The Pine Watersheds Metadata Report
(PIN)

Oxford, Mississippi

Created by E:\lter\climhy\sitePDF.pl
on Mon Mar 12 09:50:35 2007

Research Area Information

The Pines Watershed ..... PIN

The Pines Watershed

Research Area Information

Harvest URL -Option 2

http://www2.srs.fs.fed.us/hydrodb/PineData.txt

Site north bounding coordinate (decimal degree) ..... 34.39941 N

Site west bounding coordinate (decimal degree) ..... 89.45661 W

Site south bounding coordinate (decimal degree) ..... 34.39301 N

Site east bounding coordinate (decimal degree) ..... 89.45118 W

Publications

1. Ursic, S. J.; Thames, J. L. 1960. Effect of cover types and soils on runoff in northern Mississippi. Journal of Geophysical Research 65(2):663-667. 2. Ursic, S. J.; Dendy, F. D. 1965. Sediment yields from small watersheds under various land uses and forest covers. In: Proc. of the Federal Inter-Agency Sedimentation Conference. U. S. Dept. Agric. Misc. Publ. No. 970, 7-52. 3. Ursic, S. J.; Duffy, P. D. 1972. Hydrologic Performance of Eroded Lands Stabilized with Pine. In: Proc. Mississippi Water Resources Research Institute, Mississippi State University, State College, Mississippi, 203-216. 4. Mansell, R. S.; Bloom, S. A.; Rhue, R. D. 1988. Simulated transport of multiple cations in soil using variable selectivity coefficients. Soil Science Soc. Amer. J. 52(6): 1533-1540. 5. Ursic, S. J.; Esher, Robert. J. 1988. Influence of Small Mammals on Stormflow Responses of Pine-Covered Catchments. Water Resources Bull. 24(1): 133-139. 6. Kress, M. W.; Baker, R.; Ursic, S. J. 1990. Chemistry Response of Two Forested Watersheds to Acid Atmospheric Deposition. Water Resources Bull. 26(5): 747-755. 7. Marion, Daniel A.; Ursic, S. J. 1993. Sediment Production in Forests of the Coastal Plain, Piedmont, and Interior Highlands. In: Technical Workshop on Sediments: Proc. of the EPA/Forest Service Workshop; 1992 February 3-7; Corvallis, OR. Washington , D. C.; Terrene Institute: 19-27. 8. Esher, R. J.; Baker, J. B.; Ursic, S. J.; Miller, L. C. 1993. Responses of Invertebrates to Experimental Acidification of the Forest Floor under Southern Pines. In: Longcore, Jerry R.; Sepik, Greg F., eds. Proc. 8th American Woodcock Symposium; 1990 October 29-November 2; Lafayette, IN. Biological Rep. 16. Washington, D. C. : U. S. Depatrment of the Interior, Fish and Wildlife Service: 75-83. 9. Halverson, Howard G,; Guldin, James M. 1996. Effects of a Severe Ice Storm on Mature Loblolly Pine Stands in North Mississippi. In: Edwards, M. Boyd, ed. Proc. 8th Biennial Southern Silvicultural Research Conference, 1994, November 1-3, Auburn, AL. General Technical Report SRS-1. Ashville NC. USDA Forest Service, Southern Research Station: 147-153.

USGS Harvest URL

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

Meteorlogical Stations

Pine Watershed 1 Precipitation..... Pine1P

Watershed

Pine Watershed 1.....Pine1
Pine Watershed 2.....Pine2
Pine Watershed 3.....Pine3

Pine Watershed 1

Watershed Spatial Characteristics

North bounding coordinate (decimal degrees) ..... 34.39482 N
West bounding coordinate (decimal degrees) ..... 89.45362 W
South bounding coordinate (decimal degrees) ..... 34.39360 N
East bounding coordinate (decimal degrees) ..... 89.45196 W
Area (hectares) 1.36
Aspect (degrees azmuth) 235
Minimum watershed elevation (meters; a.m.s.l) 9.1
Maximum watershed elevation (meters; a.m.s.l) 29.0

Watershed Descriptions

Soil description

The soil types on the watersheds are 29% loessial and 71% Coastal Plain. Loessial soils are Lexington, Loring, and Grenada, while the Coastal Plain soils are principally Ruston.

Treatment History

The basin was initially planted with loblolly pine in 1938. Stand was thinned in 1958 as part of the establishment of the experimental area. No treatments had been applied prior to termination of site in 1996.

Pine Watershed 2

Watershed Spatial Characteristics

North bounding coordinate (decimal degrees) ..... 34.39505 N
West bounding coordinate (decimal degrees) ..... 89.45224 W
South bounding coordinate (decimal degrees) ..... 34.39301 N
East bounding coordinate (decimal degrees) ..... 89.45118 W
Area (hectares) 1.45
Aspect (degrees azmuth) 180
Minimum watershed elevation (meters; a.m.s.l) 12.2

Maximum watershed elevation (meters; a.m.s.l) 29.7

Watershed Descriptions

Soil description

The soil types on the watersheds are 46% loessial and 54% Coastal Plain. Loessial soils are Lexington, Loring, and Grenada, while the Coastal Plain soils are principally Ruston.

