**Abstract**

Monroe County, home of the Florida Keys, is uniquely challenged by climate change and Sea Level Rise (SLR). As a result, it is taking a proactive approach to coastal resilience, protecting its critical road and highway infrastructure by merging climate change science with transportation engineering and planning. This presentation details how the County is developing a long-term roads adaptation plan through a multi-year project utilizing innovative design criteria, SLR projections, policy development, financing evaluation, and public/stakeholder outreach. As a first step, the County performed a pilot project to establish an interim standard methodology for adapting transportation infrastructure to SLR, using an annual average allowance of 7-days of tidal flooding per year. Design concepts, schedules and construction costs were then developed according to this adapted standard in full compliance with all applicable laws, codes, permits, and regulations. Development of the adaptation plan is on-going, including specific improvement recommendations as well as a maintenance and roadway action plan based on projected vulnerability over time. For example, the plan is evaluating improvements to be performed over 5, 10-, 15-, 20-, and 25-year horizons, while also providing general recommendations for the years 2060 and 2100. The plan also considers funding alternatives and strategies, providing Monroe County a viable roadmap to ensure sustainable access to and within the Florida Keys for the rest of the century.

**Speaker Bio**

Mr. Gregory Corning, PE, is the Civil Design Lead for Wood’s Florida Operations, providing technical leadership and engineering analysis for projects involving climate resiliency and assessment, project management, dredging and dewatering planning and design, stormwater design and permitting, and construction administration, engineering, and inspection. Mr. Corning has performed climate resiliency and assessment projects for parks, facilities, roadways, canals, and stormwater assets throughout Florida. He has been supporting Monroe County on its resiliency and canal restoration programs, including grant writing, for over 10 years. Mr. Corning enjoys supporting government partners in their public engagement processes, working with wide ranges of stakeholders and the general public on contentious resilience and sustainability issues. He is based in South Florida, working out of Wood’s Miami Lakes office.