Association of State Floodplain Managers, Inc.

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ASFPM Comments to NOAA U.S. Global Change Research Program
Regarding the 5th National Climate Assessment

The Association of State Floodplain Managers appreciates the opportunity to comment on the U.S. Global Change Research Program's proposed themes and framework for the Fifth National Climate Assessment (NCA5). In general, the Association sees strong merit in the proposals for themes and framework for presenting the broad range of information and analysis represented by the next National Climate Assessment.

ASFPM supports continuation of changes first reflected in Fourth National Climate Assessment (NCA4) that provided data and context more relevant to informing and taking action. For practitioners, like floodplain managers, having data like qualitative and quantitative risk information, local/regional scale data, and decision support tools is very important. As NCA4 pointed out, adaptations being taken at all levels of government and the private sector have only accelerated and grown more diverse. Thus, we strongly support the major theme proposed in NCA5 to provide information to inform climate change adaptation, increased resiliency, and risk reduction. In terms of the temporal scope of NCA5, ASFPM urges that the suite of scenario products be extended beyond 2100 to at least the next 100 years. This is because residential buildings have a useful life of well over 100 years, as does certain infrastructure and critical facilities.

In the NCA4, the USGCRP made findings with "high confidence" that extreme precipitation events will increase in intensity and frequency in all regions of the U.S. Unfortunately, much practical experience of late seems to confirm such a conclusion. We are concerned about the availability of up-to-date information on expected frequencies of extreme precipitation events, information that we believe agencies at all levels and the public will need for informed and thoughtful adaptation to critical climate change-related factors through the 21st Century and beyond.

All states, communities, federal programs and the public need accurate and up-to-date resources to identify and predict likely frequencies of flood events for a wide variety of planning activities and setting standards for disaster resistant and resilient construction and reconstruction of public infrastructure and private development. ASFPM is concerned that some of the basic inputs for hydrologic modelling, precipitation frequency analysis, are outdated and do not reflect the increase in intensity and frequency of extreme precipitation events in most areas of the country or predict future conditions brought about by climate change. The most commonly used resource for predicting recurrence frequencies of large precipitation events is the Atlas 14 series of the NOAA/National Weather Service Office of Weather Prediction. Most of the Atlas 14

volumes have or are now falling far out of date, with no identified consistent funding mechanism to provide a reasonable update frequency or to incorporate anticipate future climate conditions. A recent report of the Advisory Committee on Water Information, Subcommittee on Hydrology, Extreme Storm Events Work Group entitled "Extreme Rainfall Product Needs," recommends "[a]n improved funding model is needed to ensure a sustainable, cost-effective approach for developing these [precipitation frequency] estimates." Additionally, the published methodology and data for the Probably Maximum Precipitation, another hydrologic input for large infrastructure, such as dams, is 20- to 50- years old.

Hundreds of millions of dollars are being spent annually on modelling and developing FEMA-supported NFIP flood hazard maps for key regulatory, land use planning, hazard mitigation and insurance purposes. Additionally, many billions are annually spent on infrastructure siting, engineering, and disaster reconstruction, and more in private sector development, with flood information that is already out-of-date and in many cases, increasingly underestimating flood hazard risks. The ASFPM urges the USGCRP to include recommendations to assure consideration for these critical precipitation frequency studies. We believe all Atlas 14 volumes should be updated every 5 years. To further improve precipitation frequency data, we would also recommend a study to identify an appropriate methodology to update the Probable Maximum Precipitation for the nation. We believe these concerns to be highly relevant to each of the five major themes that are proposed in the Department of Commerce /NOAA subject notice.

The ASFPM would be happy to provide additional information regarding the above or other perspectives on making the NCA5 the most useful and informative statement yet on this most critical subject matter.

The ASFPM and its 37 Chapters represent over 19,000 state and local officials as well as other professionals engaged in all aspects of floodplain management and flood hazard mitigation including management of local floodplain ordinances, flood risk mapping, engineering, planning, community development, hydrology, forecasting, emergency response, water resources development and flood insurance. All ASFPM members are concerned with reducing our nation's flood-related losses. More information on the Association, its 14 policy committees and 37 State Chapters can be found at: www.floods.org.

Respectfully,

Chad Berginnis, CFM
Executive Director