

Delaware Valley   
Early Warning System

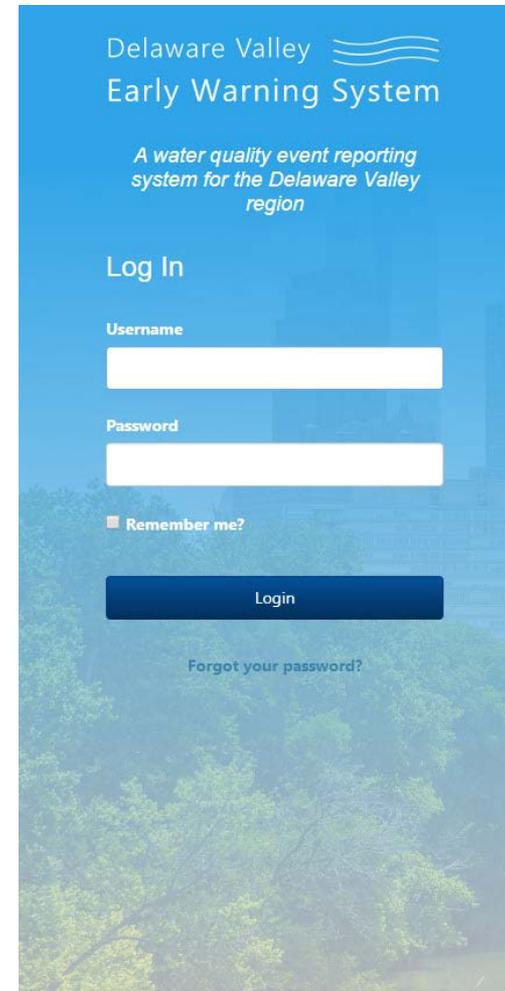
# Flood Forecast Viewer

SAN Pathogens and Point Source Workgroup

August 10, 2022

# What is the Delaware Valley Early Warning System? (EWS)

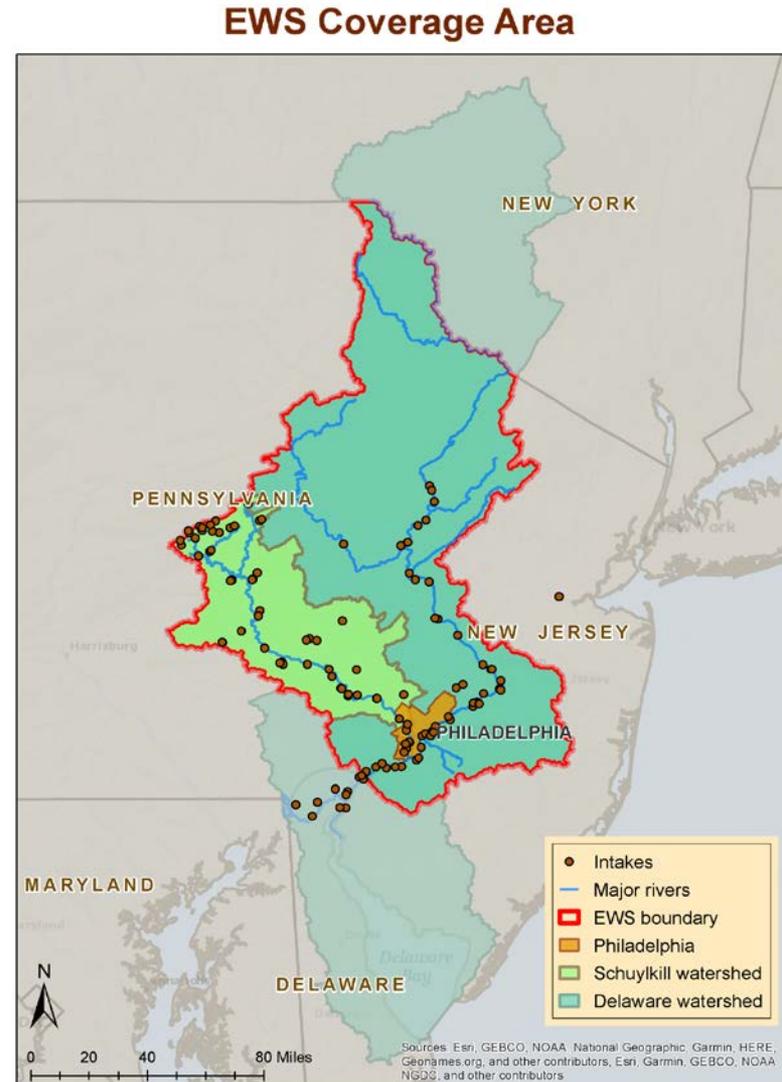
- The EWS is a monitoring, spill modeling and notification system designed to provide advance warning of surface water contamination events in the Schuylkill and lower Delaware River watersheds
- It consists of a website and email notification system, as well as a telephone hotline and notification system



