LIGHTENING THE WATER FOOTPRINT OF FLORIDA'S NEW RESIDENTIAL DEVELOPMENTS

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Each day, nearly 1,000 people move to Florida. Along with this influx of residents comes the demand for new home construction – the Sunshine State had over 30,000 housing starts in the first quarter of 2021 alone. Public supply now accounts for the largest share of our state's freshwater withdrawals (Marella, 2015), and typically half to 2/3 of the water consumed by new homes and residential communities goes to landscape irrigation. These water use trends highlight the need for a substantial and widespread shift in the urban development status quo if we are to protect the water resources upon which new residents and, ultimately, all Floridians depend. Factoring in the real, consequential, and cascading effects of climate change, this need for a paradigm shift becomes even more apparent.

At the 2020 Water Symposium, we presented an emerging public- private partnership (P3) aimed at making the business case for "irrigation-free" landscaping and other water conservation measures. In this presentation, we will: 1) highlight how these partnerships have evolved; 2) introduce an integrated, incentive-based, and dynamic sustainability performance framework for Florida's master-planned community development projects, known as the Sustainable Floridians Benchmarking and Monitoring Program (SF-BMP) which is being expanded through these partnerships; and 3) present SF-BMP pilot projects that function as "living laboratories" to benchmark, set, adopt, implement, manage, monitor, and adapt an integrated suite of ecological and sustainability performance metrics and targets for incorporation into the program. Session attendees will learn about the long process of partnership and program building that has led to current work on projects with 30- to 50-year buildout horizons and the potential to measurably reduce the water, energy, and ecosystem footprints of tens of thousands of new Florida homes.

PRESENTER BIO: Ms. Kipp is an ecological economist and Sustainable Floridians state coordinator with the UF Program for Resource Efficient Communities (PREC) and Center for Land Use Efficiency (CLUE). Her work focuses on promoting the adoption of best design, construction, and management practices that measurably reduce environmental degradation from urban development.