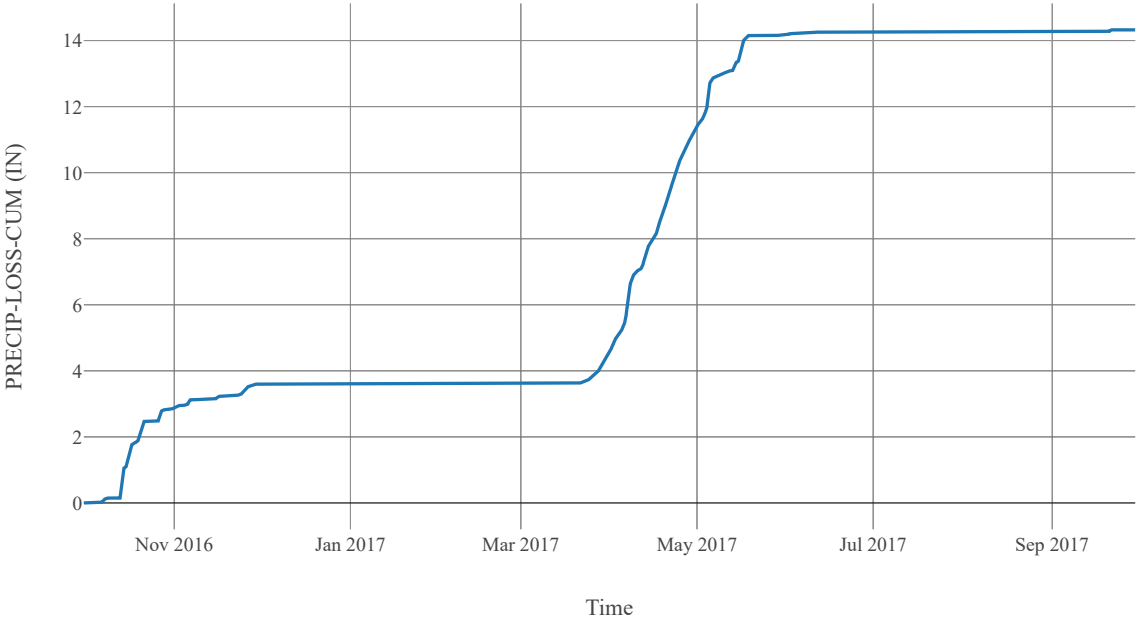
Cumulative Excess Precipitation



Precipitation Loss

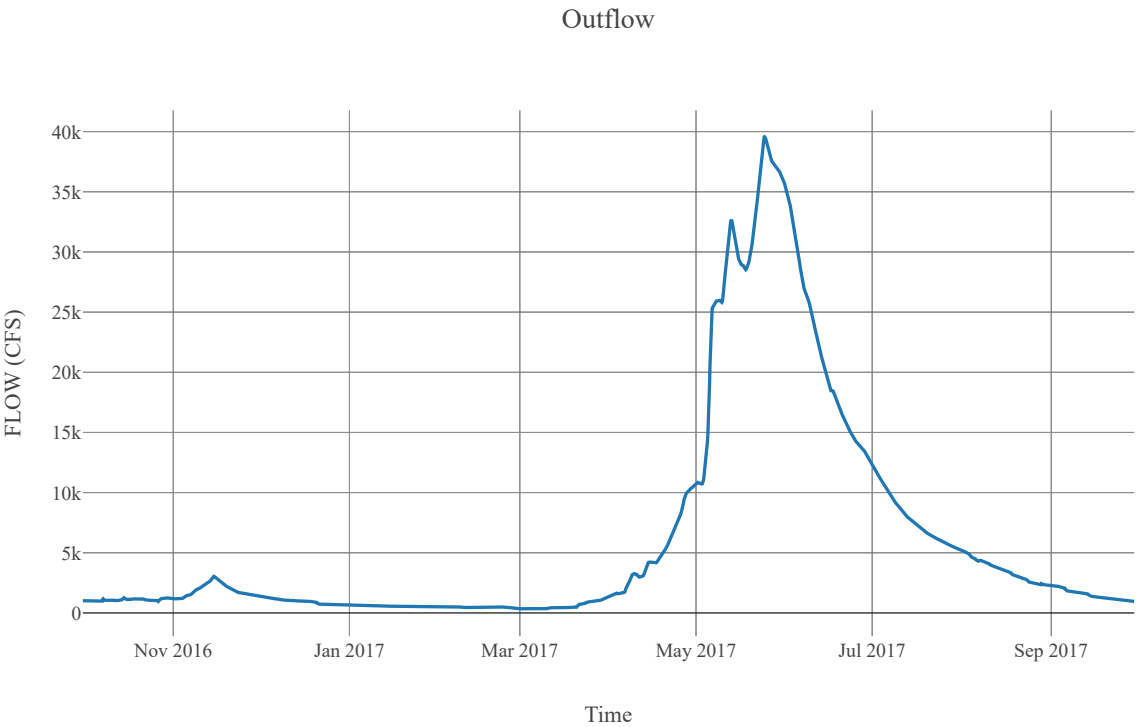


Cumulative Precipitation Loss



Junction : BonaparteCk_CF

Downstream : OkanaganRv_R030

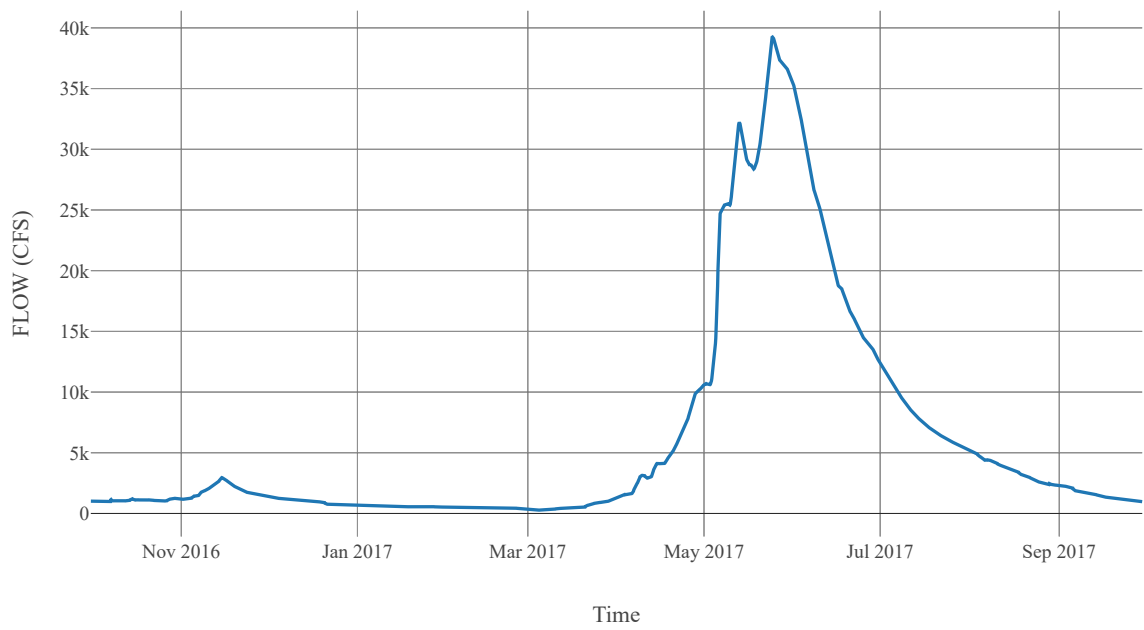


Reach : OkanaganRv_R030

Loss Method : None
Downstream : Okanagan Nr Tonasket

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N

Outflow



Subbasin : OkanaganRv_S030

Area : 373.49
Latitude : 48.81
Longitude : -119.42
Downstream : Okanagan Nr Tonasket

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.9
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

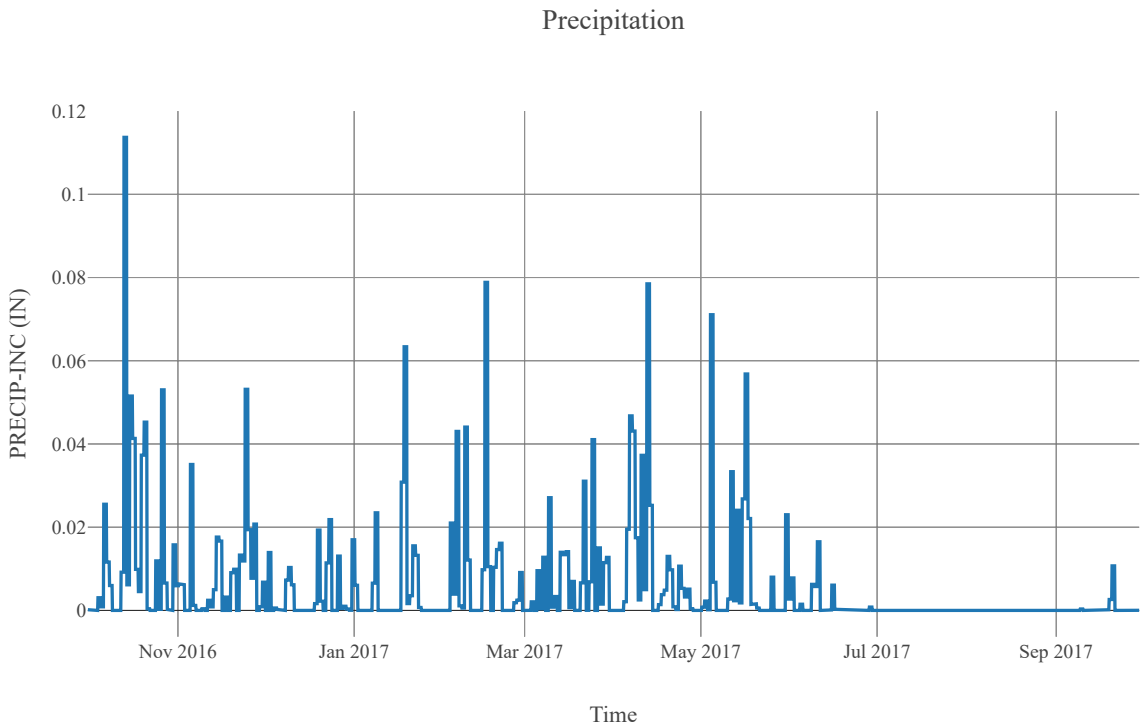
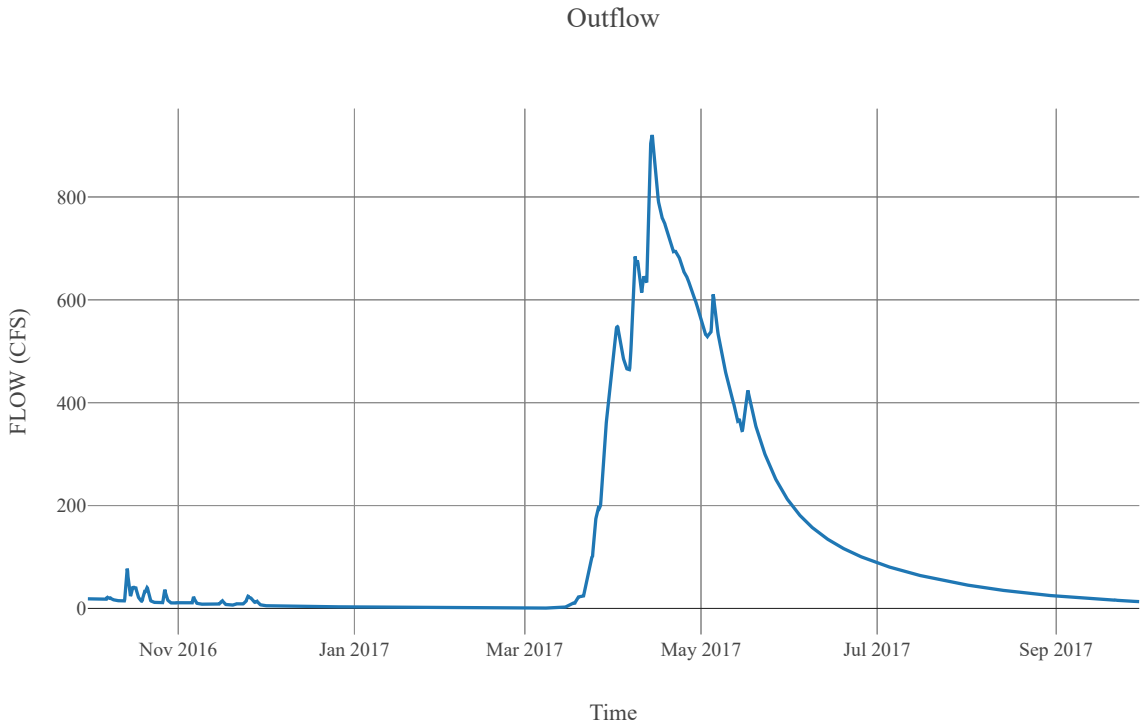
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	11.61
Storage Coefficient	11.61

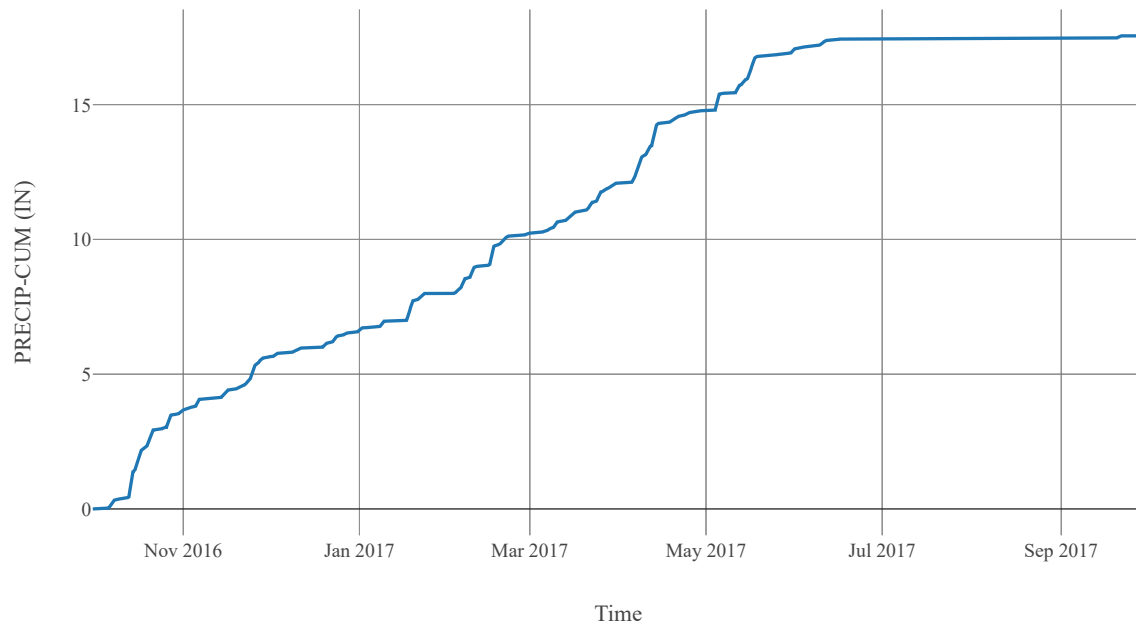
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	232.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1161
		Number Steps	1

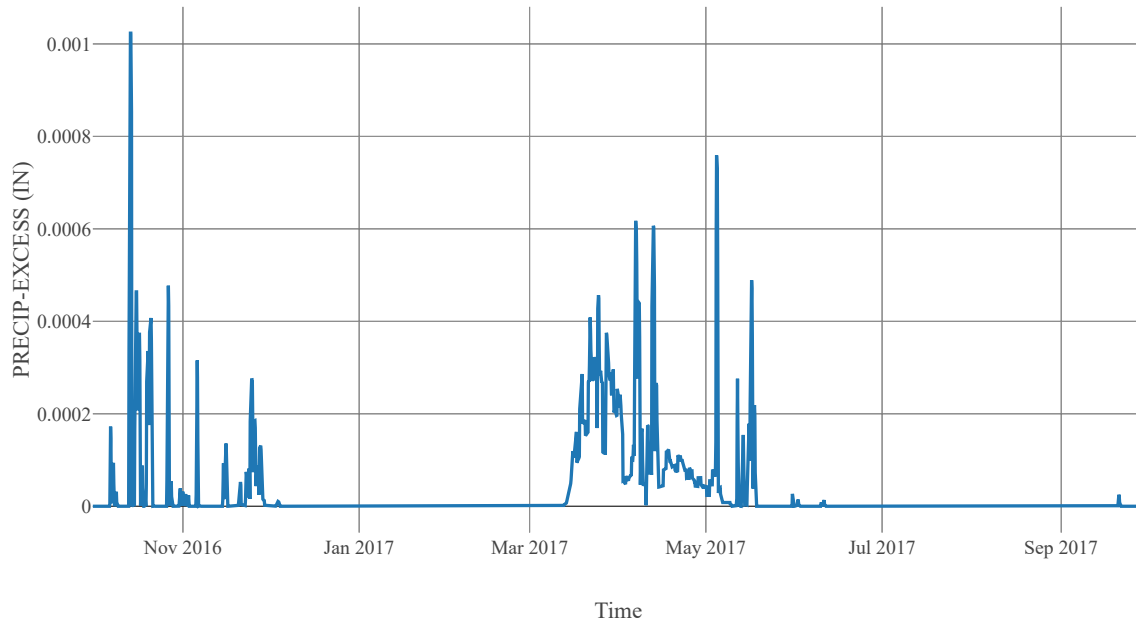
Statistics		
Name	Value	Unit
Baseflow Volume	82928.63	Ac-ft
Precipitation Volume	349617.19	Ac-ft
Loss Volume	229795.16	Ac-ft
Excess Volume	2086.94	Ac-ft



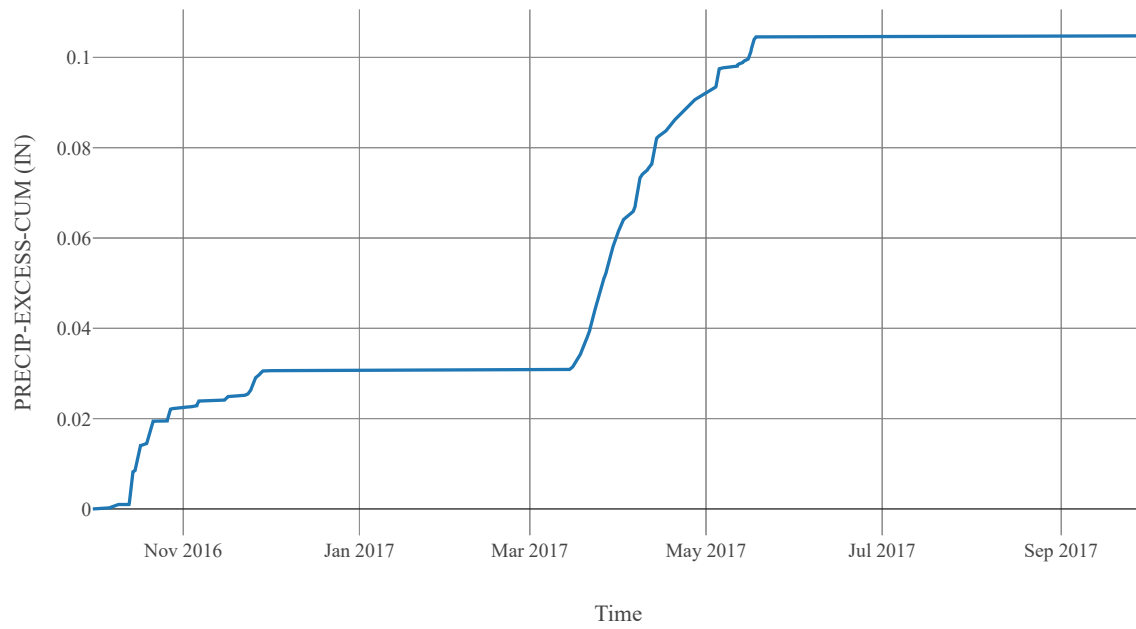
Cumulative Precipitation



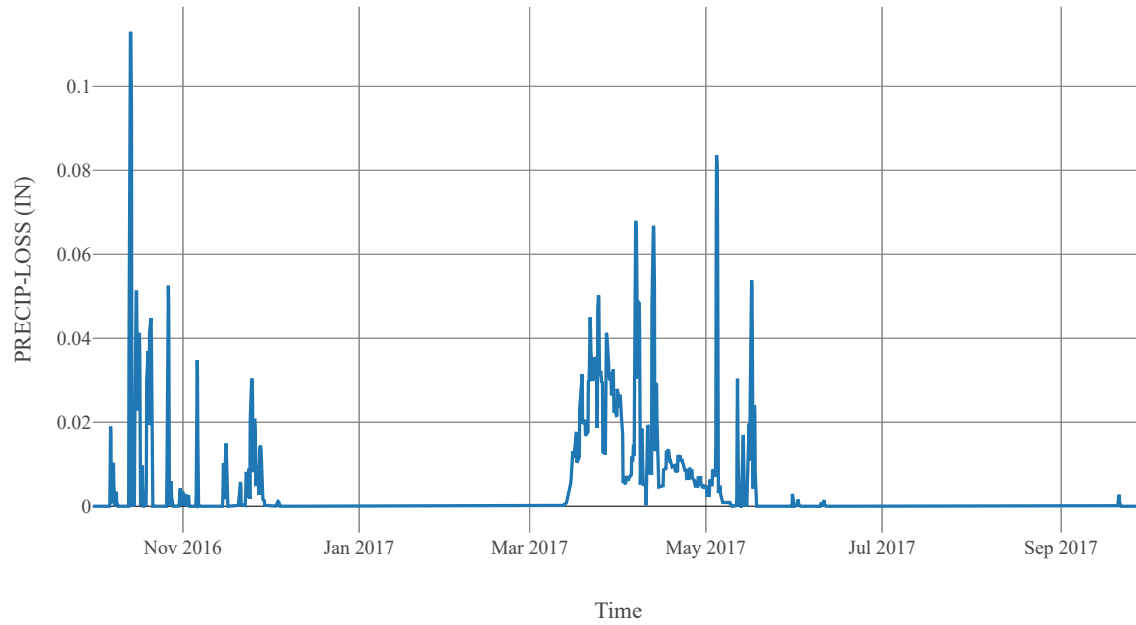
Excess Precipitation



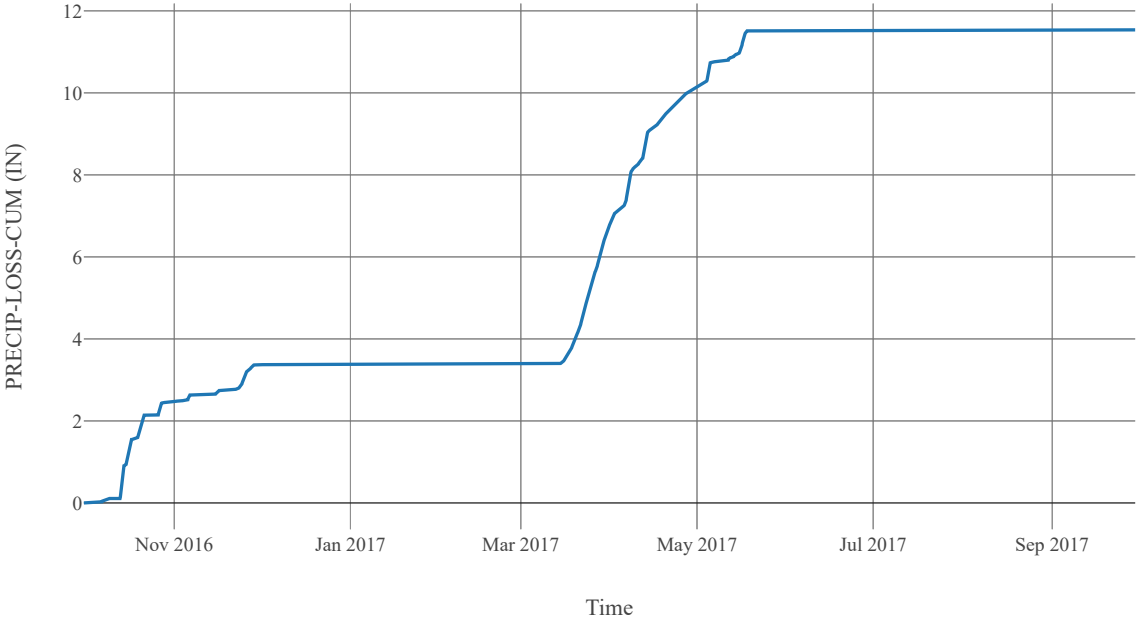
Cumulative Excess Precipitation



Precipitation Loss



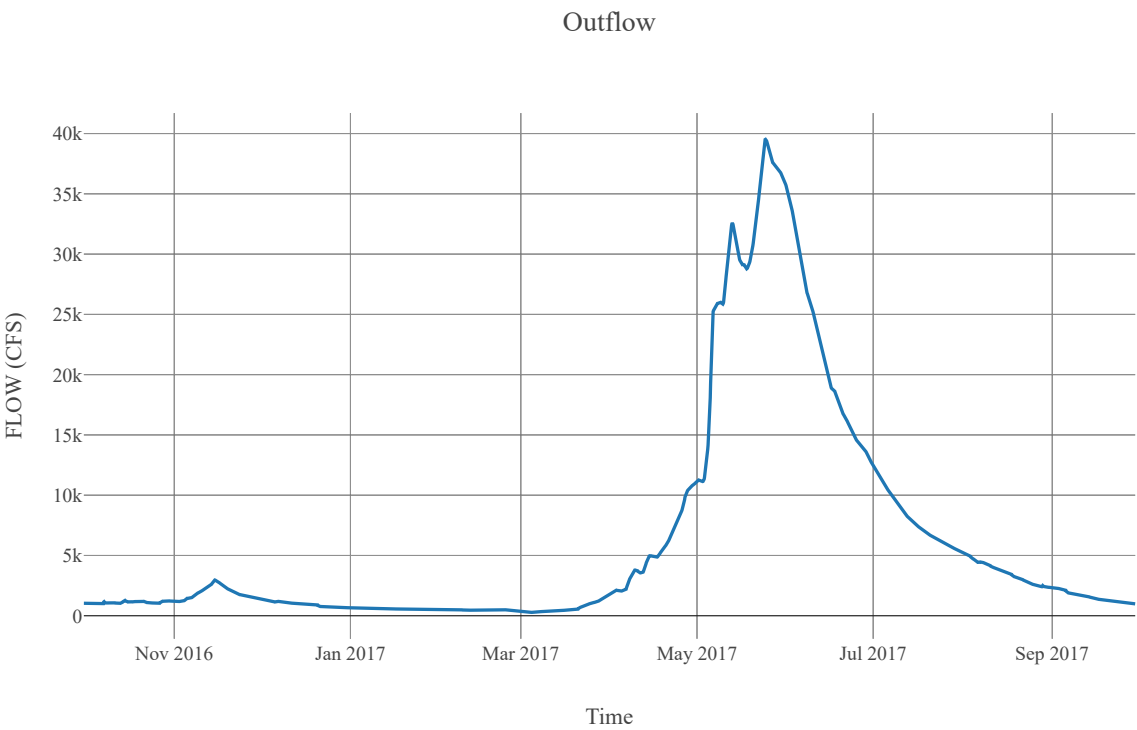
Cumulative Precipitation Loss



Junction : OkanaganNrTonasket

Observed Hydrograph : Okanogan river near tonasket

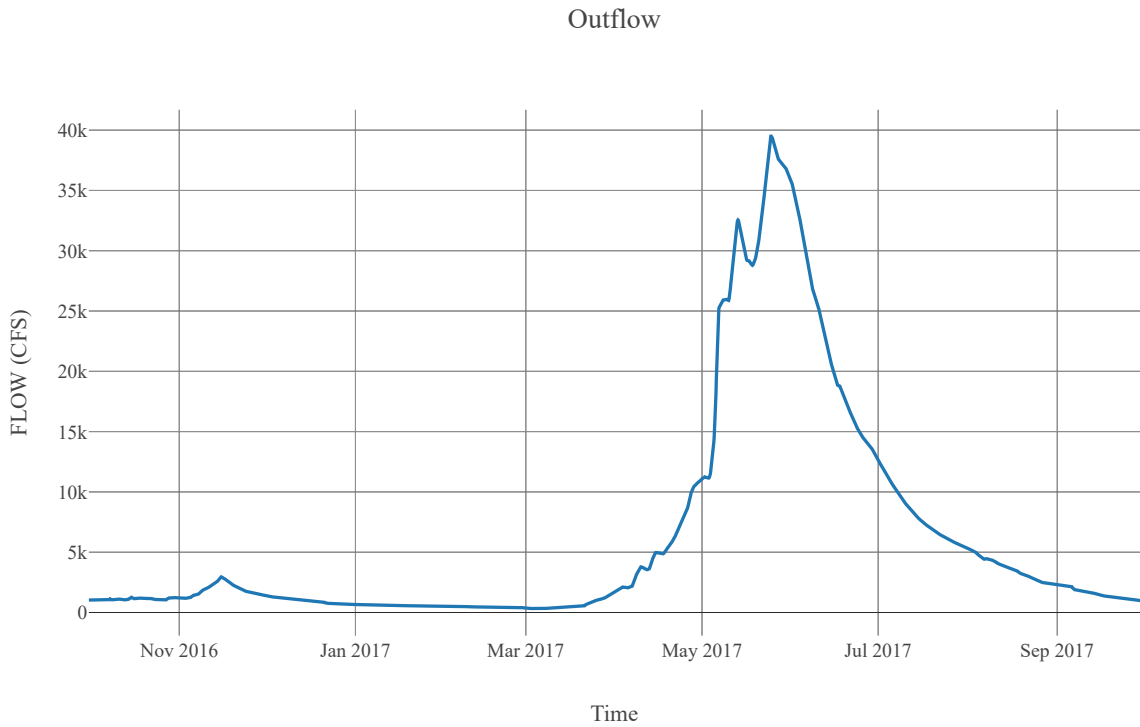
Downstream : OkanaganRv_R025



Reach : OkanaganRv_R025

Loss Method : None
Downstream : OmakCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : OmakCk_S010

Area : 119.41
Latitude : 48.36
Longitude : -119.23
Downstream : Omak Ck

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.09
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

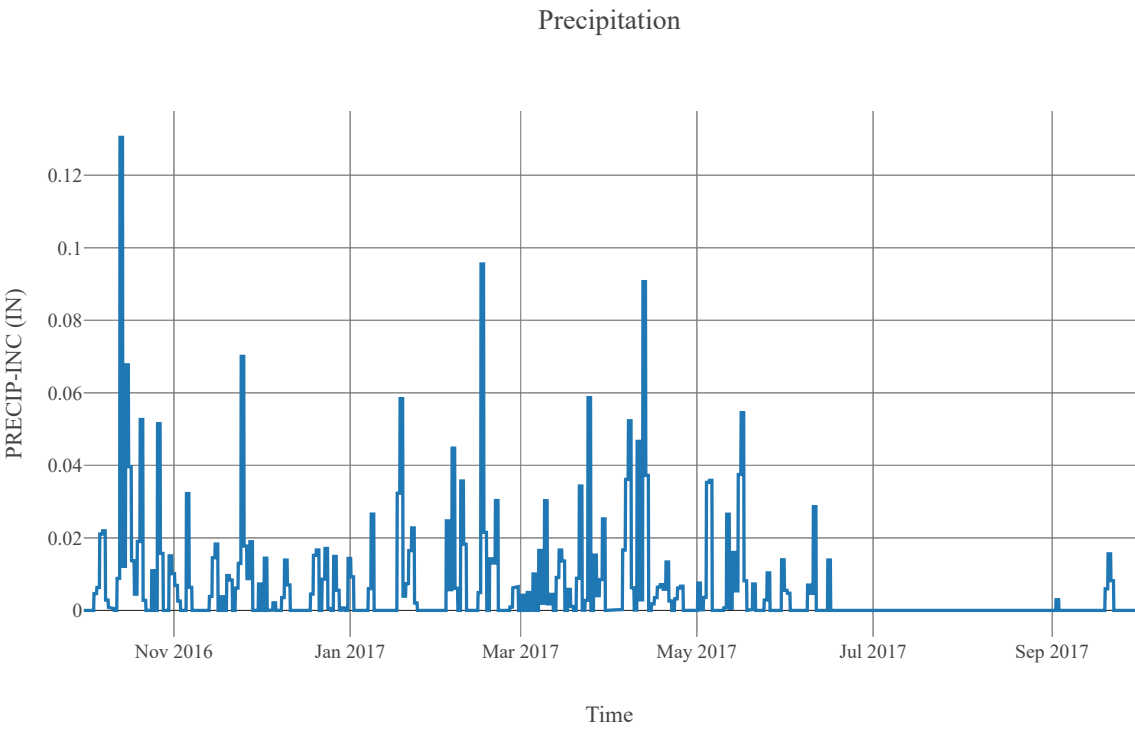
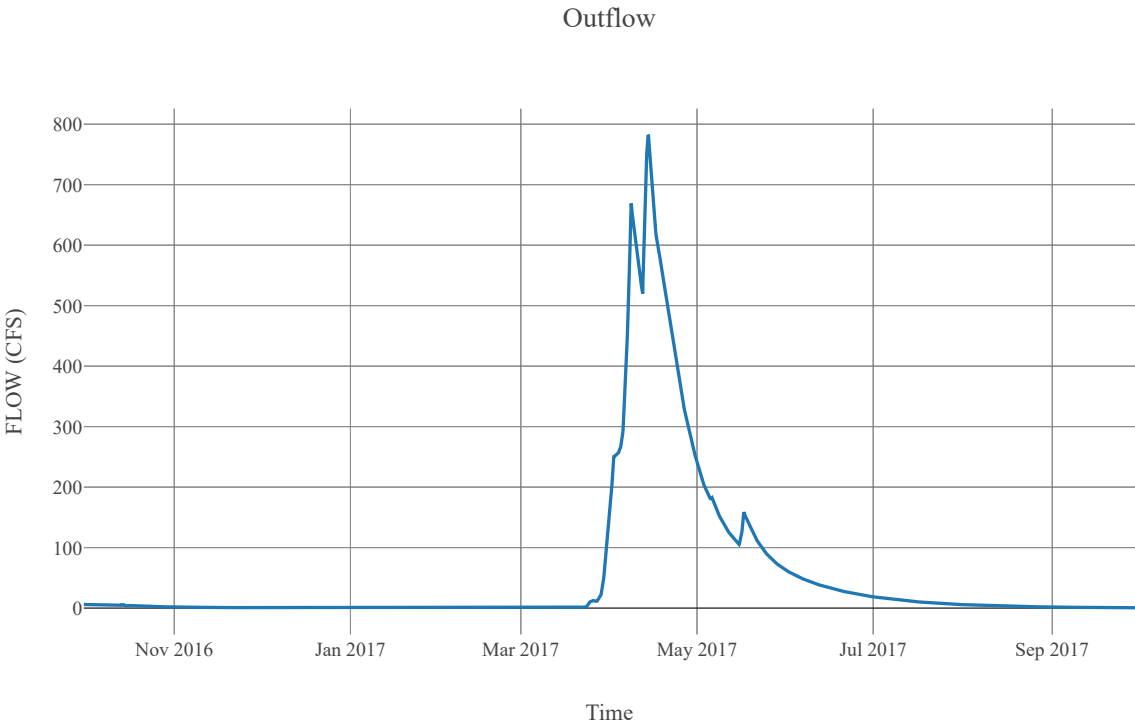
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.28
Storage Coefficient	6.28

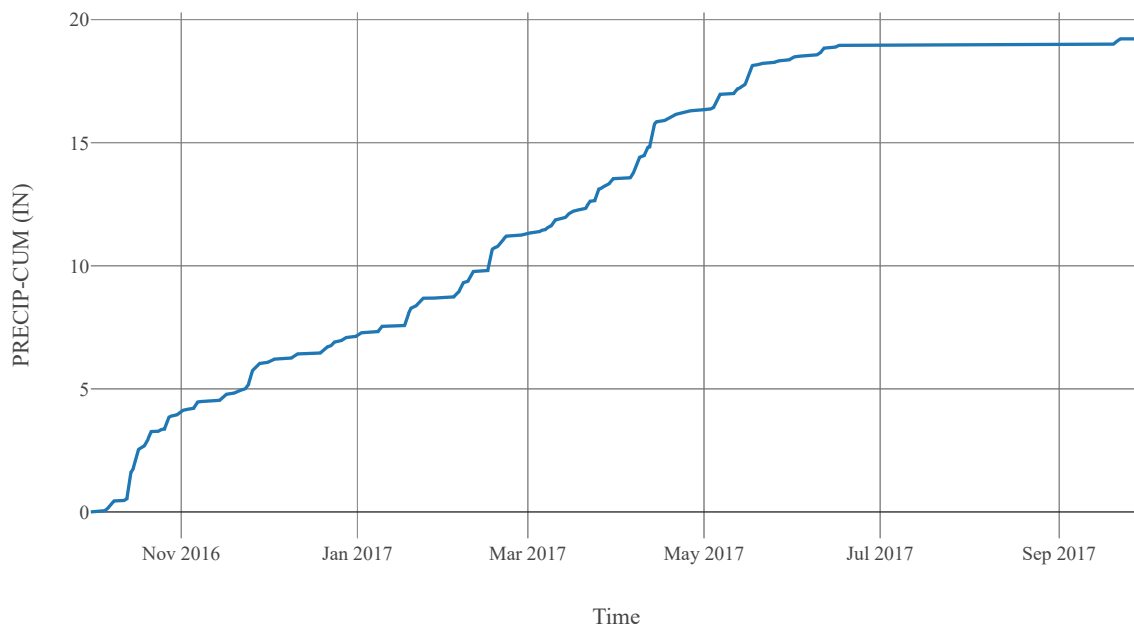
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	125.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	628
		Number Steps	1

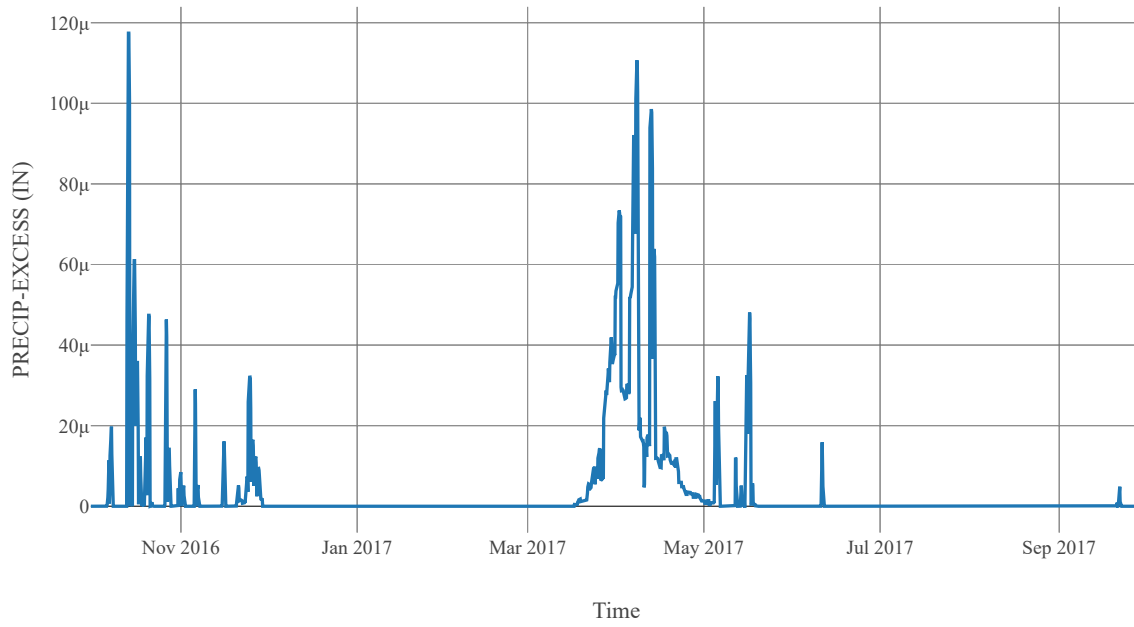
Statistics		
Name	Value	Unit
Baseflow Volume	39201.1	Ac-ft
Precipitation Volume	122386.2	Ac-ft
Loss Volume	85110.11	Ac-ft
Excess Volume	76.67	Ac-ft



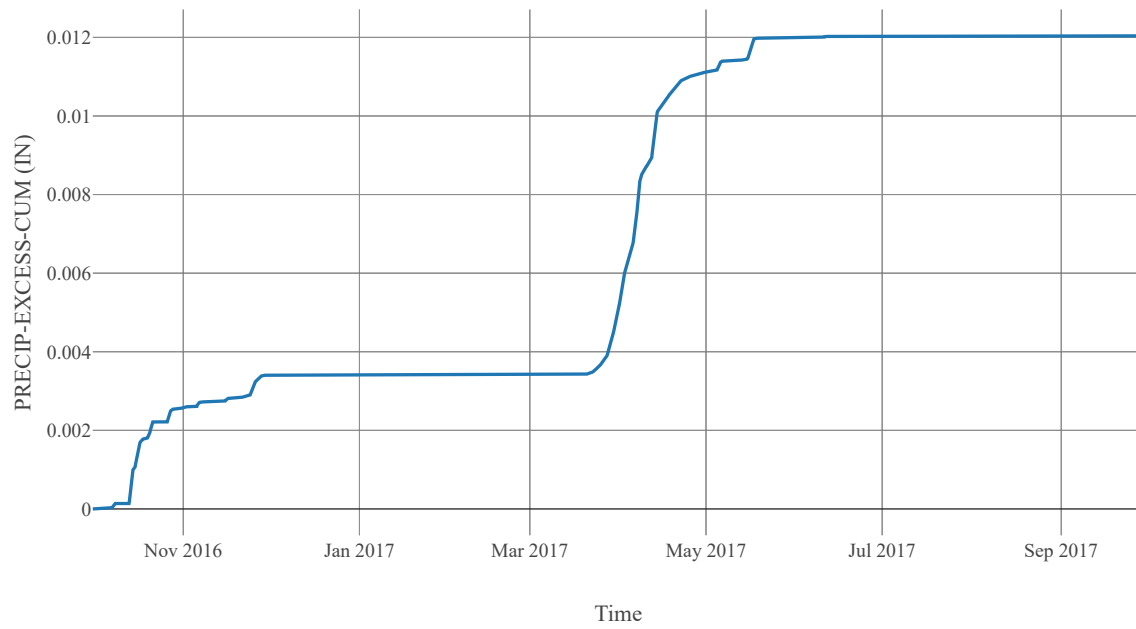
Cumulative Precipitation



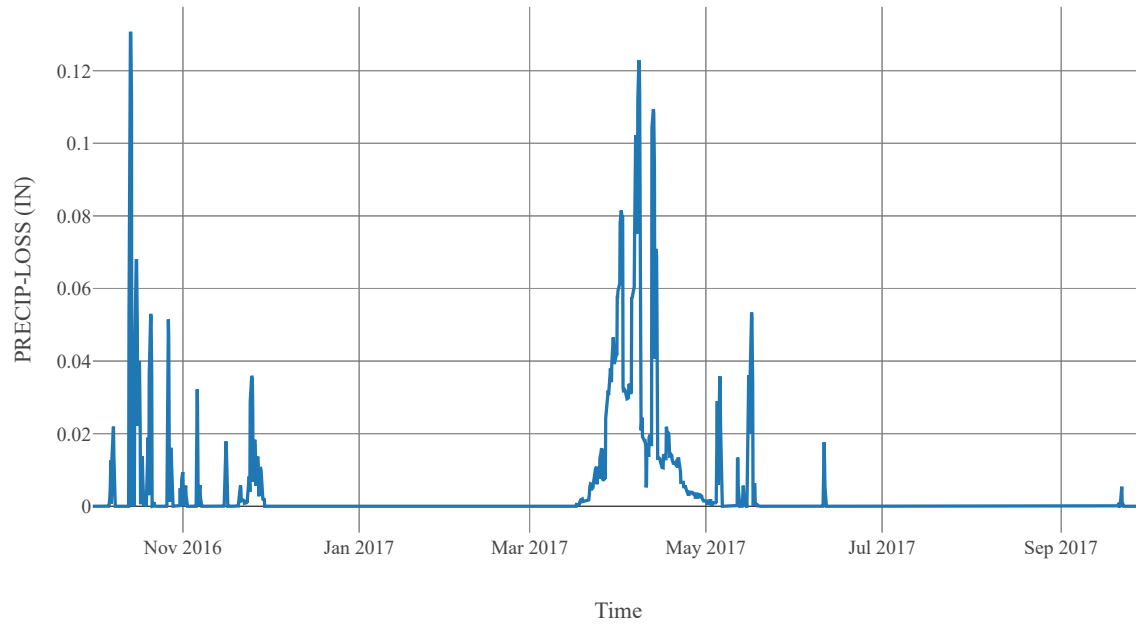
Excess Precipitation



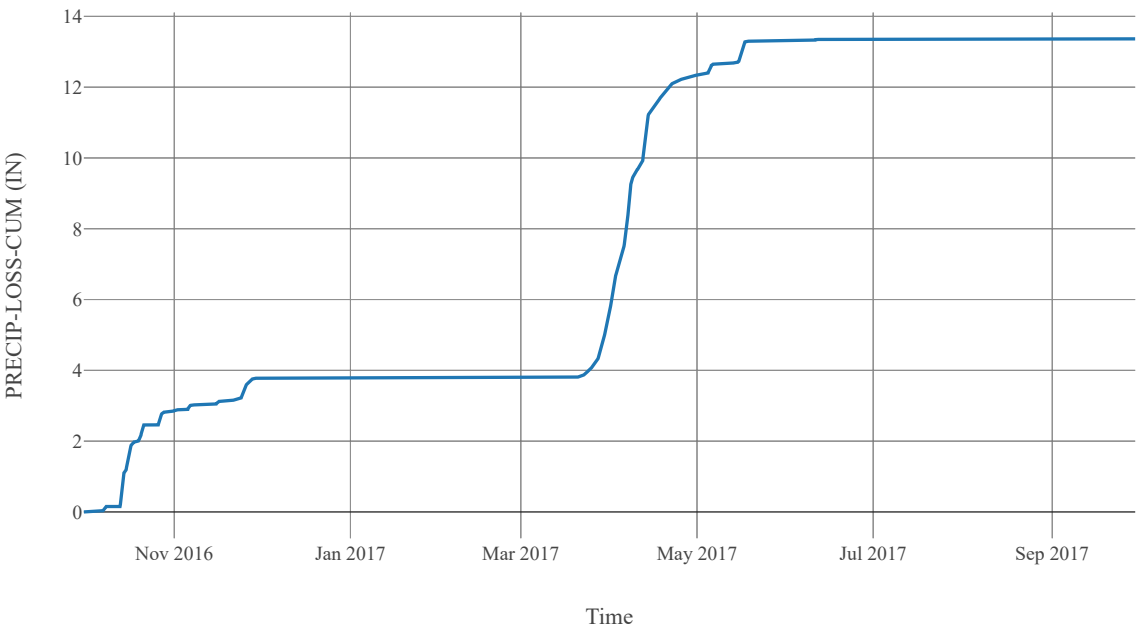
Cumulative Excess Precipitation



Precipitation Loss

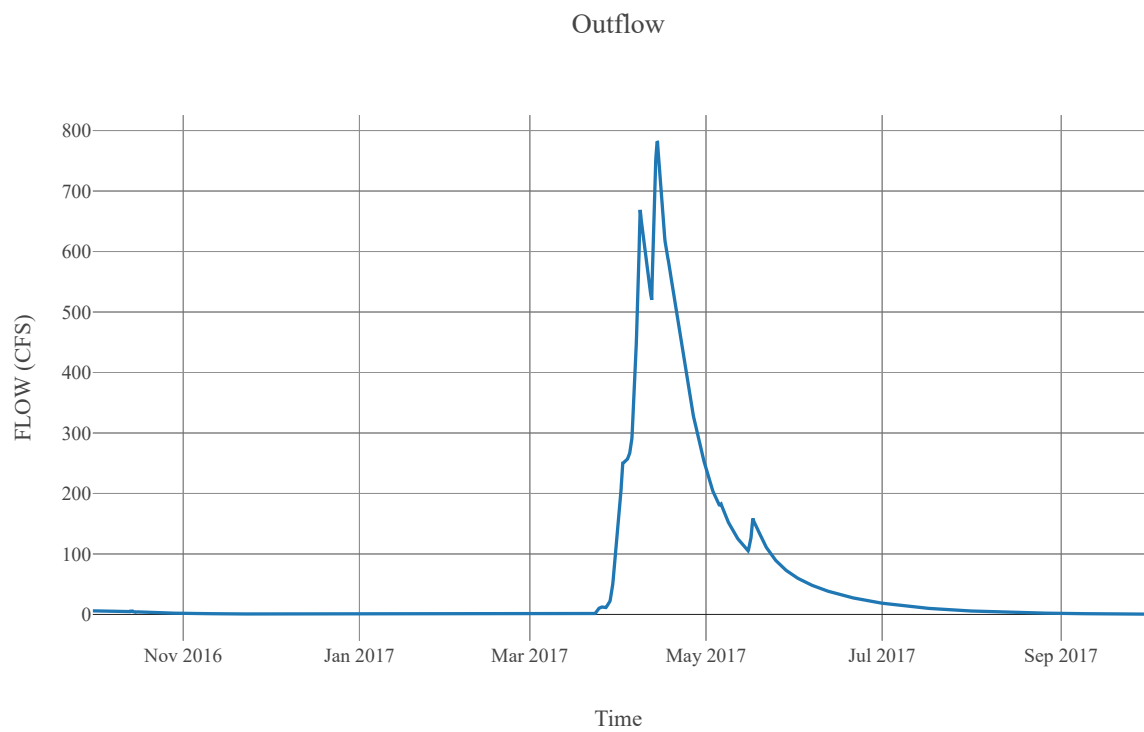


Cumulative Precipitation Loss



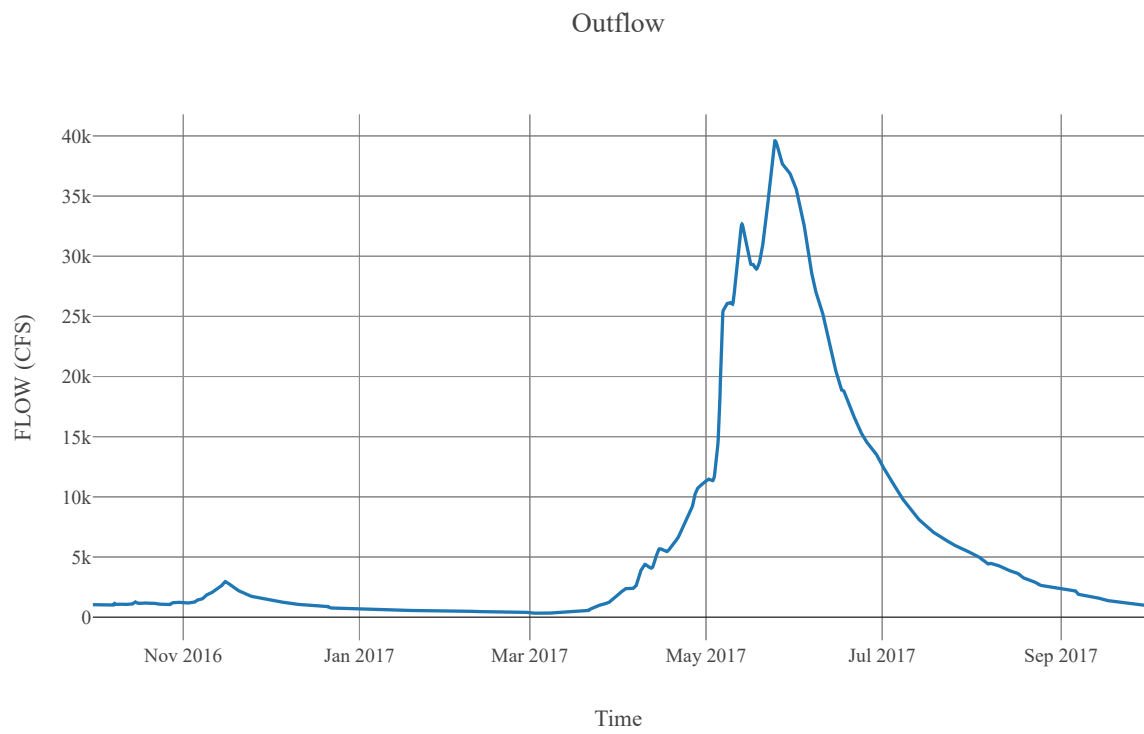
Junction : OmakCk

Observed Hydrograph : Omak creek near omak
Downstream : OmakCk_CF



Junction : OmakCk_CF

Downstream : OkanaganRv_R023

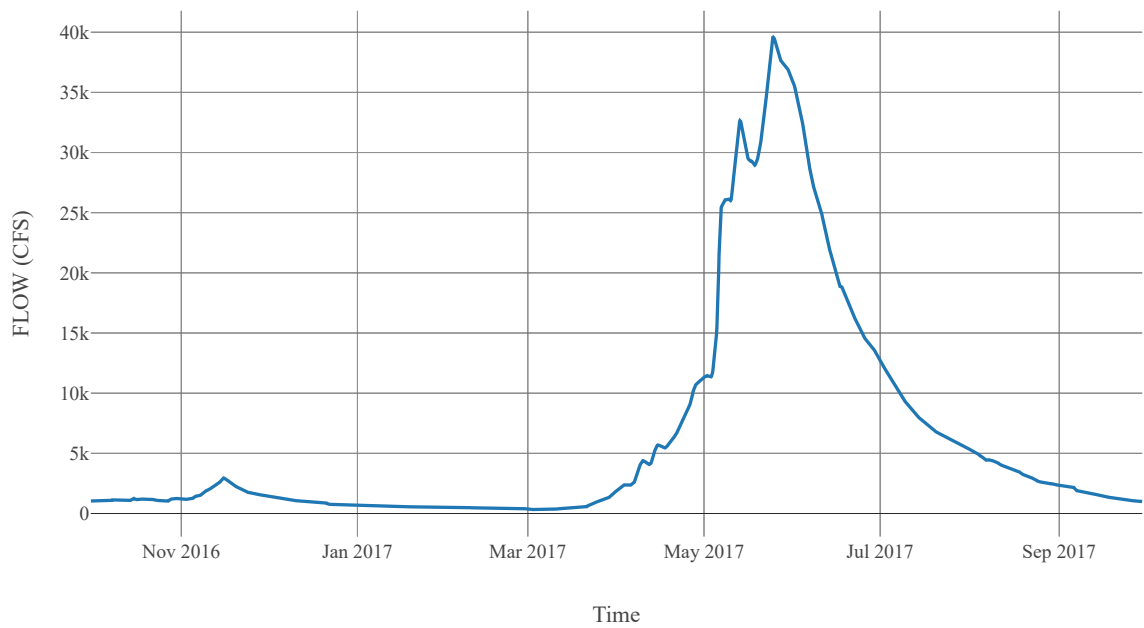


Reach : OkanaganRv_R023

Loss Method : None
Downstream : SalmonCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	33628
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	OkanaganRv_R023
	Energy Slope
	0
	Right Mannings N
	0.15

Outflow



Subbasin : SalmonCk_S010

Area : 147.61
Latitude : 48.55
Longitude : -119.81
Downstream : Salmon Ck

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.97
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

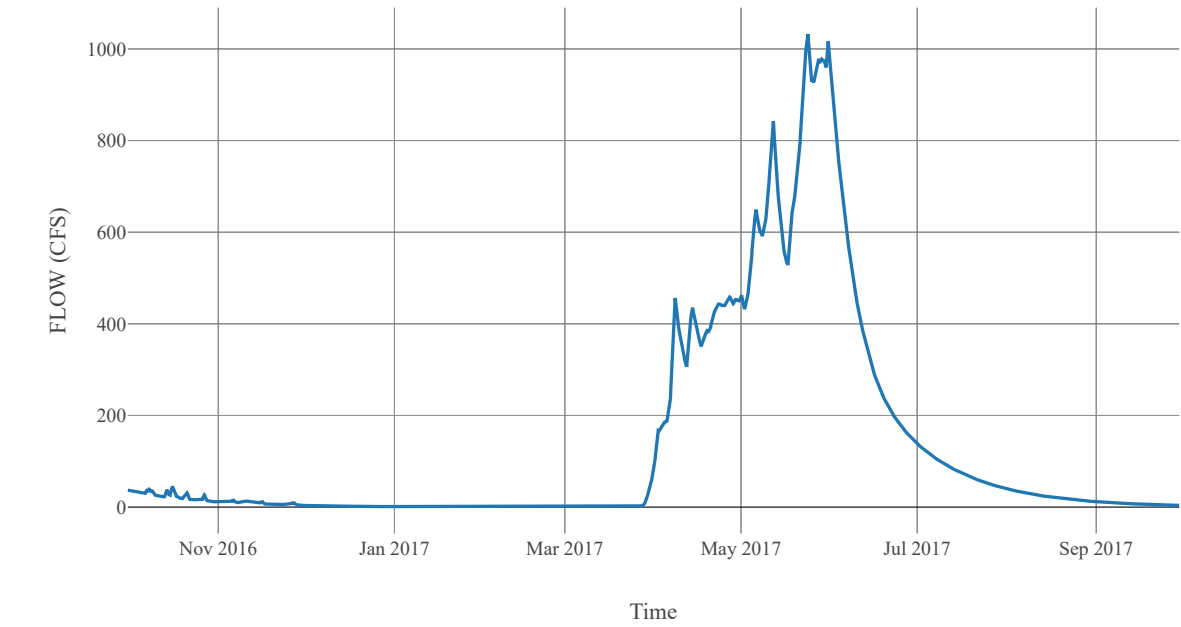
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.07
Storage Coefficient	6.07

Baseflow	
Method	Linear Reservoir

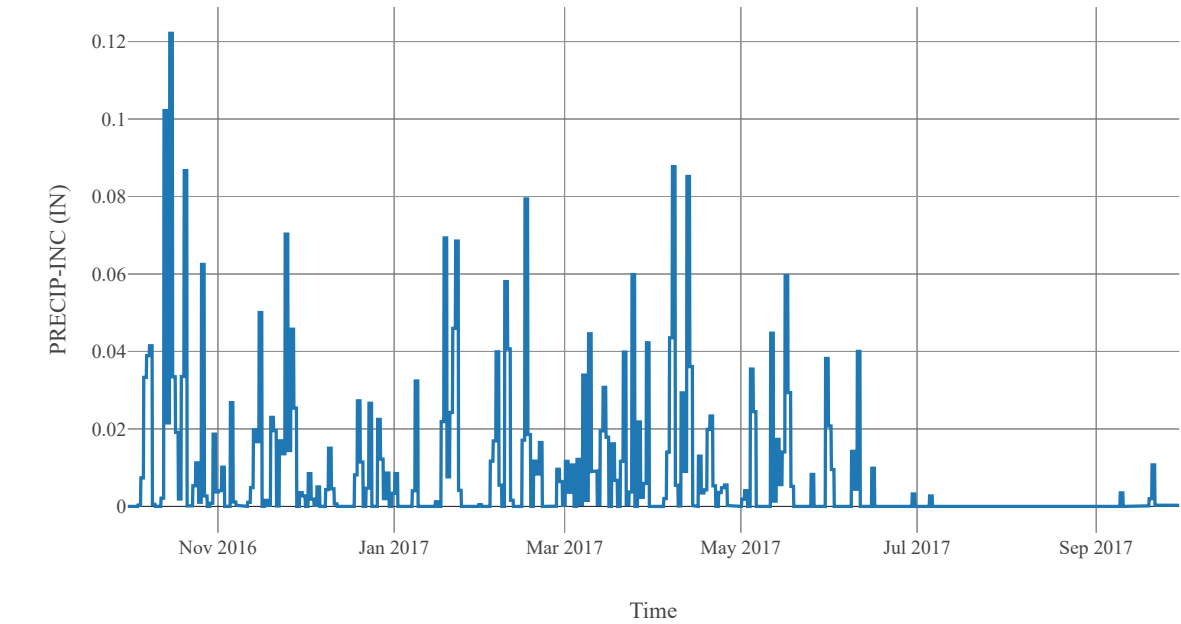
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	121.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.25
		Layer Number	2
		Storage Coefficient	607
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	96680.65	Ac-ft
Precipitation Volume	191721.86	Ac-ft
Loss Volume	152781.86	Ac-ft
Excess Volume	1496.5	Ac-ft

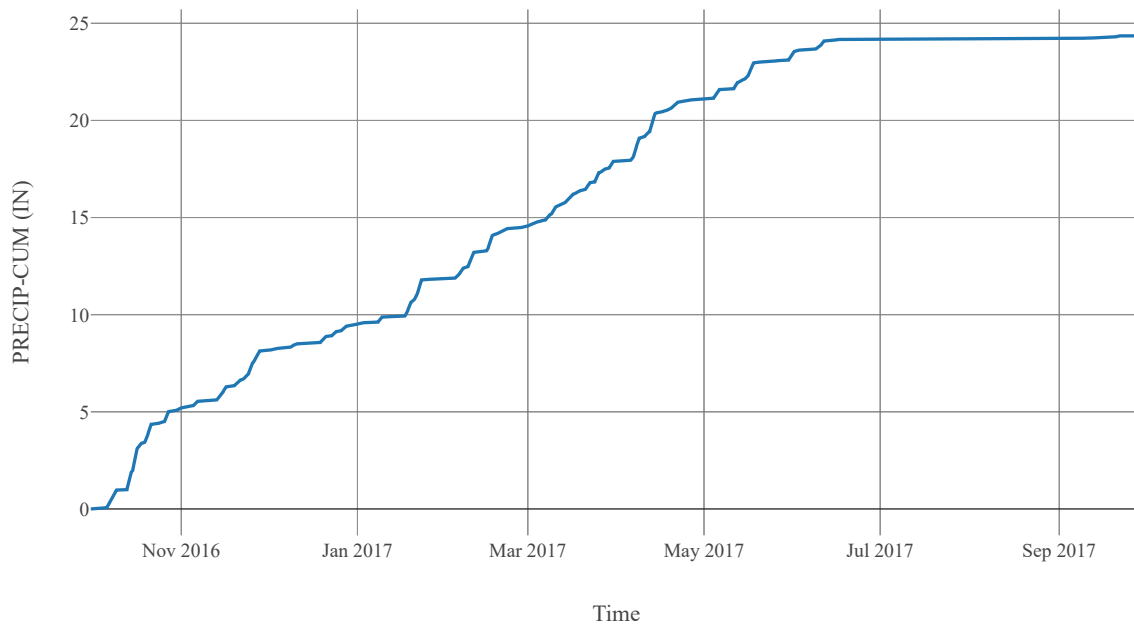
Outflow



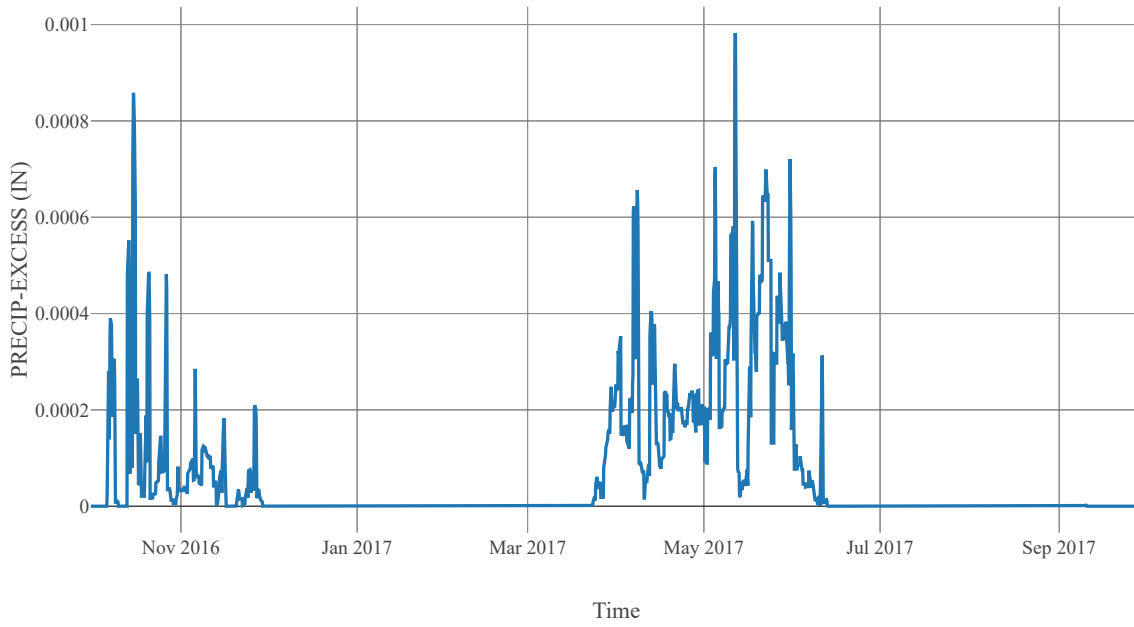
Precipitation



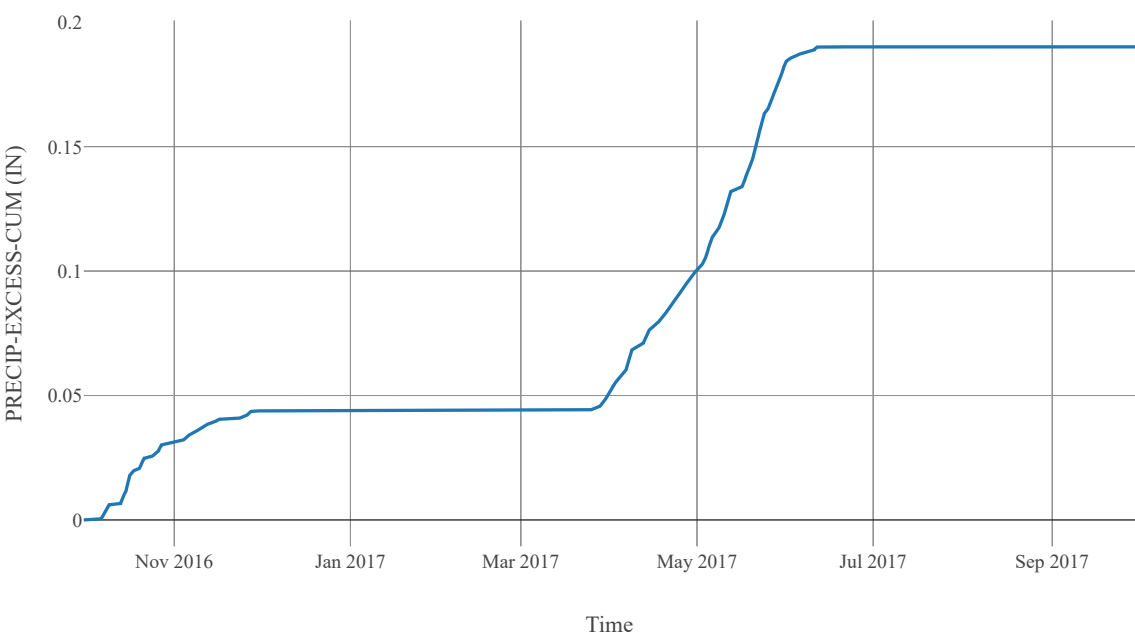
Cumulative Precipitation



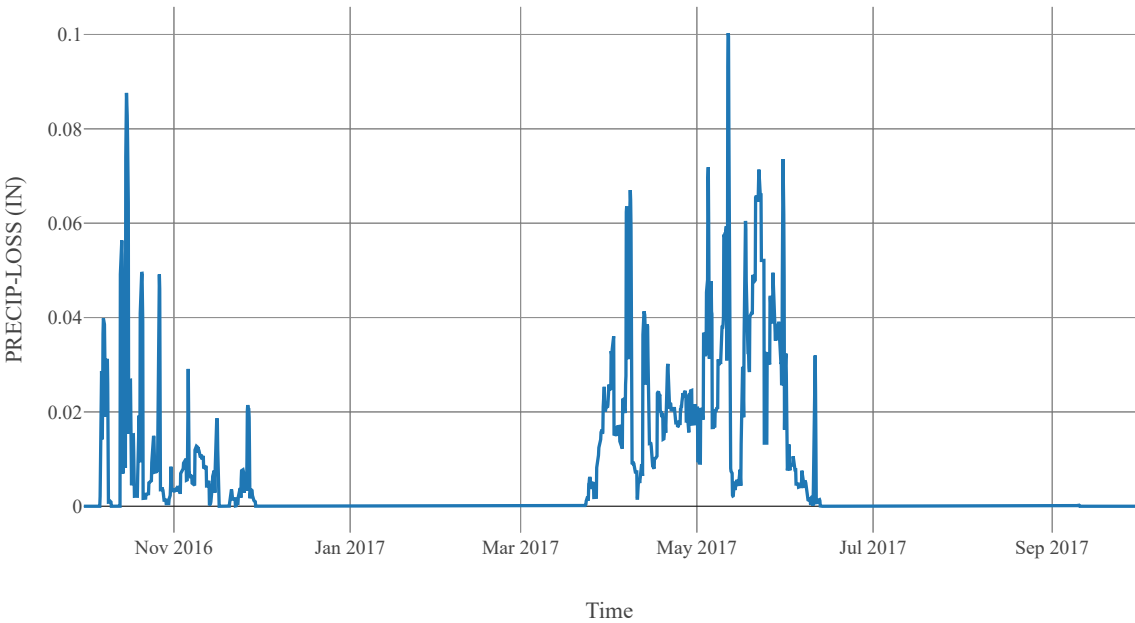
Excess Precipitation



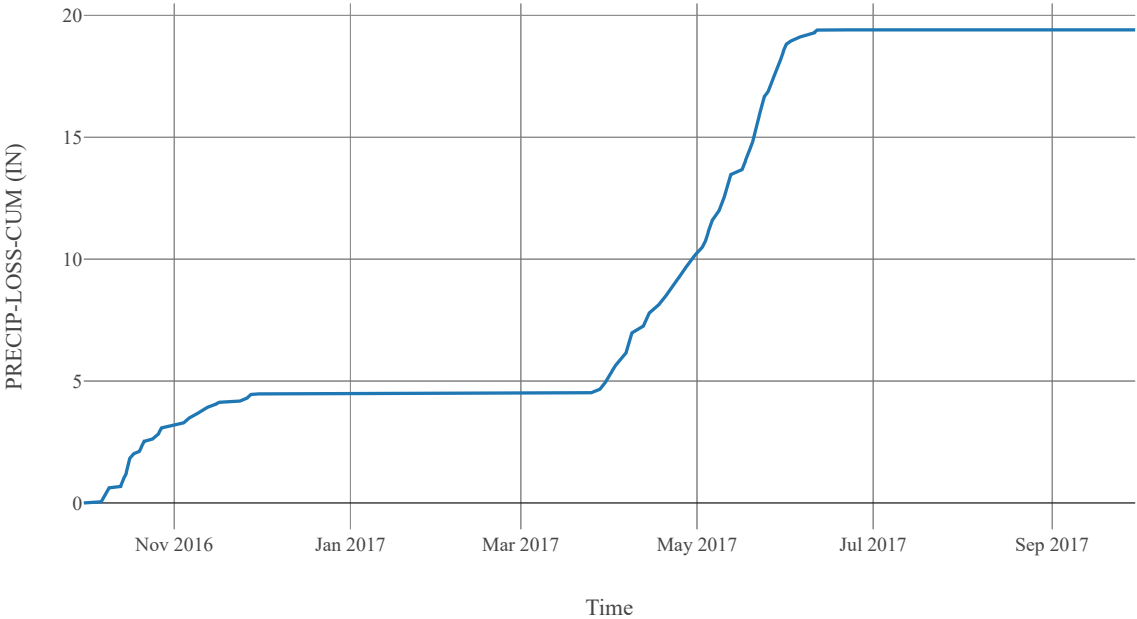
Cumulative Excess Precipitation



Precipitation Loss

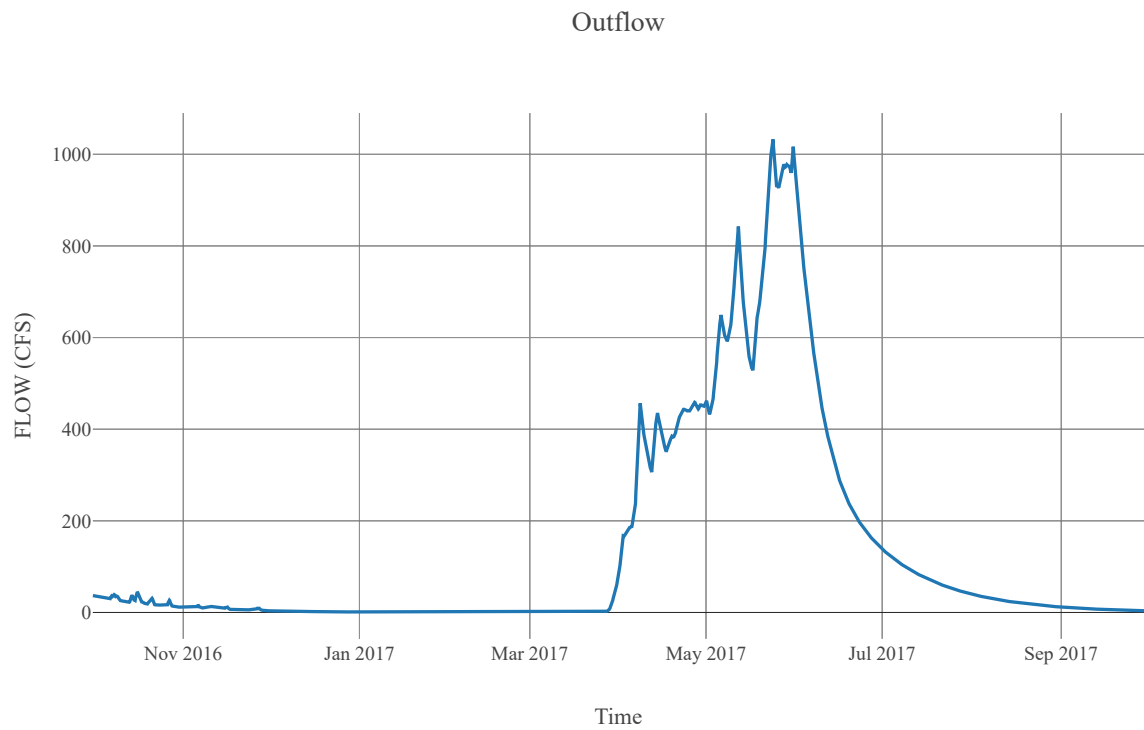


Cumulative Precipitation Loss



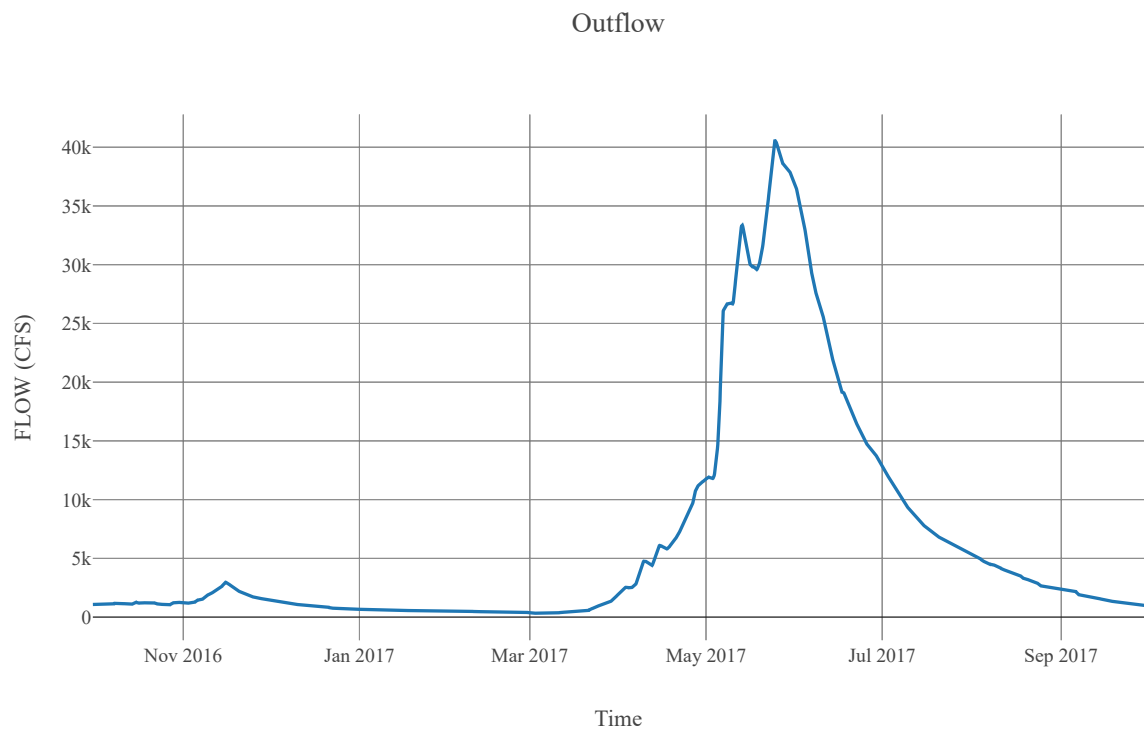
Junction : SalmonCk

Observed Hydrograph : Salmon creek above diversion
Downstream : SalmonCk_CF



Junction : SalmonCk_CF

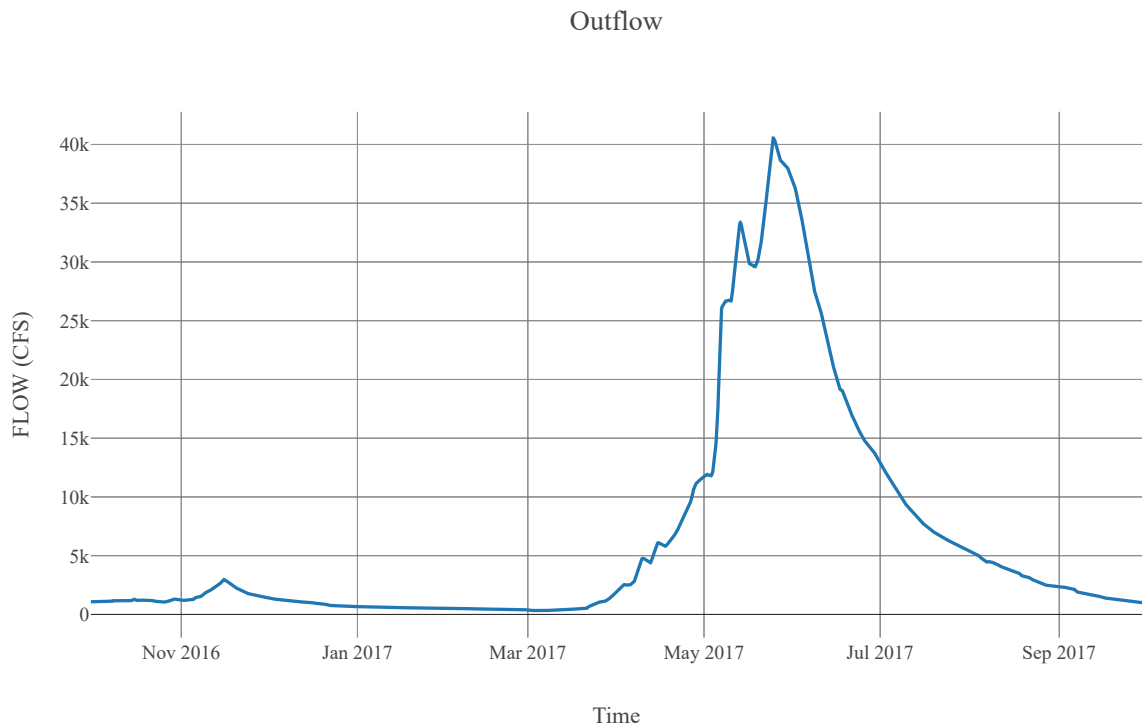
Downstream : OkanaganRv_R020



Reach : OkanaganRv_R020

Loss Method : None
Downstream : Okanagan Nr Malott

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : OkanaganRv_S020

Area : 434.04
Latitude : 48.49
Longitude : -119.51
Downstream : Okanagan Nr Malott

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.7
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

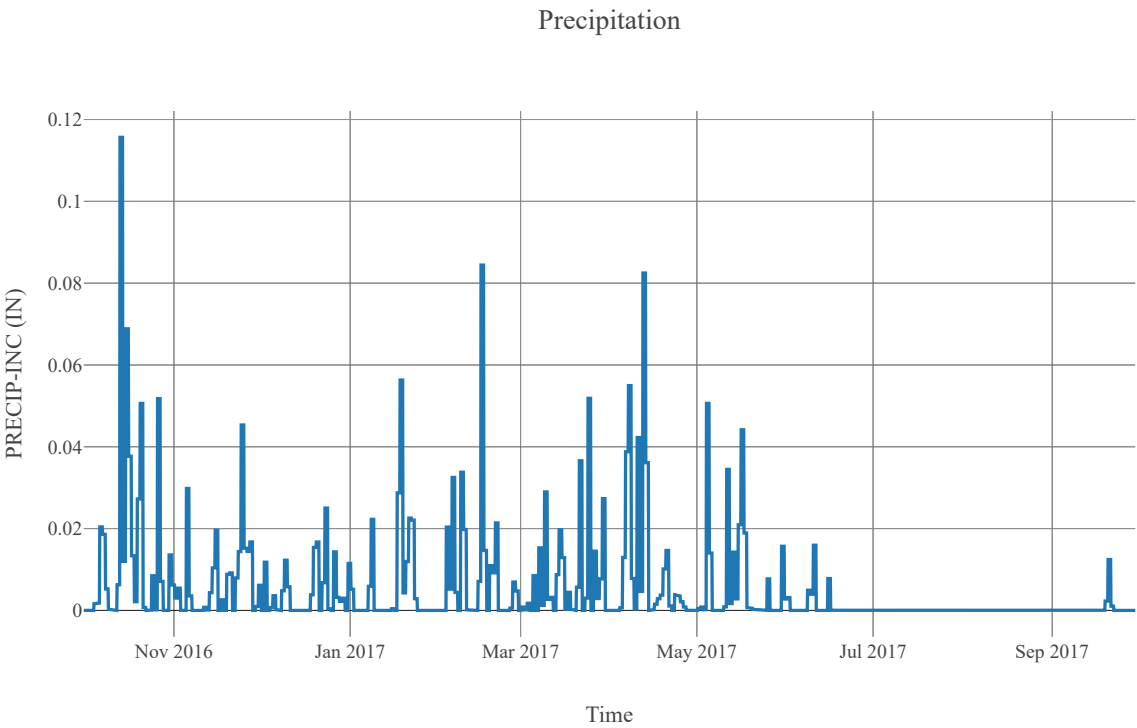
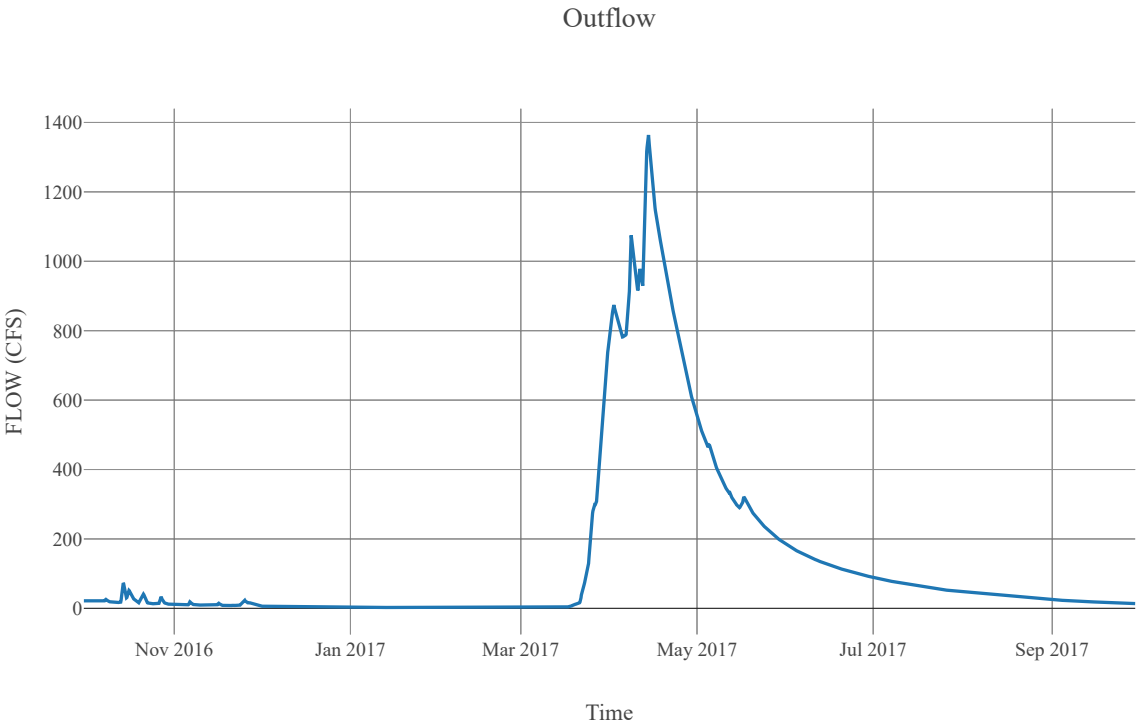
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	11.72
Storage Coefficient	11.72

