

Hazard Services Reference Materials

Watches

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New Flood Watch

- Click on the MAPS icon on the Hazard Services toolbar console to select the "Forecast Zones" map
- The map boundaries will turn green and the mouse pointer will become a "+". Left-click specific zones that you want to include in the watch, or left-click and drag over the zones to paint the selected zones in the map.
- When done, right-click to trigger the painted area to be converted to a polygon. The HID will open with only the "Hydrology" category selected.
- Set the "Type" to be FF.A, and then click Preview.
- The Product Editor will open. Enter the necessary details of the Basis Bullet and Impacts Bullet for each zone, and then click "Issue All".

New Segmented Flood Watch

- Click on the MAPS icon on the Hazard Services toolbar console to select the "Forecast Zones" map
- Left-click specific zones that you want to include in the first segment of the flood watch, or left-click and drag over the zones to paint the selected zones in the map.
- When done, right-click to trigger the painted area to be converted to a polygon. The HID will open with only the "Hydrology" category selected.
- Set the "Type" to be FF.A. This is now your first segment.
- Now go back to the maps and forecast zones, and select the counties for your second segment. Right-click when done. Set the Type to FF.A
- You should have two tabs open in your HID, one for each segment. If not, go to the status console and click on the first segment to get it to show in the HID.
- Make the beginning and/or end times different for each segment. Enter the necessary details of the Basis Bullet and Impacts Bullet for each zone.

- Preview and modify the text including a Test message.
- Issue All

Remove Counties from a Flood Watch

- From the status console select the FF.A that you issued above. Now right-click specific zones that you want to remove. Once finished, go into the HID and select the Update Hazard Hatch Area. The counties you removed should no longer appear in the map segment. You can't make any more adjustments with the selected, so deselect it if you still want to make adjustments.
- Select Preview. A pop up window will come up requesting the reason for the cancellation. Hit ok and then you will see two segments, a CAN for the cancelled watch counties, and a CON for the continued counties.
- Edit and Issue All

Separate an existing Flood Watch into Multiple Segments

- Let's say you want to extend the time for the easternmost counties in your watch. You'll need to separate out these counties and adjust the end times.
- First step is to select the flood watch from the console. Right click off the counties that you wish to make adjustments too. Once you've removed those counties select the Update Hazard Hatch Area in the HID
- Now you'll need to create your new segment. Left click the counties that you removed in the previous step. Right click once they are all highlighted. In the HID assign the Type as a flood watch. This has the effect of producing a separate segment (note the different segment numbers). For this second segment, adjust the end time by adding 3 hours.
- Preview the product. You'll see that the first segment has a VTEC of CON, or continue. The second segment is EXT for an extension in time. Review, add Test wording, and send.

Adding Counties to an existing Flood Watch Segment

- Select the segment in the console or spatial display
- If counties aren't already highlighted in green as selectable, then go to maps and select forecast zones.

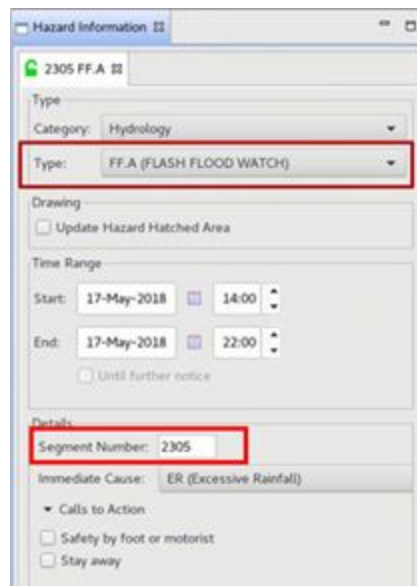


- Select the pointer in the toolbar
- Now right click to get the hatching over the counties you wish to add to the segment
- Select the Update Hazard Hatch Area in the HID
- When you preview the product you should see an EXA in the VTEC for the added counties

- When you run a follow up statement you'll see that these counties are now combined in the watch statement