The image shows a login page for the Delaware Valley Early Warning System. The page has a blue header with the text "Delaware Valley Early Warning System" and a logo of three wavy lines. Below the header, there is a subtitle: "A water quality event reporting system for the Delaware Valley region". The main content area is white and contains a "Log In" section. It includes a "Username" label above a white input field, a "Password" label above another white input field, and a "Remember me?" checkbox. Below these fields is a dark blue "Login" button. At the bottom of the login section, there is a link that says "Forgot your password?". The background of the page is a blurred image of green trees.

# EWS Coverage Area

- Coverage Area is Lower Delaware River Watershed:
  - NJ/New York border to Delaware border
- 124 intakes in EWS Coverage area
- Over 7,400 stream miles in the EWS Coverage area
- EWS water and industrial users provide critical services to the **6.8 million** people in the EWS coverage area
  - Drinking water
  - Wastewater
  - Energy
  - Manufacturing



# EWS Partnership

480 registered users from 61 organizations

## Drinking Water Suppliers



## Industrial Companies



## Regulatory Agencies



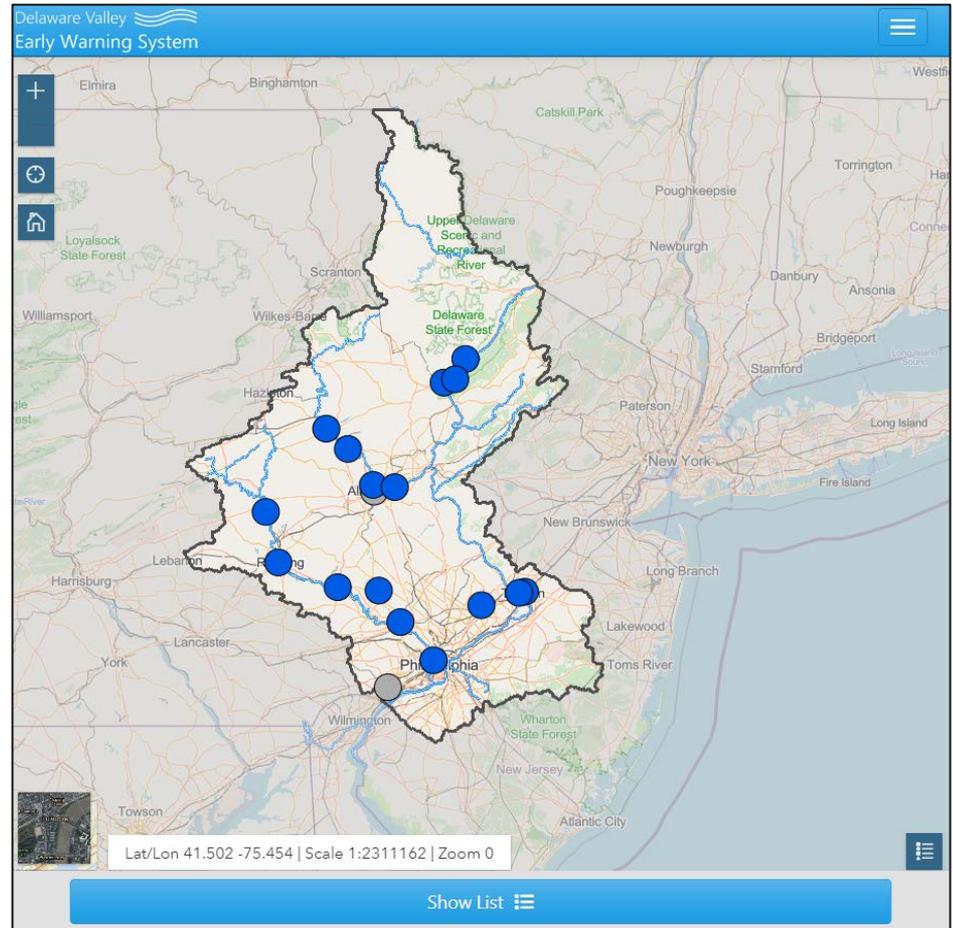
## Safety



# Objective

## Provide an Overview of the Flood Forecast Viewer (FFV)

- Explain what the FFV is and why it was developed
- Preview the functions of the FFV
- Explain how to access the FFV



One year ago....