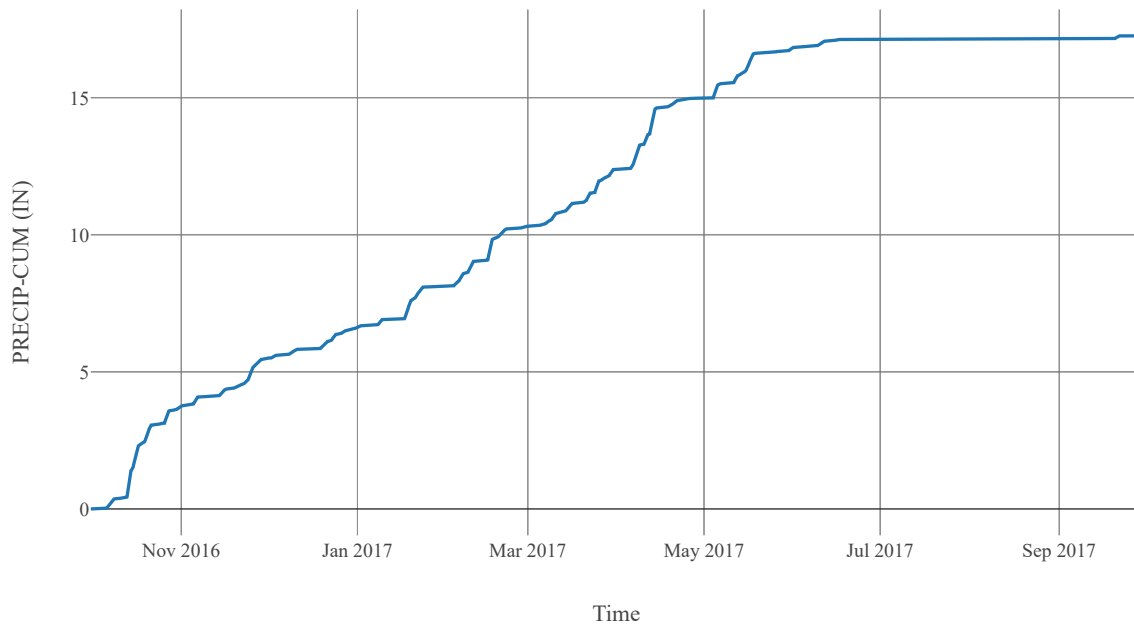
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	234.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	1172
		Number Steps	1

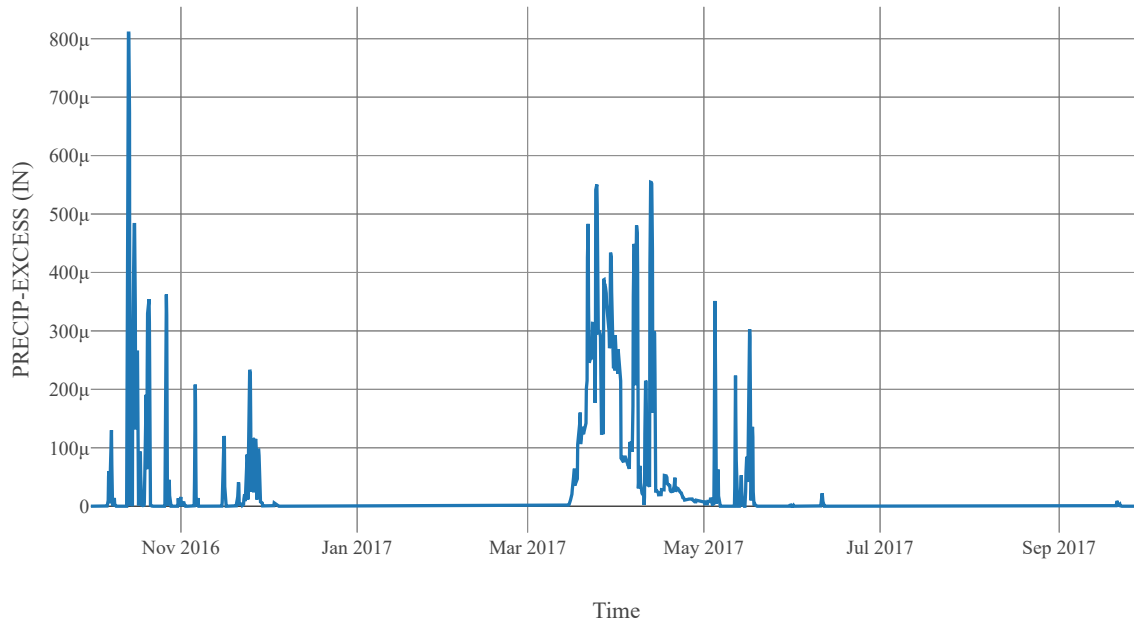
Statistics		
Name	Value	Unit
Baseflow Volume	96591.78	Ac-ft
Precipitation Volume	399445.61	Ac-ft
Loss Volume	264909.57	Ac-ft
Excess Volume	1867.44	Ac-ft



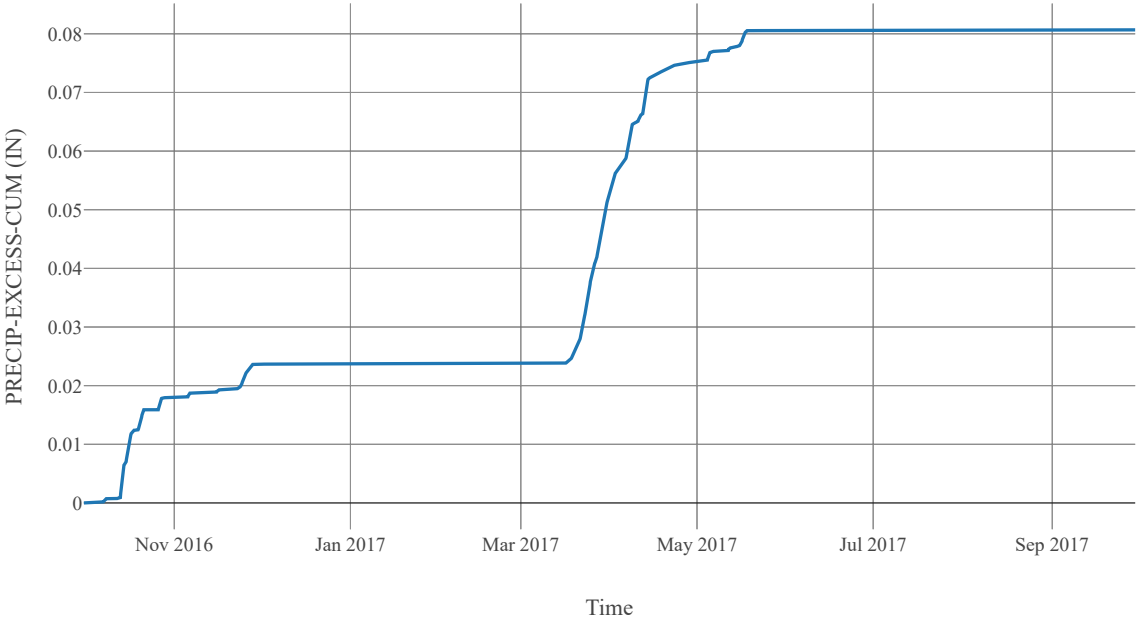
Cumulative Precipitation



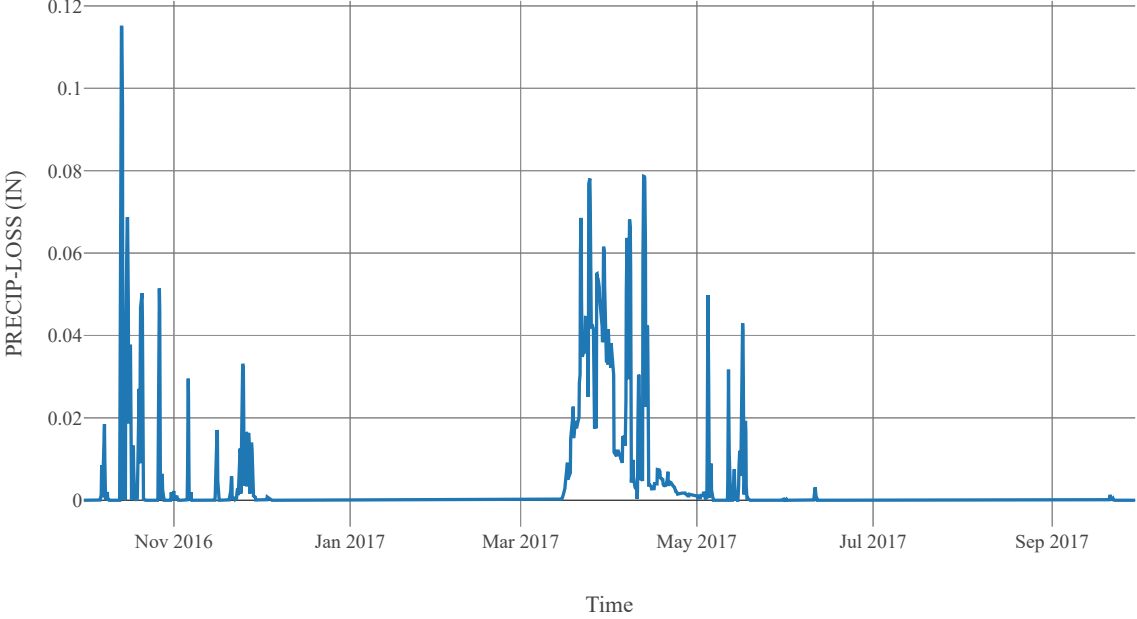
Excess Precipitation



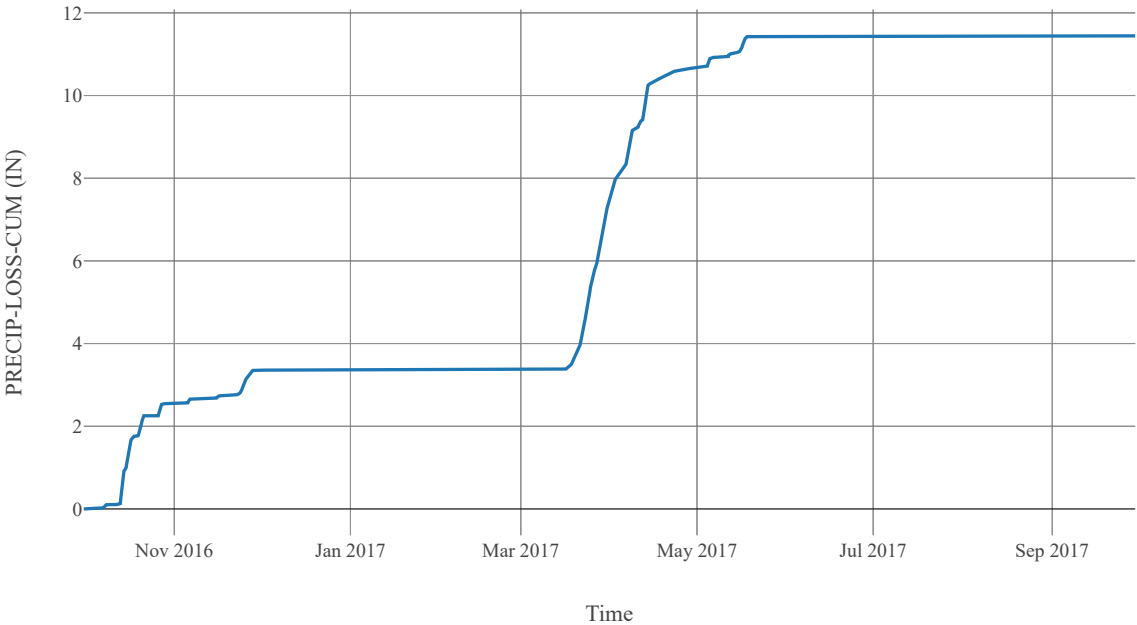
Cumulative Excess Precipitation



Precipitation Loss

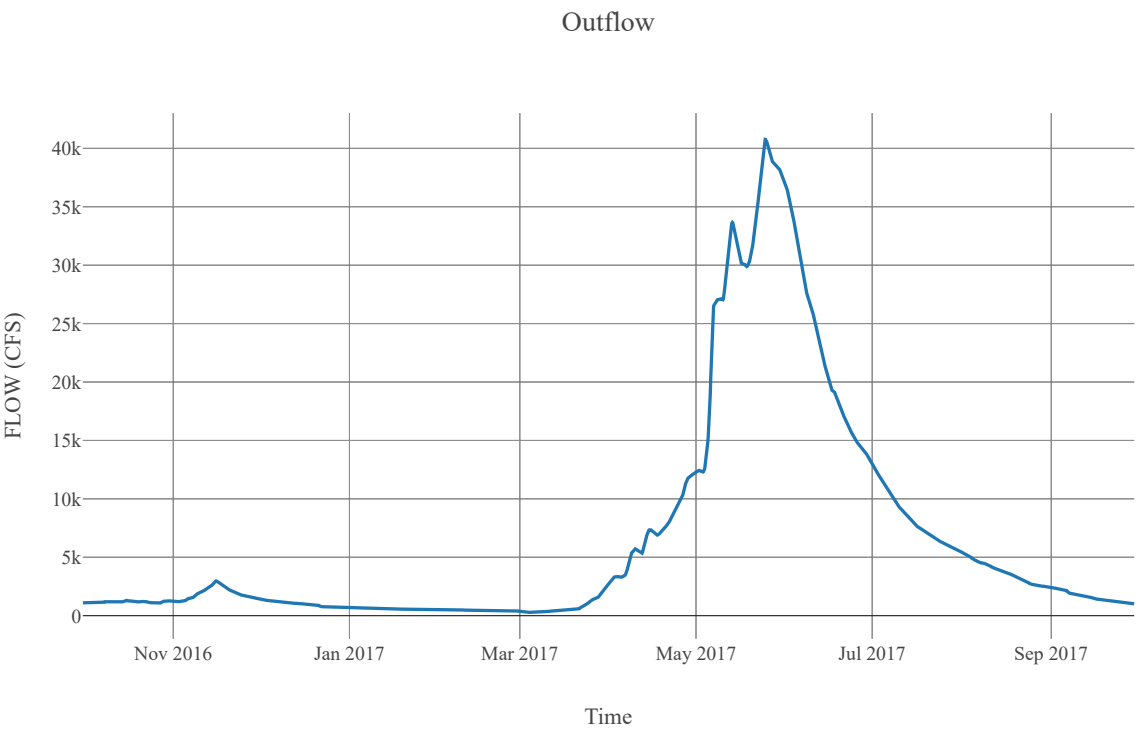


Cumulative Precipitation Loss



Junction : OkanaganNrMalott

Observed Hydrograph : Okanagan river at malott
Downstream : OkanaganRv_R010

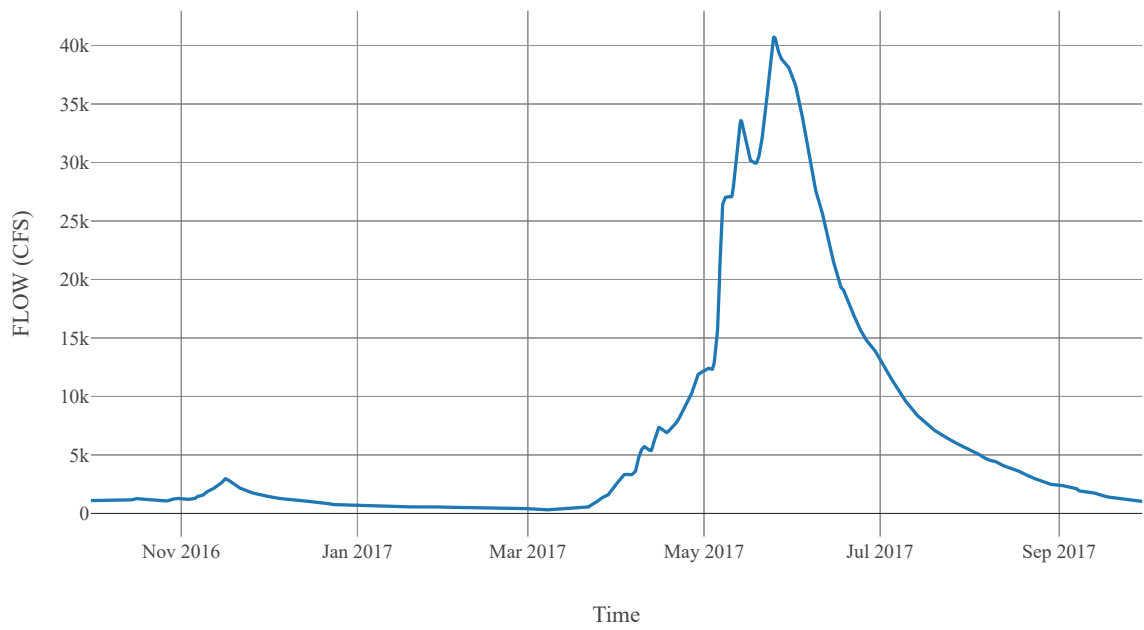


Reach : OkanaganRv_R010

Loss Method : None
Downstream : OkanaganRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	90169
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	OkanaganRv_R010
	Energy Slope
	0
	Right Mannings N
	0.15

Outflow



Subbasin : OkanaganRv_S010

Area : 242.61
Latitude : 48.28
Longitude : -119.69
Downstream : OkanaganRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	1.28
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

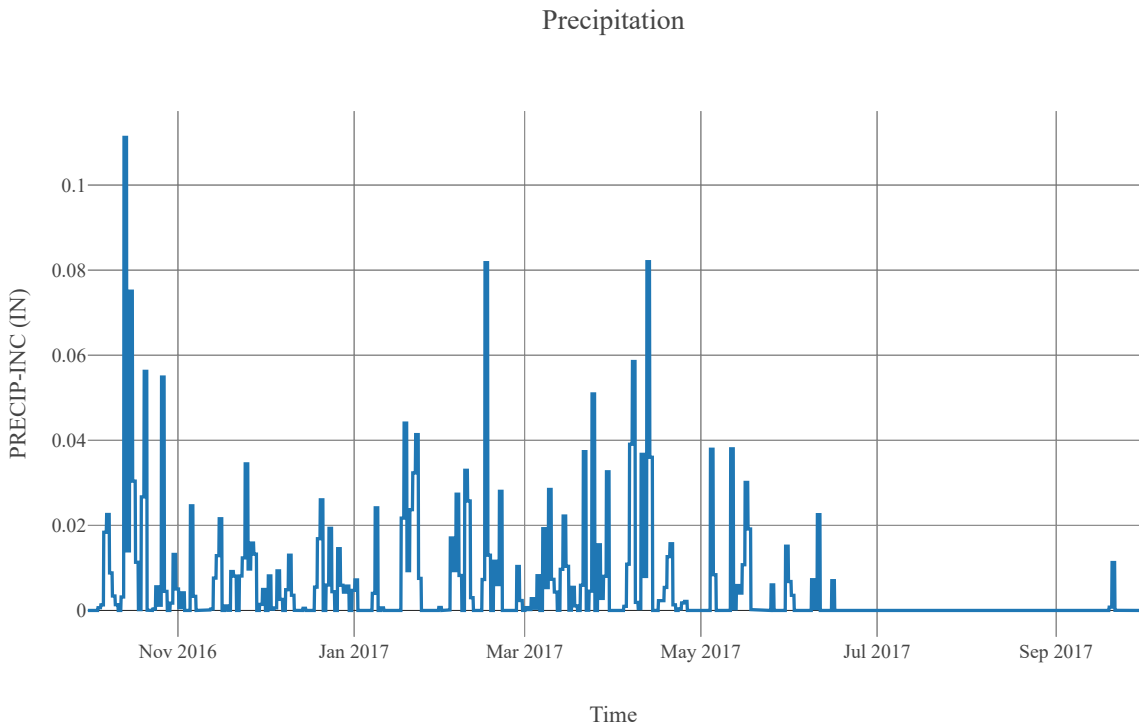
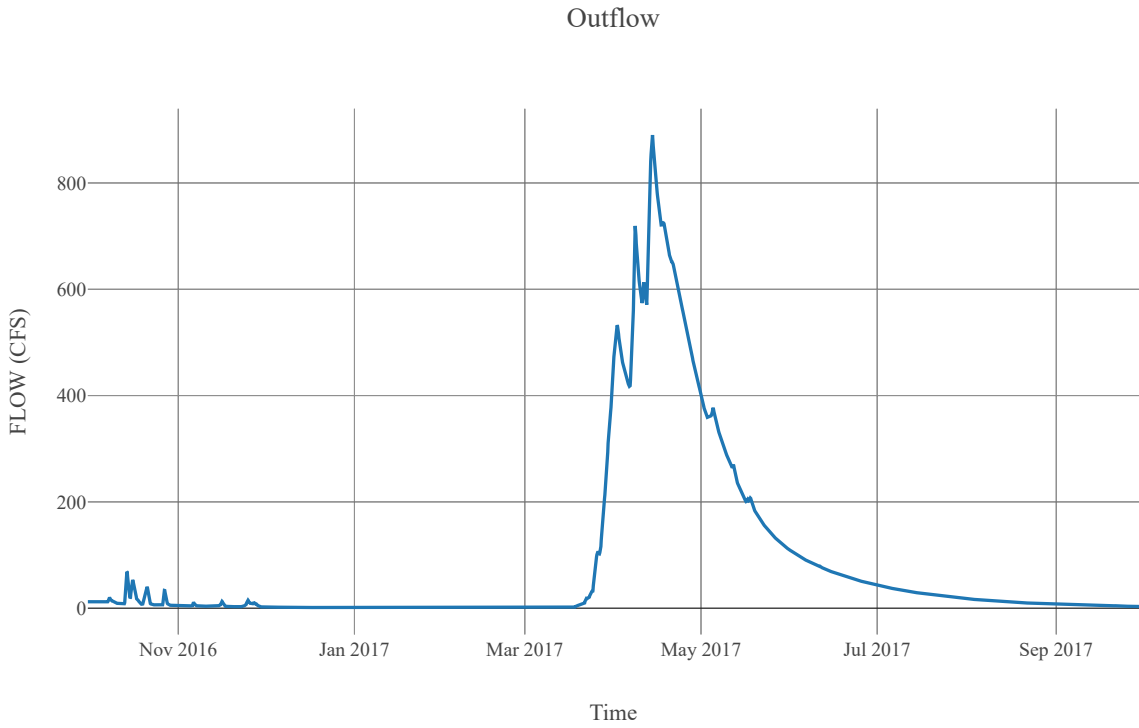
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	8.39
Storage Coefficient	8.39

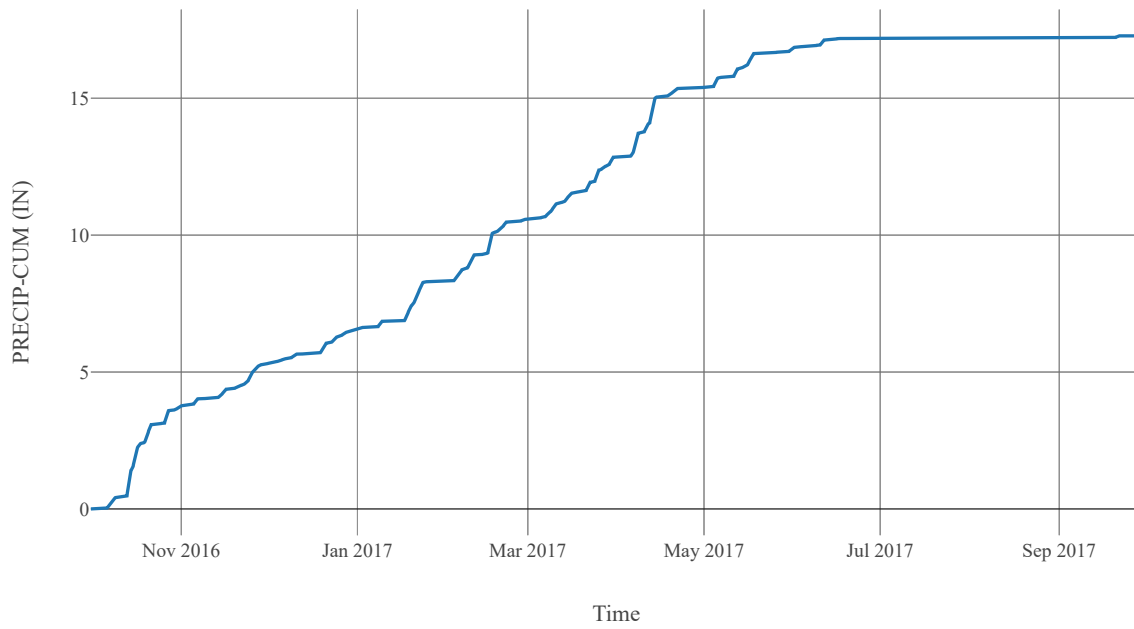
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	167.8
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.05
		Layer Number	2
		Storage Coefficient	839
		Number Steps	1

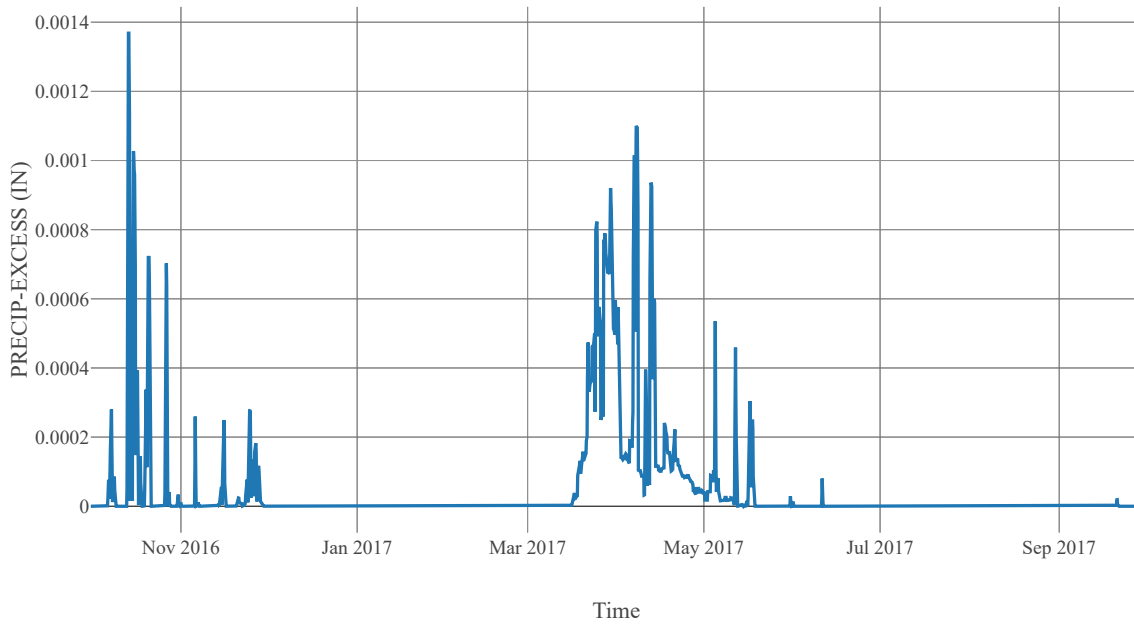
Statistics		
Name	Value	Unit
Baseflow Volume	59078.02	Ac-ft
Precipitation Volume	223562.26	Ac-ft
Loss Volume	149787.9	Ac-ft
Excess Volume	1942.14	Ac-ft



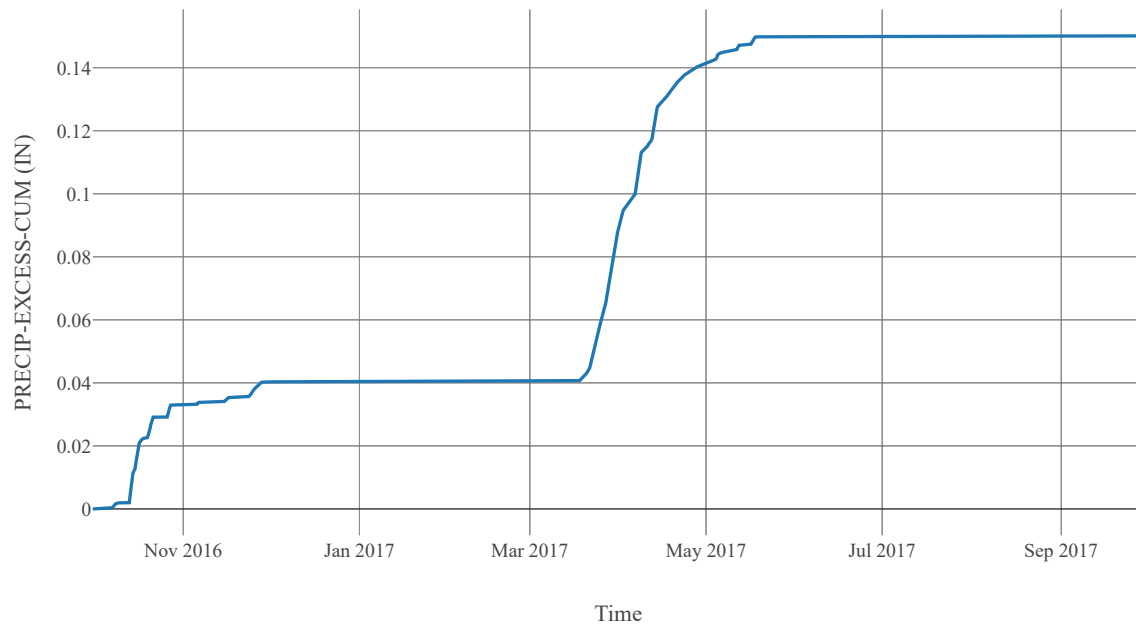
Cumulative Precipitation



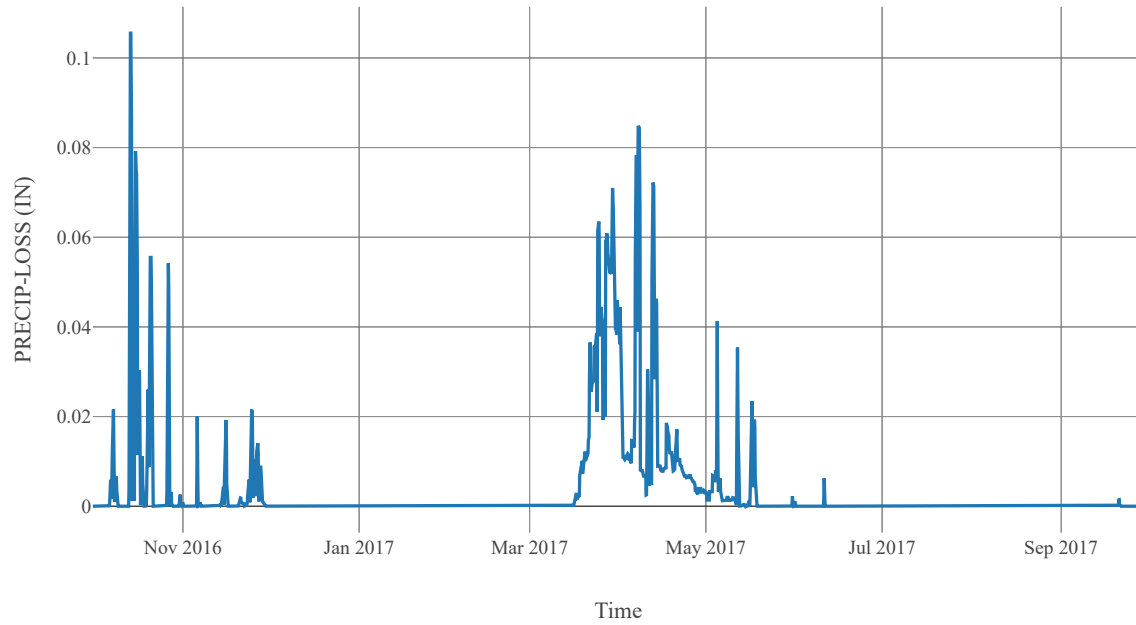
Excess Precipitation



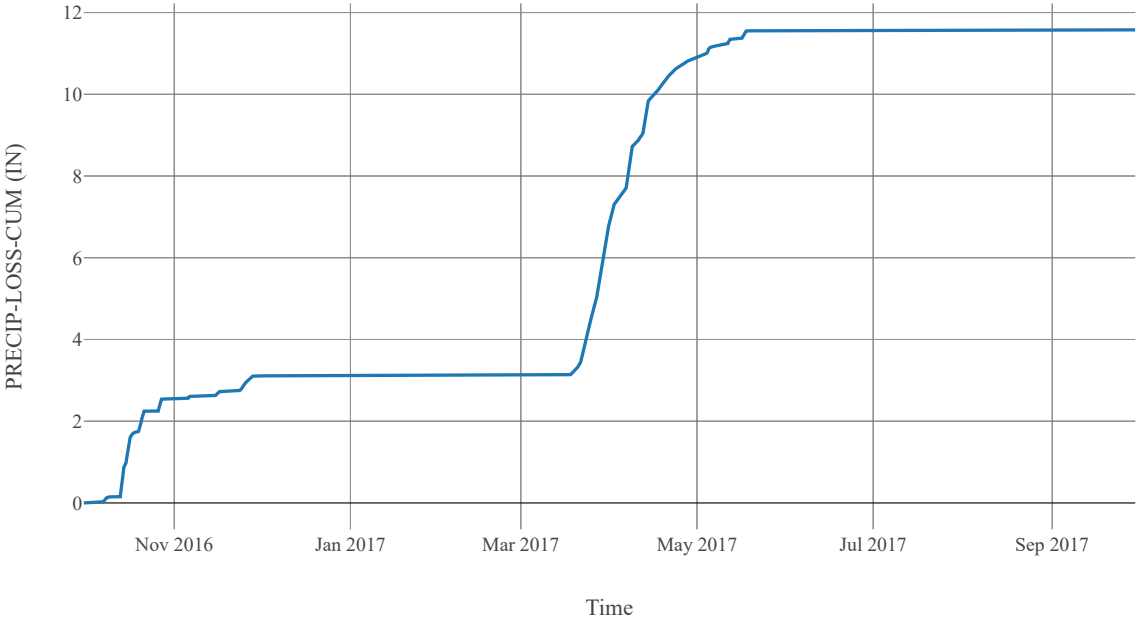
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Junction : OkanoganRv_CF

Downstream : MidColumbia_R073



Reach : MidColumbia_R073

Loss Method : None
Downstream : MethowRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : MethowRv_S030

Area : 366.76
Latitude : 48.7
Longitude : -120.52
Downstream : Methow Ab Goat Ck

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.18
Deficit Constant	
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

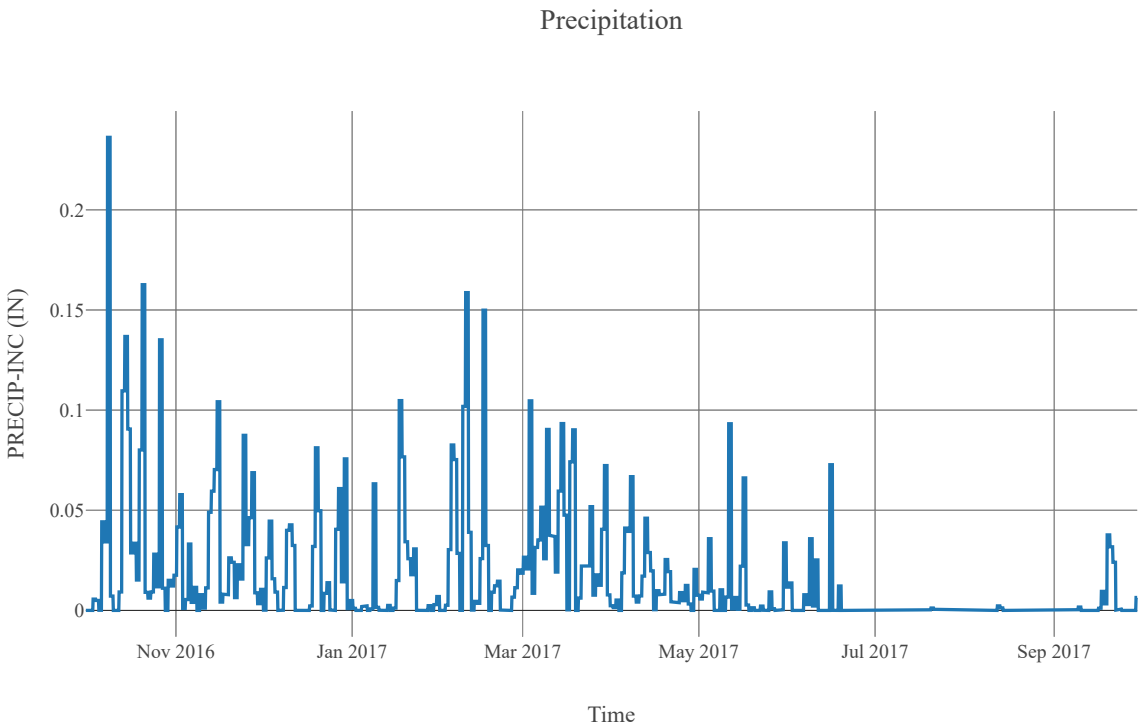
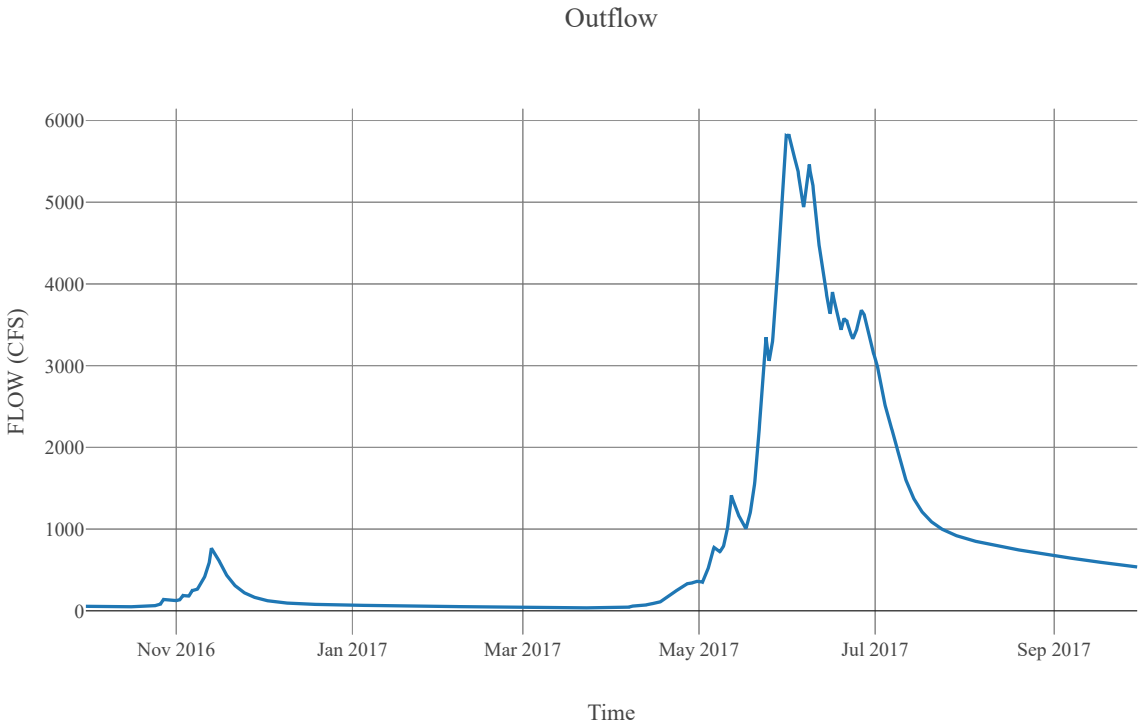
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.53
Storage Coefficient	7.53

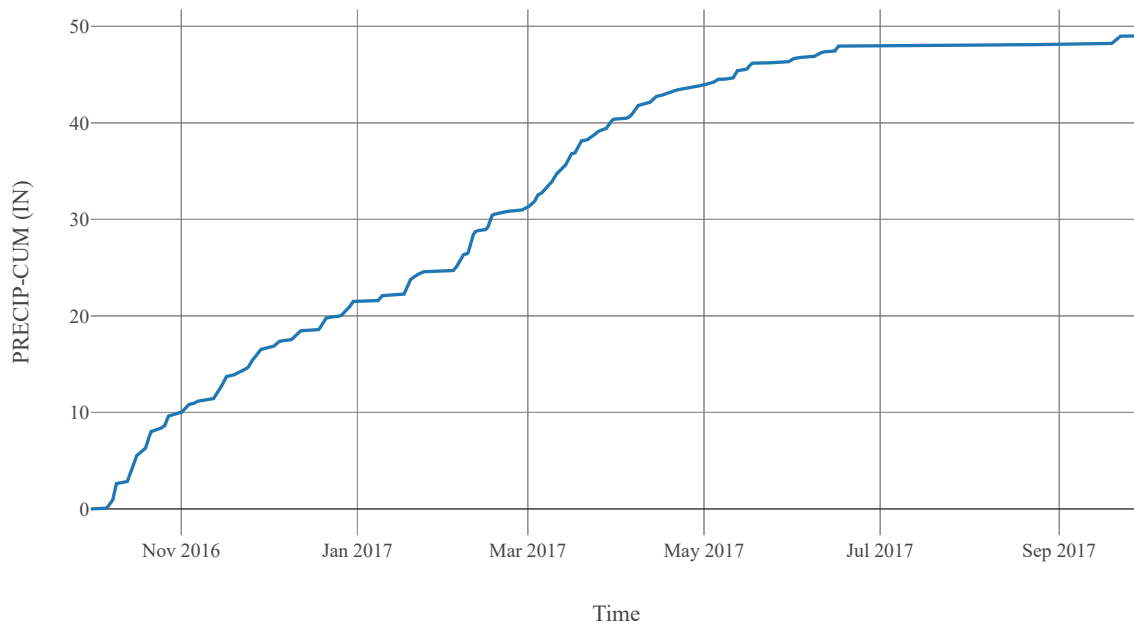
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	150.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.15
		Layer Number	2
		Storage Coefficient	3012
		Number Steps	1

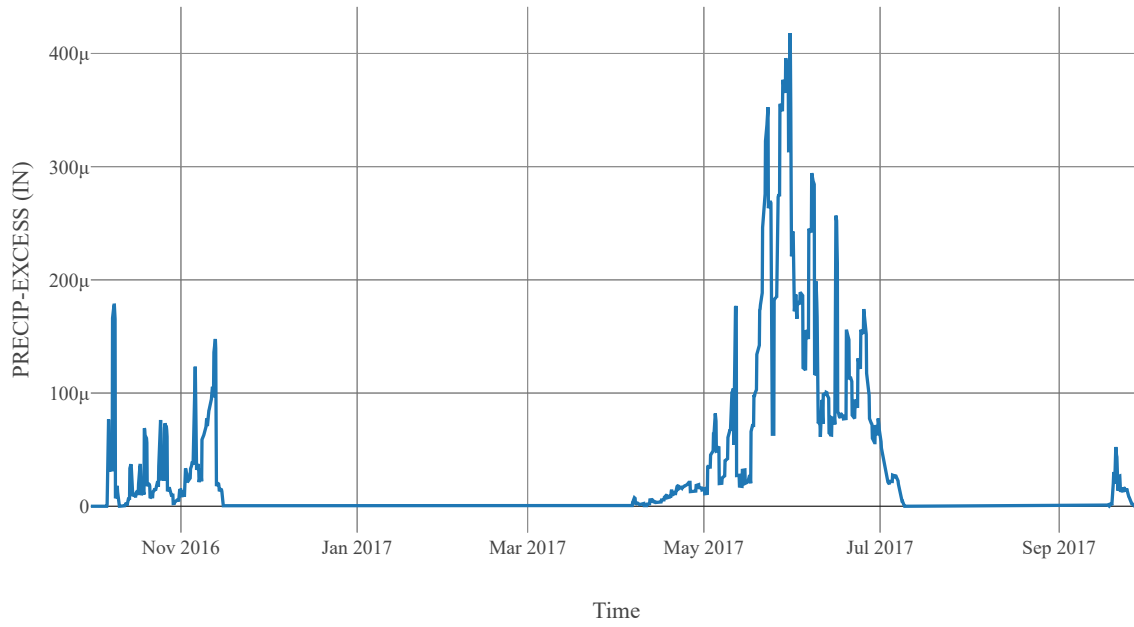
Statistics		
Name	Value	Unit
Baseflow Volume	589122.06	Ac-ft
Precipitation Volume	958701.81	Ac-ft
Loss Volume	869526.3	Ac-ft
Excess Volume	1567.97	Ac-ft



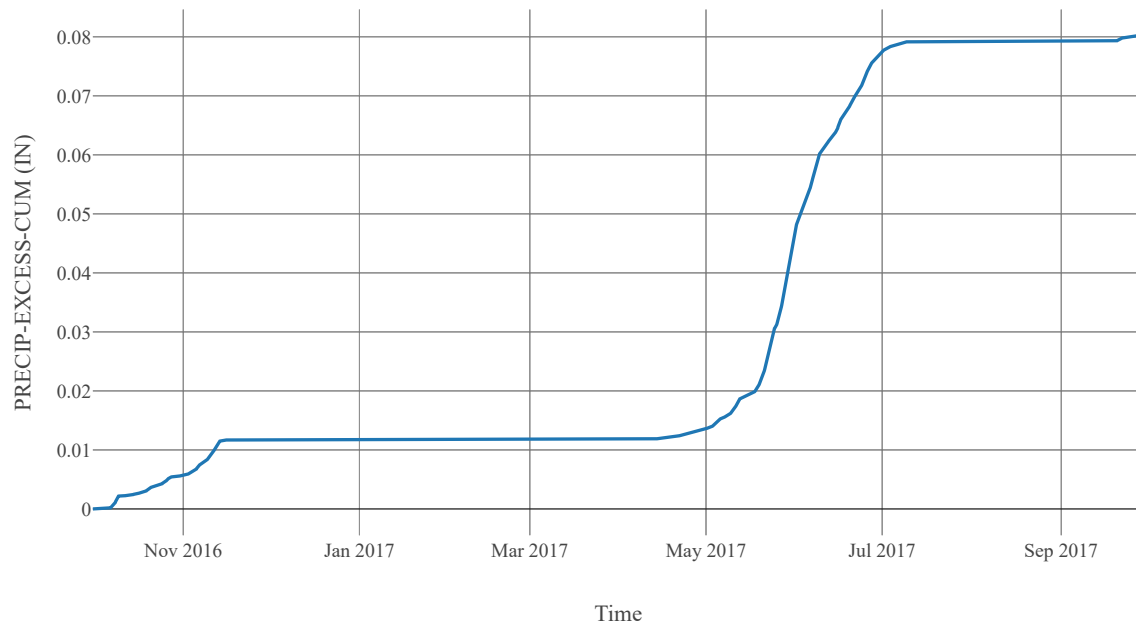
Cumulative Precipitation



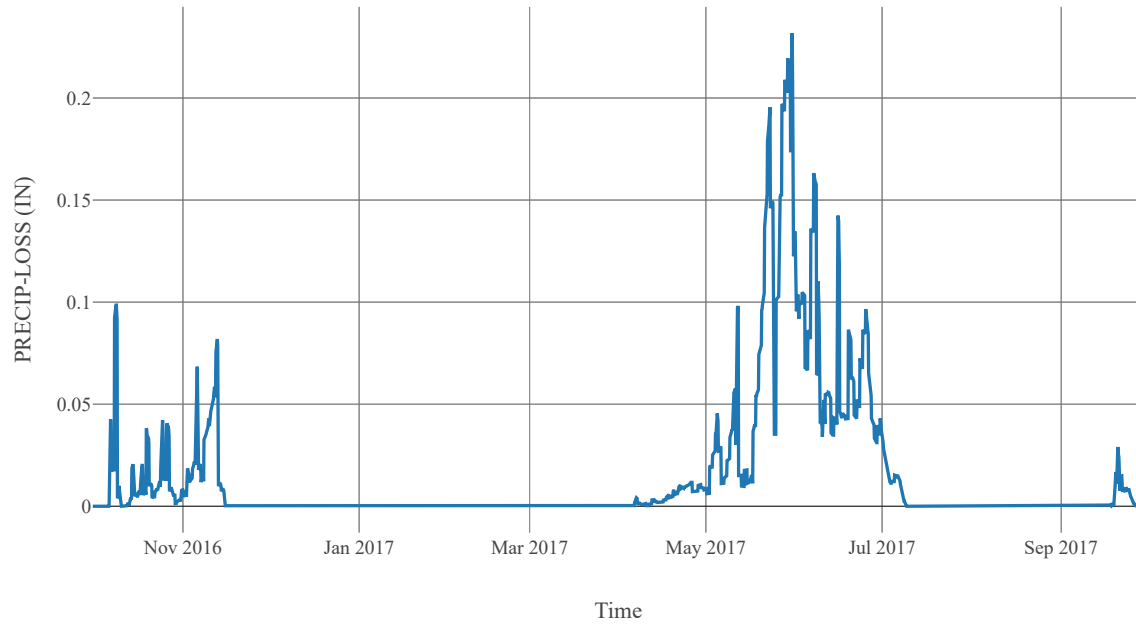
Excess Precipitation



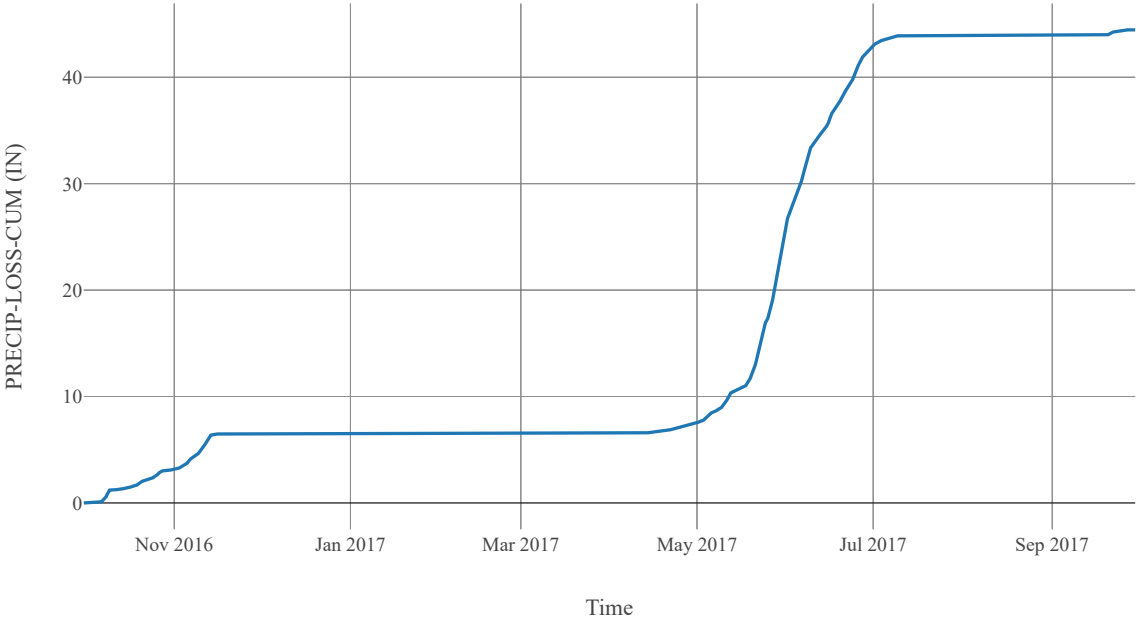
Cumulative Excess Precipitation



Precipitation Loss

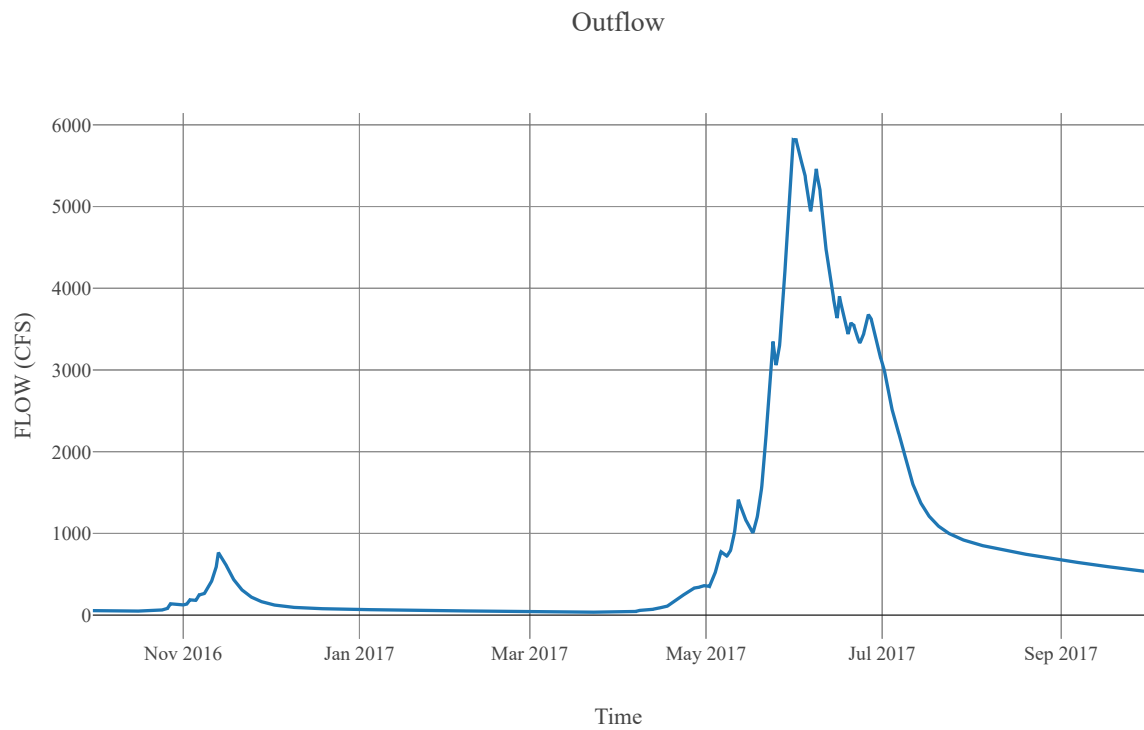


Cumulative Precipitation Loss



Junction : MethowAbGoatCk

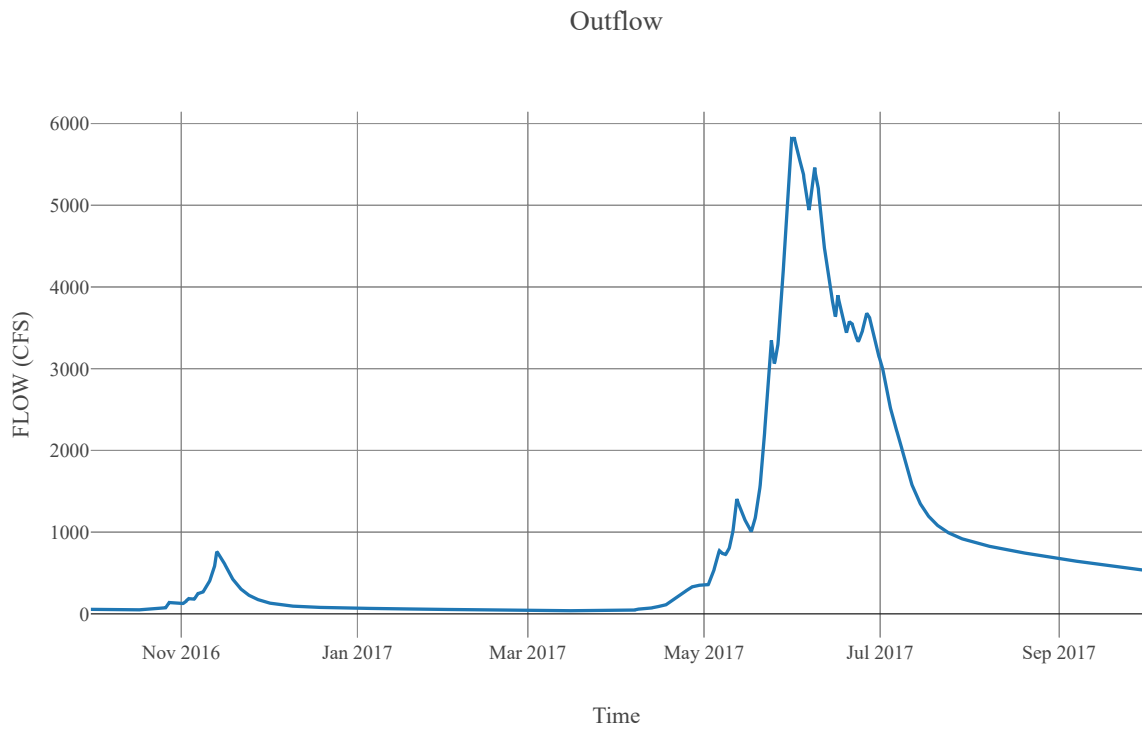
Observed Hydrograph : Methow river above goat cree
Downstream : MethowRv_R025



Reach : MethowRv_R025

Loss Method : None
Downstream : ChewuchRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : ChewuchRv_S010

Area : 525.02
Observed Hydrograph : Chewuch river at winthrop
Latitude : 48.74
Longitude : -120.12
Downstream : ChewuchRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.38
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

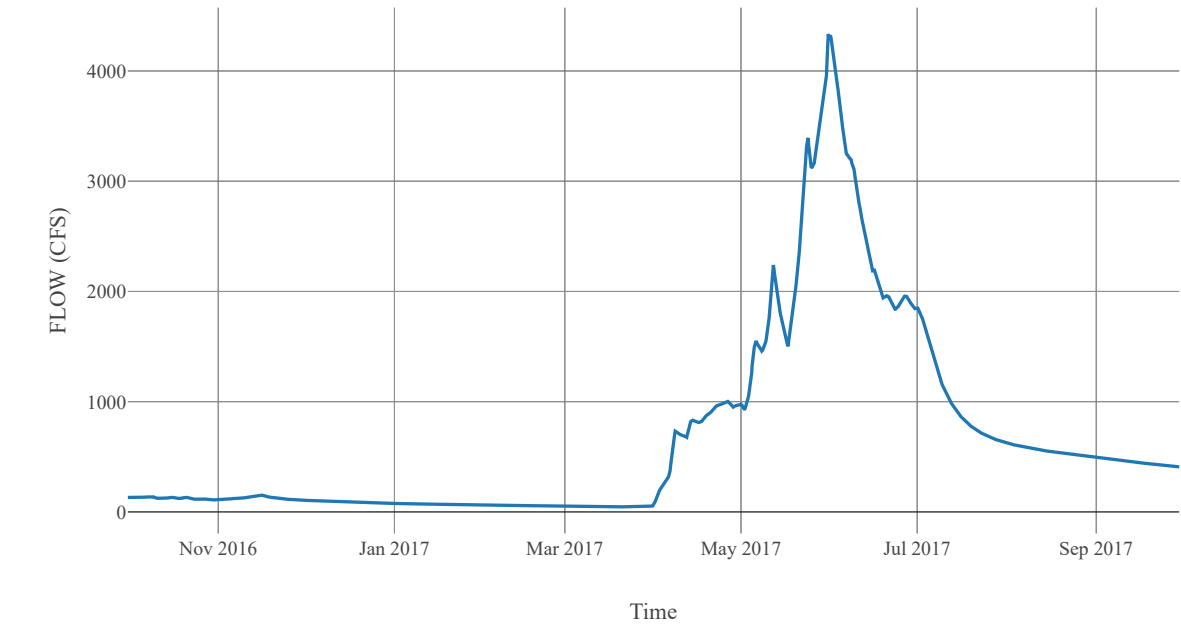
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.39
Storage Coefficient	9.39

Baseflow	
Method	Linear Reservoir

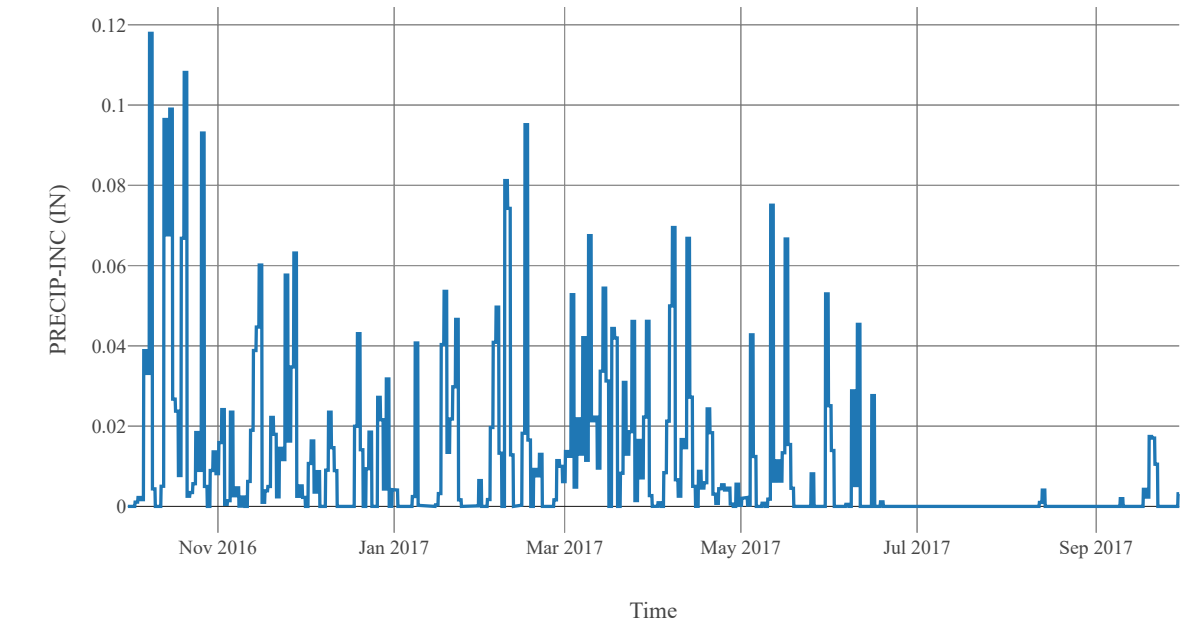
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	187.8
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.25
		Layer Number	2
		Storage Coefficient	3756
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	480418.89	Ac-ft
Precipitation Volume	903167.83	Ac-ft
Loss Volume	780429.44	Ac-ft
Excess Volume	2976.94	Ac-ft

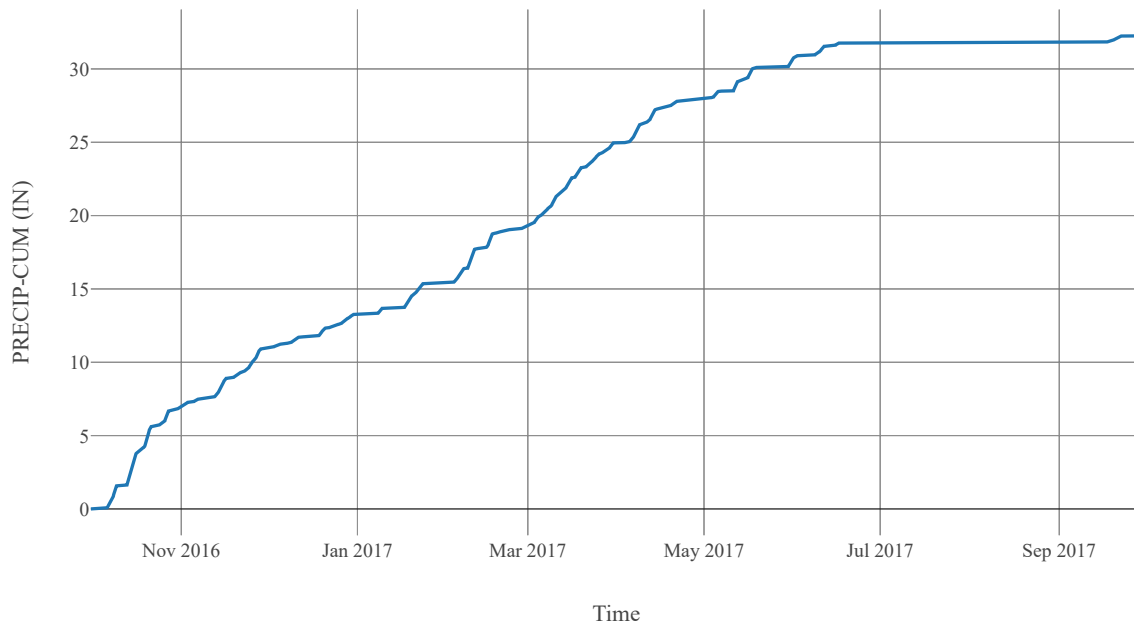
Outflow



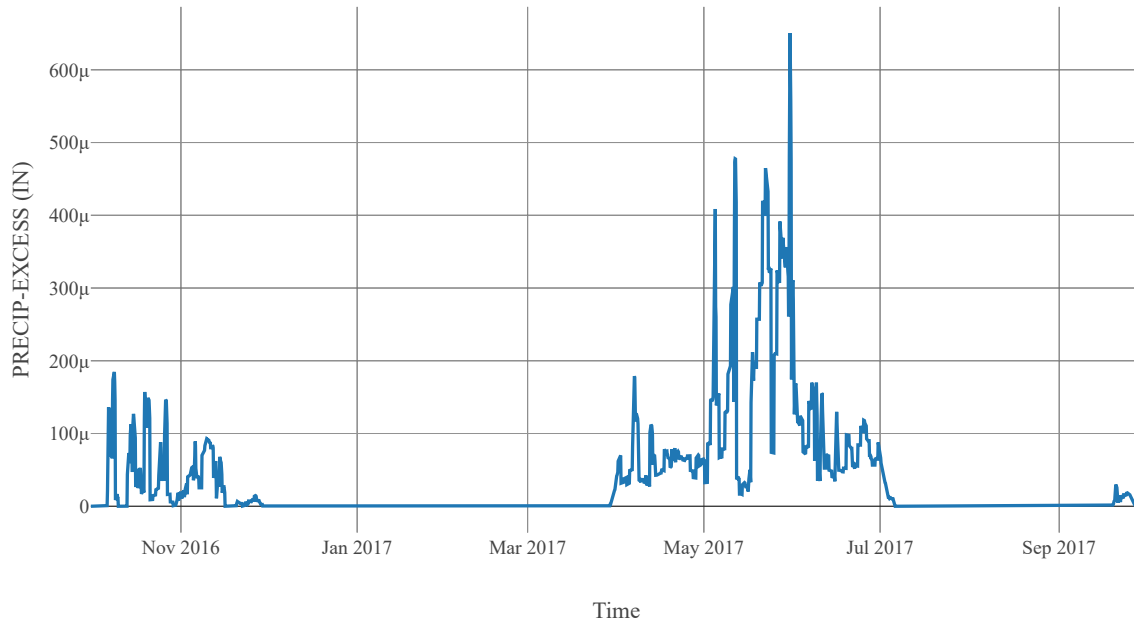
Precipitation



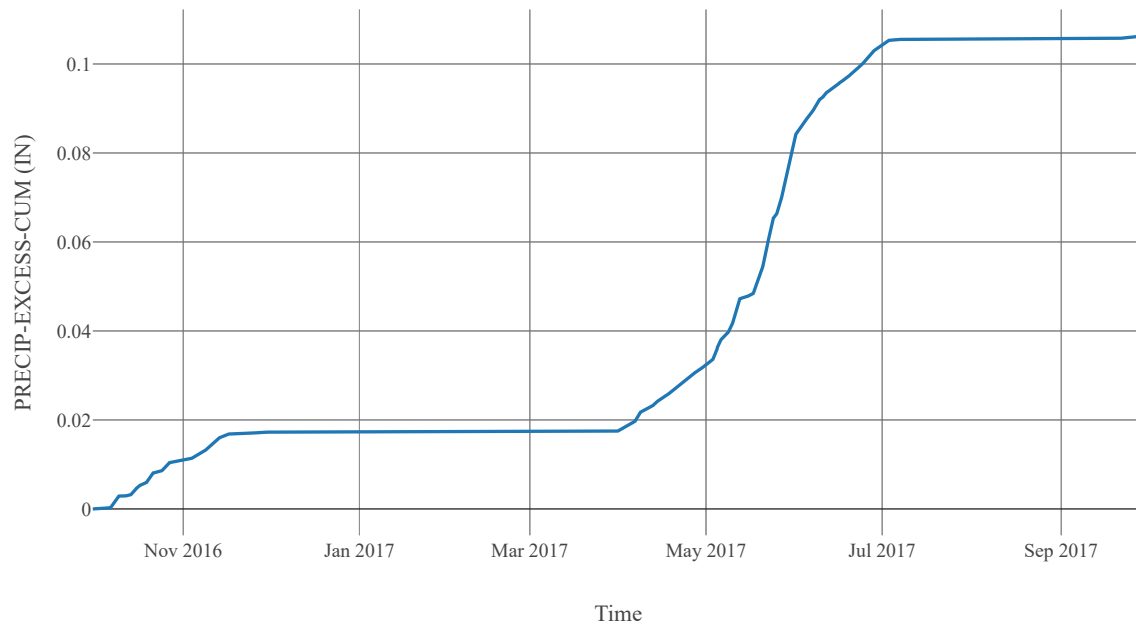
Cumulative Precipitation



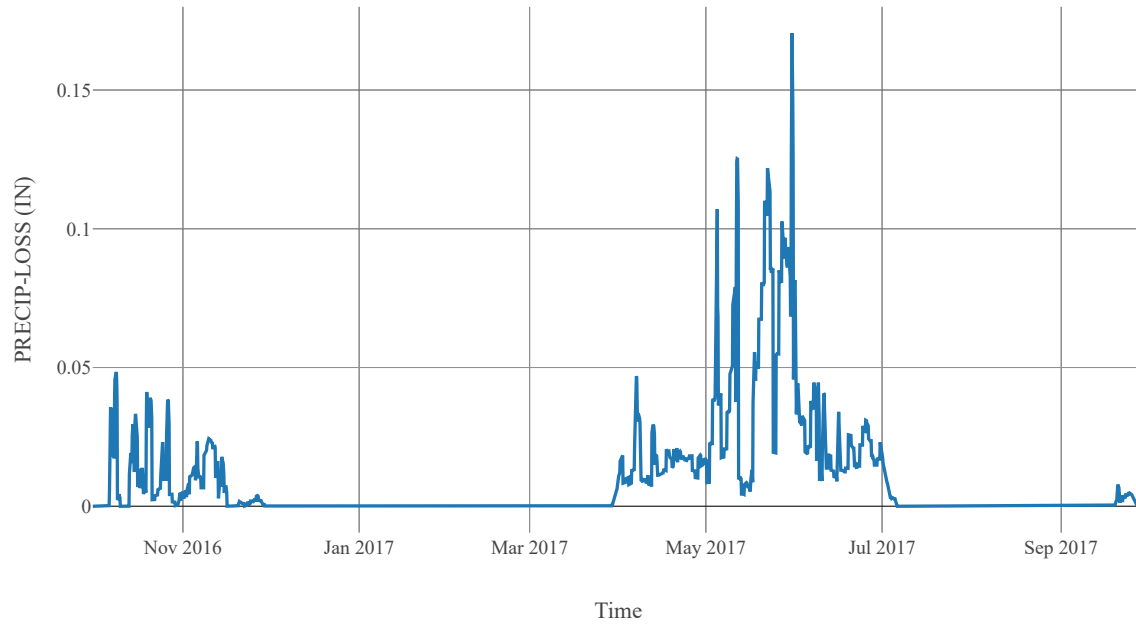
Excess Precipitation



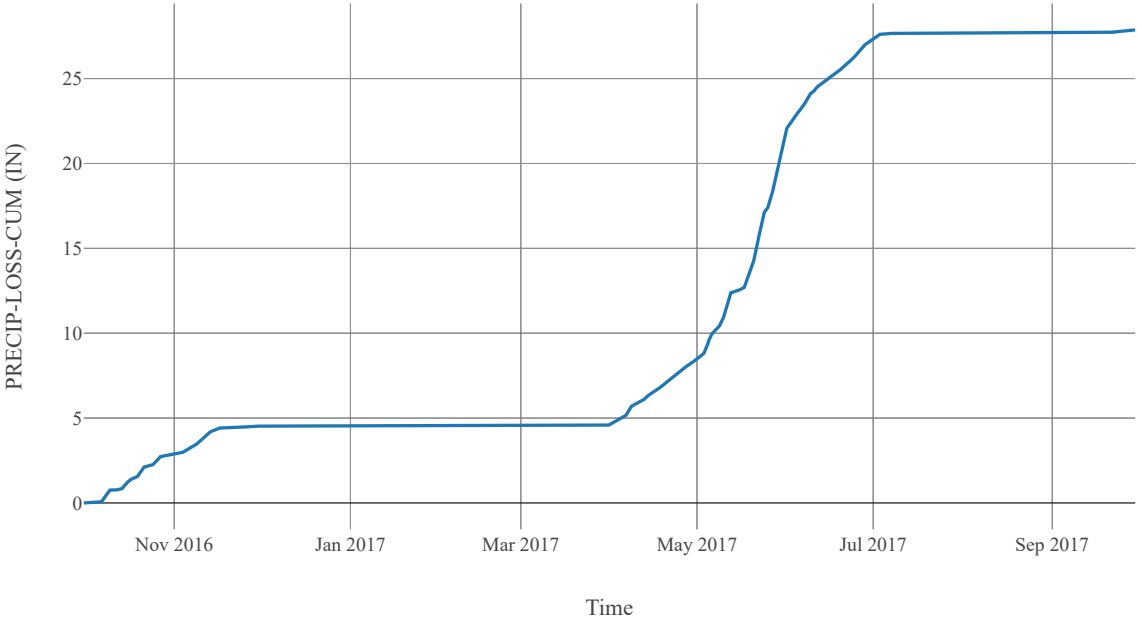
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : MethowRv_S020

Area : 183.84
Latitude : 48.52
Longitude : -120.29
Downstream : ChewuchRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.46
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

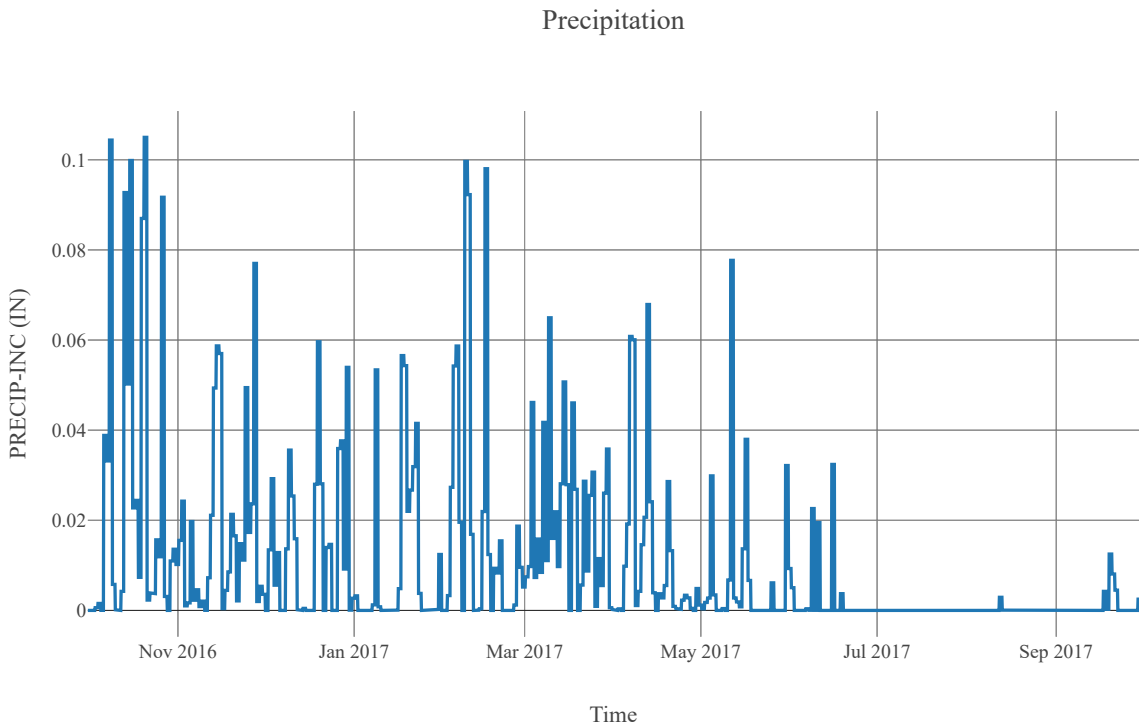
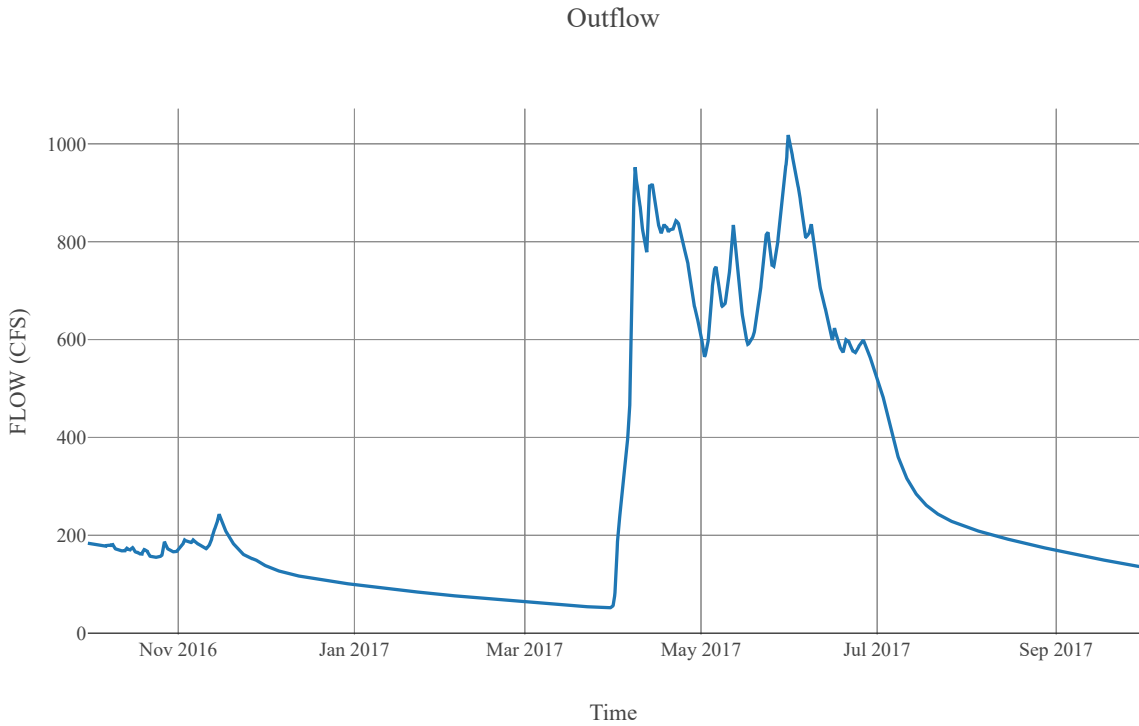
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.98
Storage Coefficient	7.98

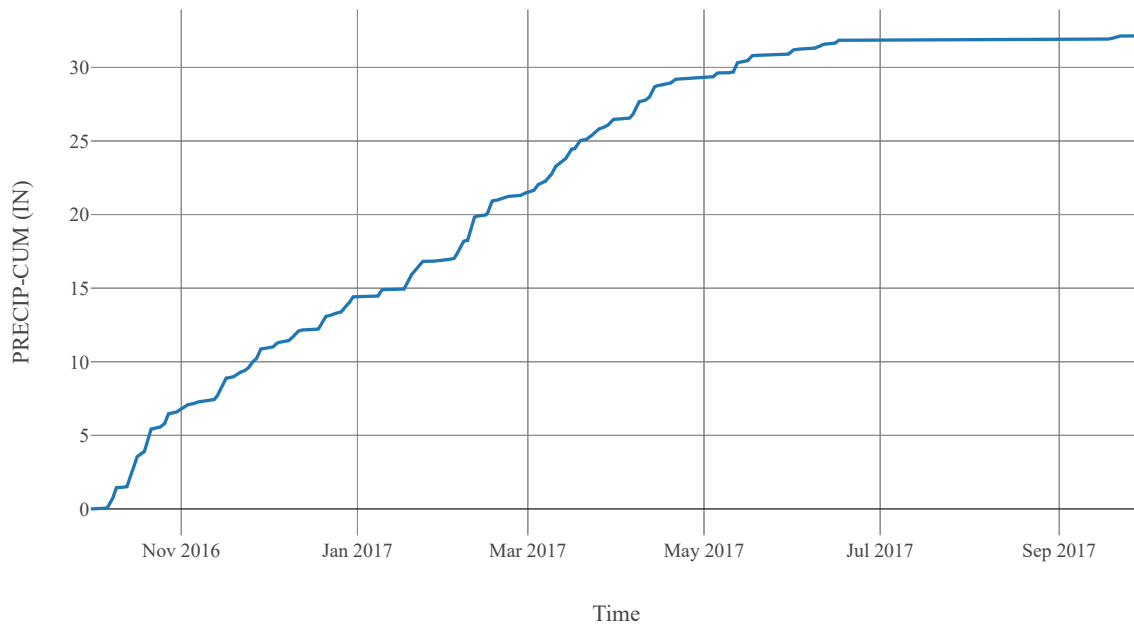
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	159.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	1
		Layer Number	2
		Storage Coefficient	3192
		Number Steps	1

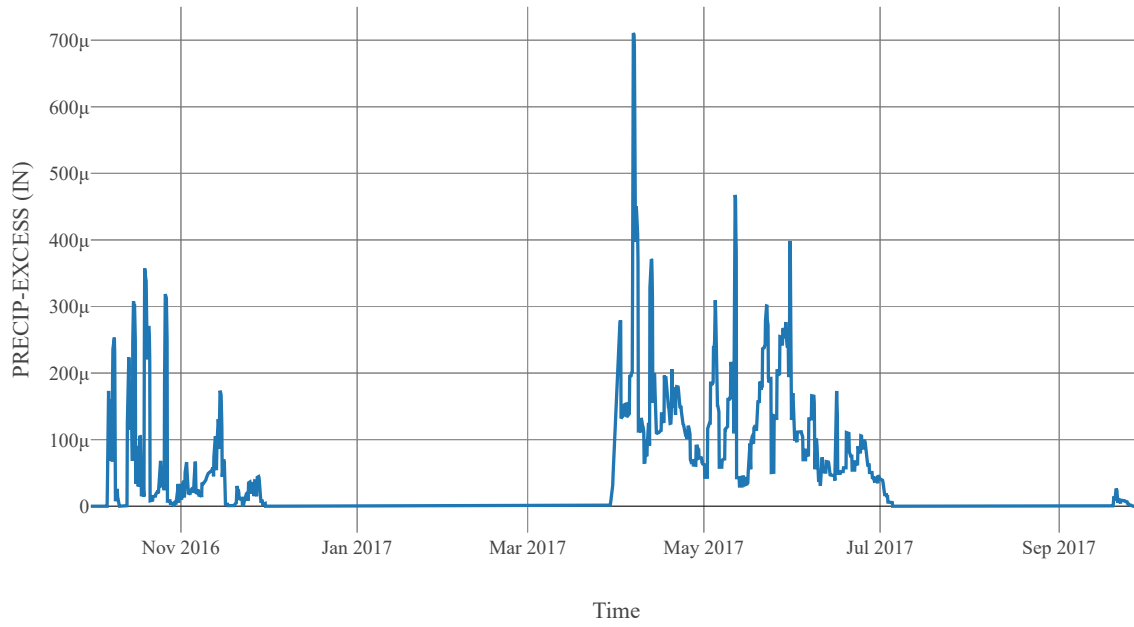
Statistics		
Name	Value	Unit
Baseflow Volume	206623.68	Ac-ft
Precipitation Volume	315162.19	Ac-ft
Loss Volume	265486.69	Ac-ft
Excess Volume	1226.88	Ac-ft