Combining 2 Segments by changing the Segment number

- Each segment of a watch will produce it's own segment in the actual text of the FA.A. Say you want to combine like segments to reduce the length of your product as the event unfolds.
- If you don't already have a 2 segmented watch please created one now.
- To combine the two, change the segment number of the 1st segment to match the number of the 2nd or vice versa so they have matching numbers.
- Preview the product and note the combined segment in the text product
- Issue All
- Note in the console that you still have the 2 entries for the flood watch. This is just for database purposes



GFE Flood Watch Grid

When you create a flood watch in hazard services it will produce a grid in GFE automatically. This is to be used in your zones, HWO, etc. However you will not issue your flood watch statements in GFE! ***Note: If someone is using GFE hazard grids you may be blocked. You'll need to coordinate your edits with anyone making edits in GFE hazards.

- Open GFE in a separate AWIPS window
- Go to the hazards grid

- Now in your hazard services frame make adjustments to your flood watch and see if the changes appear in GFE or if you get a message telling you the grid is blocked by someone else.

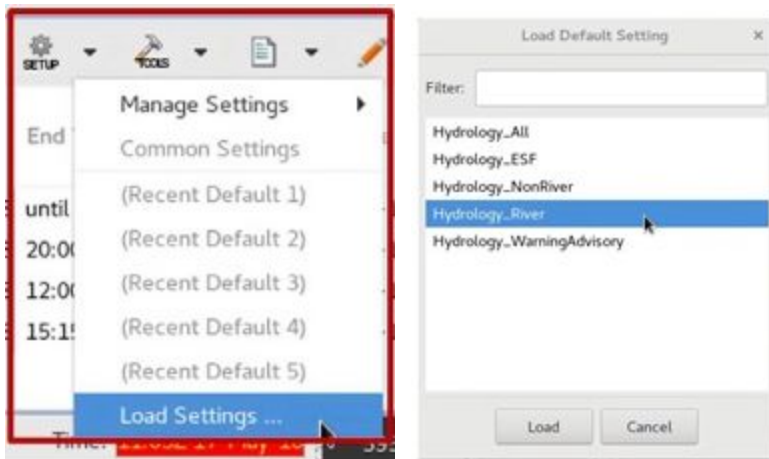
Hazard Services Reference Materials

River Floods

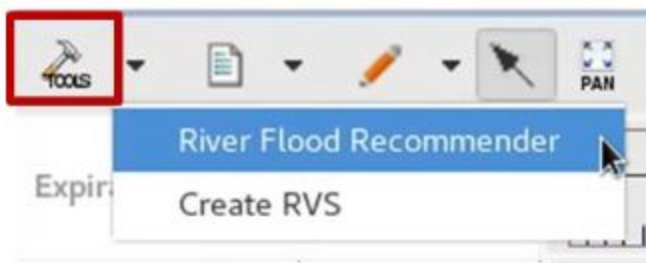
Starting Practice Mode [Instructions](#)
River Flood Warnings ([Video](#) 6 min)

* It is best that you change your CAVE window from D2D to Hydro Perspective **before** opening hazard services. Or you could open an additional CAVE session.

Open Hazard Services. Change the Settings to just show river floods to filter out all other headline products. To do this click on the SETUP icon and select Load Settings and select Hydrology_River



To open the river flood recommender (RFR), click on the TOOLS button in the console and choose "River Flood Recommender".



Run the River Flood Recommender (RFR). The River Flood Recommender runs using the latest observed and forecast stage values in the hydro database. When you Run the RFR it will look for any gage observations or forecasts that at, above, or are within 5% of flood stage. If any gauges meet any of the above criteria, the events will populate the console with the POTENTIAL status.

