

RETHINKING WATER SUPPLY STRATEGIES FOR A RESILIENT FUTURE

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Water supply is carefully planned, permitted, and managed throughout Florida to ensure all water users can rely on their supplies over the terms of their permit, and to allow for growth, while protecting water resources. For water allocations to be permitted, the applicant demonstrates that the need is reasonable, and that the use will not adversely affect permitted water users or water resources. Monitoring data and modeling results help to inform decision-making to ensure success. Currently, however, challenges loom related to rising sea levels and intensifying storms, increased flooding or drought, and other challenges related to climate change and growth in Florida. Incorporating these elements into current and future projects to mitigate these effects, and updating water policy to guide water use planning and permitting into the future is necessary. Issues for consideration include, but are not limited to, risk of saltwater intrusion on groundwater and surface water supplies, challenges and opportunities for various source waters, including alternative water supplies, water storage challenges including aquifer recharge, updating of regional water supply plans and water resource protections (and the associated data and models) to account for changing conditions, and updating of associated consumptive use permitting rules and policies. This presentation will focus on resilient strategies and challenges based upon the current scientific understanding of Florida's water supply vulnerabilities.

PRESENTER BIO: Dr. Shortelle is a limnologist with over 30 years of experience managing water resources, and innovative solutions for water policy and restoration projects throughout Florida. She led the FDEP Office of Water Policy and two water management districts for over ten years before recently returning to the private sector.