# Tropical Storm Ida @ Schuylkill Watershed (September 2021)



Schuylkill River, Philadelphia Photograph by Tim Haas



Schuylkill River, Norristown Photograph by Norristown FD



Schuylkill River, Philadelphia Photograph by Tim Haas



Pickering Creek, Phoenixville Photograph by Steven Falk

# EWS Flood Forecast Viewer

## What is the Flood Forecast Viewer?

- Displays NOAA 24-hour look-ahead forecast of **predicted** flooding condition in waterways within the EWS coverage area
- The flood prediction data is updated by NOAA every 6 hours, and the EWS Flood Forecast Viewer mirrors those updates
- Launched in June 2022 in beta (testing) mode

## Why was it Developed?

- Designed to increase water systems' awareness of possible impacts from flooding
- The EWS team observed that flood events often create unexpected challenges for emergency managers, water suppliers, wastewater, stormwater and industrial professionals
  - Flood conditions can exacerbate sewer and storm water system releases, impact source water quality, disrupt product storage, and create additional risks for road incidents resulting in accidents and spills.

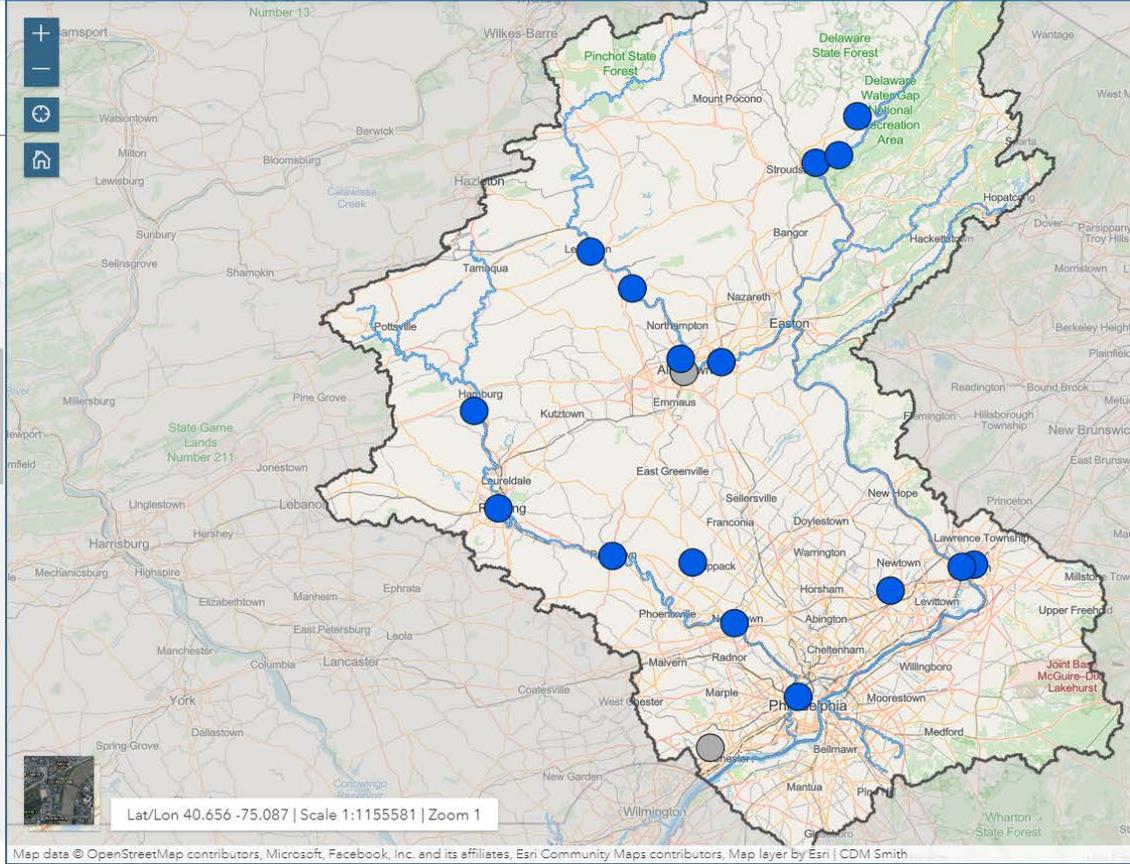
Flooding Forecasts for the next 24 hrs [About](#)