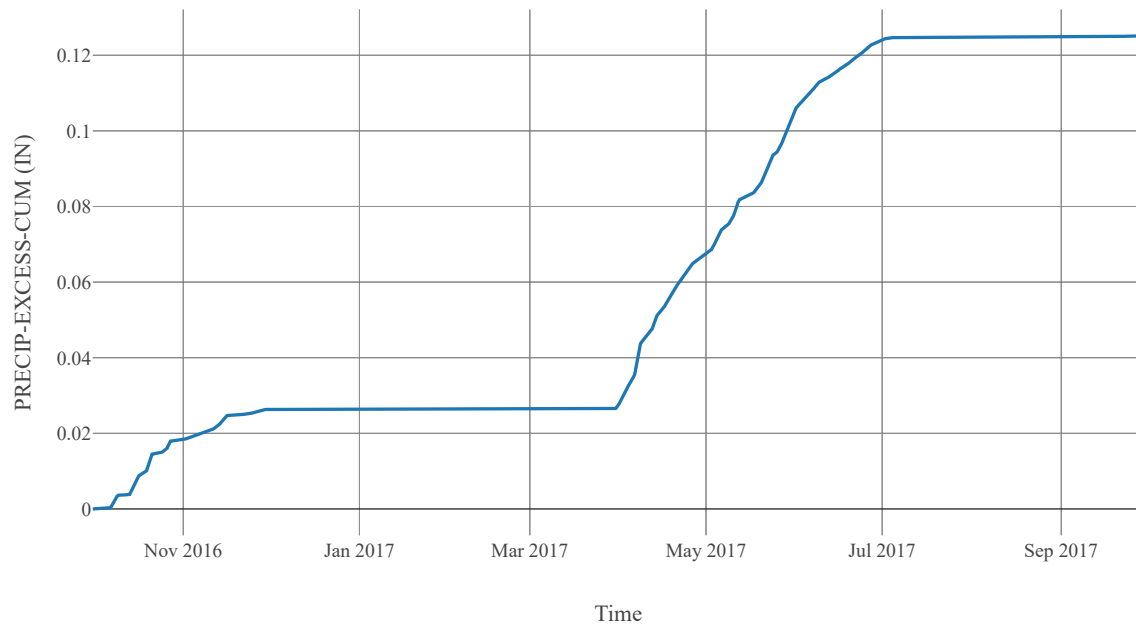
Cumulative Precipitation



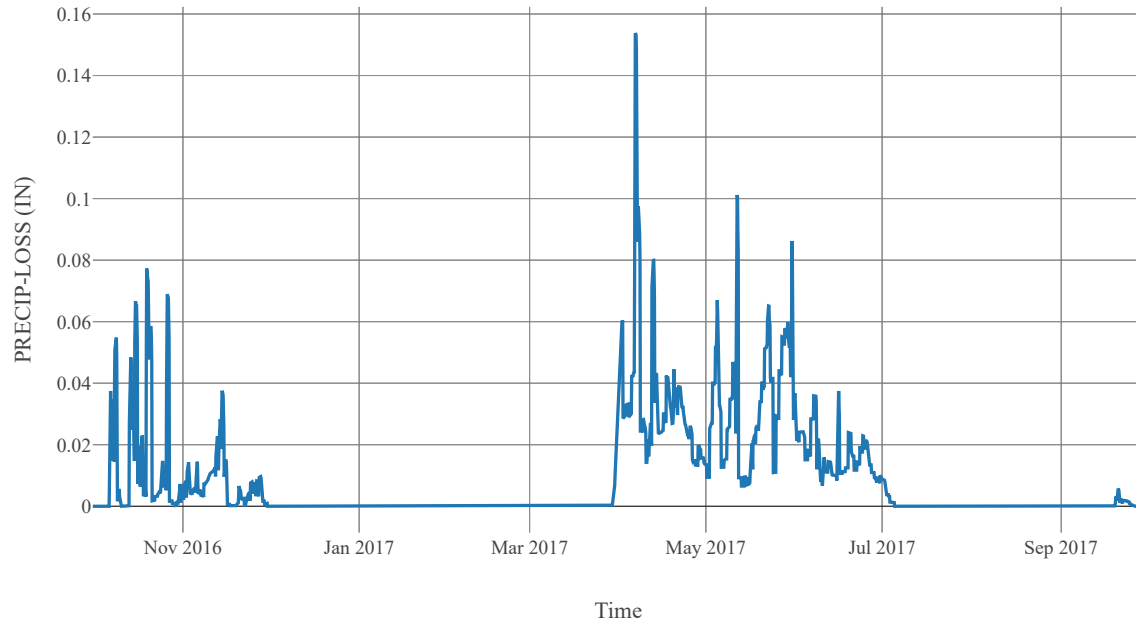
Excess Precipitation



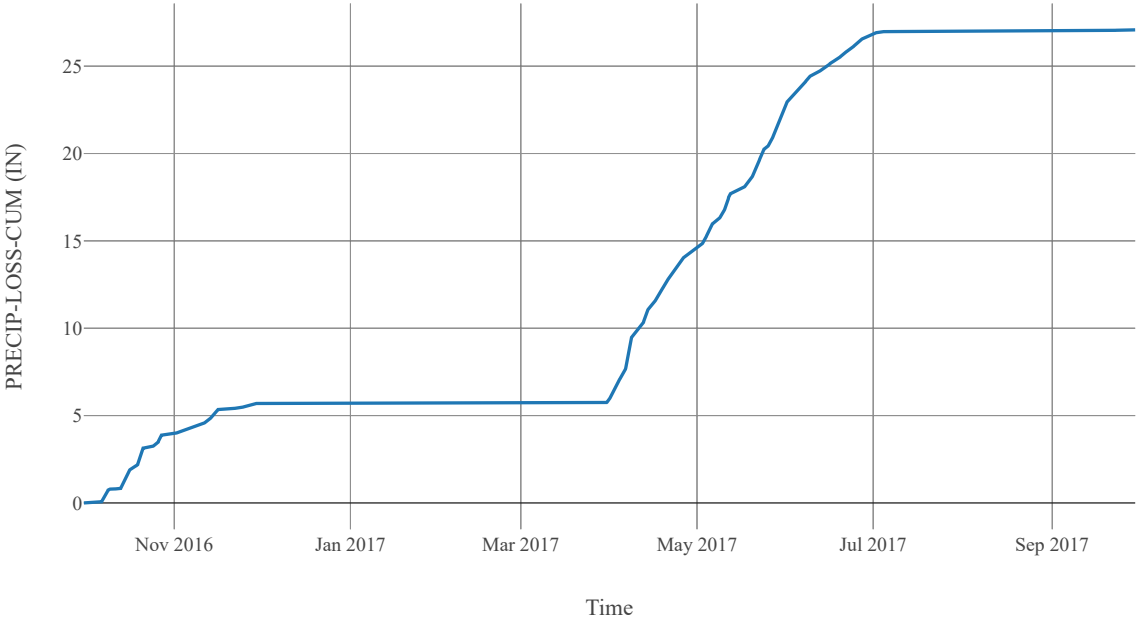
Cumulative Excess Precipitation



Precipitation Loss

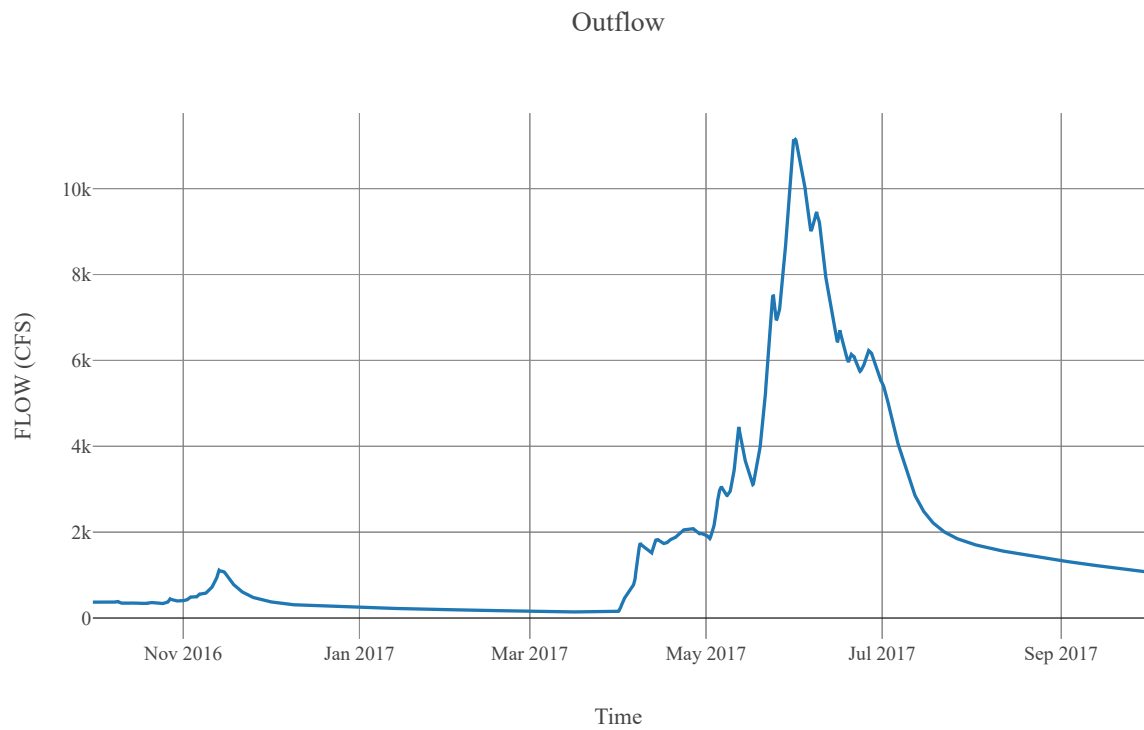


Cumulative Precipitation Loss



Junction : ChewuchRv_CF

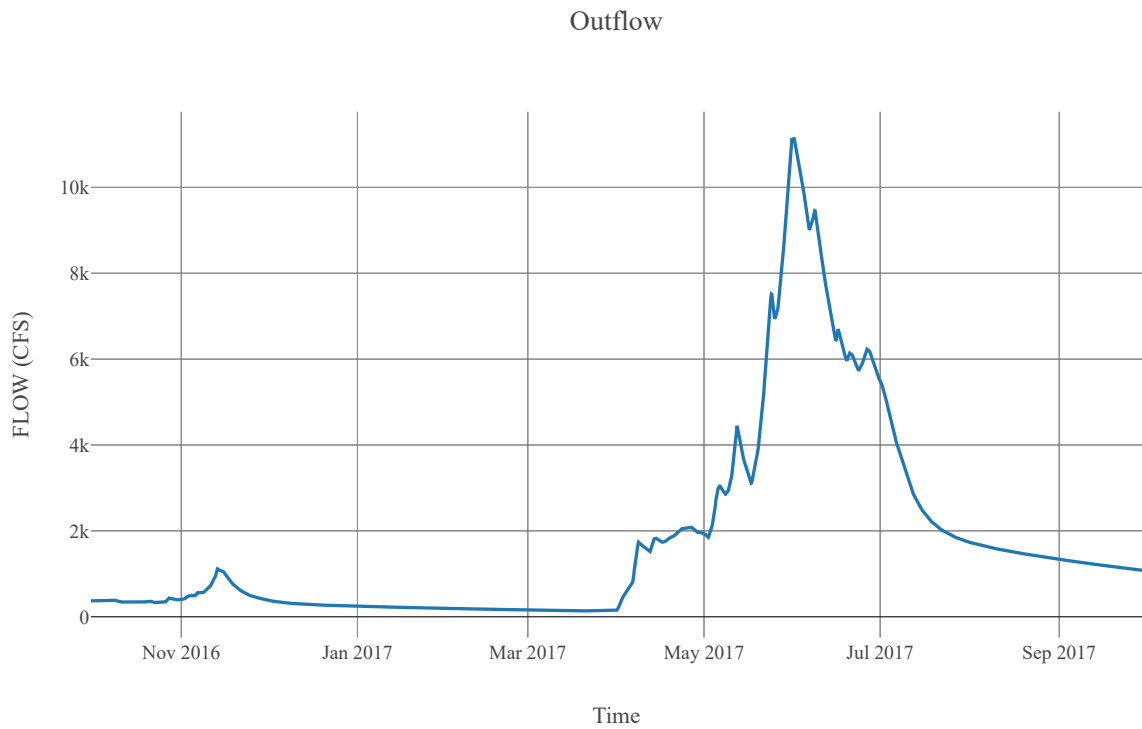
Observed Hydrograph : Methow river at winthrop
Downstream : MethowRv_R020



Reach : MethowRv_R020

Loss Method : None
Downstream : Methow Nr Twisp

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : TwispRv_S010

Area : 244.81
Latitude : 48.37
Longitude : -120.41
Downstream : Twisp Rv

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.16
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

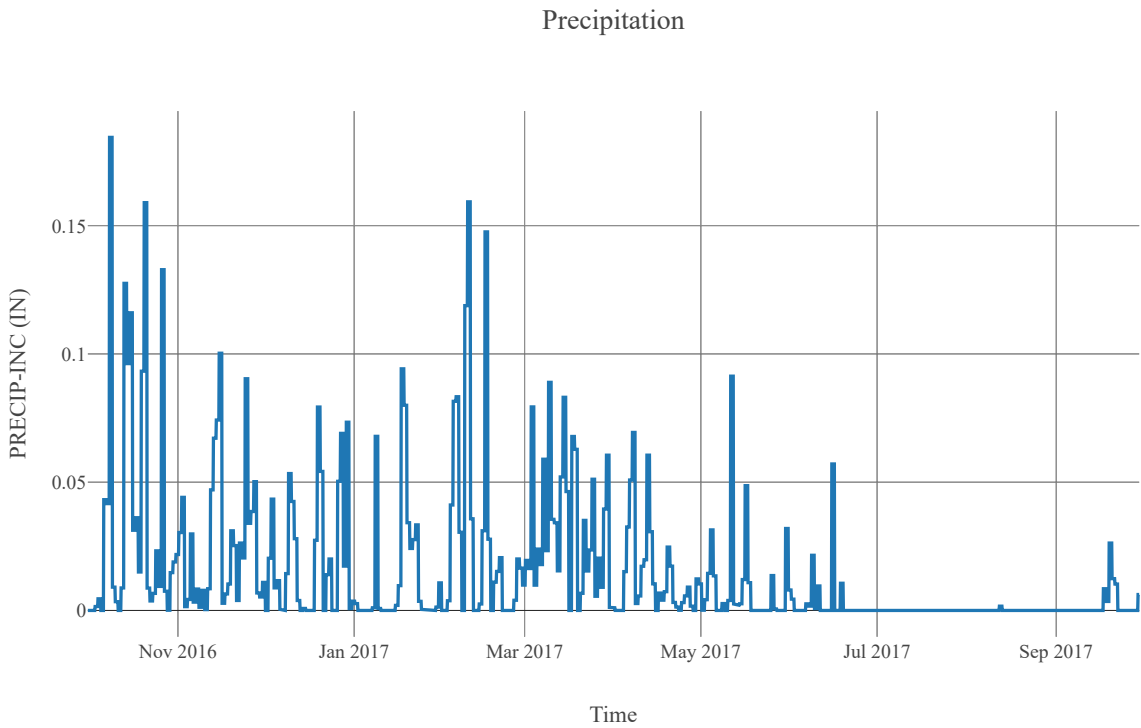
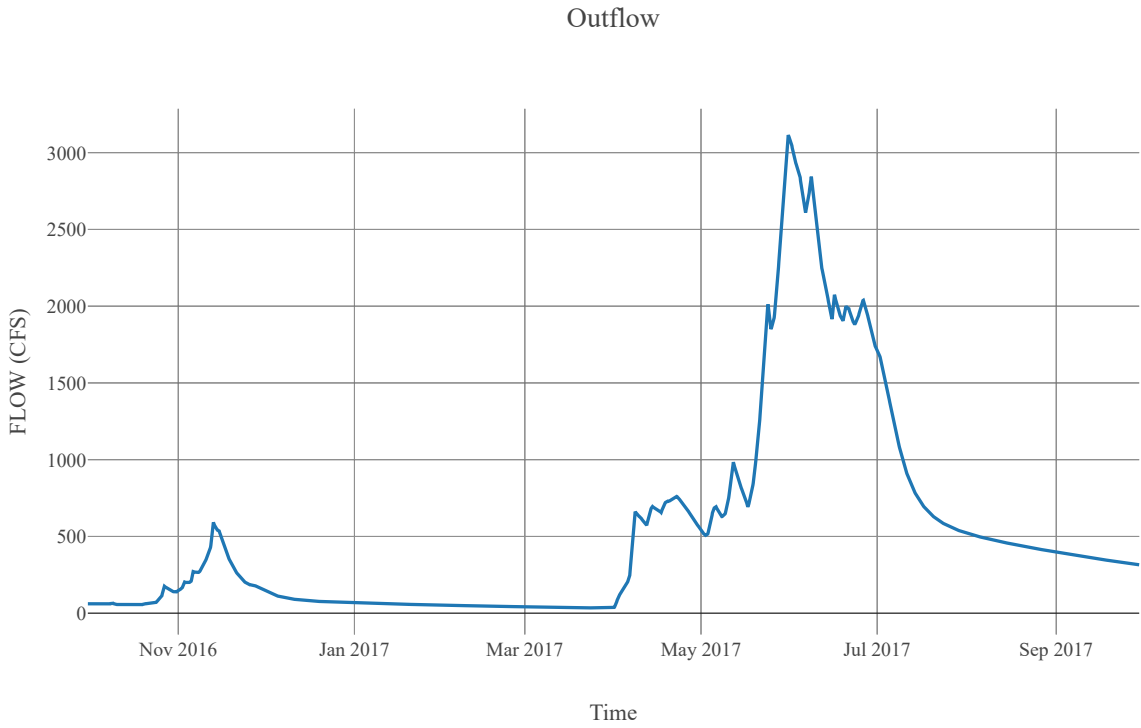
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.45
Storage Coefficient	7.45

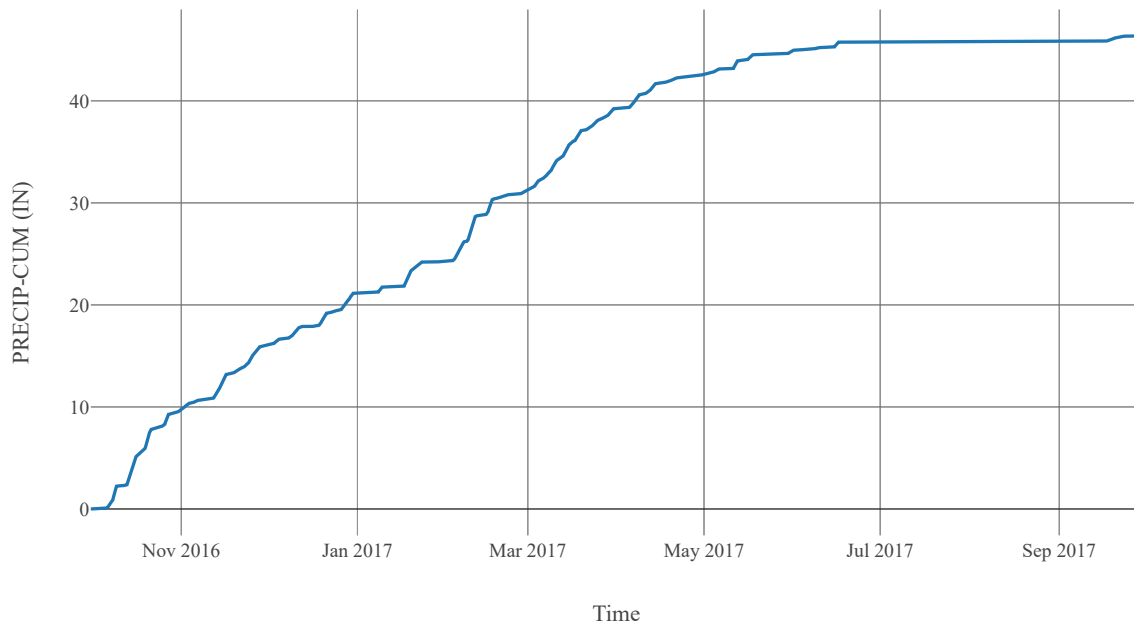
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	149
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.25
		Layer Number	2
		Storage Coefficient	2980
		Number Steps	1

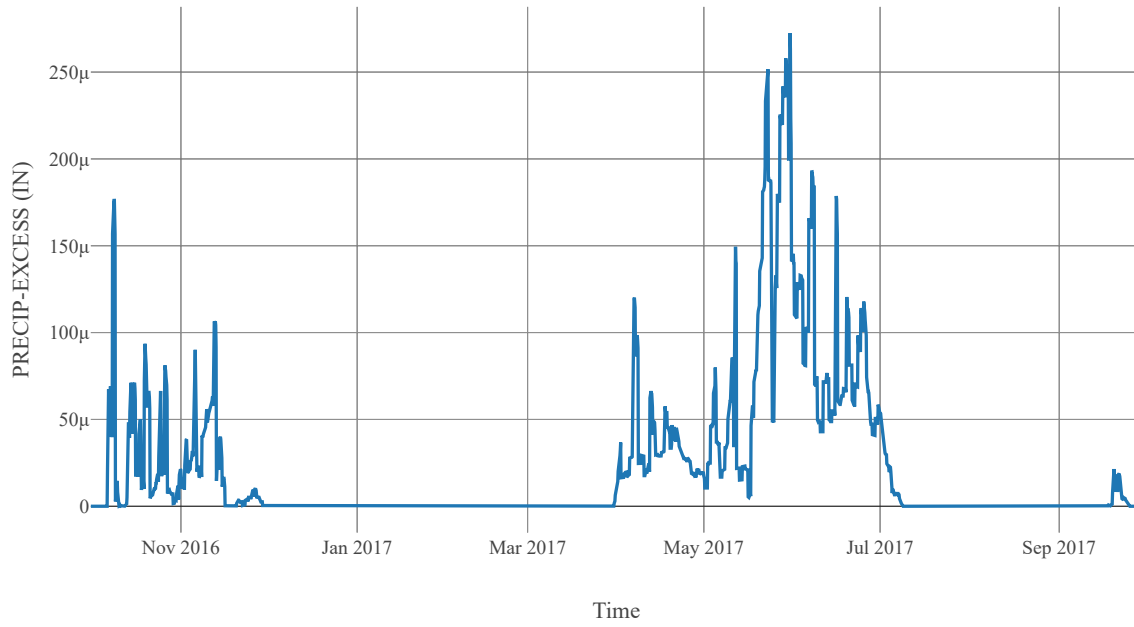
Statistics		
Name	Value	Unit
Baseflow Volume	379612.55	Ac-ft
Precipitation Volume	605342.33	Ac-ft
Loss Volume	543788.6	Ac-ft
Excess Volume	871.46	Ac-ft



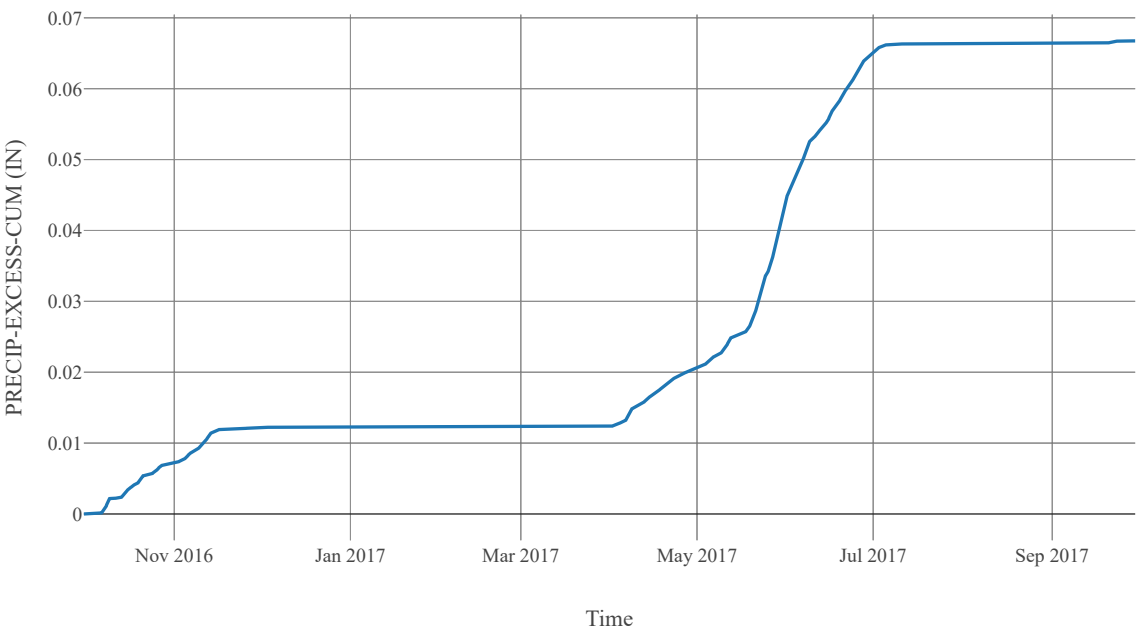
Cumulative Precipitation



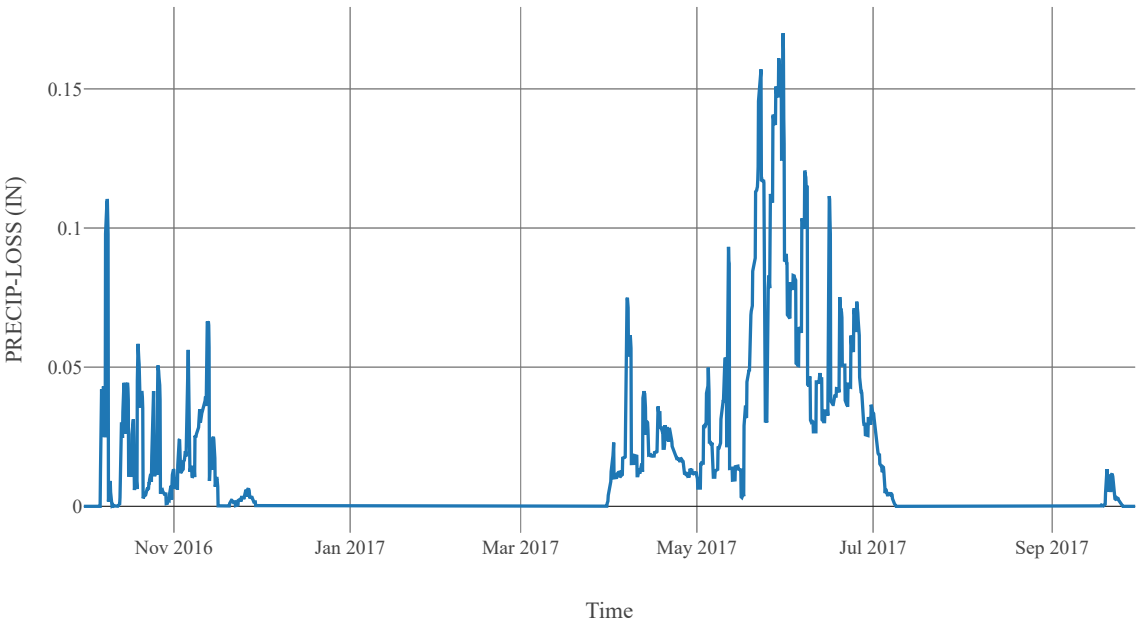
Excess Precipitation



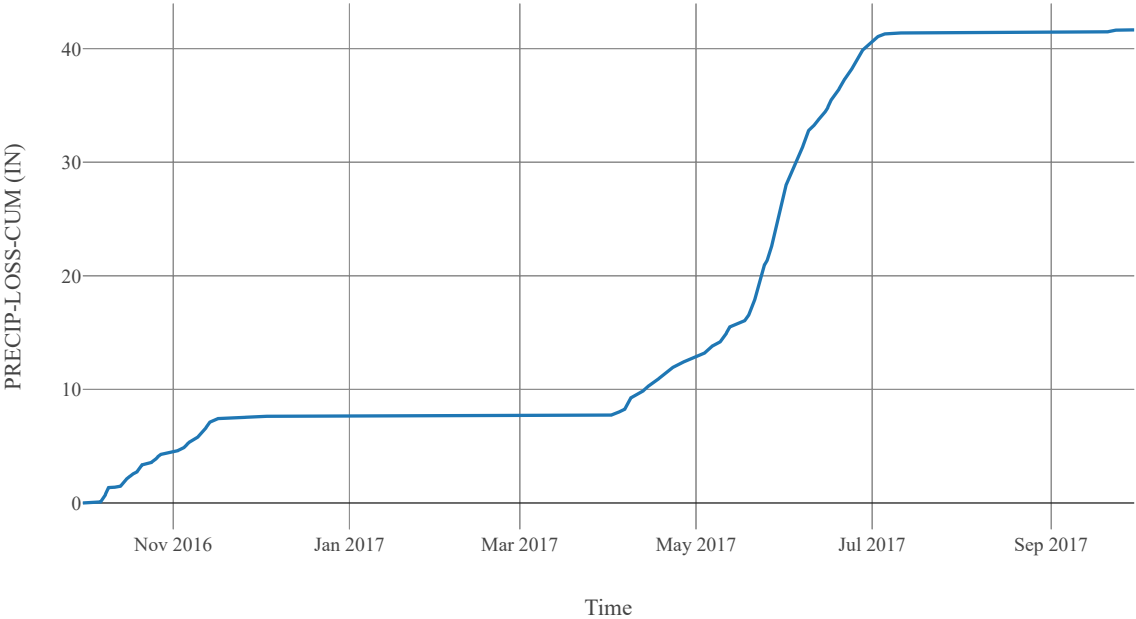
Cumulative Excess Precipitation



Precipitation Loss

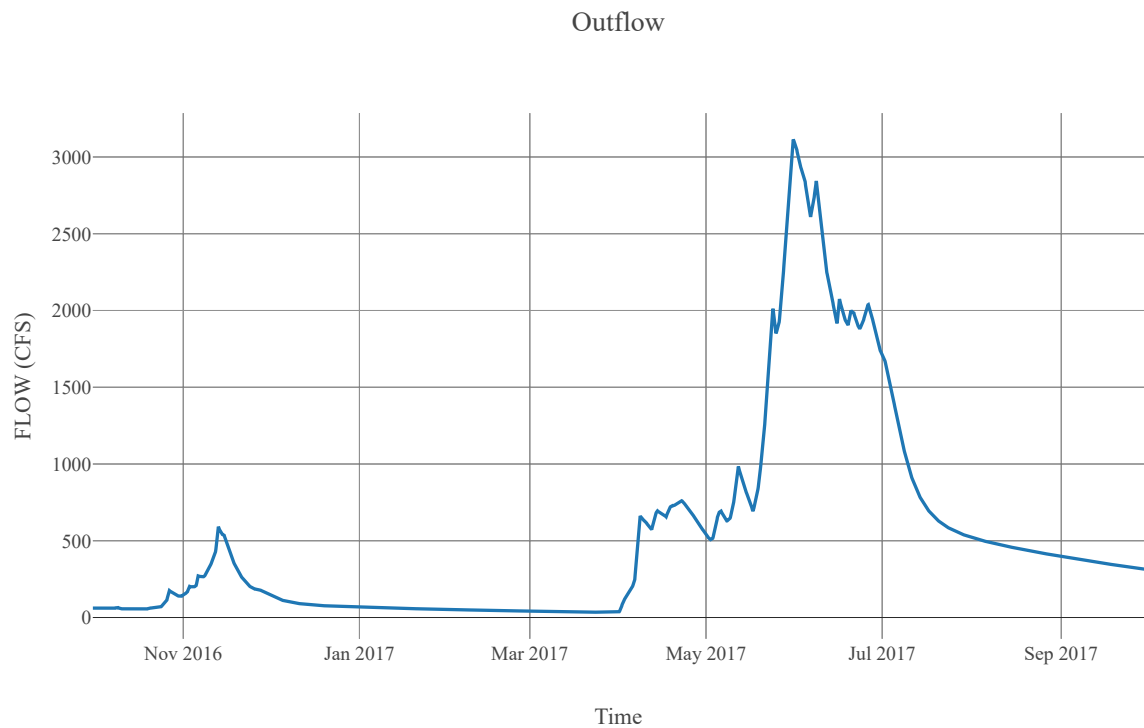


Cumulative Precipitation Loss



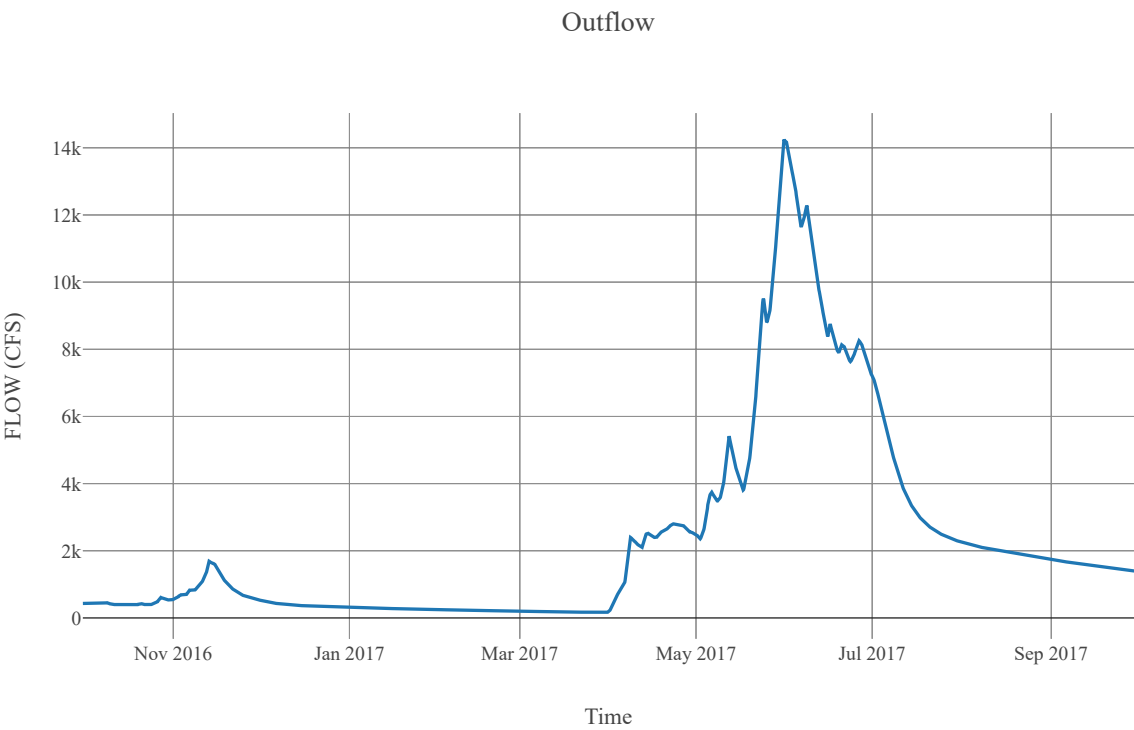
Junction : TwispRv

Observed Hydrograph : Twisp river near twisp
Downstream : Methow Nr Twisp



Junction : MethowNrTwisp

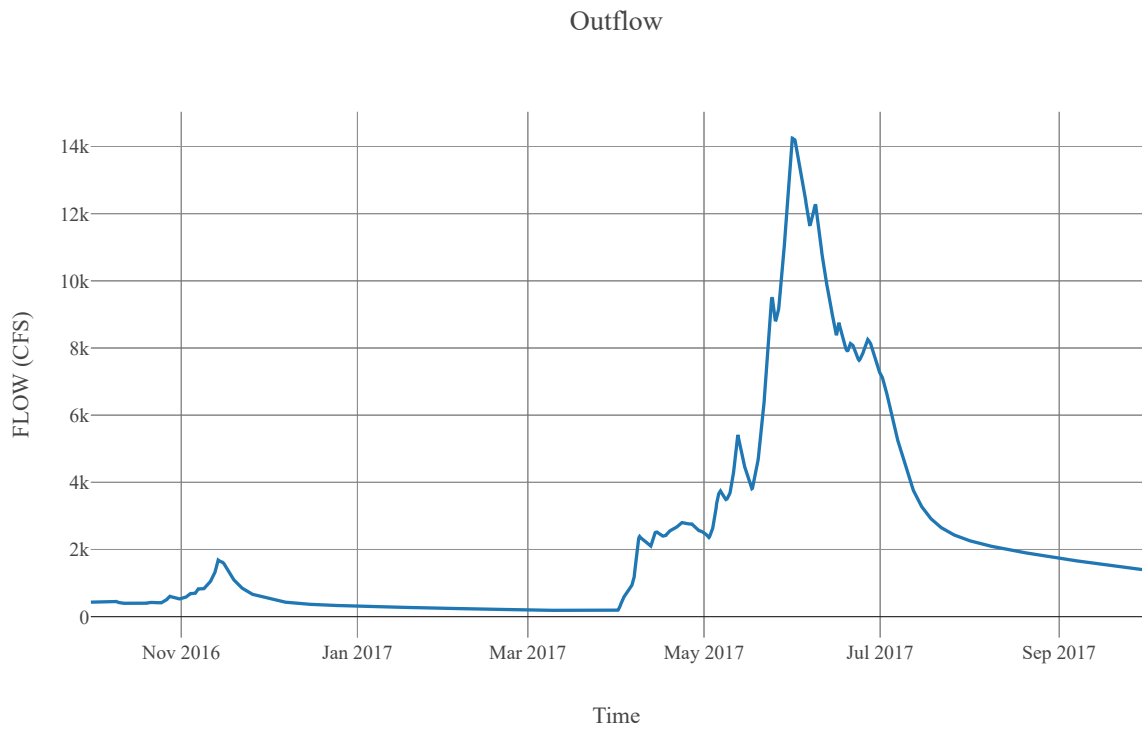
Observed Hydrograph : Methow river at twisp
Downstream : MethowRv_R010



Reach : MethowRv_R010

Loss Method : None
Downstream : Methow Nr Pateros

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : MethowRv_S010

Area : 471.72
Latitude : 48.26
Longitude : -120.08
Downstream : Methow Nr Pateros

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.14
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

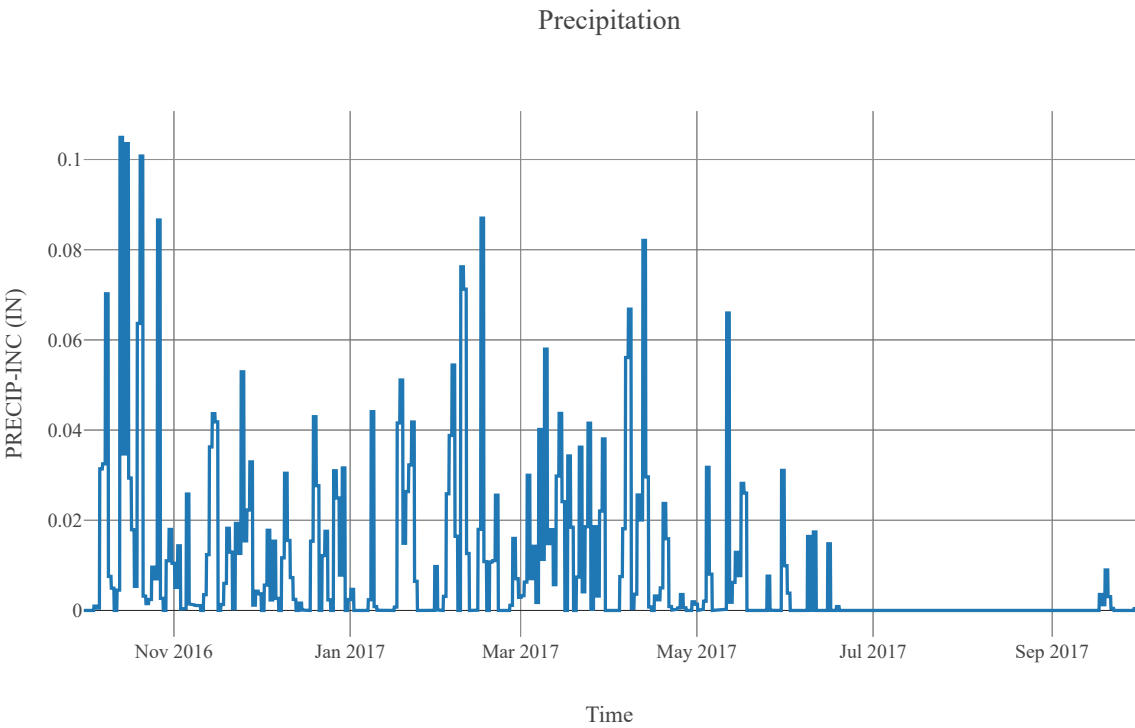
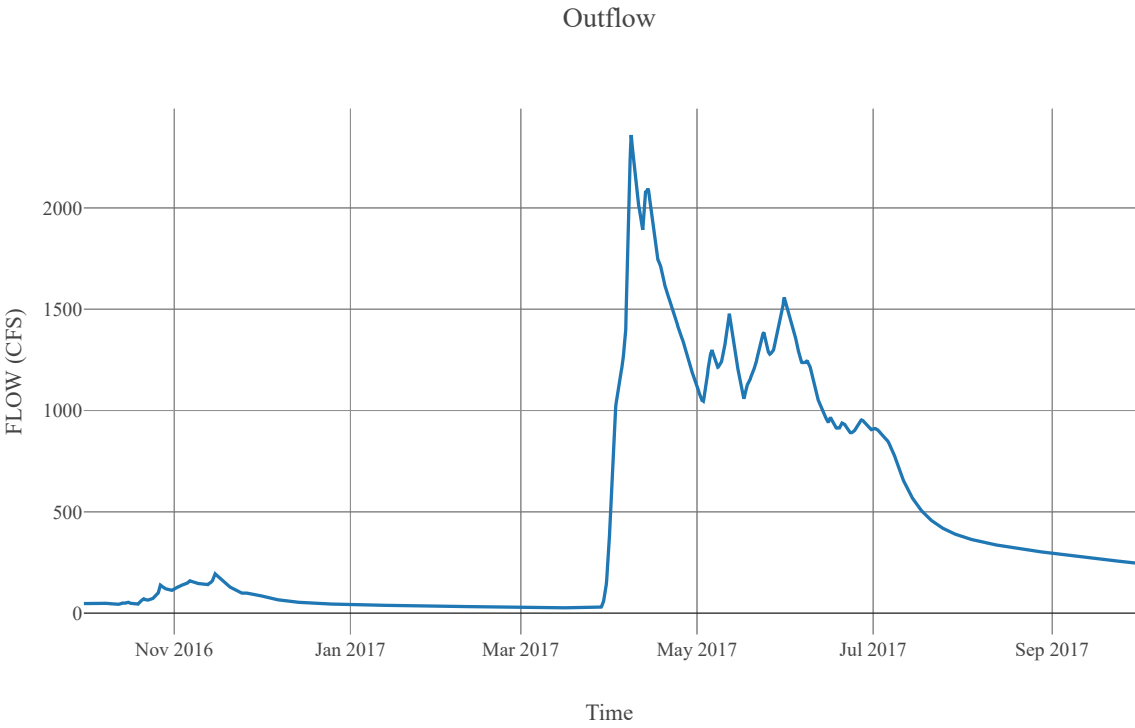
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.88
Storage Coefficient	9.88

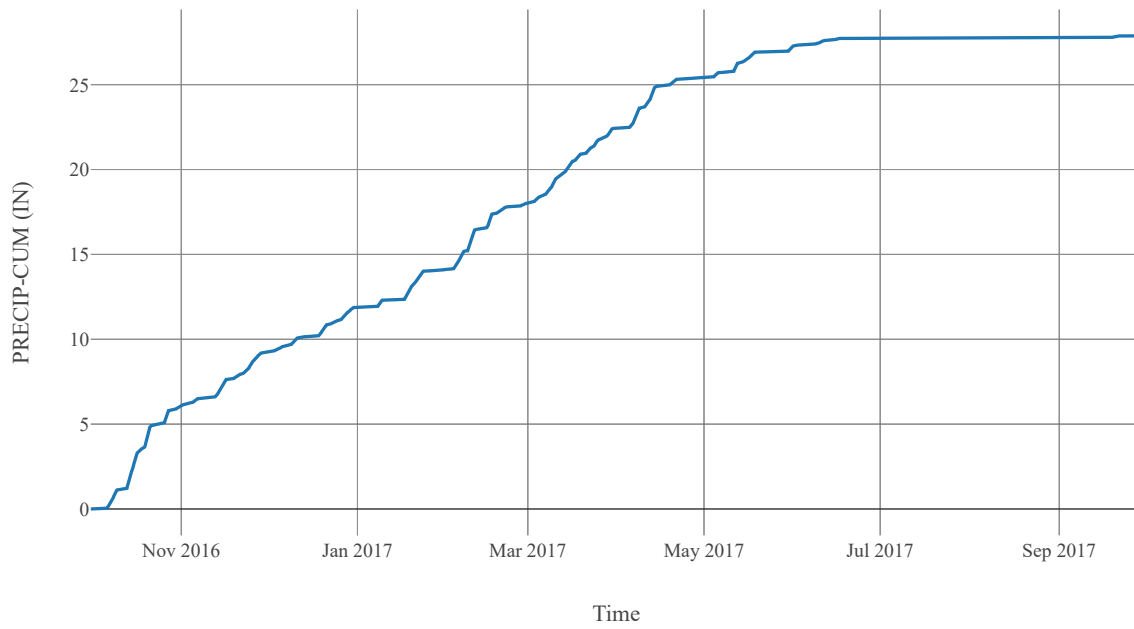
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	197.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	3952
		Number Steps	1

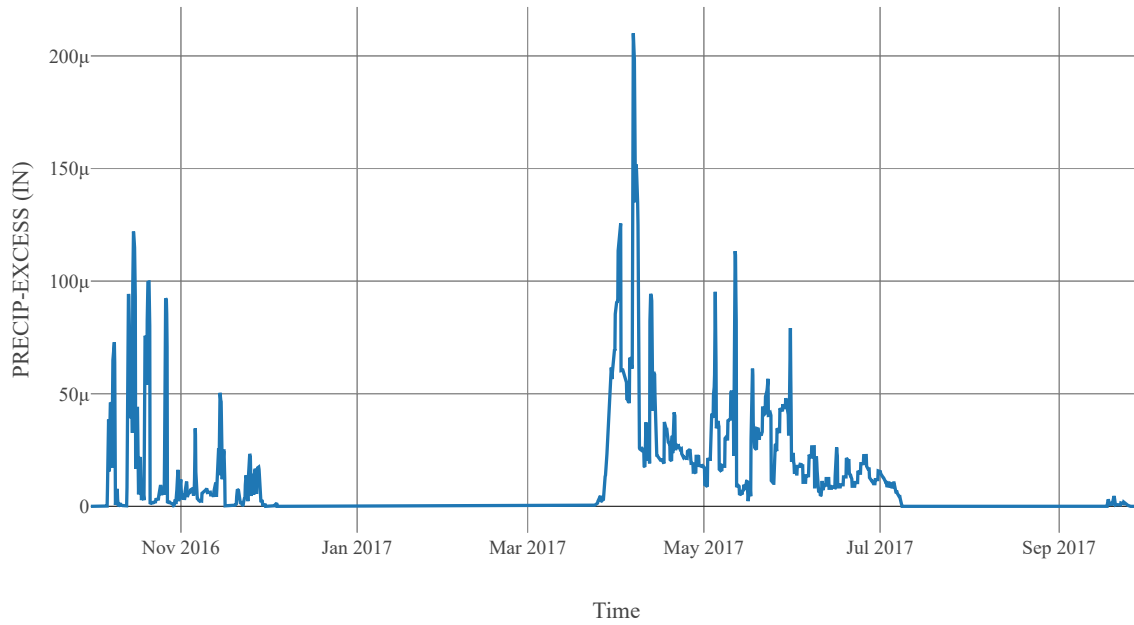
Statistics		
Name	Value	Unit
Baseflow Volume	327617.19	Ac-ft
Precipitation Volume	701256.3	Ac-ft
Loss Volume	574385.14	Ac-ft
Excess Volume	805.27	Ac-ft



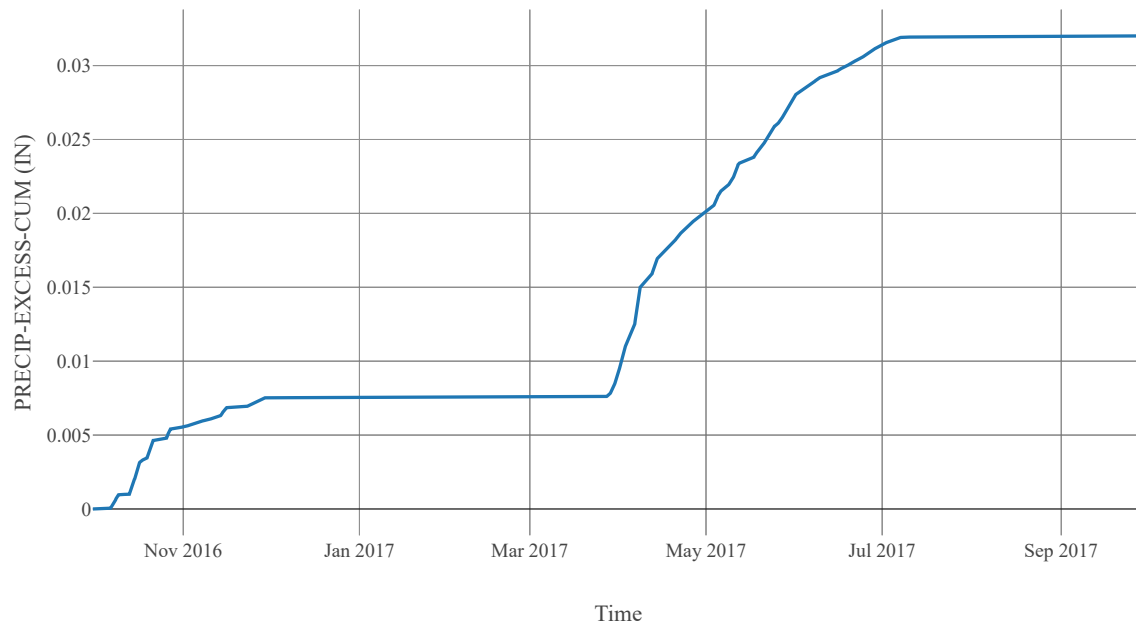
Cumulative Precipitation



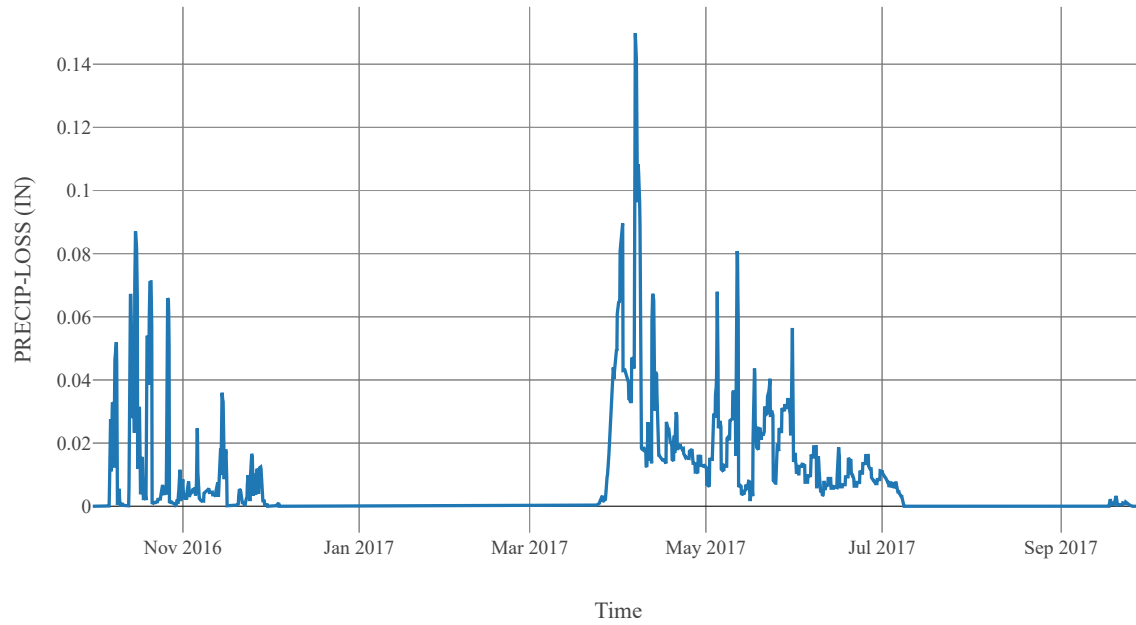
Excess Precipitation



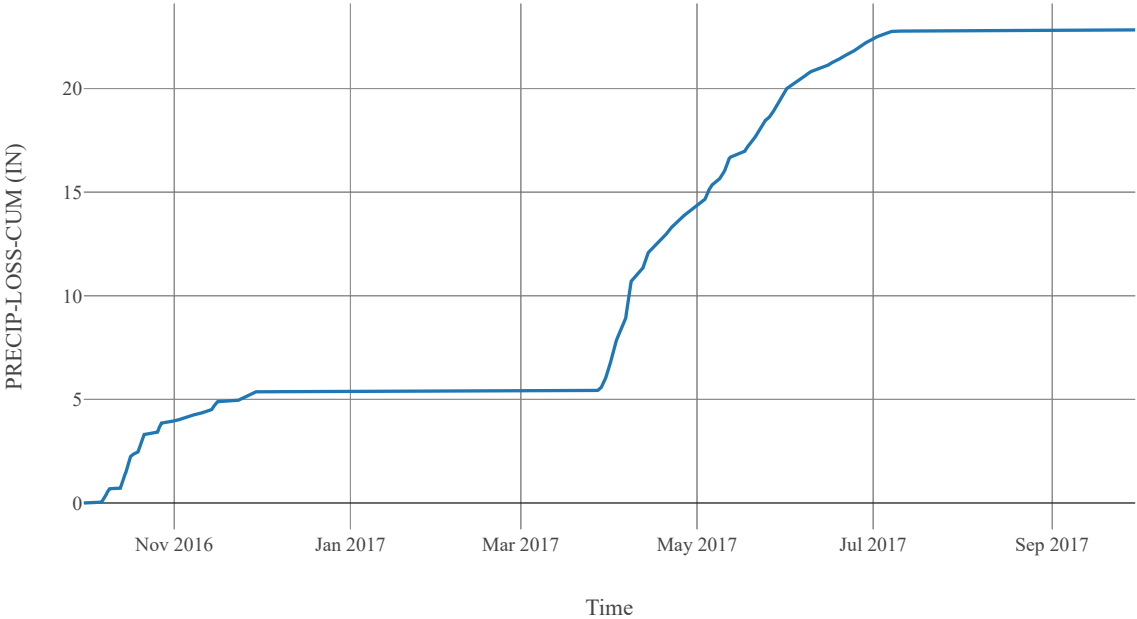
Cumulative Excess Precipitation



Precipitation Loss



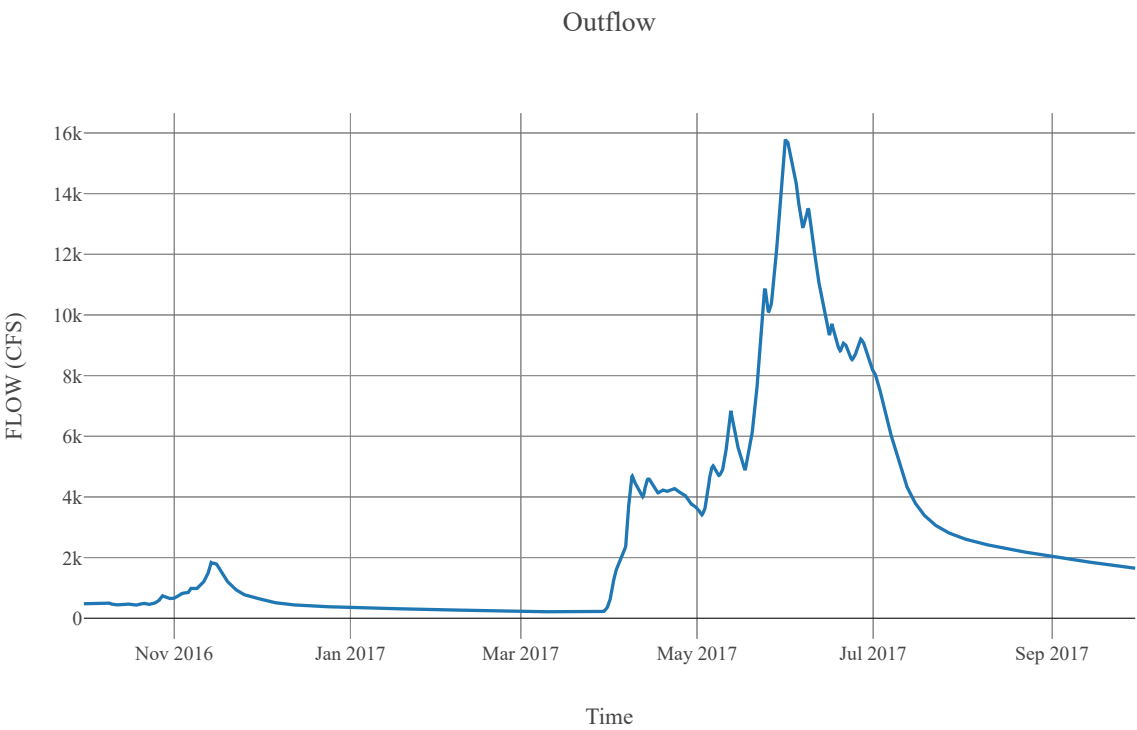
Cumulative Precipitation Loss



Junction : MethowNrPateros

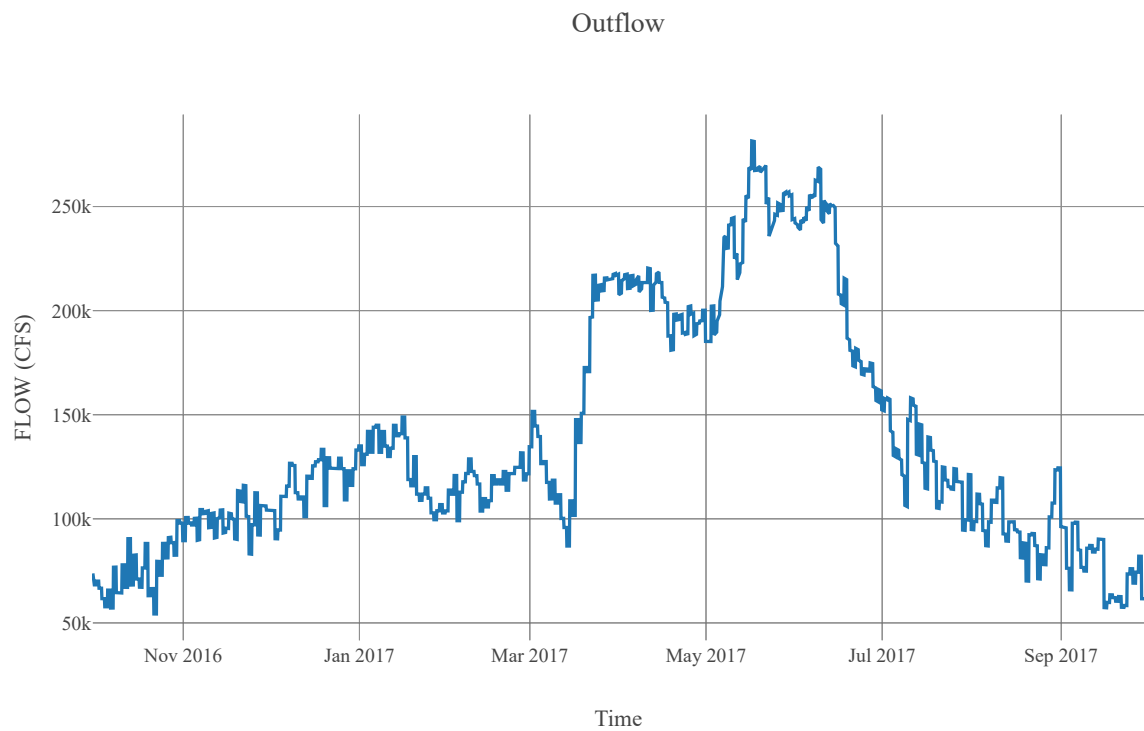
Observed Hydrograph : Methow river near pateros

Downstream : MethowRv_CF



Junction : MethowRv_CF

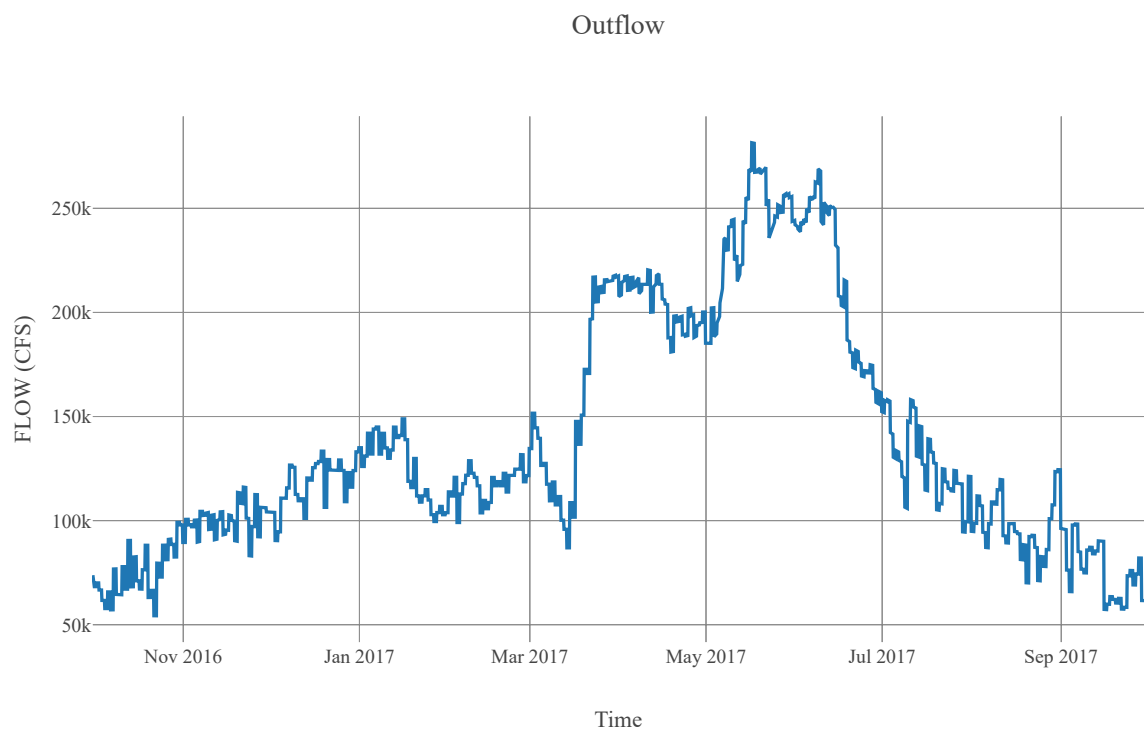
Downstream : MidColumbia_R070



Reach : MidColumbia_R070

Loss Method : None
Downstream : Wells_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : MidColumbia_S070

Area : 268.47
Latitude : 48.1
Longitude : -119.81
Downstream : Wells_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.64
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

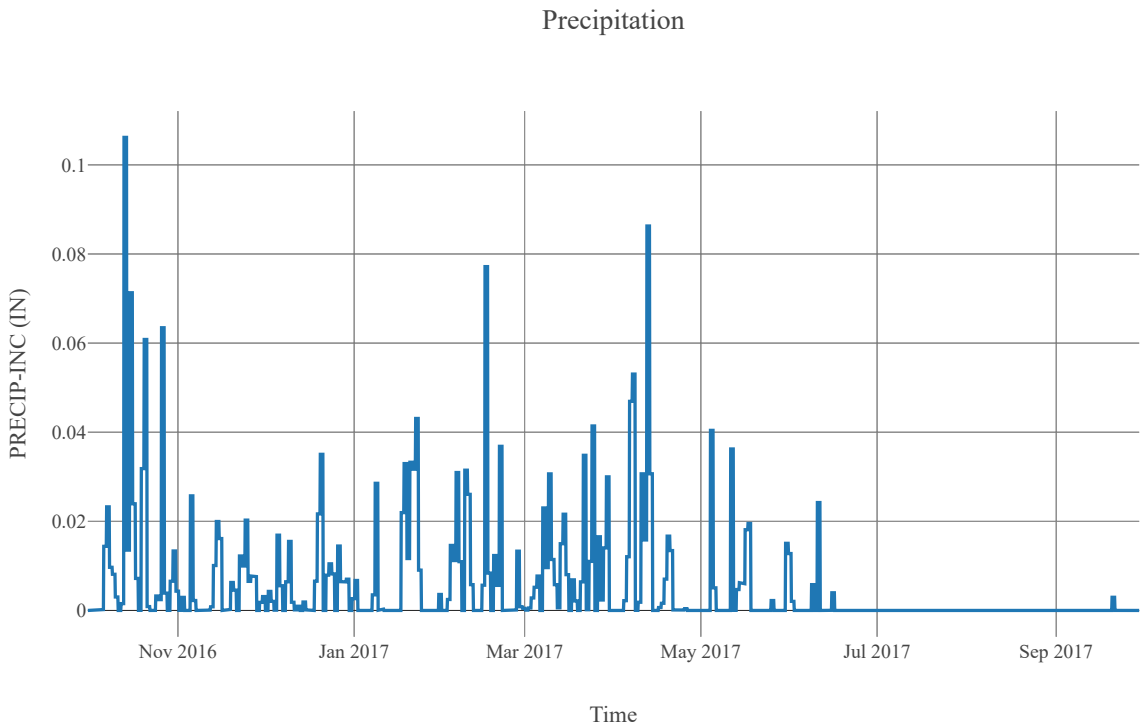
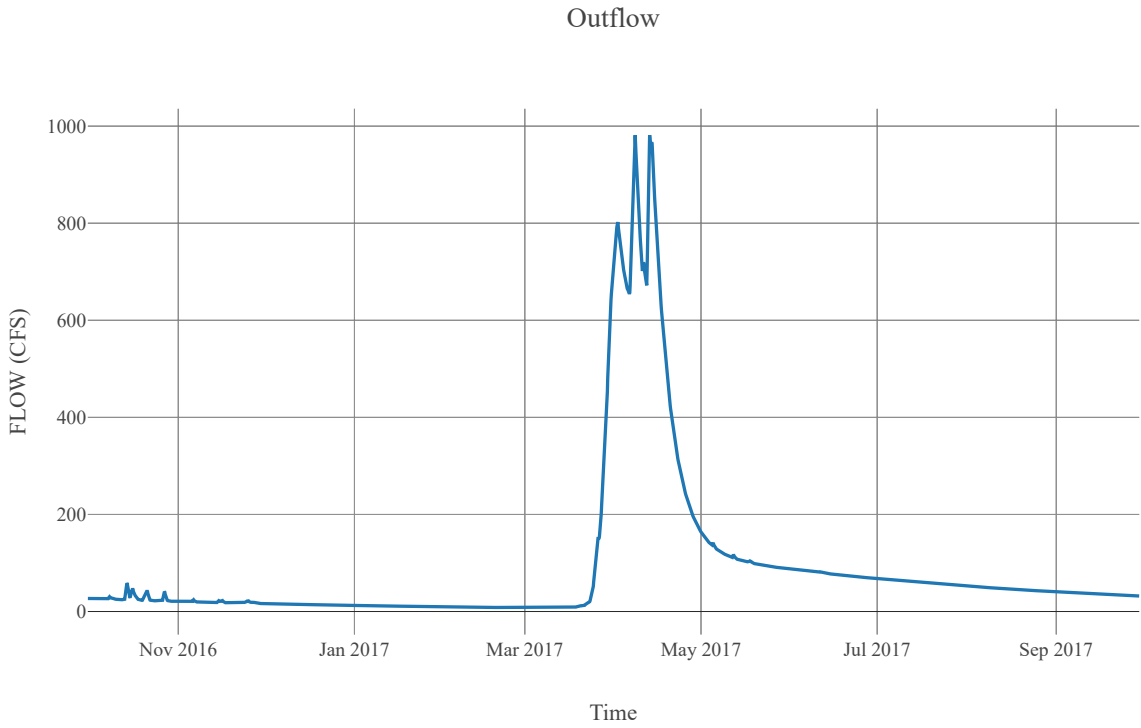
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.25
Storage Coefficient	7.25

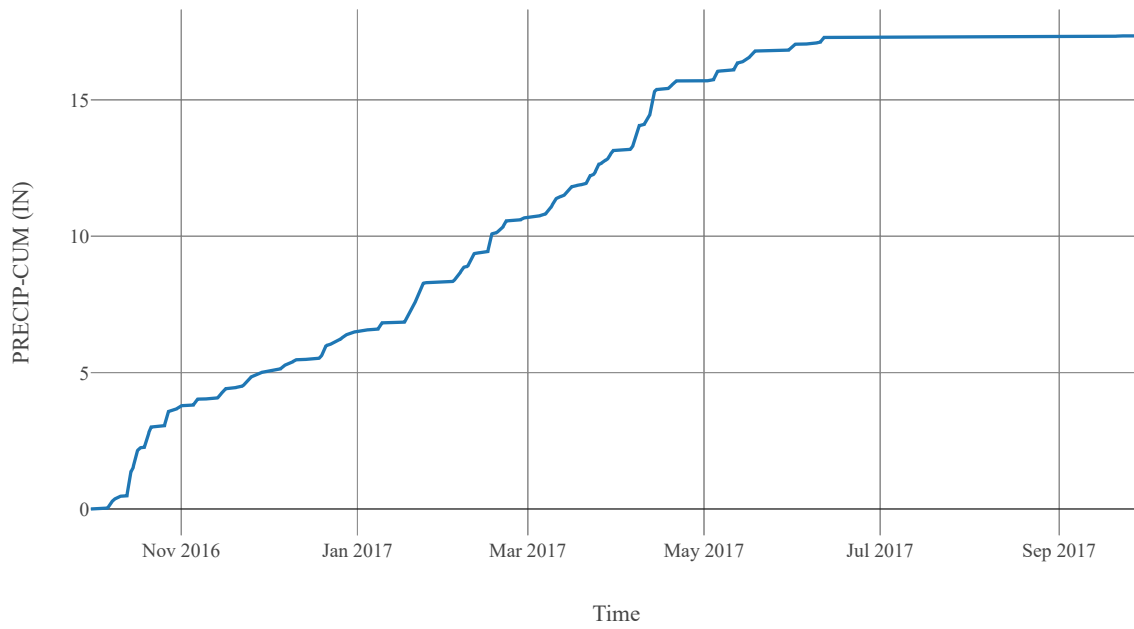
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	145
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	2900
		Number Steps	1

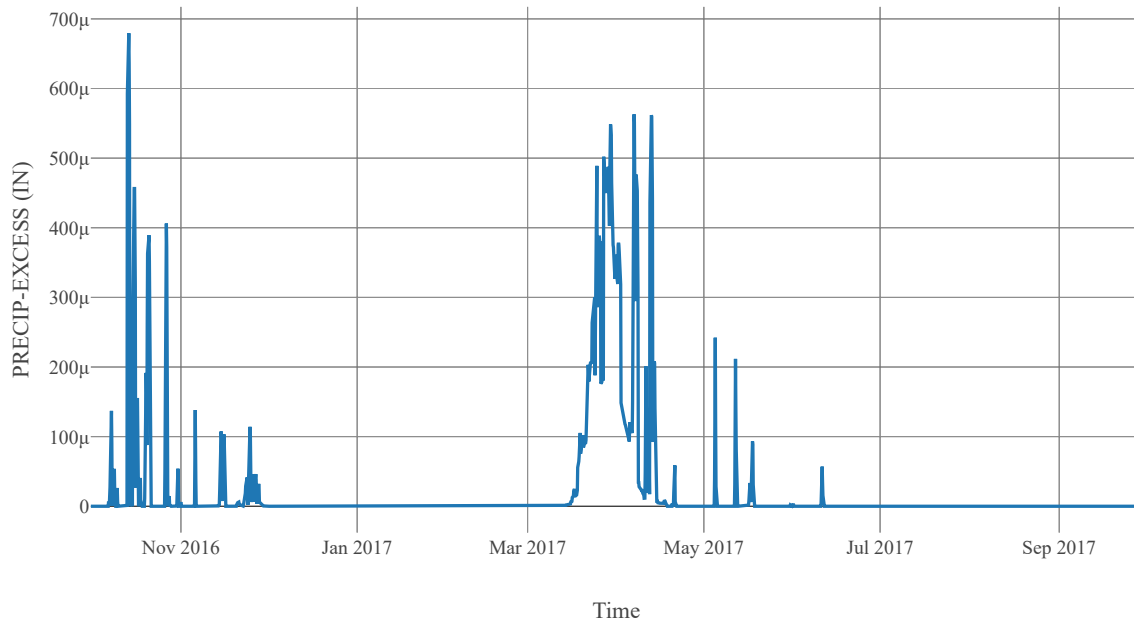
Statistics		
Name	Value	Unit
Baseflow Volume	62954.55	Ac-ft
Precipitation Volume	248341.84	Ac-ft
Loss Volume	164877.03	Ac-ft
Excess Volume	1062.01	Ac-ft



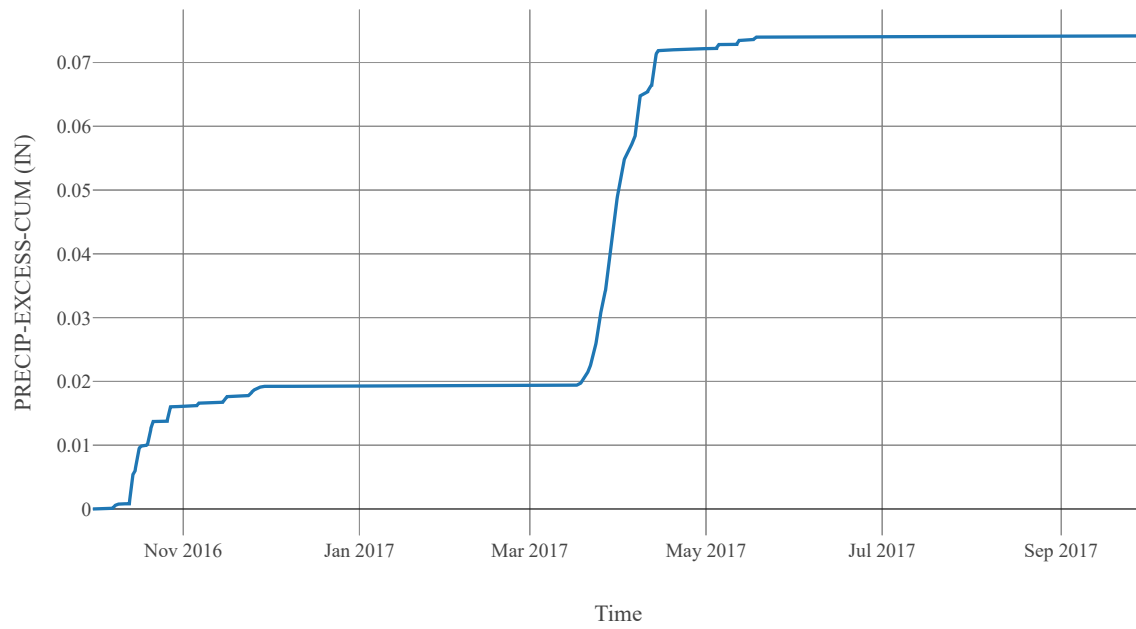
Cumulative Precipitation



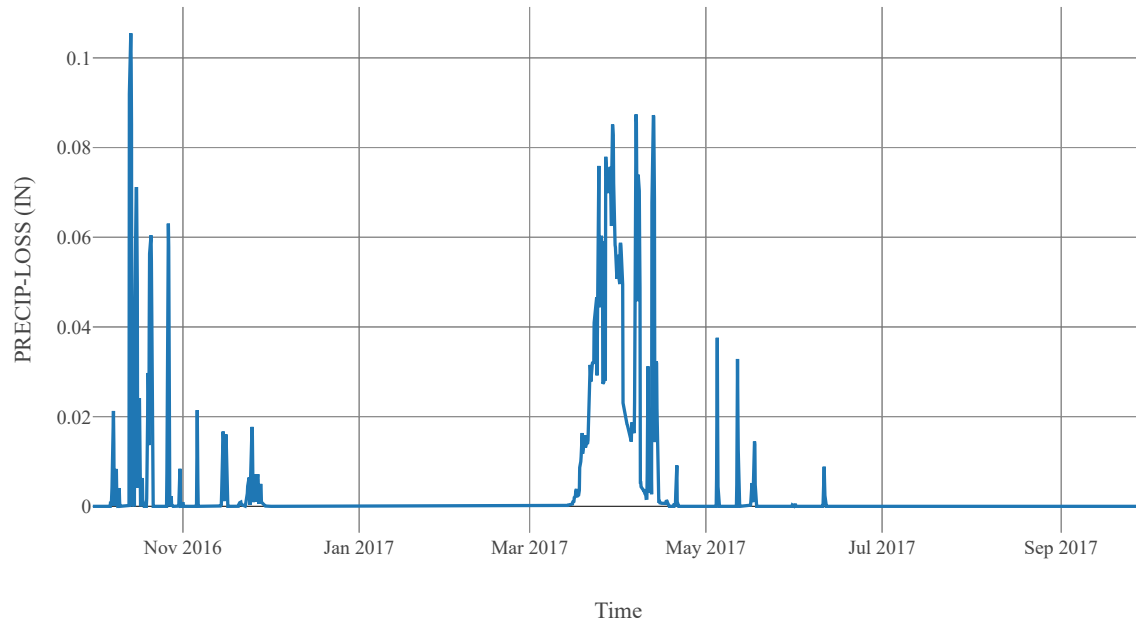
Excess Precipitation



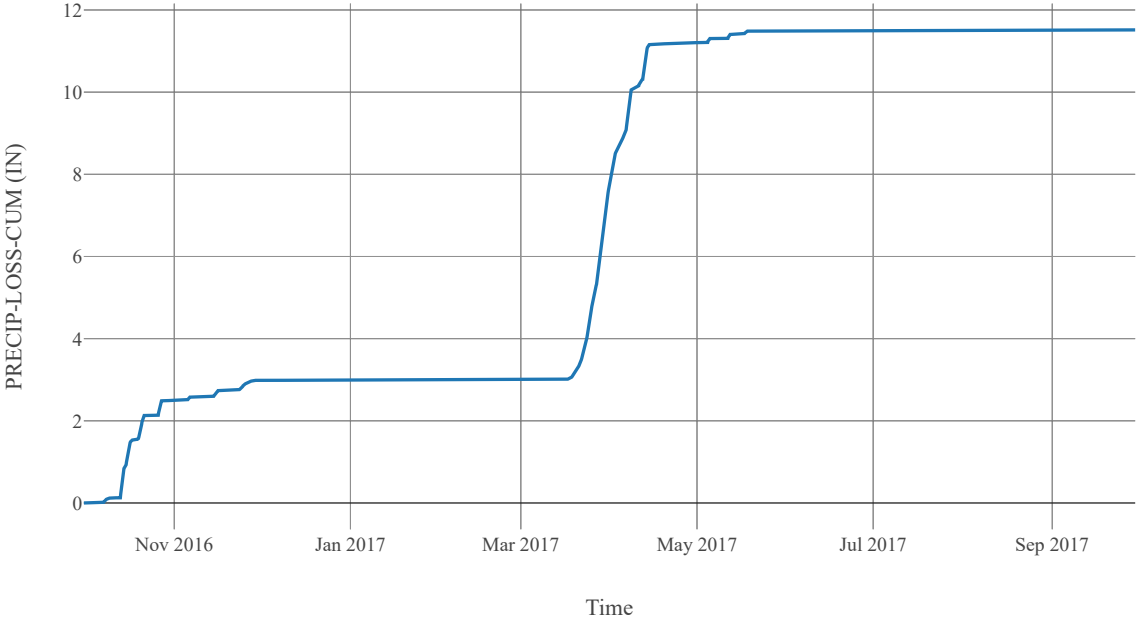
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Junction : Wells_IN

Observed Hydrograph : Wells In
Downstream : Wells

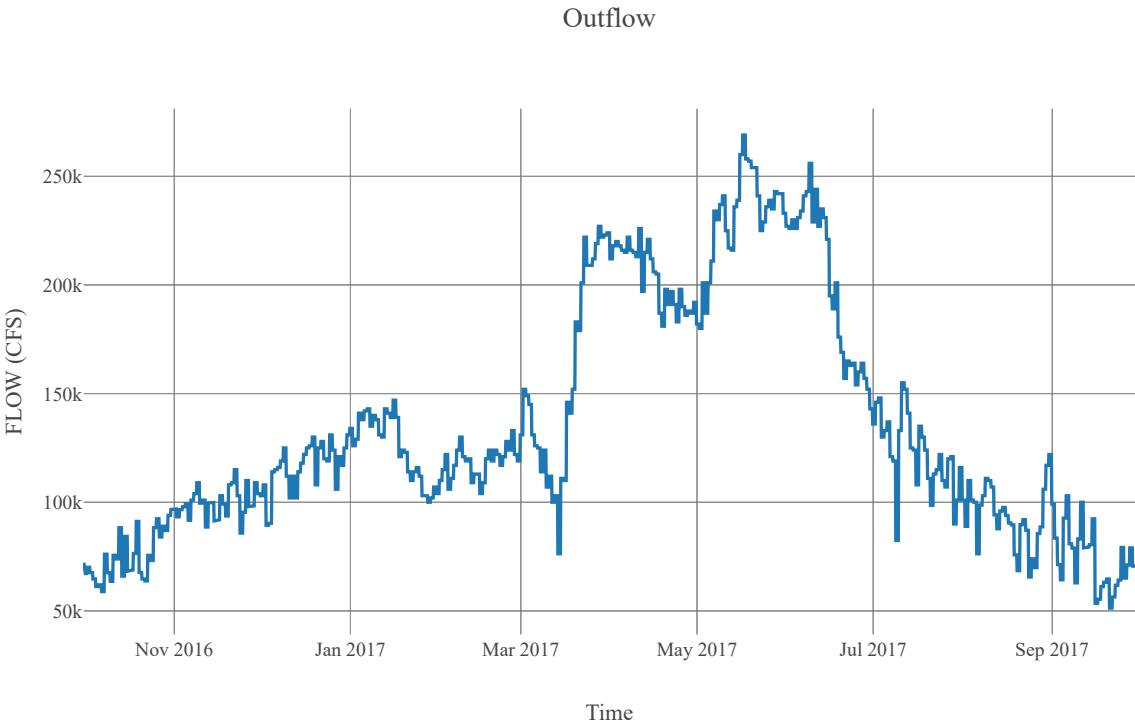


Reservoir : Wells

Quality Method : Unspecified

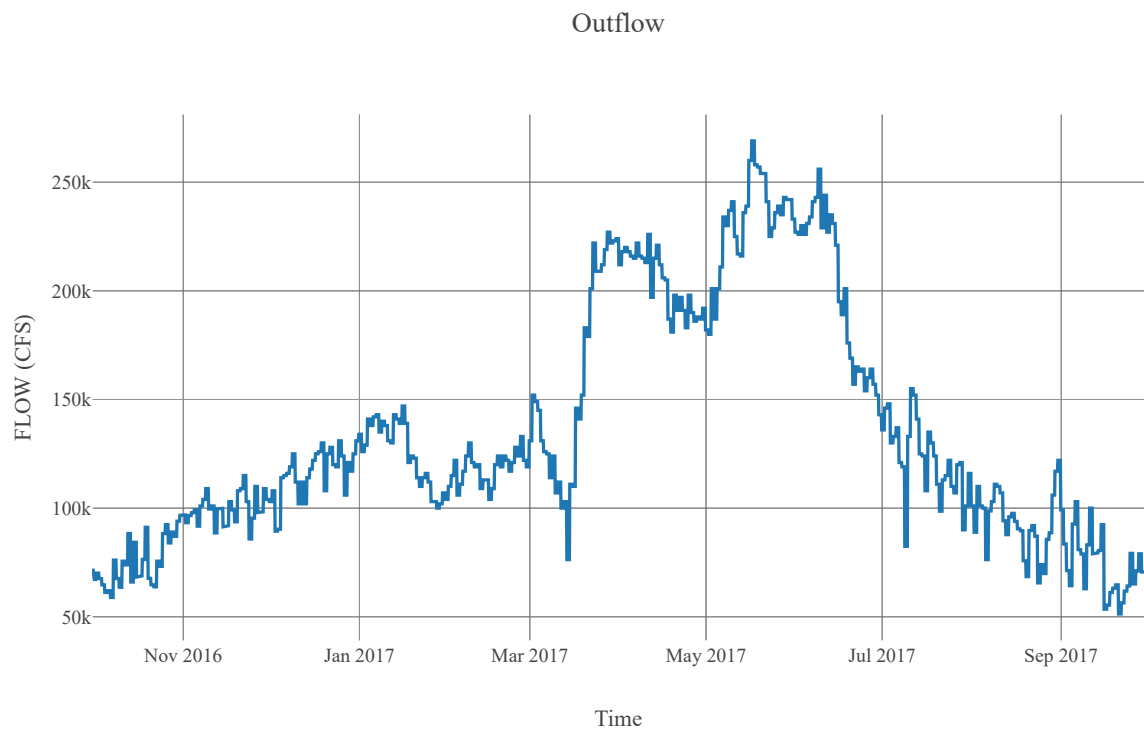
Method : Specified Outflow

Downstream : Wells_OUT



Junction : Wells_OUT

Downstream : MidColumbia_R060



Reach : MidColumbia_R060

Loss Method : None
Downstream : ChelanRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : LkChelan_S010

Area : 584.92
Latitude : 48.08
Longitude : -120.41
Downstream : LkChelan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	9.27
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

