Proposed Intervention/statement:

On behalf of the Foundation for Food & Agriculture Research and the Chesapeake Bay Program's Science & Technical Advisory Committee, I submit the urgent need for a progressive approach to integrating scientific data to inform sustainable water management. Despite decades of research, we have made limited progress toward understanding when and where natural and engineered practices benefit our regional surface- and groundwater supplies, if properly installed. We call to elevate insights from experts in adaptive management and science-based decision support; look to their successes as guidance to meeting our challenges. Specifically, we ask that the UN call for model-based research and data collection built on the following four principles: 1) Commitment to learning while doing - collecting coordinated data across sites as practices are put on the ground; 2) Commitment to exploring how best to extrapolate **local** information to regional and international scales (I.e., upscale, not downscale information); 3) Commitment to evaluating/learning about these systems by comparing system response across variable conditions (I.e., along hydro chemical and climatic gradients). 4) Remembering and embracing diverse ideas (models) about how our activities affect our water resources. Sharing these hypotheses a priori can provide a powerful strategy to designing data collection efforts and engaging stakeholders.

In short, we ask that the UN community uphold its commitment to supporting local challenges to water management through interdisciplinary **model-based** information collection and synthesis.