0 of 18 Gauges forecasting flood conditions

Forecasts by Gauge [Definitions](#)

Show only gauges forecasting flood conditions

Gauge ALNP1	<a href="#">Gauge details</a>
Location Allentown, PA	Flooding Forecast ● No Flooding Status
Gauge BETP1	<a href="#">Gauge details</a>
Location Bethlehem, PA	Flooding Forecast ● No Flooding Status
Gauge BREP1	<a href="#">Gauge details</a>
Location Berne, PA	Flooding Forecast ● No Flooding Status
Gauge GRAP1	<a href="#">Gauge details</a>
Location Graterford, PA	Flooding Forecast ● No Flooding Status
Gauge LHTP1	<a href="#">Gauge details</a>



# Flood Forecast Viewer

Shows NOAA-predicted flood conditions with 24-hour  
lookahead for 18 gauges in the EWS coverage area

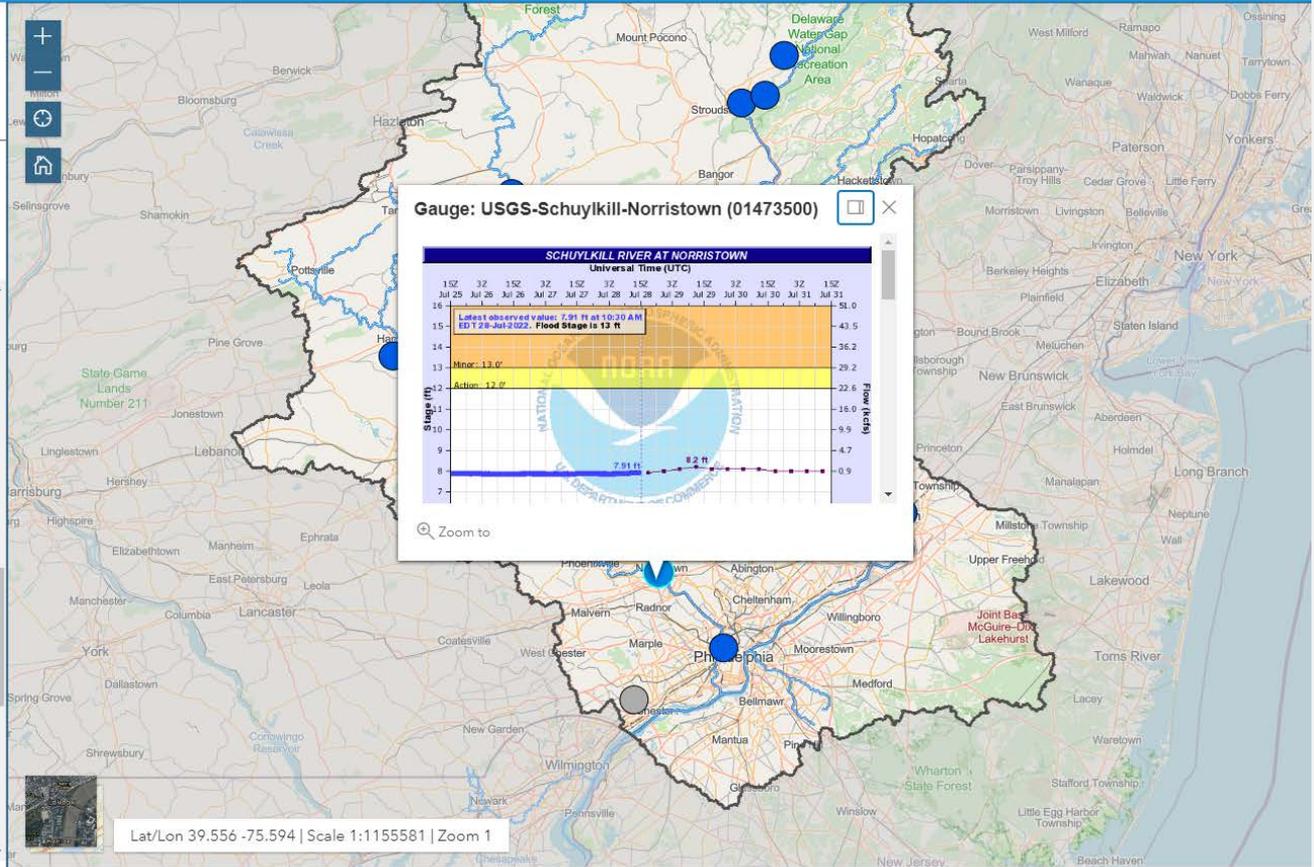
Flooding Forecasts for the next 24 hrs [About](#)