Flood Recommender x

Type

Warning

ALL

Misc. Options

Include points below advisory

Watch/Warning Cutoff Time (hours) 24

Recommender Run Type

Create/update/end hazards for chosen river points

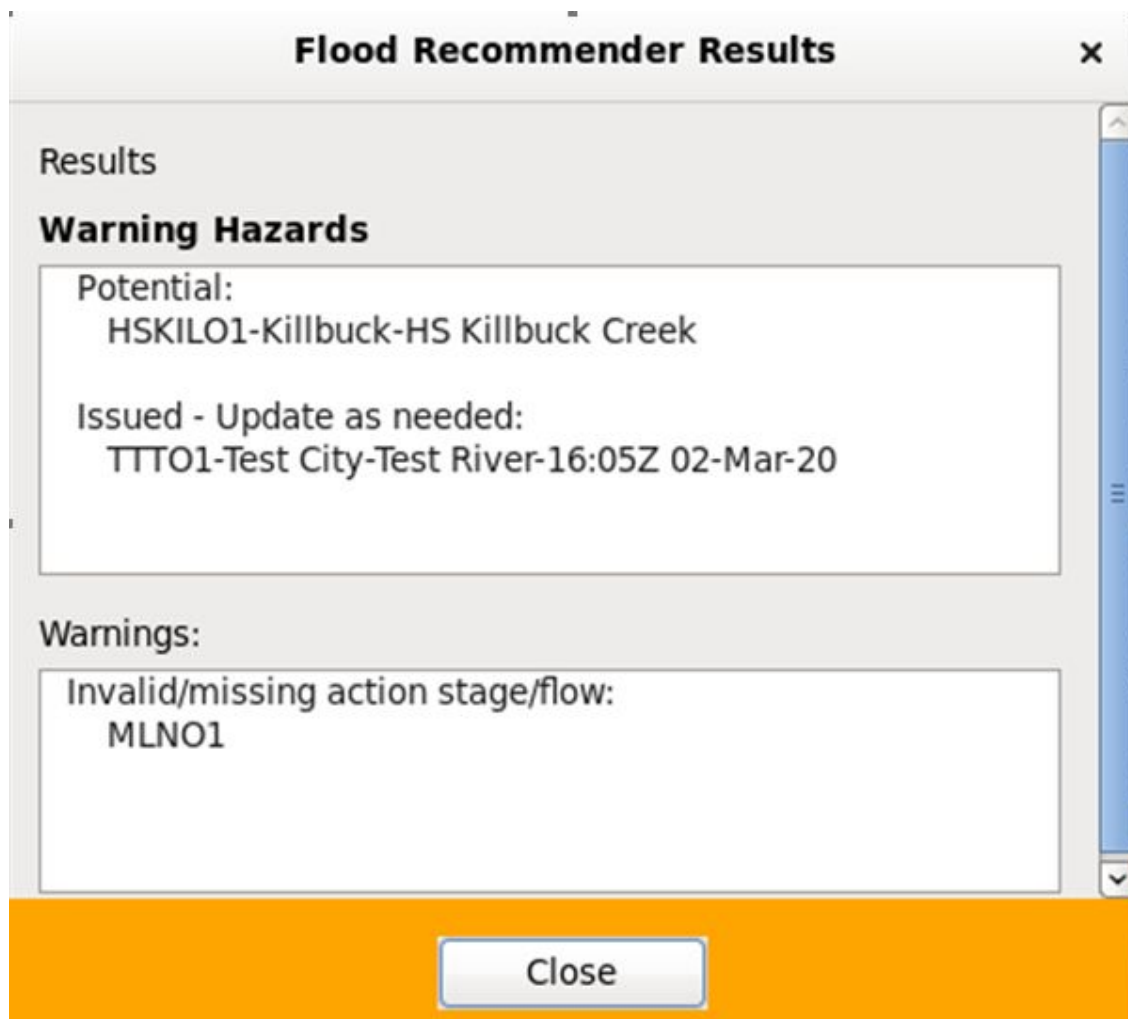
Refresh existing hazards for chosen river points

Forecast Point Choices

- Black River
- Blanchard River
- Chagrin River
- Cuyahoga River
- French Creek
- Grand River
- Hazard Services Test Group
- Huron River
- Killbuck Creek

