

Challenges and Innovations to Operational Hydrologic Forecasting in Alaska

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ABSTRACT

This presentation will review the National Weather Service's water mission, past, present, and future and describe specific cold season challenges in Alaska. Approaches to estimation and assimilation of snow conditions into current and future operational models will be described, along with other geoscience innovations of interest to the cryospheric science community. These include new approaches to both *in situ* monitoring and remote sensing in Alaska. Emerging needs driven by changing environmental conditions will be discussed. Ongoing collaborations with research partners will also be described, as well as research gaps and challenges where the APRFC is interested in new development. Finally, specific barriers to overcome in moving from research-to-operations will be discussed.

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