0 of 18 Gauges forecasting flood conditions

Forecasts by Gauge [Definitions](#)

Show only gauges forecasting flood conditions

Gauge NRSP1	<a href="#">Gauge details</a>
Location Norristown, PA	Flooding Forecast ● No Flooding Status
Gauge PADP1	<a href="#">Gauge details</a>
Location Philadelphia, PA	Flooding Forecast ● No Flooding Status
Gauge PTNP1	<a href="#">Gauge details</a>
Location Pottstown, PA	Flooding Forecast ● No Flooding Status
Gauge RDRP1	<a href="#">Gauge details</a>
Location Reading, PA	Flooding Forecast ● No Flooding Status
Gauge SHOP1	<a href="#">Gauge details</a>



# Flood Forecast Viewer

Click a gauge icon in the interactive map to see the NOAA Hydrograph for a particular gauge



← Back to All Forecasts

### Flooding Forecast Details

Gauge

**PADP1**

Location

Philadelphia, PA

**Affected Intakes**

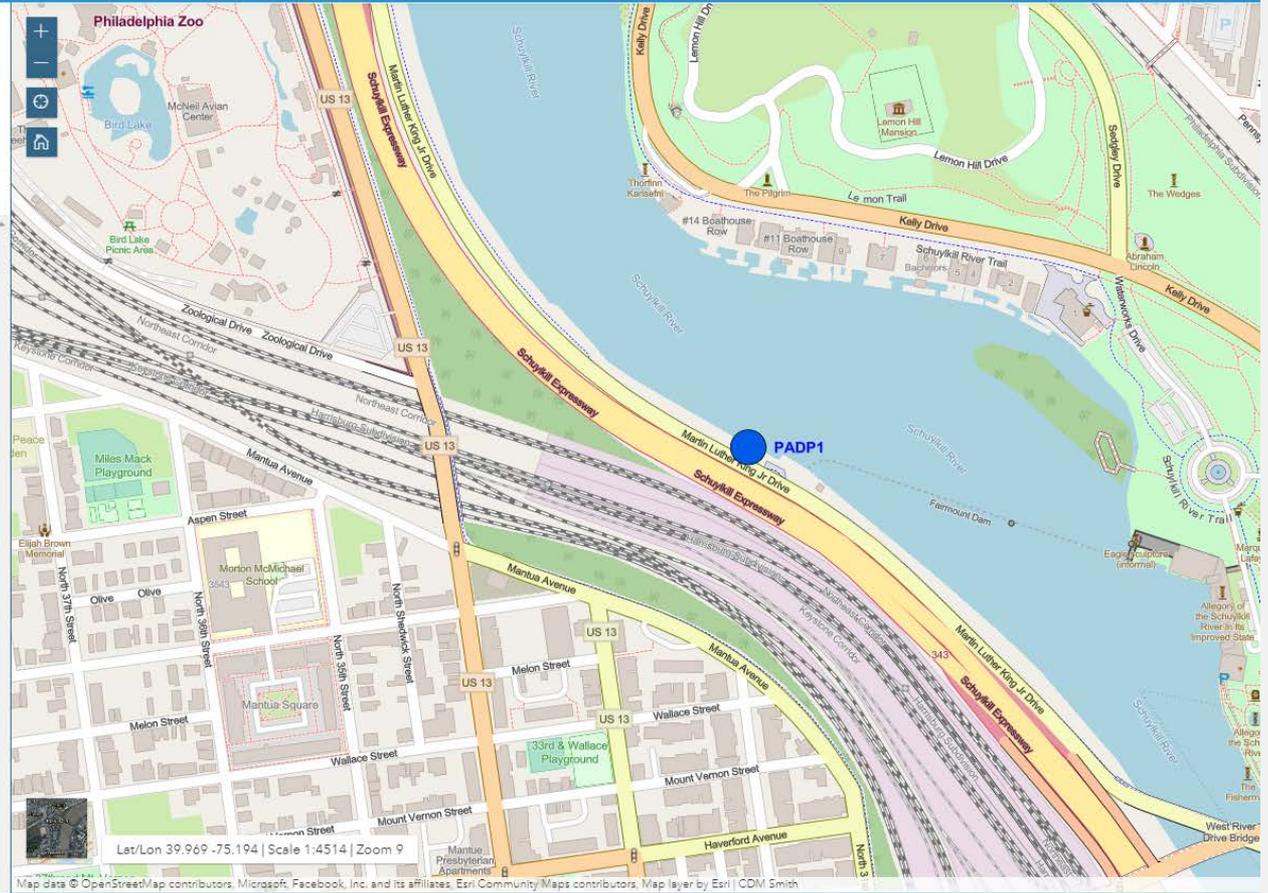
[View NOAA Hydrograph](#)