All None

Run Cancel



Event ID	Lock Status	IBW Type	Hazard Type	Status	Stream	Point ID	Start Time	End Time	Expiration Time	VTEC Actions	Time to Expiration
<input checked="" type="checkbox"/> 461	U		FLW	ISSUED	Test River	TTTO1	16:05Z 02-Mar-20	until further notice	02:15Z 03-Mar-20	NEW	10hrs 4min
<input checked="" type="checkbox"/> 462	U		FLW	POTENTIAL	HS Killbuck Creek	HSKILO1	16:11Z 02-Mar-20	until further notice			

You may want to sort the console by Status (by left-clicking on the Status column header) in order to identify the recommended hazards. Additionally, the spatial display will update with polygons around the gages. If the polygons don't appear, adjust your time window (using the selected time in the timeline) to overlap with the potential products. Note that you could also just run the recommender for a particular river, which would reduce the number of hazards in the Console. Click on the Group Name column header to sort by river. Select multiple or single gage sites to edit in the HID. It is recommended that you issue your FLW's around the same time and typically each river/basin at the same time.

Select multiple events for one River in the Console by left-click them and using CTRL+left-click to select multiple rows. The selected events show up separately in the HID. Most of the elements are automatically added based on RFC forecasts and defined settings for the forecast point. You can make any necessary edits.

The screenshot displays the 'Hazard Information' window for two events: 462 FLW HSKILO1 and 461 FLW TTTO1. The interface is divided into several sections:

- Type:** Category: Hydrology; Type: River Flood Warning (FLW).
- Drawing:** Update Hazard Hatched Area.
- Time Range:** Start: 02-Mar-2020 16:12; End: N/A N/A; Until further notice.
- Details:** Includes tabs for Point Details, Crest Comparison, and Impact Statement.

The **Impact Statement** section is expanded to show search parameters and a list of impacts:

HSKIL01 - Hazard Services Test Group

CurObs	4.00
MaxFcst	-9999.00
FidStg	3.50
FidFlow	-9999.00
Lookup PE	HG
Based On Lookup PE	YES

Impacts to Use
ImpactStg/Flow - Start - End - Tendency

Impacts

- 3.00-01/01-12/31-Rising
Several low lying roads in Holmes County including Township Roads 91 and 92, and County Roads 621 and 622 are flooded.
- 3.50-01/01-12/31-Rising
Flooded roads in and near Killbuck include Water Street, County Road 621, State Route 60 south, State Route 520, as well as local low
- 4.00-01/01-12/31-Rising
Private property on Water Street in the Village of Killbuck flooded. Several county and local roads impassable including State Route 60
- 4.50-01/01-12/31-Rising
Several homes threatened in the town of Killbuck. North Main, Jefferson, and Waters Streets inundated. Northern and southern
- 5.00-01/01-12/31-Rising
Widespread flooding in both north and south end of Killbuck. Many county and local roads impassable. State Route 17 in Millersburg
- 5.50-01/01-12/31-Rising
The FEMA 1 percent flood level.
- 6.00-01/01-12/31-Rising
Severe flooding in the Village of Killbuck and throughout the valley.

Buttons for 'Preview...' and 'Propose' are located at the bottom of the window.

One area that you may routinely make edits too are the impact statements. In Hazard Services you have the option of selecting impact statements for rising or falling rivers (where those impacts are available).

