Title: Stream discharge in gaged watersheds at the HJ Andrews Experimental Forest, 1949 to present

Abstract:

Streamflow from selected small watersheds has been continuously monitored at the Andrews Forest beginning in November 1952 and the Lookout Creek Gauging Station has been maintained by the USGS since October, 1949. The objectives of this study include: (1) to evaluate long-term changes in hydrology associated with various management treatments, notably clearcut logging, selective logging, and burning; (2) to provide baseline data for affiliated precipitation and stream water chemistry and sediment transport studies; and (3) to characterize the hydrologic regime of old-growth forests at different elevations. Streamflow records from small watersheds began in November 1952 at WS 1, 2, and 3 (60 to 100 ha), 1963 at WS 6, 7, and 8 (15 to 22 ha) 1968 at WS 9 and 10 (9 and 10 ha), 1980 at Mack Creek (580 ha), and 1949 at Lookout Creek (6242 ha). Data have been collected continuously since the start of data collection for all watersheds, with the exception of WS7, which was shut down as a cost-saving maneuver from WY1988 through WY1994. See https://andrewsforest.oregonstate.edu/research/infrastructure/watersheds for other information.

Keywords: hydrology; silviculture; floods; radio telemetry; disturbance; hydrologic processes; stream discharge; streamflow; long term monitoring; timber harvest; water; runoff; forest ecosystems; experimental forests; watersheds; streams; long term studies;

Date data commenced: 1949-10-01
Date data terminated: 2019-09-30
Principal Investigator: Sherri L. Johnson

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2. Daily streamflow summaries
3. Monthly streamflow summaries
4. Annual streamflow summaries by wateryear (October 1 - September 30)
5. Instantaneous and total discharge for requested time intervals
6. Flow summaries for sediment and nutrient sampling periods
7. Discharge data calculated from discontinued rating curves (5 minute frequency data)

1. Corrected instantaneous stage height with flow calculations

Only Lookout Creek streamflow data is available here. Please use Entity 5 (the interactive FLOW program) to download high temporal resolution streamflow data for all other Andrews small watersheds. Lookout Creek data available here: 1) Hourly data has been reconstructed from USGS and USFS streamflow charts and punch tapes (1950-1986), 2) USGS 30 minute data (1986-2010), and 3) USGS 15 minute data (2010-present).

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</table>

**2. Daily streamflow summaries**

Daily data can also be interactively viewed, downloaded, and graphically displayed using [ClimDB/HydroDB](https://climhy.lternet.edu/).  

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</table>

**3. Monthly streamflow summaries**

Monthly data can also be interactively viewed, downloaded, and graphically displayed using [ClimDB/HydroDB](https://climhy.lternet.edu/).  

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4. Annual streamflow summaries by wateryear (October 1 - September 30)

Annual data can also be interactively viewed, downloaded, and graphically displayed using [ClimDB/HydroDB](https://climhy.lternet.edu/).

**Attribute List:**

- **STCODE**: N N char(5) enum
- **FORMAT**: N N numeric(2,0) range 4.0000 4.0000 number
- **SITECODE**: Y N char(6) place
- **WATERYEAR**: Y N numeric(4,0) range 1950.0000 2019.0000 number
- **MEAN_Q**: N Y numeric(8,3) range 0.0340 207.1000 cfs
- **MAX_Q**: N Y numeric(8,3) range 0.4130 8000.0000 cfs
- **MIN_Q**: N Y numeric(8,3) range 0.0000 15.0000 cfs
- **MEAN_Q_AREA**: N Y numeric(7,3) range 0.0180 8.9380 cfsm
- **TOTAL_Q_AREA**: N Y numeric(7,3) range 0.2490 116.6000 in
- **ESTCODE**: N N char(1) enum
- **ESTDAYS**: N N numeric(3,0) range 0.0000 150.0000 days
- **TOTAL_DAYS**: N N numeric(3,0) range 0.0000 366.0000 days

5. Instantaneous and total discharge for requested time intervals

This is the interactive FLOW program which allows downloads of all Andrews small watersheds for any time period at user-specified time intervals. Rating equations can also be displayed.