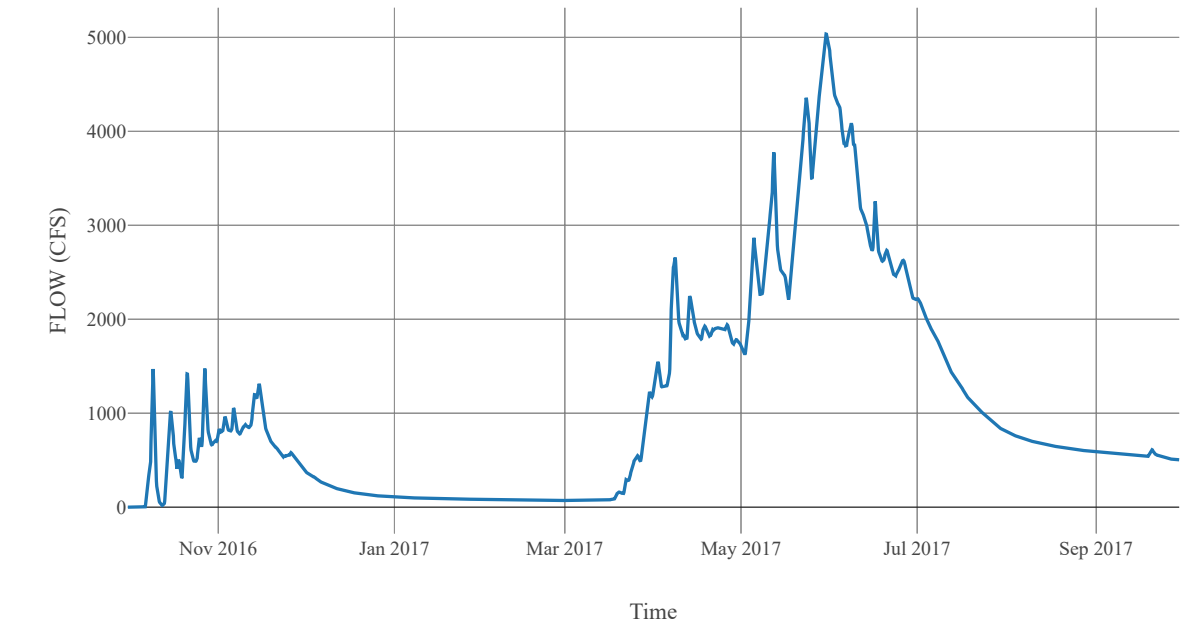
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	12.03
Storage Coefficient	12.03

Baseflow	
Method	Linear Reservoir

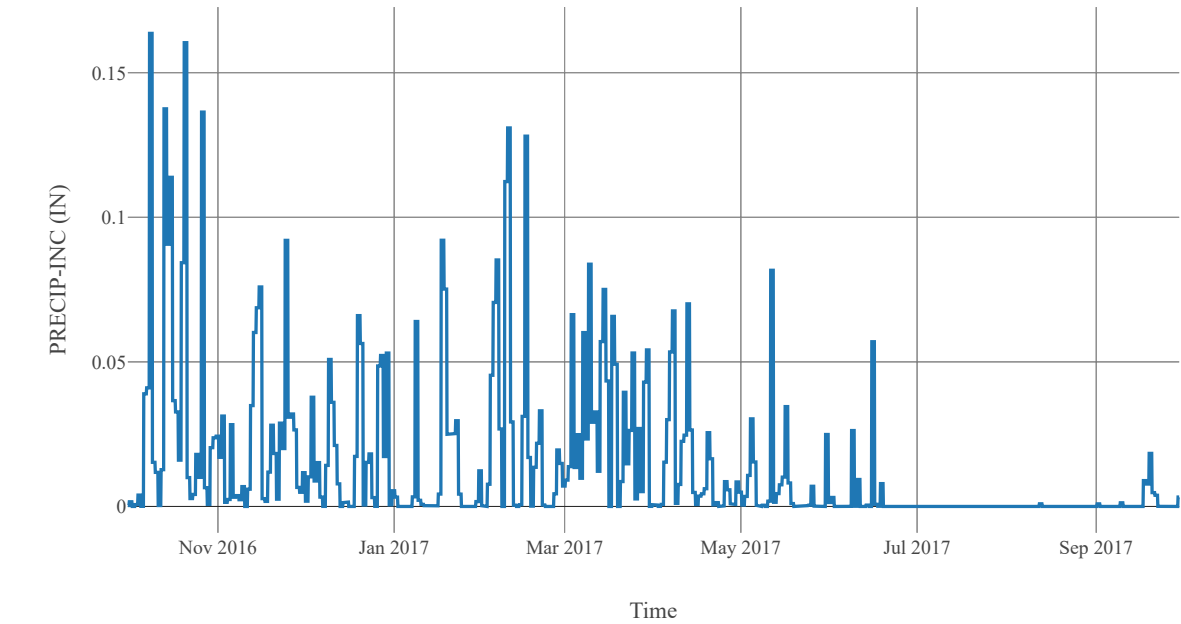
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	240.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	2
		Storage Coefficient	4812
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	651047.28	Ac-ft
Precipitation Volume	1339906.23	Ac-ft
Loss Volume	1067487.13	Ac-ft
Excess Volume	109066.52	Ac-ft

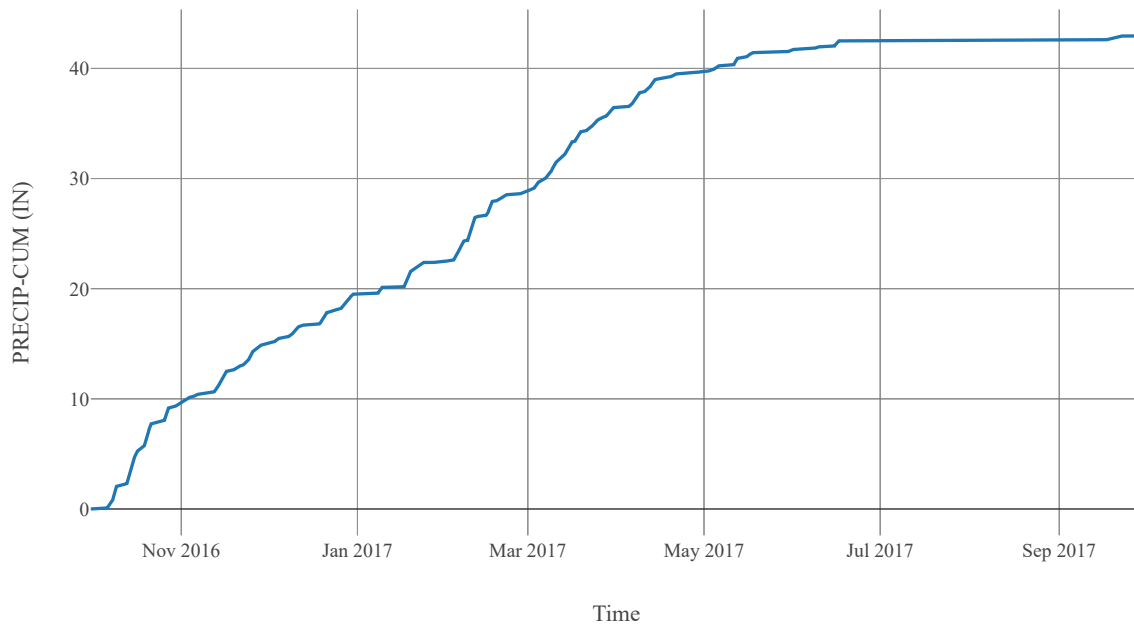
Outflow



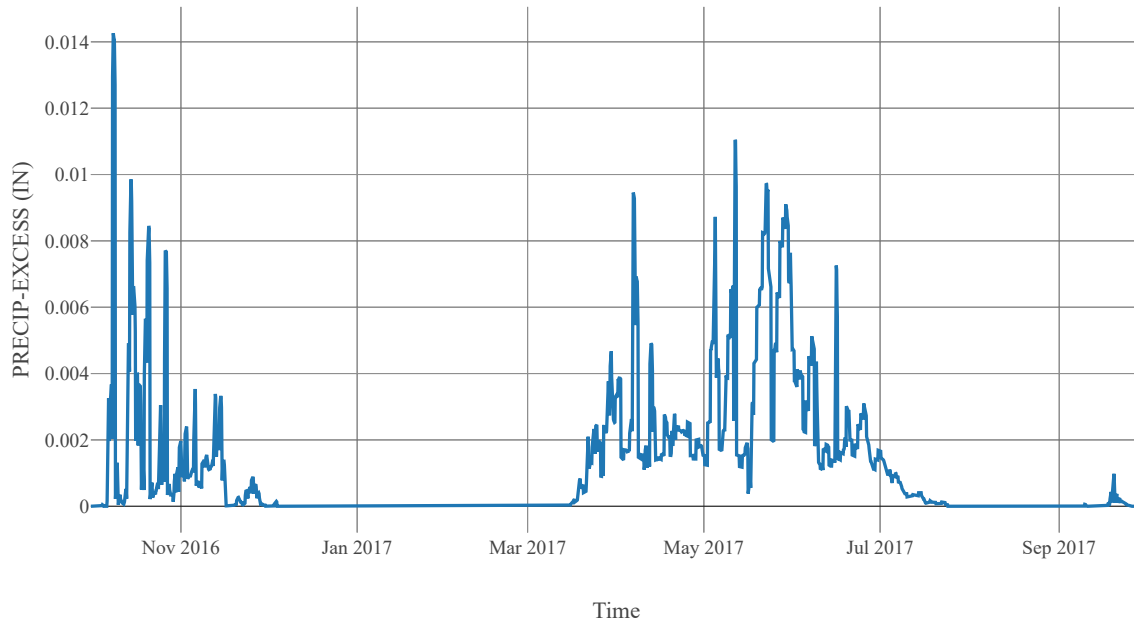
Precipitation



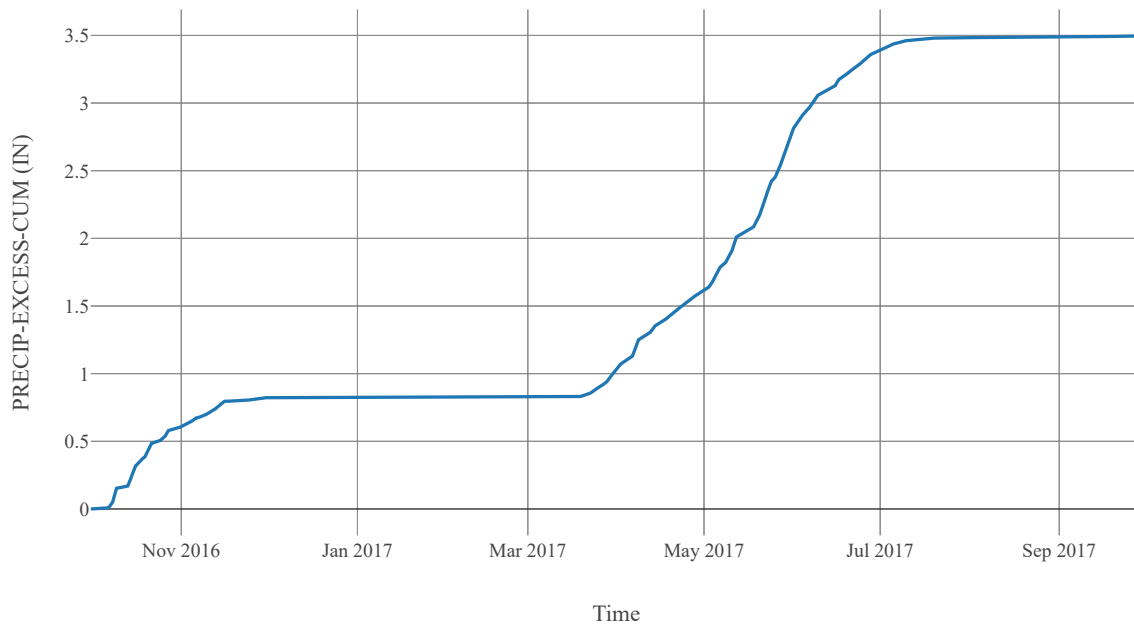
Cumulative Precipitation



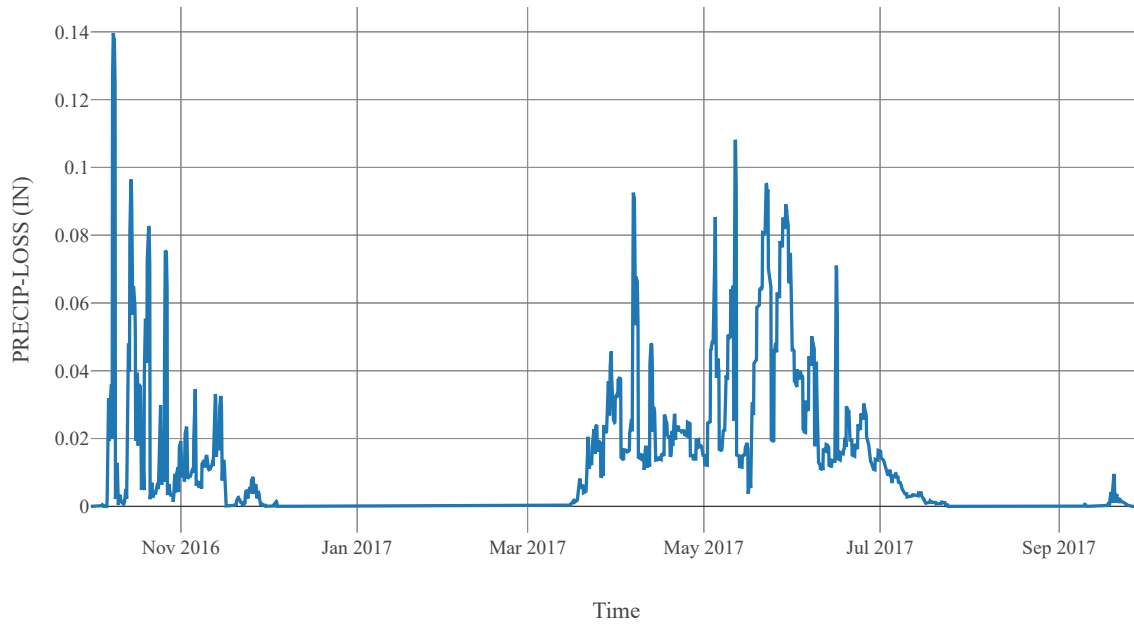
Excess Precipitation



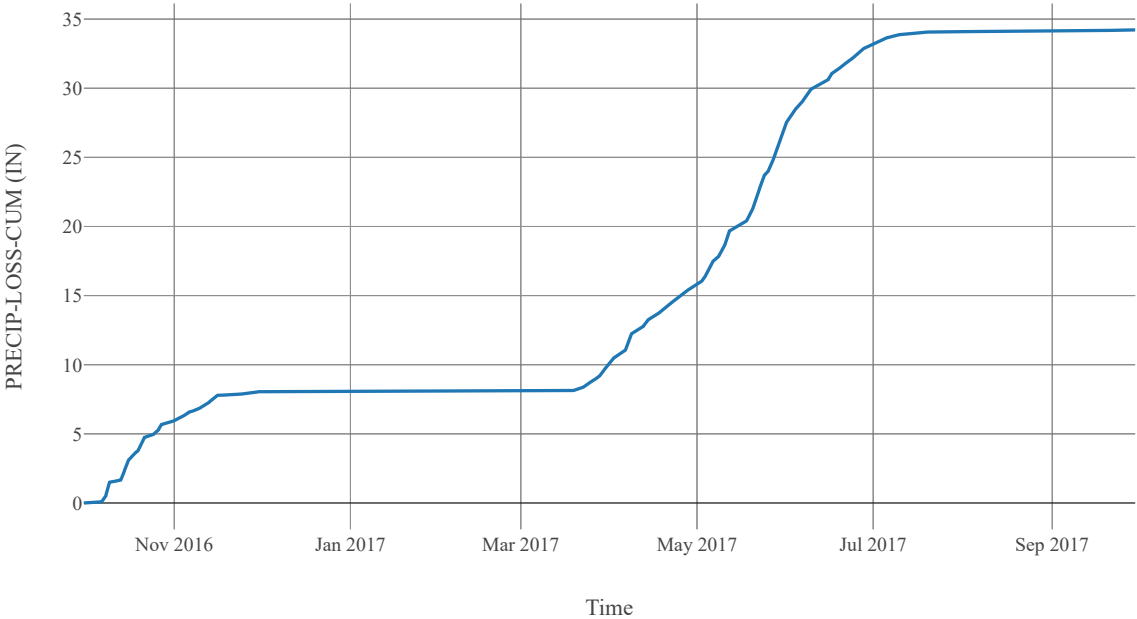
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Subbasin : LkChelan_S020

Area : 341.76
Observed Hydrograph : Chelan river at chelan
Latitude : 48.39
Longitude : -120.85
Downstream : LkChelan_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	3
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

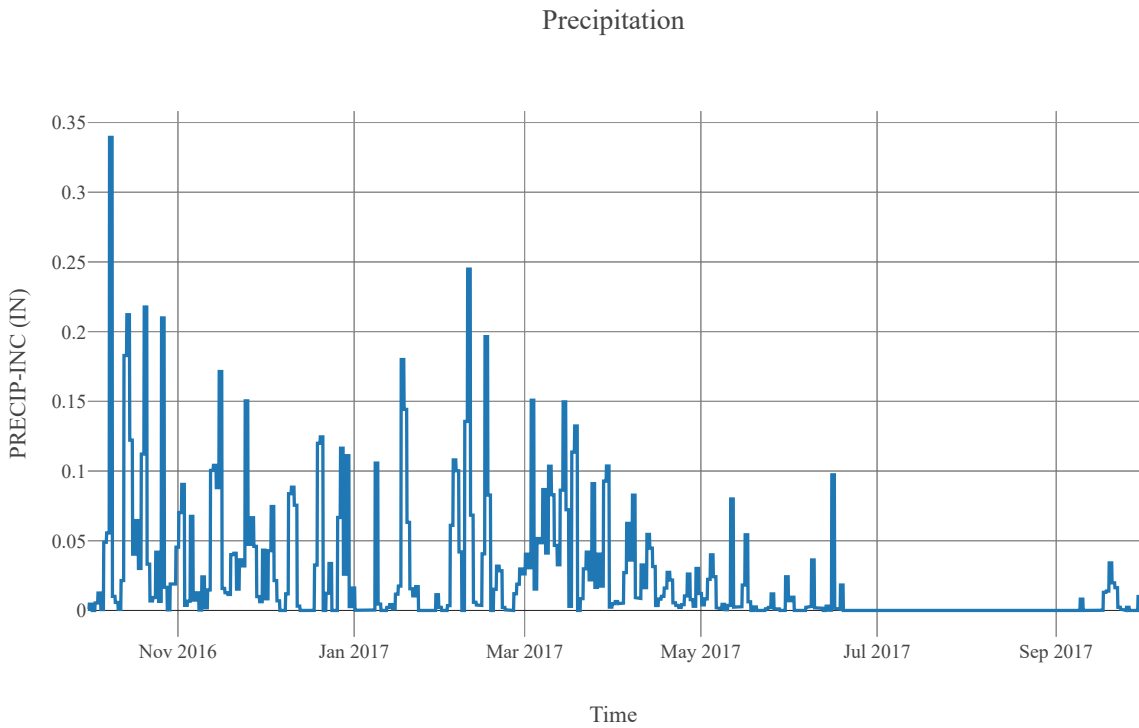
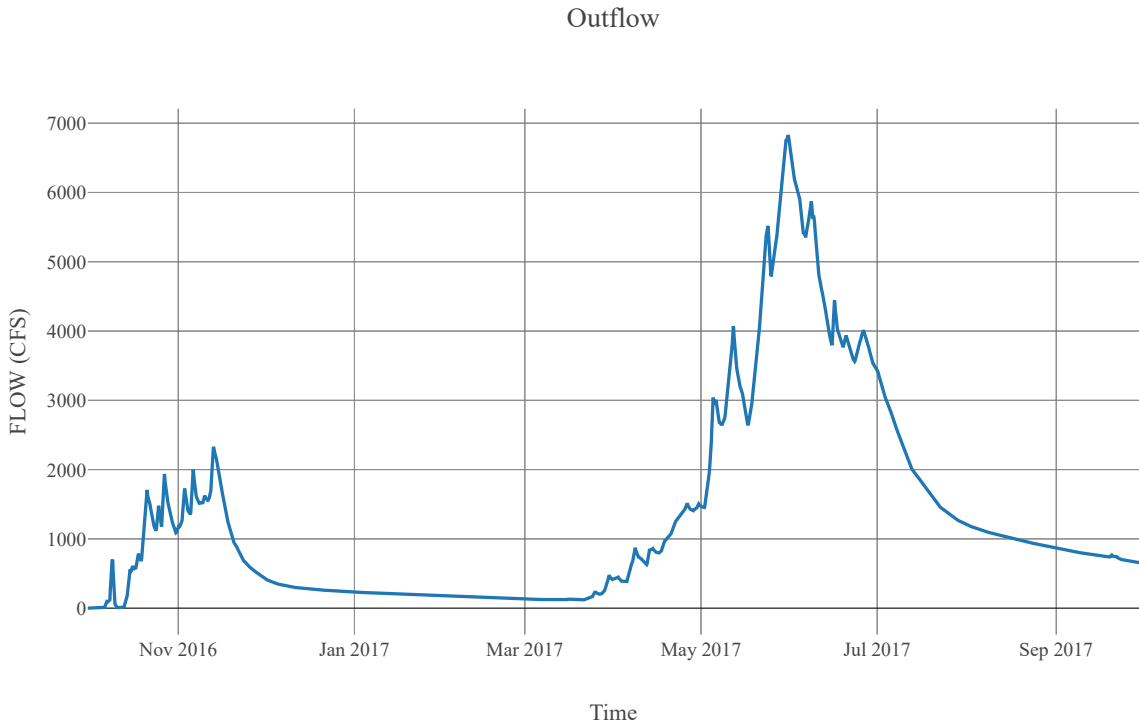
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.25
Storage Coefficient	6.25

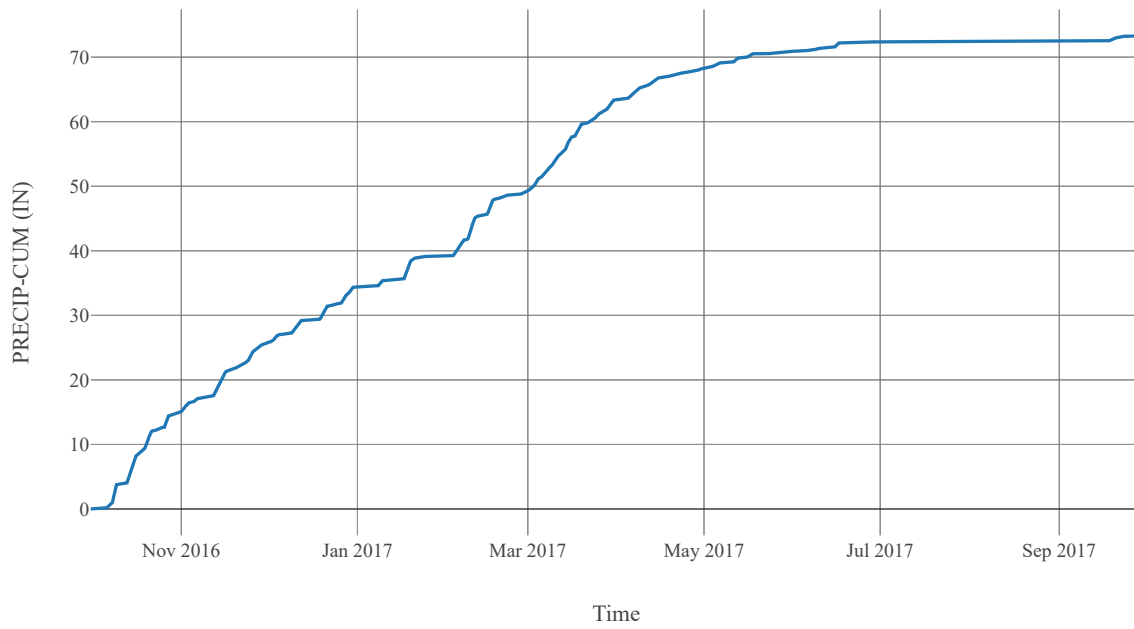
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	125
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	2
		Storage Coefficient	2500
		Number Steps	1

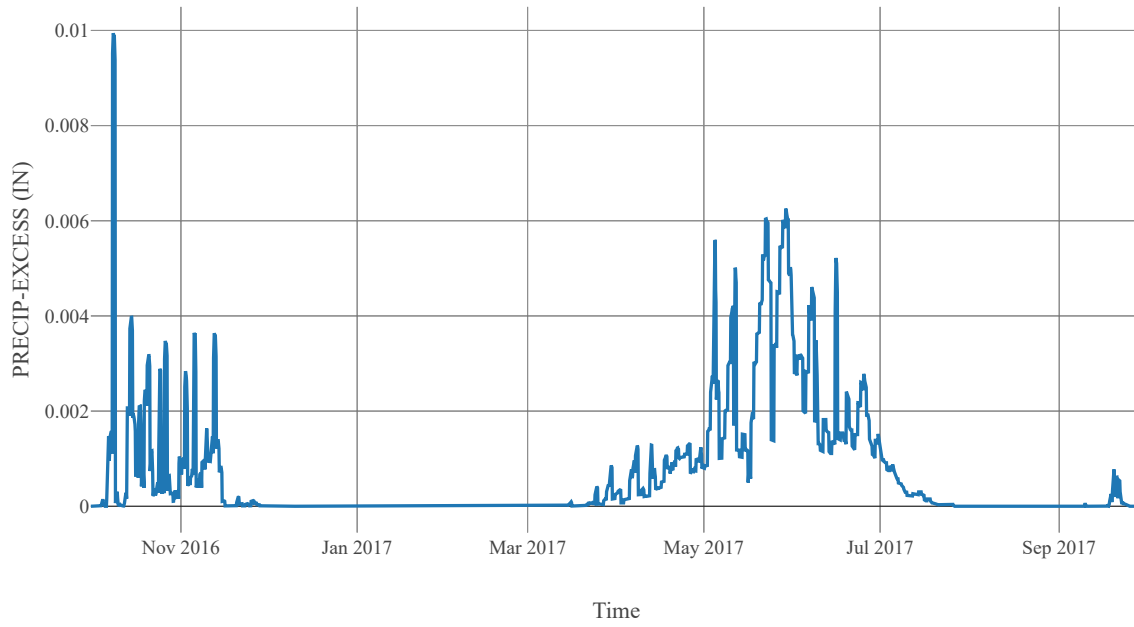
Statistics		
Name	Value	Unit
Baseflow Volume	913047.45	Ac-ft
Precipitation Volume	1335867.21	Ac-ft
Loss Volume	1194449.59	Ac-ft
Excess Volume	36941.74	Ac-ft



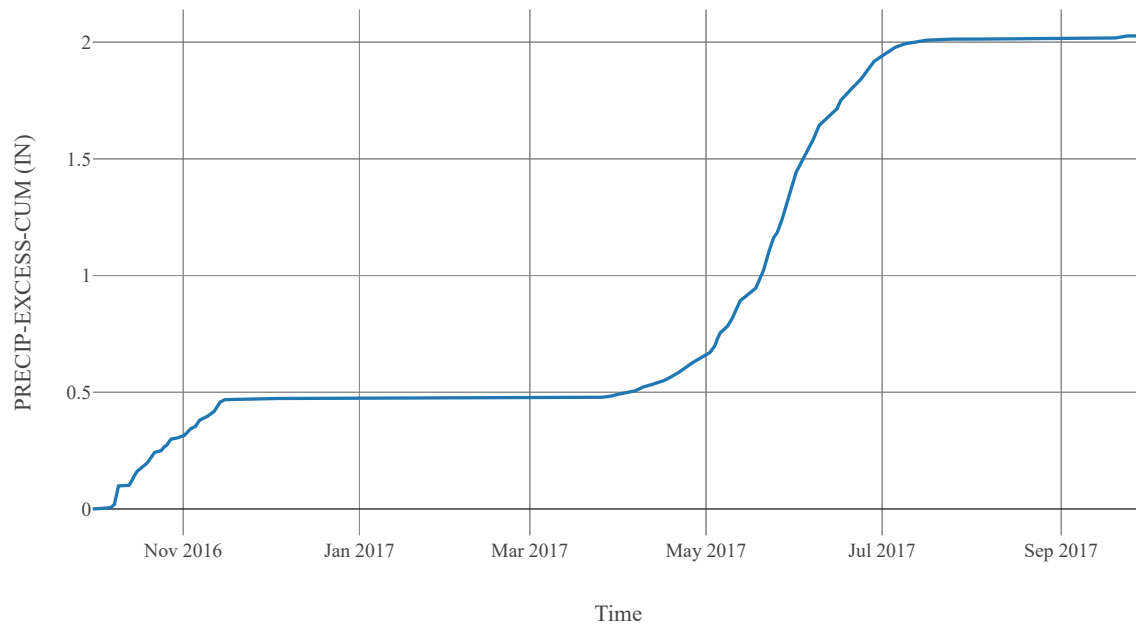
Cumulative Precipitation



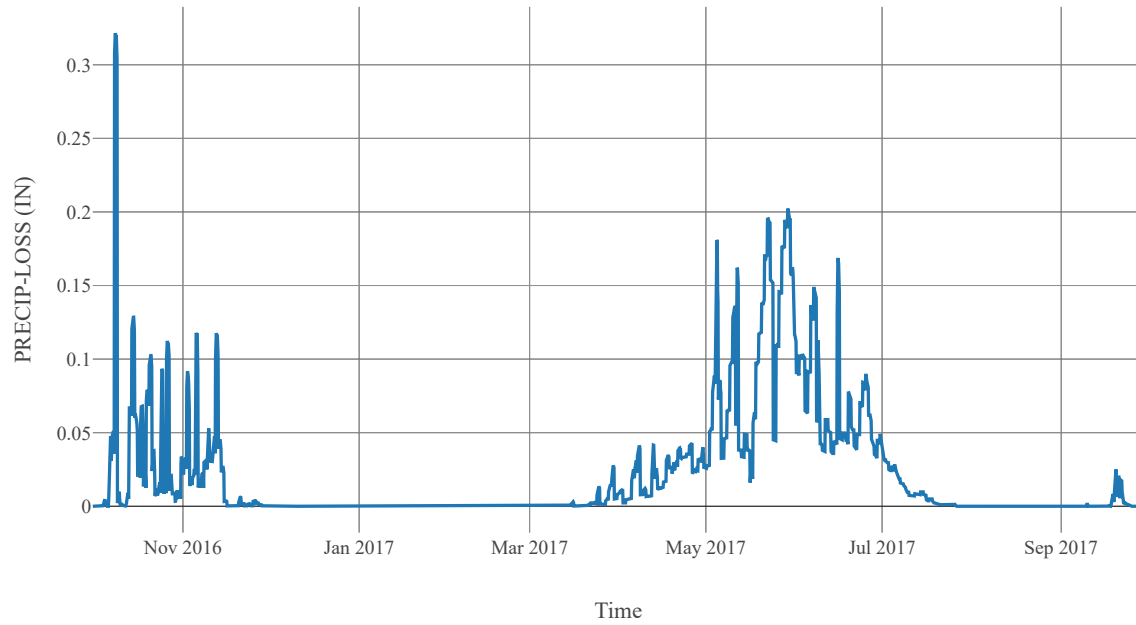
Excess Precipitation



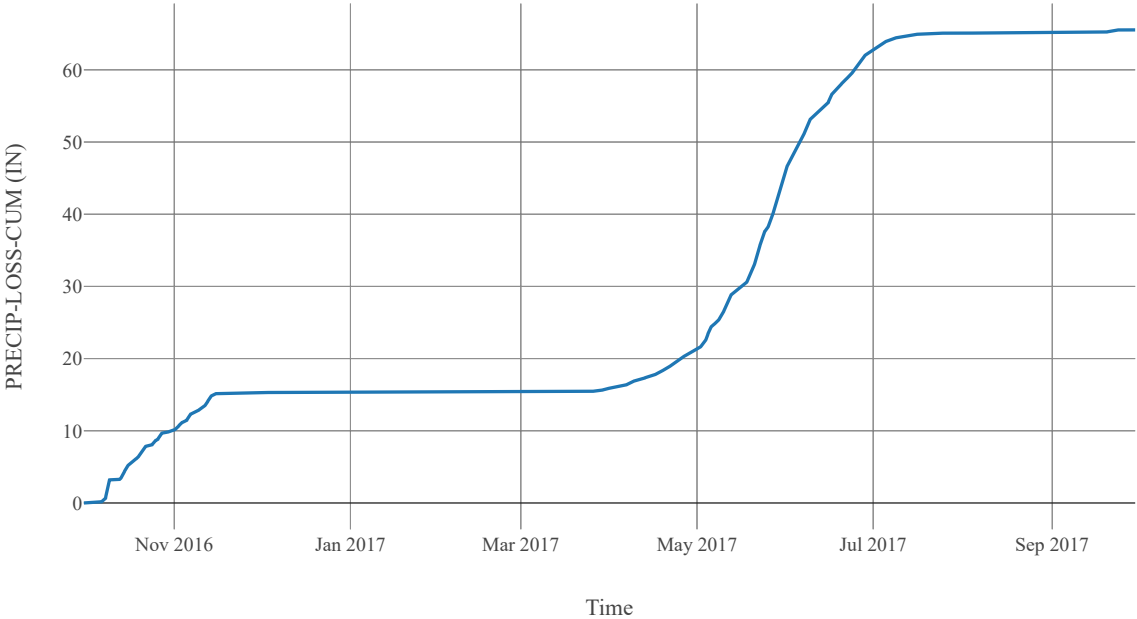
Cumulative Excess Precipitation



Precipitation Loss

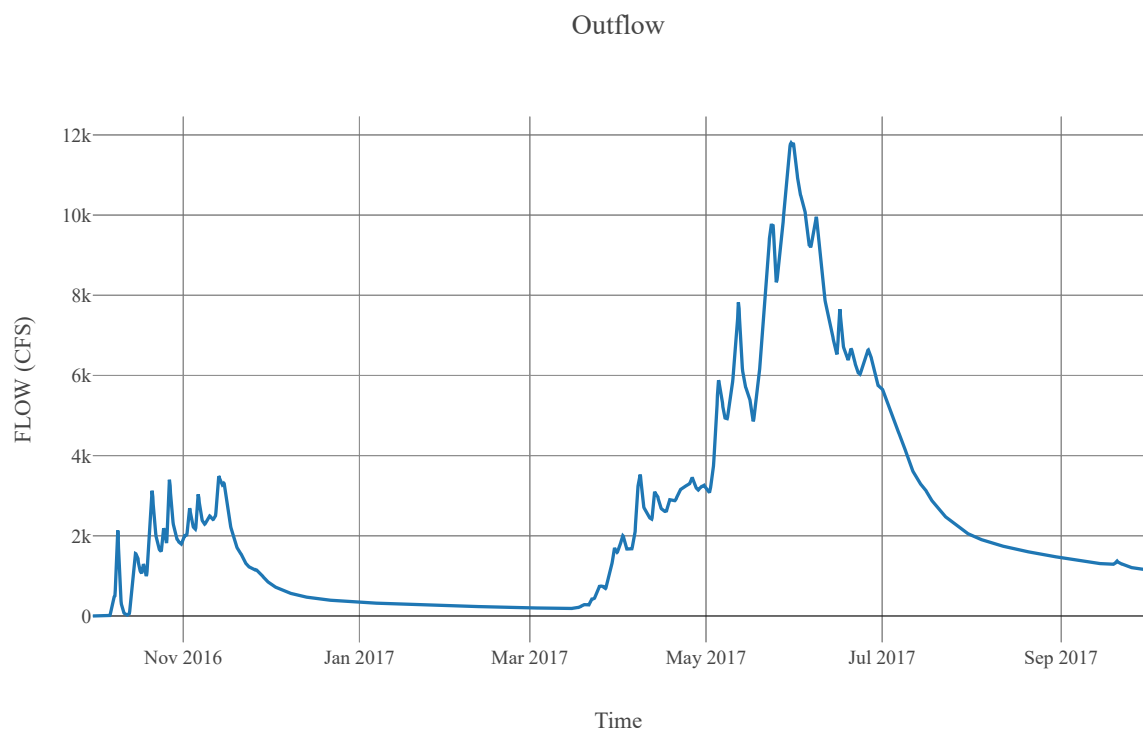


Cumulative Precipitation Loss



Junction : LkChelan_IN

Downstream : Lk Chelan



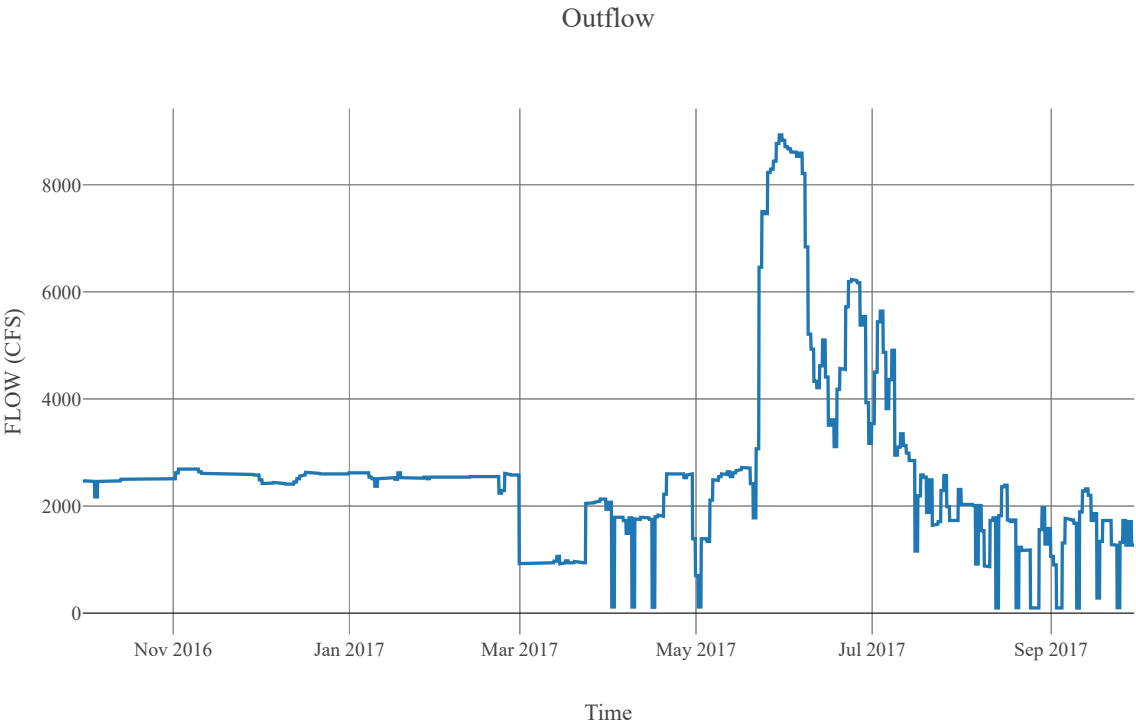
Outflow

Reservoir : LkChelan

Quality Method : Unspecified

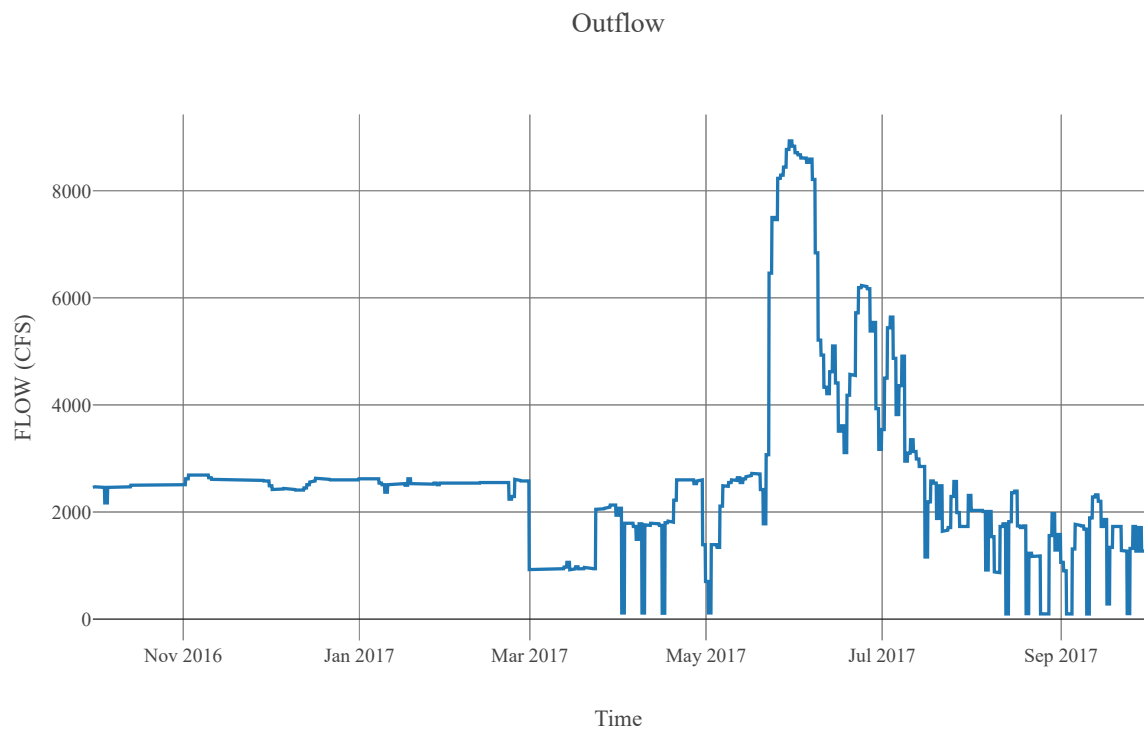
Method : Specified Outflow

Downstream : LkChelan_OUT



Junction : LkChelan_OUT

Downstream : ChelanRv_CF



Subbasin : MidColumbia_S060

Area : 99.12
Latitude : 47.91
Longitude : -119.95
Downstream : ChelanRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.18
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

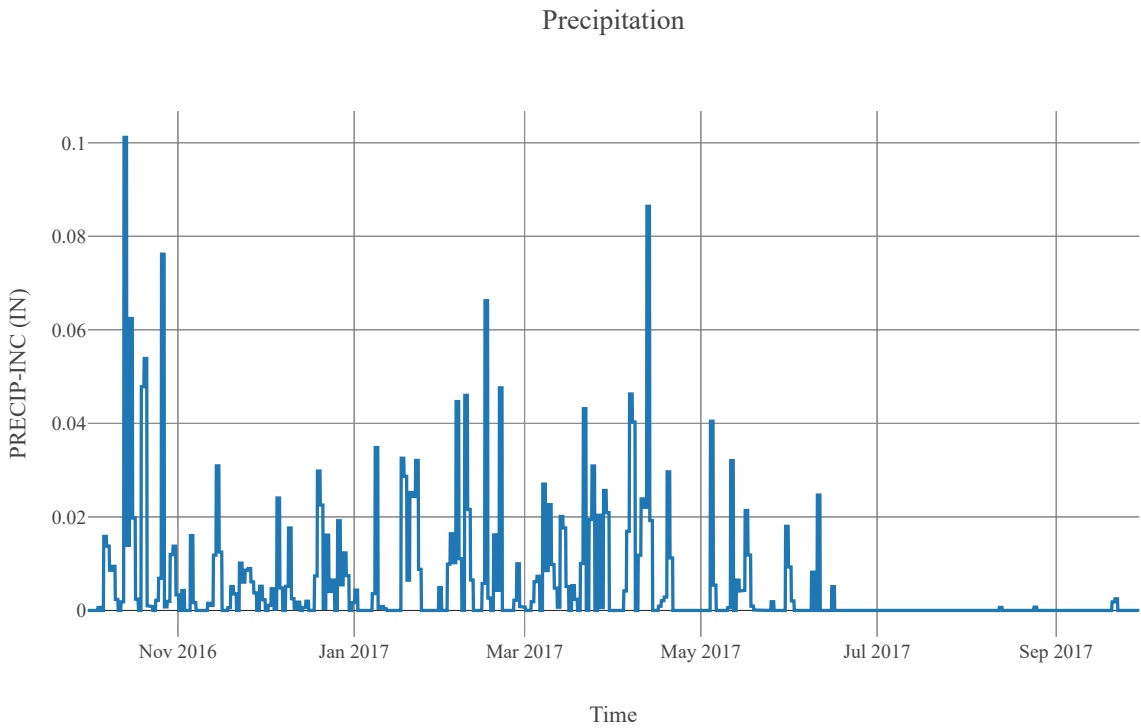
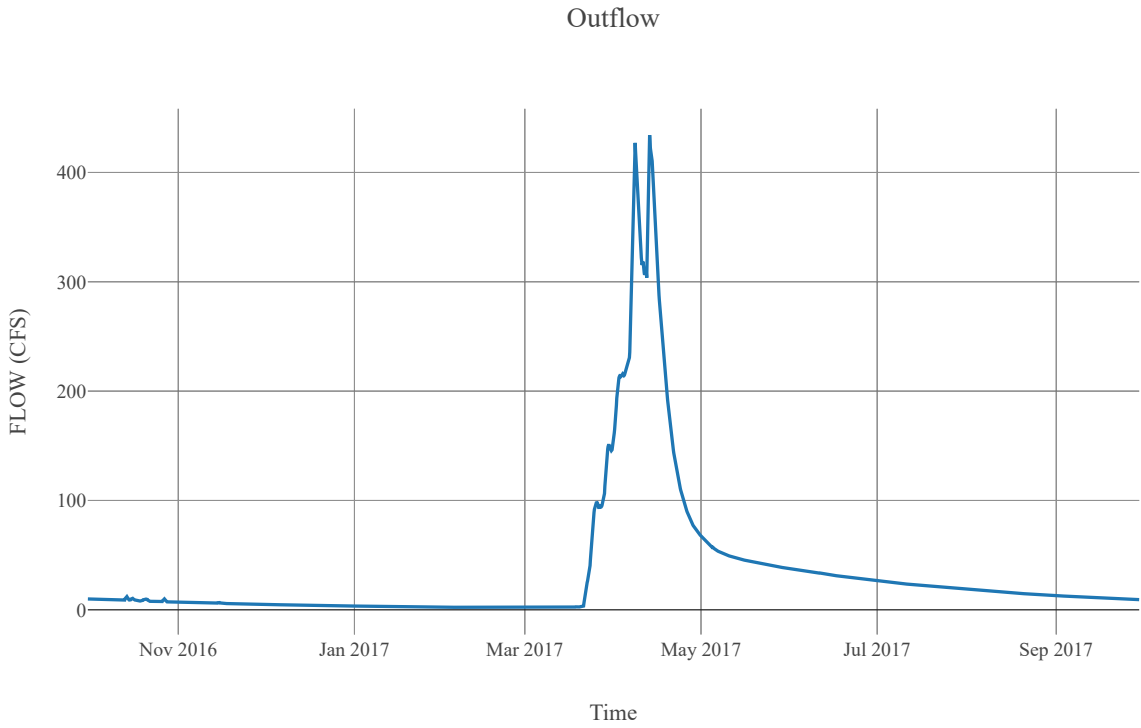
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.2
Storage Coefficient	5.2

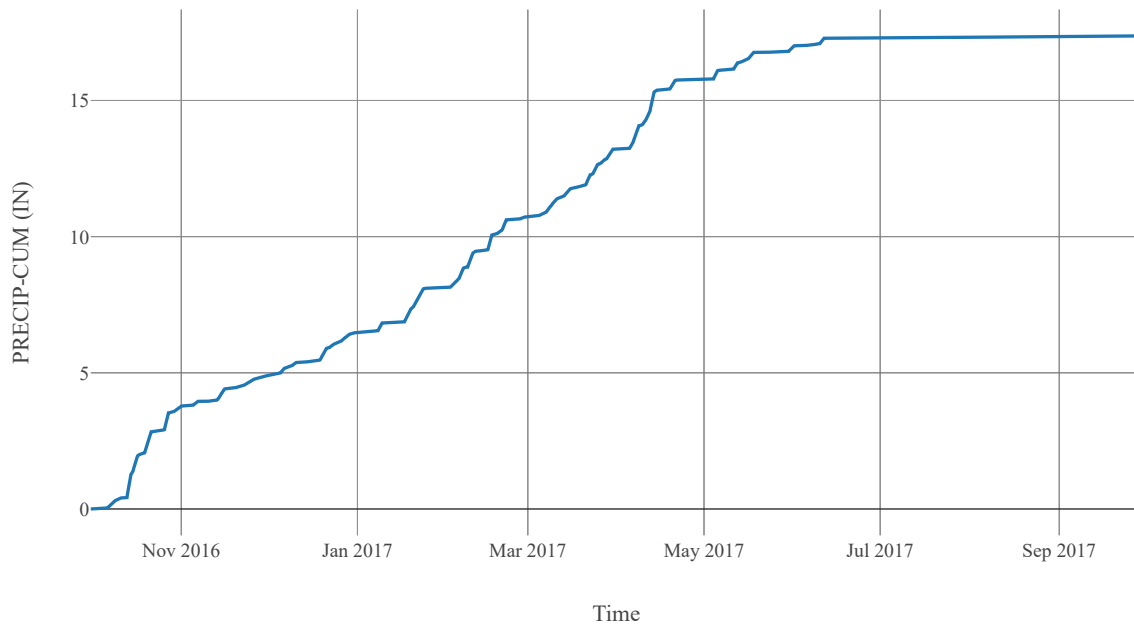
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	104
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	2080
		Number Steps	1

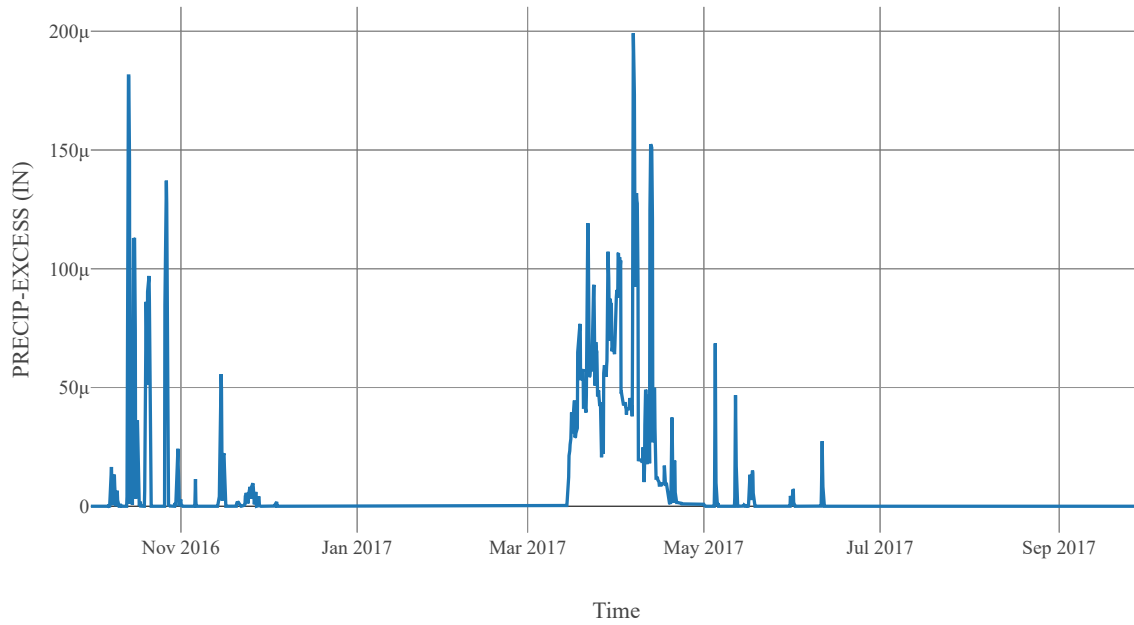
Statistics		
Name	Value	Unit
Baseflow Volume	24271.28	Ac-ft
Precipitation Volume	91828.47	Ac-ft
Loss Volume	62172.34	Ac-ft
Excess Volume	112.11	Ac-ft



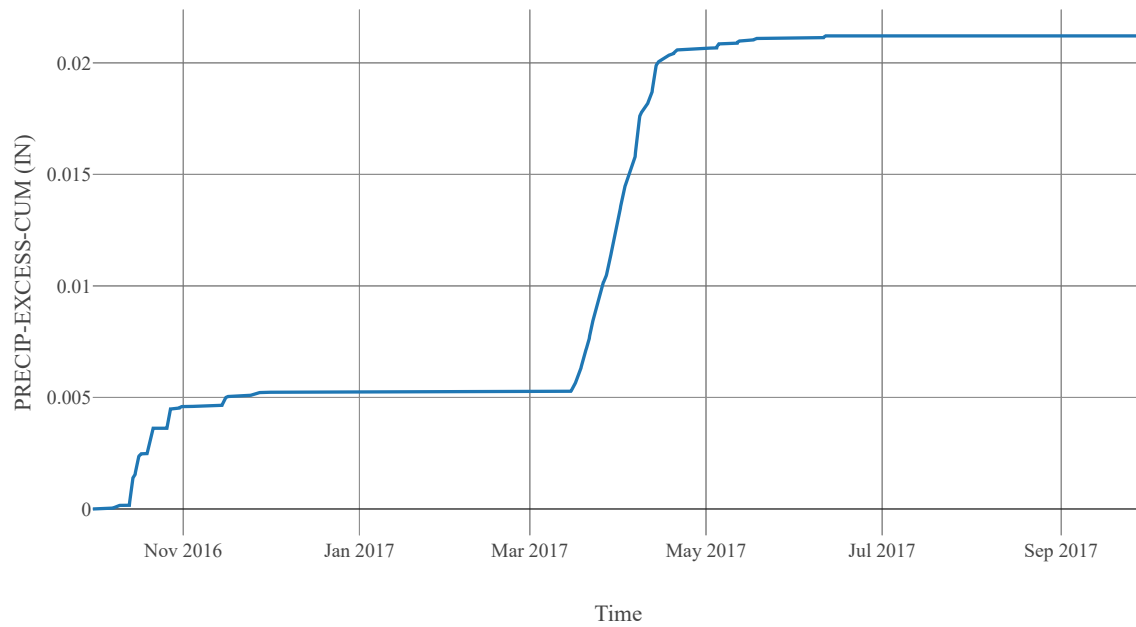
Cumulative Precipitation



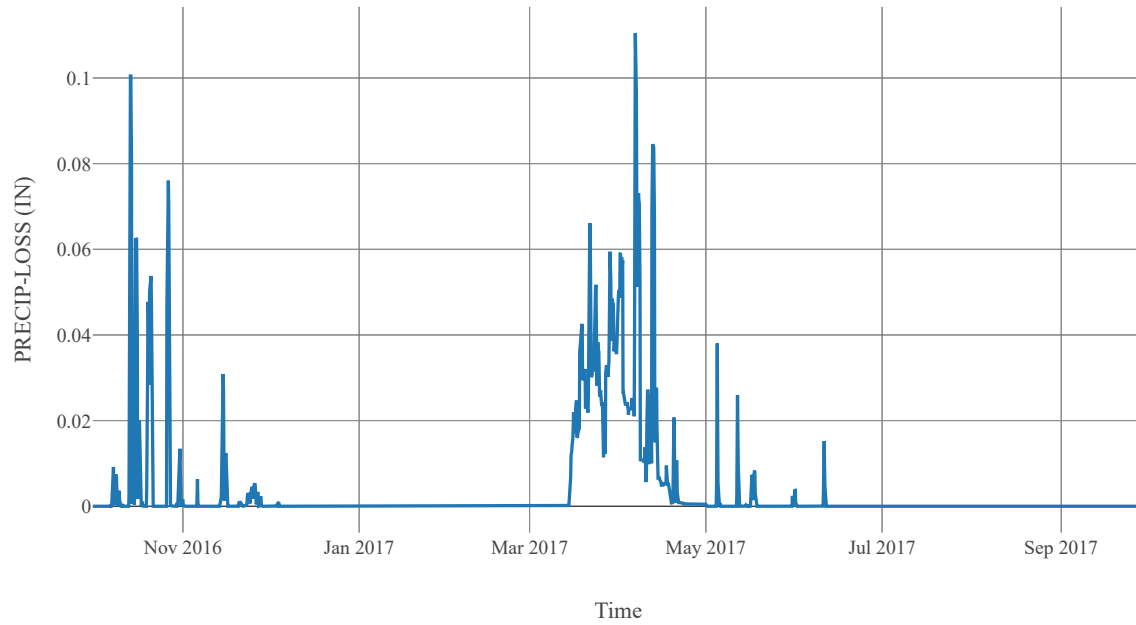
Excess Precipitation



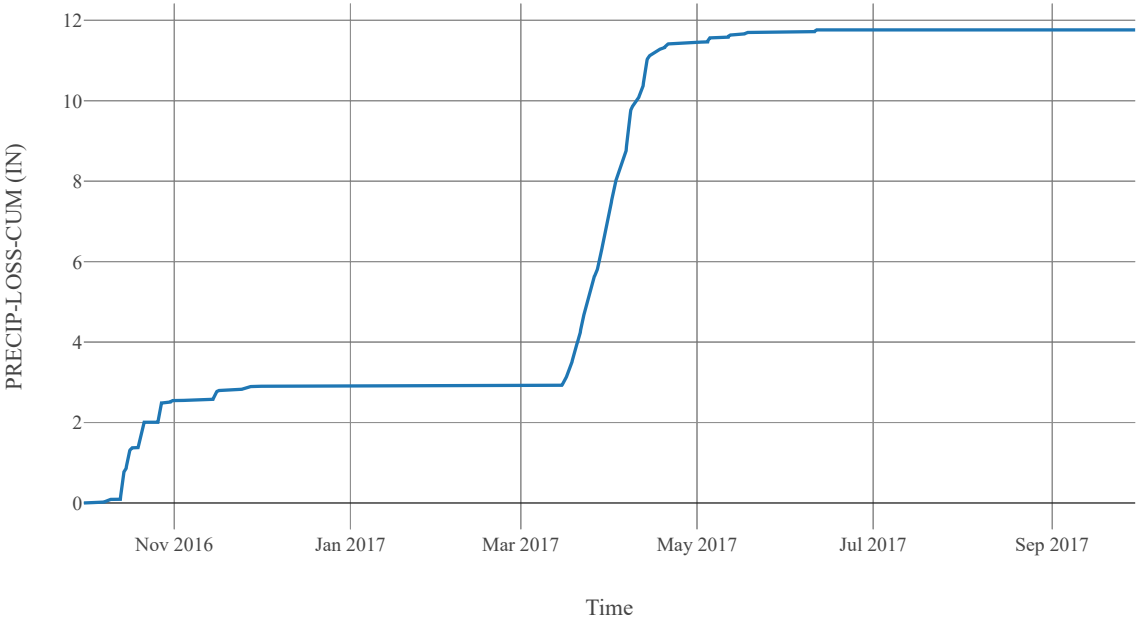
Cumulative Excess Precipitation



Precipitation Loss

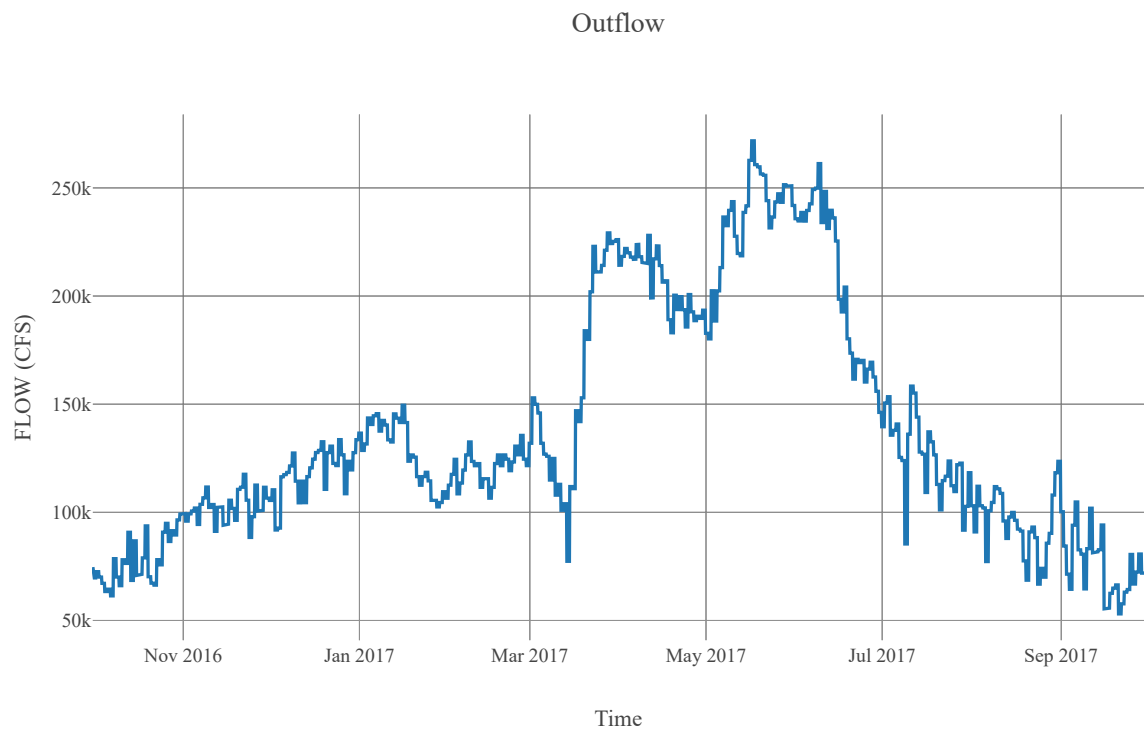


Cumulative Precipitation Loss



Junction : ChelanRv_CF

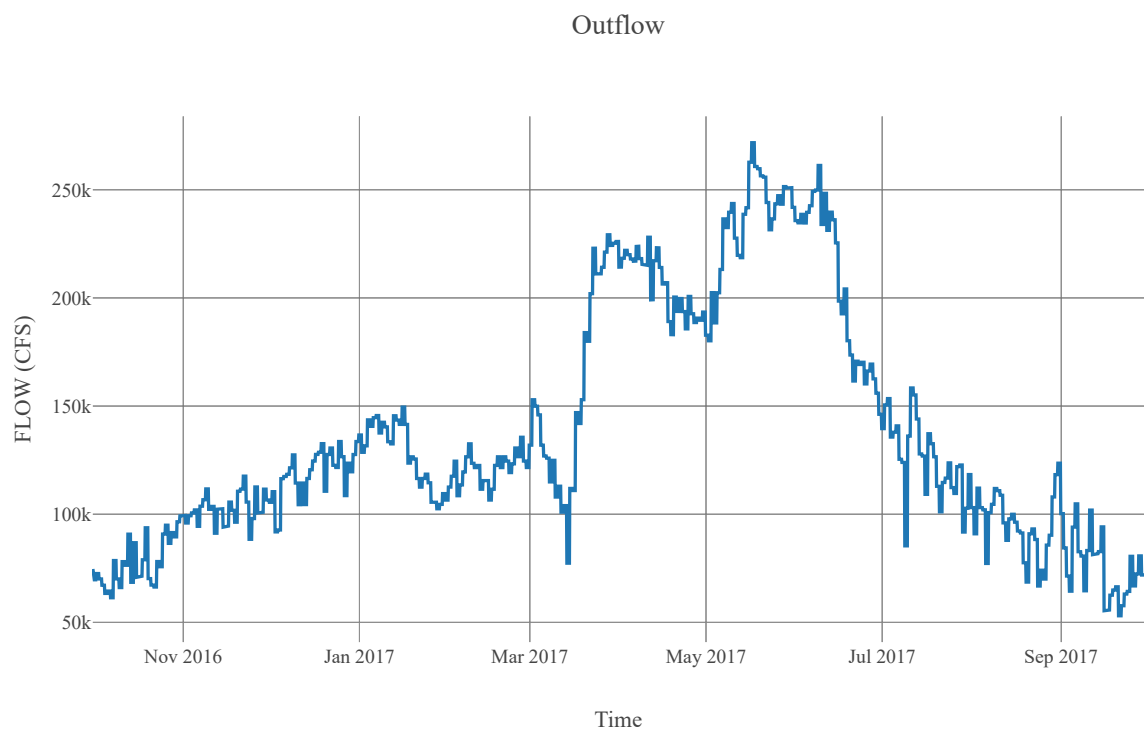
Downstream : MidColumbia_R055



Reach : MidColumbia_R055

Loss Method : None
Downstream : EntiatRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : EntiatRv_S020

Area : 203.31
Latitude : 47.99
Longitude : -120.57
Downstream : Entiat Nr Ardenvoir

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.13
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

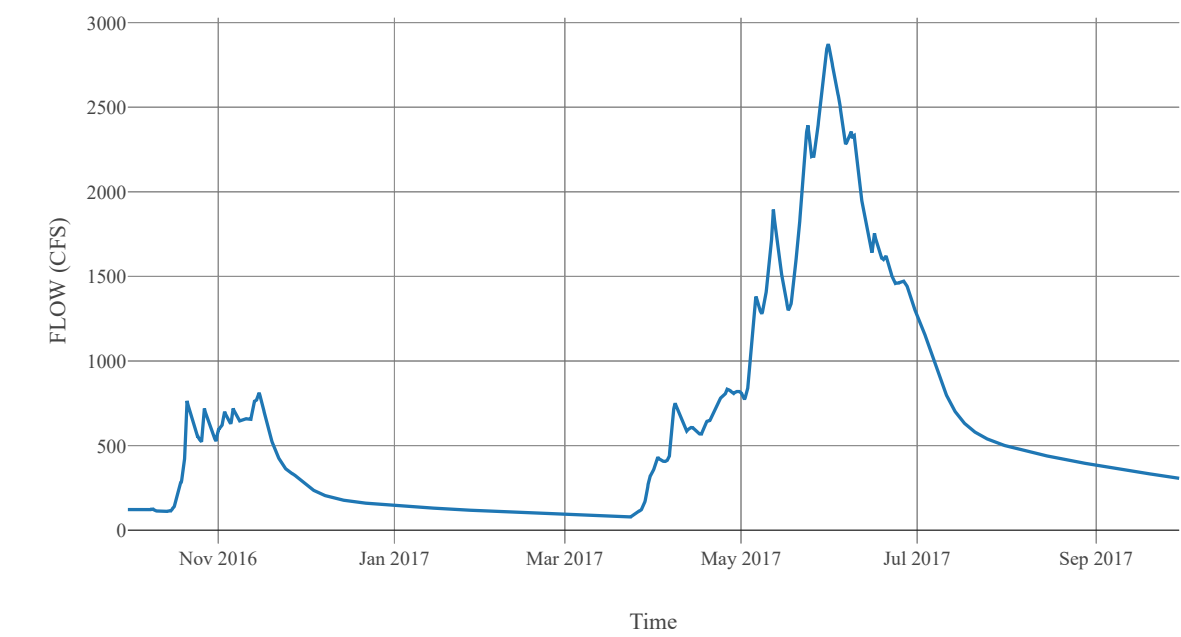
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.71
Storage Coefficient	7.71

Baseflow	
Method	Linear Reservoir

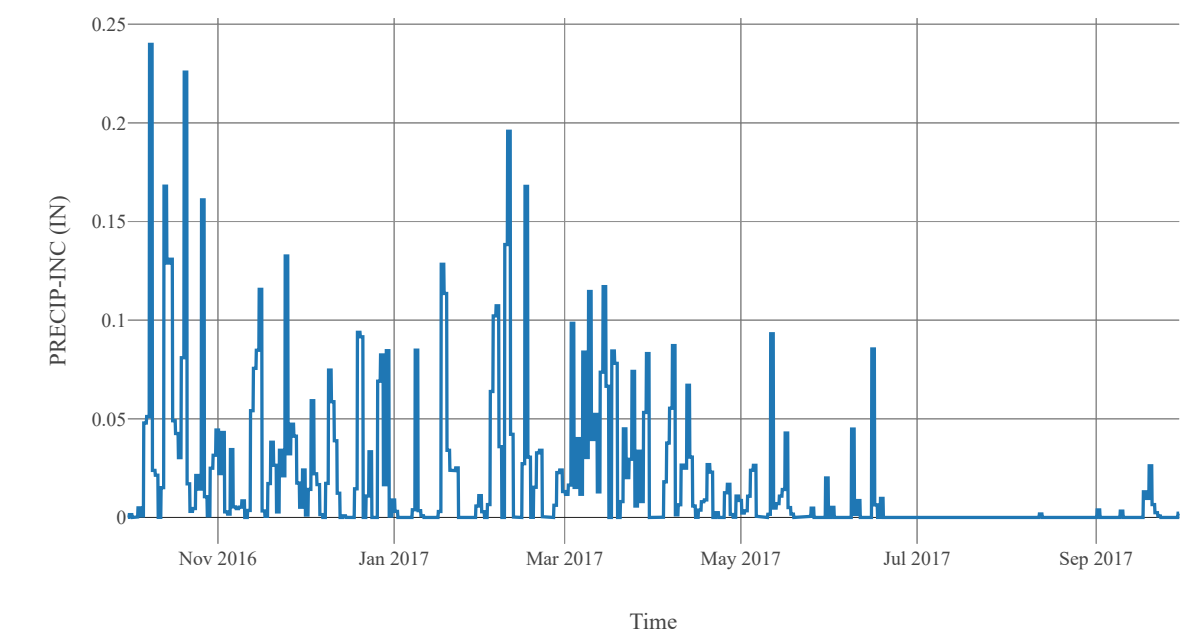
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	154.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.6
		Layer Number	2
		Storage Coefficient	3084
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	431000.71	Ac-ft
Precipitation Volume	620700.44	Ac-ft
Loss Volume	564525	Ac-ft
Excess Volume	734.84	Ac-ft

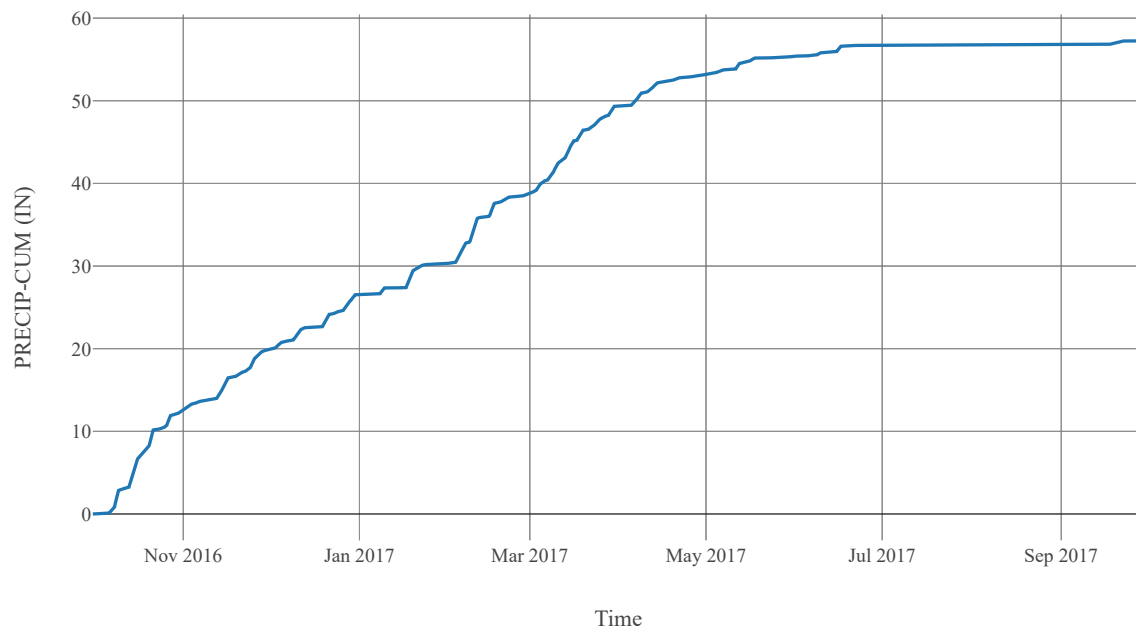
Outflow



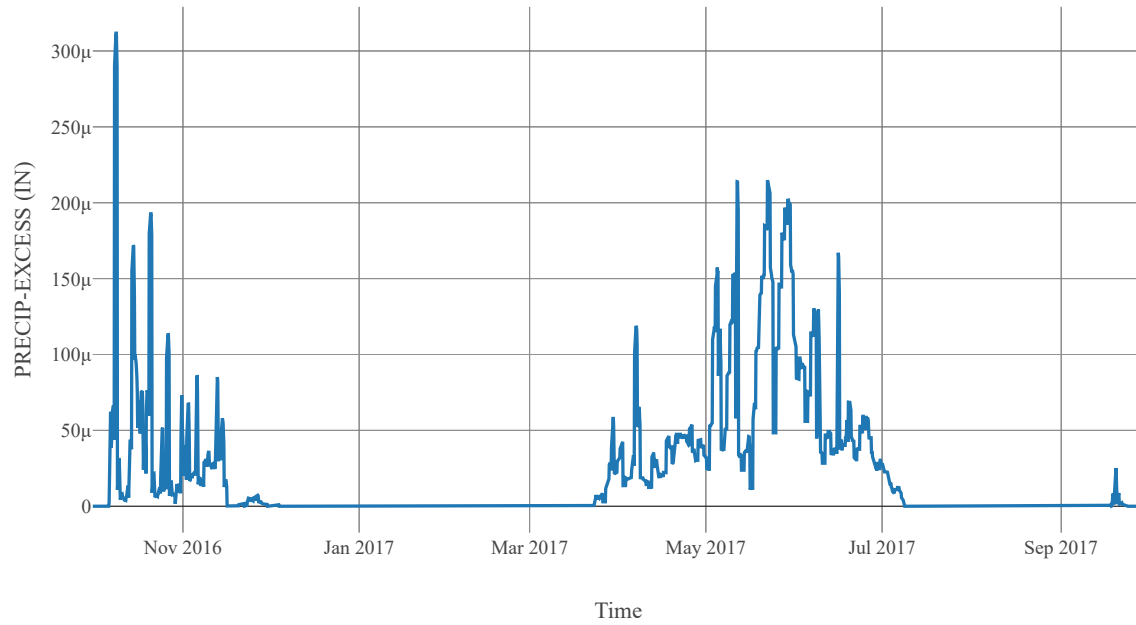
Precipitation



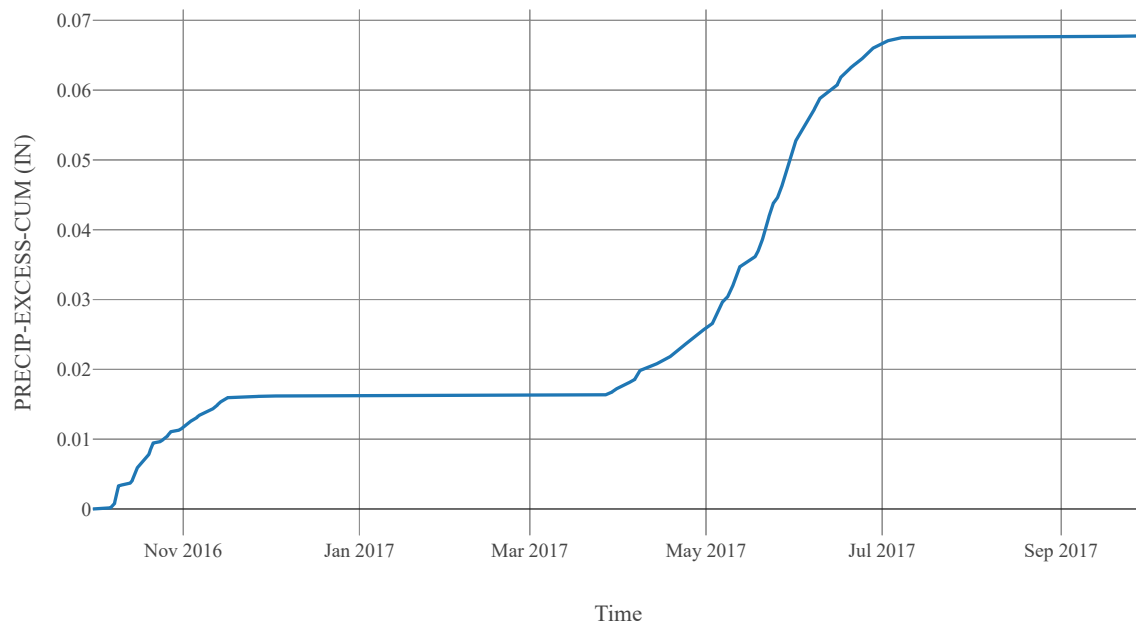
Cumulative Precipitation



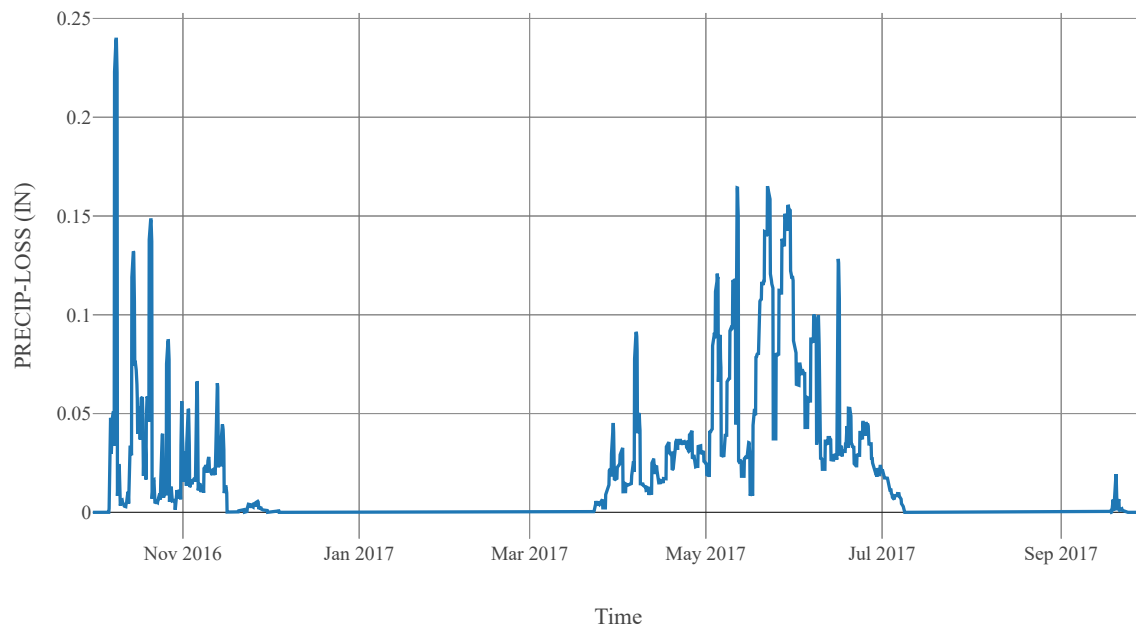
Excess Precipitation



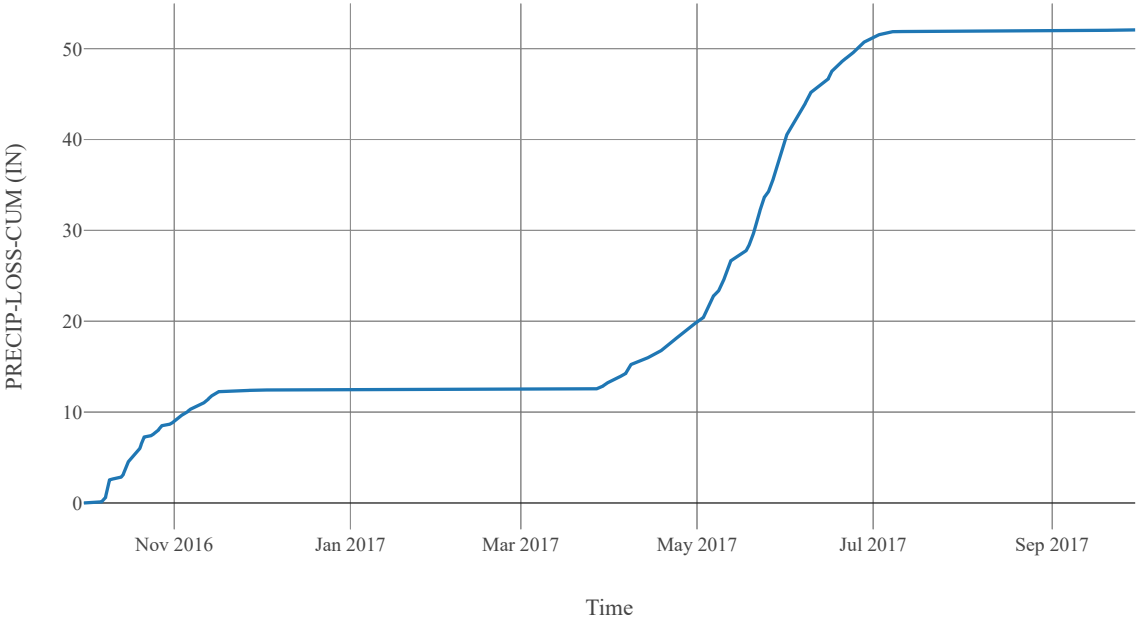
Cumulative Excess Precipitation



Precipitation Loss

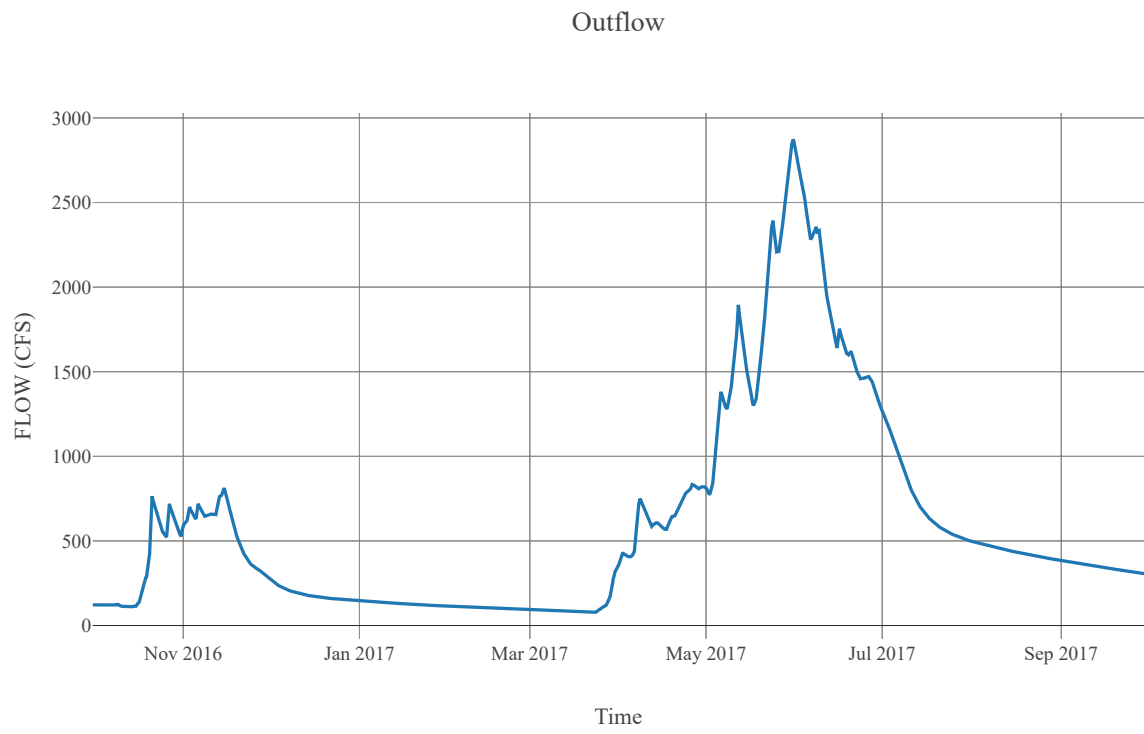


Cumulative Precipitation Loss



Junction : EntiatNrArdenvoir

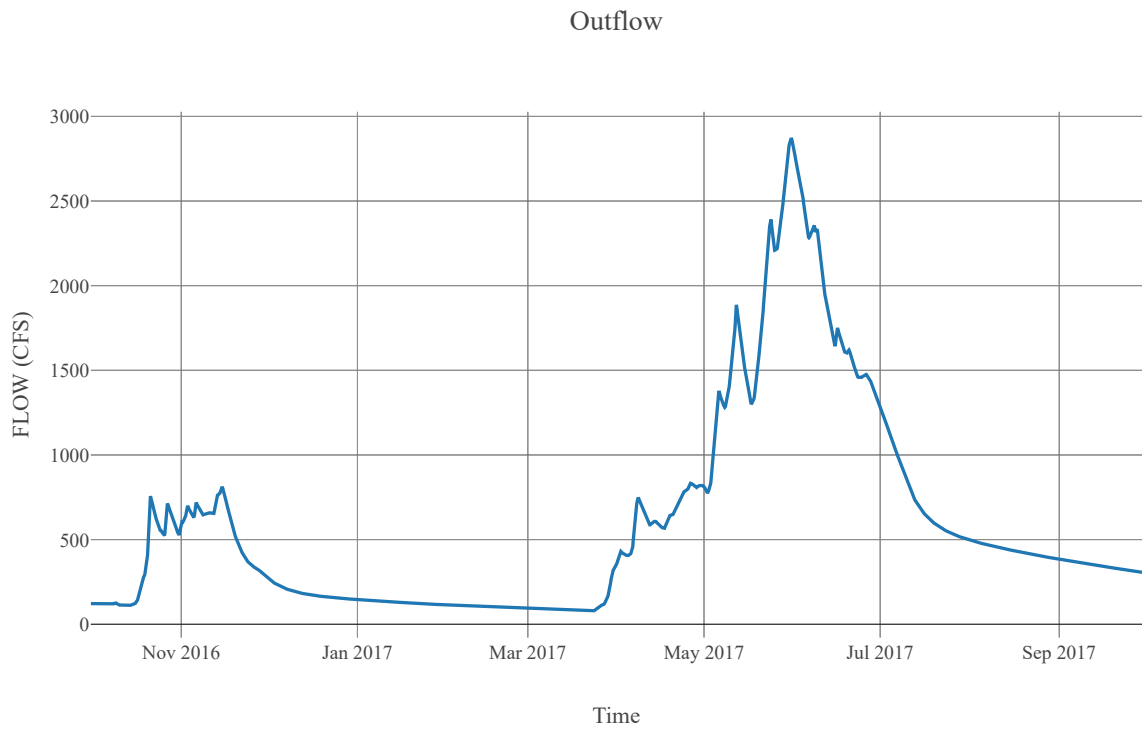
Observed Hydrograph : Entiat river near ardenvoir
Downstream : EntiatRv_R015