Details

FldFlow	-9999.00
Lookup PE	HG
Based On Lookup PE	YES

Impacts to Use
ImpactStg/Flow - Start - End - Tendency

Impacts

- 3.00-01/01-12/31-Rising
Several low lying roads in Holmes County including Township Roads 91 and 92, and County Roads 621 and 622 are flooded.
- 3.50-01/01-12/31-Falling
Flood waters recede from Water Street, County Road 621, State Route 60 south, State Route 520, as well as local low lying roads.
- 3.50-01/01-12/31-Rising
Flooded roads in and near Killbuck include Water Street, County Road 621, State Route 60 south, State Route 520, as well as local low
- 4.00-01/01-12/31-Falling
Several county and local roads impassable including State Route 60 south and County Road 621.
- 4.00-01/01-12/31-Rising
Private property on Water Street in the Village of Killbuck flooded. Several county and local roads impassable including State Route 60
- 4.50-01/01-12/31-Rising
Several homes threatened in the town of Killbuck. North Main, Jefferson, and Waters Streets inundated. Northern and southern
- 5.00-01/01-12/31-Rising
Widespread flooding in both north and south end of Killbuck. Many county and local roads impassable. State Route 17 in Millersburg
- 5.50-01/01-12/31-Rising
The FEMA 1 percent flood level.
- 6.00-01/01-12/31-Rising
Severe flooding in the Village of Killbuck and throughout the valley. Flood waters back up onto Interstate 71 near Burbank. Fire Station in

Once finalized you can Preview the text product. Add your call to action. Then send.

Product Editor

FLW FLS
WGUS41 KCLE 021612
FLWCLE

BULLETIN - EAS ACTIVATION REQUESTED
Flood Warning
National Weather Service Cleveland OH
1112 AM EST Mon Mar 2 2020

...The National Weather Service in Cleveland OH has issued a Flood Warning for the following rivers in Ohio...

HS Killbuck Creek Near Killbuck affecting Holmes and Wayne Counties.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Turn around, don't drown when encountering flooded roads. Most flood deaths occur in vehicles.

Additional information is available at www.weather.gov.

The next statement will be issued this evening at 915 PM EST.

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OHC075-169-030215-
/O.NEW.KCLE.FL.W.0003.200302T1612Z-00000T0000Z/
/HSKIL01.1.ER.00000T0000Z.200302T1500Z.00000T0000Z.NO/
1112 AM EST Mon Mar 2 2020

The National Weather Service in Cleveland has issued a

- * Flood Warning for the HS Killbuck Creek Near Killbuck.
- * From this morning until further notice.
- * At 10:00 AM EST Monday the stage was 4.0 feet.
- * Flood stage is 3.5 feet.
- * Minor flooding is occurring.
- * Recent Activity...The maximum river stage in the 24 hours ending at 10:00 AM EST Monday was 4.0 feet.
- * Forecast...No forecast is available for this location.
- * Impact...At 3.5 feet, Flooded roads in and near Killbuck include Water Street, County Road 621, State Route 60 south, State Route 520, as well as local low lying roads. Holmes county fairgrounds inundated.
- * Impact...At 4.0 feet, Private property on Water Street in the Village of Killbuck flooded. Several county and local roads impassable including State Route 60 south and County Road 621.
- * Impact...At 4.5 feet, Several homes threatened in the town of Killbuck. North Main, Jefferson, and Waters Streets inundated. Northern and southern portions of town threatened. Many local and county roads flooded including State Route 16 and 60 north, and County Road 621.
- * Impact...At 5.0 feet, Widespread flooding in both north and south end of Killbuck. Many county and local roads impassable. State Route 17 in Millersburg flooded.
- * Flood History...No available flood history.

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LAT...LON 4099 8203 4099 8193 4067 8190 4045 8191
4045 8202 4067 8202

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Jamison

Hazard Data Editor Legacy_FLW_FLS_Formatter

Issue All Dismiss

Product Editor

FLW

Overview Headline:
...The National Weather Service in [Cleveland](#) OH has issued a Flood Warning for the following rivers in Ohio...
Test River At Test City affecting [Ashtabula](#) County.

Overview Synopsis:

Group Summary:

Calls To Action:
Turn around, don't drown when encountering flooded roads. Most flood deaths occur in vehicles.

Additional Info Statement:
Additional information is available at www.weather.gov.

461 - CLE - TTTO1 - Test City - Test River
OHC007-030215-
/O.NEW.KCLE.FL.W.0002.200302T1605Z-00000T0000Z/
/TTTO1.2.ER.00000T0000Z.200302T1500Z.00000T0000Z.UU/

Observed Stage Bullet: (* required field)
At 10:00 AM EST Monday the stage was 4.0 feet.

