

Summer Low Flow Trend Indicator 1975-2017
Data.wa.gov Metadata
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The following descriptions explain the contents of each column in this data set:

- **Stn ID**: The official station identification code for each U.S. Geological Survey or U.S. Bureau of Reclamation flow gaging station.
- **Station Name**: A shortened version of the official flow gage name.
- **Salmon Region**: The 7 Washington State Salmon Recovery Regions.
- **WRIA**: The Water Resource Inventory Area where the watershed that drains to the flow gaging station is located.
- **Trib Level**: Indicates how far from the mouth of the river system the gage is located, based on the naming conventions of tributaries:
 - 1 = mainstem site (drains to sea or sound).
 - 2 = tributary to Level 1 mainstem site (note: all mainstem sites on rivers that drain to the Columbia River, such as the Yakima River, are Level 2).
 - 3 = tributary to Level 2 tributary.
 - 4 = tributary to Level 3 tributary.
- **M-K p**: The 'p' value for the Mann-Kendall non-parametric trend test.
 - A 'p' less than 0.5 indicates that "more likely than not" a trend exists, rather than a relationship due to randomness, a 'p' less than 0.5 but greater than 0.1 is designated as a "weak" trend.
 - A 'p' level less than 0.1 indicates that it's "very likely" a trend exists, and is designated as a "strong" trend.
 - A 'p' value greater than 0.5 is considered most likely due to randomness, and is designated as "no trend".
- **Reg p**: The 'p' value for the linear regression trend test. The same designations for the 'p' value apply as defined above for "M-K p".
- **Trend Category**: Based on the lowest 'p' value of the Mann-Kendall and Linear Regression trend tests, the trends are placed in one of five categories:

- Strong increasing = positive slope on linear regression and at least one 'p' value less than 0.1.
 - Weak increasing = positive slope on linear regression and at least one 'p' value less than 0.5.
 - No trend = both 'p' values greater than 0.5.
 - Weak decreasing = negative slope on linear regression and at least one 'p' value less than 0.5.
 - Strong decreasing = negative slope on linear regression and at least one 'p' value less than 0.1.
- Trend (cfs/yr): The slope on the linear regression line, representing the average annual increase or decrease in flow over the period of record.
 - Trend (%/year): The slope of the linear regression line divided by the average over the period of record of the annual values of minimum 30-day average low flow. This represents the average annual percent increase or decrease in flow.
 - Cat. Change from 2011: This shows how the trend category for this gage has changed from baseline conditions (1975-2011 trend) with 6 more years of flow data added (current 1975-2017 trend).
 - Change from 2016: This shows how the trend for this gage has changed from last year's trend (1975-2016) with 1 more year of flow data added (current 1975-2017 trend).
 - up = the trend in annual percent change of 30-day average low flow per year has increased (less negative or more positive) compared to last year.
 - down = the trend in annual percent change of 30-day average low flow per year has decreased (more negative or less positive) compared to last year.