

Workshop on Nonstationarity, Hydrologic Frequency Analysis, and Water Management – Next Steps

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Proceedings

Workshop on Nonstationarity, Hydrologic Frequency Analysis, and Water Management

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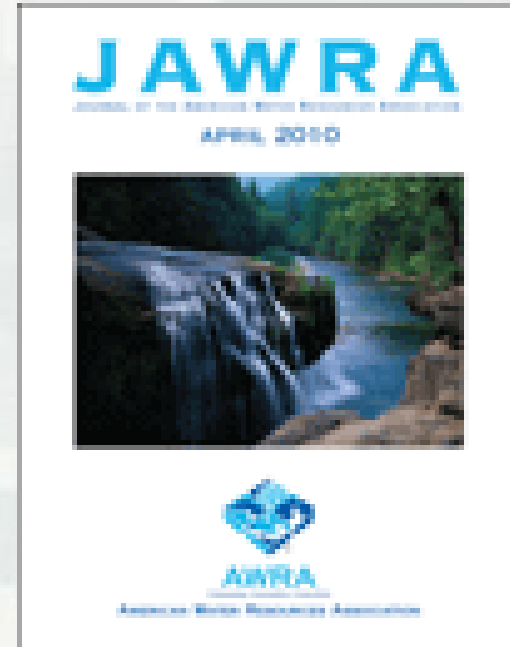
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JAWRA

- 16 papers submitted to feature collection of Journal of Water Resources Association



Federal Responsibility for Water Data and Analysis

- Federal government does not do a good job of keeping hydrologic analysis up-to-date.
- Federal government should provide adequate resources to keep hydrologic data, information, and methods up-to-date – precipitation frequency estimates, probable maximum precipitation, methods for flood frequency estimation (Bulletin 17B).
- SWAQ/CEQ water group recommendation?





Hydrologic Frequency Analysis

- Develop best practices for understanding changes in hydrologic frequency analysis
 - ▶ Develop a better understanding on ongoing hydrologic change and what are the processes causing extreme events.
 - ▶ What is the potential for future changes
- Recommend a sub-group under CCAWWG and to develop “best practices” for addressing non-stationarity in hydrologic frequency analysis and water management.



Climate Model Uncertainty

- Improve collaboration among climate scientists, hydrologists and water resources managers on validation of climate models and their use in decision making.
 - ▶ Global climate models have multiple deficiencies; they don't contain some physical processes and other processes are poorly represented.
 - ▶ On the other hand, climate model output does provide some plausible scenarios of future climate conditions which should be considered in water resources planning.
- A second workshop is planned for August 2010.



Decision Making Under Uncertainty

- There are inherent irreducible uncertainties in climate science, and we must recognize the uncertainty in our planning models and decision making.
- USACE has plans for evaluating methodologies.
- Discussion with CEQ Integrated Water Resources Management team.