Reach : EntiatRv_R015

Loss Method : None
Downstream : MadRv_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	41062
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	EntiatRv_R015
	Energy Slope
	0.01
	Right Mannings N
	0.15



Subbasin : MadRv_S010

Area : 91.01
Observed Hydrograph : Mad river at ardenvoir
Latitude : 47.8
Longitude : -120.51
Downstream : MadRv_CF

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.01
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

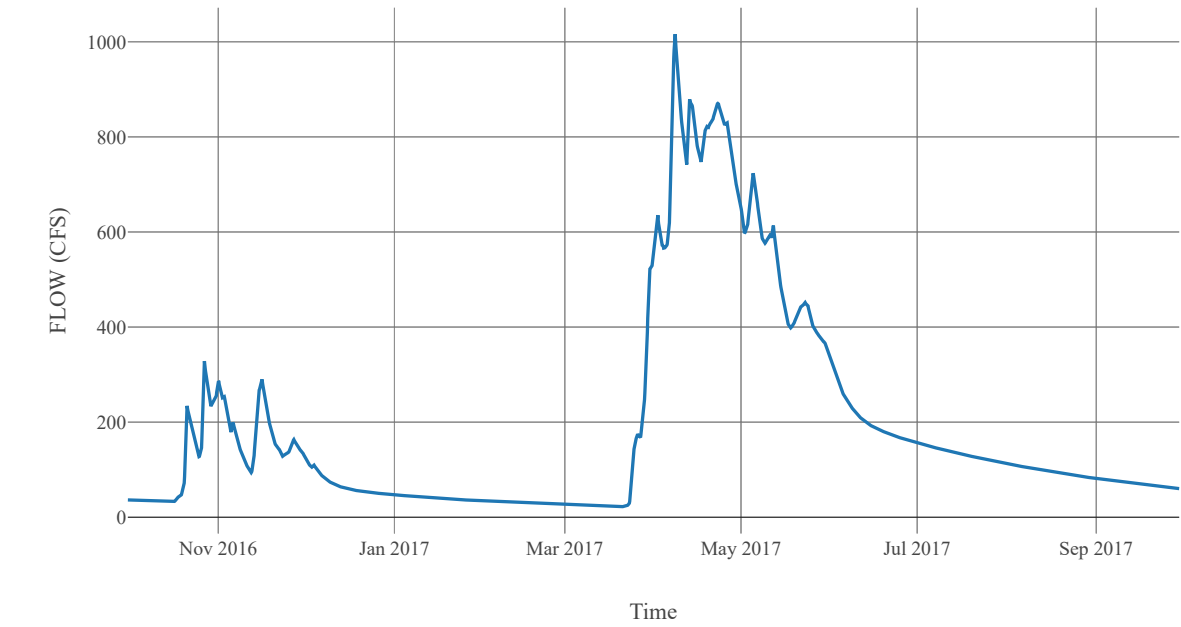
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.72
Storage Coefficient	5.72

Baseflow	
Method	Linear Reservoir

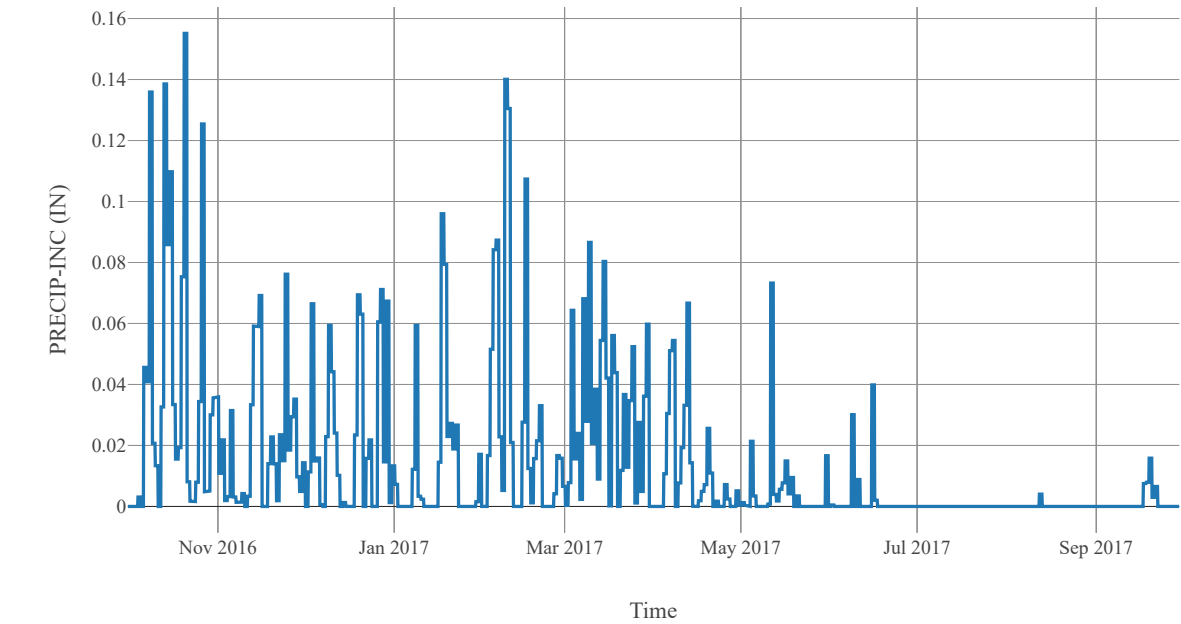
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	114.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.4
		Layer Number	2
		Storage Coefficient	2288
		Number Steps	1

Name	Statistics	
	Value	Unit
Baseflow Volume	137762.52	Ac-ft
Precipitation Volume	204732.53	Ac-ft
Loss Volume	176864.24	Ac-ft
Excess Volume	17.69	Ac-ft

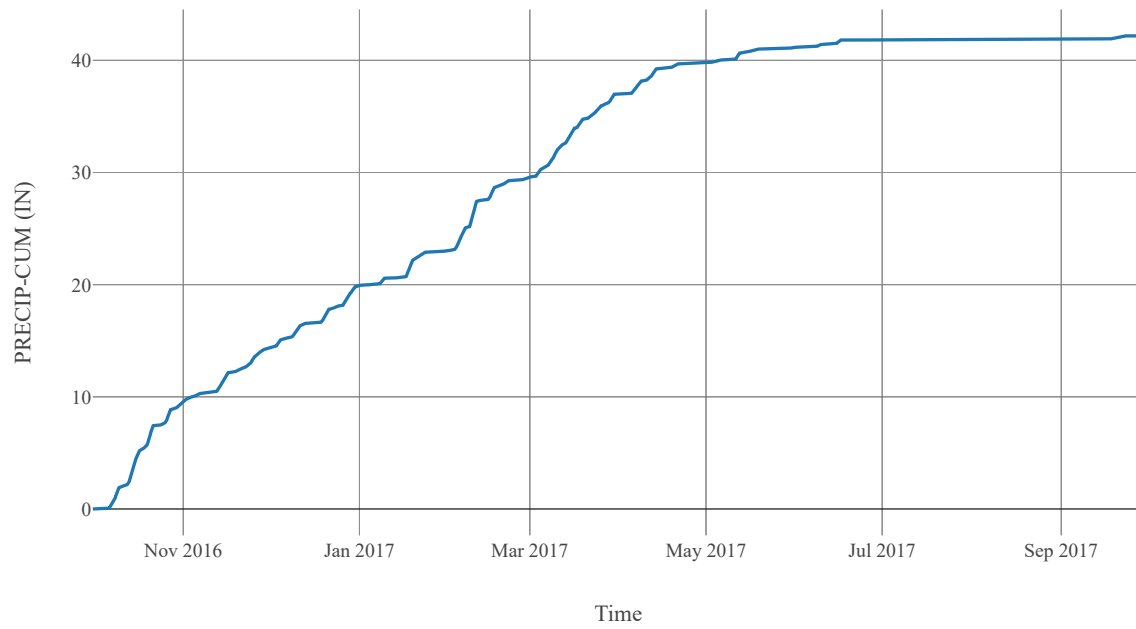
Outflow



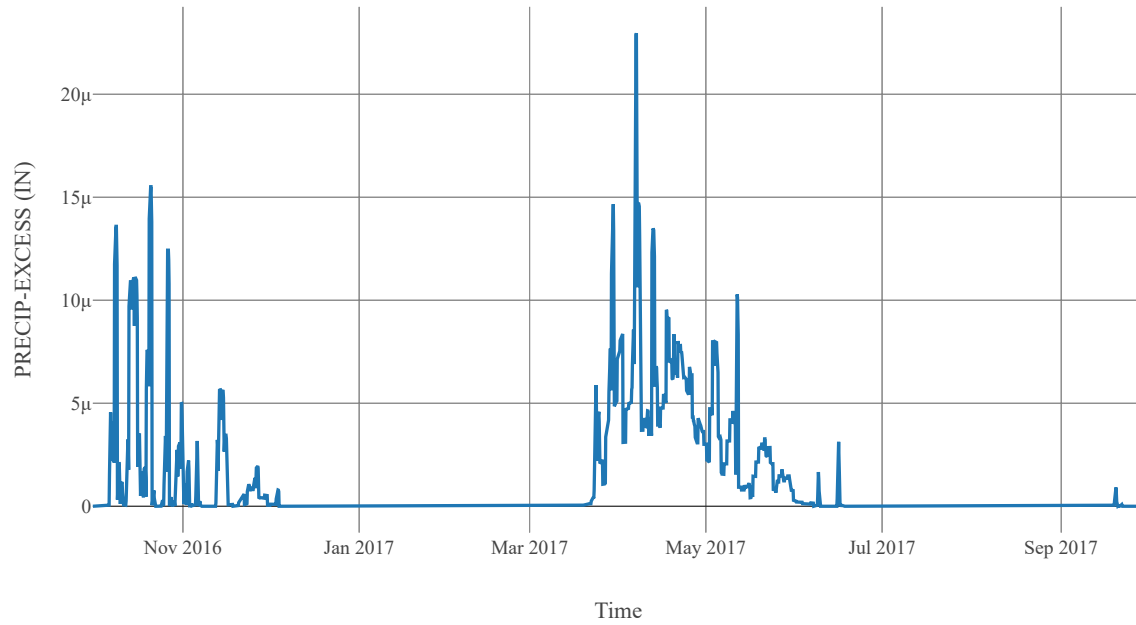
Precipitation



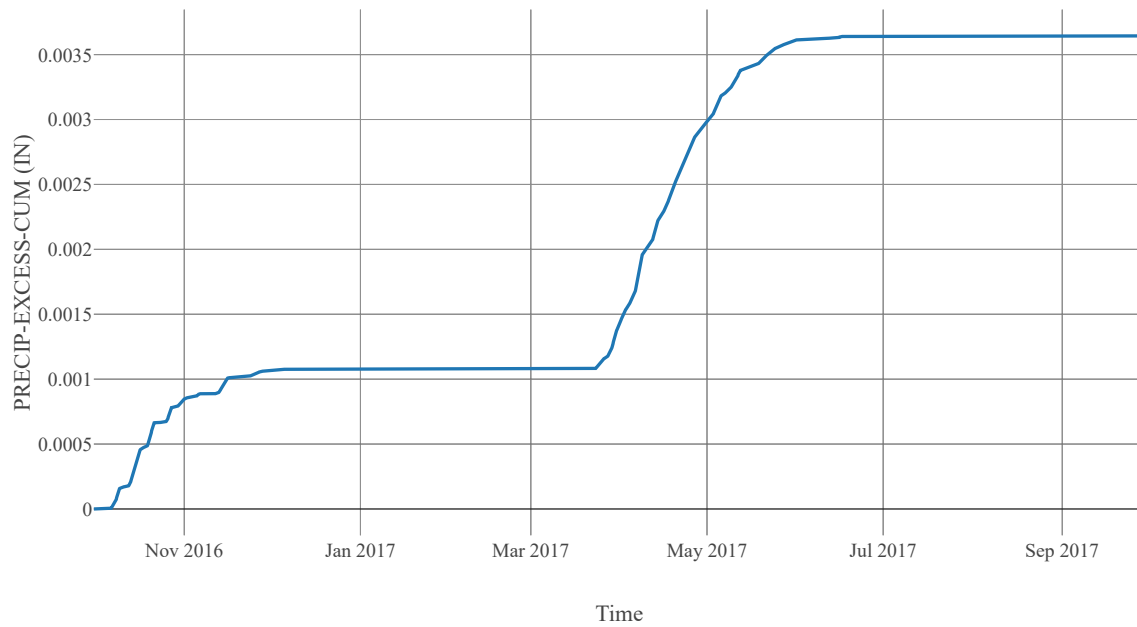
Cumulative Precipitation



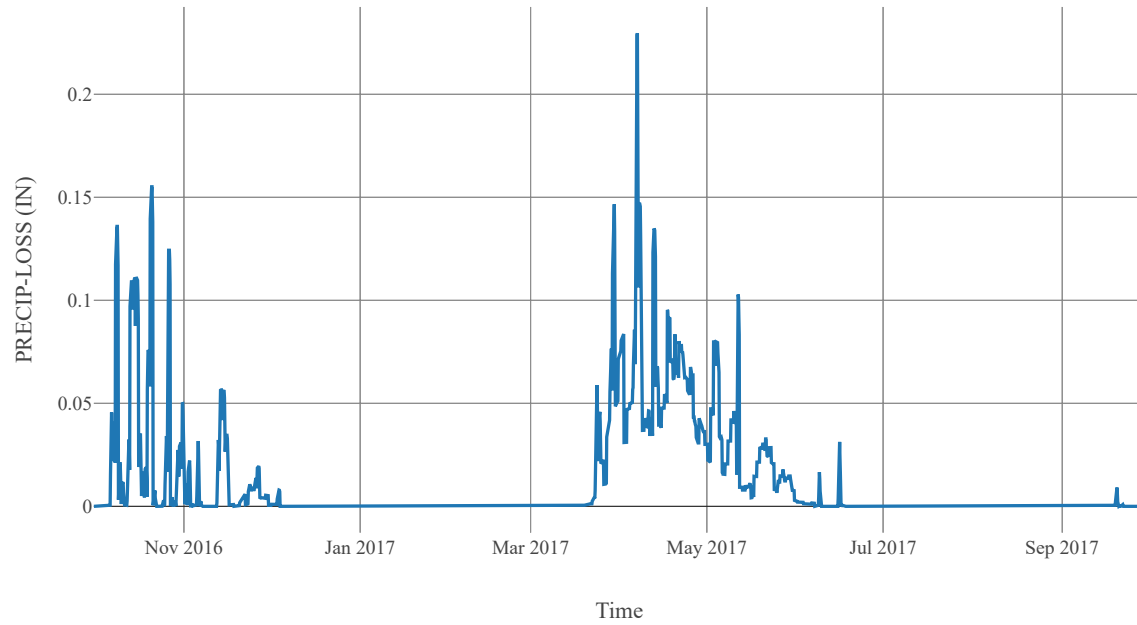
Excess Precipitation



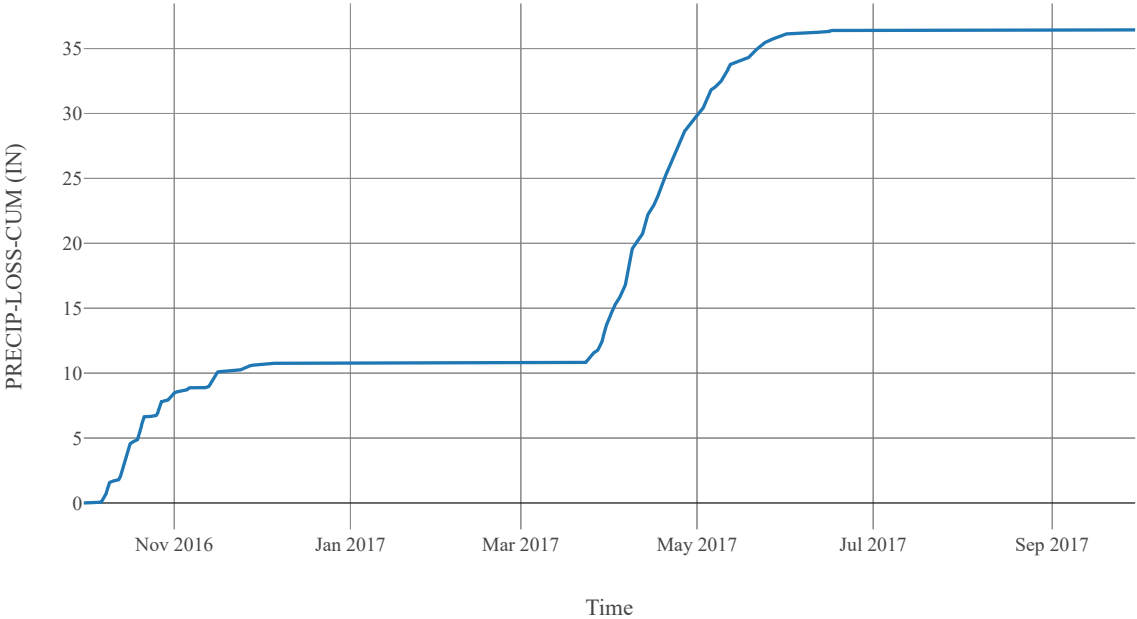
Cumulative Excess Precipitation



Precipitation Loss

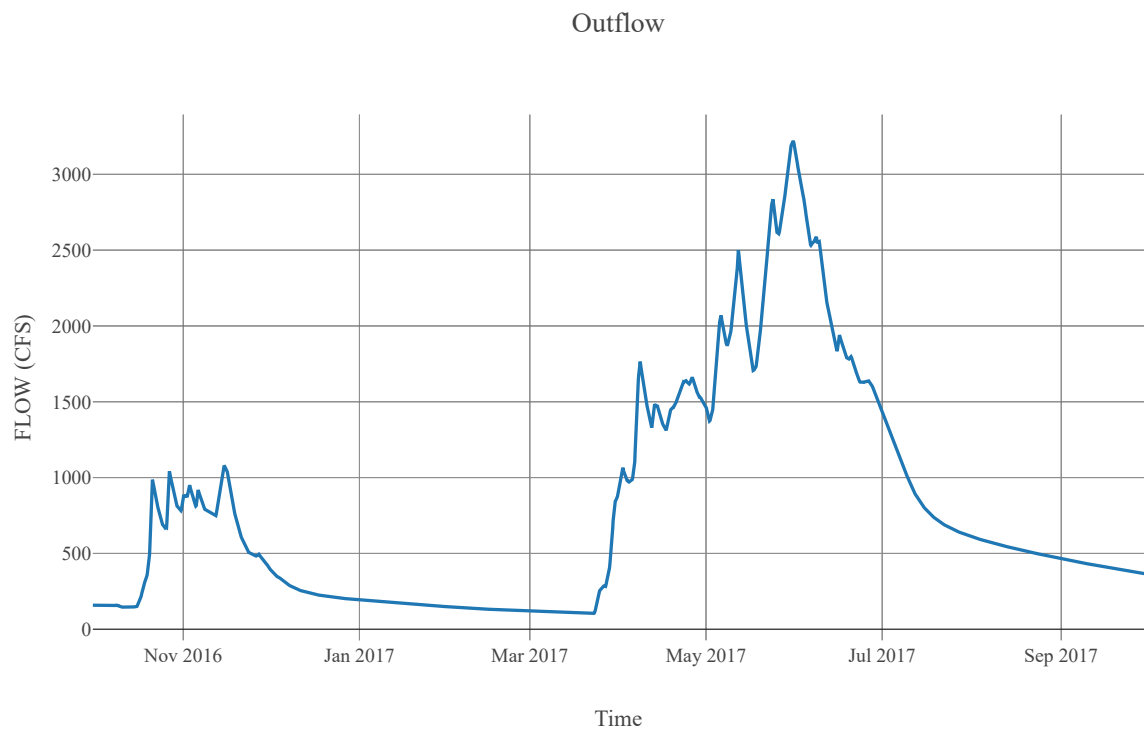


Cumulative Precipitation Loss



Junction : MadRv_CF

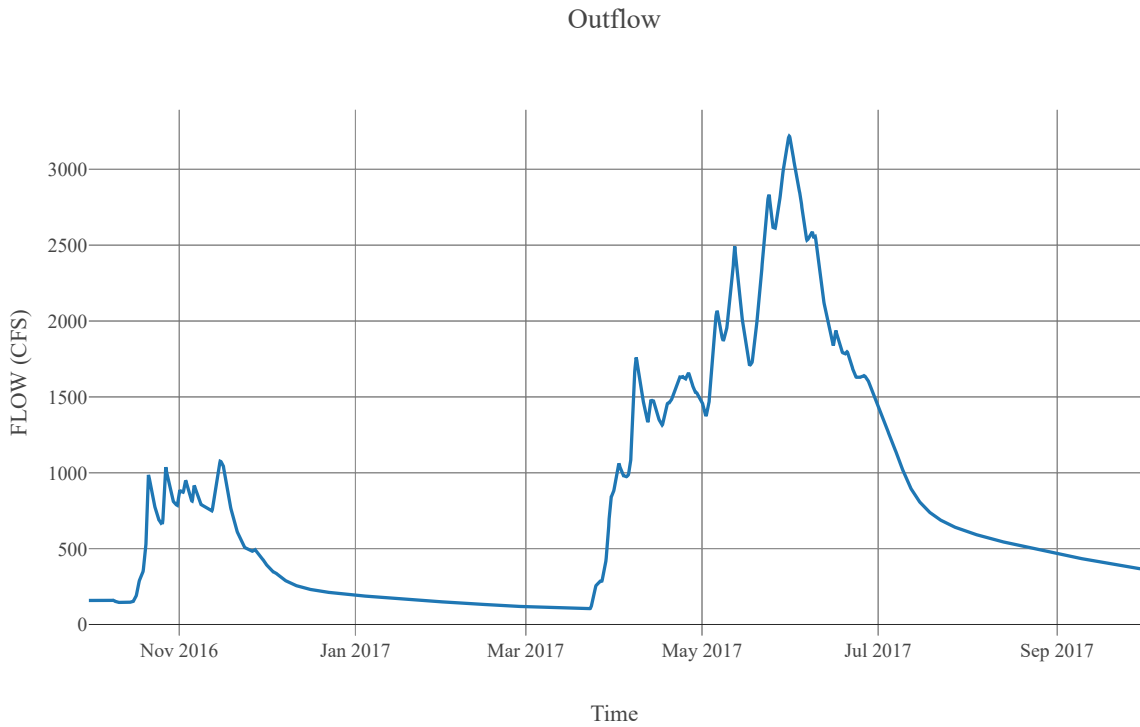
Downstream : EntiatRv_R010



Reach : EntiatRv_R010

Loss Method : None
Downstream : Entiat Nr Entiat

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	0.04
	Nvalue Ratio
	1
	Length
	58205
	Max Depth Difference
	0
	Left Mannings N
	0.15
	Channel Type
	Eight Point
	Mannings N
	0.04
	Cross Section Name
	EntiatRv_R010
	Energy Slope
	0.01
	Right Mannings N
	0.15



Subbasin : EntiatRv_S010

Area : 119.58
Latitude : 47.72
Longitude : -120.34
Downstream : Entiat Nr Entiat

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

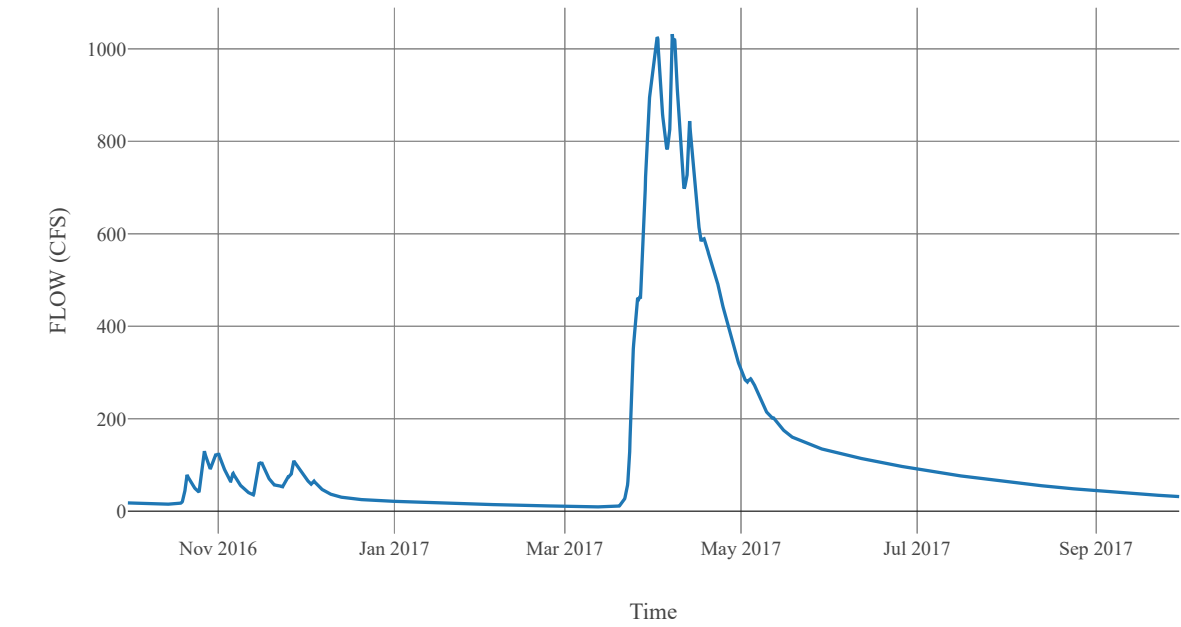
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	5.15
Storage Coefficient	5.15

Baseflow	
Method	Linear Reservoir

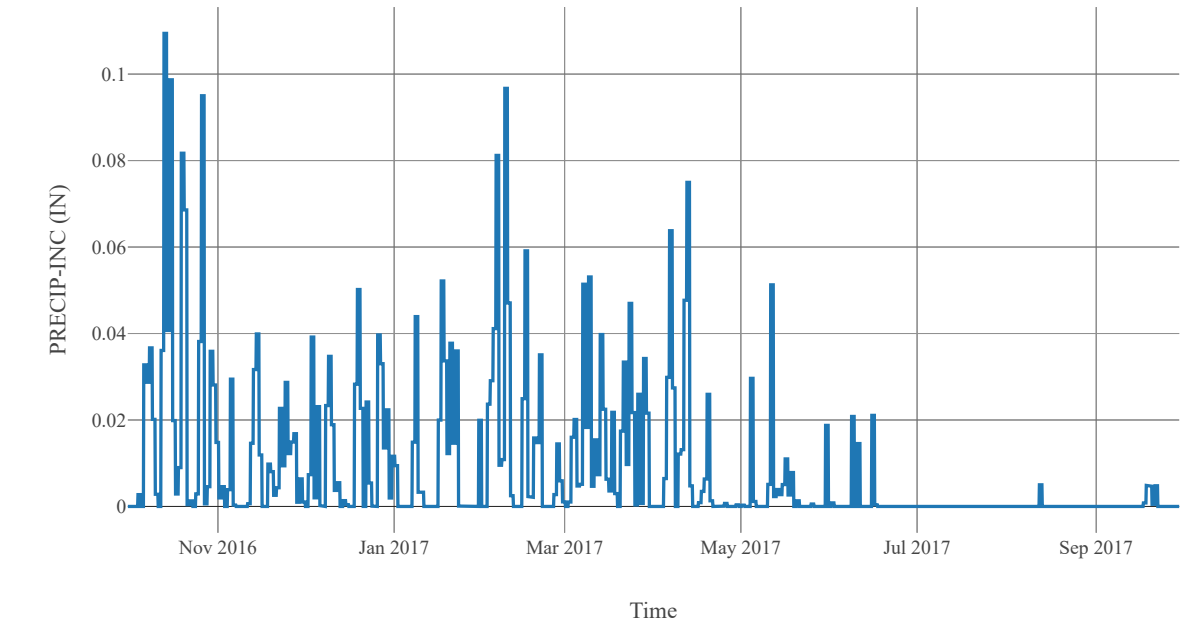
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	103
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.15
		Layer Number	2
		Storage Coefficient	2060
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	88887.28	Ac-ft
Precipitation Volume	171971.81	Ac-ft
Loss Volume	135328.57	Ac-ft
Excess Volume	0	Ac-ft

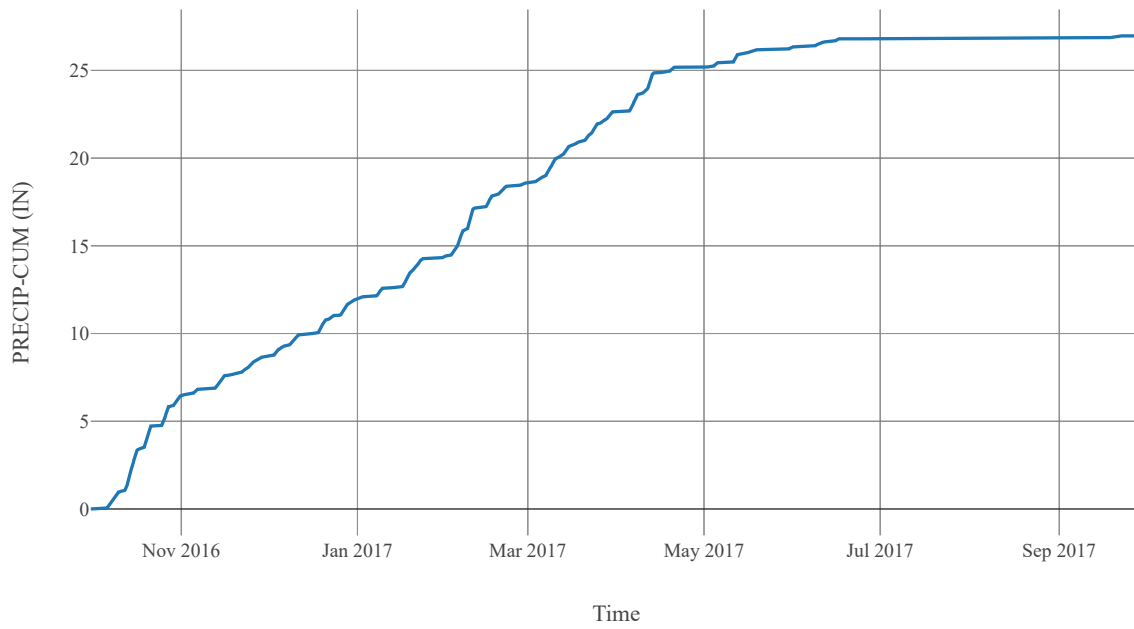
Outflow



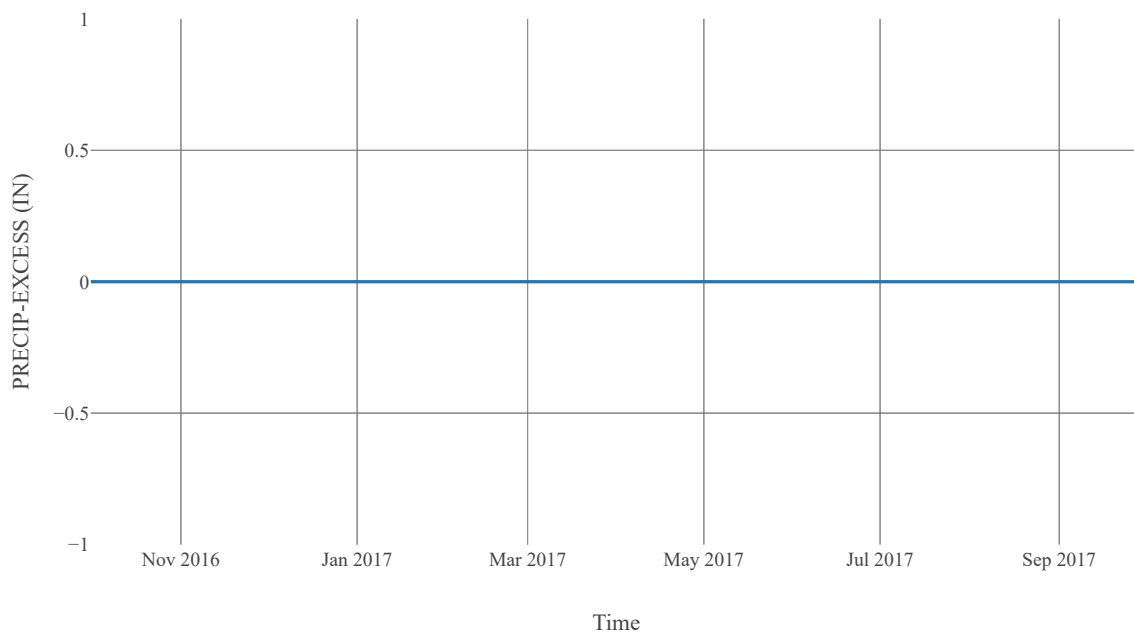
Precipitation



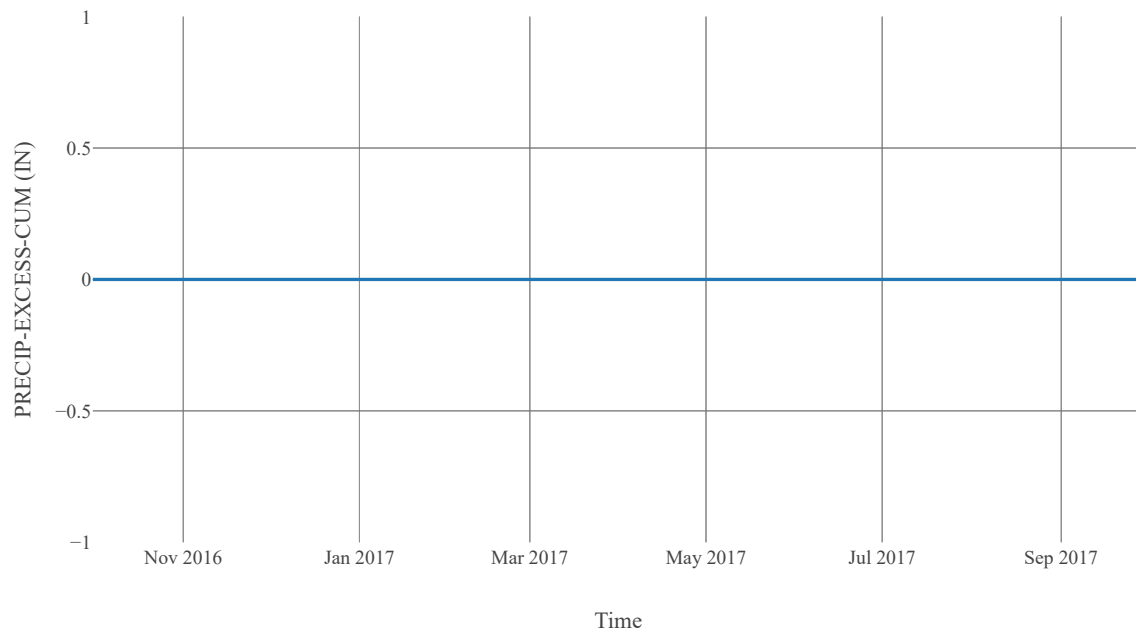
Cumulative Precipitation



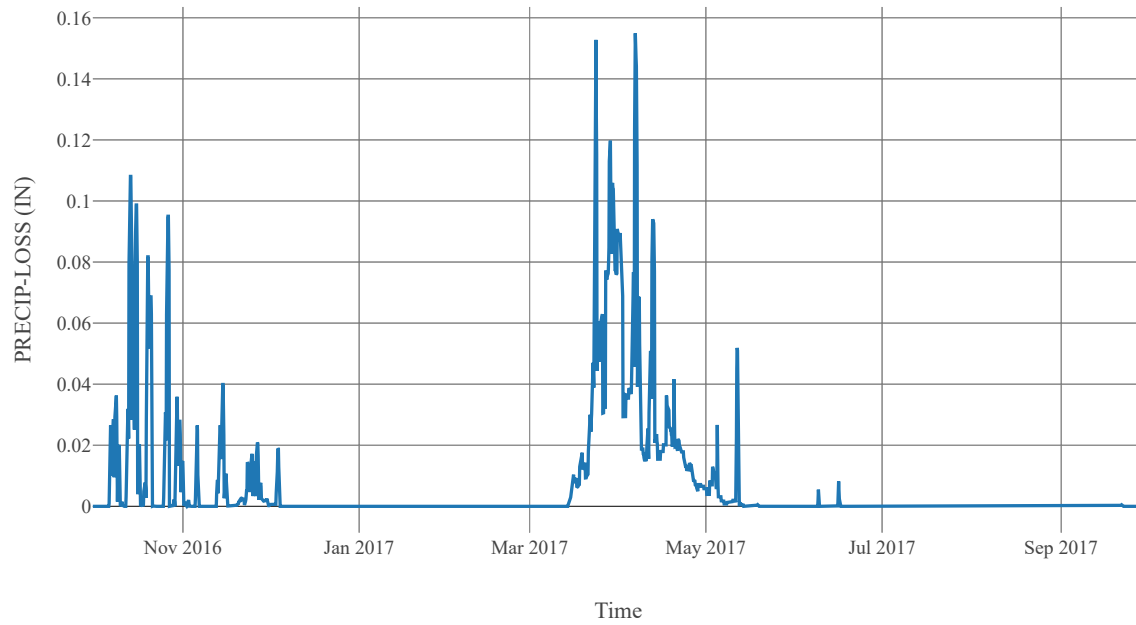
Excess Precipitation



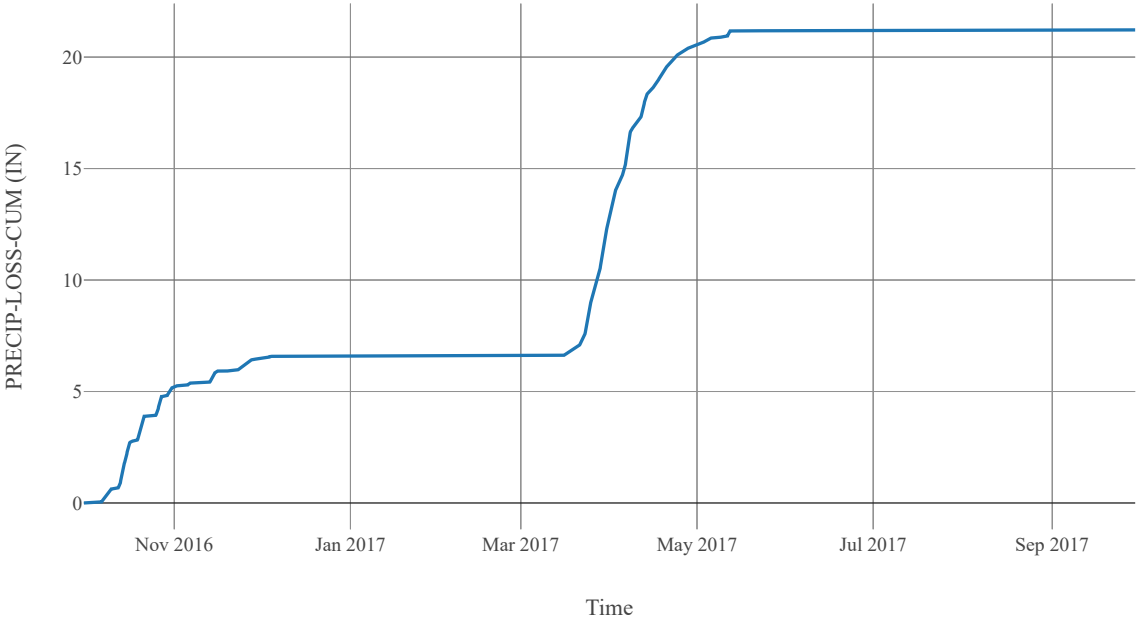
Cumulative Excess Precipitation



Precipitation Loss



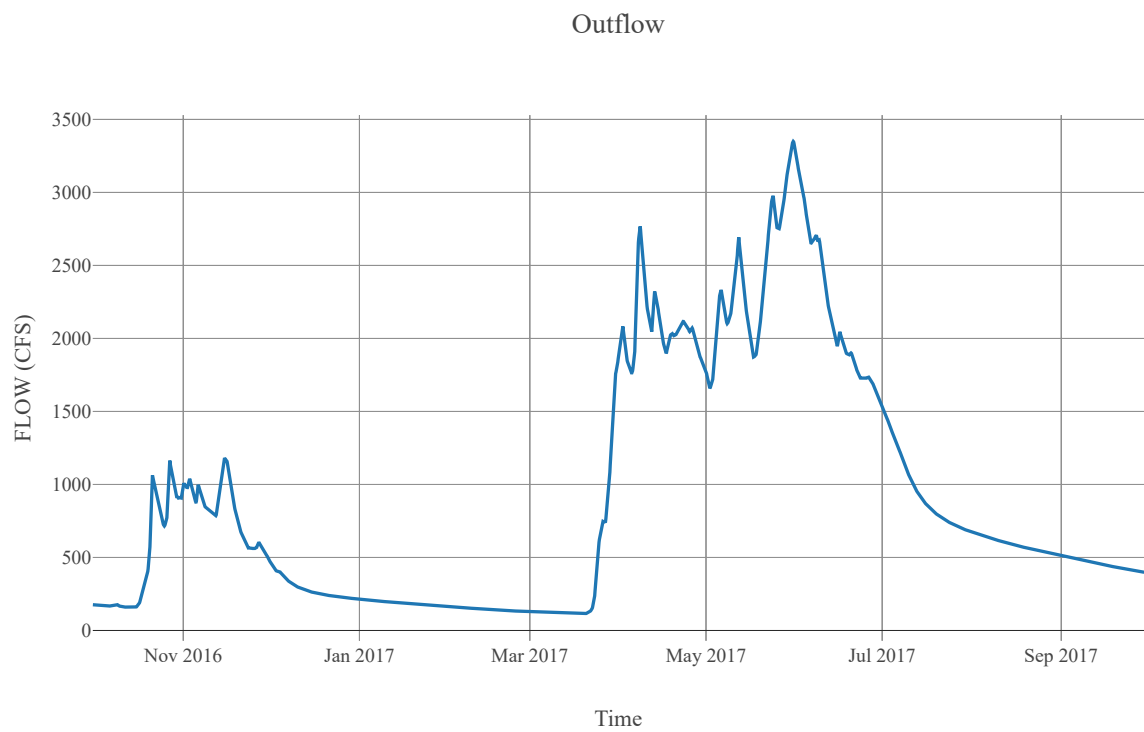
Cumulative Precipitation Loss



Junction : EntiatNrEntiat

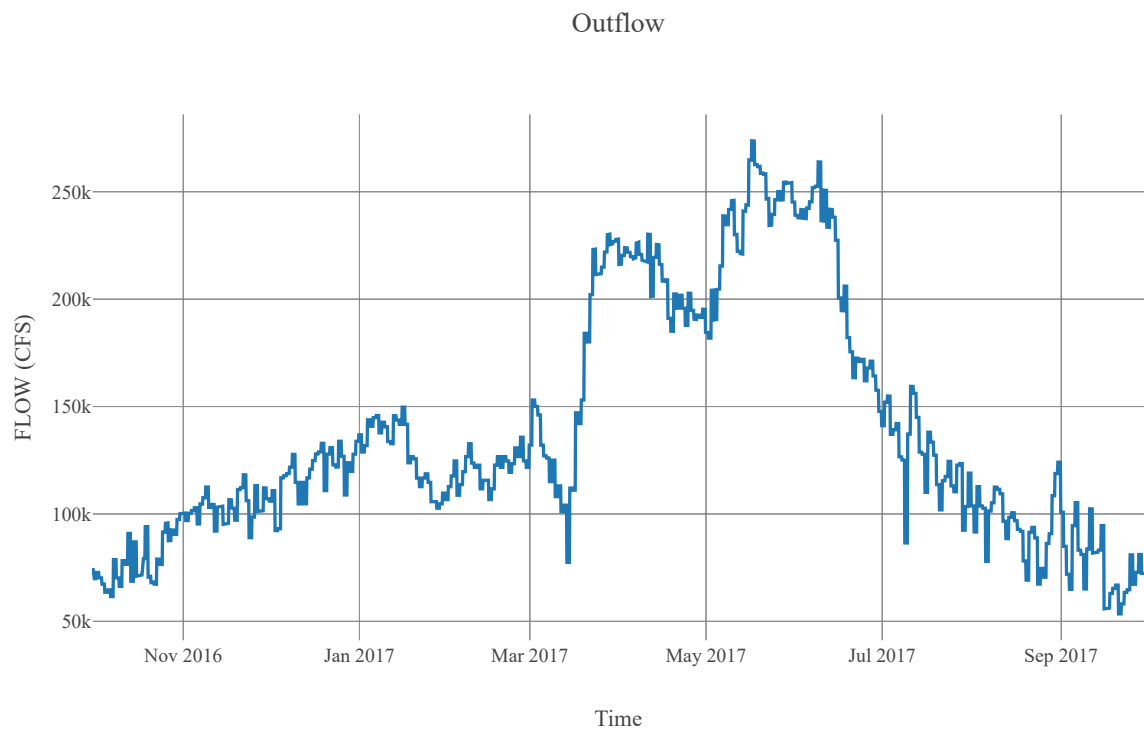
Observed Hydrograph : Entiat river near entiat

Downstream : EntiatRv_CF



Junction : EntiatRv_CF

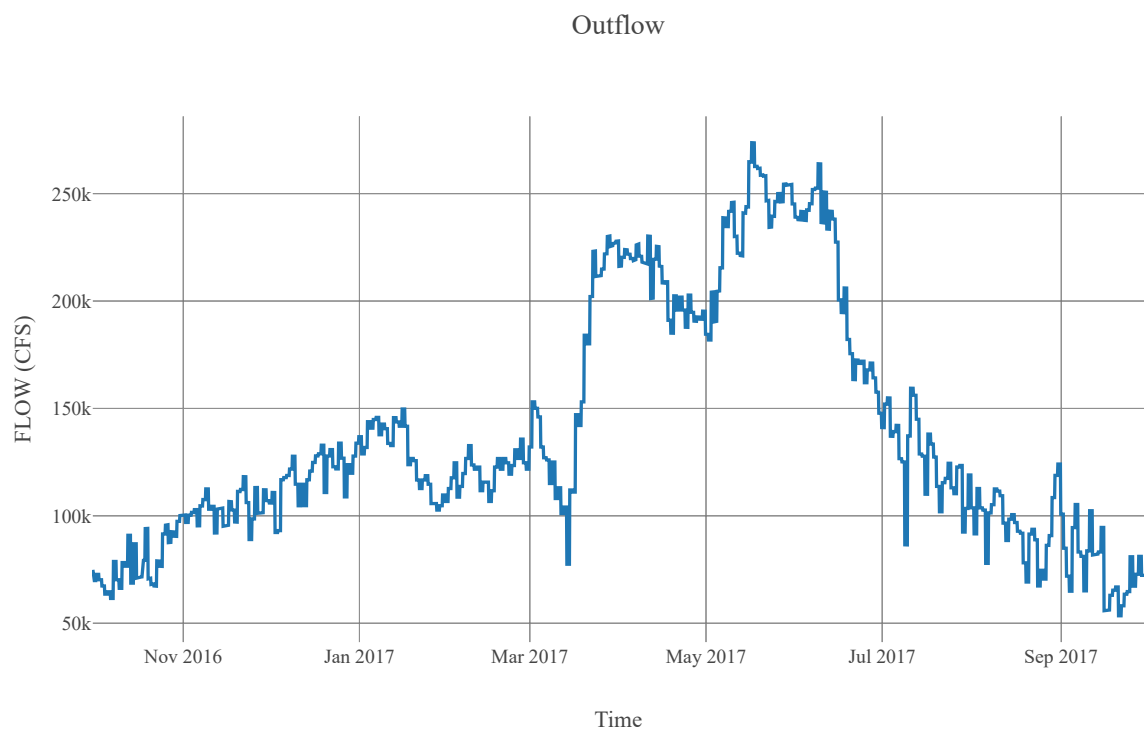
Downstream : MidColumbia_R050



Reach : MidColumbia_R050

Loss Method : None
Downstream : RockyReach_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : MidColumbia_S050

Area : 220.31
Latitude : 47.7
Longitude : -120.18
Downstream : RockyReach_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	5.1
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

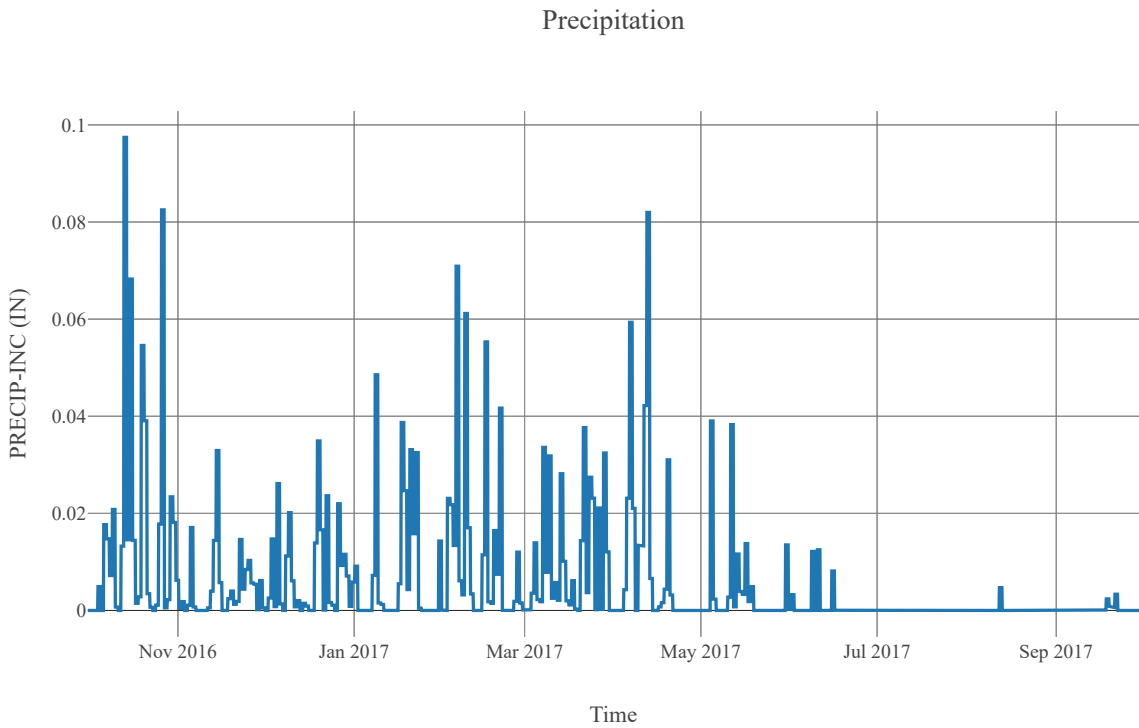
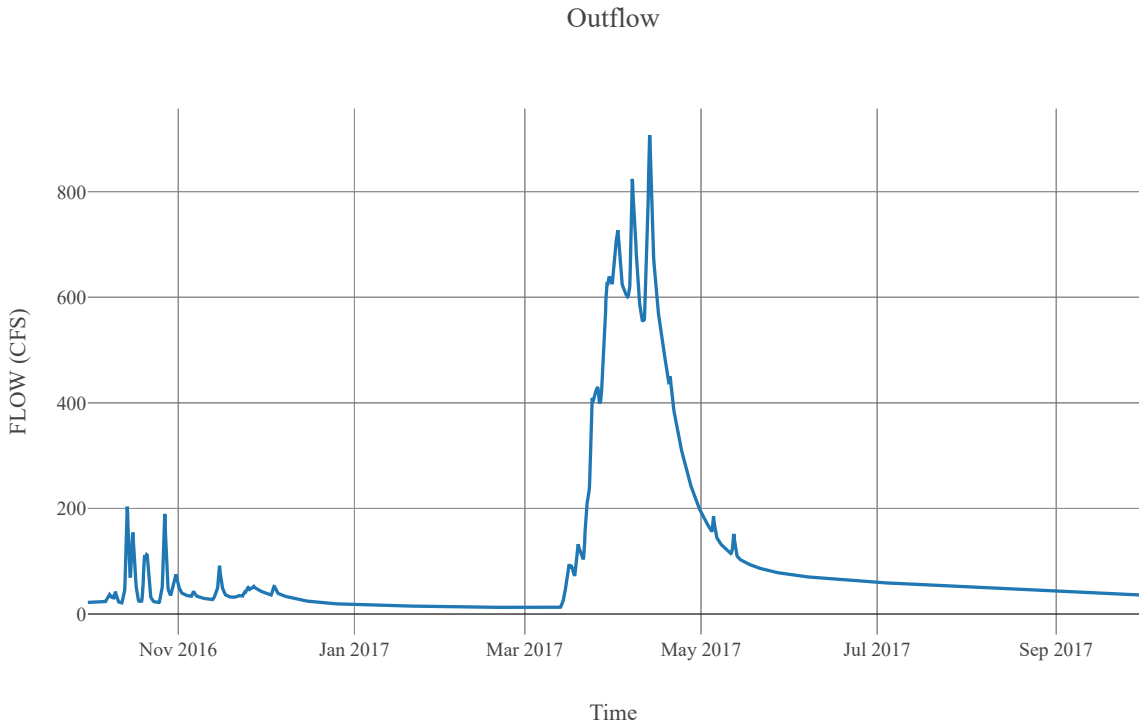
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	10.77
Storage Coefficient	10.77

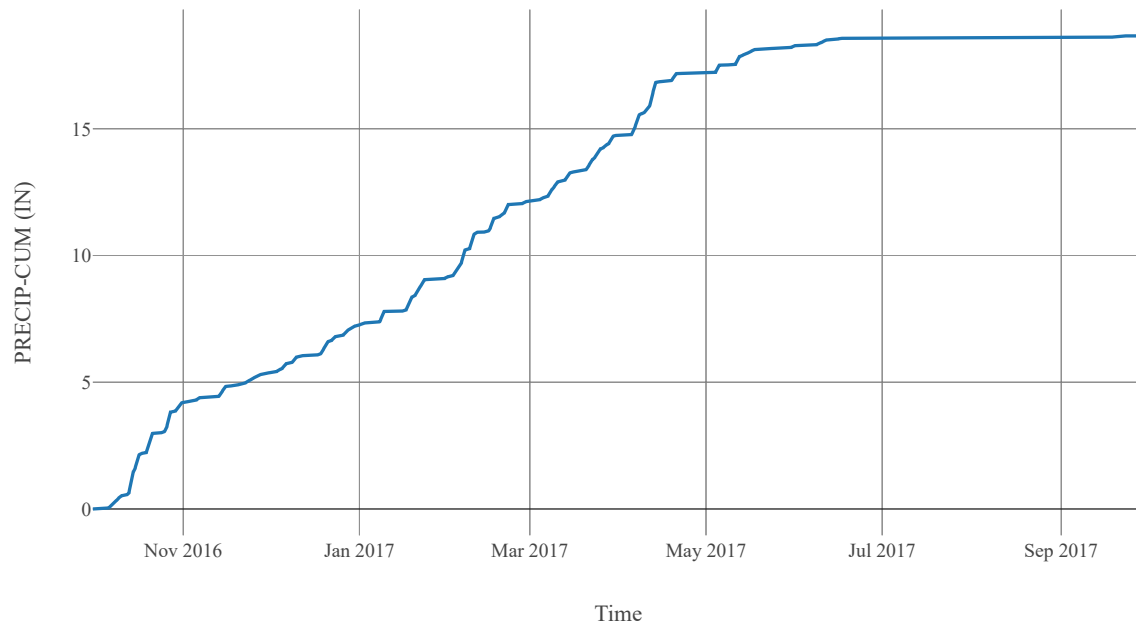
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	215.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	4308
		Number Steps	1

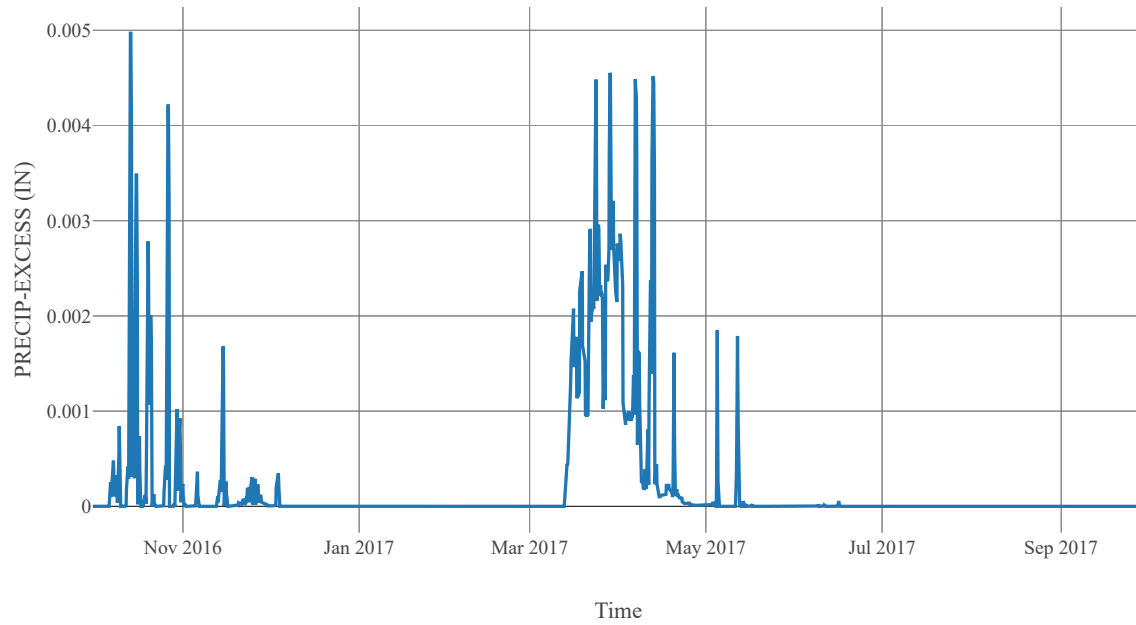
Statistics		
Name	Value	Unit
Baseflow Volume	61282.5	Ac-ft
Precipitation Volume	219291.62	Ac-ft
Loss Volume	146046.39	Ac-ft
Excess Volume	7848.65	Ac-ft



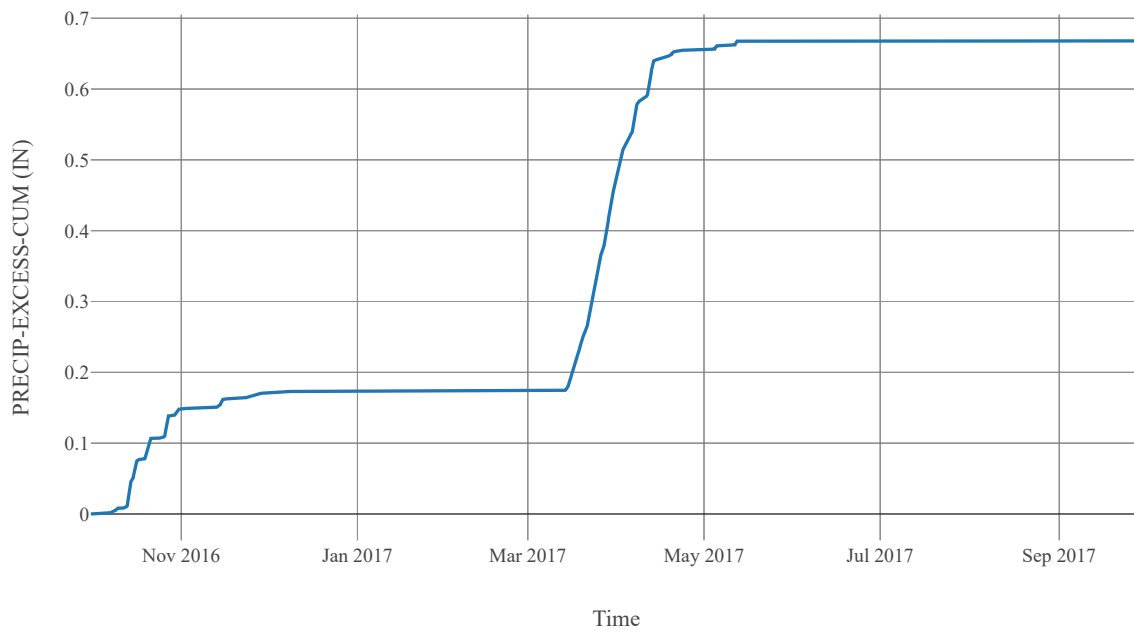
Cumulative Precipitation



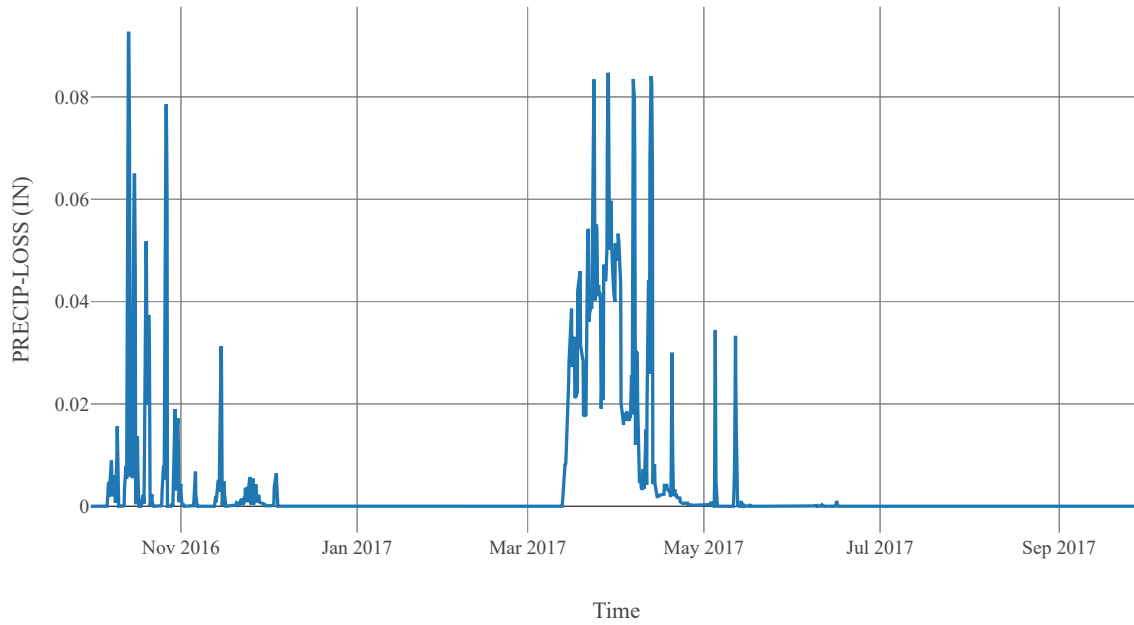
Excess Precipitation



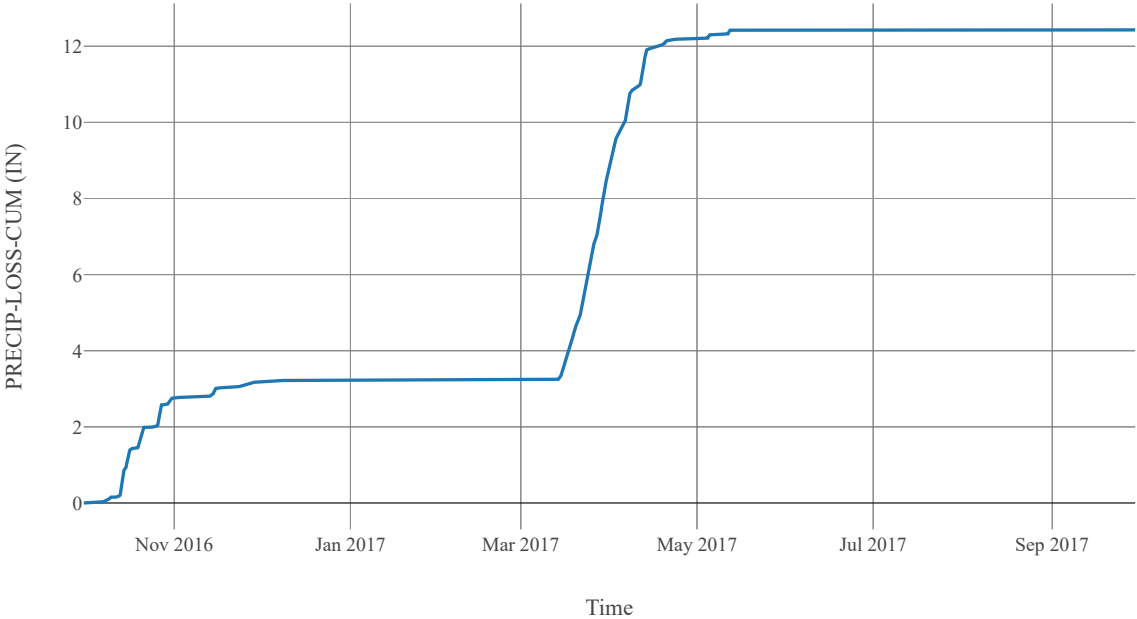
Cumulative Excess Precipitation



Precipitation Loss

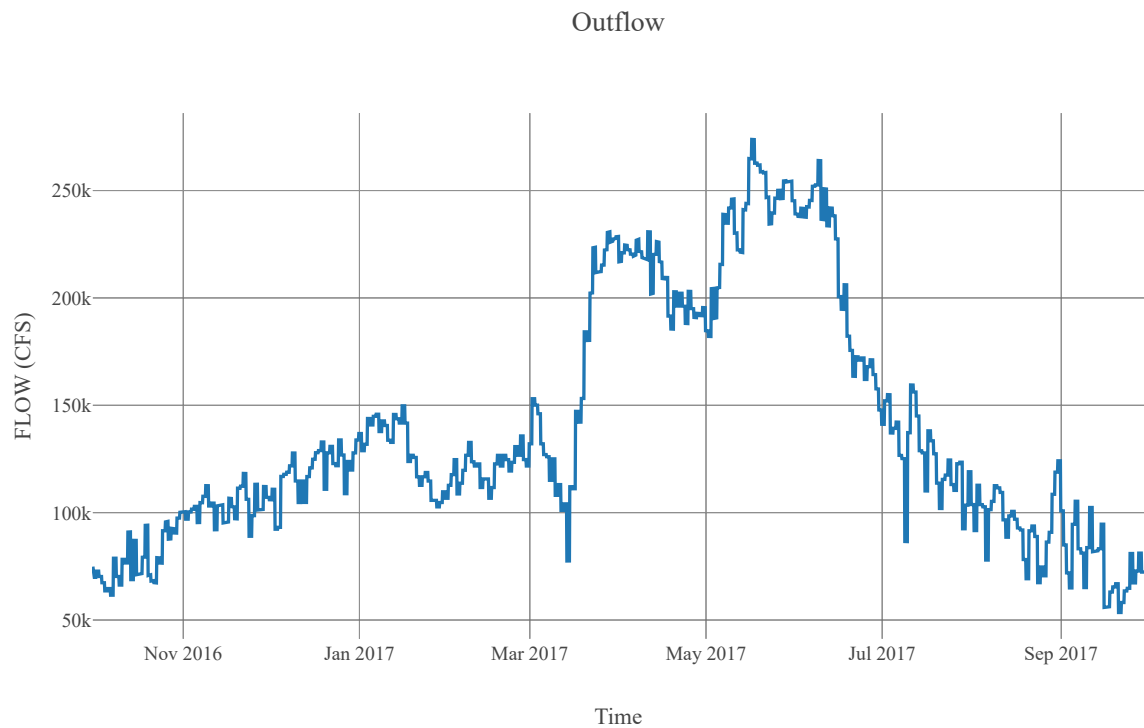


Cumulative Precipitation Loss



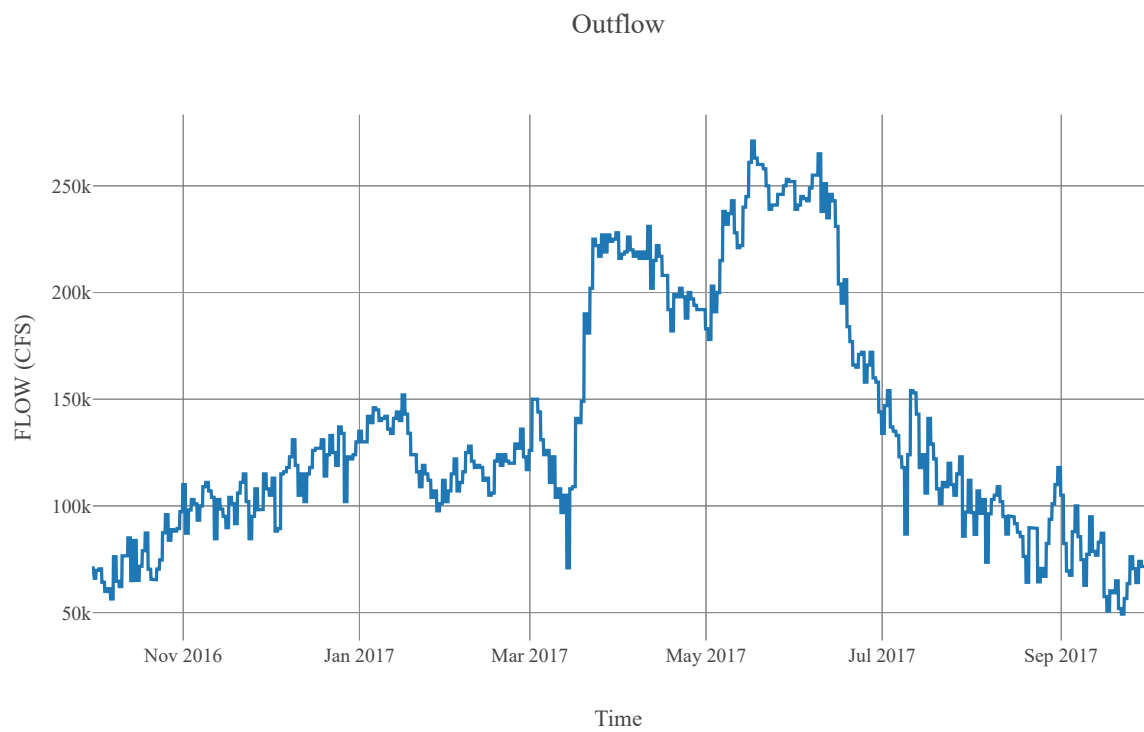
Junction : RockyReach_IN

Observed Hydrograph : Rocky Reach In
Downstream : Rocky Reach



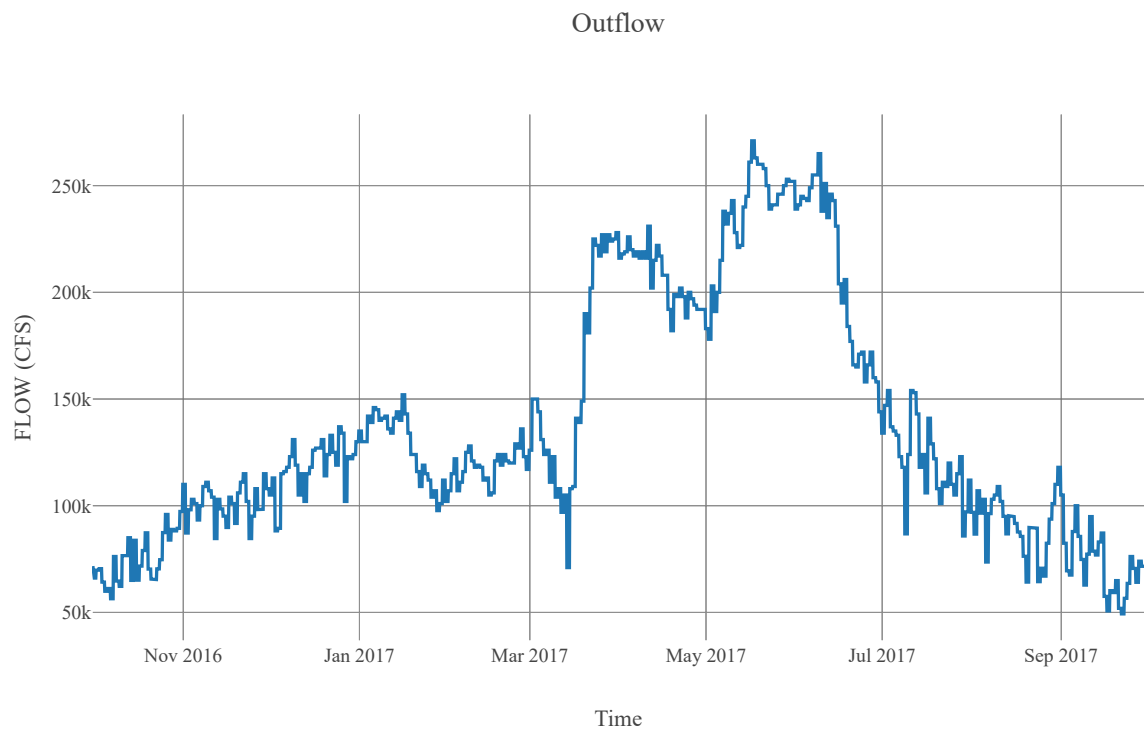
Reservoir : RockyReach

Quality Method : Unspecified
Method : Specified Outflow
Downstream : RockyReach_OUT



Junction : RockyReach_OUT

Downstream : MidColumbia_R045



Reach : MidColumbia_R045

Loss Method : None
Downstream : WenatcheeRv_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : ChiwawaRv_S010

Area : 172.23
Latitude : 48
Longitude : -120.79
Downstream : Chiwawa Nr Plain

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.13
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

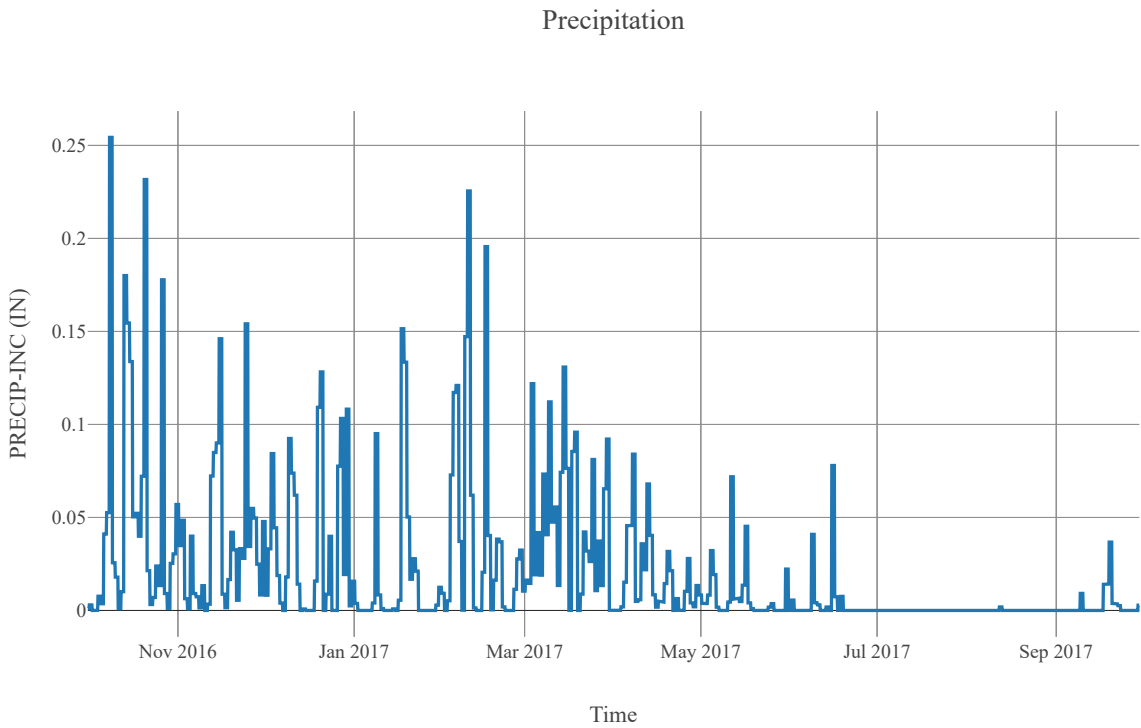
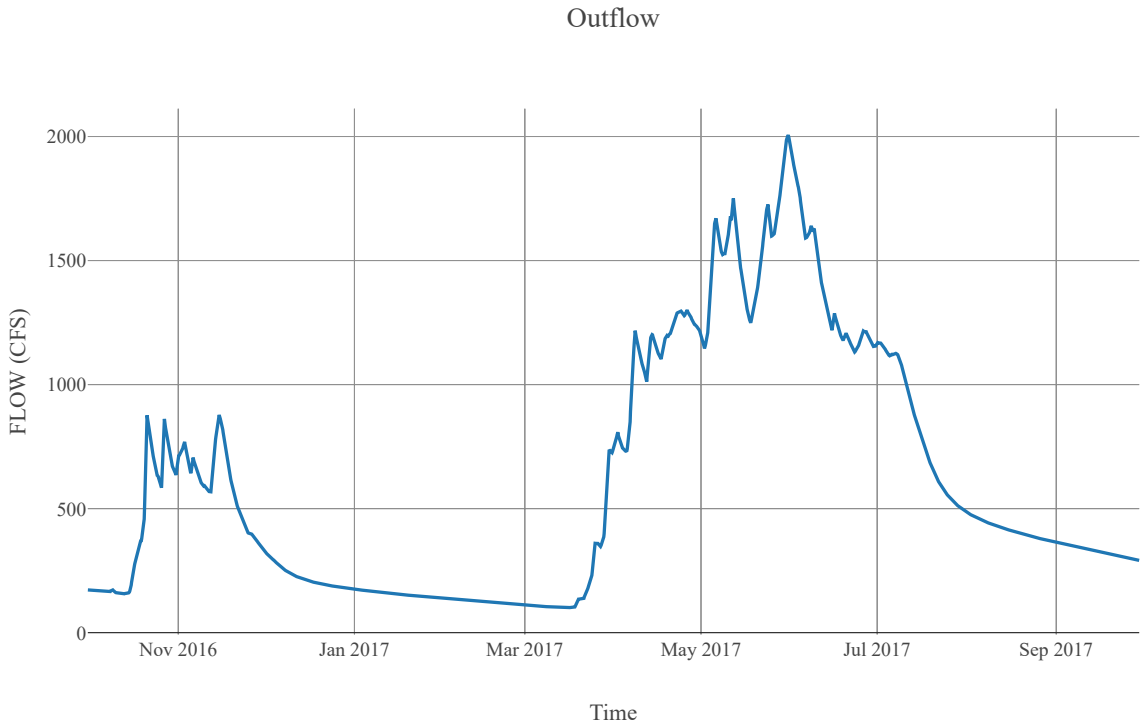
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.86
Storage Coefficient	7.86

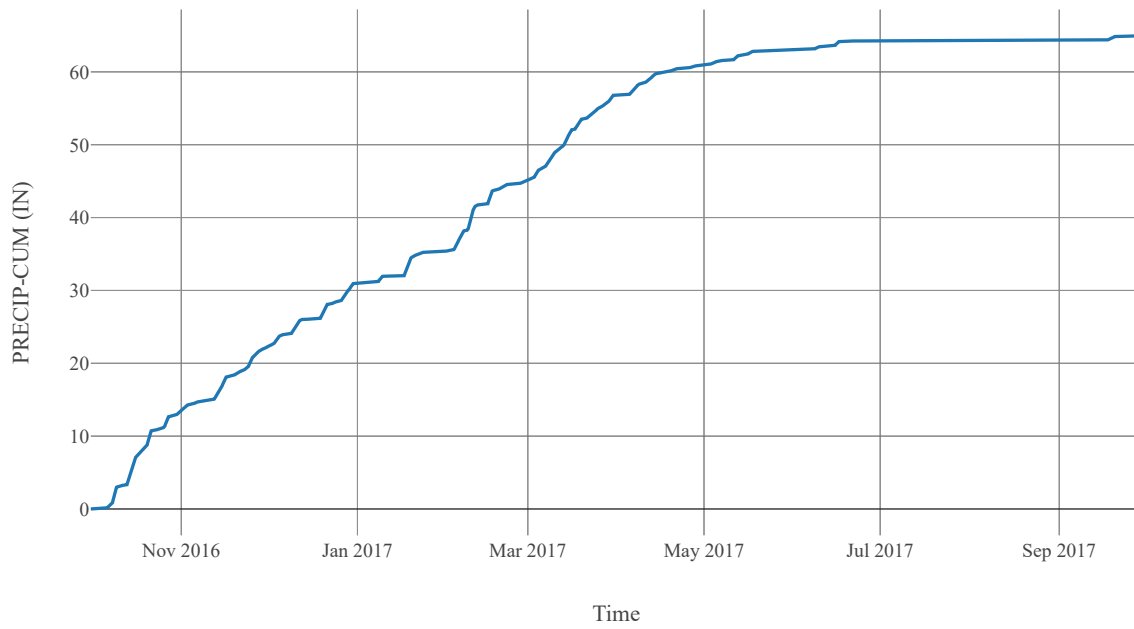
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	157.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	1
		Layer Number	2
		Storage Coefficient	3144
		Number Steps	1

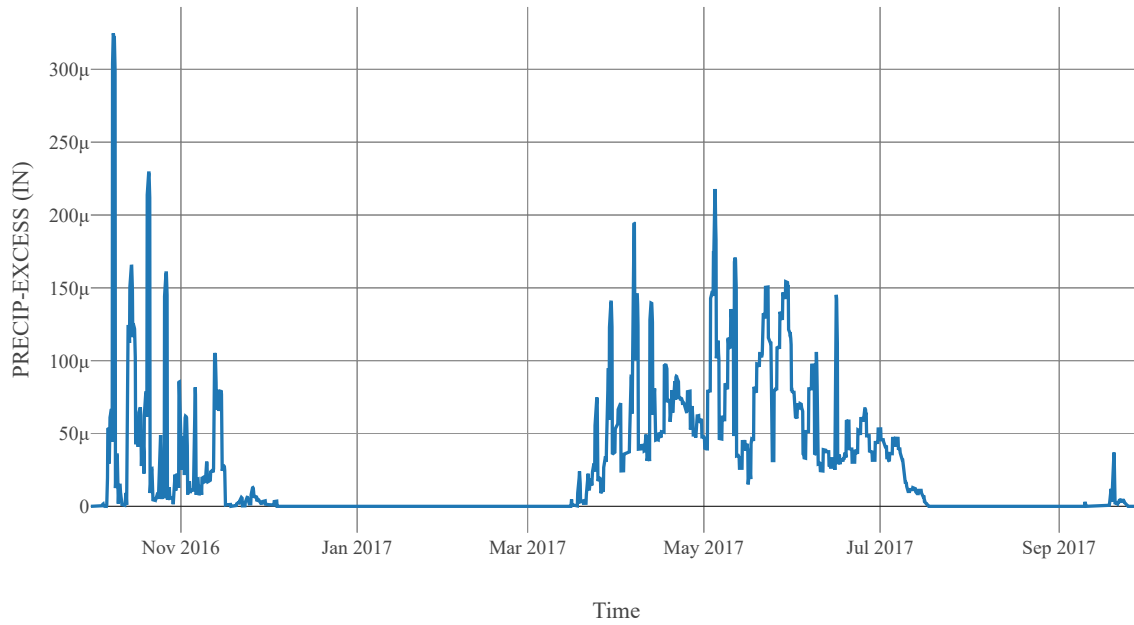
Statistics		
Name	Value	Unit
Baseflow Volume	439119.67	Ac-ft
Precipitation Volume	596494.37	Ac-ft
Loss Volume	542609.53	Ac-ft
Excess Volume	706.31	Ac-ft