Flooding Forecast

No Flooding Status

Affected Streams

No flooding is forecasted by NOAA



# Flood Forecast Viewer

Click any gage detail button to learn more about a gauge's location, flooding forecast, and potentially affected intakes

**National Weather Service**  
**Advanced Hydrologic Prediction Service**

Home      News      Organization

Local weather forecast by "City, ST"      Go

National Conditions: Rivers, Satellite, Climate, Observed Precip

Local Conditions: Warnings, Weather, Forecast, Radar

AHPS Documentation: User Guide, User Brochure

What is AHPS?: Facts, Our Partners

Feedback/Questions: Provide Feedback, Ask Questions

WHEN FLOODED TURN AROUND DON'T DROWN

FLOODSMART.GOV      USA.GOV

National Observations      **WFO Observations**      Hydrograph

Visit <https://www.weather.gov/owp/operations> for access to new **EXPERIMENTAL** products and services from the National Water Center: National Hydrologic Discussion, Area Hydrologic Discussion, Flood Hazard Outlook and the National Water Center Visualization Services, a suite of geospatial services depicting River Forecast Center and National Water Model information.

Weather Forecast Office Philadelphia/Mount Holly, NJ      Middle Atlantic River Forecast Center

Hydrograph      River at a Glance      Download      Probability Information

Auto Refresh: OFF     

**SCHUYLKILL RIVER AT PHILADELPHIA**  
 Universal Time (UTC)

14Z Jul 25 2Z Jul 26 14Z Jul 26 2Z Jul 27 14Z Jul 27 2Z Jul 28 14Z Jul 28 2Z Jul 29 14Z Jul 29 2Z Jul 30 14Z Jul 30 2Z Jul 31 14Z Jul 31

14 13 12 11 10 9 8 7 6 5 4

85.0 69.9 56.1 43.6 31.7 21.1 12.3 5.8 0.9

Flow (kcms)

Stage (ft)

Latest observed value: 5.89 ft at 10:00 AM EDT 28-Jul-2022. Flood Stage is 11 ft

Minor: 11.0'      Action: 10.0'

6.09 ft      6.2 ft

10am Mon Jul 25 10pm Mon Jul 25 10am Tue Jul 26 10pm Tue Jul 26 10am Wed Jul 27 10pm Wed Jul 27 10am Thu Jul 28 10pm Thu Jul 28 10am Fri Jul 29 10pm Fri Jul 29 10am Sat Jul 30 10pm Sat Jul 30 10am Sun Jul 31

Site Time (EDT)

--- Graph Created (10:48AM Jul 28, 2022)      ● Observed      - Forecast (issued 9:49AM Jul 28)

PADP1(plotting HGIRG) "Gage 0" Datum: 5.74'      Observations courtesy of US Geological Survey

# Flood Forecast Viewer

*Click the View NOAA Hydrograph button to open a gauge's latest NOAA hydrograph in a new browser tab and review NOAA-predicted flood elevations*

# EWS Flood Forecast Viewer

## Accessing the Flood Forecast Viewer:

- Any EWS user can access the Flood Forecast Viewer on the EWS website

## Notifications:

- Email notifications are only available to users belonging to organizations with intakes in the EWS coverage area
- After logging into the EWS, click on *My Notification Settings* to elect to receive flood forecast notifications

# Thank You!

## Questions or Comments?

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