Pine Watershed 3

Watershed Spatial Characteristics

North bounding coordinate (decimal degrees) ..... 34.39941 N
West bounding coordinate (decimal degrees) ..... 89.45661 W
South bounding coordinate (decimal degrees) ..... 34.39817 N
East bounding coordinate (decimal degrees) ..... 89.45544 W
Area (hectares) 1.05
Aspect (degrees azmuth) 25
Minimum watershed elevation (meters; a.m.s.l) 19.8
Maximum watershed elevation (meters; a.m.s.l) 30.5

Watershed Descriptions

Soil description

The soil types on the watersheds are 100% loessial. Loessial soils are Lexington, Loring, and Grenada

Gauging Stations

Pine Watershed 1 Flume Pine1F
Pine Watershed 2 Flume Pine2F
Pine Watershed 3 Flume Pine3F

Pine Watershed 1 Flume

Hydrologic Gauging Station

Latitude (decimal degrees) ..... 34.39437 N

Longitude (decimal degrees) ..... 89.45360 W

Elevation (meters; a.m.s.l.) 9.1

Begin Date 01/02/1958

Watershed Area (hectares) 1.36

History

Twelve-hr charts were changed weekly on the FW-1. Charts were stored in a separate file for each station by water-year. The datapod checked stage every two minutes and recorded both time and stage when the stage changed by 3 mm (0.01 ft). Datapod batteries were changed approximately monthly. Datapod chips were read and converted to ASCII data files using an Omnidata Datapod Model 217 DSM Reader and were then reviewed by a hydrologic technician. Any discrepancies between chart and datapod records were resolved by using data from the FW-1 chart. Corrected and verified data files were stored on diskette and PC hard drive.

Weir Description

All streamflow data are based on stage measurements within a 3-foot H-flume. Stage was measured using both a Belfort FW-1 stage recorder and (after 09/08/1992) a potentiometer connected to a Omnidata DP115 Datapod. Twelve-hr charts were used on the FW-1. The datapod checked stage every two minutes and recorded both time and stage when the stage changed by 3 mm (0.01 ft).

Weir Calibration and Modification History

Calibration Period was 02/01/1958, through 09/30/1997. Modification History: From 02/01/1958 to 09/08/1992, stage was measured with just the FW-1 using a 12-hr chart. From 09/08/1992 to 09/30/1997, stage was measured using both the FW-1 and potentiometer, and recorded on a 24-hr chart and Omni datapod, respectively. All stage measurements were discontinued on 9/30/1997.

Stream Discharge

Data Logger Sampling Interval ..... 2 minute

Summary Interval ..... 2 minute

Data Accuracy (liters per second) ..... 0.25 L/s

Pine Watershed 2 Flume

Hydrologic Gauging Station

Latitude (decimal degrees) ..... 34.39303 N

Longitude (decimal degrees) ..... 89.45200 W

Elevation (meters; a.m.s.l.) 12.2

Begin Date 04/04/1958

Watershed Area (hectares) 1.45

History

Twelve-hr charts were changed weekly on the FW-1. Charts were stored in a separate file for each station by water-year. The datapod checked stage every two minutes and recorded both time and stage when the stage changed by 3 mm (0.01 ft). Datapod batteries were changed approximately monthly. Datapod chips were read and converted to ASCII data files using an Omnidata Datapod Model 217 DSM Reader and were then reviewed by a hydrologic technician. Any discrepancies between chart and datapod records were resolved by using data from the FW-1 chart. Corrected and verified data files were stored on diskette and PC hard drive.

Weir Description

All streamflow data are based on stage measurements within a 3-foot H-flume. Stage was measured using both a Belfort FW-1 stage recorder and (after 09/08/1992) a potentiometer connected to a Omnidata DP115 Datapod. Twelve-hr charts were used on the FW-1. The datapod checked stage every two minutes and recorded both time and stage when the stage changed by 3 mm (0.01 ft).

Weir Calibration and Modification History

Calibration Period was 04/25/1958, through 09/30/1997. Modification History: From 04/25/1958 to 09/08/1992, stage was measured with just the FW-1 using a 12-hr chart. From 09/08/1992 to 09/30/1997, stage was measured using both the FW-1 and potentiometer, and recorded on a 24-hr chart and Omni datapod, respectively. All stage measurements were discontinued on 9/30/1997.

Stream Discharge

Data Logger Sampling Interval ..... 2 minute

Summary Interval ..... 2 minute

Data Accuracy (liters per second) ..... 0.25 L/s

Pine Watershed 3 Flume

Hydrologic Gauging Station

Latitude (decimal degrees) ..... 34.39934 N

Longitude (decimal degrees) ..... 89.45556 W

Elevation (meters; a.m.s.l.) 19.8

Begin Date..... 02/02/1958

Watershed Area (hectares) 1.05

History

Twelve-hr charts were changed weekly on the FW-1. Charts were stored in a separate file for each station by water-year. The datapod checked stage every two minutes and recorded both time and stage when the stage changed by 3 mm (0.01 ft). Datapod batteries were changed approximately monthly. Datapod chips were read and converted to ASCII data files using an Omnidata Datapod Model 217 DSM Reader and were then reviewed by a hydrologic technician. Any discrepancies between chart and datapod records were resolved by using data from the FW-1 chart. Corrected and verified data files were stored on diskette and PC hard drive.

Weir Description

All streamflow data are based on stage measurements within a 3-foot H-flume. Stage was measured using both a Belfort FW-1 stage recorder and (after 09/08/1992) a potentiometer connected to a Omnidata DP115 Datapod. Twelve-hr charts were used on the FW-1. The datapod checked stage every two minutes and recorded both time and stage when the stage changed by 3 mm (0.01 ft).

Weir Calibration and Modification History

Calibration Period was 02/28/1958, through 09/30/1997. Modification History: From 02/28/1958 to 09/08/1992, stage was measured with just the FW-1 using a 12-hr chart. From 09/08/1992 to 09/30/1997, stage was measured using both the FW-1 and potentiometer, and recorded on a 24-hr chart and Omni datapod, respectively. All stage measurements were discontinued on 9/30/1997.

Stream Discharge

Data Logger Sampling Interval..... 2 minute

Summary Interval .....2 minute

Data Accuracy (liters per second) .....0.25 L/s