Fraser Experimental Forest Metadata Report (FRA)

Fraser, Colorado

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Research Area Information

Fraser Experimental Forest

Research Area Information

Harvest URL -Option 2

http://www.fs.fed.us/rm/fraser/fraserdata.txt

Site URL

http://www.fs.fed.us/rm/fraser/

Site north bounding coordinate (decimal degree) 39.93

Site west bounding coordinate (decimal degree) .....-105.97

Site south bounding coordinate (decimal degree) 39.82

Site east bounding coordinate (decimal degree) .....-105.85

Site Watershed URL

http://www.fs.fed.us/rm/fraser/activeresearch.htm

Site Map URL

http://www.fs.fed.us/rm/fraser/hydrodb/fefmap.gif

Publications

Some publications are available at: http://www.fs.fed.us/rm/fraser/publications.htm

USGS Harvest URL

http://gce-lter.marsci.uga.edu/harvest/usgs/fra_lter.txt

Meteorlogical Stations

Headquarters

Meteorological Station

Latitude (decimal degrees) 39.9045
Longitude (decimal degrees) .....-105.8830
Elevation (meters; a.m.s.l.) 2763
Begin Date..... 07/01/1939

Air Temperature

Begin Date..... 07/01/1939
Data Logger Sampling Interval..... continuous
Summary Interval .....hourly
Data Accuracy (degree celsius) ..... +/-1.0 degree F

Precipitation

Begin Date..... 07/01/1939
Data Logger Sampling Interval..... continuous
Summary Interval .....hourly
Data Accuracy (millimeters) ..... +/-0.01 inches
Instrumentation Description

Dual traverse 12 inch capacity Belfort precipitation gauge with an 8 inch opening on the bucket.

Water Temperature

Watershed

East St. Louis Creek Watershed

Watershed Spatial Characteristics

North bounding coordinate (decimal degrees) 39.9
West bounding coordinate (decimal degrees) .....-105.89
South bounding coordinate (decimal degrees) 39.84
East bounding coordinate (decimal degrees) .....-105.85
Area (hectares) 803
Aspect (degrees azmuth) .....North
Minimum watershed elevation (meters; a.m.s.l) 2896
Maximum watershed elevation (meters; a.m.s.l) 3993

Watershed Ecological Characteristics

Mean annual precipitation (millimeters) 595
Mean snowpack description

274

Watershed Descriptions

Comparison description

This watershed is the control watershed.

Lower Fool Creek Watershed

Watershed Spatial Characteristics

North bounding coordinate (decimal degrees) 39.88
West bounding coordinate (decimal degrees) .....-105.87
South bounding coordinate (decimal degrees) 39.86
East bounding coordinate (decimal degrees) .....-105.85
Area (hectares) 289
Aspect (degrees azmuth) .....North
Minimum watershed elevation (meters; a.m.s.l) 2896

Maximum watershed elevation (meters; a.m.s.l) 3505

Watershed Ecological Characteristics

Mean annual precipitation (millimeters) 595

Mean snowpack description

337

Watershed Descriptions

Comparison description

Approximately 14 hectares of the watershed was impacted by roads and log decks. The watershed was harvested in the summers of 1954,1955, and 1956. Forty percent of the watershed was harvested (50% of the timbered area) using alternative cut and leave strips which varied from 1 to 6 tree heights wide.

Gauging Stations

East St. Louis Creek

Hydrologic Gauging Station

Latitude (decimal degrees) 39.8869
Longitude (decimal degrees) .....-105.8773
Elevation (meters; a.m.s.l.) 2905
Begin Date..... 3/31/1943
Associated meteorological station

Headquarters (HQ3)

Photo URL

http://www.fs.fed.us/rm/fraser/hydrodb/EastStLouisWeir.jpg

Weir Description

Data is recorded with two instruments: 1) paper punch analoger which can be automatically read with a digitizer and 2) a drum chart recorder. In the late 1990s the paper punch analoger was replaced with a High Sierra data logger.

Stream Discharge

Data Logger Sampling Interval..... continuous
Summary Interval .....15 minute
Data Accuracy (liters per second) ..... +/-0.01 feet

Lower Fool Creek

Hydrologic Gauging Station

Latitude (decimal degrees) 39.8919
Longitude (decimal degrees) .....-105.8693
Elevation (meters; a.m.s.l.) 2910
Begin Date..... 3/19/1940
Associated meteorological station

Headquarters (HQ3)

Photo URL

http://www.fs.fed.us/rm/fraser/hydrodb/FoolCreekWeir.jpg

Weir Calibration and Modification History

Data from 1940-1981 was measured with a flume, and data from 1979-present is measured with a weir, which catches 10% more flow (based on the 1979-1981 calibration period). Hence the 1982-present data is adjusted (which is why the watershed code is LFADJ for adjusted) to remove this extra 10% of the flow.

Stream Discharge

Begin Date..... 3/19/1940

Data Logger Sampling Interval..... continuous

Summary Interval .....15 minute

Data Accuracy (liters per second) ..... +/-0.01 feet

Instrumentation Description

Data is recorded with two instruments: 1) paper punch analoger which can be automatically read with a digitizer and 2) a drum chart recorder. In the late 1990s the paper punch analoger was replaced with a High Sierra data logger.

Sensor History

Data from 1940-1981 was measured with a flume, and data from 1979-present is measured with a weir, which catches 10% more flow (based on the 1979-1981 calibration period). Hence the 1982-present data is adjusted (which is why the watershed code is LFADJ for adjusted) to remove this extra 10% of the flow.