Flood Stage Bullet: (* required field)
Flood stage is 2.5 feet.

Flood Category Bullet: (* required field)
Moderate flooding is occurring.

Recent Activity Bullet:
Recent Activity...The maximum river stage in the 24 hours ending at 10:00 AM EST Monday was 4.0 feet.

Forecast Stage Bullet: (* required field)
No forecast is available for this location.

Impacts Bullet:
Impact...At 4.0 feet, River Street flooded.

Flood History Bullet:
Flood History...No available flood history.

Flood Point Table:

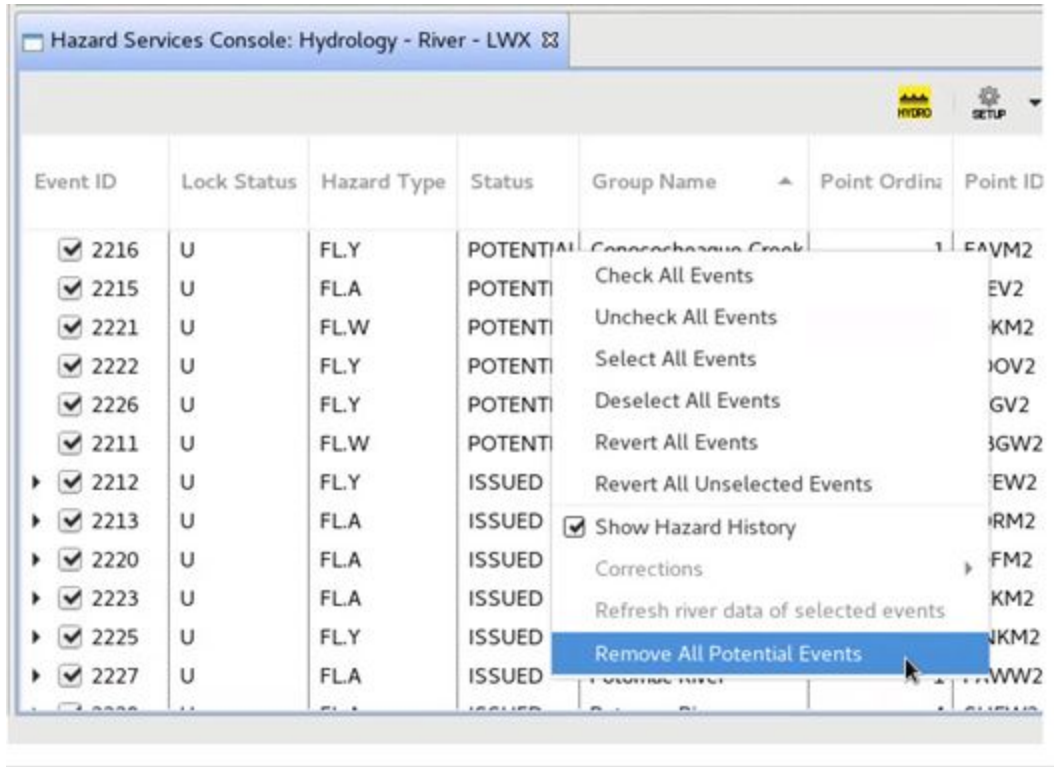
Product expires in: 10:00 At: 02:15Z 03-Mar-20