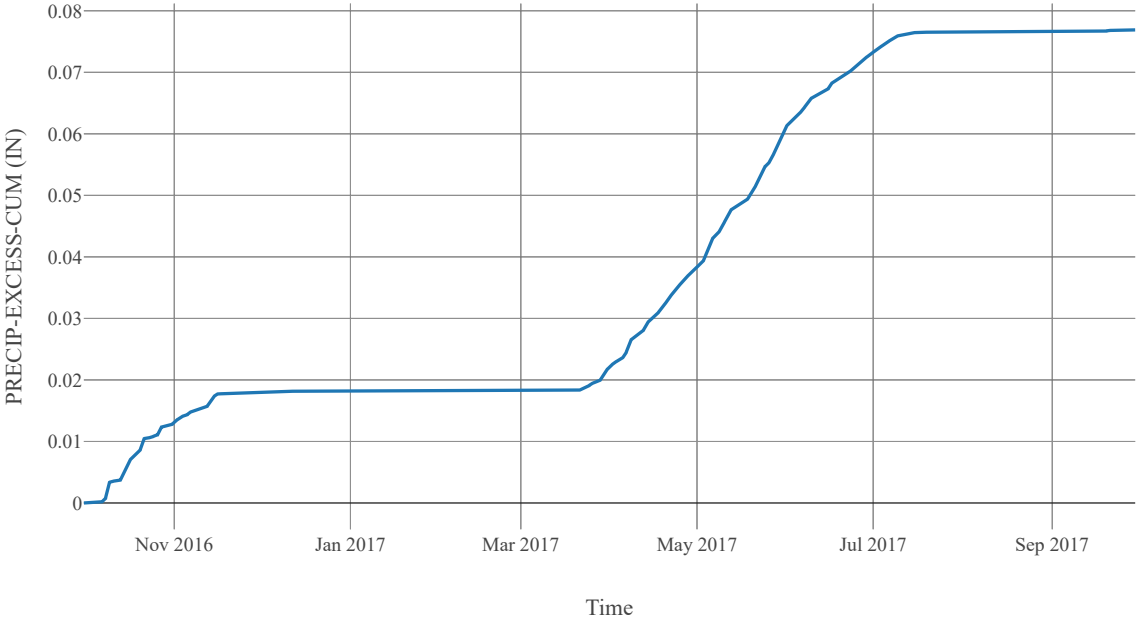
Cumulative Precipitation



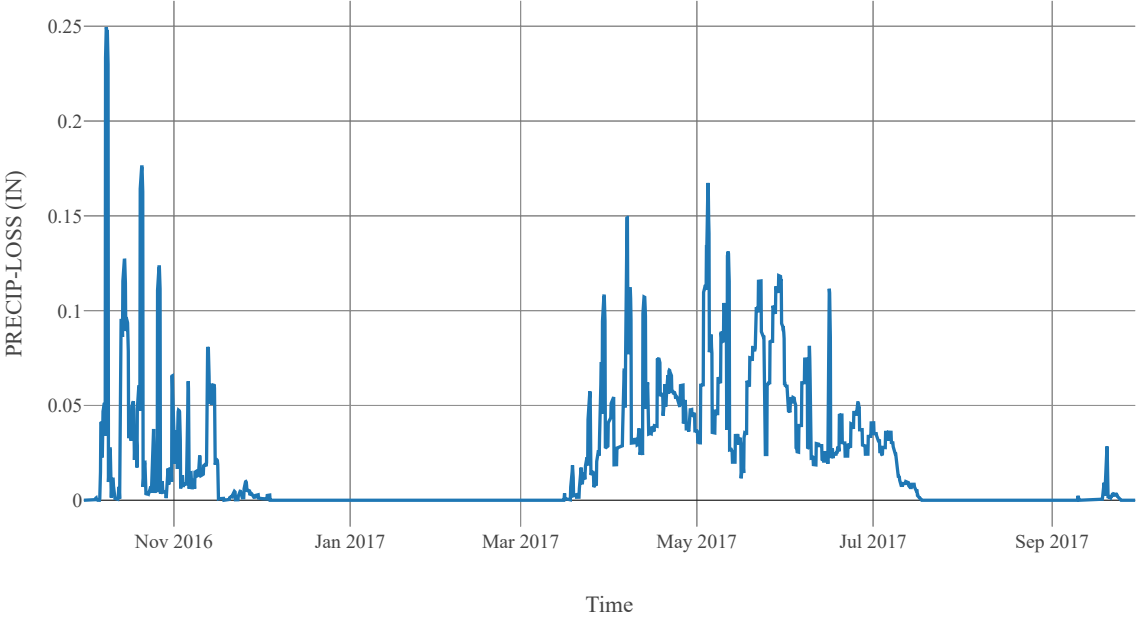
Excess Precipitation



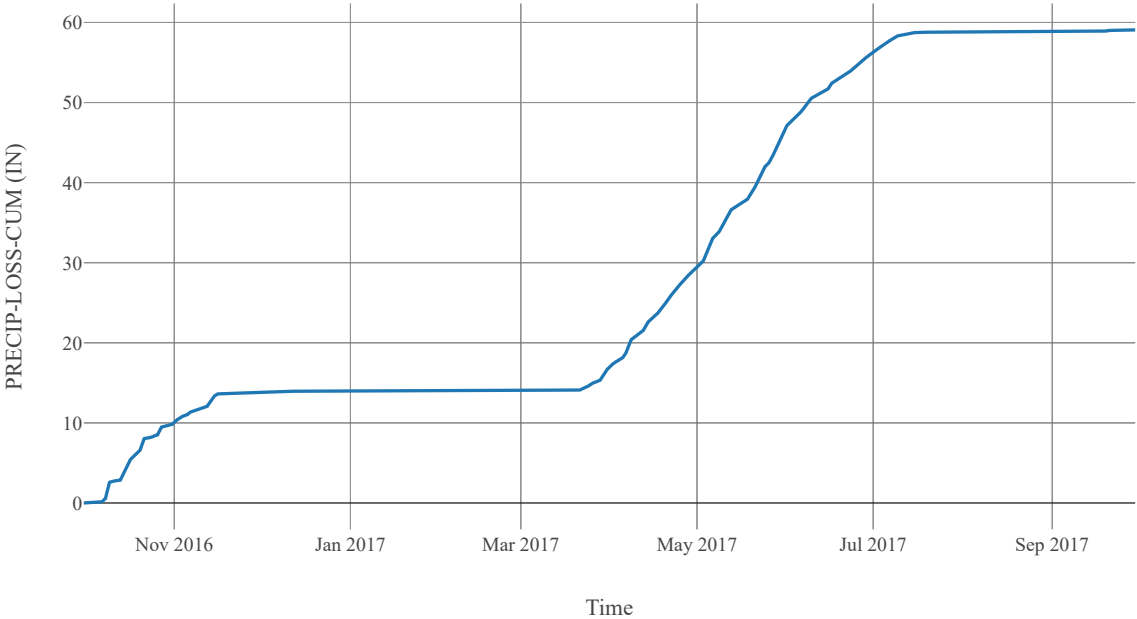
Cumulative Excess Precipitation



Precipitation Loss

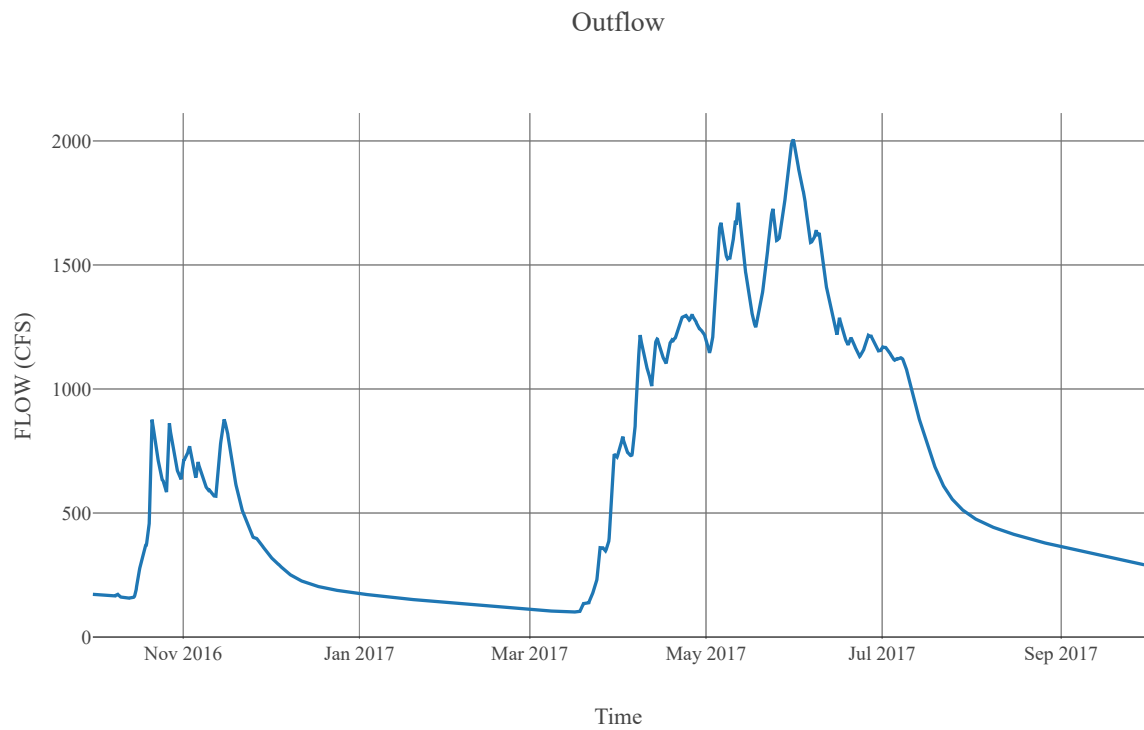


Cumulative Precipitation Loss



Junction : ChiwawaNrPlain

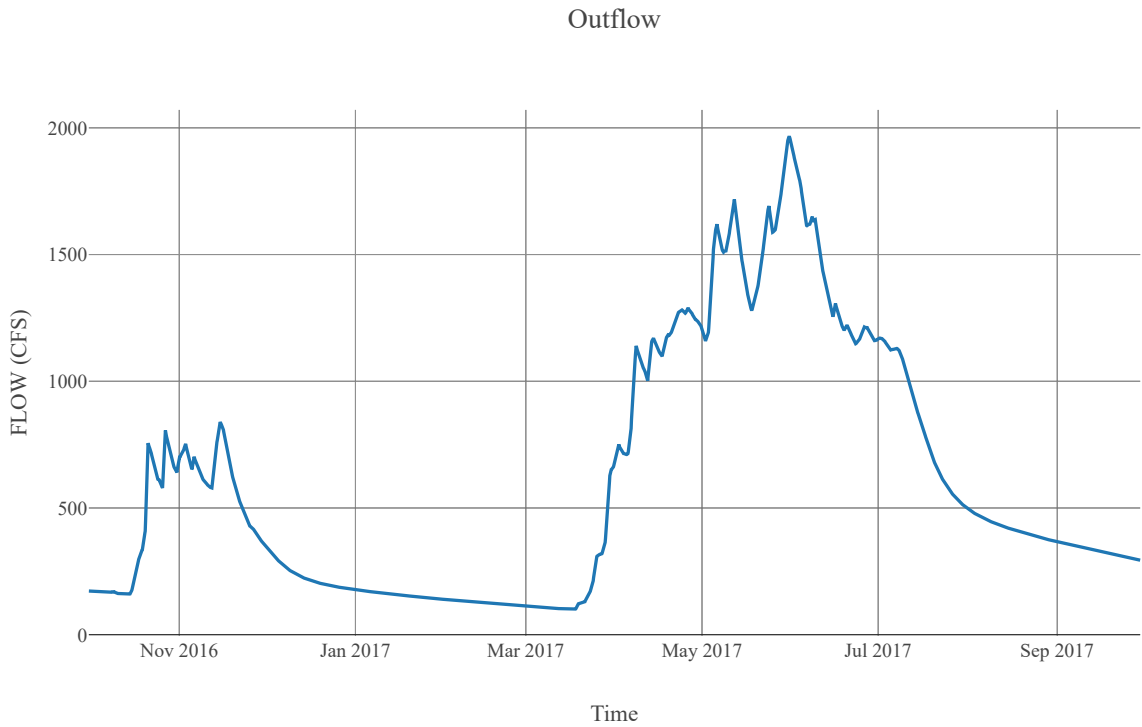
Observed Hydrograph : Chiwawa river near plain
Downstream : WenRv_R030



Reach : WenRv_R030

Loss Method : None
Downstream : Wenatchee At Plain

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : WenRv_S030

Area : 424.09
Latitude : 47.87
Longitude : -120.93
Downstream : Wenatchee At Plain

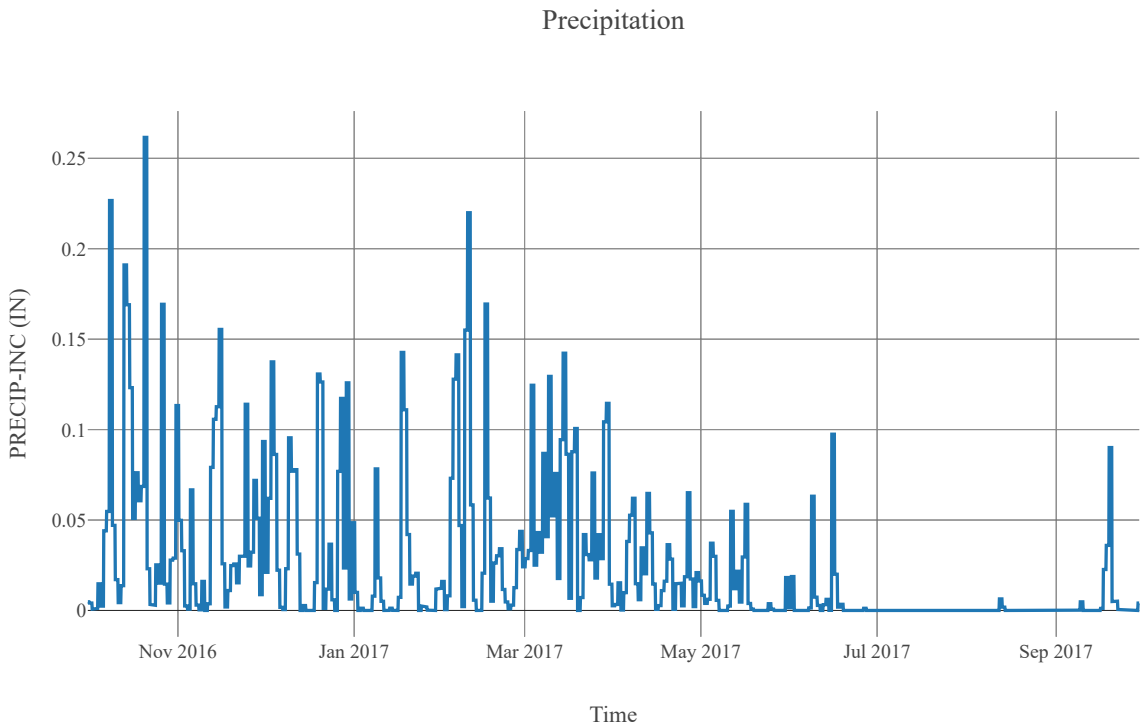
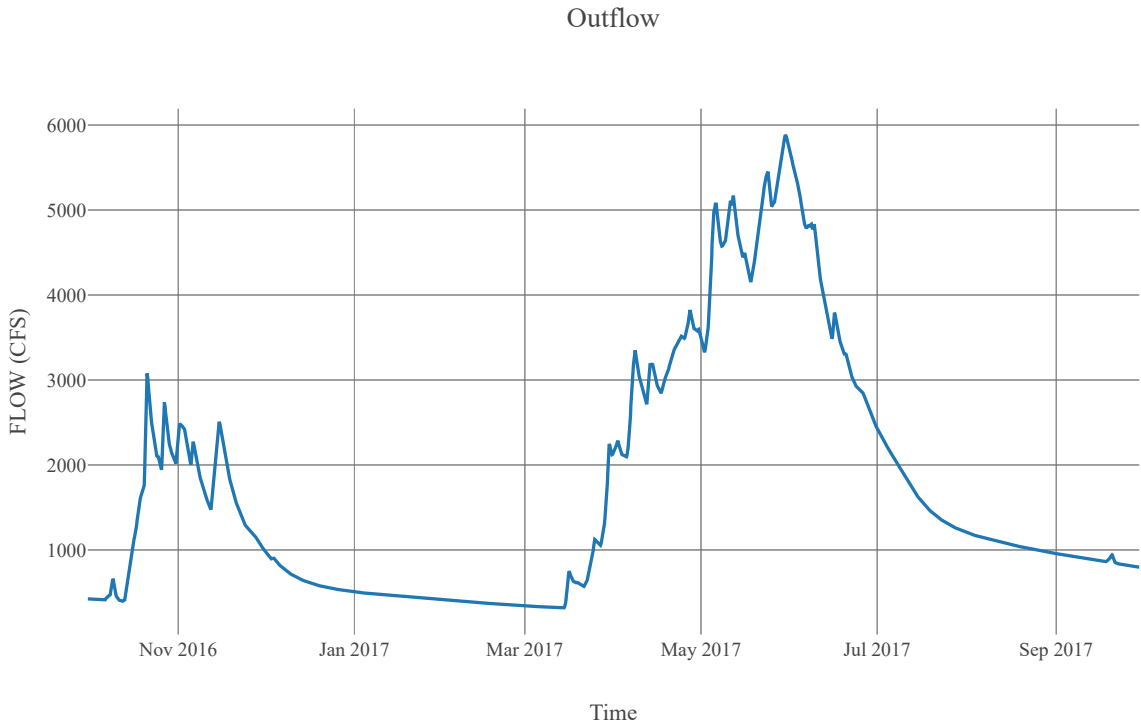
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	1.41
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

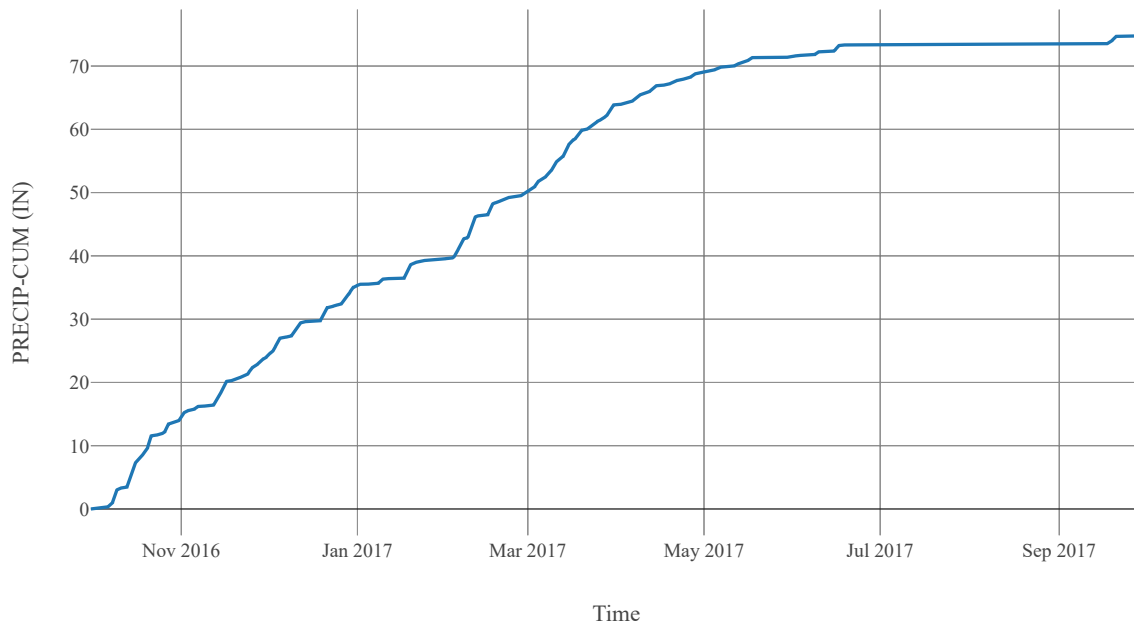
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.47
Storage Coefficient	9.47

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.5
		Initial Rate
		0
		Layer Number
		1
	2	Storage Coefficient
		189.4
		Number Steps
		1
		Baseflow Fraction
		0.5
		Initial Rate
		1
		Layer Number
		2
		Storage Coefficient
		3788
		Number Steps
		1

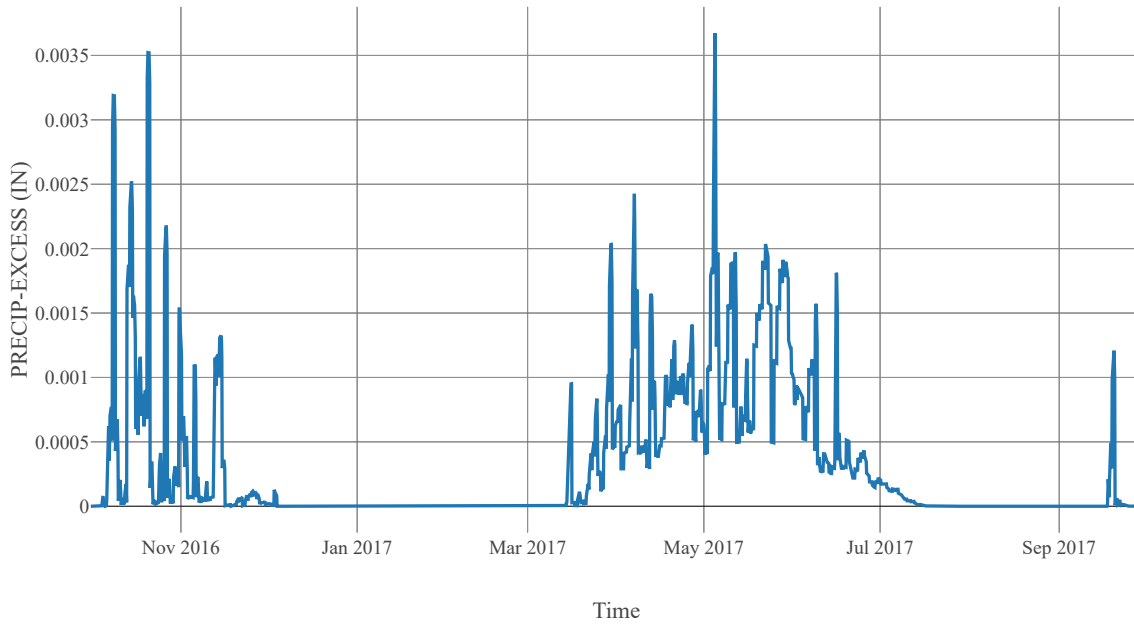
Statistics		
Name	Value	Unit
Baseflow Volume	1216179.51	Ac-ft
Precipitation Volume	1691003.03	Ac-ft
Loss Volume	1522134.25	Ac-ft
Excess Volume	21769.04	Ac-ft



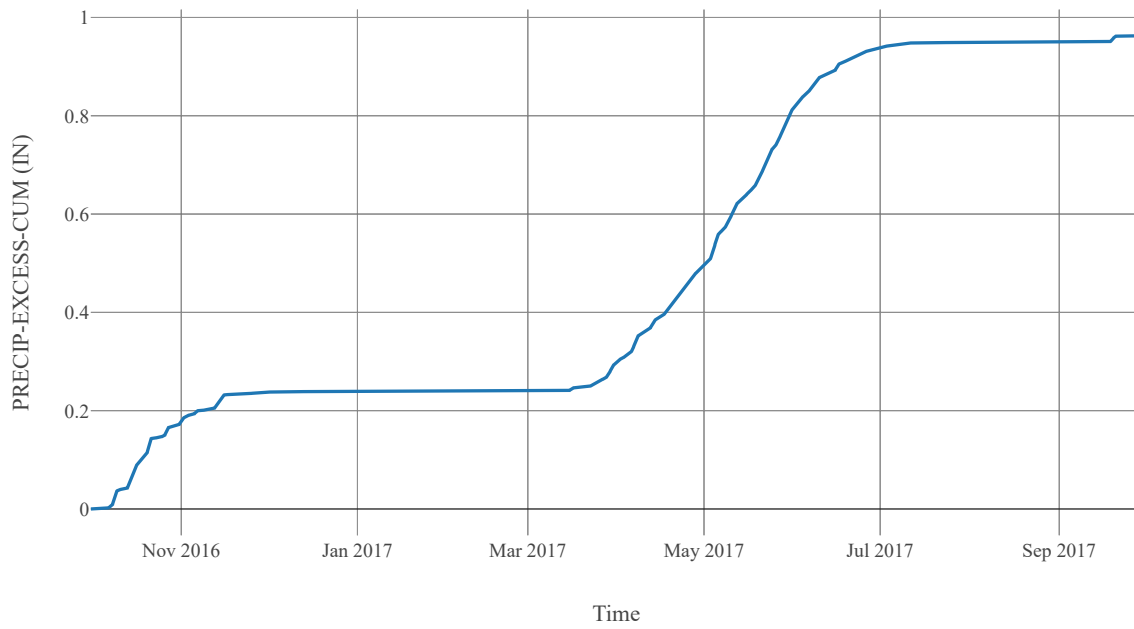
Cumulative Precipitation



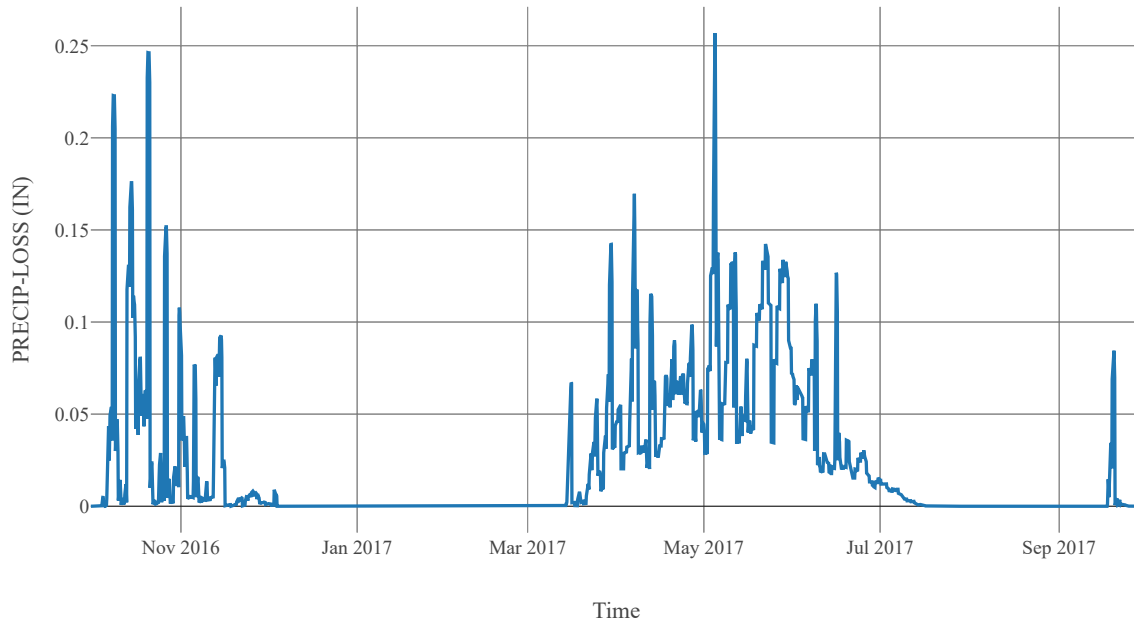
Excess Precipitation



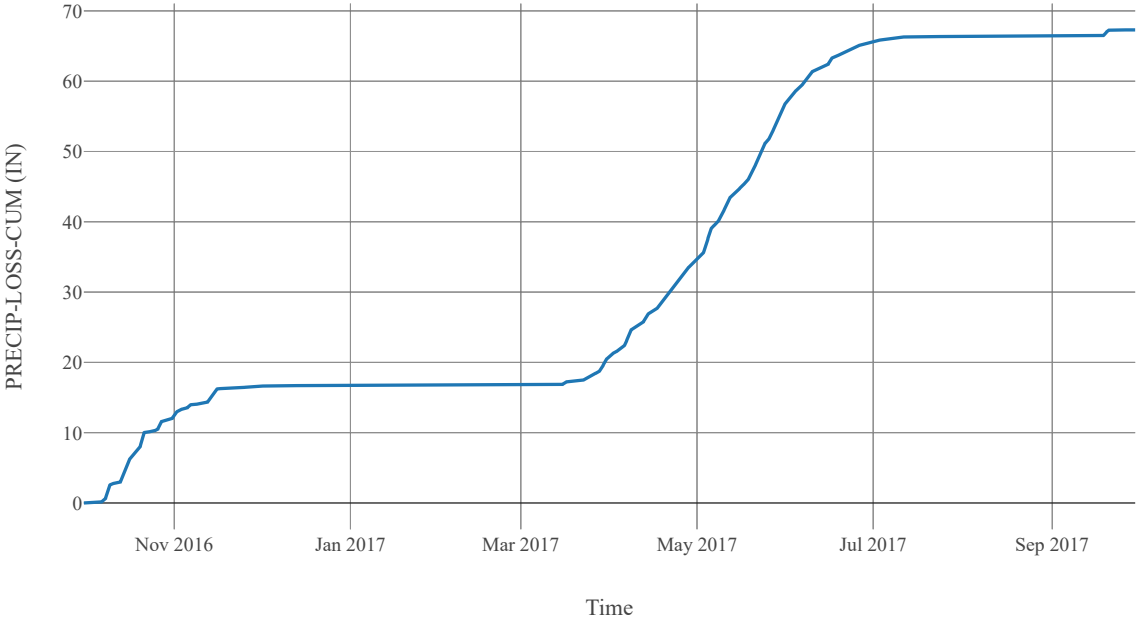
Cumulative Excess Precipitation



Precipitation Loss

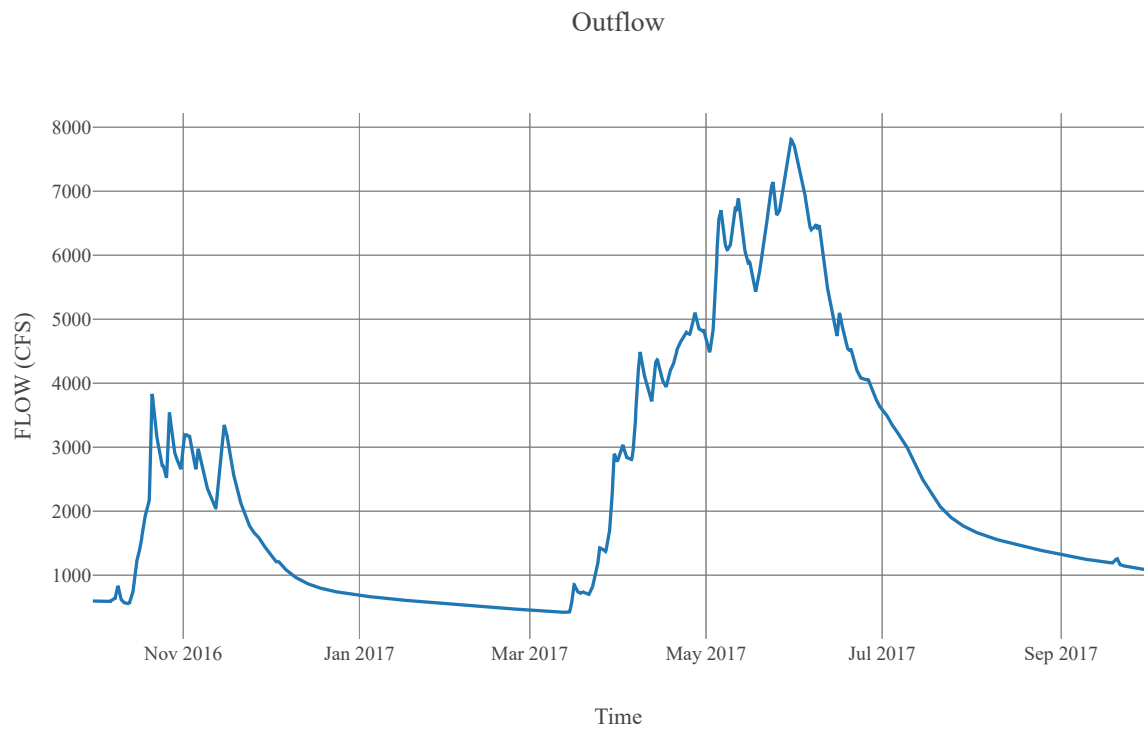


Cumulative Precipitation Loss



Junction : WenatcheeAtPlain

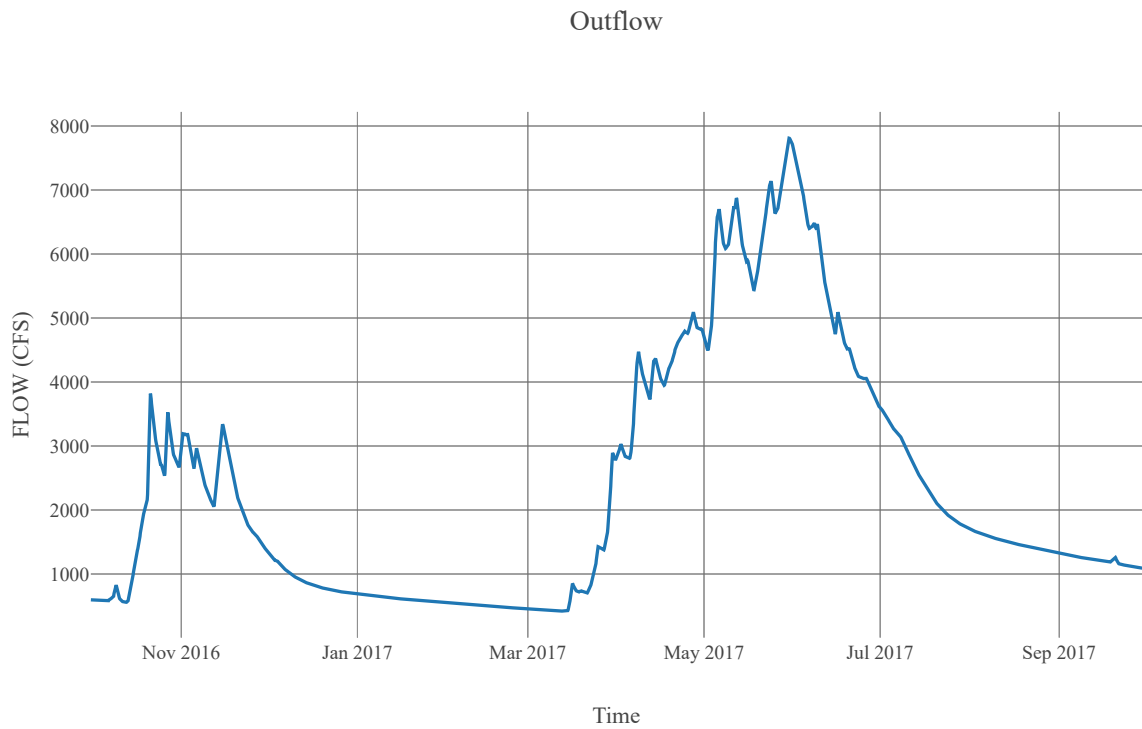
Observed Hydrograph : Wenatchee river at plain
Downstream : WenRv_R025



Reach : WenRv_R025

Loss Method : None
Downstream : IcicleCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : IcicleCk_S010

Area : 192.88
Latitude : 47.58
Longitude : -120.94
Downstream : Icicle Nr Leavenworth

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.73
Deficit Constant	
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

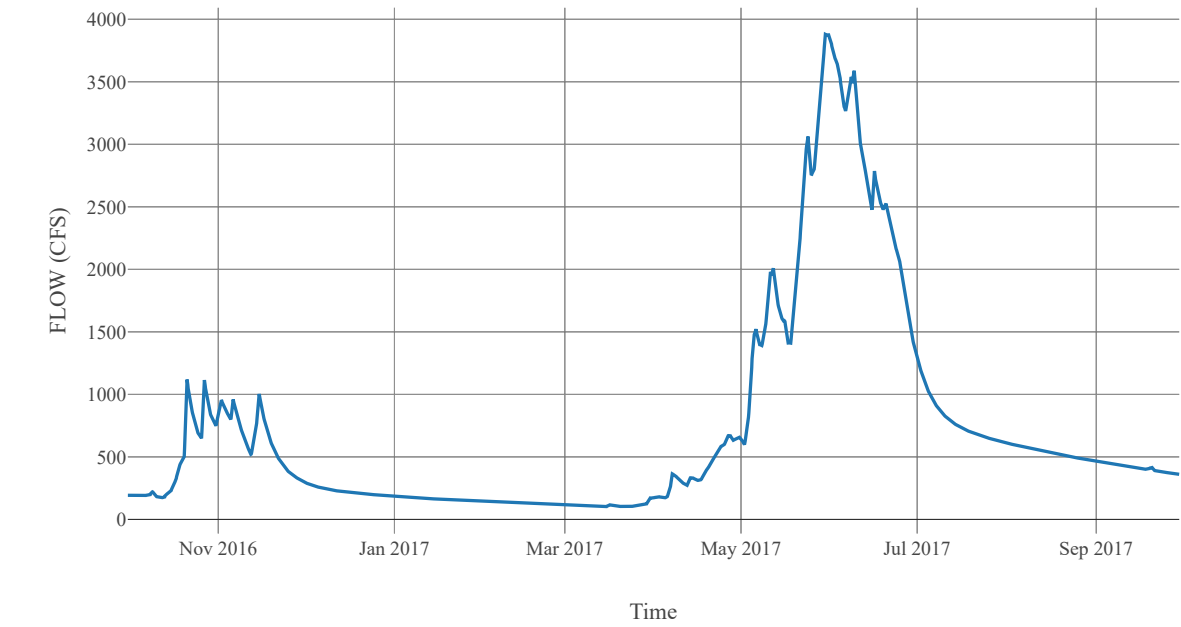
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.85
Storage Coefficient	6.85

Baseflow	
Method	Linear Reservoir

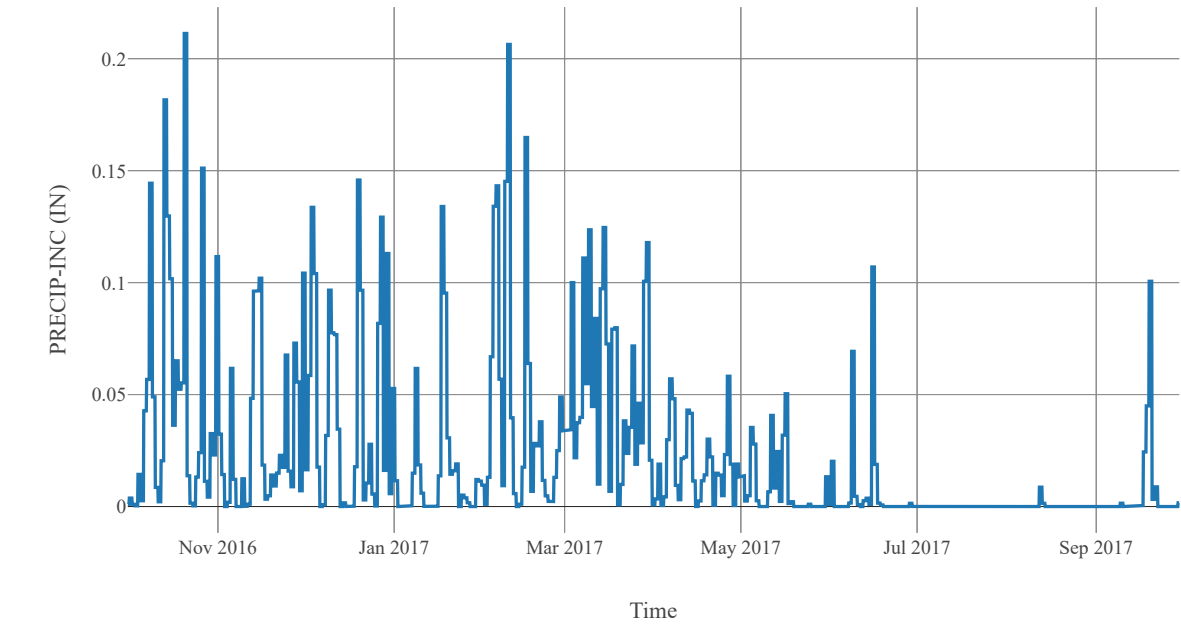
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	137
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	1
		Layer Number	2
		Storage Coefficient	2740
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	512933.52	Ac-ft
Precipitation Volume	704349.86	Ac-ft
Loss Volume	643144.21	Ac-ft
Excess Volume	4729.48	Ac-ft

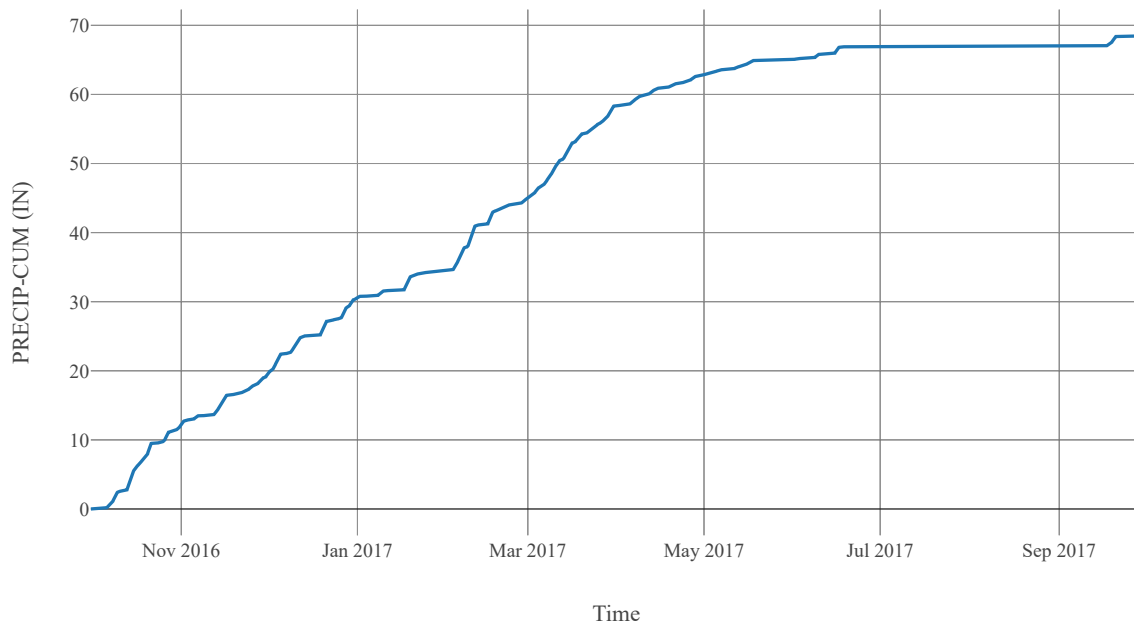
Outflow



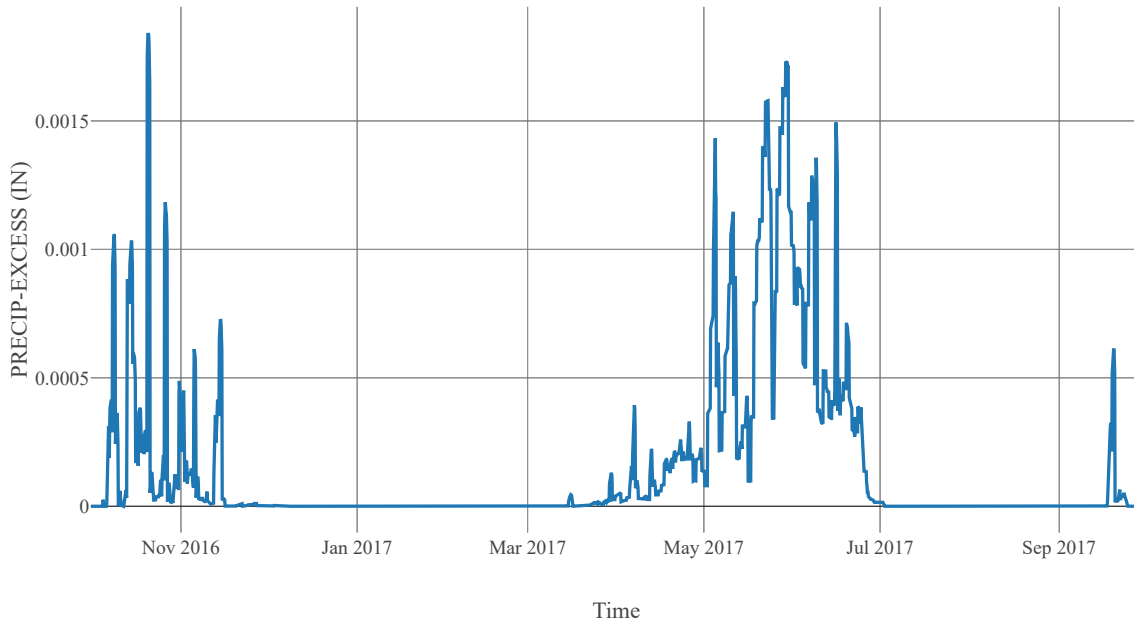
Precipitation



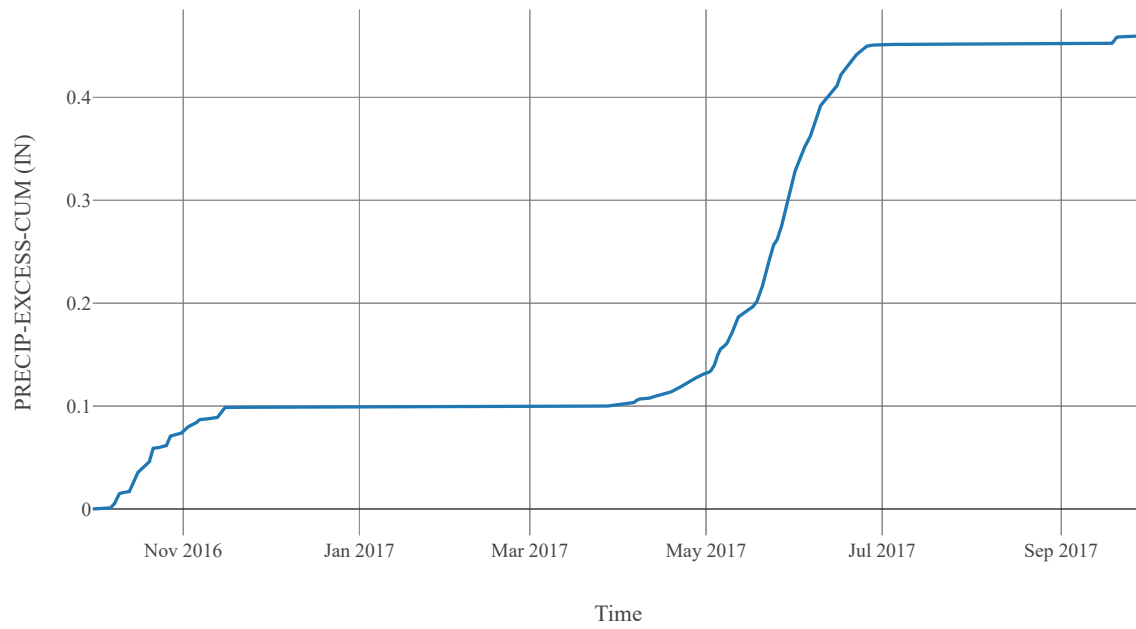
Cumulative Precipitation



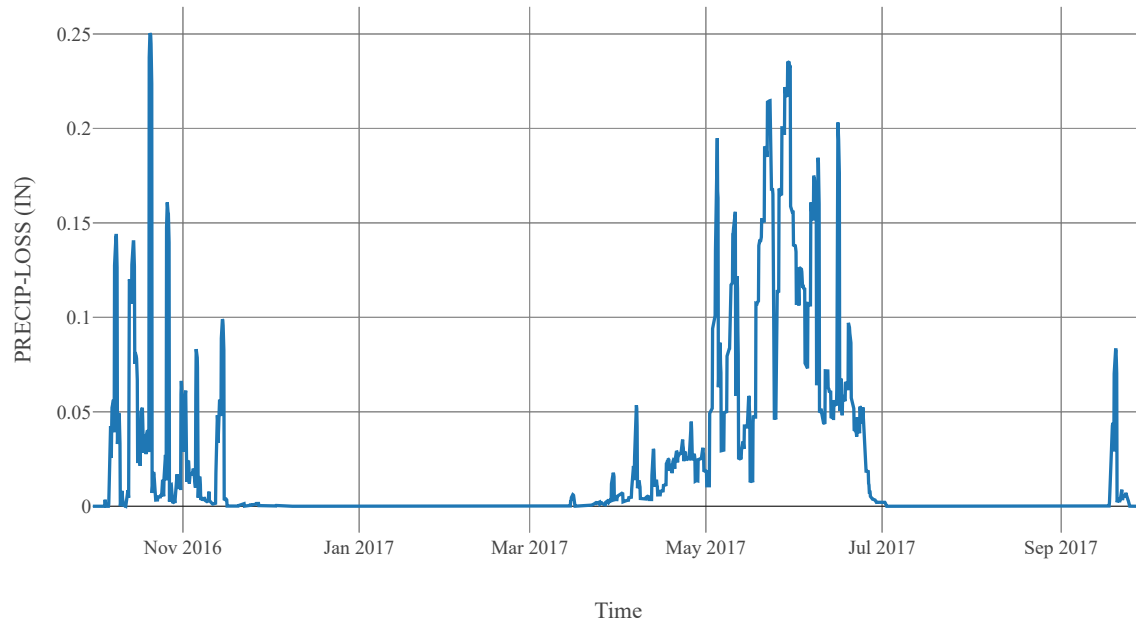
Excess Precipitation



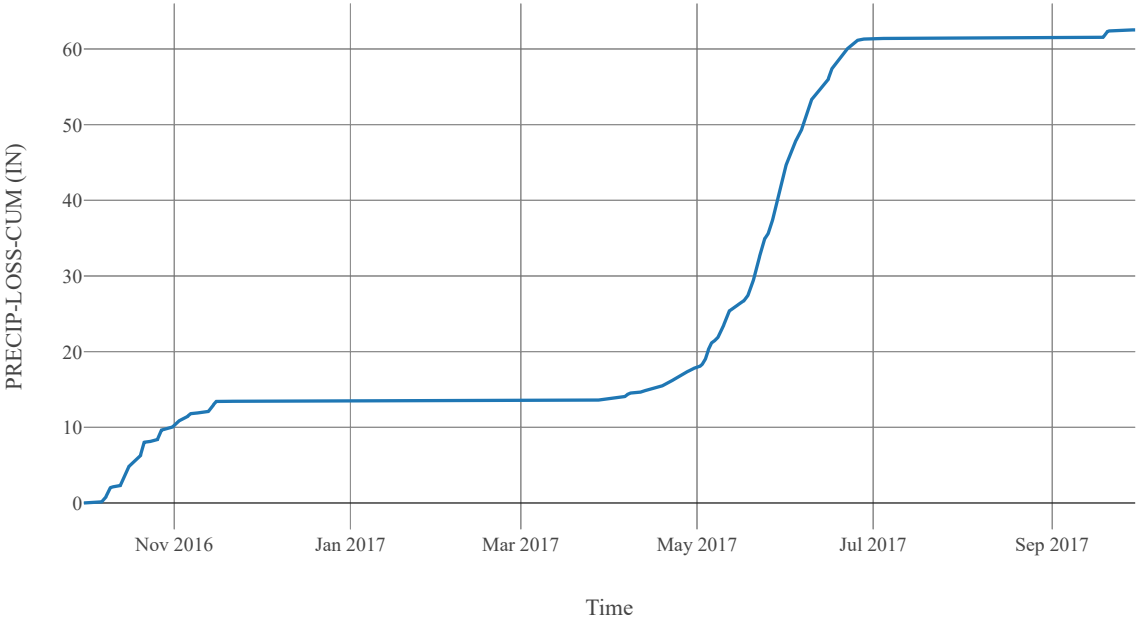
Cumulative Excess Precipitation



Precipitation Loss

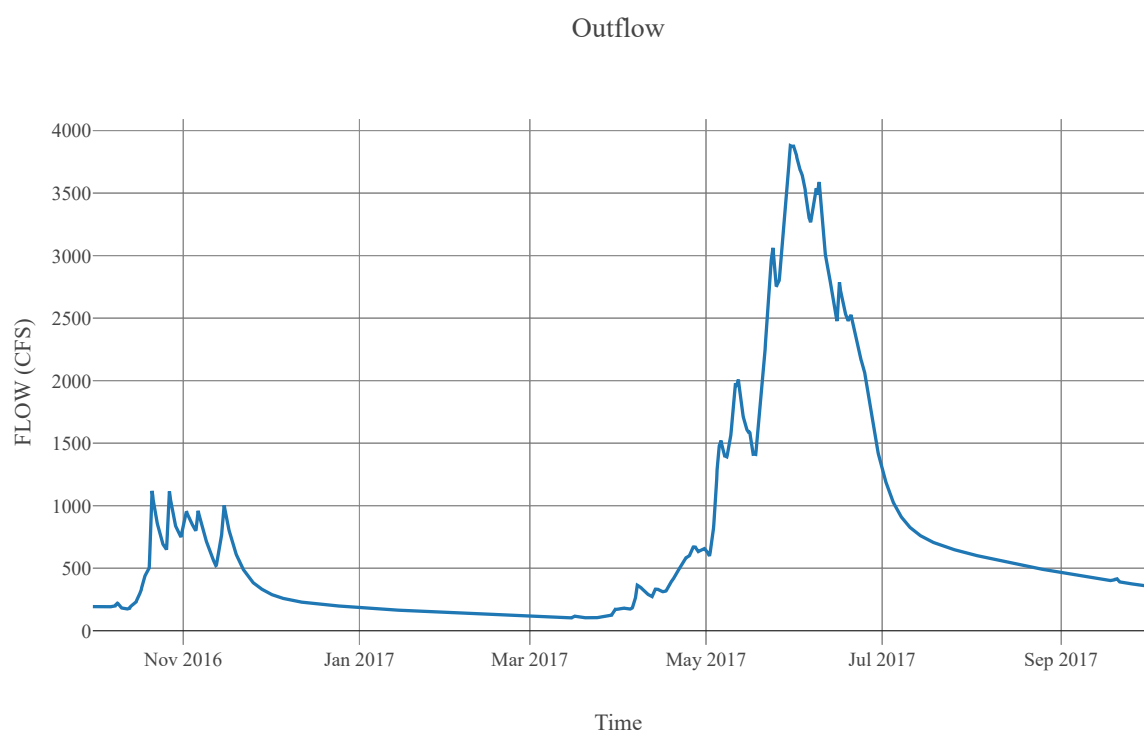


Cumulative Precipitation Loss



Junction : IcicleNrLeavenworth

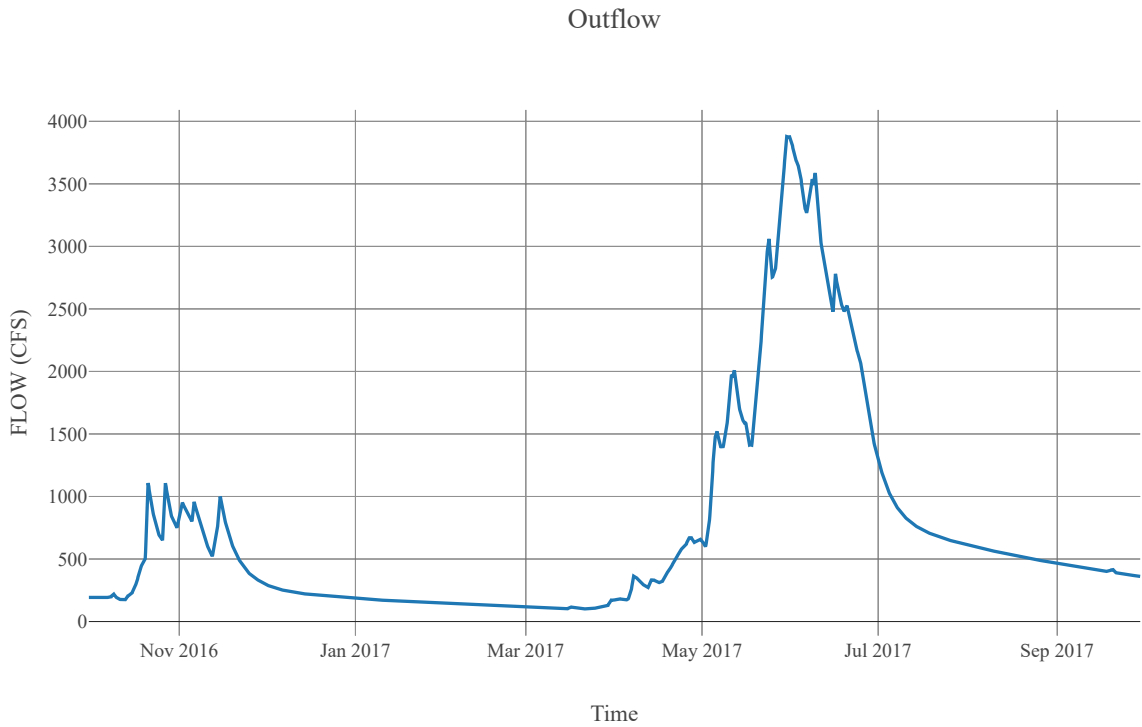
Observed Hydrograph : Icicle creek above snow cree
Downstream : IcicleCk_R005



Reach : IcicleCk_R005

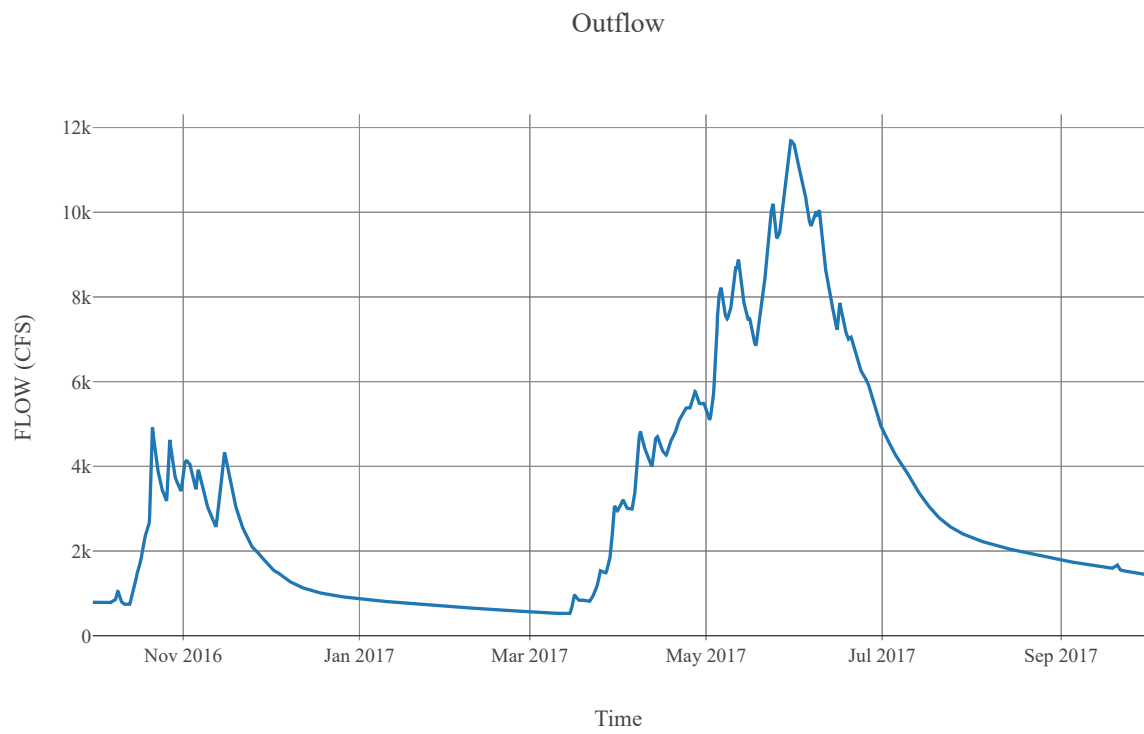
Loss Method : None
Downstream : IcicleCk_CF

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Junction : IcicleCk_CF

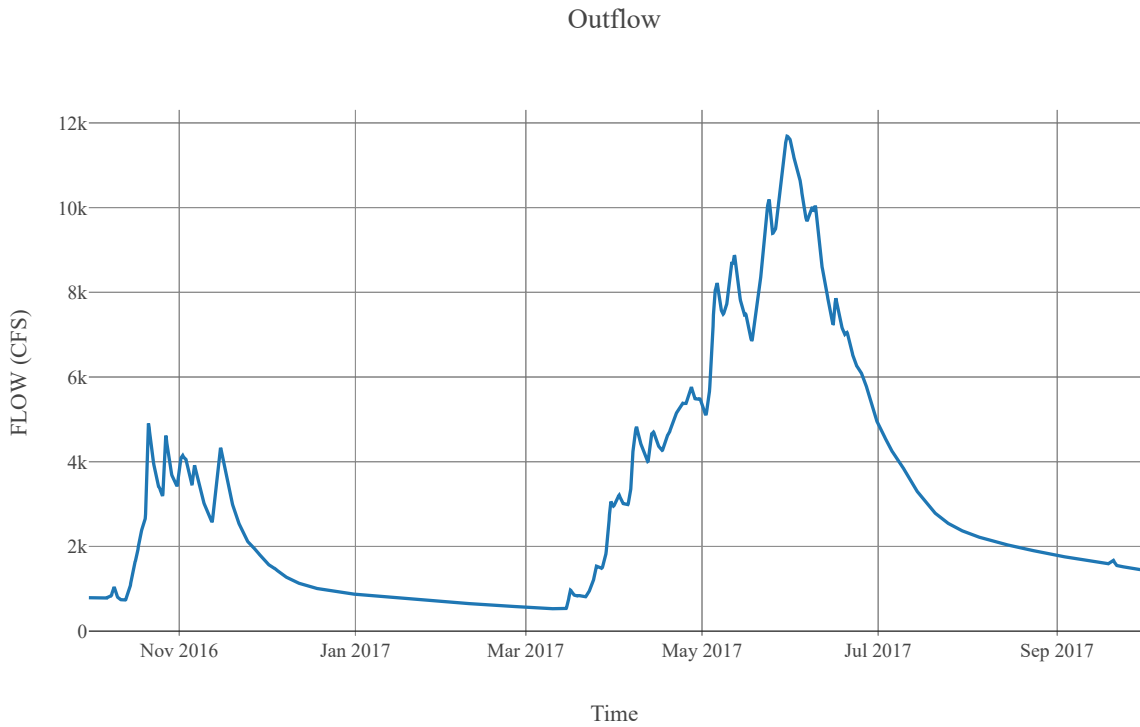
Downstream : WenRv_R020



Reach : WenRv_R020

Loss Method : None
Downstream : Wenatchee Nr Peshastin

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
0.15	



Subbasin : WenRv_S020

Area : 210.93
Latitude : 47.66
Longitude : -120.7
Downstream : Wenatchee Nr Peshastin

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.42
Deficit Constant	
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

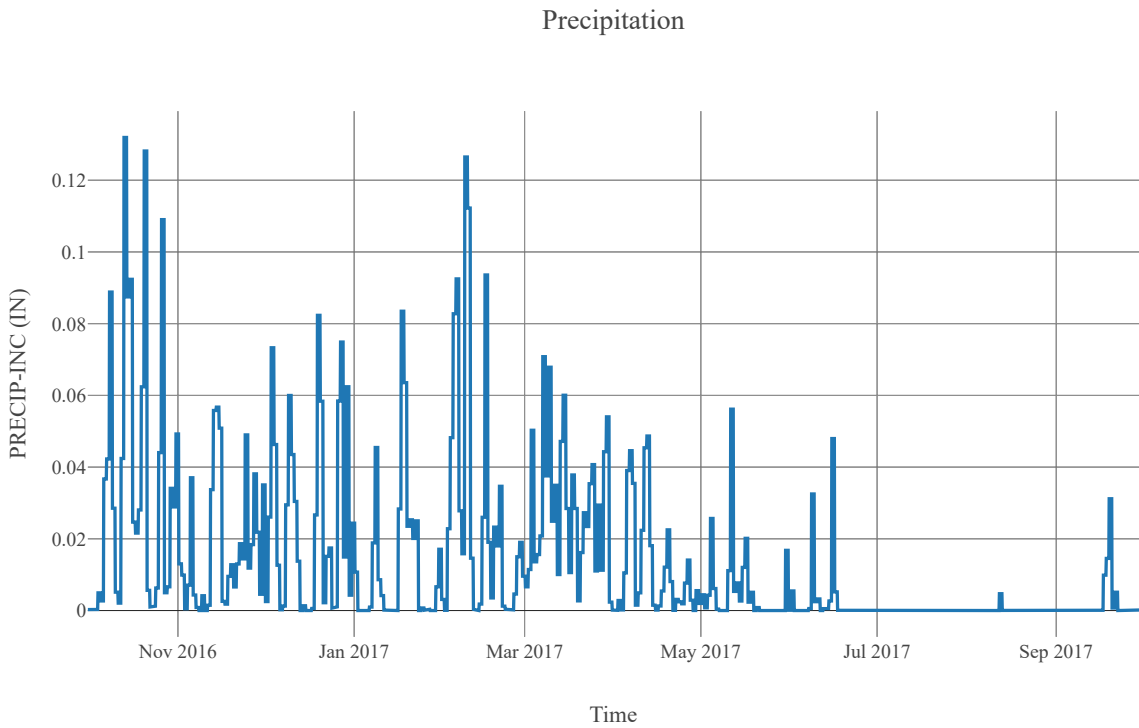
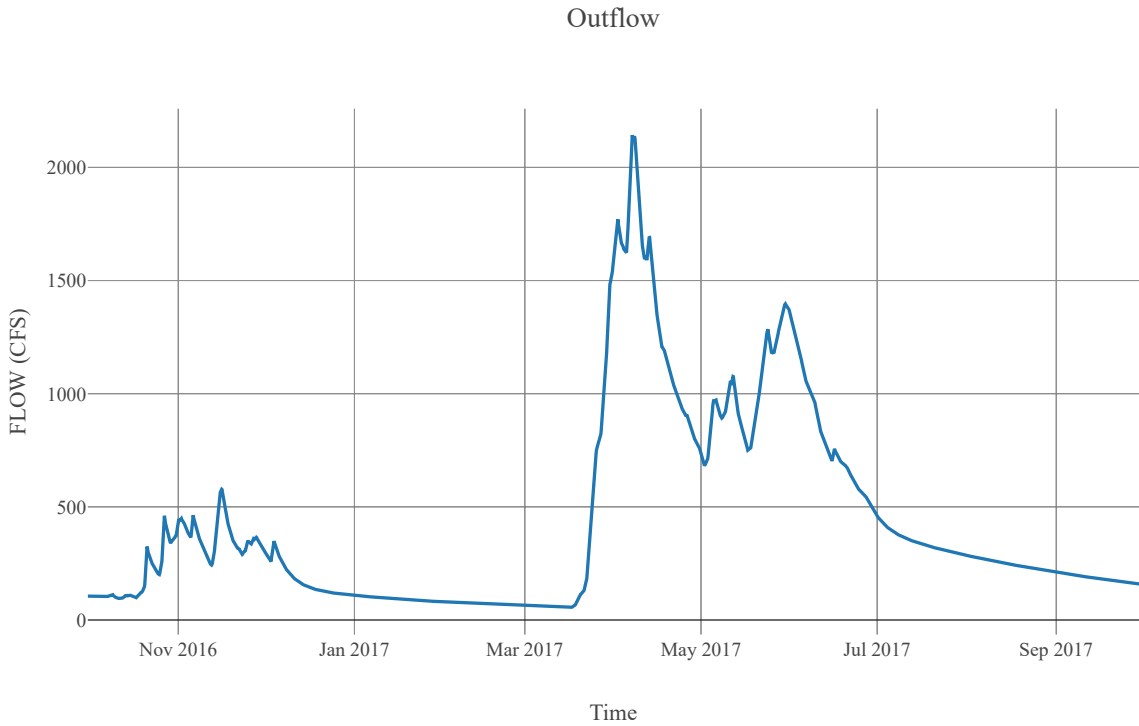
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	6.16
Storage Coefficient	6.16

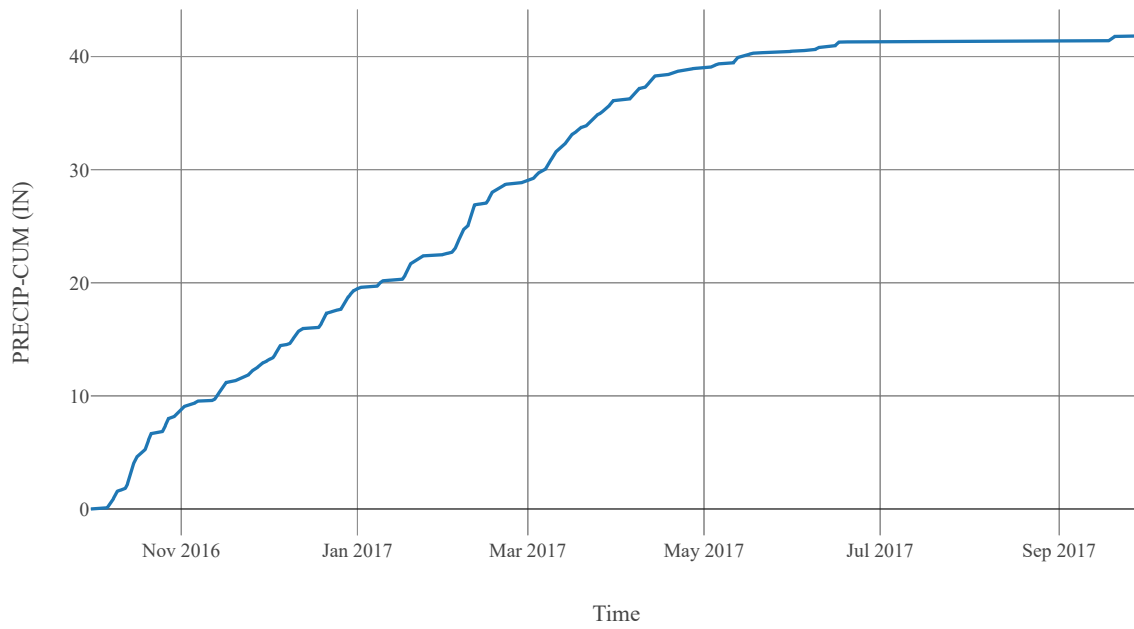
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	123.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.5
		Layer Number	2
		Storage Coefficient	2464
		Number Steps	1

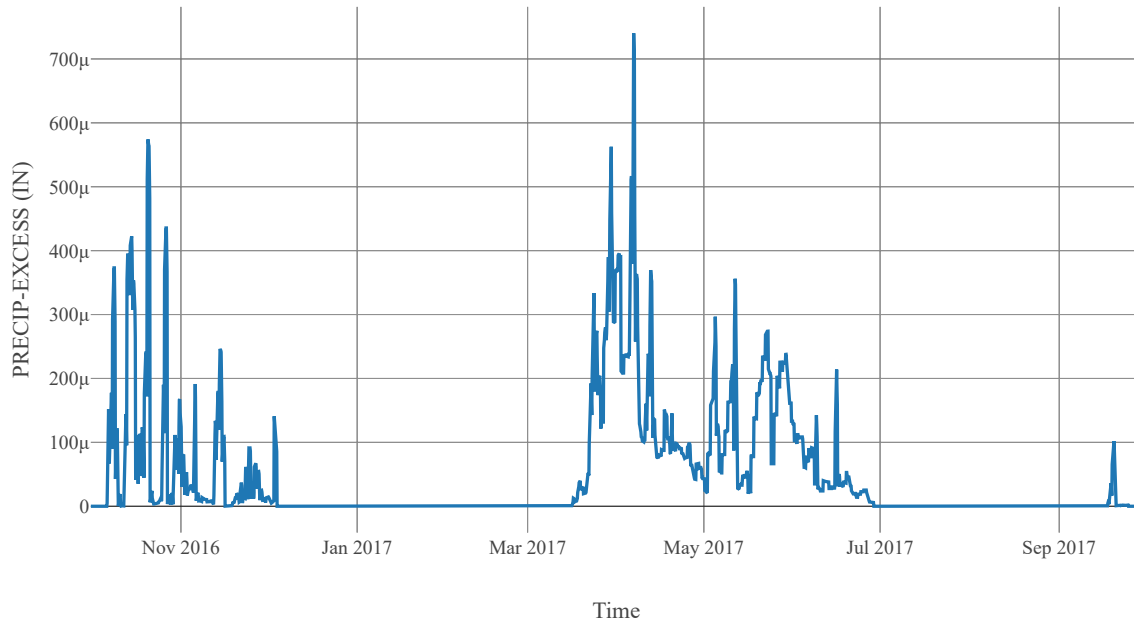
Name	Statistics	
	Value	Unit
Baseflow Volume	309094.53	Ac-ft
Precipitation Volume	470528.84	Ac-ft
Loss Volume	402244.76	Ac-ft
Excess Volume	1696.55	Ac-ft



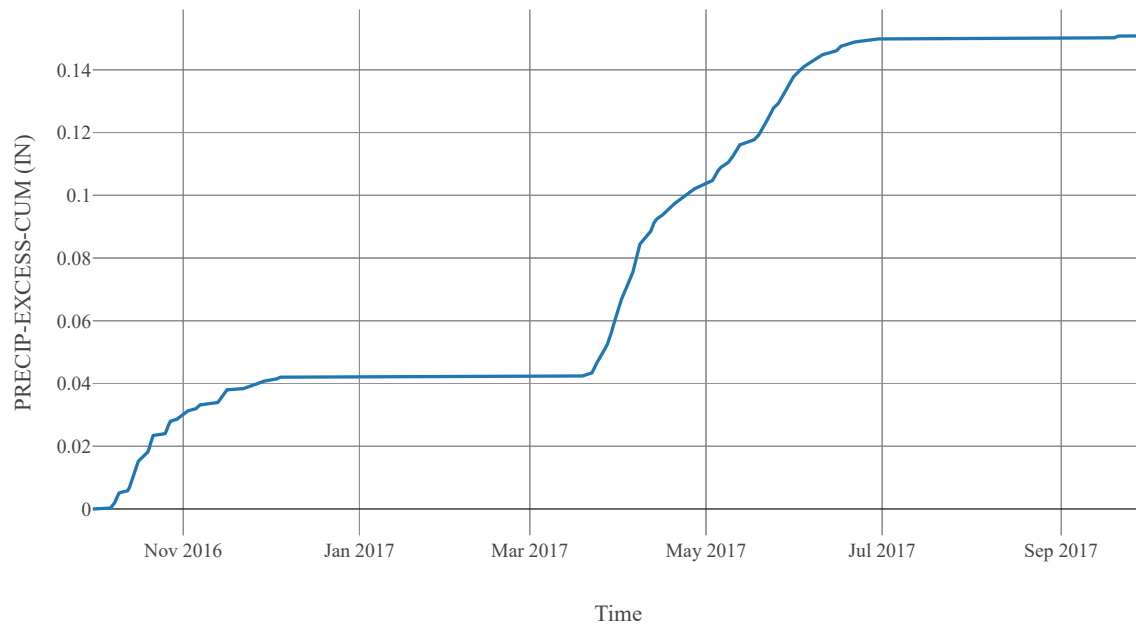
Cumulative Precipitation



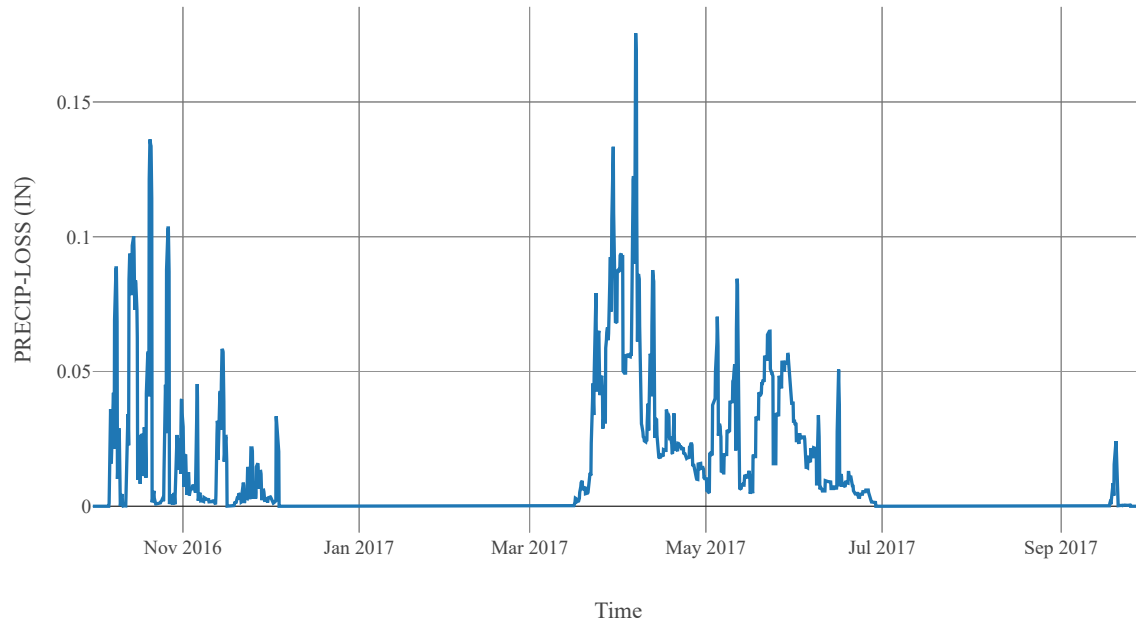
Excess Precipitation



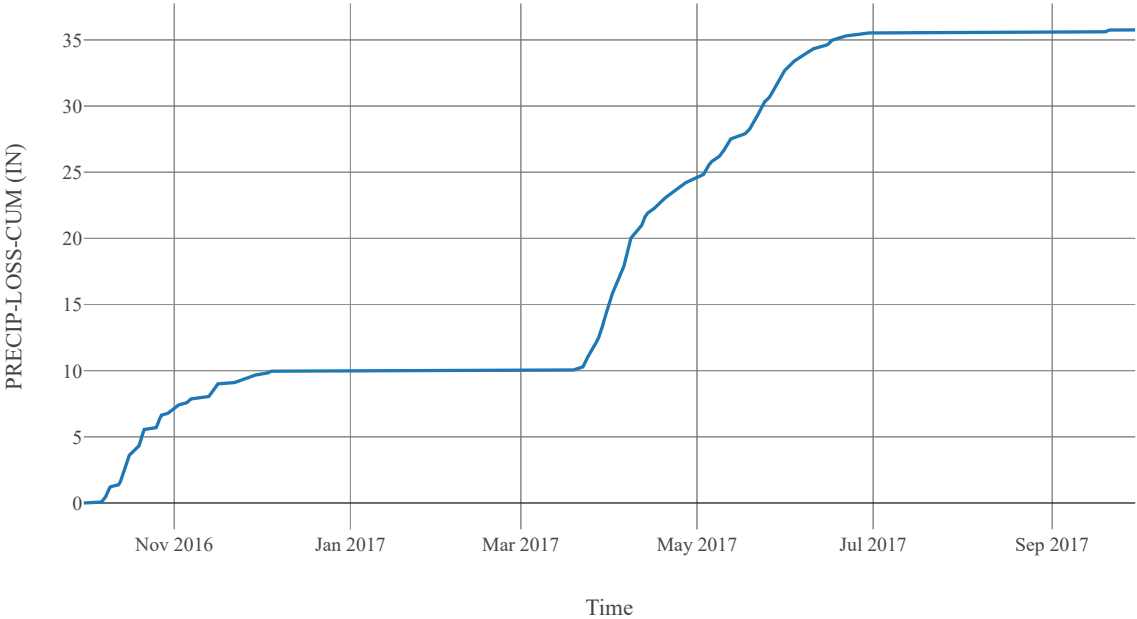
Cumulative Excess Precipitation



Precipitation Loss

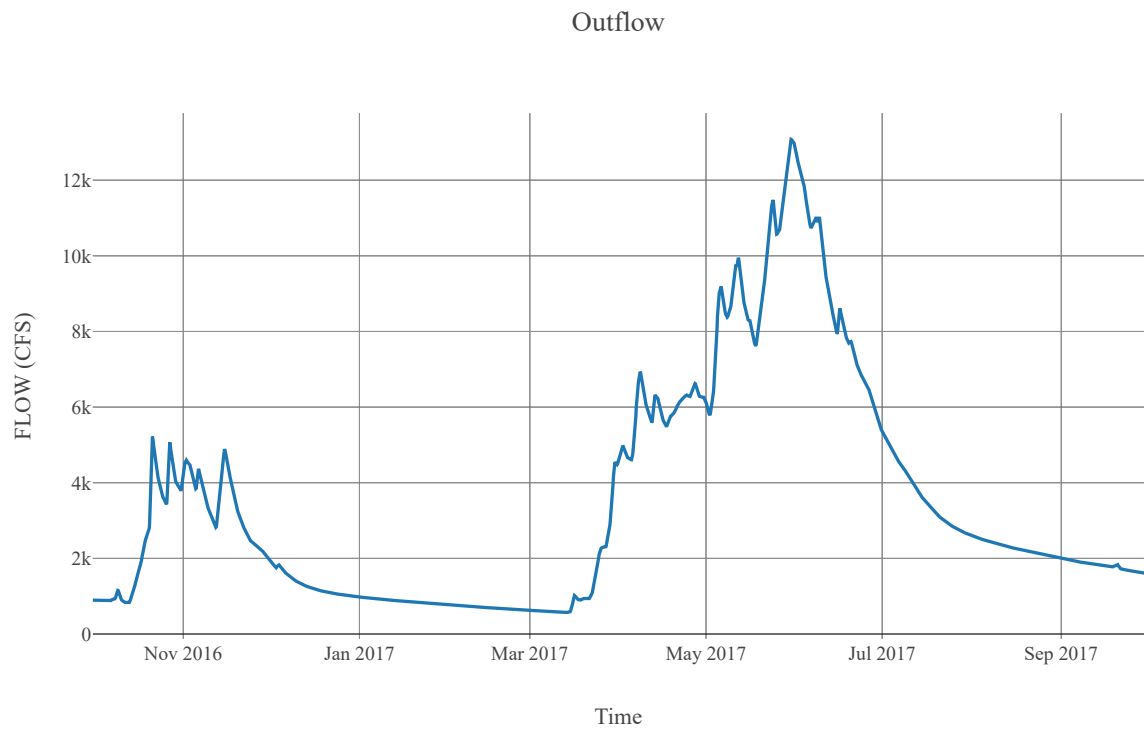


Cumulative Precipitation Loss



Junction : WenatcheeNrPeshastin

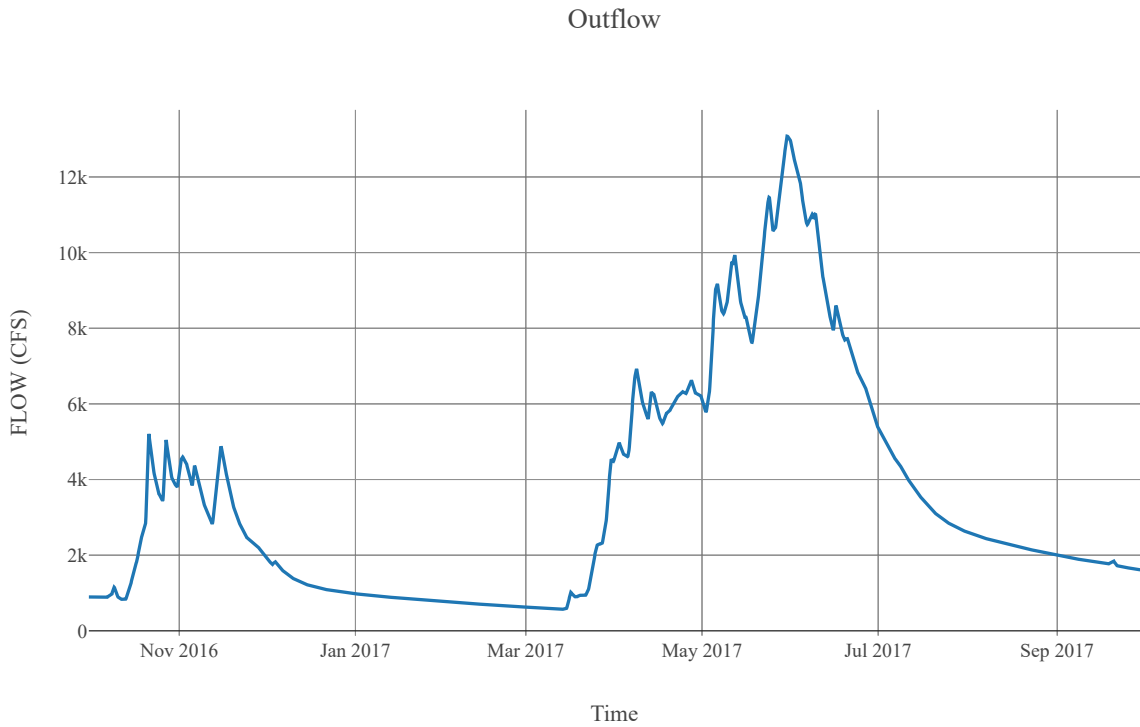
Observed Hydrograph : Wenatchee river at peshastin
Downstream : WenRv_R015



