

## INNOVATIVE WATER RESOURCES PROJECTS THROUGH ALTERNATIVE DELIVERY METHODS

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Florida has significant water resources challenges that need to be addressed soon. Protecting and enhancing our underground aquifers, rivers, and streams are all necessary to meet Florida's need for green infrastructure and spend the billions of dollars being allocated. As Florida's population grows from 21 million people to potentially 35 million people by 2070, sustainable water resources are critical, including water availability for those people, for agriculture, for industry, and for the environment.

Adding to this challenge, certain factors have reached a tipping point – algae blooms, red tide, sea level rise, sewage spills, water shortages, aging infrastructure, etc. - and immediate action is necessary. The present system of government projects, including traditional design, bid, build processes, along with single-use projects, will not meet all of the needs in the time frame that Florida requires. One potential tool is alternative delivery methods, such as public-private partnerships. Coupled with innovative multi-use projects that include a number of public benefits, alternative or collaborative delivery methods can improve stakeholder engagement and public perception of a project while helping Florida meet these challenges in time to make a difference.

This presentation will focus on two case studies of innovative multi-use projects using collaborative alternative delivery methods.

The C-51 Reservoir Project is a collaboration between utilities and local governments throughout South Florida, along with state and regional agencies and the private sector, to capture harmful discharges to tide, store the water and then use it to recharge the aquifer for public water supply and for environmental purposes.

The 4G Ranch Beneficial Reuse Project is a collaboration between Pasco County, state and regional agencies and the private sector to create new wetlands, recharge the aquifer and restore existing depleted wetlands. Both involve alternative delivery methods to design, permit and implement these regionally significant water resource projects.

**PRESENTER BIO:** Ernie Cox has degrees in Geology, Economics and Law from the University of Florida. His innovative conservation, sustainable development and water resource projects include the Collier County and St. Lucie County Rural Land Stewardship Areas, Hatchineha Ranch, Babcock Ranch, Farmton/Deering Park, C-51 Reservoir and the 4G Ranch Beneficial Reuse Project.