

>> RICK KOEHLER (NOAA, NWS): Good morning, I'm Rick Koehler, I'm a, instruction hydrologist with the National Weather Service and an old hydrographer for NOS so I have some geodetic backgrounds here. Some overviews for weather service. We also forecast rivers and stages. So it does both weather and water. Certainly the Corps of Engineers, NWS also does forecasting. But the bulk of forecast, what will be happening down the road for rivers, focused on the water resources, Weather Service has a tremendous responsibility for putting out flood stages and things along those lines.

As far as horizontal accuracy, probably Weather Service is not a very high accuracy user. Our work station that we had in our forecast office use 1 to 100 thousand scale backgrounds so probably an accuracy of 500 meters with one centimeter will not make a difference. What that means when you get that tornado warning, that will be plus or minus a couple of kilometers so keep that in mind.

As far as vertical goes, there is much higher responsibility and the hydrology does know this. We need to know water levels down to a 1 inch accuracy. And a lot of our service hydrologists will go out into the field and they will locate not just the flood plain but those that might have any kind of damage for potential `rises and having a autonomous system go out there would be a tremendous break-through of wonderful tools for the Weather Service to do that. So I can see that as being a very big plus for coming out of this adjustment.

Other things, hydrology, we are moving from a hydraulic kind of modeling which means much more detailed information especially for elevations and we are trying to use more lidar data. Along those lines, there are models out there looking at gravimetric studies groundwater. A gentleman from the FAA talking about those man-made structures going up. I'm worried about the man-made structures going down which can affect water resource and environmental areas along rivers like that. So those type of studies will be enhanced by this changing to a new datum.

The other thing is Weather Service uses other people's system. We work cooperatively with USGS so whatever they have, we will use that. We have some of your standards from FEMA. What FEMA decides, Weather Service will incorporate that.

Finally, the big player on the block as far as Weather Service is something called the Community Hydrologic Prediction System, a cooperative program for public, private and academic types. So whatever comes about from this meeting, it has got to be across the board and used by many different groups so we can all be talking on the same plain. So that's all I have. Thank you.