Reach : WenRv_R015

Loss Method : None
Downstream : Wenatchee Nr Monitor

Route	
Space Time Method	Auto Dx Dt
Method	Muskingum Cunge
Maximum Depth Iterations	20
Index Parameter Type	Index Flow
Initial Variable	Combined Inflow
Index Flow	20000
Channel Type	Eight Point
Maximum Route Step Iterations	30
Channel	Channel Mannings N
	Nvalue Ratio
	Length
	Max Depth Difference
	Left Mannings N
	Channel Type
	Mannings N
	Cross Section Name
	Energy Slope
	Right Mannings N



Subbasin : WenRv_S010

Area : 302
Latitude : 47.46
Longitude : -120.59
Downstream : Wenatchee Nr Monitor

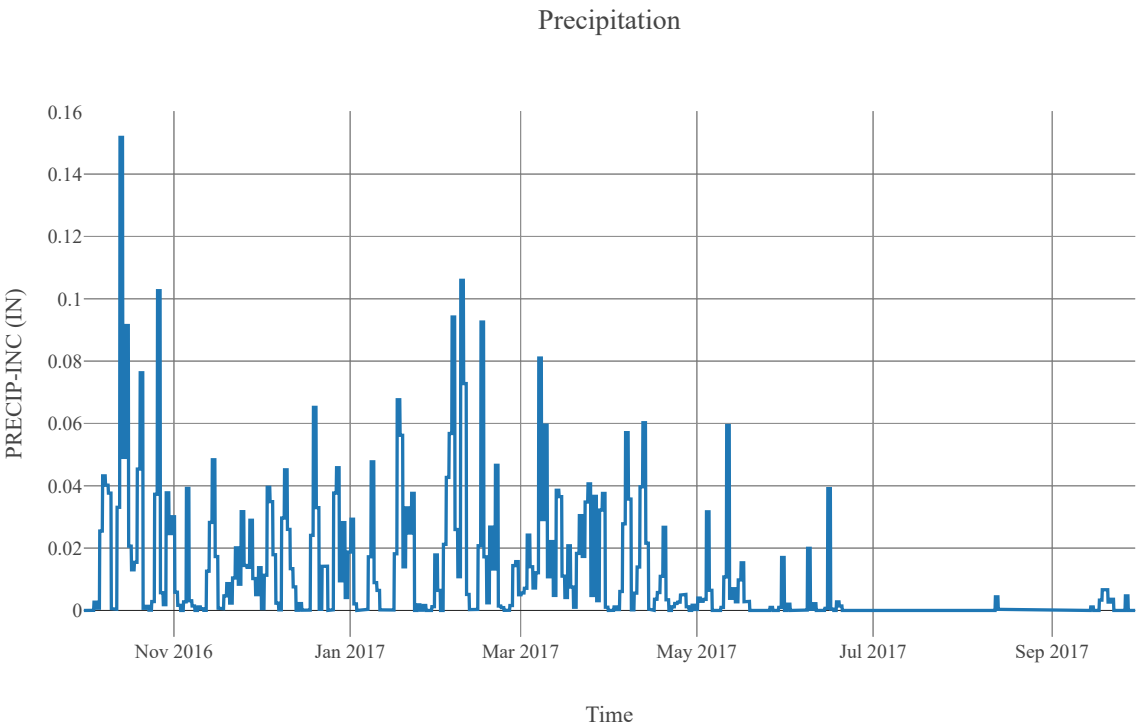
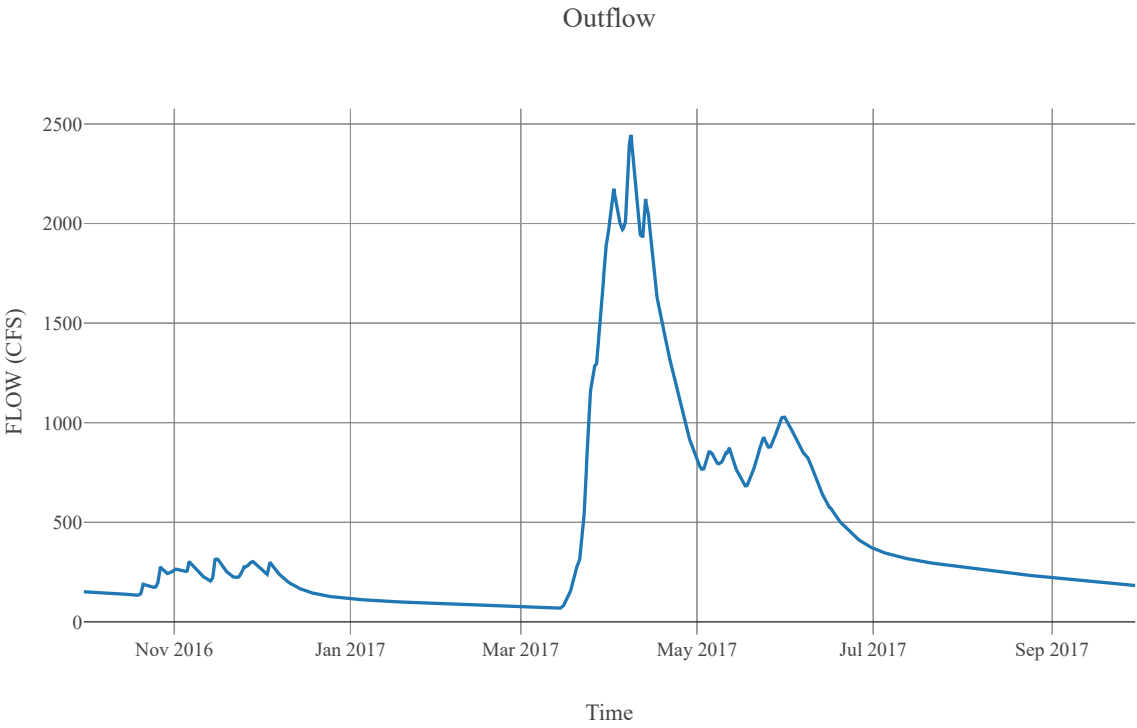
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.03
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

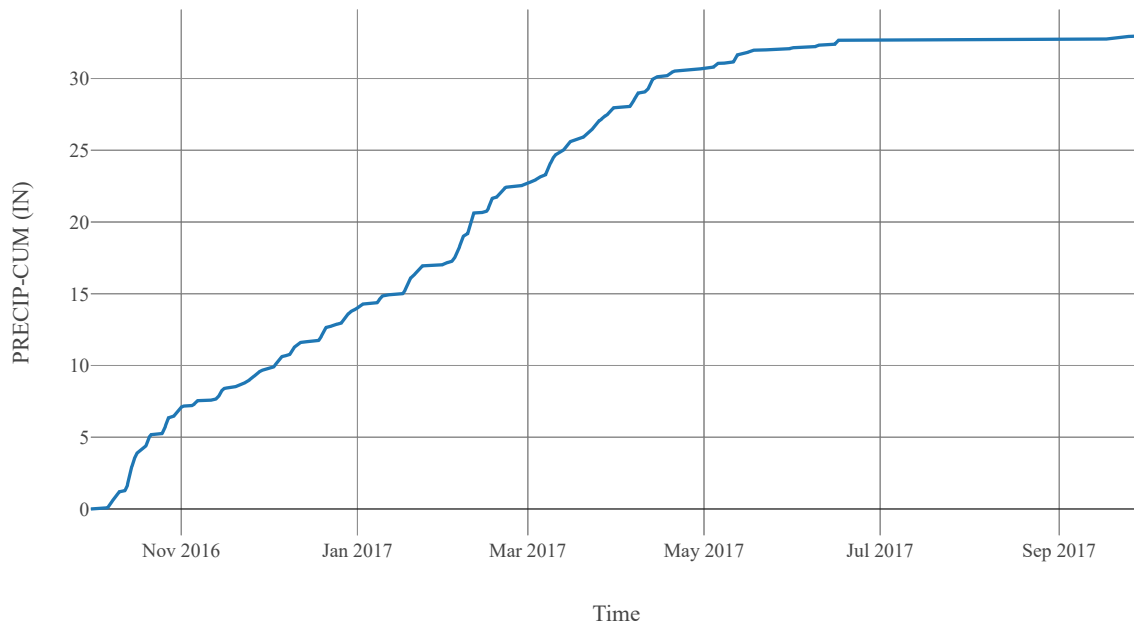
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	8.92
Storage Coefficient	8.92

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.5
		Initial Rate
		0
		Layer Number
		1
	2	Storage Coefficient
		178.4
		Number Steps
		1
		Baseflow Fraction
		0.5
		Initial Rate
		0.5
		Layer Number
		2
		Storage Coefficient
		3568
		Number Steps
		1

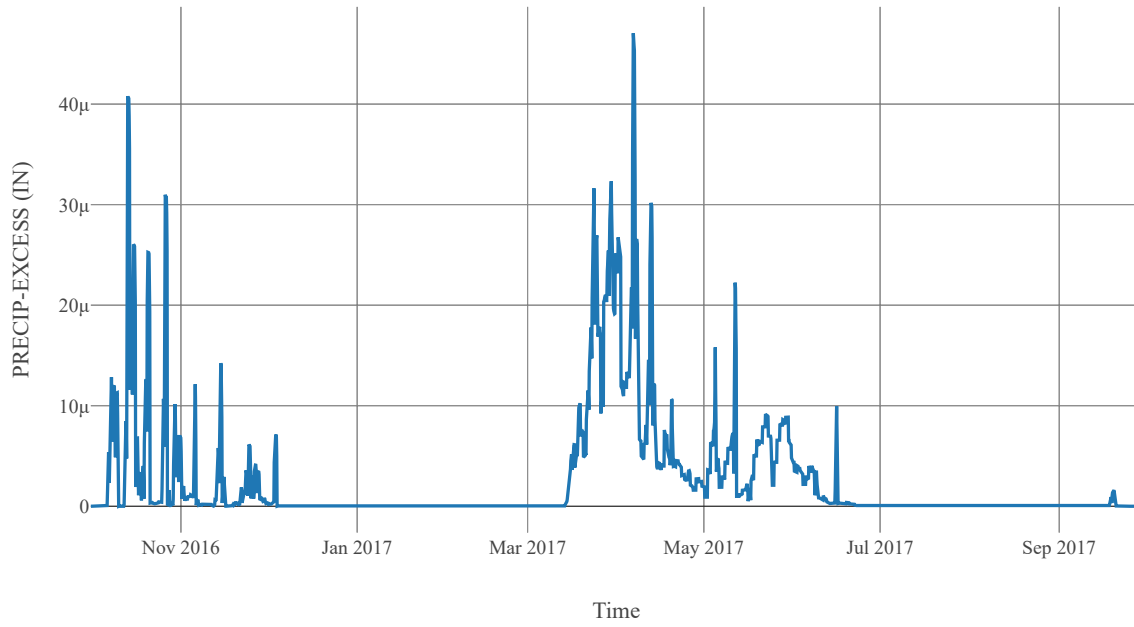
Statistics		
Name	Value	Unit
Baseflow Volume	310560.86	Ac-ft
Precipitation Volume	531035.18	Ac-ft
Loss Volume	435656.58	Ac-ft
Excess Volume	130.74	Ac-ft



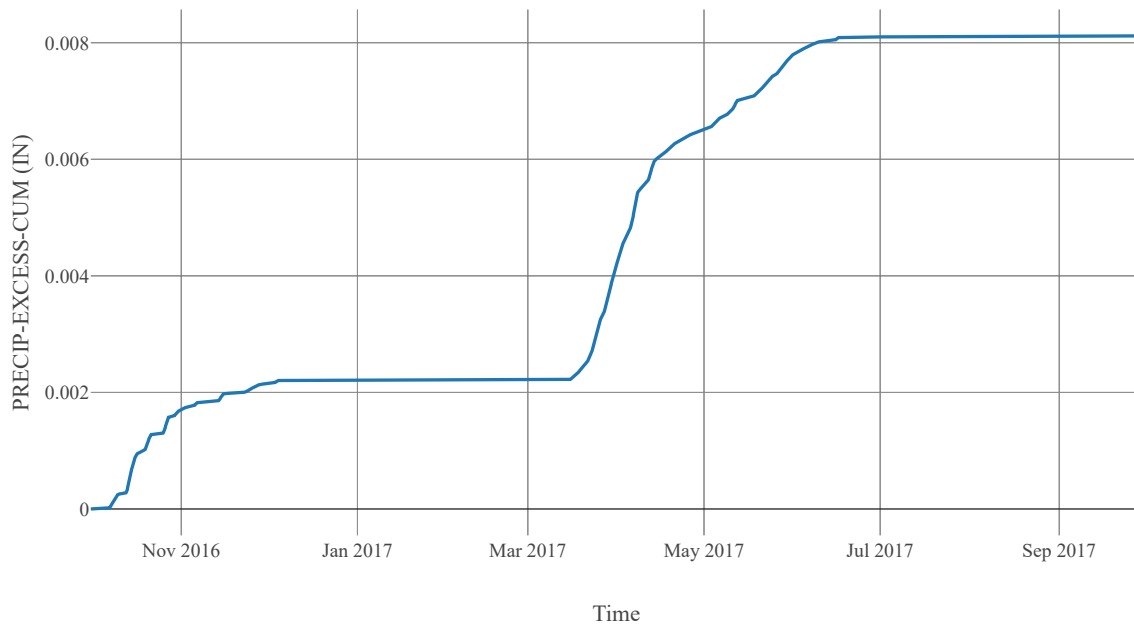
Cumulative Precipitation



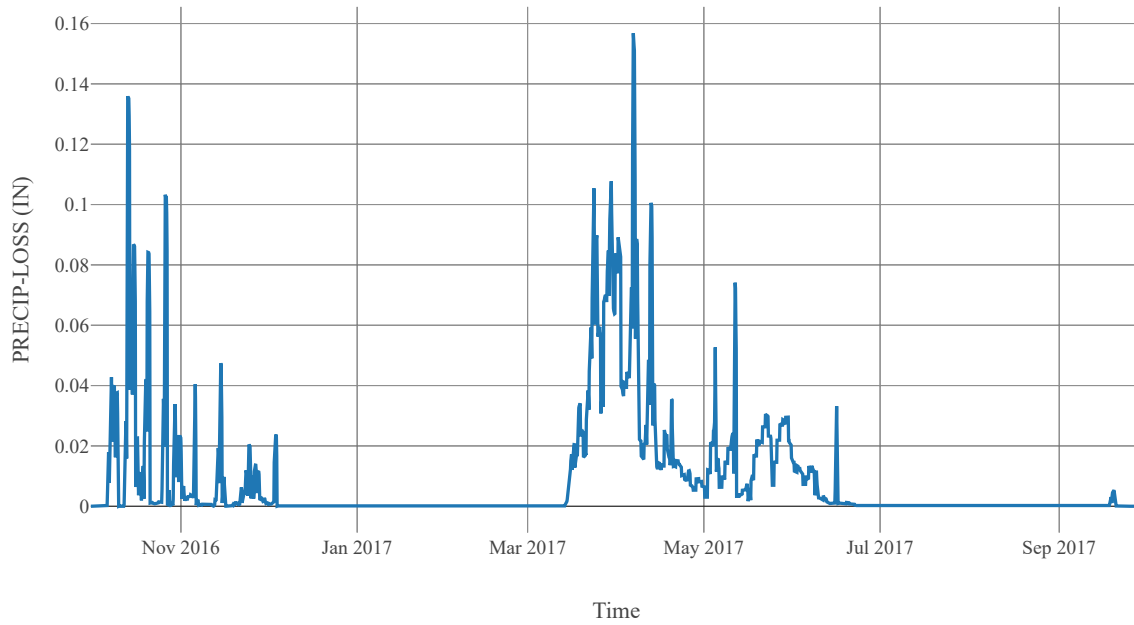
Excess Precipitation



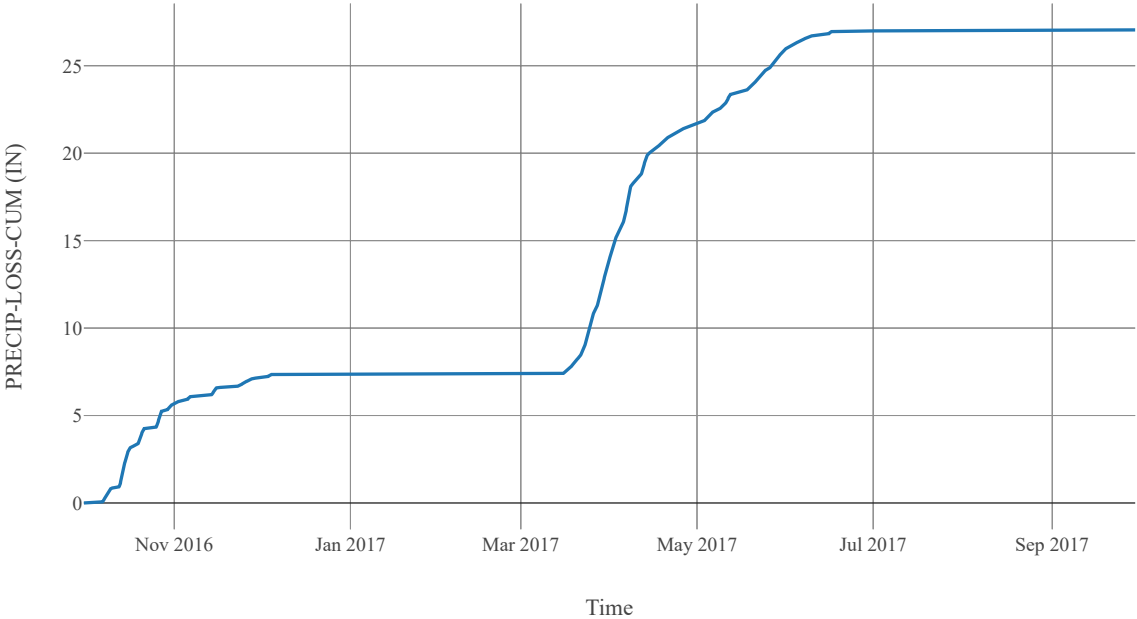
Cumulative Excess Precipitation



Precipitation Loss

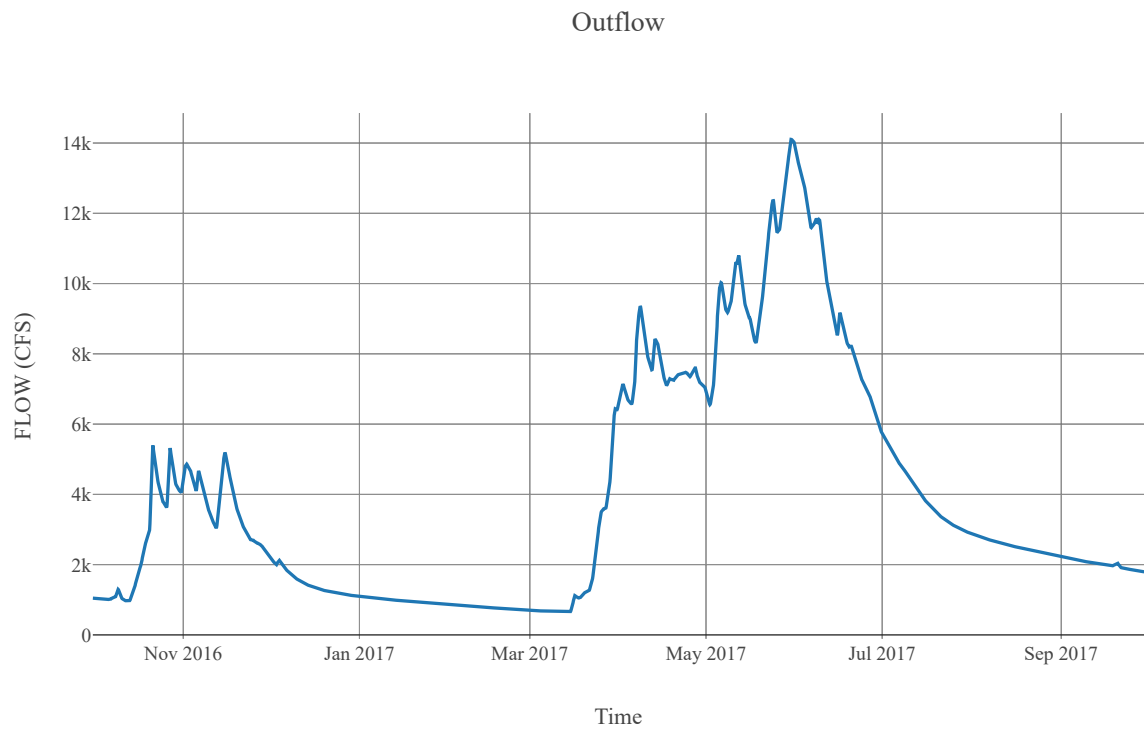


Cumulative Precipitation Loss



Junction : WenatcheeNrMonitor

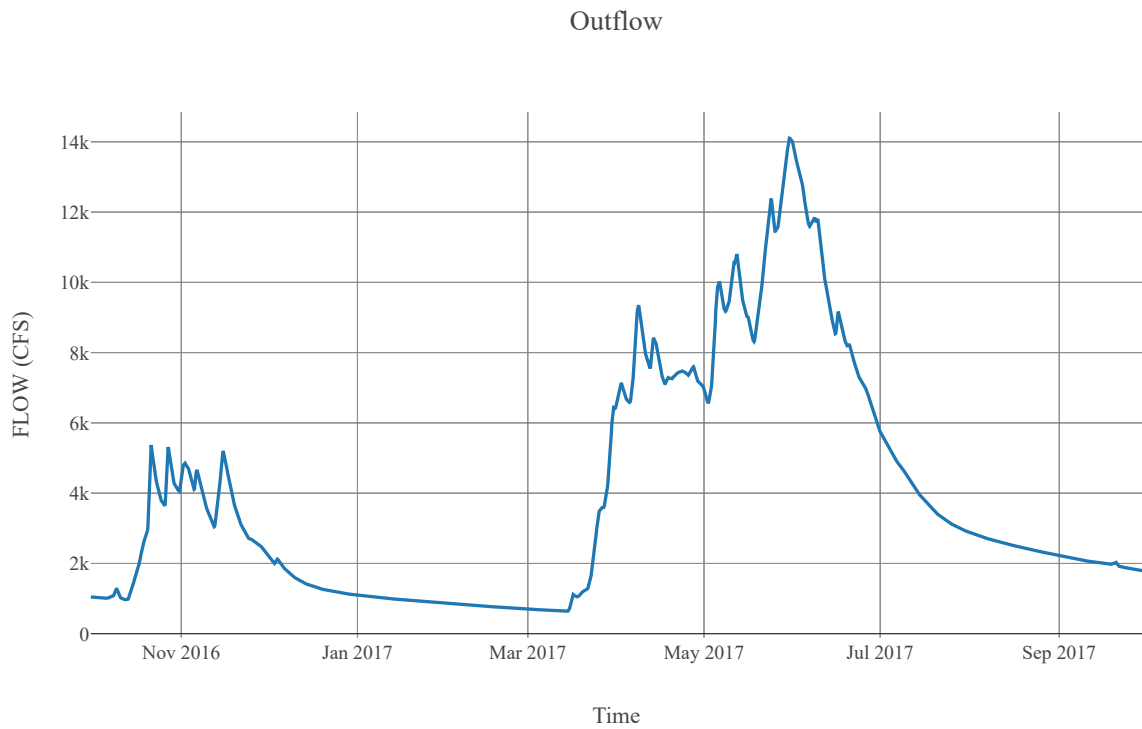
Observed Hydrograph : Wenatchee river at monitor
Downstream : WenRv_R010



Reach : WenRv_R010

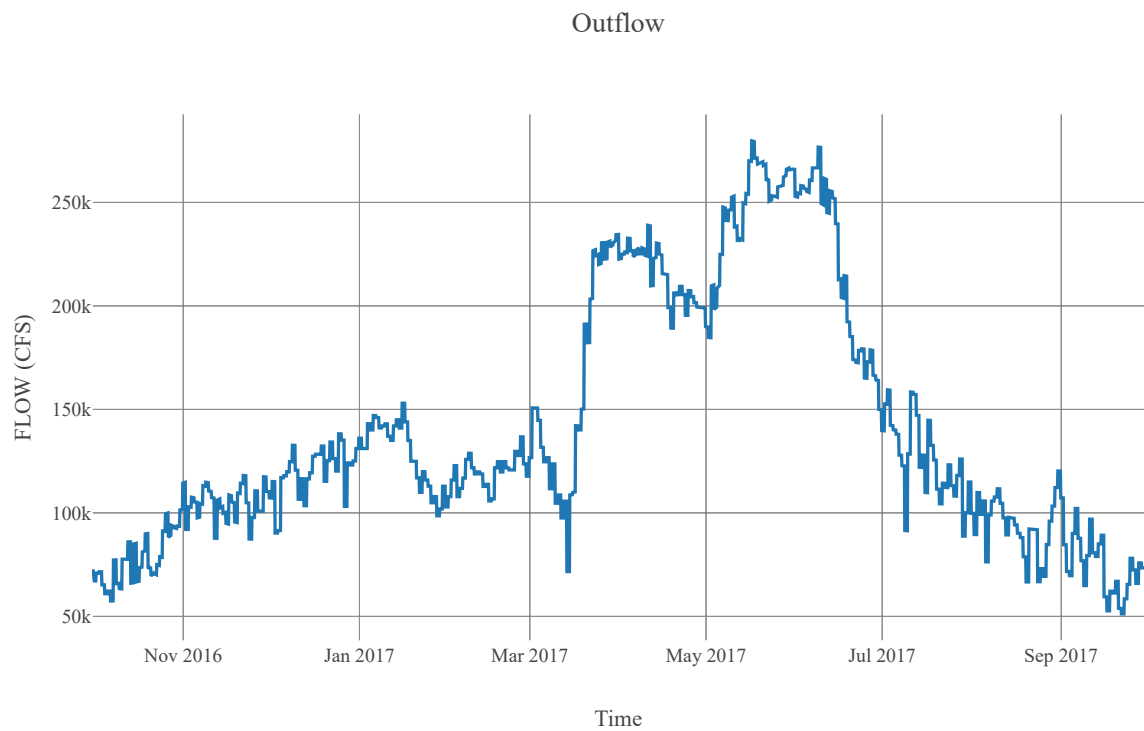
Loss Method : None
Downstream : WenatcheeRv_CF

Route		
Space Time Method	Auto Dx Dt	
Method	Muskingum Cunge	
Maximum Depth Iterations	20	
Index Parameter Type	Index Flow	
Initial Variable	Combined Inflow	
Index Flow	20000	
Channel Type	Eight Point	
Maximum Route Step Iterations	30	
Channel	Channel Mannings N	0.04
	Nvalue Ratio	1
	Length	35878
	Max Depth Difference	0
	Left Mannings N	0.15
	Channel Type	Eight Point
	Mannings N	0.04
	Cross Section Name	WenRv_R010
	Energy Slope	0
	Right Mannings N	0.15



Junction : WenatcheeRv_CF

Downstream : MidColumbia_R040



Reach : MidColumbia_R040

Loss Method : None
Downstream : RockIsland_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : MidColumbia_S040

Area : 301
Latitude : 47.42
Longitude : -120.25
Downstream : RockIsland_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.29
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

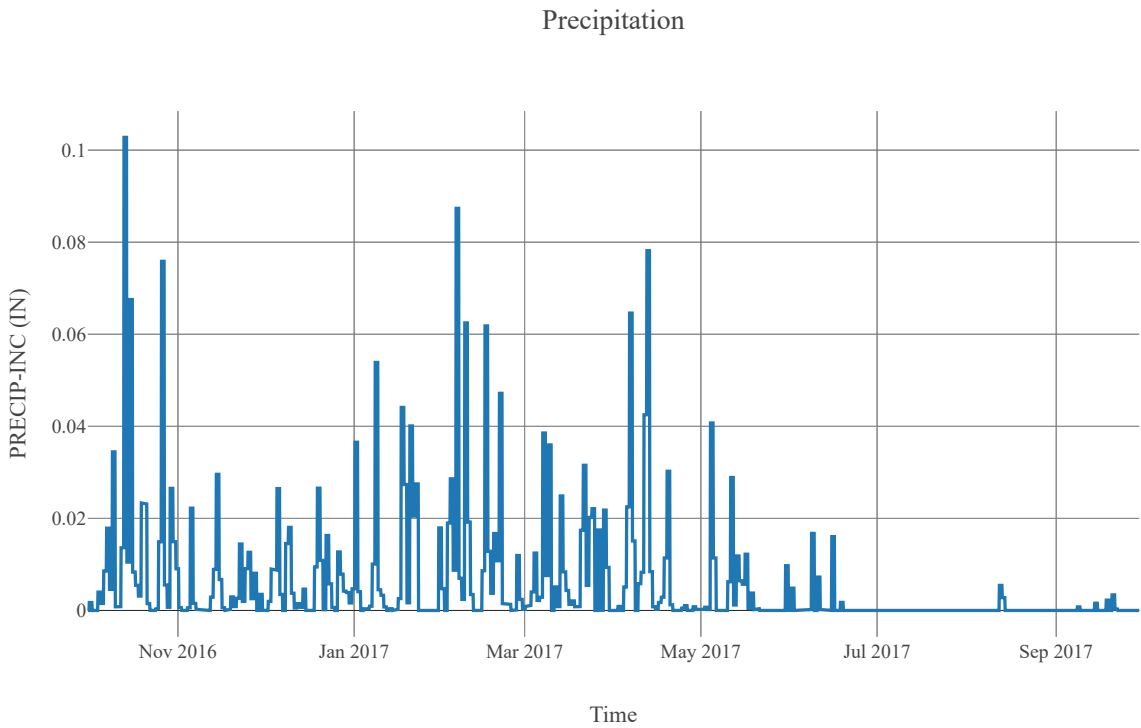
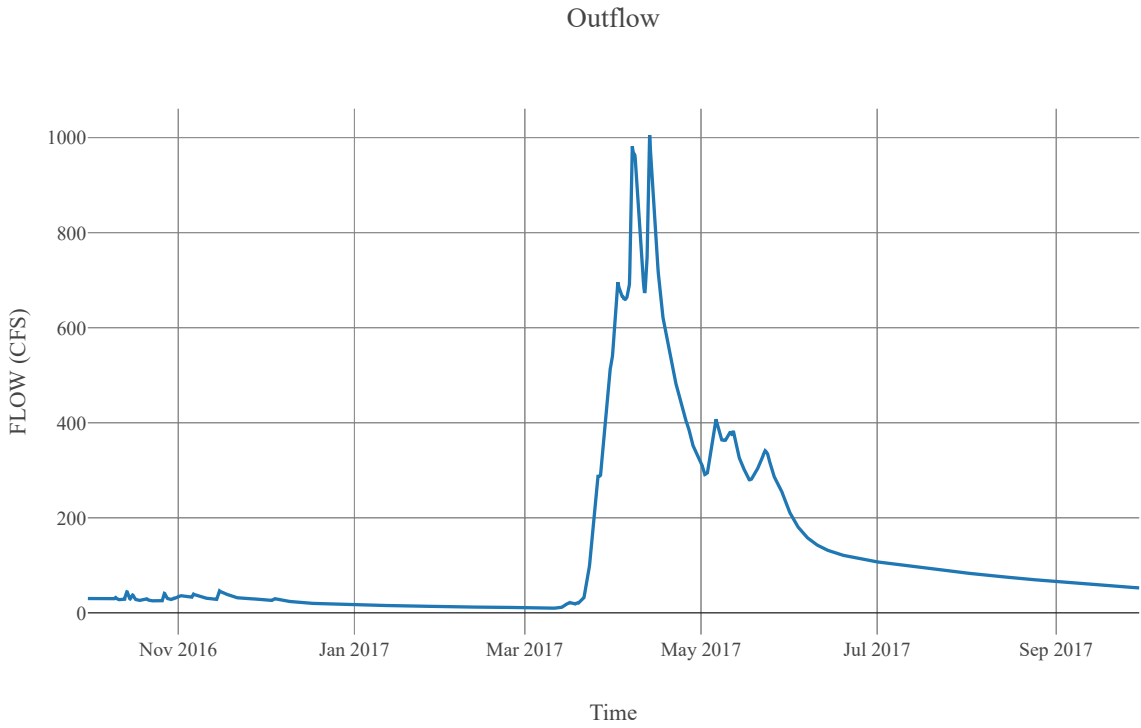
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.68
Storage Coefficient	7.68

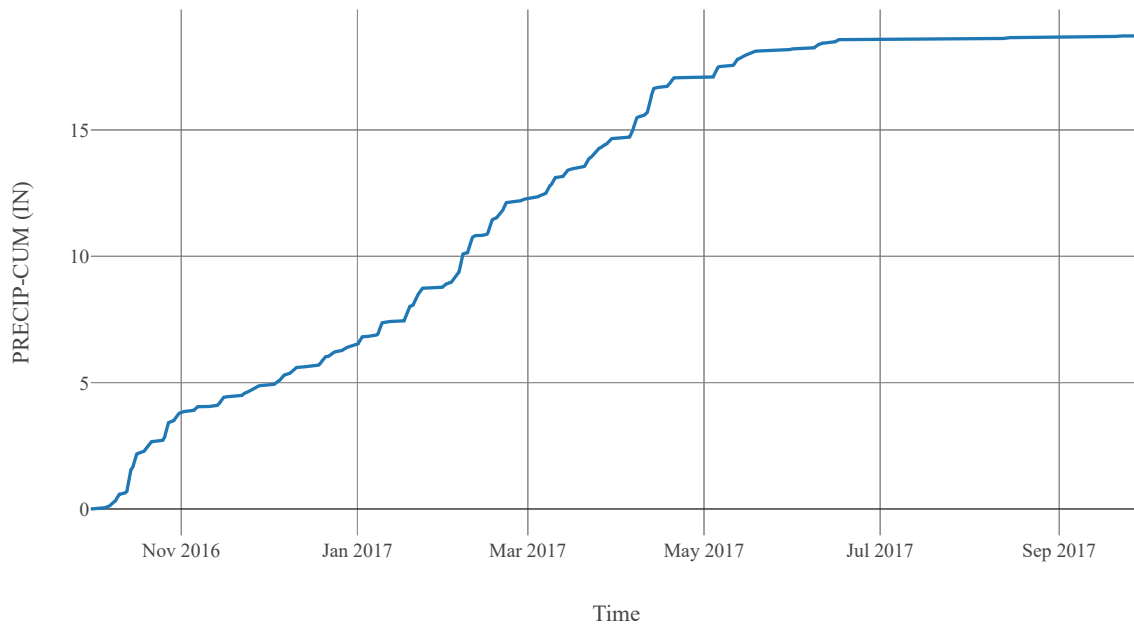
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	153.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	3072
		Number Steps	1

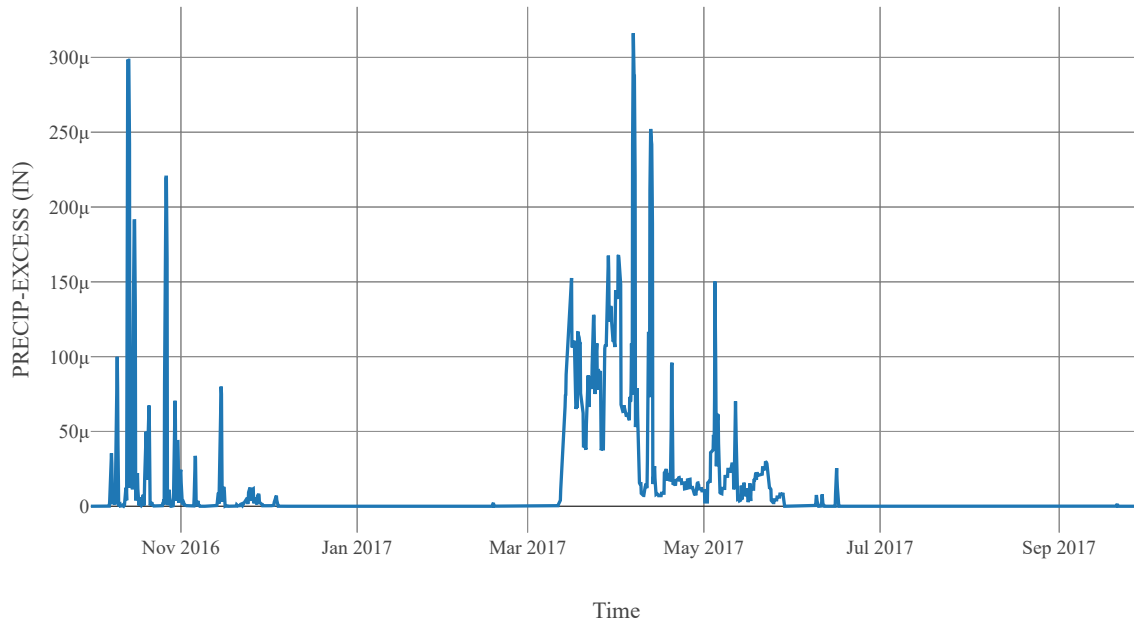
Statistics		
Name	Value	Unit
Baseflow Volume	91241.22	Ac-ft
Precipitation Volume	300547.86	Ac-ft
Loss Volume	214201.4	Ac-ft
Excess Volume	622.99	Ac-ft



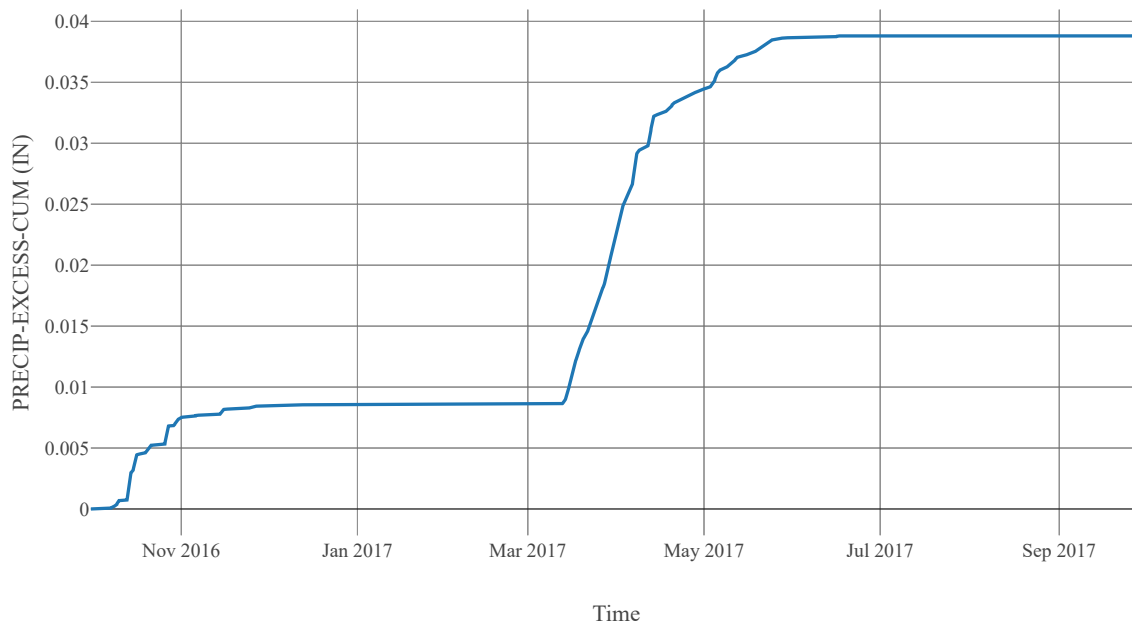
Cumulative Precipitation



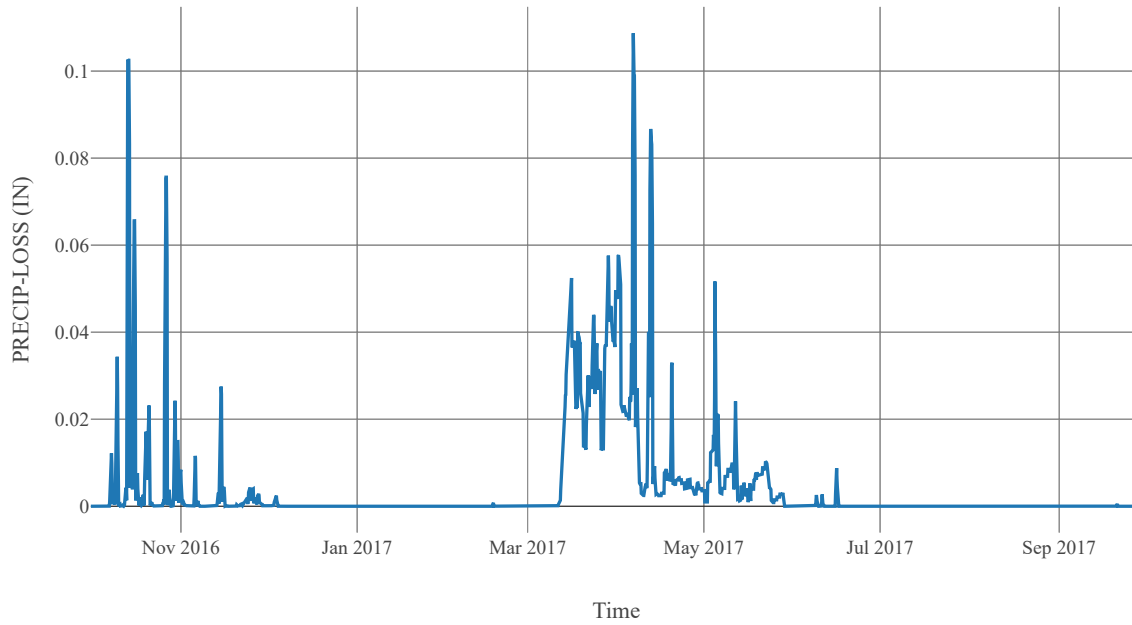
Excess Precipitation



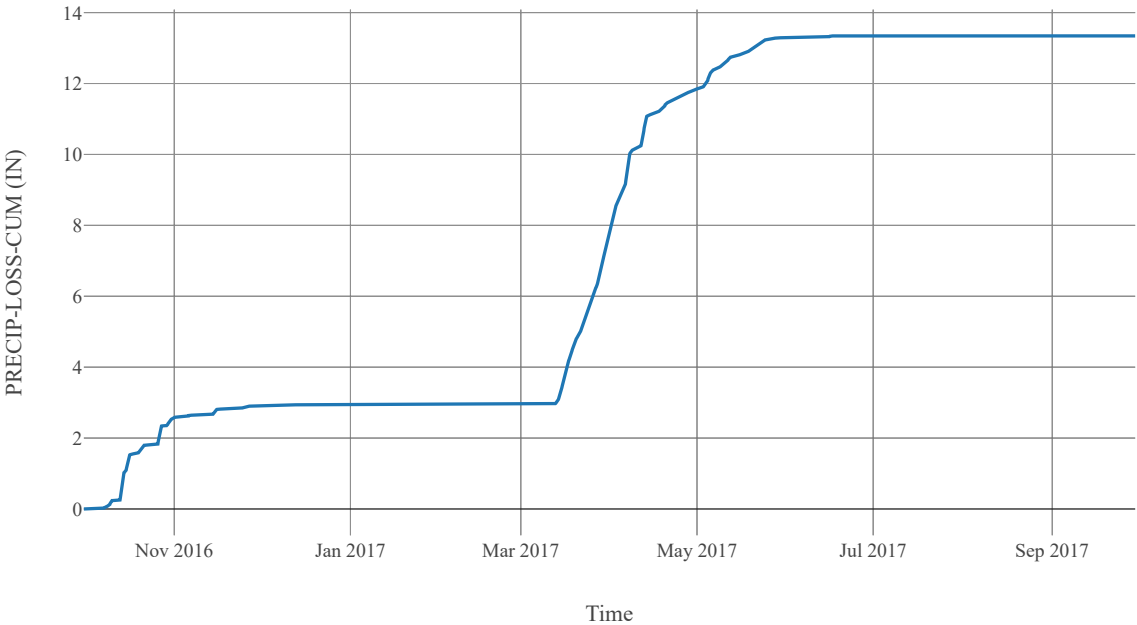
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



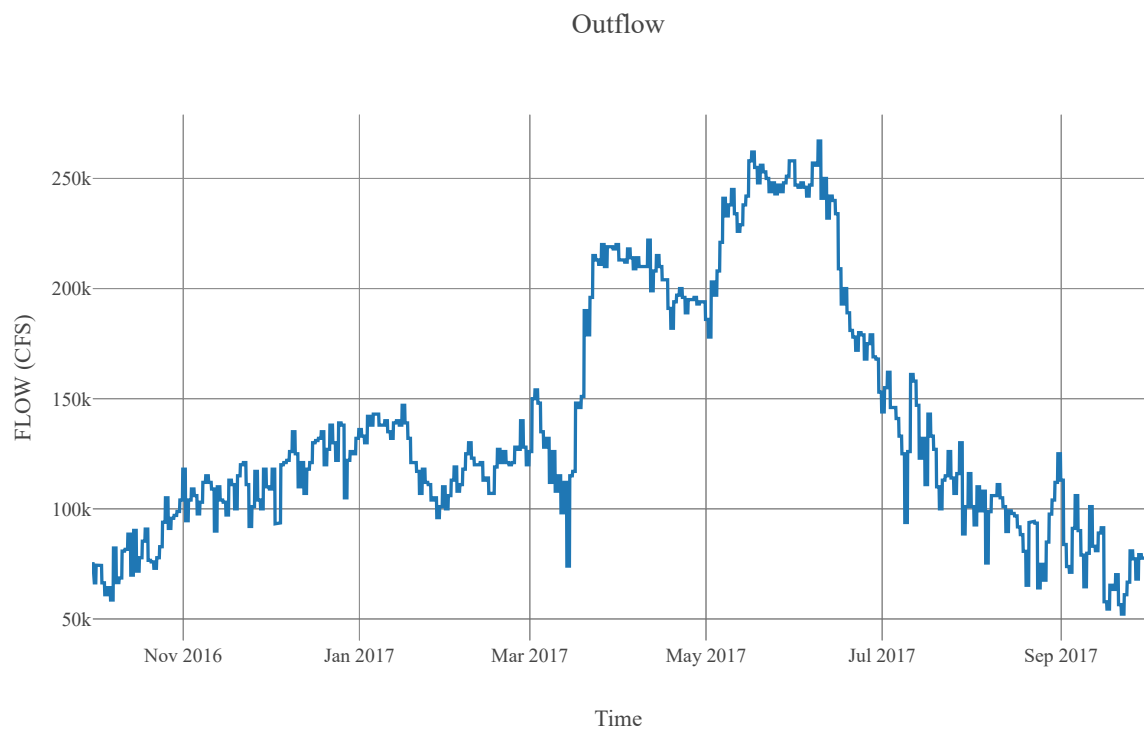
Junction : RockIsland_IN

Observed Hydrograph : Rock Island In
Downstream : Rock Island



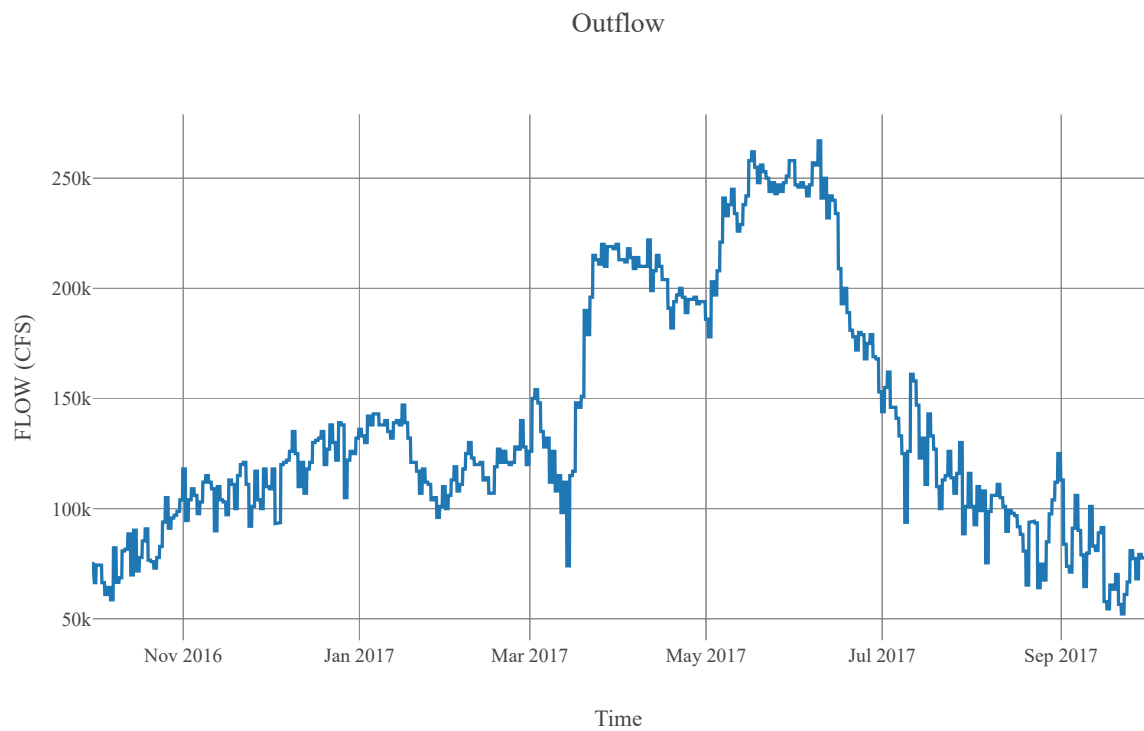
Reservoir : RockIsland

Quality Method : Unspecified
Method : Specified Outflow
Downstream : RockIsland_OUT



Junction : RockIsland_OUT

Downstream : MidColumbia_R035



Reach : MidColumbia_R035

Loss Method : None
Downstream : DouglasCk_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : DouglasCk_S010

Area : 930.37
Latitude : 47.61
Longitude : -119.73
Downstream : DouglasCk_CF

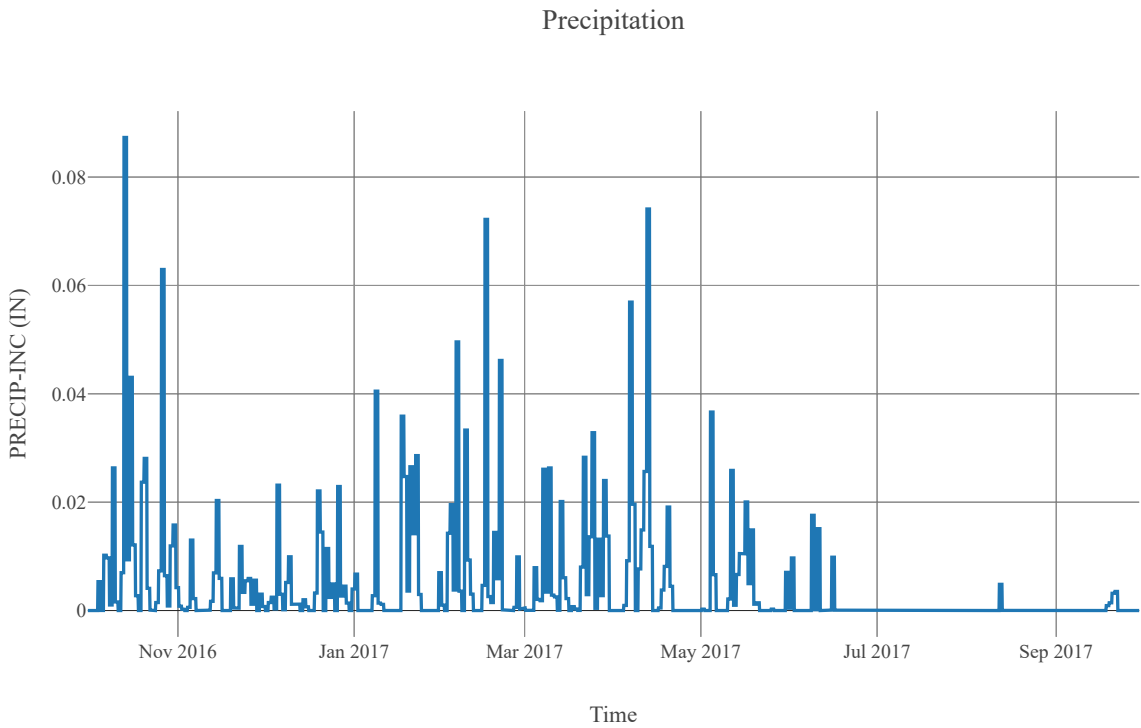
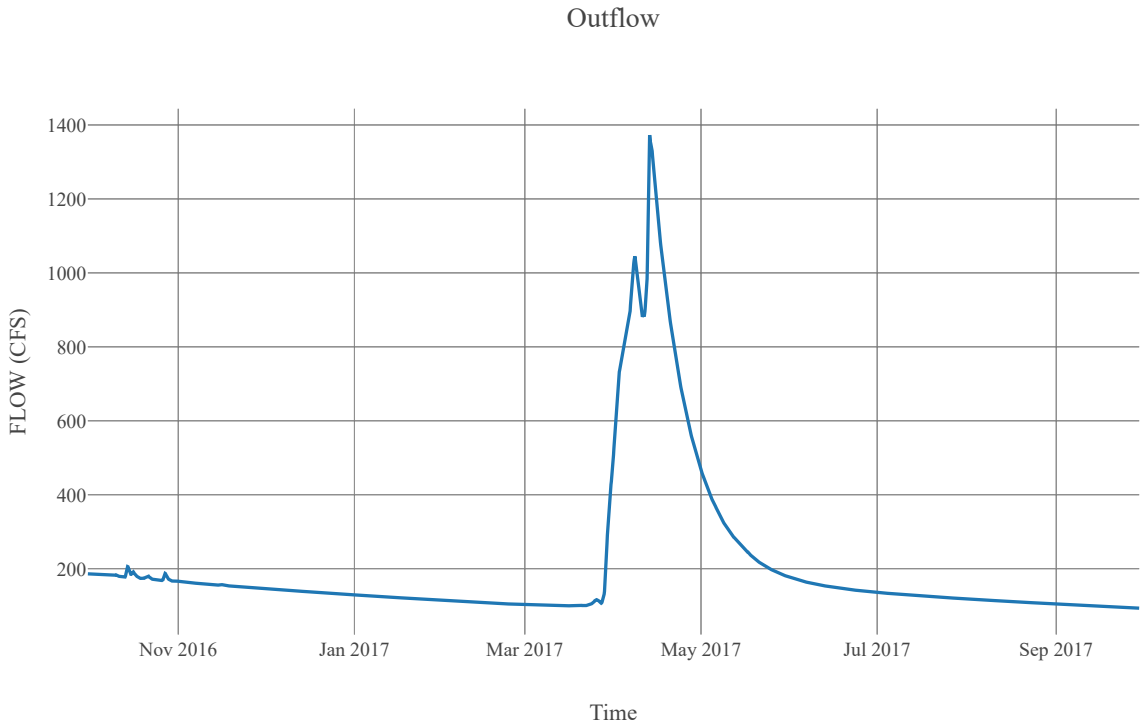
Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.26
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

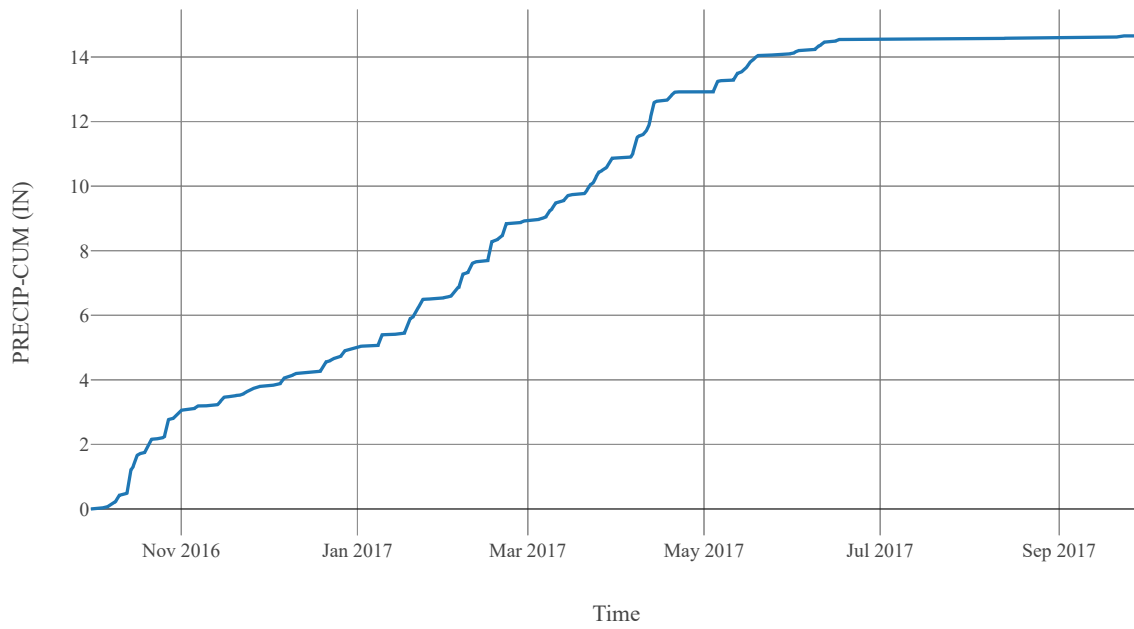
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	15.17
Storage Coefficient	15.17

Baseflow		
Method	Linear Reservoir	
Baseflow Layer List	1	Baseflow Fraction
		0.5
		Initial Rate
		0
		Layer Number
		1
	2	Storage Coefficient
		303.4
		Number Steps
		1
		Baseflow Fraction
		0.5
		Initial Rate
		0.2
		Layer Number
		2
		Storage Coefficient
		6068
		Number Steps
		1

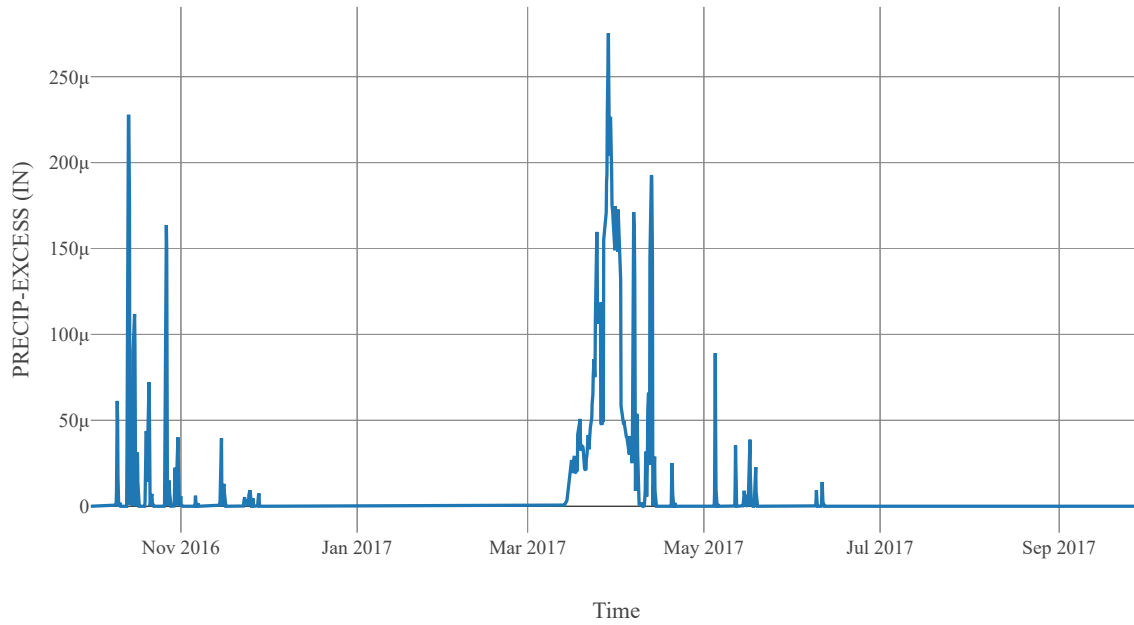
Statistics		
Name	Value	Unit
Baseflow Volume	145662.05	Ac-ft
Precipitation Volume	727124.28	Ac-ft
Loss Volume	452952.95	Ac-ft
Excess Volume	1180.75	Ac-ft



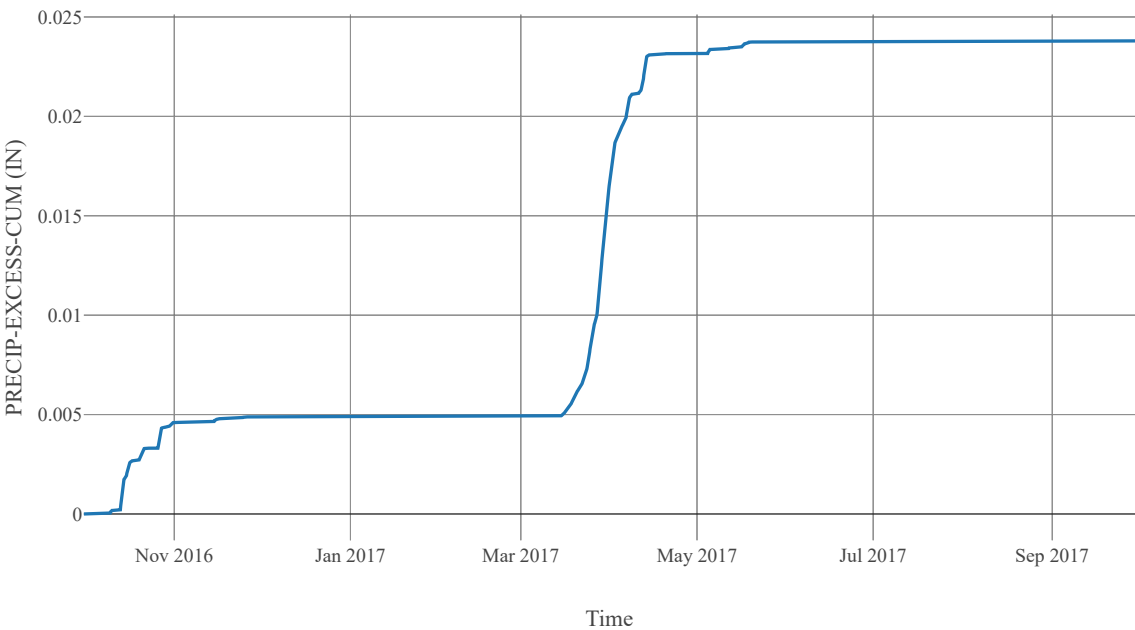
Cumulative Precipitation



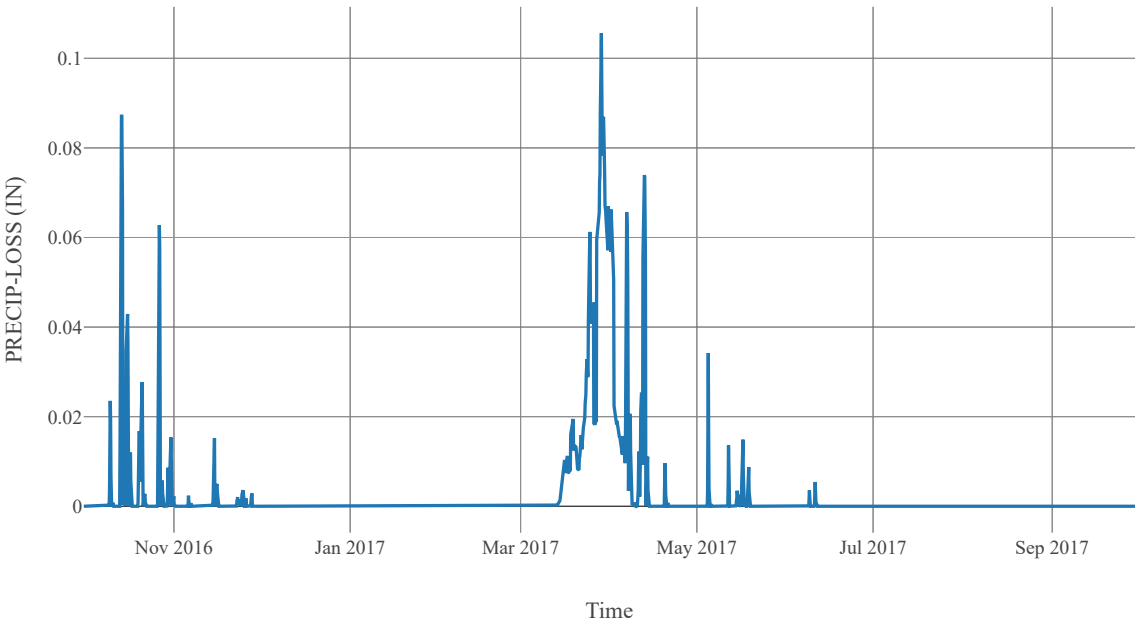
Excess Precipitation



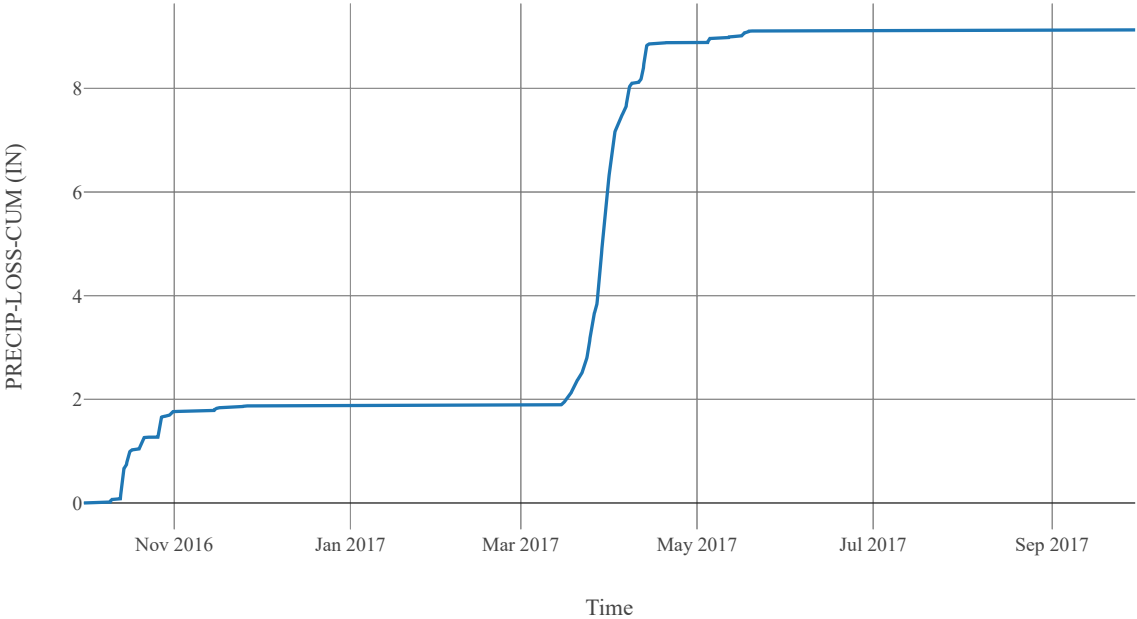
Cumulative Excess Precipitation



Precipitation Loss

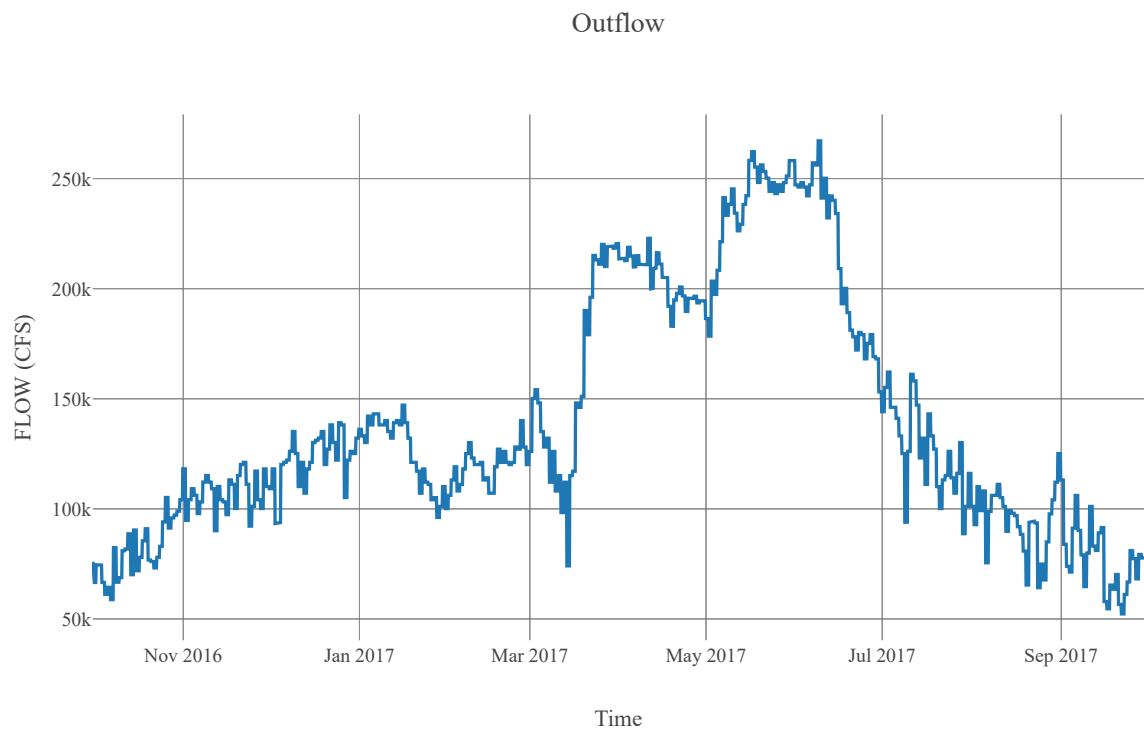


Cumulative Precipitation Loss



Junction : DouglasCk_CF

Downstream : MidColumbia_R030



Reach : MidColumbia_R030

Loss Method : None
Downstream : Wanapum_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown

Outflow



Subbasin : MidColumbia_S030

Area : 565.3
Latitude : 47.1
Longitude : -120.05
Downstream : Wanapum_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.21
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

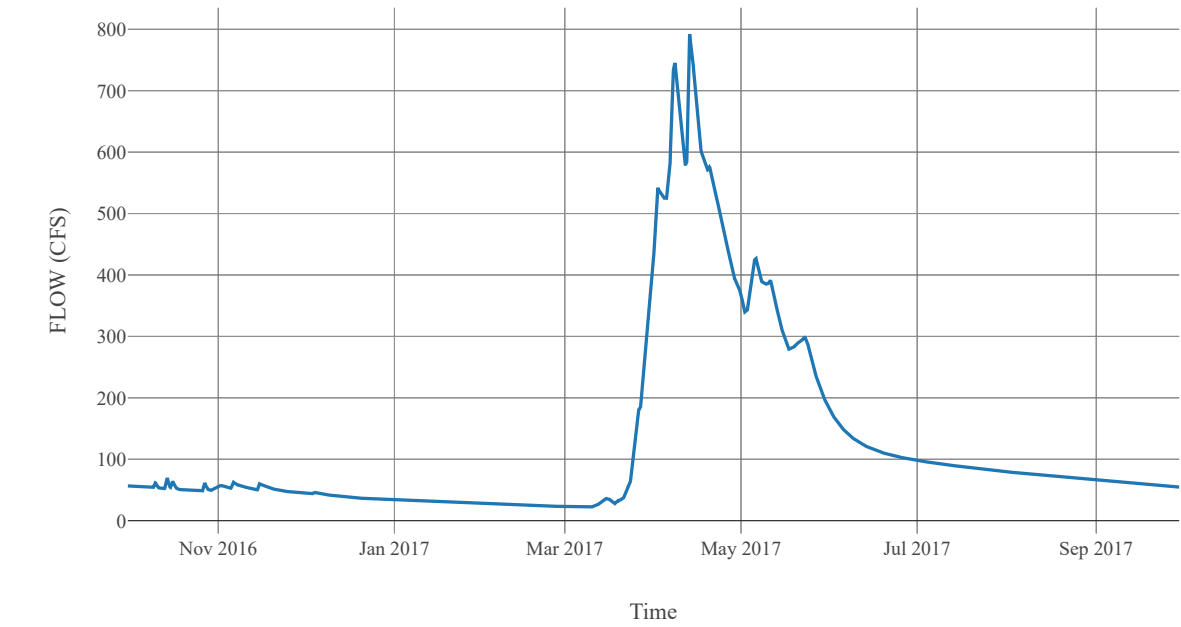
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	9.56
Storage Coefficient	9.56

Baseflow	
Method	Linear Reservoir

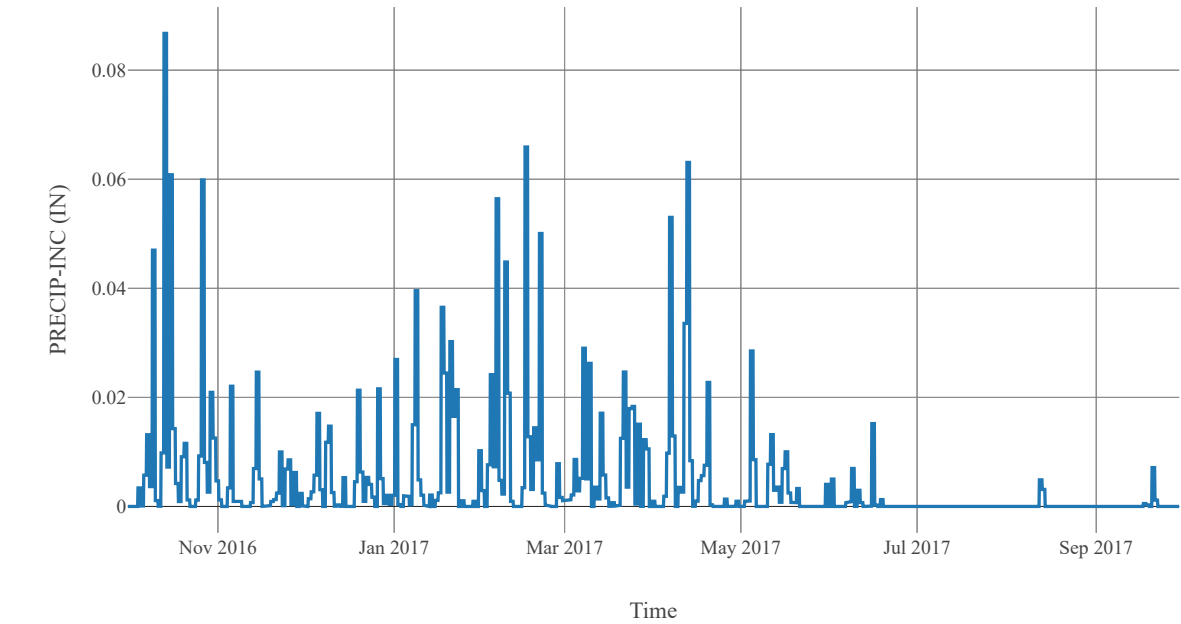
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	191.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	3824
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	89985.97	Ac-ft
Precipitation Volume	443852.28	Ac-ft
Loss Volume	287628.32	Ac-ft
Excess Volume	605.29	Ac-ft

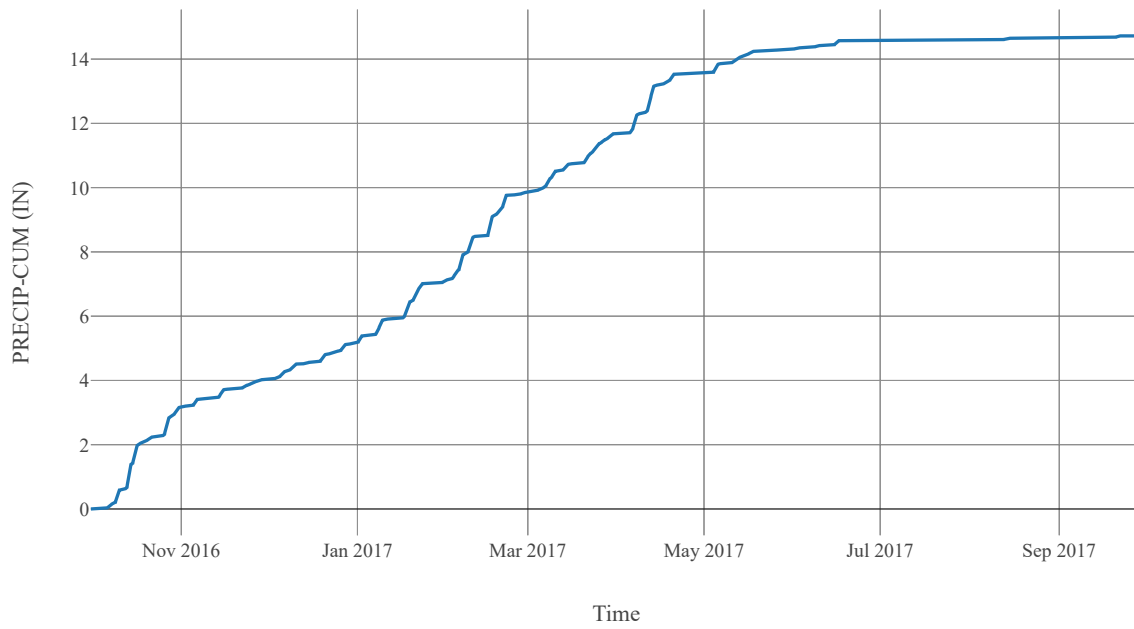
Outflow



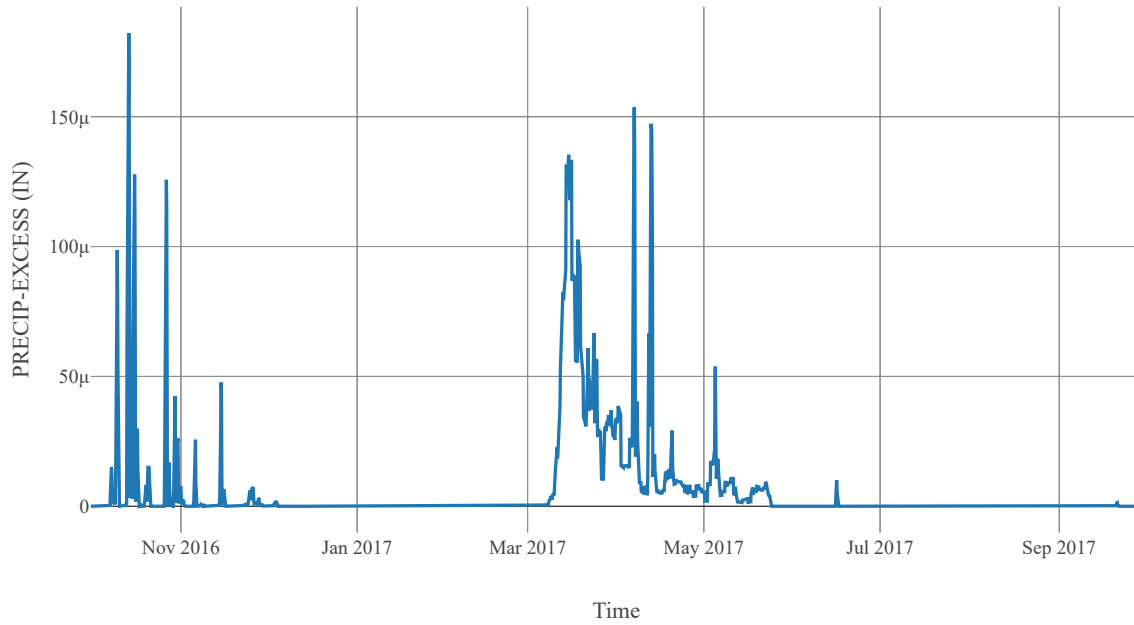
Precipitation



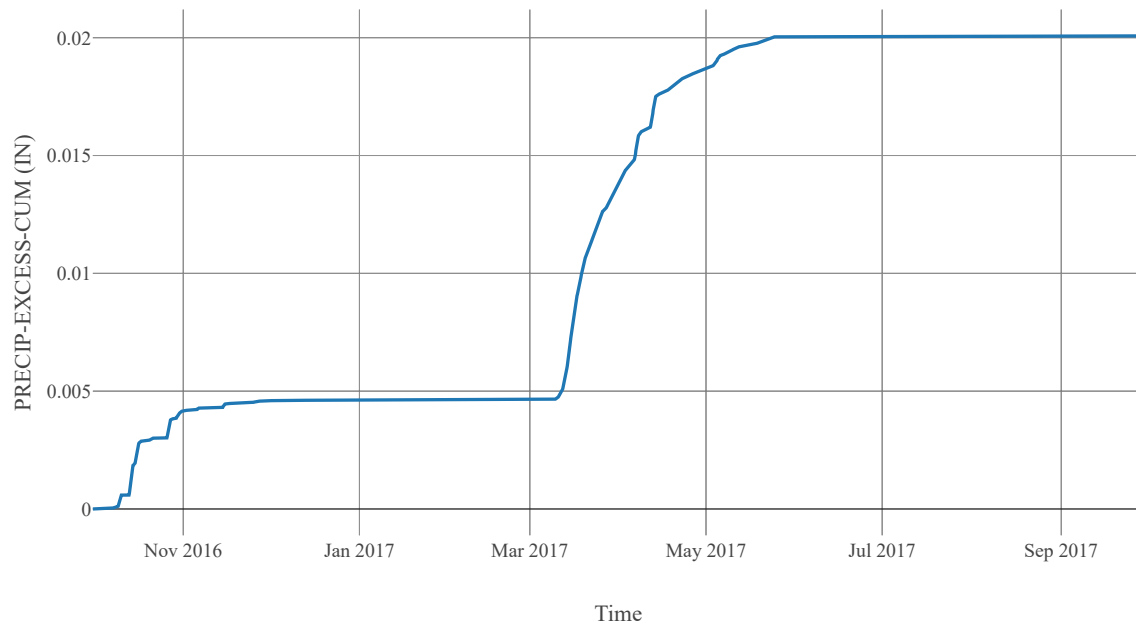
Cumulative Precipitation



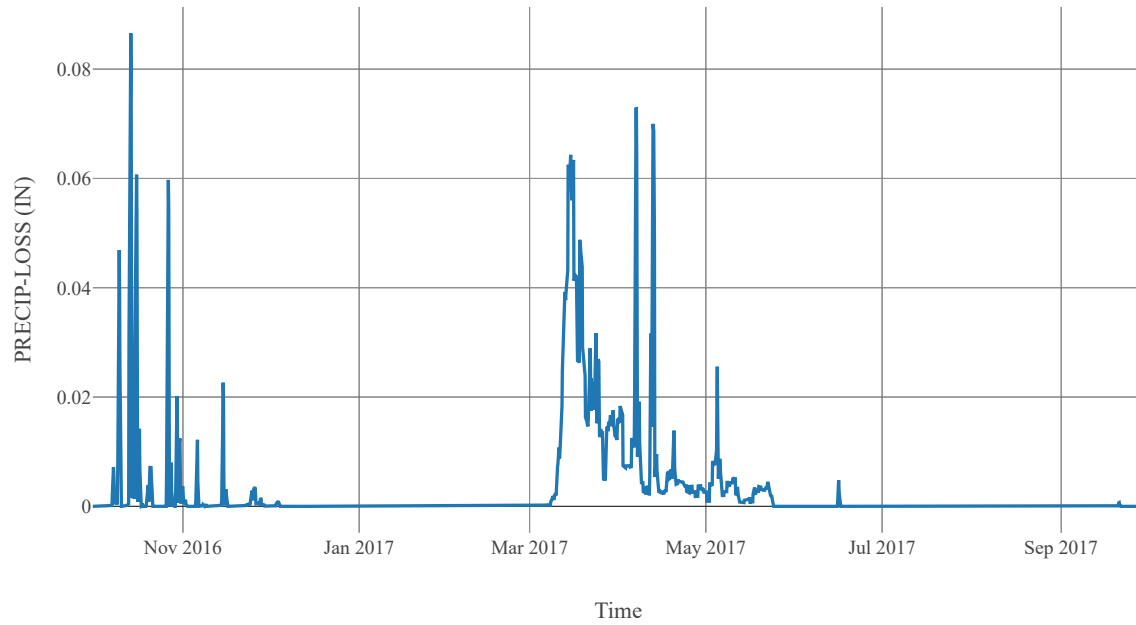
Excess Precipitation



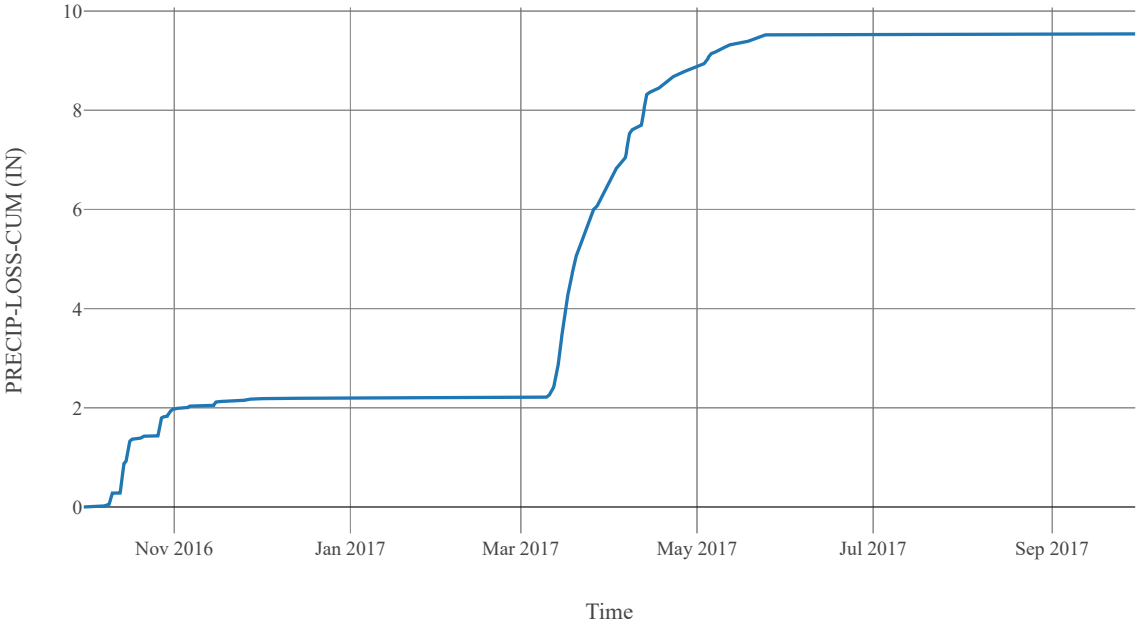
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Junction : Wanapum_IN

