

CASE STUDY 1: BABCOCK RANCH AND HURRICANE IAN

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Babcock Ranch is a community situated in Southwest Florida that was designed carefully with sustainability in mind. While the words sustainability do have several meanings, on September 28th, 2022, Babcock would endure one of its biggest design tests to date as Hurricane Ian slowly churned just off the Southwest Florida Coast.

As part of the sustainable community design, the founders of the new community placed an emphasis on storm resiliency, and this meant the threat of extreme rainfall. Hurricane Ian made landfall as a strong category 4 Hurricane around 4:00 in the afternoon, bringing with it rainfall in some locations in excess of 20".

Months prior to the storm, National Stormwater Trust installed monitoring stations at several control structure locations throughout the community to monitor water levels; and to ultimately place future operational structures throughout the community. Though, the operable structures were not in place in time for the hurricane; the data that was obtained during the storm was able to be incorporated into a security plan for the community throughout the duration of the storm, including important messaging to residents; and in follow up to the community's proven resiliency from the storm, the data was able to be used to make better decisions on the location of future operational weirs; three of which are now operable onsite, with a commitment to implement approximately 20 structures throughout the community over time to increase the storm resiliency of the community.

PRESENTER BIO: Amy is the founder and president of Wicks Consulting Group; a Civil Engineering Consulting firm based on integrated stormwater designs that propose development as a complete systems approach. Amy has been the lead Engineer for much of Babcock Ranch, leading the design and implementation of their resilient stormwater management systems that successfully managed the extreme rainfall event of Hurricane Ian.