Create valid Events by polling each site.

* Filter for HU to limit to Great lake HU2 – 04;
* Set alerts for specific HU.

Store HUC,

<https://waterwatch.usgs.gov/webservices/realtime?region=oh&format=json>

<https://waterdata.usgs.gov/oh/nwis/uv?site_no=04200500> – black river

<https://waterdata.usgs.gov/oh/nwis/uv?site_no=04201400> – Rocky river.

#### Output Description

Formatted output is returned for each site that meets the filter criteria. Each site grouping contains the following elements:

|  |  |  |
| --- | --- | --- |
| **Element Name** | **Description** | **Examples** |
| **site\_no** | Each site in the USGS data base has a unique 8- to 15-digit identification number. Site numbers are assigned based on this logic. You can search using an exact match or match using a partial site number. To use an exact match you must include all of the digits including any leading zeros (0) that make up the complete site number. A site will not be found if the site number has a leading zero and it is not included in the string tested using an exact match. | **07144100** |
| **station\_nm** | This is the official name of the site in the database. | **L ARKANSAS R NR SEDGWICK, KS** |
| **dec\_lat\_va** | Decimal latitude. | **37.8831** |
| **dec\_long\_va** | Decimal longitude. | **-97.4245** |
| **huc\_cd** | In the United States, watersheds have been numbered since the 1970's using an 8-digit system known as a ["Hydrologic Unit Code"](http://help.waterdata.usgs.gov/tutorials/site-information/what-is-my-watershed-address-and-how-will-it-help-me-find-usgs-data) (HUC). | **11030012** |
| **flow** | Is the volume of water flowing past a given point in the stream in a given period of time. For periods where flow is replaced by a status code see the following reference for additional information [on status codes.](http://help.waterdata.usgs.gov/codes-and-parameters/instantaneous-and-daily-value-status-codes) | **114** |
| **flow\_unit** | A rate of the flow, in streams and rivers, for example. It is equal to a volume of water one foot high and one foot wide flowing a distance of one foot in one second. One "cfs" is equal to 7.48 gallons of water flowing each second. | **cfs** |
| **flow\_dt** | Is the measurement date and local standard time of the flow element. | **2016-01-20 08:15:00** |
| **stage** | Is the height of the water in the stream above a reference point (also known as gage height). Gage height refers to the elevation of the water surface in the specific pool at the streamgaging station, not along the entire stream. Gage height also does not refer to the depth of the stream. Measurements of gage height are continually recorded by equipment inside a gagehouse on the streambank. For periods where stage is replaced by a status code see the following reference for additional information [on status codes.](http://help.waterdata.usgs.gov/codes-and-parameters/instantaneous-and-daily-value-status-codes) | **3.37** |
| **stage\_unit** | Is the unit used in the measurement of the stage element. | **ft** |
| **stage\_dt** | Is the measurement date and local standard time of the stage element. | **2016-01-20 08:15:00** |
| **class** | Streamflow condition classification.  0 - Not valid (internal use)  1 - New minimum  2 - ge old minimum and le 5th percentile  3 - gt 5th percentile and le 10th percentile  4 - gt 10th percentile and le 25th percentile  5 - gt 25th percentile and le 75th percentile  6 - gt 75th percentile and le 90th percentile  7 - gt 90th percentile and le old maximum  8 - New maximum  Additional details regarding the class value can be found in the metadata describing["Realtime USGS Streamflow Stations."](http://water.usgs.gov/GIS/metadata/usgswrd/XML/realstx.xml) | **0** |
| **percentile** | A percentile is a value on a scale of one hundred that indicates the percent of a distribution that is equal to or below it. | **86.42** |
| **percent\_median** | percent\_median = flow/long\_term\_median \* 100 | **240** |
| **percent\_mean** | percent\_mean = flow/long\_term\_mean \* 100 | **194.74** |
| **url** | A URL link to the National Water Information System Web Interface for current conditions for the site. | **https://waterdata.usgs.gov/ks/nwis/uv?site\_no=07144100** |

OH","dec\_lat\_va":41.3903,"dec\_long\_va":-81.6986,"huc\_cd":"04110002","tz\_cd":"EST","flow":0.32,"flow\_unit":"cfs","flow\_dt":"2019-06-28 14:30:00","stage":4.79,"stage\_unit":"ft","stage\_dt":"2019-06-28 14:30:00","class":0,"percentile":10,"percent\_median":"27.12","percent\_mean":"4.13","url":"https:\/\/waterdata.usgs.gov\/oh\/nwis\/uv?site\_no=412325081415500"},{"site\_no":"412453081395500","station\_nm":"West Creek at Brooklyn Heights OH","dec\_lat\_va":41.4147,"dec\_long\_va":-81.6653,"huc\_cd":"04110002","tz\_cd":"EST","flow":4.55,"flow\_unit":"cfs","flow\_dt":"2019-06-28 13:30:00","stage":1.24,"stage\_unit":"ft","stage\_dt":"2019-06-28 13:30:00","class":0,"percentile":54.83,"percent\_median":"114.61","percent\_mean":"36.55","url":"https:\/\/waterdata.usgs.gov\/oh\/nwis\/uv?site\_no=412453081395500"},{"site\_no":"412624081450700","station\_nm":"East Branch Big Creek at Brooklyn OH","dec\_lat\_va":41.44,"dec\_long\_va":-81.7519,"huc\_cd":"04110002","tz\_cd":"EST","flow":18.5,"flow\_unit":"cfs","flow\_dt":"2019-06-28 14:00:00","stage":2.42,"stage\_unit":"ft","stage\_dt":"2019-06-28 14:00:00","class":0,"percentile":70.13,"percent\_median":"264.66","percent\_mean":"109.79","url":"https:\/\/waterdata.usgs.gov\/oh\/nwis\/uv?site\_no=412624081450700"},{"site\_no":"412742081380801","station\_nm":"Inflow to rain garden, 75 south, Cleveland OH","dec\_lat\_va":41.4617,"dec\_long\_va":-81.6356,"huc\_cd":"04110002","tz\_cd":"EST","flow":0,"flow\_unit":"cfs","flow\_dt":"2019-04-08 14:54:00","stage":0,"stage\_unit":null,"stage\_dt":"0000-00-00 00:00:00","class":0,"percentile":0,"percent\_median":null,"percent\_mean":null,"url":"https:\/\/waterdata.usgs.gov\/oh\/nwis\/uv?site\_no=412742081380801"},{"site\_no":"412743081380801","station\_nm":"Inflow to rain garden, 75 north, Cleveland OH","dec\_lat\_va":41.462,"dec\_long\_va":-81.6356,"huc\_cd":"04110002","tz\_cd":"EST","flow":0.34,"flow\_unit":"cfs","flow\_dt":"2019-01-10 15:34:00","stage":0,"stage\_unit":null,"stage\_dt":"0000-00-00