

**WASHINGTON DEPARTMENT OF ECOLOGY**  
**ENVIRONMENTAL ASSESSMENT PROGRAM**  
**FRESHWATER MONITORING UNIT**  
**STREAM DISCHARGE TECHNICAL NOTES**

**STATION ID:** 29C100  
**STATION NAME:** Wind River at Stabler  
**WATER YEAR:** 2010  
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**Introduction**

Watershed Description

The basin consists mainly of Forest Service lands. Reference gage heights are determined by staff gage observations. During extreme high and low discharge events the staff gage can become submerged or de-watered. During these times secondary gages are used to determine gage height.

Gage Location

Ecology's telemetry stream gage on the Wind River at Stabler is located at river mile 11.0, on Hemlock Road,. The gage is on the left bank on the upstream side of bridge.

Table 1.

Drainage Area (square miles)	107
Latitude (degrees, minutes, seconds)	45 48 28
Longitude (degrees, minutes, seconds)	121 54 33

## Discharge

Table 2. Discharge Statistics.

Mean Annual Discharge (cfs)	515
Median Annual Discharge (cfs)	484
Maximum Daily Mean Discharge (cfs)	2,000
Minimum Daily Mean Discharge (cfs)	58
Maximum Instantaneous Discharge (cfs)	2,320
Minimum Instantaneous Discharge (cfs)	57
Discharge Equaled or Exceeded 10 % of Recorded Time (cfs)	984
Discharge Equaled or Exceeded 90 % of Recorded Time (cfs)	94
Percent of Time Discharge is Greater Than Range of Ratings	0%
Percent of Time Discharge is Less Than Range of Ratings	0%

Note: Statistics displayed in Table 2 may not include values in which the predicted discharge exceeds the range of ratings.

## Narrative

There were no days where the rating was exceeded.

## Error Analysis

Table 3. Error Analysis Summary.

Logger Drift Error (% of discharge)	2.5%
Weighted Rating Error (% of discharge)	17%
Total Potential Error (% of discharge)	19.5%

**Rating Table(s)**

Table 4. Rating Table Summary

Rating Table No.	2			
Period of Ratings	10-01-08 2-27-13			
Range of Ratings (cfs)	66 to 1,338			
No. of Defining Measurements	32			
Rating Error (%)	16.9%			

Rating Table No.				
Period of Ratings				
Range of Ratings (cfs)				
No. of Defining Measurements				
Rating Error (%)				

**Narrative**

Flow measurements are influenced by turbulence and bedrock side's ledges and very deep pools.

## Stage Record

Table 5. Stage Record Summary

Minimum Recorded Stage (feet)	2.28
Maximum Recorded Stage (feet)	8.96
Range of Recorded Stage (feet)	6.68
Number of Un-Reported Days	0
Number of Days Qualified as Estimates	0
Number of Days Qualified as Unreliable Estimates	0

## Narrative

Flows exceeded the interpolated range of the rating 29 days. However these were considered reliable extrapolations.

## Modeled Discharge

Table 6. Model Summary

Model Type (Slope conveyance, other, none)	
Range of Modeled Stage (feet)	
Range of Modeled Discharge (cfs)	
Valid Period for Model	
Model Confidence	

## Surveys

Table 7. Survey Type and Date (station, cross section, longitudinal)

Type	Date
All	08/26/2009

## Activities Completed

A cross sectional, and longitudinal survey of the station was conducted on 08/26/2009.