**Attribute List:**

- **STCODE**: N N char(5) enum
- **FORMAT**: N N numeric(2,0) range 5.0000 5.0000 number
- **SITECODE**: Y N char(6) place
- **DATE_TIME**: Y N datetime range 10/1/1952 12:00:00 AM, 10/1/2018 12:00:00 AM
- **EQN_SET_CODE**: N N char(3) enum
- **STAGE**: N Y numeric(6,3) range 0.0000 2.5000 ft
- **INST_Q**: N Y numeric(8,3) range 0.0000 8000.0000 cfs
- **MEAN_Q**: N Y numeric(8,3) range 0.0000 500.0000 cfs
- **MEAN_Q_AREA**: N Y numeric(7,3) range 0.0000 400.0000 cfsm
- **TOTAL_Q_INT**: N Y numeric(8,6) range 0.0000 2.0000 in
6. Flow summaries for sediment and nutrient sampling periods

Total flow is summarized, generally in 3 week periods, for inclusion with stream sampling data in CF002.

Attribute List:

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7. Discharge data calculated from discontinued rating curves (5 minute frequency data)

This data was online previously but has been deprecated in favor of new rating equations: WS1, 2, 3 (WY1999-2016); WS 8 (WY 1988-2016); and WS10 (WY 1997 - 2016)

Attribute List:

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<thead>
<tr>
<th>Attribute</th>
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<th>Type</th>
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Attributes Definitions:

BEGIN_DATETIME
Beginning date and time of proportional sampling period

DATE
Date

DATE_TIME
Date and time (PST) of stage height measurement

END_DATETIME
Ending date and time of proportional sampling period

EQN_SET_CODE
Equation set code describes the rating equation set and version used to calculate streamflow

ESTCODE
Estimate code

ESTDAYS
Number of days estimated in the summary period

EVENT_CODE
Indicates that a comment exists independently for this date and time, and is typically the installation or removal of a v-notch or other change in rating curves used, or a site maintenance visit

FORMAT
Entity number

INST_Q
Instantaneous flow as cubic feet per second (cfs)

INST_Q_AREA
Instantaneous flow as cubic feet per second per square mile (cfsm)

INTERVAL
Time interval in minutes (length of time since previous stage value)

MAX_Q
Maximum cubic feet per second (cfs) for this date (entity 2) or month (entity 3) or year (entity 4)

MEAN_Q
Mean flow as cubic feet per second (cfs) for the preceding time interval (entity 1, 5) or this date (entity 2) or month (entity 3) or year (entity 4)

MEAN_Q_AREA
Mean flow as cubic feet per second per square mile (cfsm) for the preceding time interval (entity 1, 5) or this date (entity 2) or month (entity 3) or year (entity 4)

MIN_Q
Minimum cubic feet per second (cfs) for this date (entity 2) or month (entity 3) or year (entity 4)

MONTH
Calendar month

SITECODE
Site code

STAGE
Stage height

STCODE
Study code

TOTAL_DAYS
Total days of non-missing record included in the summary period

TOTAL_Q
Total flow in cubic feet for the preceding time interval

TOTAL_Q_AREA
Total flow as inches of water (over the watershed area) for this date (entity 2) or month (entity 3) or year (entity 4)

TOTAL_Q_INT
Total flow as inches of water (over the watershed area) for the preceding time interval

TOTAL_Q_SMPL
Total flow as inches of water during proportional sampling period (over the watershed area)

WATERYEAR
Wateryear: October 1 - September 30

YEAR
Calendar year

Enumerated Domains:

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A Accepted value
M Missing value
E Estimated value
P Provisional data (subject to change)
Q Questionable value
S Proportional nutrient sample removed

Enumerated Domain for Attribute: STCODE
HF004 Study code HF004

Enumerated Domain for Attribute: EQN_SET_CODE
1 GSWS01, Equation set A, version 1, current version, original flume 1952-1956
2 GSWS01, Equation set B, version 1, current version, main flume 1956-Present
3 GSWS01, Equation set C, version 1, current version, v-notch 1999-Present summers only
4 GSWS02, Equation set A, version 1, current version, main flume 1952-Present
5 GSWS02, Equation set B, version 1, current version, v-notch 1999-Present summers only
6 GSWS03, Equation set A, version 1, current version, main flume 1952-Present
7 GSWS03, Equation set B, version 1, current version, main flume post-flood 1964-1966
8 GSWS03, Equation set C, version 1, current version, v-notch 1999-Present summers only
GSWS06, Equation set A, version 1, current version, original H-flume
1963-1997
GSWS06, Equation set B, version 1, current version, main flume 1997-Present

GSWS06, Equation set C, version 1, current version, v-notch 1998-Present
summers only

