

Climate Change and Water Working Group Science to Engineering Applications in Watersheds Workshop, Seattle, WA, 2015

Summary comments from Group 1 across all natural theme areas

Group 1 included representatives from Federal water management agencies, and urban and other local-scale water management domains. The common discussion points from this group over all the targeted breakout sessions were these:

- **Translating science:** This point was common in all group discussions and was often linked to other points – communicating confidence and limits in all models in the chain from GCMs to impacts, e.g. The group agreed that the transfer and translation was in each direction: the users/managers communicating their decisions needing climate science and climate change information, and the developers/producers communicating what science is available and planned for the new future which could inform those decisions. The group also expressed the need for faster and better communication of interim products as progress increments along the multi-year research agendas.
- **Producing and testing more variables than T and Pr:** This point was often expressed in all natural theme areas in connection with the need for better information on ET and PET, and on stream T.
- **Doing more work in the relatively less-served watersheds:** The group requested that more work on both physical climatology and hydrology and on the biological and ecological responses be designed for applications in the eastern U.S. and in the outlying states and territories of the U.S. where less work has been done relative to the West of the CONUS.
- **Evaluating and communicating model performance along the entire model chain:** Practitioners repeatedly expressed the need to know more about the confidence and limits to models in the chain from GCM to impacts, how uncertainties interact along that chain, and how evaluation of all models in that chain can best be done and communicated. Relatedly, users of climate science expressed the need to know “when the model is finished and ready to use” while the developers/producers wanted to know “when their answers would be good enough.” This is the issue of setting targets for confidence for groups of variables important to various impacts assessments so that producers know which variables at which scales and with which levels of confidence can have priority.