

A two-year planning effort
focused on building community resilience
to the impacts of climate change in Broward County

BROWARD COUNTY: A RESILIENCE PLAN IN THE MAKING

#ResilientBroward

September / October 2023

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The Resilience Plan Steering Committee held its seventh meeting on **AUGUST 23, 2023**, with progress reports on heat data analysis, stakeholder input, community outreach, economics modeling, and methodology to be applied in the county-owned asset analysis.

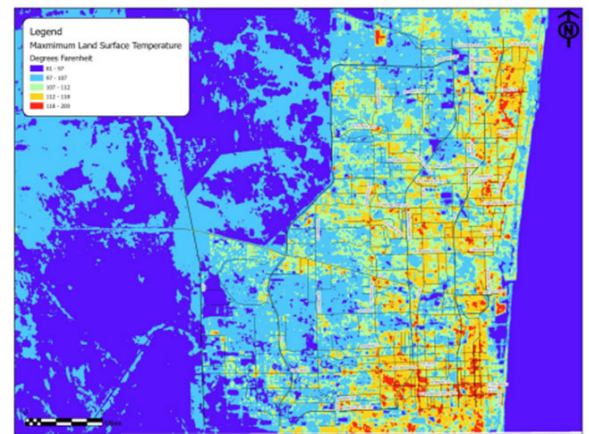
Heat Data Analysis

Official temperature readings revealed July 2023 to be the hottest month on record. Heat mitigation is an important part of the County-wide Risk Assessment and Resilience Plan, and in the ultimate selection of optimal infrastructure solutions. In this analysis, satellite recordings of land surface temperature are being used to more closely indicate real heat conditions.

Identification of heat islands has been correlated with densely populated, industrial and commercial areas with high coverage of impervious surfaces.

The initial analysis shows a potential difference of up to 13°F when comparing impervious areas and pervious areas. The results are currently being combined with socio-economic data to investigate impacts to vulnerable populations and local activities.

Influences on Heat



Maximum LST

Outreach Activities

Six meetings were held with over 100 expert stakeholders to present and review the initial results of the no-action hydrologic modeling scenarios.

Stakeholders provided comments and suggested refinements that have been incorporated into the model where possible. Feedback confirmed that model results captured well areas that regularly flood during heavy rains and those that experienced severe flooding with past storm events.

Findings further revealed that more severe model scenarios corresponded well with flood levels experienced during the April 12th flood event.

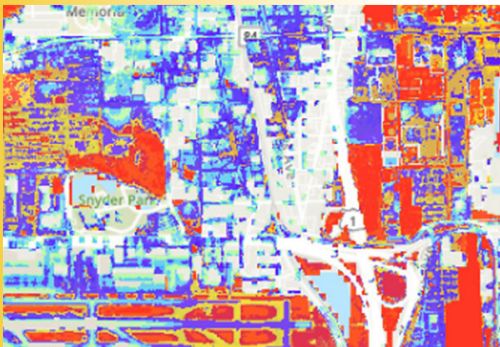
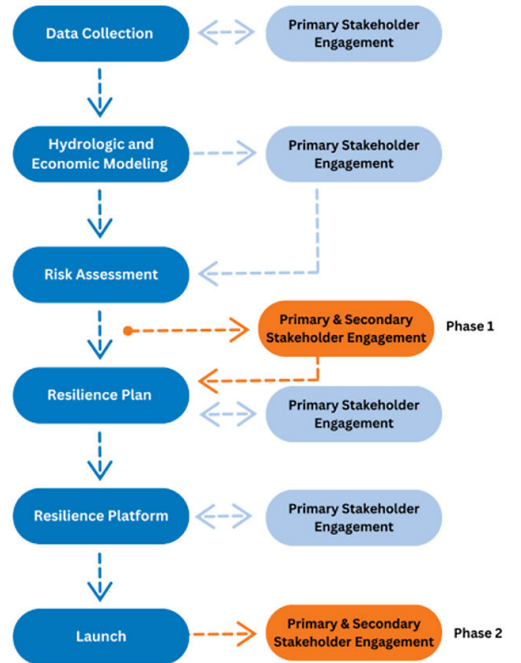


Adaptation Strategy Kickoff

Primary strategies for adaptation will be developed around four concepts: Runoff Reduction, Runoff Storage, Strategic Conveyance and Discharge, and Adapting to Water. Tools for addressing these concepts include Policy, Infrastructure, Procedures, and Regulation.

Population growth, sea level rise, and a higher groundwater table all reduce storage and discharge capacity of existing gravity-controlled storm water management systems. Initial recommendations include more active water management, coordinated discharges, and systematic land use reclamation for stormwater storage. Real time data will help establish an organized network for responsive system management and flexible operations.

Stakeholder Engagement Diagram



Critical Asset Analysis

Nearly a dozen County Agencies participated in a sample risk assessment of twenty critical assets to help develop and test the proposed methodology for risk weighting and ranking of assets. Flood depth derived from hydrologic model output coupled with a weighted criticality score will be used to determine risk factors and a risk prioritization schedule for additional County assets. This methodology was developed to support adaptation and use by local municipalities as well.

Economics Modeling Update

The team is currently finalizing the baseline no-action economic model results with the final memorandum to be shared and presented at the next Steering Committee meeting on October 11, 2023.



RESILIENT ENVIRONMENT