GSWS07, Equation set A, version 1, current version, original H-flume
1963-1997
GSWS07, Equation set B, version 1, current version, main flume 1997-Present

GSWS07, Equation set C, version 1, current version, v-notch 1998-Present
summers only

GSWS08, Equation set A, version 1, current version, original H-flume
1987-Present

GSWS08, Equation set B, version 1, old version, main flume 1987-Present

GSWS08, Equation set C, version 1, current version, v-notch 1997-Present
summers only

GSWS09, Equation set A, version 1, current version, original H-flume
1968-1973
GSWS09, Equation set B, version 1, old version, original v-notch 1973-1979
summers only
GSWS09, Equation set B, version 2, current version, original v-notch 1973-1979
summers only
GSWS09, Equation set C, version 1, old version, main flume 1973-Present
GSWS09, Equation set C, version 2, current version, main flume 1973-Present
GSWS09, Equation set D, version 1, current version, v-notch 1997-Present
summers only

GSWS10, Equation set A, version 1, current version, original H-flume
1968-1973
GSWS10, Equation set B, version 1, current version, original v-notch 1973-1979
summers only
GSWS10, Equation set C, version 1, old version, main flume 1973-Present

GSWS10, Equation set C, version 2, current version, main flume 1973-Present

GSWS10, Equation set D, version 1, current version, v-notch 1997-Present
summers only
GSWSMA, Equation set A, version 1, older version, main flume 1979-1995
GSWSMA, Equation set A, version 2, old version, main flume 1979-1995
GSWSMA, Equation set A, version 3, old version, main flume 1979-1995 prior
to fish ladder
GSWSMF, Equation set A, version 1, old version, fish ladder 1995-Present
GSWSMF, Equation set A, version 2, current version, fish ladder 1995-Present
GSWSMA, Equation set A, version 4, current version, main flume 1995-Present
represents concurrent fish ladder operation; equations are the same as version 3
GSWSMC, combined Mack Creek main flume + fish ladder (sum of eqn sets
34+35)

GSLOOK, USGS rating tables for Lookout Creek near Blue River (14161500)

GSTIDB, USGS rating tables for Blue River below Tidbits Creek (14161100)

GSLOOK, USGS rating table a for Lookout Creek near Blue River (14161500);
reconstructed rating curve 0
GSLOOK, USGS rating table b for Lookout Creek near Blue River (14161500);
reconstructed rating curve 1
GSLOOK, USGS rating table c for Lookout Creek near Blue River (14161500);
reconstructed rating curve 2
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<td>INSREM</td>
<td>Installation or removal of a v-notch weir, or a change in rating equations applied</td>
</tr>
<tr>
<td>MAINTAE</td>
<td>A maintenance event has occurred (e.g., site visit)</td>
</tr>
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WEATHR

A weather event is affecting the stream discharge measurement

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A Accepted value
M Missing value
E Estimated value
P Provisional data (subject to change)
Q Questionable value
S Proportional nutrient sample removed

Enumerated Domain for Attribute: STCODE
HF004 Study code HF004

Enumerated Domain for Attribute: ESTCODE
A Accepted value
M Missing value
E Estimated value
P Provisional data (subject to change)
Q Questionable value
S Proportional nutrient sample removed

Enumerated Domain for Attribute: STCODE
HF004 Study code HF004

Enumerated Domain for Attribute: ESTCODE
A Accepted value
M Missing value
E Estimated value
P Provisional data (subject to change)
Q Questionable value
S Proportional nutrient sample removed

Enumerated Domain for Attribute: STCODE
HF004 Study code HF004

Enumerated Domain for Attribute: ESTCODE
A Accepted value
M Missing value
E Estimated value
P Provisional data (subject to change)
Q Questionable value
S Proportional nutrient sample removed
Enumerated Domain for Attribute: STCODE
HF004 Study code HF004