Observed Hydrograph : Wanapum In
Downstream : Wanapum



Reservoir : Wanapum

Quality Method : Unspecified

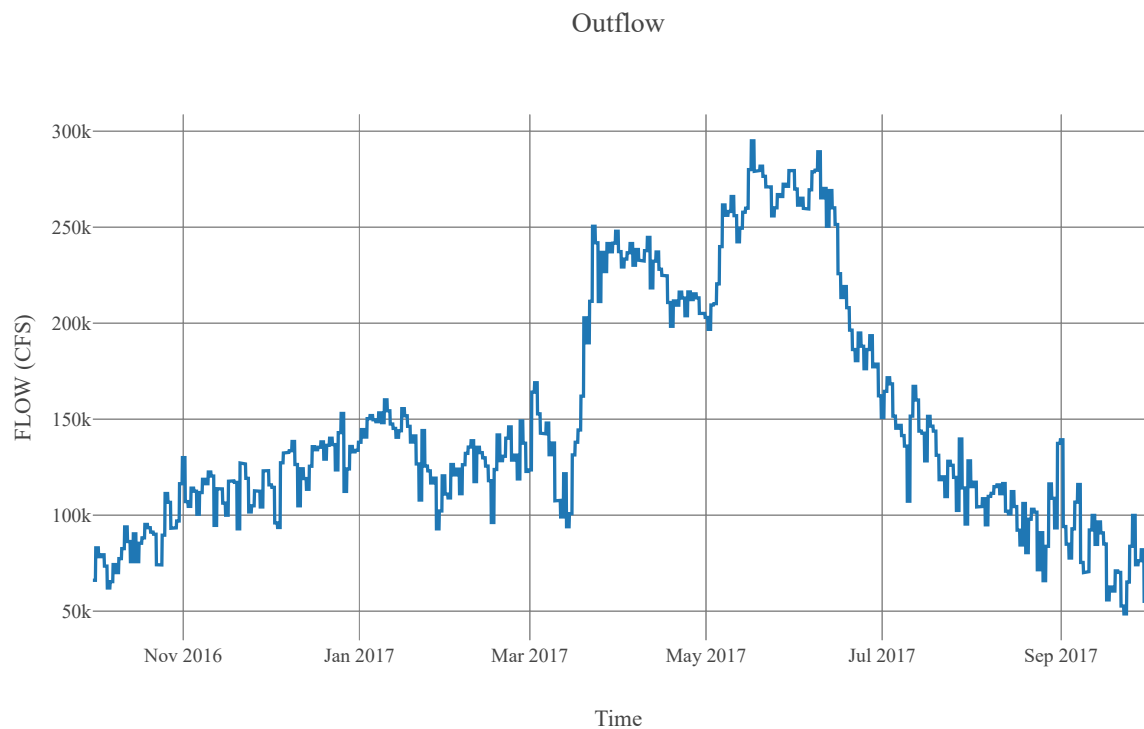
Method : Specified Outflow

Downstream : Wanapum_OUT



Junction : Wanapum_OUT

Downstream : MidColumbia_R025



Reach : MidColumbia_R025

Loss Method : None
Downstream : CrabCk_CF

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : CrabCk_S010

Area : 299.51
Latitude : 46.87
Longitude : -119.47
Downstream : Crab Creek

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	2.76
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

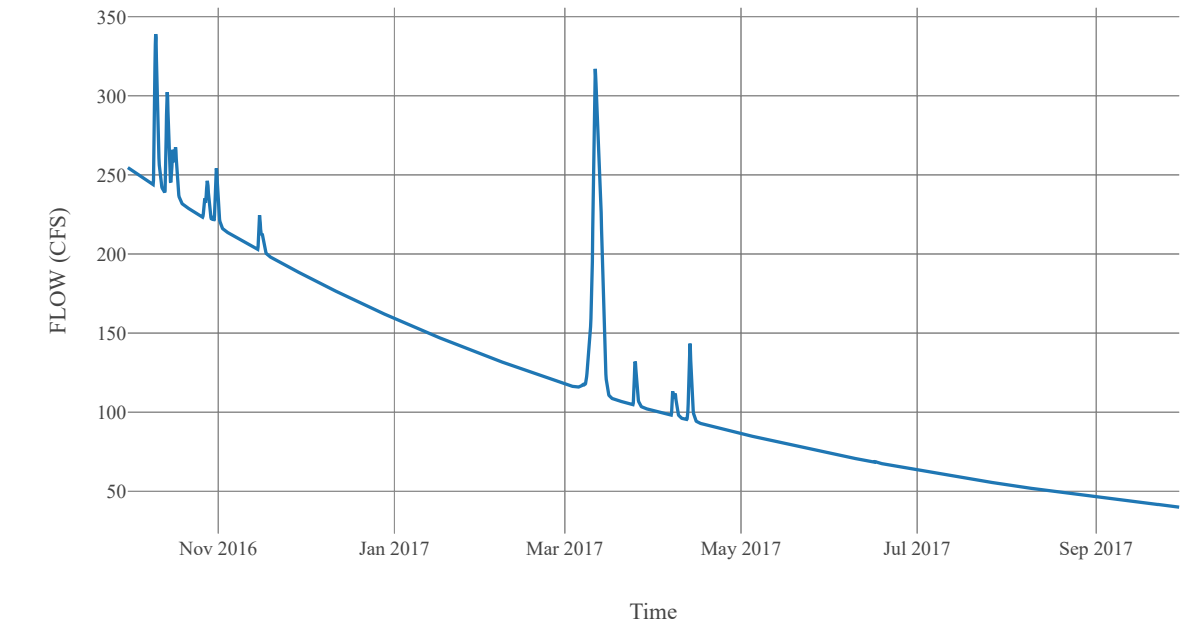
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	11.8
Storage Coefficient	11.8

Baseflow	
Method	Linear Reservoir

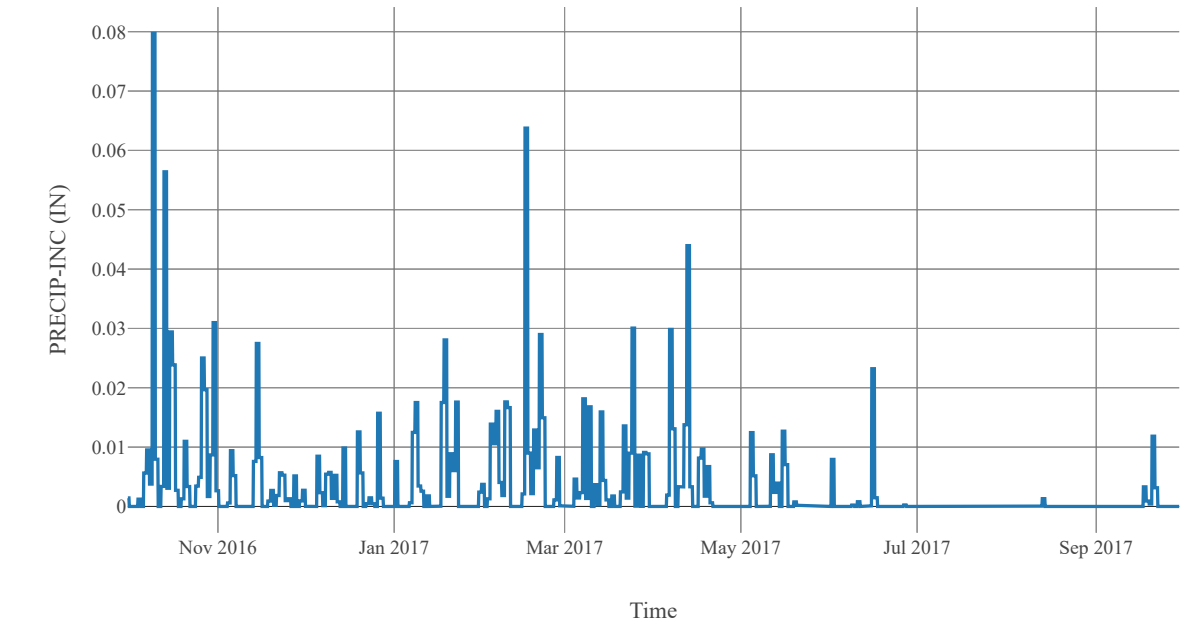
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	236
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.85
		Layer Number	2
		Storage Coefficient	4720
		Number Steps	1

Statistics		
Name	Value	Unit
Baseflow Volume	83706.83	Ac-ft
Precipitation Volume	162273.91	Ac-ft
Loss Volume	77417.12	Ac-ft
Excess Volume	2197.36	Ac-ft

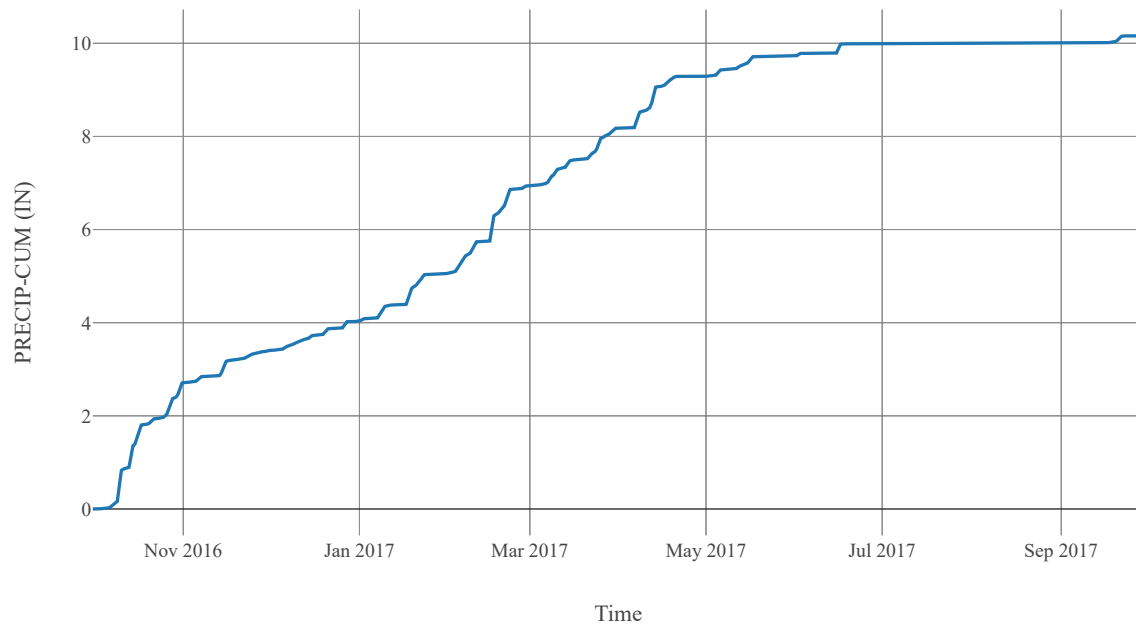
Outflow



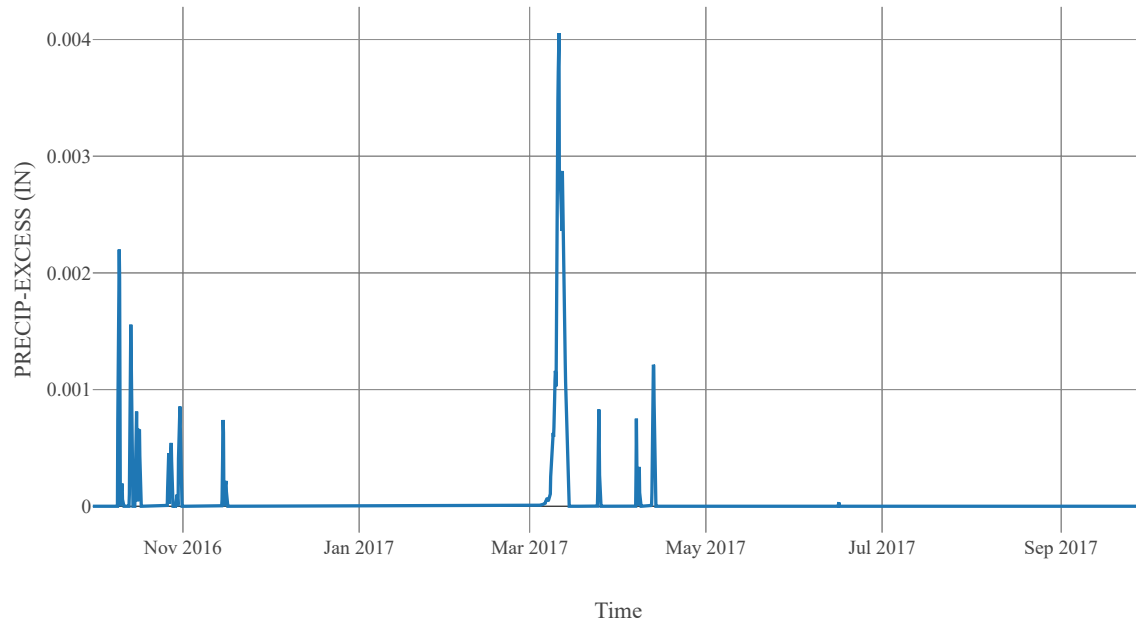
Precipitation



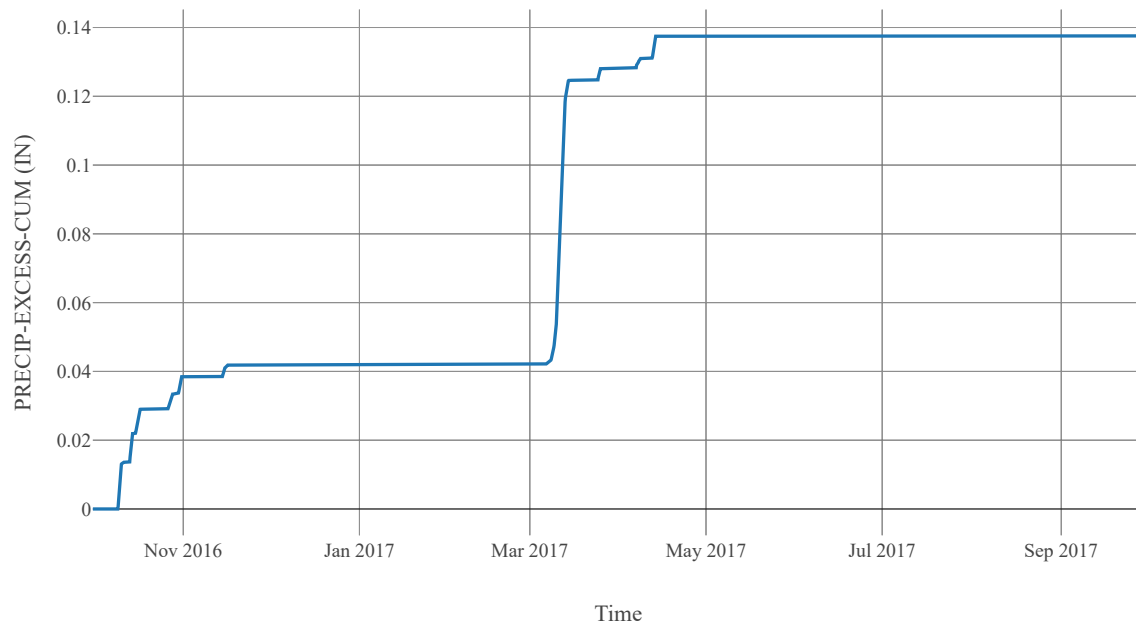
Cumulative Precipitation



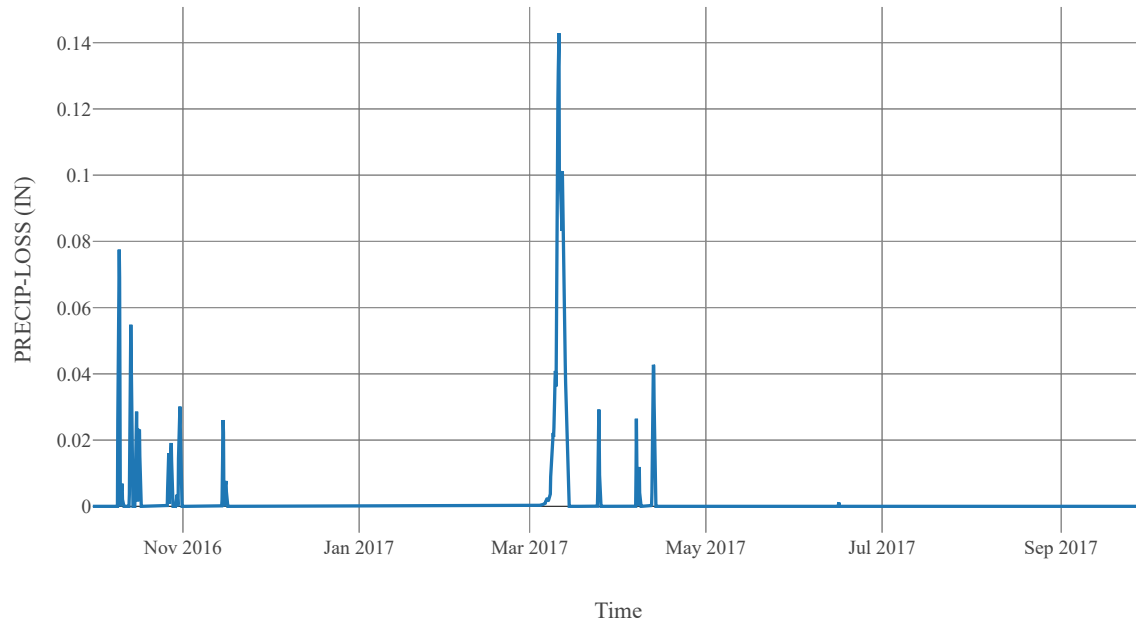
Excess Precipitation



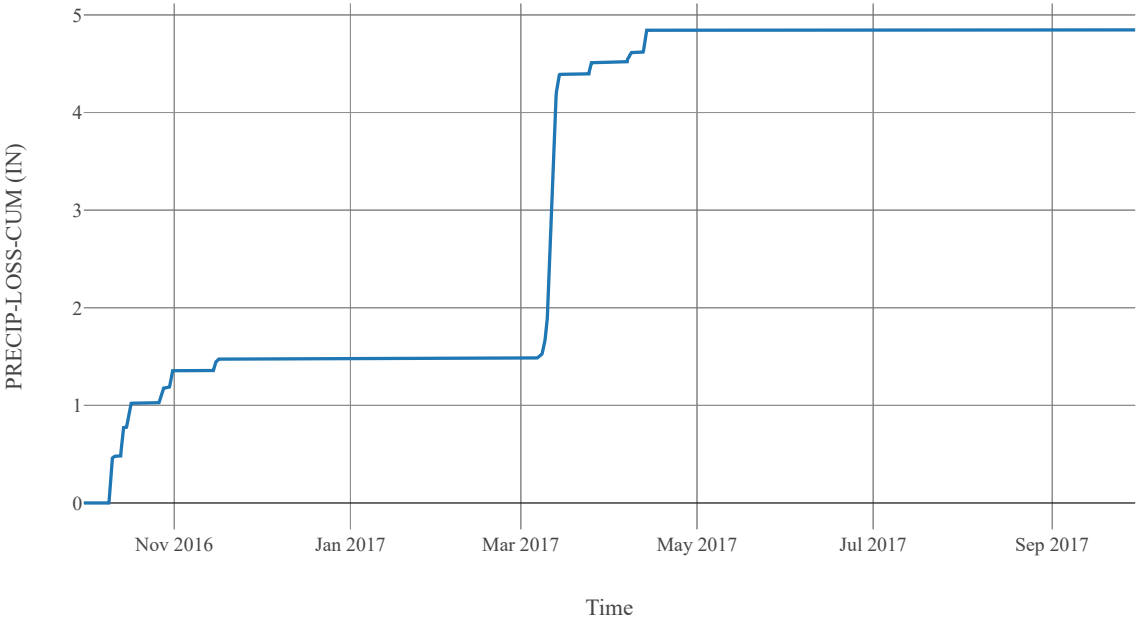
Cumulative Excess Precipitation



Precipitation Loss

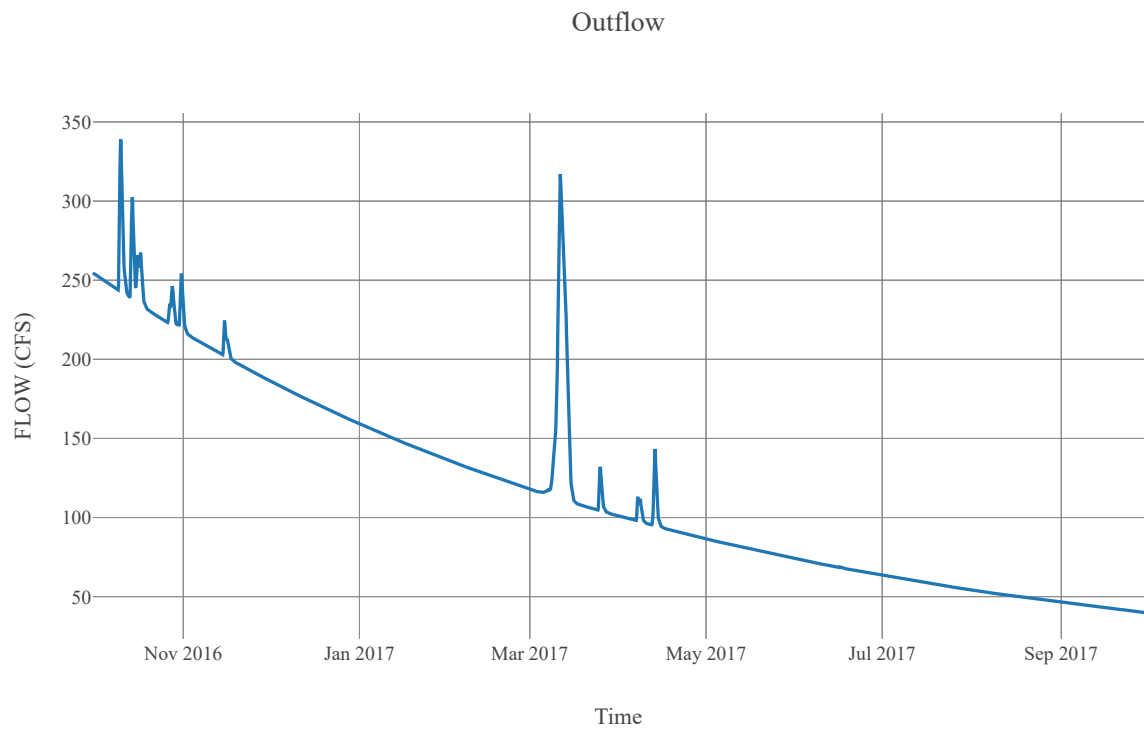


Cumulative Precipitation Loss



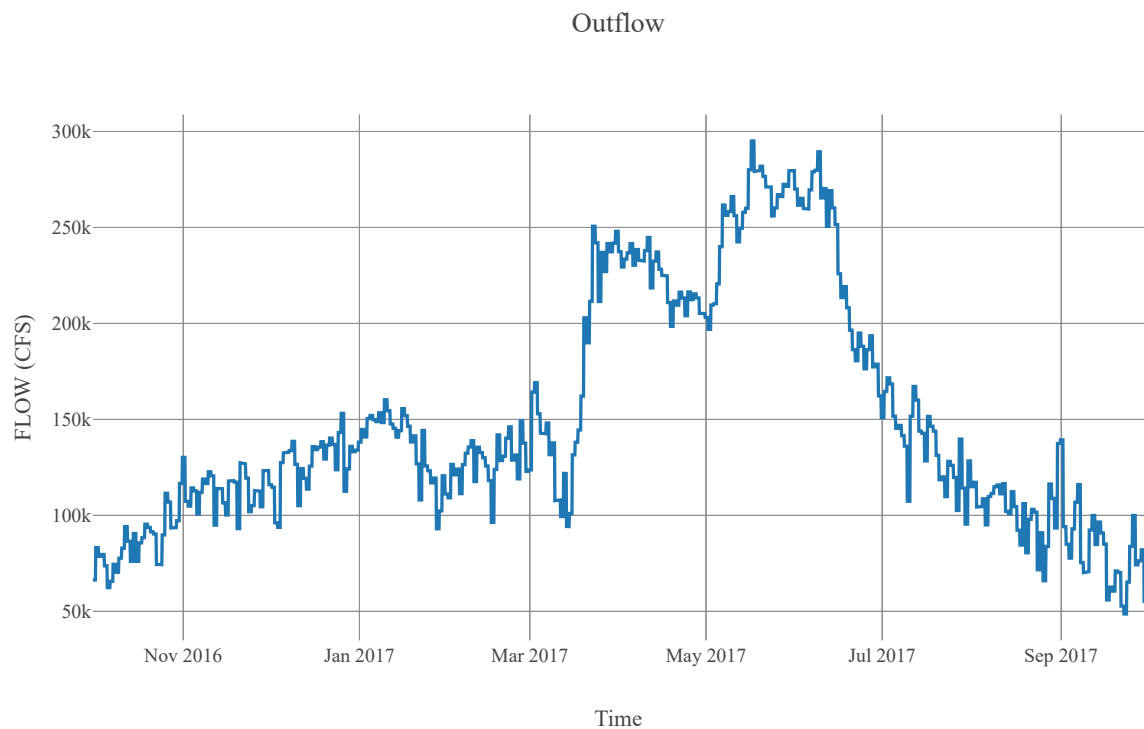
Junction : CrabCreek

Observed Hydrograph : Crab creek near beverly
Downstream : CrabCk_CF



Junction : CrabCk_CF

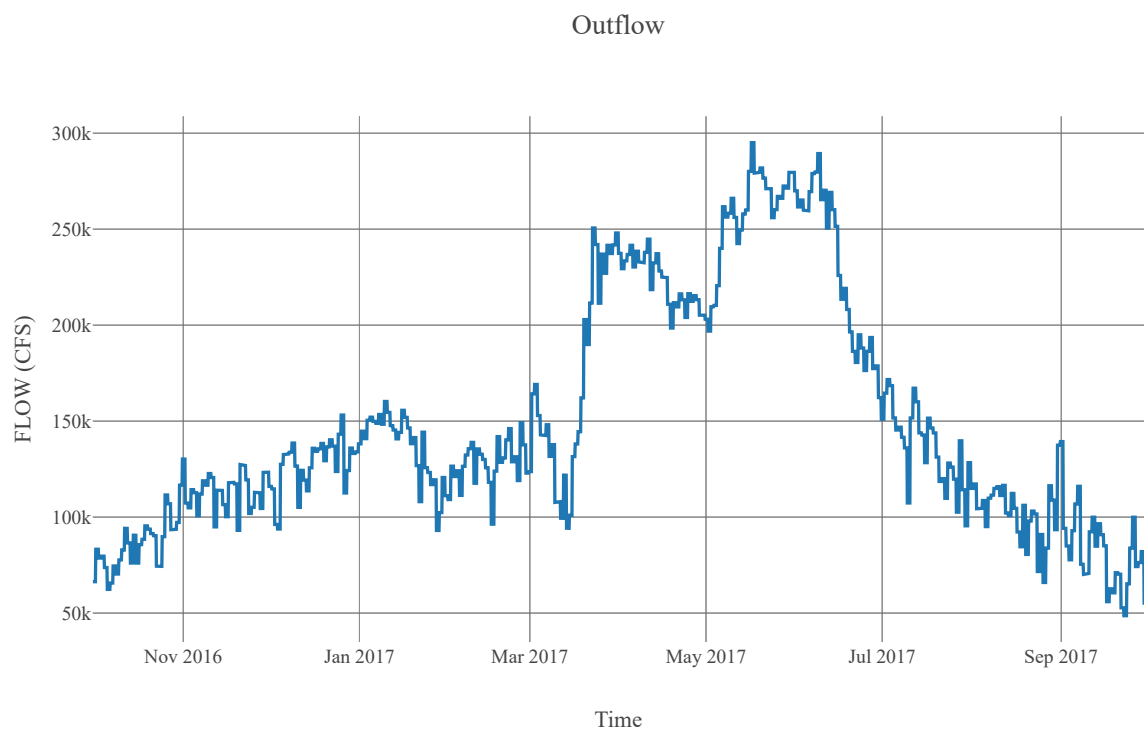
Downstream : MidColumbia_R020



Reach : MidColumbia_R020

Loss Method : None
Downstream : PriestRapids_IN

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : MidColumbia_S020

Area : 241.95
Latitude : 46.77
Longitude : -119.99
Downstream : PriestRapids_IN

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.28
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

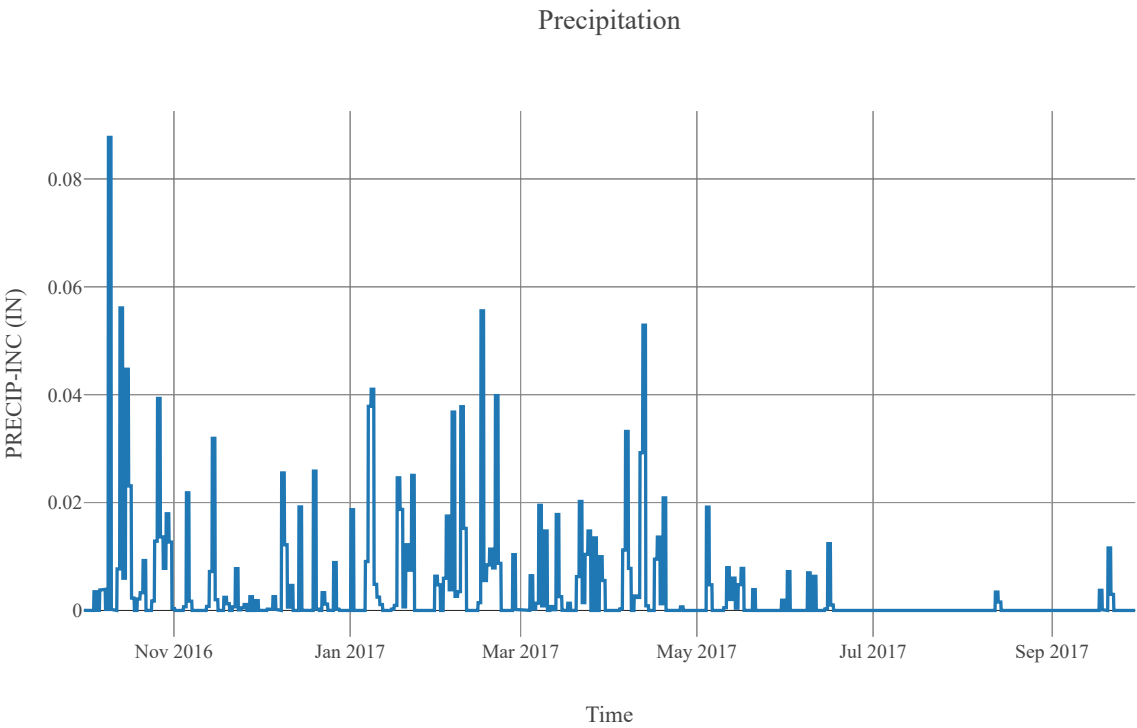
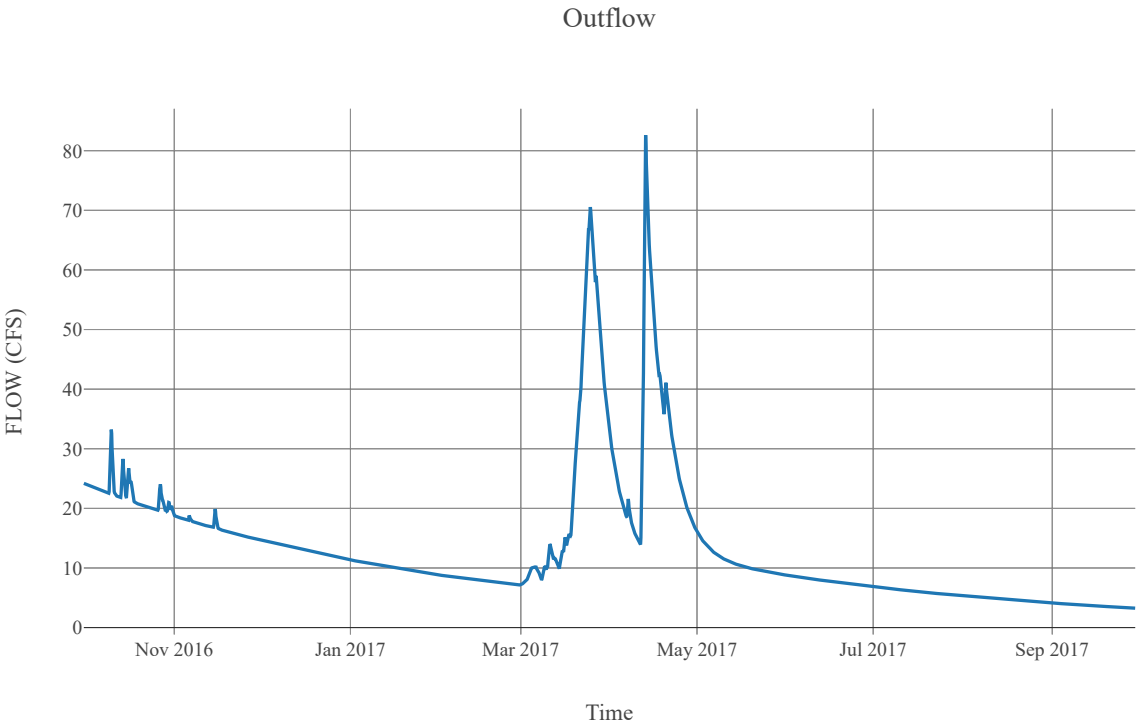
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	7.32
Storage Coefficient	7.32

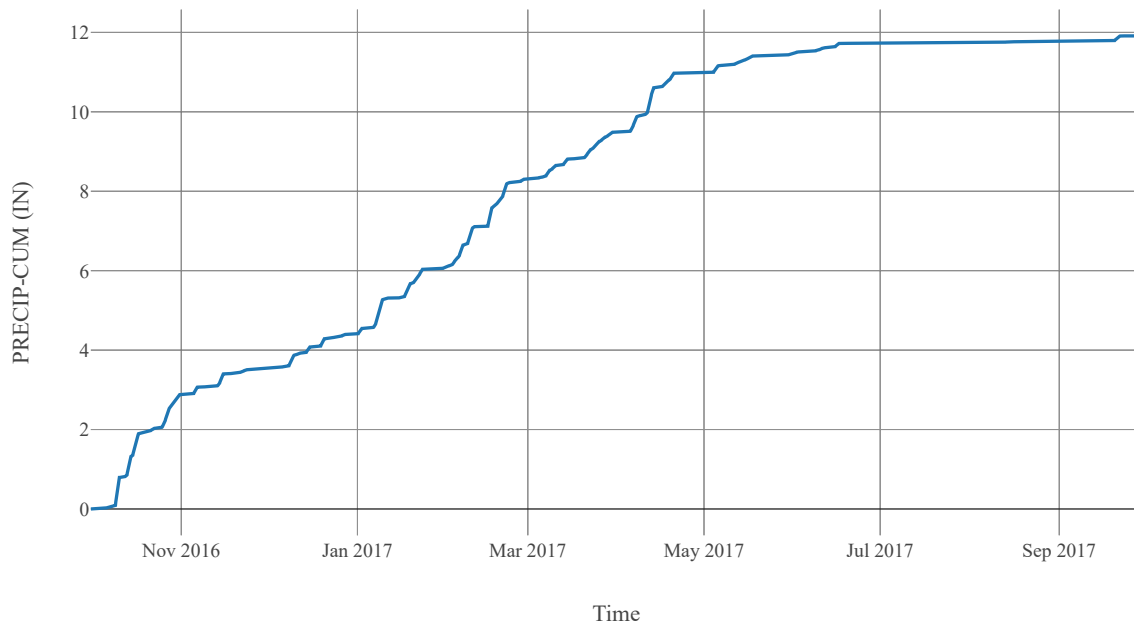
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	146.4
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	2928
		Number Steps	1

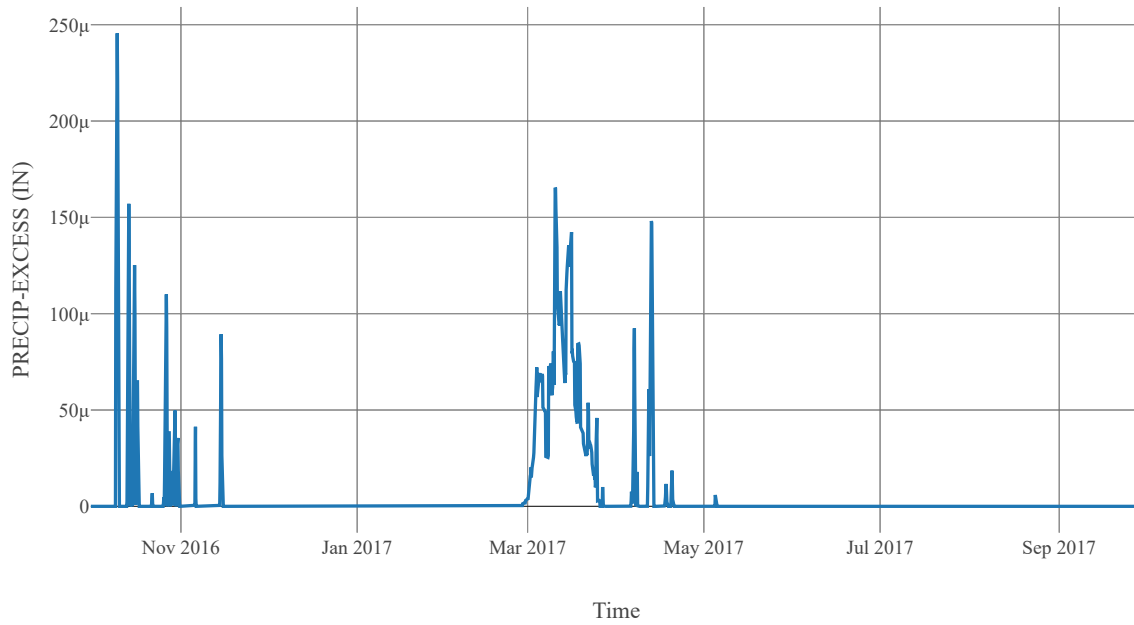
Statistics		
Name	Value	Unit
Baseflow Volume	9428.61	Ac-ft
Precipitation Volume	153706.24	Ac-ft
Loss Volume	87031.88	Ac-ft
Excess Volume	244.37	Ac-ft



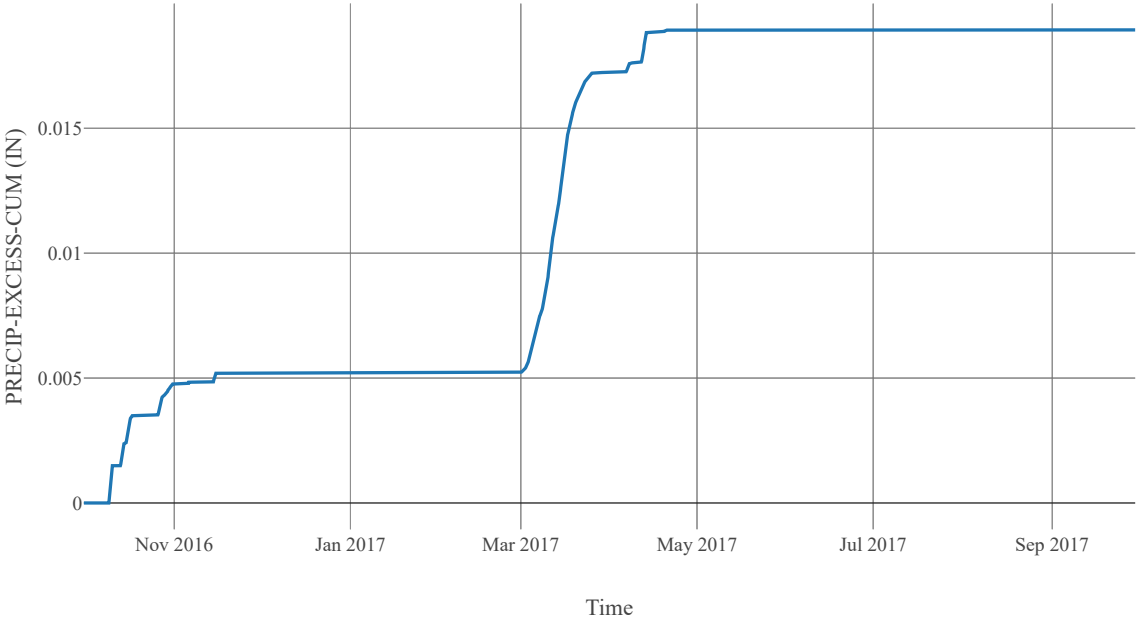
Cumulative Precipitation



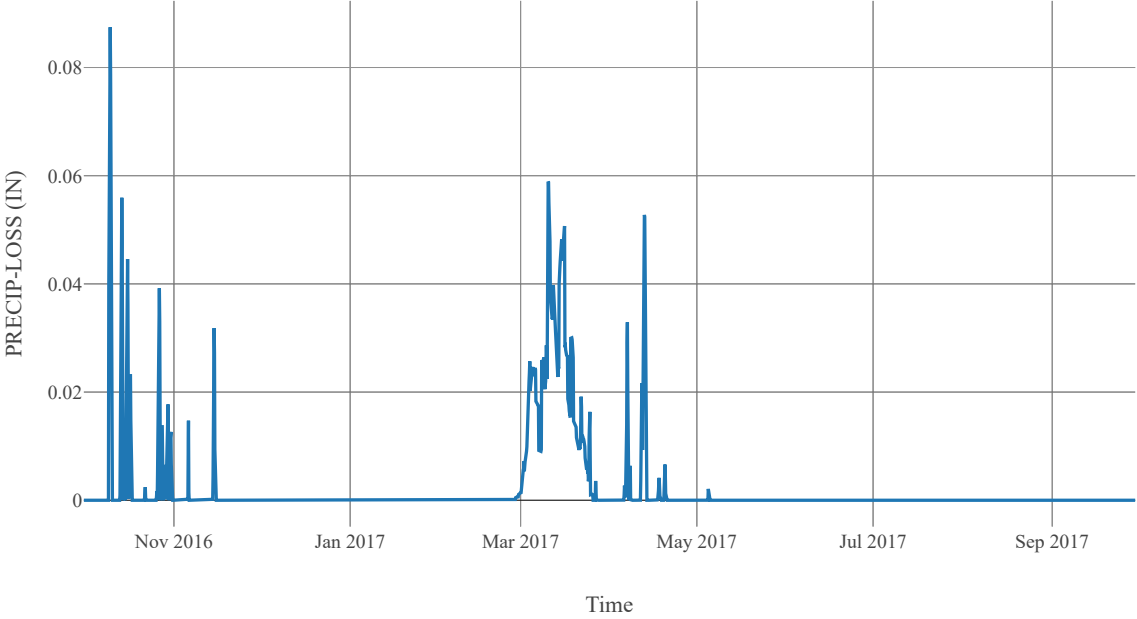
Excess Precipitation



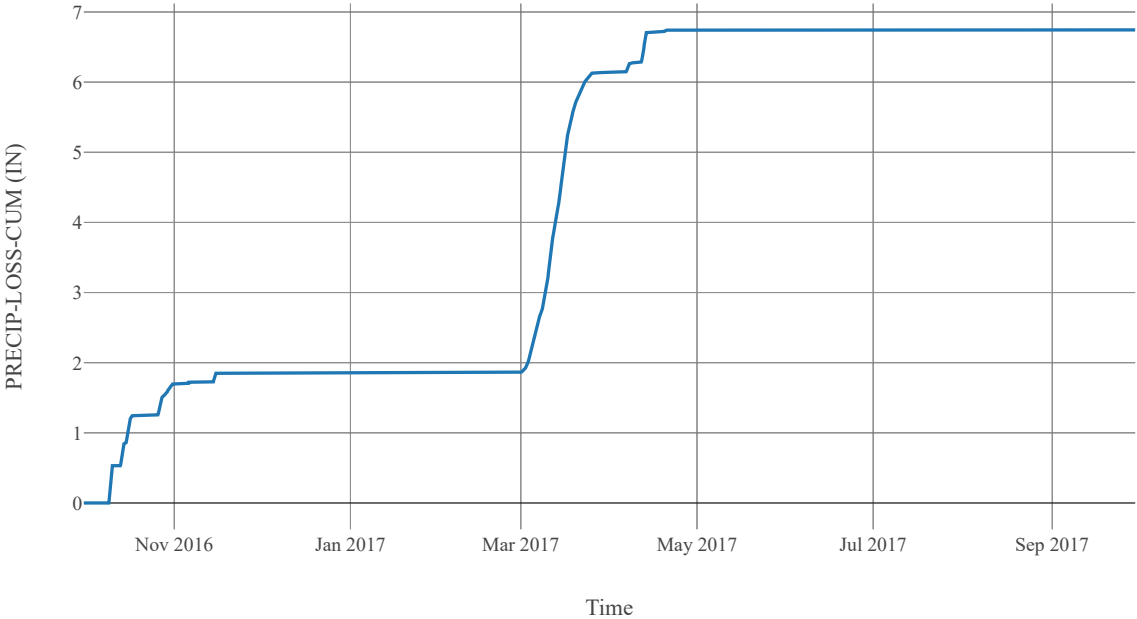
Cumulative Excess Precipitation



Precipitation Loss

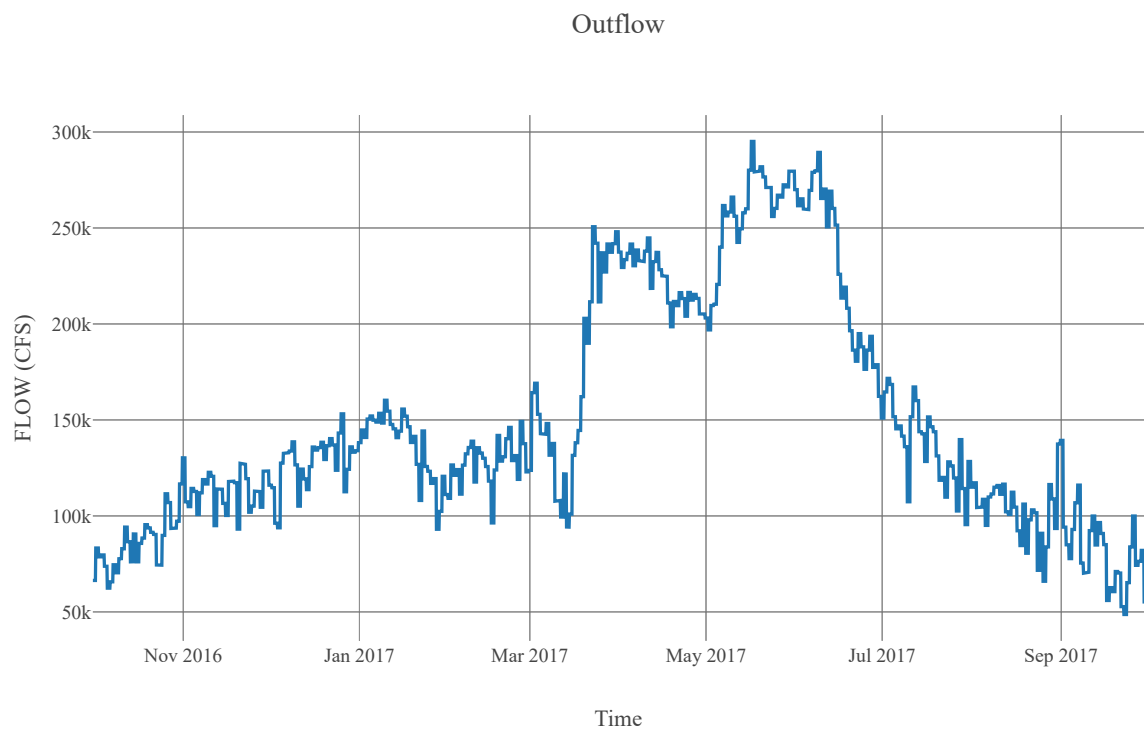


Cumulative Precipitation Loss



Junction : PriestRapids_IN

Observed Hydrograph : Priest Rapids Dam In
Downstream : Priest Rapids



Reservoir : PriestRapids

Quality Method : Unspecified
Method : Specified Outflow
Downstream : PriestRapids_OUT



Junction : PriestRapids_OUT

Downstream : MidColumbia_R015



Reach : MidColumbia_R015

Loss Method : None
Downstream : Pe16p4ww Cf

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : PE16P4WW_S010

Area : 356.11
Latitude : 46.77
Longitude : -119.08
Downstream : Pe16p4ww Cf

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	1.67
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

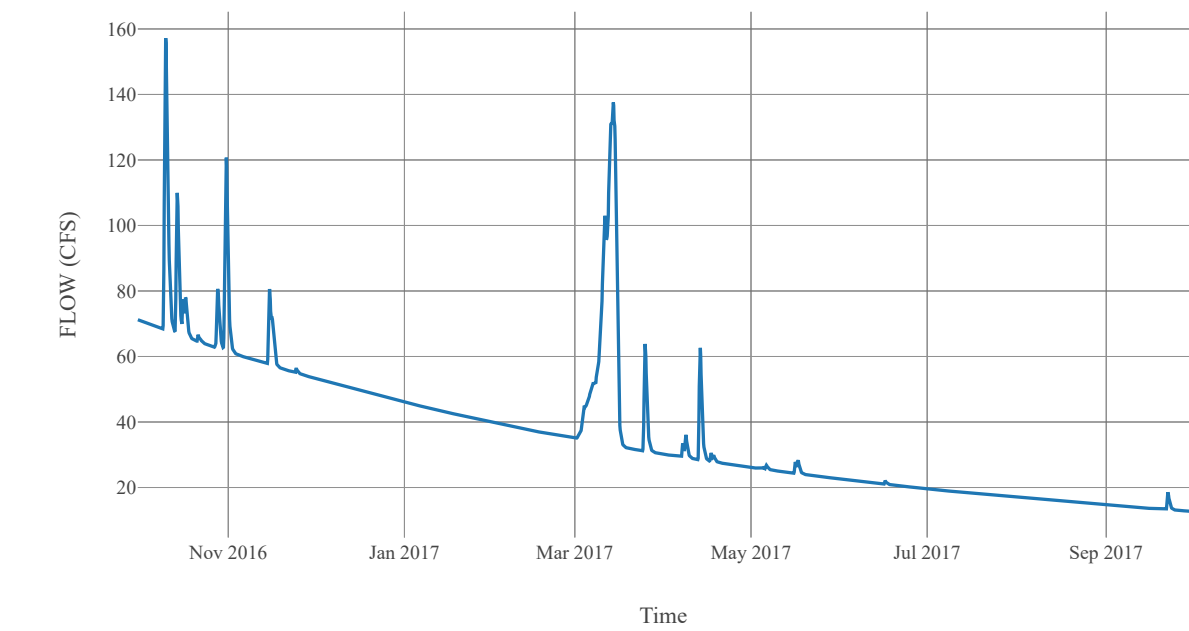
Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	12.71
Storage Coefficient	12.71

Baseflow	
Method	Linear Reservoir

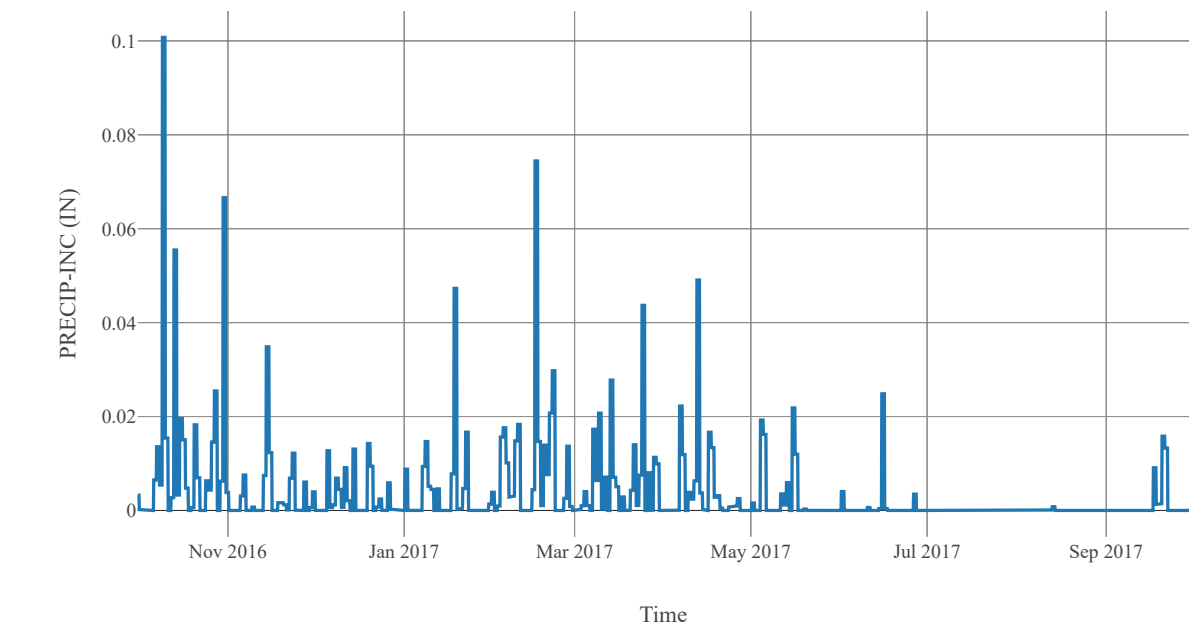
Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	254.2
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.2
		Layer Number	2
		Storage Coefficient	5084
		Number Steps	1

Name	Statistics	
	Value	Unit
Baseflow Volume	24557.51	Ac-ft
Precipitation Volume	224488.7	Ac-ft
Loss Volume	112869.14	Ac-ft
Excess Volume	1916.93	Ac-ft

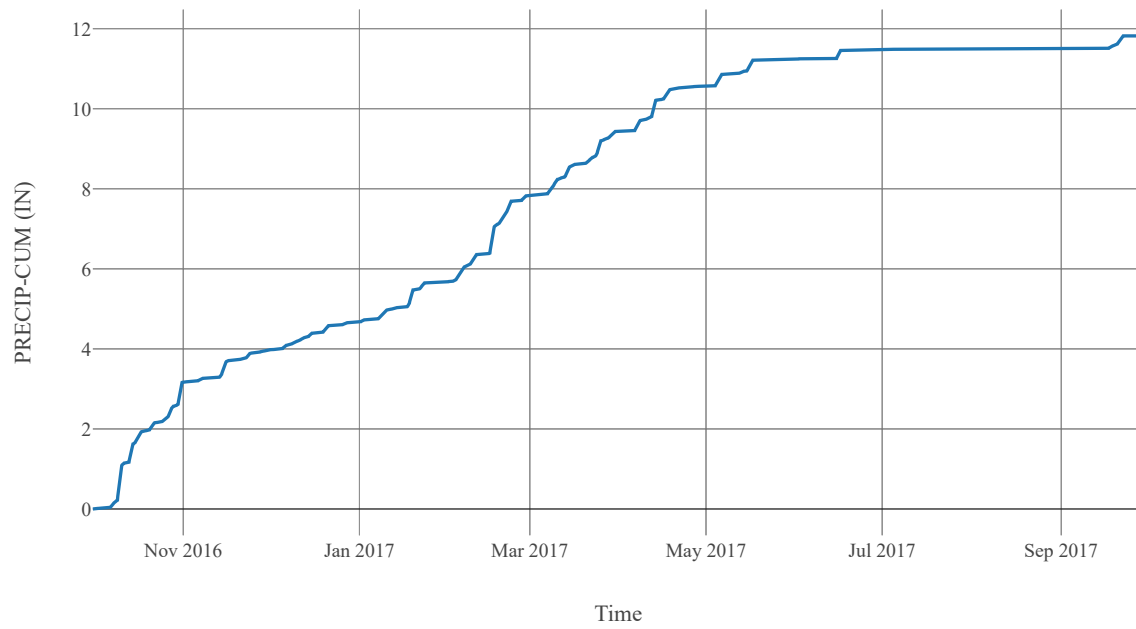
Outflow



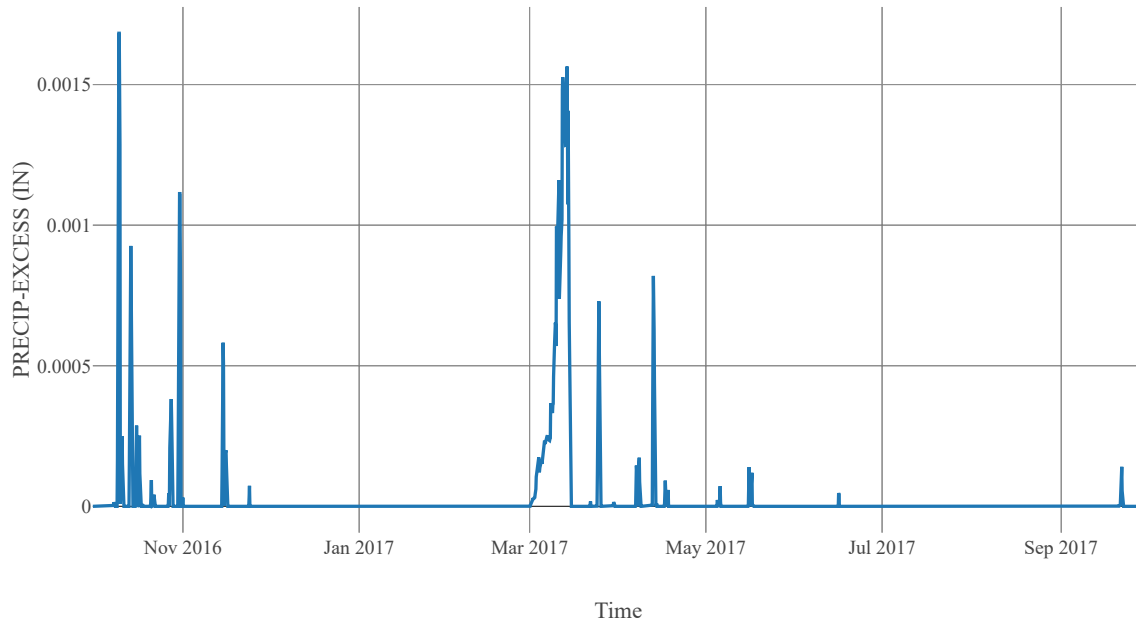
Precipitation



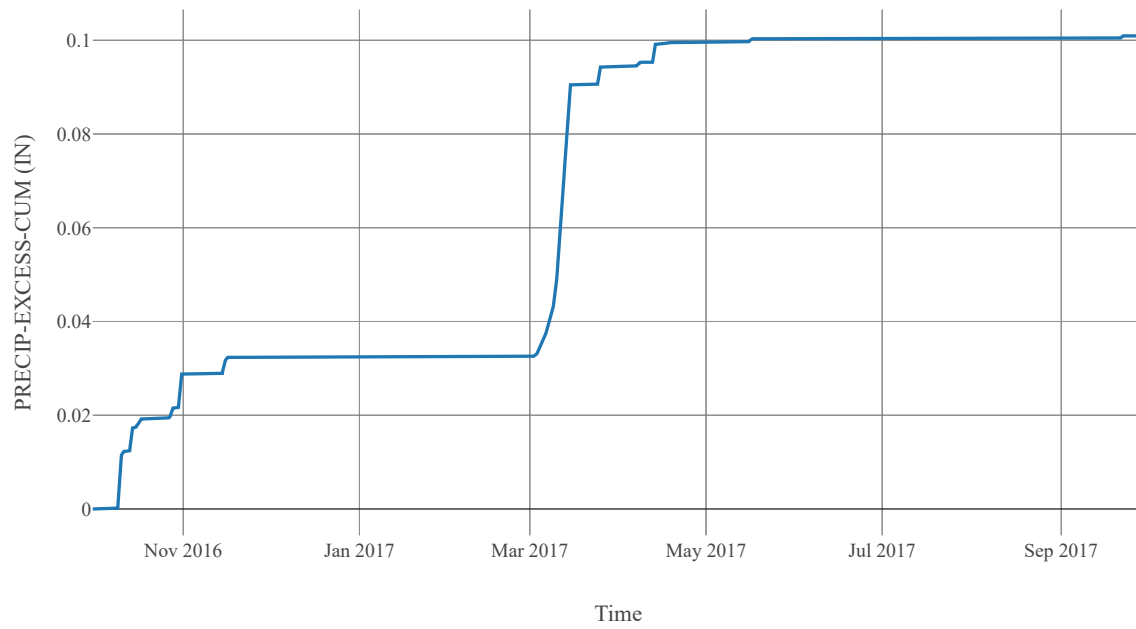
Cumulative Precipitation



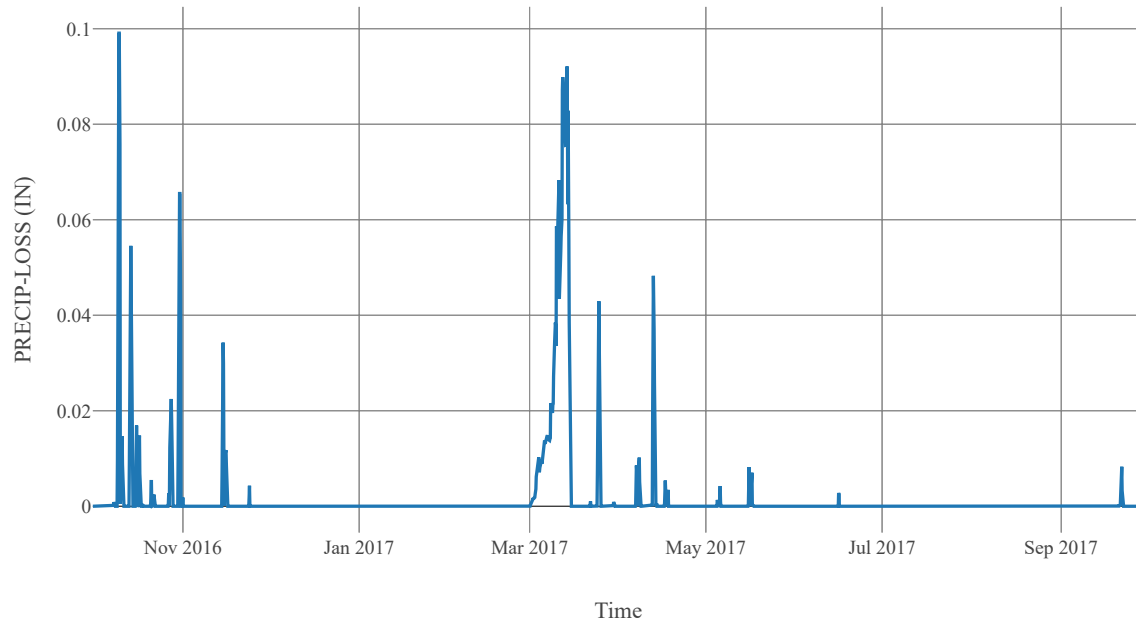
Excess Precipitation



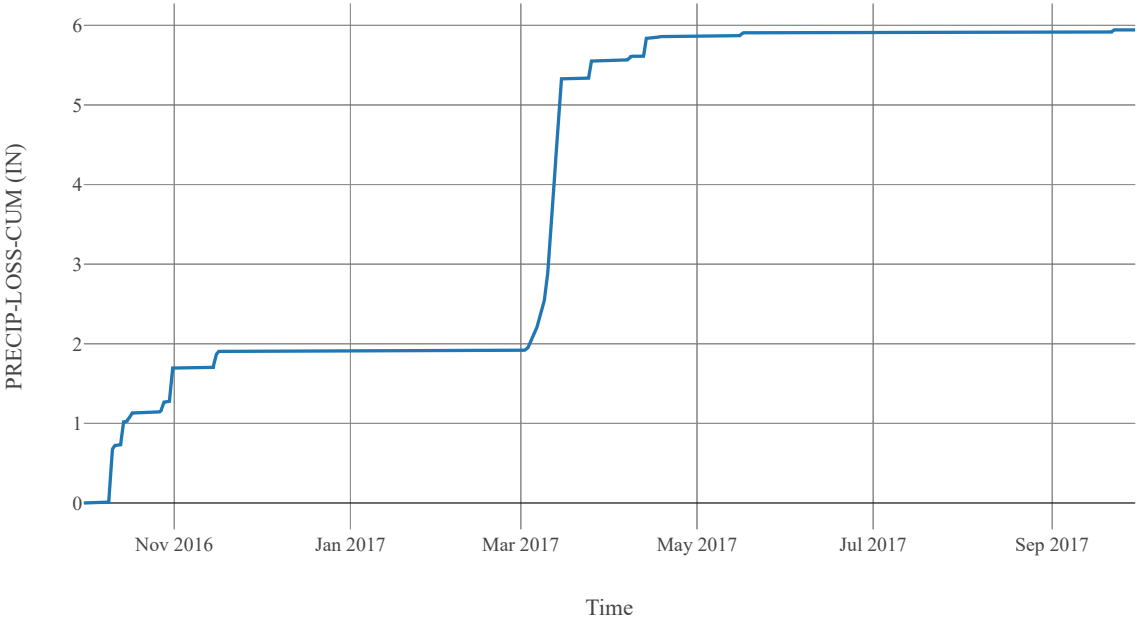
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Junction : PE16P4WW_CF

Downstream : MidColumbia_R010



Reach : MidColumbia_R010

Loss Method : None
Downstream : To Main Columbia

Route	
Method	Route None
Initial Variable	Combined Inflow
Channel Type	Unknown



Subbasin : MidColombia_S010

Area : 622.25
Latitude : 46.64
Longitude : -119.5
Downstream : To Main Columbia

Loss Rate	
Percolation Rate	0.25
Percent Impervious Area	0.49
Method	Deficit Constant
Initial Deficit	6
Maximum Deficit	6
Recovery Factor	1

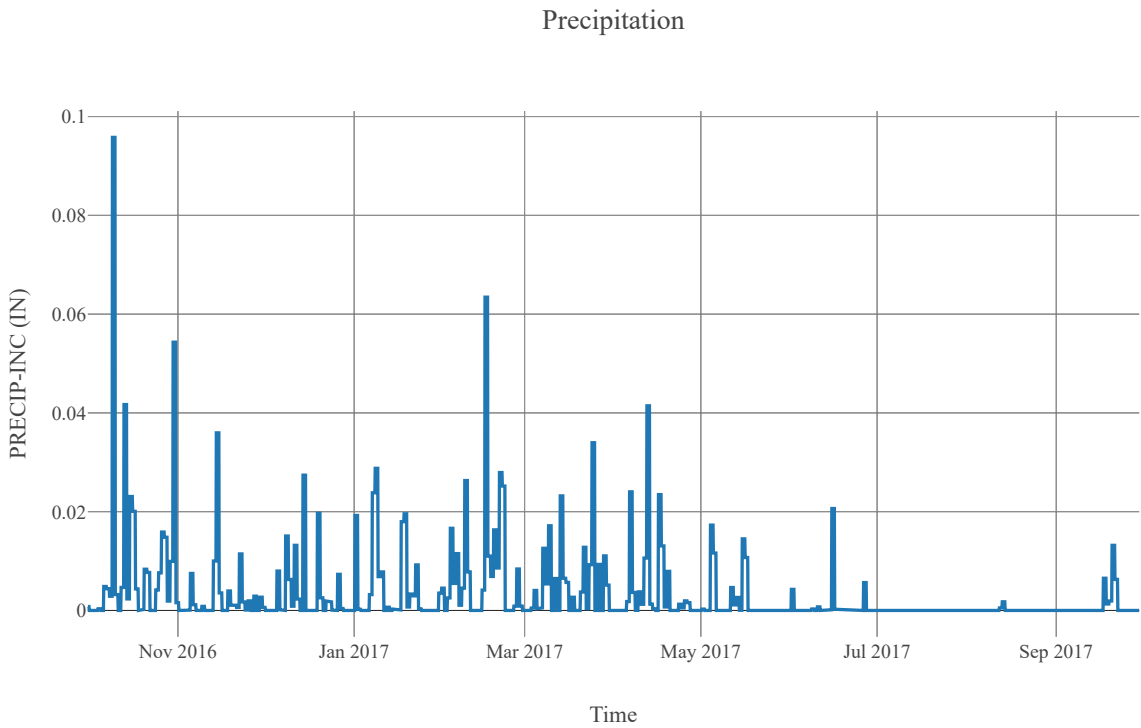
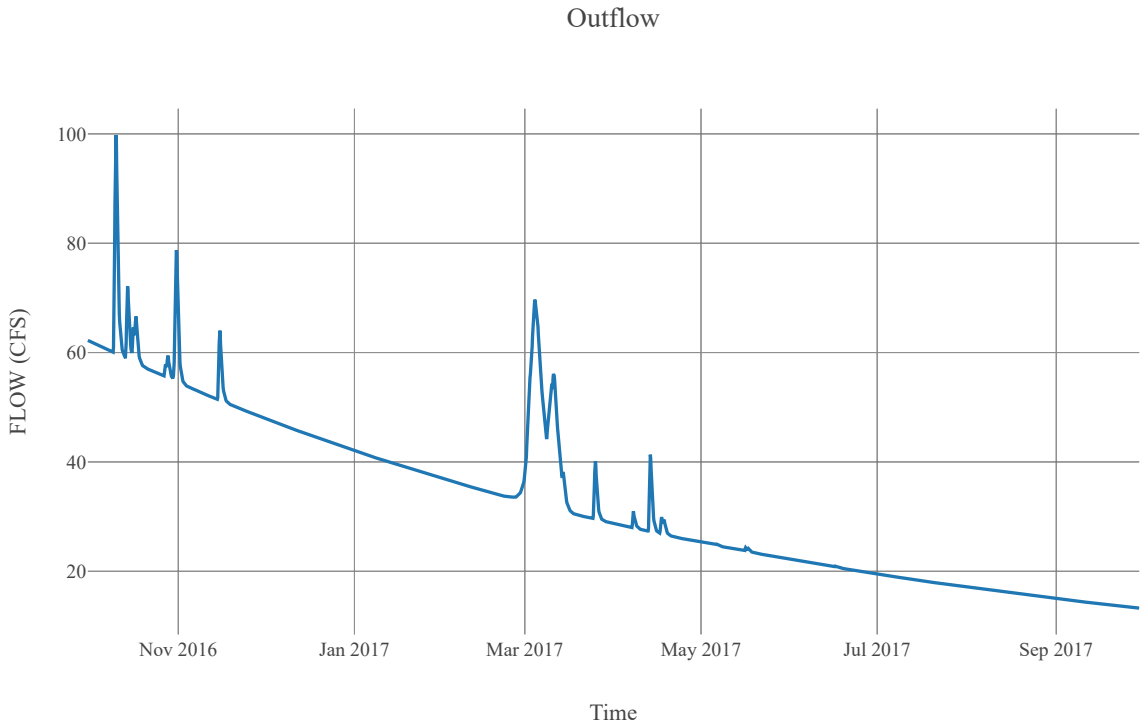
Canopy	
Initial Storage	0
Uptake Method	Simple
Method	Simple
Allow Simultaneous Precip Et	True
Crop Coefficient	1
Storage Capacity	0.1

Transform	
Clark Method Type	Specified
Time Area Method	Default
Method	Mod Clark
Grid Region Name	Middle Columbia
Time Of Concentration	14.13
Storage Coefficient	14.13

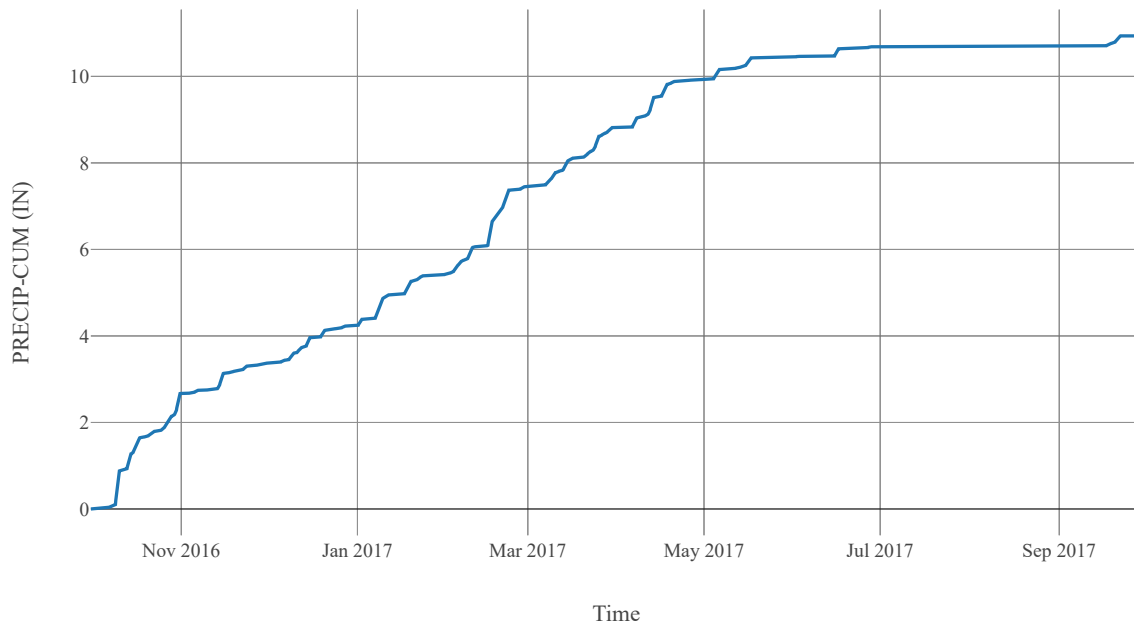
Baseflow	
Method	Linear Reservoir

Baseflow Layer List	1	Baseflow Fraction	0.5
		Initial Rate	0
		Layer Number	1
		Storage Coefficient	282.6
		Number Steps	1
	2	Baseflow Fraction	0.5
		Initial Rate	0.1
		Layer Number	2
		Storage Coefficient	5652
		Number Steps	1

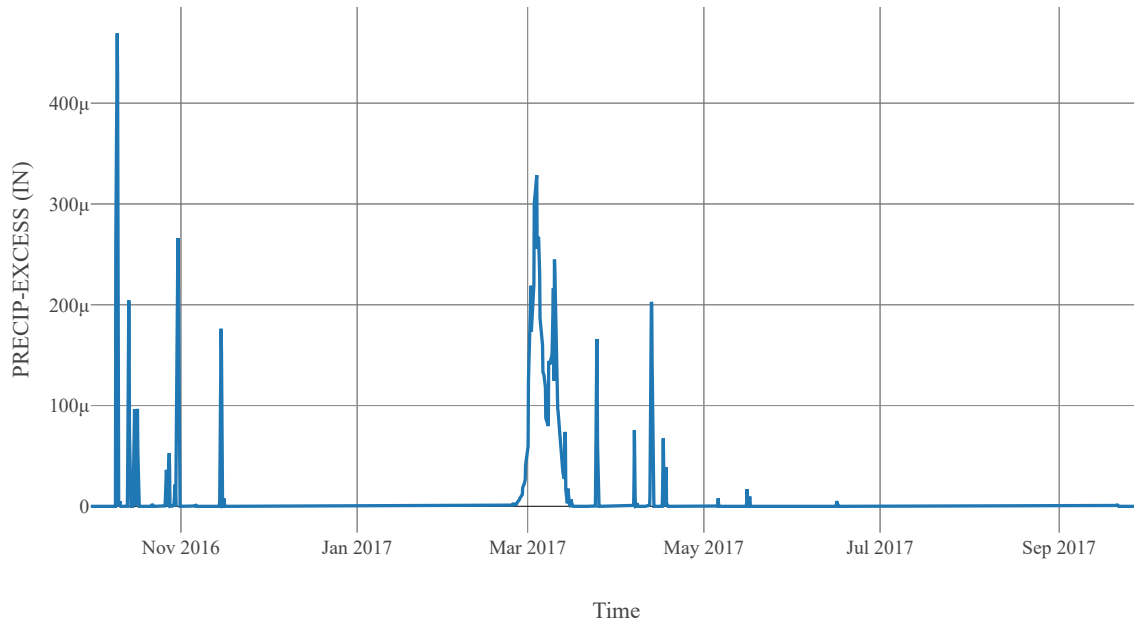
Statistics		
Name	Value	Unit
Baseflow Volume	22869.7	Ac-ft
Precipitation Volume	362923.01	Ac-ft
Loss Volume	179142.97	Ac-ft
Excess Volume	882.12	Ac-ft



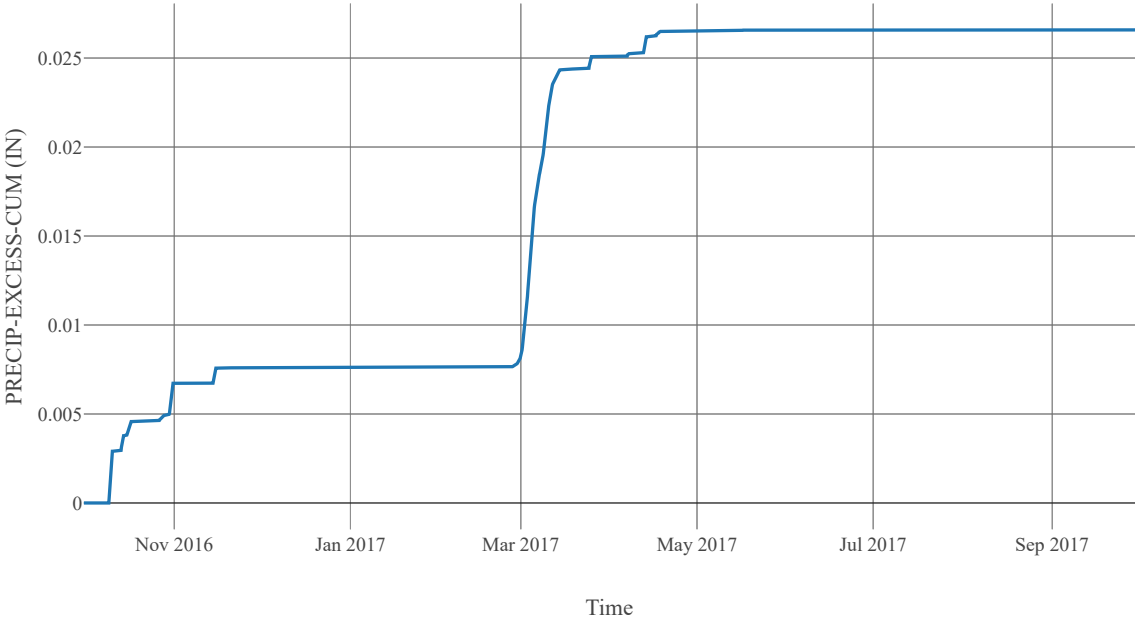
Cumulative Precipitation



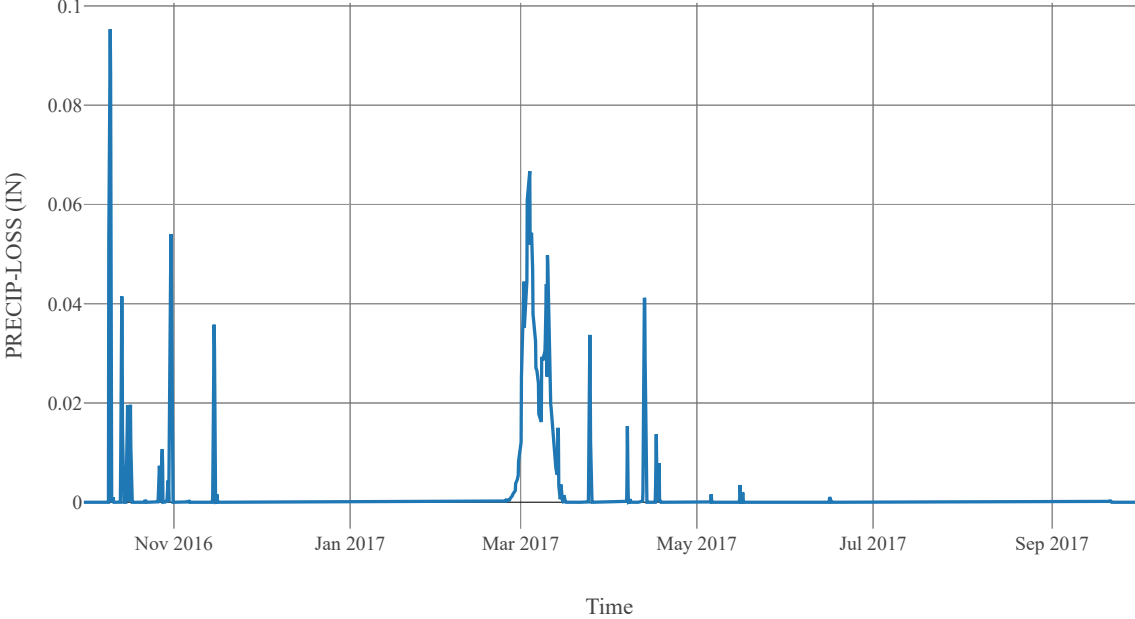
Excess Precipitation



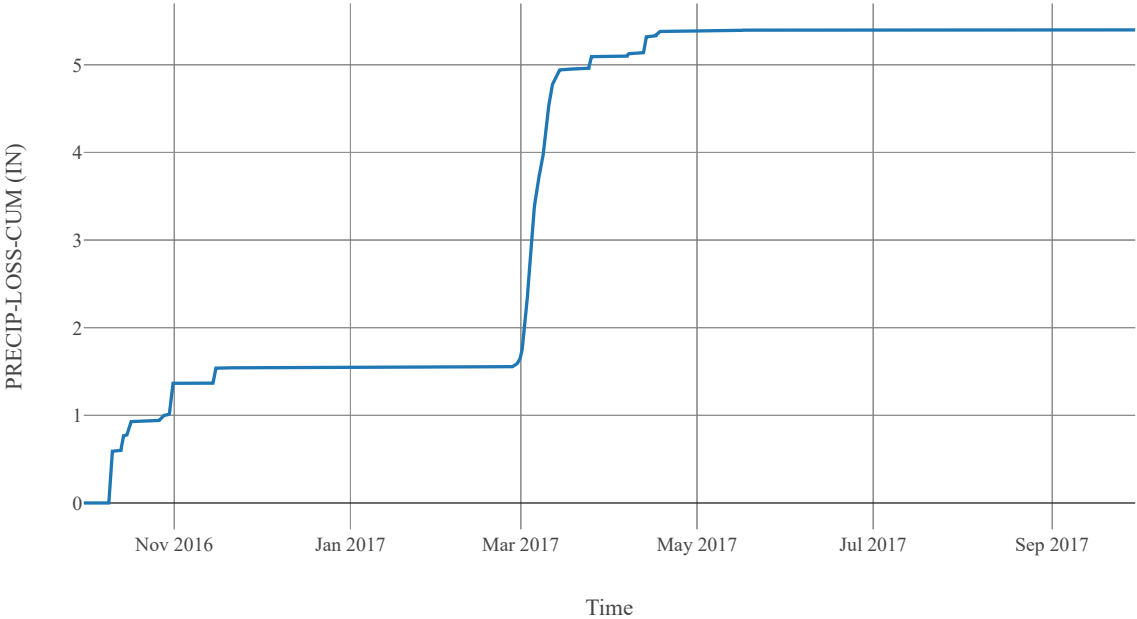
Cumulative Excess Precipitation



Precipitation Loss



Cumulative Precipitation Loss



Sink : ToMainColumbia

