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*Limitations in process-understanding, modeling, and monitoring in the Western U.S. and Canada requiring an integrated and interdisciplinary team approach?*

The monitoring of fluxes of snow/snowmelt, groundwater recharge and depletion are lacking. At the nexus of these questions is soil moisture and in situ networks. Remote Sensing provides some relief.

*Key Objectives and Tasks?*

Quantify and improve monitoring networks for snow monitoring and soil moisture in the western states on the established in situ soil moisture networks. How snow sublimates, runs off, or converts to soil moisture is not well understood.

Design and test new technologies for monitoring snow and soil moisture beneath a snowpack.

*Resultant social, economic, and environmental benefits to justify associated capital investment.*

Water supply and forecasting in the Western U.S. is dependent upon snow. Understanding the mechanisms of snow accumulation, melt, transition to ground water etc.

# National Soil Moisture Network

0-10cm