Enumerated Domain for Attribute: EQN_SET_CODE
1 GSWS01, Equation set A, version 1, current version, original flume 1952-1956
2 GSWS01, Equation set B, version 1, current version, main flume 1956-Present
3 GSWS01, Equation set C, version 1, current version, v-notch 1999-Present summers only
4 GSWS02, Equation set A, version 1, current version, main flume 1952-Present
5 GSWS02, Equation set B, version 1, current version, v-notch 1999-Present summers only
6 GSWS03, Equation set A, version 1, current version, main flume 1952-Present
7 GSWS03, Equation set B, version 1, current version, main flume post-flood 1964-1966
8 GSWS03, Equation set C, version 1, current version, v-notch 1999-Present summers only
9 GSWS06, Equation set A, version 1, current version, original H-flume 1963-1997
10 GSWS06, Equation set B, version 1, current version, main flume 1997-Present
11 GSWS06, Equation set C, version 1, current version, v-notch 1998-Present summers only
13 GSWS07, Equation set B, version 1, current version, main flume 1997-Present
14 GSWS07, Equation set C, version 1, current version, v-notch 1998-Present summers only
15 GSWS08, Equation set A, version 1, current version, main flume 1987-Present
16 GSWS08, Equation set B, version 2, current version, main flume 1987-Present
17 GSWS08, Equation set C, version 1, current version, v-notch 1997-Present summers only
18 GSWS09, Equation set A, version 1, current version, original H-flume 1968-1973
19 GSWS09, Equation set B, version 1, current version, original H-flume 1968-1973 summers only
20 GSWS09, Equation set B, version 2, current version, original v-notch 1973-1979 summers only
21 GSWS09, Equation set C, version 1, old version, main flume 1973-Present
22 GSWS09, Equation set C, version 2, current version, main flume 1973-Present
23 GSWS09, Equation set D, version 1, current version, v-notch 1997-Present summers only
24 GSWS10, Equation set A, version 1, current version, original H-flume 1968-1973
25 GSWS10, Equation set B, version 1, current version, original v-notch 1973-1979 summers only
26 GSWS10, Equation set C, version 1, old version, main flume 1973-Present
27 GSWS10, Equation set C, version 2, current version, main flume 1973-Present
28 GSWS10, Equation set D, version 1, current version, v-notch 1997-Present summers only
29 GWSM, Equation set A, version 1, older version, main flume 1979-1995
30 GWSM, Equation set A, version 2, old version, main flume 1979-1995
GSWSMA, Equation set A, version 3, old version, main flume 1979-1995 prior
to fish ladder
GSWSMF, Equation set A, version 1, old version, fish ladder 1995-Present

GSWSMA, Equation set A, version 2, current version, fish ladder 1995-Present
represents concurrent fish ladder operation; equations are the same as version
3

GSWSMC, combined Mack Creek main flume + fish ladder (sum of eqn sets
34+35)

GSLOOK, USGS rating tables for Lookout Creek near Blue River (14161500)

GSTIDB, USGS rating tables for Blue River below Tidbits Creek (14161100)

GSLOOK, USGS rating table a for Lookout Creek near Blue River (14161500);
reconstructed rating curve 0
GSLOOK, USGS rating table b for Lookout Creek near Blue River (14161500);
reconstructed rating curve 1
GSLOOK, USGS rating table c for Lookout Creek near Blue River (14161500);
reconstructed rating curve 2
GSLOOK, USGS rating table d for Lookout Creek near Blue River (14161500);
reconstructed rating curve 3
GSLOOK, USGS rating table e for Lookout Creek near Blue River (14161500);
reconstructed rating curve 4
GSLOOK, USGS rating table f for Lookout Creek near Blue River (14161500);
original version; extended forward through WY 1956
GSLOOK, USGS rating table f for Lookout Creek near Blue River (14161500);
reconstructed rating curve 5; extended forward through WY 1956
GSLOOK, USFS rating table g for Lookout Creek near Blue River (14161500);
original version
GSLOOK, USFS rating table g for Lookout Creek near Blue River (14161500);
reconstructed rating curve 6
GSLOOK, USGS rating table 1 for Lookout Creek near Blue River (14161500);
original version; extended backward to include WY 1963
GSLOOK, USGS rating table 1 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 7; extended backward to include WY 1963
GSLOOK, USGS rating table 2 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 8
GSLOOK, USGS rating table 3 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 9
GSLOOK, USGS rating table 4 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 10
GSLOOK, USGS rating table 5 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 11
GSLOOK, USGS rating table 6 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 12
GSLOOK, USGS rating table 7 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 13
GSLOOK, USGS rating table 8 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 14
GSLOOK, USGS rating table 9 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 15
GSLOOK, USGS rating table 10 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 16
GSLOOK, USGS rating table 11 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 17
GSLOOK, USGS rating table 12 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 18
GSLOOK, USGS rating table 13 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 19
GSLOOK, USGS rating table 14 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 20
GSLOOK, USGS rating table 15 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 21
GSLOOK, USGS rating table 16 for Lookout Creek near Blue River (14161500);
reconstructed rating curve 22
GSLOOK, USGS rating table 17 for Lookout Creek near Blue River (14161500); reconstructed rating curve 23
GSLOOK, USGS rating table 18 for Lookout Creek near Blue River (14161500); reconstructed rating curve 24
GSWS01, Equation set D, version 1, current version, main flume 1999-Present (replacement for eqn_set_code=' 2')
GSWS02, Equation set C, version 1, current version, main flume 1999-Present (replacement for eqn_set_code=' 4')
GSWS03, Equation set D, version 1, current version, main flume 1999-Present (replacement for eqn_set_code=' 6')
GSWS08, Equation set D, version 1, current version, main flume 1999-Present (replacement for eqn_set_code=' 17')
GSWS10, Equation set E, version 1, current version, main flume 1999-Present (replacement for eqn_set_code=' 28')