Save Undo Redo

Hazard Data Editor Legacy_FLW_FLS_Formatter

Issue All Dismiss

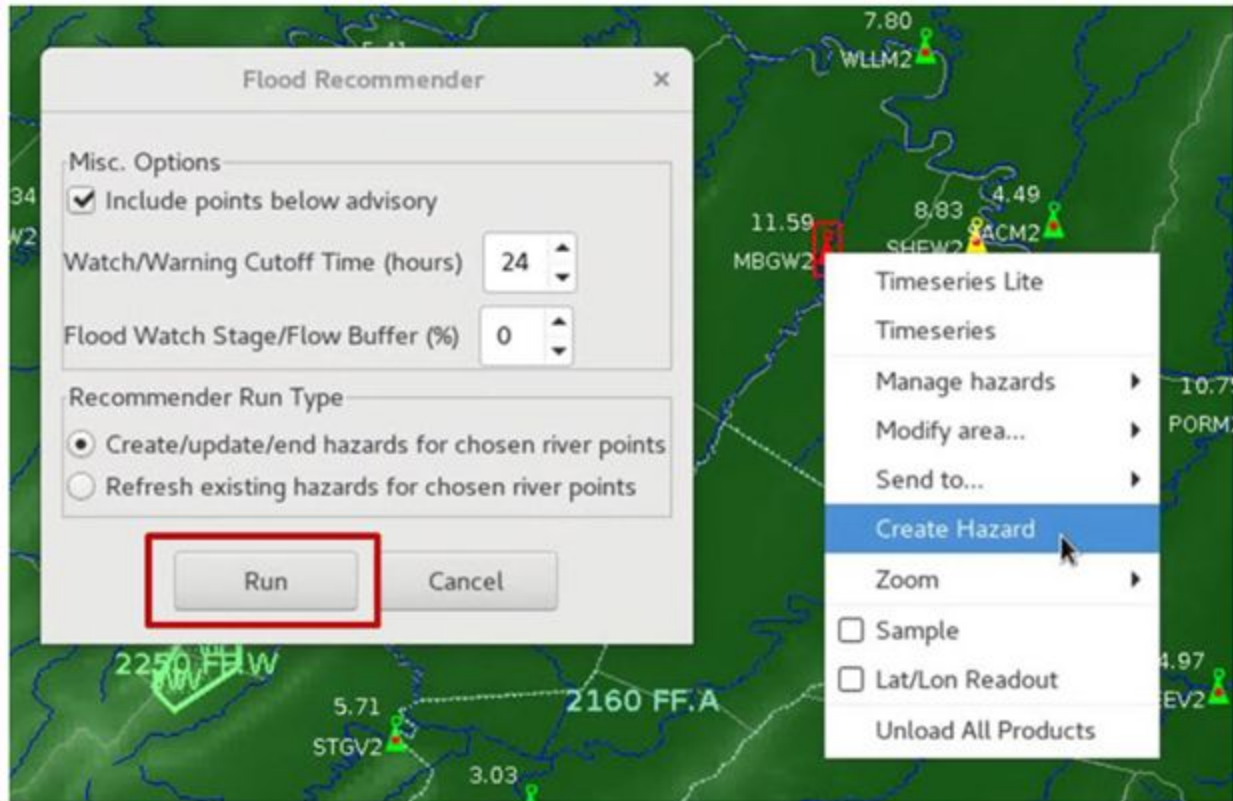
To remove unwanted events created by the recommender, right-click in the console and select "Remove All Potential Events". This is a handy way to clean up the Console and rerun the recommender.



Running RFR for 1 Location

The user can run the RFR for one location at a time. Double left-click on the river gauge. When the gauge is selected, a red rectangle will surround the gauge. Choose a yellow or red-colored gauge to ensure you have something that meets advisory or watch/warning criteria.

Hold down the right mouse button and select "Create Hazard" from the menu, and when the Flood Recommender comes up, click Run. The Flood Recommender is a smaller version of the one run from the TOOLS icon.



Note: Notice the check box "Include points below advisory". You can use this feature to create an event not recommended by the RFR.

Follow up statements

You can produce a follow up statement either by clicking on the individual product in the console and editing in the HID, which will automatically default to an FLS. Or you can run the RFR and follow the recommendations.

Ending a River Flood Event

There are three methods to end a river flood product:

- Console: Right-click the hazard row and select "End This".

- Spatial Display: Left-click on the polygon to select it. It will become hatched and the HID will appear. Right-click and hold to select Manage hazards -> End This.
- River Flood Recommender: Run the RFR. Once the event is listed in the console as ENDING, select it and review the HID (requires hydro database to recommend ending).