

## DOCUMENTING FLOOD OCCURRENCE AND EXPOSURE

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The South Florida Water Management District (SFWMD) is initiating efforts to compile Districtwide flood damage exposure and flood occurrence data to support model validation and flood damage cost projections for the Flood Protection Level of Service Program (FPLOS) and trend analysis for the flood occurrence Resiliency Metric. Exposure data requires building footprints with first floor elevations and occupancy type, local and highway road information including number of lanes, critical infrastructure, and ground elevations. Flood damage functions require depreciated structure and content replacement costs. Flood occurrence data requires geo-located depth and duration observations. In a utopian data universe, it would not be a challenge to compile such data because the data would be normalized and accessible for use and exportable through a single interface and the tools needed to record flood observations would be standardized and available statewide. However, Florida is not a utopian data universe, and this lack of uniform information will limit what can be modeled and assessed at the regional, state, and national level. The good news is we can build this utopian data infrastructure through collaboration. Some of this collaboration is ongoing in the State Geographic Information Office and the Florida Department of Emergency Management. To build on this and support Resiliency Planning in South Florida, standardized requirements for exposure and flood occurrence data, funding for state and local initiatives to compile these data, and regional or statewide data acquisition and assessment tools are needed. SFWMD has developed a flood occurrence application and a flood damage assessment tool and is proposing consideration of these tools for regional or statewide use.

**PRESENTER BIO:** Christine Carlson leads a team of geospatial professionals in the development and maintenance of enterprise geospatial data and the deployment of geospatial products and tools. During her 30-year + career, she has worked in a variety of capacities and fields including modeling, restoration evaluation, and remote sensing.