



Interstate Council on Water Policy
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August 9, 2018

Mr. Timothy Schneider
Office of Science and Technology Integration
National Weather Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
Washington, DC

Dear Mr. Schneider:

The Interstate Council on Water Policy appreciates the opportunity to provide comments on the annotated outline of the National Oceanic and Atmospheric Administration's (NOAA's) "*Subseasonal and Seasonal (S2S) Forecasting Innovation: Plans for the 21st Century*" report.

The Interstate Council on Water Policy is made up of state, interstate, intrastate and affiliate regional water management agencies and entities across the United States. Our members operate reservoirs, are responsible for water quality monitoring and permitting and supply water to hundreds of cities and municipalities across the nation. More reliable, long term forecasts would help them to better and more efficiently manage their water resources.

Drought contingency plan implementation and reservoir operations criteria are informed by hydrologic forecasts made at multiple timescales. Longer forecast lead times are critical for efficiently managing the river system under challenging conditions and mitigating shortage risks. If skillful, S2S precipitation forecasts could add valuable lead time to assist in making decisions associated with drought contingency plan implementation, such as triggering specified shortage mitigation actions.

We recommend that NOAA use its Hurricane Forecasting Improvement Project as a model for improving S2S precipitation forecasting. The hurricane forecasting project has been successful because it dedicated resources over a sustained period, set specific targets for improving forecasts, and set a schedule for meeting the targets. As many of our members are in coastal areas, they are familiar with and benefit from the Hurricane forecasting improvements. Gains in S2S forecasts should have similar benefits.

The skill of NOAA's existing Climate Prediction Center (CPC) S2S precipitation outlooks is insufficient to support many of our members' water management decisions needed for

our drought contingency planning and other water supply management operations. We urge NOAA to dedicate the resources necessary for rapidly making substantive improvement in S2S precipitation forecasting, and offer the following comments on the report outline:

- A section needs to be added to the outline to show the proposed schedule for making specific forecast improvements and the associated budgetary needs. Also, the existing budget for S2S forecasting should be summarized. This section should address the resources needed to make substantive improvements to precipitation forecasting – at lead times of three months and longer -- within the next five years.

- Orographic precipitation is very important to our members, particularly those located in the western US, and the report needs to describe how NOAA will provide the high-performance computing resources needed for accurately simulating mountain topography in its modeling, and what additional resources are needed to perform high-resolution research modeling.

- It is our impression that funding limitations have prevented NOAA from updating existing statistical forecasting tools and developing new ones that could add value to the dynamical modeling approaches. The report should describe how improved statistical tools would add value to S2S forecasting and identify NOAA's plans for improving statistical tools and the resources needed to do so.

Thank you for the opportunity to submit comments on the S2S report outline. We will be closely tracking this work as it proceeds and look forward to hearing about NOAA's progress on this very important subject.

With best regards,



Sue Lowry
Executive Director

