
Command Reference:

SetStreamEstimateCoefficientsPFGage()

Set stream estimate coefficients to use a specific gage for proration factor calculations

StateMod Command
Version 3.09.01, 2010-02-01

The `SetStreamEstimateCoefficientsPFGage()` command indicates that the proration factor for a specified station/node should be calculated using only the area*precipitation value for the specified stream gage, rather than the next downstream node. The station/node is then treated as if it were a stream gage node for other natural flow calculations (as carried out by the `CalculateStreamEstimateCoefficients()` command). These commands should be specified before the `CalculateStreamEstimateCoefficients()` command.

The following dialog is used to edit the command and illustrates the syntax of the command.

Edit SetStreamEstimateCoefficientsPFGage() Command

This command sets the a substitute gage for use when calculating the stream estimate coefficients proration factor. The data indicate stations (nodes) where the proration factor should be calculated using only the gage instead of the next downstream node. The node is then treated as if it were a gage for other stream estimate coefficient calculations. This command should be used before stream estimate coefficients are calculated with the `CalculateStreamEstimateCoefficients()` command. The information is saved in a separate list, not as a part of the stream estimate stations or coefficients data - not matching an ID will set the information by default. The station ID **should not** contain a * wildcard pattern - provide a specific identifier.

Station ID: Required - specific stream estimate station to match.

Gage ID: Required - specific proration factor gage to use.

Command:

SetStreamEstimateCoefficientsPFGage() Command Editor

The command syntax is as follows:

`SetStreamEstimateCoefficientsPFGage (Parameter=Value, ...)`

Command Parameters

Parameter	Description	Default
ID	A single stream estimate station identifier to match.	None – must be specified.
GageID	A stream gage station identifier to use, instead of the downstream gage.	None – must be specified.

The following command file illustrates how a StateMod stream estimate coefficients file can be created:

```
StartLog(LogFile="rib.commands.StateDMI.log")
# rib.commands.StateDMI
#
# Creates the Stream Estimate Station Coefficient Data file
#
# Step 1 - read river nodes from the network file and create file framework
#
ReadStreamEstimateStationsFromNetwork(InputFile="..\Network\cm2005.net")
#
# Step 2 - set preferred gages for "neighboring" gage approach
#           this baseflow nodes are generally on smaller non-gaged tribs and have
#           different flow characteristics than next downstream gages
#
SetStreamEstimateCoefficientsPFGage(ID="360645",GageID="09055300")
SetStreamEstimateCoefficientsPFGage(ID="360801",GageID="09055300")
SetStreamEstimateCoefficientsPFGage(ID="362002",GageID="09054000")
SetStreamEstimateCoefficientsPFGage(ID="360829",GageID="09047500")
..similar commands omitted...
#
# Step 3 - calculate stream coefficients
CalculateStreamEstimateCoefficients()
#
# Step 4 - set proration factors directly
#
SetStreamEstimateCoefficients(ID="364512",ProrationFactor=1.000,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="374641",ProrationFactor=0.200,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="374648",ProrationFactor=0.350,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="380880",ProrationFactor=1.000,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="381594",ProrationFactor=0.800,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="384617",ProrationFactor=0.700,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="510639",ProrationFactor=1.000,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="514603",ProrationFactor=0.800,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="514620",ProrationFactor=1.000,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="510728",ProrationFactor=1.000,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="530555",ProrationFactor=0.180,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="530678",ProrationFactor=0.230,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="531082",ProrationFactor=1.000,IfNotFound=Warn)
SetStreamEstimateCoefficients(ID="954683",ProrationFactor=0.400,IfNotFound=Warn)
#
# Step 5 - create streamflow estimate coefficient file
#
WriteStreamEstimateCoefficientsToStateMod(OutputFile="..\StateMOD\cm2005.rib")
#
# Check the results
CheckStreamEstimateCoefficients(ID="*")
WriteCheckFile(OutputFile="rib.commands.StateDMI.check.html")
```