

Storm Chasers



Jim Foerster



Shylesh Muralidharan

Accurate weather data help utilities take action

Extrême weather events are occurring with more frequency and in more places than ever before. These events can be detrimental to water infrastructure. SWS Associate Editor Amy McIntosh spoke with Jim Foerster and Shylesh Muralidharan of Schneider Electric to find out how accurate weather data can help water utilities proactively manage their assets.

Amy McIntosh: What is the biggest climate-related threat to water utilities?

Jim Foerster: The biggest threats that the utilities face these days are around flooding. Heavy rain events are happening more frequently, and areas that [might not have been] susceptible to that kind of flooding event might get two or three in a season. That puts stress on the infrastructure and the community itself.

McIntosh: What kind of information can prepare a utility for severe weather?

Shylesh Muralidharan: Any information that is related to approaching severe weather—high winds, a likely chance of rain, the probability of a lightning event—can be useful information for a utility to be prepared for severe weather that can subsequently lead to flooding.

Foerster: People are looking for weather forecasts that we refer to as “actionable.” It has to be valuable enough that somebody can take it and do something. Bad things are happening, or are about to happen, and they need to make the right decisions, and protect the responders and the public in general.

McIntosh: How can a utility use this data to take action?

Muralidharan: It’s important to know what impact [a weather event] will have on your facilities and when. For example, estimating a probable path of the storm to exactly identify which assets are going to be under the storm in the next 10, 20 or 30 minutes is extremely important because sometimes

you don’t have enough crew members to go and work on all of the storm areas, and you might have to prioritize where to send them first. To do that, you need information at a resolution that you can work with to prioritize where to send your crew first and then have a schedule based on the incoming storm.

Foerster: If a water utility or a community knows there is heavy rain coming, which usually means a flash flooding event, there are things that they can do to begin to try and mitigate [sewer overflows], such as opening different valves, or controlling water differently so it doesn’t back up and overflow the system and then cause rather unpleasant side effects. A water utility is working in concert with [other entities] to try and make sure that they’re managing this storm water runoff the best they can so it doesn’t overflow or overburden the sewer system.

In a large city, a water utility is not going to be operating on an island. An example I am aware of is when an electric utility had to make a decision during an ice storm on whether to keep power going to the pumping station to prevent flooding, or divert power to keep a major airport open. Those are the kinds of decisions [utilities] have to make in concert with other people responding to the same event. The more information they have, the better they’re going to be able to participate in that decision tree. **SWS**

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