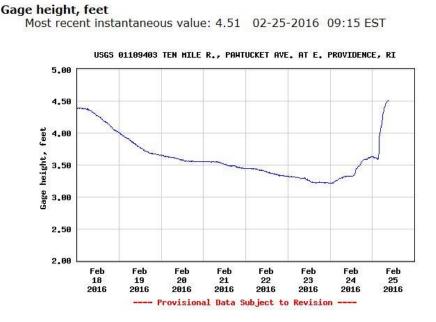
# How to Use the Ten Mile River Streamgage

## East Providence Emergency Management Agency

The "Ten Mile River at Pawtucket Avenue" US Geological Survey Streamgage is located along the river where it is crossed by Pawtucket Avenue in Rumford. The gage records data automatically on a 24/7 basis. When you link to the gage's webpage, the "Gage height" chart will appear part-way down. The most recent river level will be listed, and the chart will display readings for the most recent 7 days. The length of time that the chart displays can be changed in the box that appears just above this chart. Below is a screen-shot of the chart taken on February 25, 2015, immediately following a storm which brought close to an inch and a half of rain across the Ten Mile drainage basin.



**Important note:** The gage reading at this time was 4.51 feet. Typical of many streamgages, this is <u>not</u> the actual elevation above sea level, but instead is based on the size of the gage itself. To convert the gage reading to height above sea level, add 9.84 feet to the gage height.

City Emergency Management and Engineering Divisions have studied the gage extensively to determine flood thresholds where possible and we have determined the following flood levels, based on gage reading

#### Ten Mile River in the area of Pawtucket Avenue and Centre Street:

When the gage reading reaches 7.0 feet, the following can be expected:

- The water level is near the lowest elevation along the roadway on Pawtucket Avenue at the south end of the short bridge.
- Water is also threatening the playground and basketball courts at the Agawam Playground along Pawtucket Avenue near the river. (continued on next page)

- The river level is getting into yards and is close to some of the homes that are closest to the Ten Mile River north of Centre Street.
- By the 8-foot level, the playground area is significantly affected and Pawtucket Avenue is flooding at this location, and the play areas have some shallow water on them.

For reference, the 2010 gage level reached 12.03 feet. This flooded Pawtucket Avenue to a level over the lowest point on the guardrail and closed the road at this location. It also resulted in flooding onto some of the Ten Mile River properties on the south side, and for a distance onto the golf course on the north side. Much of Agawam Playground was flooded.

## Taunton Avenue at Commercial Way:

Extreme flooding along the Ten Mile River will reach the lowest point along Taunton Avenue near Commercial Way.

- Gage level approaching 9 feet will bring water close to Taunton Avenue at this location. This is somewhat dependent on how wet conditions have been prior to the flood event.
- The 2010 floods, when gage level reached 12.03 feet, closed Taunton Avenue at this intersection for a time.

### State Street Neighborhood:

This neighborhood is not actually within the Ten Mile River drainage area, but we have found that correlations can be made between the gage level and flooding in this neighborhood as follows:

- A gage reading of 6.7 feet is a good indicator of the start of minor property flooding in the neighborhood. At this level, water may get onto a couple of street segments and into a number of yards. Some of the neighborhood homes may be at an elevated risk for flooding if the river is at this level <u>and rising</u>.
- If the gage reading reaches 8 feet, water may be at foundation level of the lower-elevation homes.