

Chemung Basin Flood Warning System Expands to Include Schuyler County, NY

By Janet Thigpen

Reprinted from the *Susquehanna Guardian* (a publication of the Susquehanna River Basin Commission), Spring Edition, 2007

When flooding or flash flooding occurs, every minute of advanced warning is time that can be used to save lives and protect property. In the Chemung River Basin of New York, this advanced warning comes from a volunteer-run Flood Warning Service, which operates as part of a not-for-profit corporation (Environmental Emergency Services, Inc.). This cooperative effort has recently expanded, with Schuyler County joining Chemung and Steuben Counties.

The Flood Warning Service operates a real-time data collection system to supplement the flood detection and forecast capabilities of other agencies. This automated gauging network presently includes:

- 23 precipitation gauges,
- 9 climate stations,
- 7 stream sensors, and
- 1 lake level gauge.

Real-time data are fed by telemetry to an emergency operations center, where trained volunteers display and analyze the information.

During a flood event, the Flood Warning Service operation center becomes a centralized point for information collection and analysis. Volunteers track forecasts and data from a variety of sources and provide relevant information to county emergency management offices and state flood control staff. Among the “success stories” are several incidents in which emergency responders received advanced warning of localized flash flood conditions, for which they would otherwise have had no lead-time.

A key to the success of the Flood Warning Service is the ongoing spirit of cooperation among agencies, municipalities, emergency personnel, businesses, and private citizens. For twenty years, the Chemung Basin Flood Warning System has effectively combined the creativity and commitment of volunteers with the financial resources of government and local business. This formula buys time for emergency response in a basin that is prone to flash flooding.



A dedicated corps of trained volunteers manages operations during flood events.



Climate station transmits real-time data for precipitation, air temperature, barometric pressure, relative humidity, wind speed, and wind direction.

Four river level gauges provide redundancy at U.S. Geological Survey gauge sites. This redundancy protects against Murphy's Law, which decrees that when the information is most needed, something is guaranteed not to work.