Enumerated Domain for Attribute: ESTCODE
A  Accepted value
M  Missing value
E  Estimated value
P  Provisional data (subject to change)
Q  Questionable value
S  Proportional nutrient sample removed

Enumerated Domain for Attribute: STCODE
HF004  Study code HF004

Enumerated Domain for Attribute: ESTCODE
A  Accepted value
M  Missing value
E  Estimated value
P  Provisional data (subject to change)
Q  Questionable value
S  Proportional nutrient sample removed

Enumerated Domain for Attribute: STCODE
HF004  Study code HF004

Enumerated Domain for Attribute: EQN_SET_CODE
1  GSWS01, Equation set A, version 1, current version, original flume 1952-1956
2  GSWS01, Equation set B, version 1, current version, main flume 1956-Present
3  GSWS01, Equation set C, version 1, current version, v-notch 1999-Present summers only
4  GSWS02, Equation set A, version 1, current version, main flume 1952-Present
5  GSWS02, Equation set B, version 1, current version, v-notch 1999-Present summers only
6  GSWS03, Equation set A, version 1, current version, main flume 1952-Present
7  GSWS03, Equation set B, version 1, current version, main flume post-flood 1964-1966
8  GSWS03, Equation set C, version 1, current version, v-notch 1999-Present summers only
GSWS06, Equation set A, version 1, current version, original H-flume 1963-1997
GSWS06, Equation set B, version 1, current version, main flume 1997-Present

GSWS06, Equation set C, version 1, current version, v-notch 1998-Present summers only
GSWS07, Equation set B, version 1, current version, main flume 1997-Present

GSWS07, Equation set C, version 1, current version, v-notch 1998-Present summers only
GSWS08, Equation set A, version 1, current version, original H-flume 1963-1987
GSWS08, Equation set B, version 1, old version, main flume 1987-Present

GSWS08, Equation set B, version 2, current version, main flume 1987-Present

GSWS08, Equation set C, version 1, current version, v-notch 1998-Present summers only
GSWS09, Equation set A, version 1, current version, original H-flume 1968-1973
GSWS09, Equation set B, version 1, old version, original v-notch 1973-1979 summers only
GSWS09, Equation set B, version 2, current version, original v-notch 1973-1979 summers only
GSWS09, Equation set C, version 1, old version, main flume 1973-Present

GSWS09, Equation set C, version 2, current version, main flume 1973-Present
GSWS09, Equation set D, version 1, current version, v-notch 1997-Present summers only
GSWS09, Equation set D, version 2, current version, v-notch 1997-Present summers only
GSWS10, Equation set A, version 1, current version, original H-flume 1968-1973
GSWS10, Equation set B, version 1, current version, original v-notch 1973-1979 summers only
GSWS10, Equation set C, version 1, old version, main flume 1973-Present

GSWS10, Equation set C, version 2, current version, main flume 1973-Present
GSWS10, Equation set D, version 1, current version, v-notch 1997-Present summers only
GSWS10, Equation set D, version 2, current version, v-notch 1997-Present summers only
GSWSMA, Equation set A, version 1, older version, main flume 1979-1995
GSWSMA, Equation set A, version 2, old version, main flume 1979-1995
GSWSMA, Equation set A, version 3, old version, main flume 1979-1995 prior to fish ladder
GSWSMA, Equation set A, version 4, current version, main flume 1995-Present represents concurrent fish ladder operation; equations are the same as version 3
GSWSMF, Equation set A, version 1, old version, fish ladder 1995-Present
GSWSMF, Equation set A, version 2, current version, fish ladder 1995-Present
GSWSMA, Equation set A, version 4, current version, main flume 1995-Present represents concurrent fish ladder operation; equations are the same as version 3
GSWSMC, combined Mack Creek main flume + fish ladder (sum of eqn sets 34+35)

GSLOOK, USGS rating tables for Lookout Creek near Blue River (14161500)
GSLOOK, USGS rating table a for Lookout Creek near Blue River (14161500); reconstructed rating curve 0
GSLOOK, USGS rating table b for Lookout Creek near Blue River (14161500); reconstructed rating curve 1
GSLOOK, USGS rating table c for Lookout Creek near Blue River (14161500); reconstructed rating curve 2
GSLOOK, USGS rating table d for Lookout Creek near Blue River (14161500); reconstructed rating curve 3

GSLOOK, USGS rating table e for Lookout Creek near Blue River (14161500); reconstructed rating curve 4

GSLOOK, USGS rating table f for Lookout Creek near Blue River (14161500); original version; extended forward through WY 1956

GSLOOK, USGS rating table f for Lookout Creek near Blue River (14161500); reconstructed rating curve 5; extended forward through WY 1956

GSLOOK, USFS rating table g for Lookout Creek near Blue River (14161500); original version

GSLOOK, USFS rating table g for Lookout Creek near Blue River (14161500); reconstructed rating curve 6

GSLOOK, USGS rating table 1 for Lookout Creek near Blue River (14161500); original version; extended backward to include WY 1963

GSLOOK, USGS rating table 1 for Lookout Creek near Blue River (14161500); reconstructed rating curve 7; extended backward to include WY 1963

GSLOOK, USGS rating table 2 for Lookout Creek near Blue River (14161500); reconstructed rating curve 8

GSLOOK, USGS rating table 3 for Lookout Creek near Blue River (14161500); reconstructed rating curve 9

GSLOOK, USGS rating table 4 for Lookout Creek near Blue River (14161500); reconstructed rating curve 10

GSLOOK, USGS rating table 5 for Lookout Creek near Blue River (14161500); reconstructed rating curve 11

GSLOOK, USGS rating table 6 for Lookout Creek near Blue River (14161500); reconstructed rating curve 12

GSLOOK, USGS rating table 7 for Lookout Creek near Blue River (14161500); reconstructed rating curve 13

GSLOOK, USGS rating table 8 for Lookout Creek near Blue River (14161500); reconstructed rating curve 14

GSLOOK, USGS rating table 9 for Lookout Creek near Blue River (14161500); reconstructed rating curve 15

GSLOOK, USGS rating table 10 for Lookout Creek near Blue River (14161500); reconstructed rating curve 16

GSLOOK, USGS rating table 11 for Lookout Creek near Blue River (14161500); reconstructed rating curve 17

GSLOOK, USGS rating table 12 for Lookout Creek near Blue River (14161500); reconstructed rating curve 18

GSLOOK, USGS rating table 13 for Lookout Creek near Blue River (14161500); reconstructed rating curve 19

GSLOOK, USGS rating table 14 for Lookout Creek near Blue River (14161500); reconstructed rating curve 20

GSLOOK, USGS rating table 15 for Lookout Creek near Blue River (14161500); reconstructed rating curve 21

GSLOOK, USGS rating table 16 for Lookout Creek near Blue River (14161500); reconstructed rating curve 22

GSLOOK, USGS rating table 17 for Lookout Creek near Blue River (14161500); reconstructed rating curve 23

GSLOOK, USGS rating table 18 for Lookout Creek near Blue River (14161500); reconstructed rating curve 24

GSWS01, Equation set D, version 1, current version, main flume 1999-Present (replacement for eqn_set_code='2')

GSWS02, Equation set C, version 1, current version, main flume 1999-Present (replacement for eqn_set_code='4')

GSWS03, Equation set D, version 1, current version, main flume 1999-Present (replacement for eqn_set_code='6')

GSWS08, Equation set D, version 1, current version, main flume 1999-Present (replacement for eqn_set_code='17')

GSWS10, Equation set E, version 1, current version, main flume 1999-Present (replacement for eqn_set_code='28')

Enumerated Domain for Attribute: EVENT_CODE
NA No event is reported (not applicable)
INSREM Installation or removal of a v-notch weir, or a change in rating equations applied
MAINTE A maintenance event has occurred (e.g., site visit)
A weather event is affecting the stream discharge measurement.