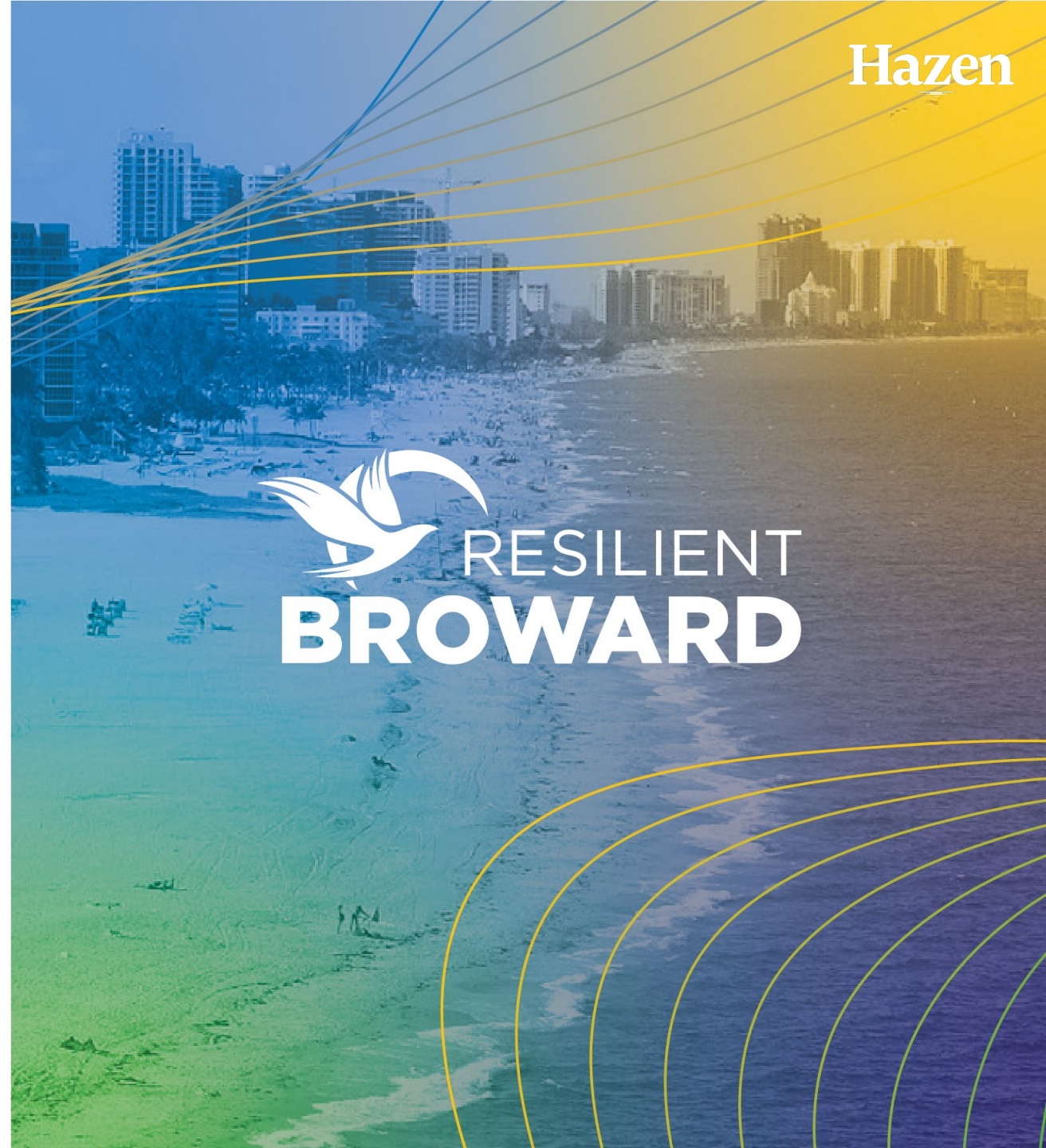




COUNTYWIDE RISK ASSESSMENT AND RESILIENCE PLAN

Baseline Hydrologic Model Results –
Countywide Stakeholder Review

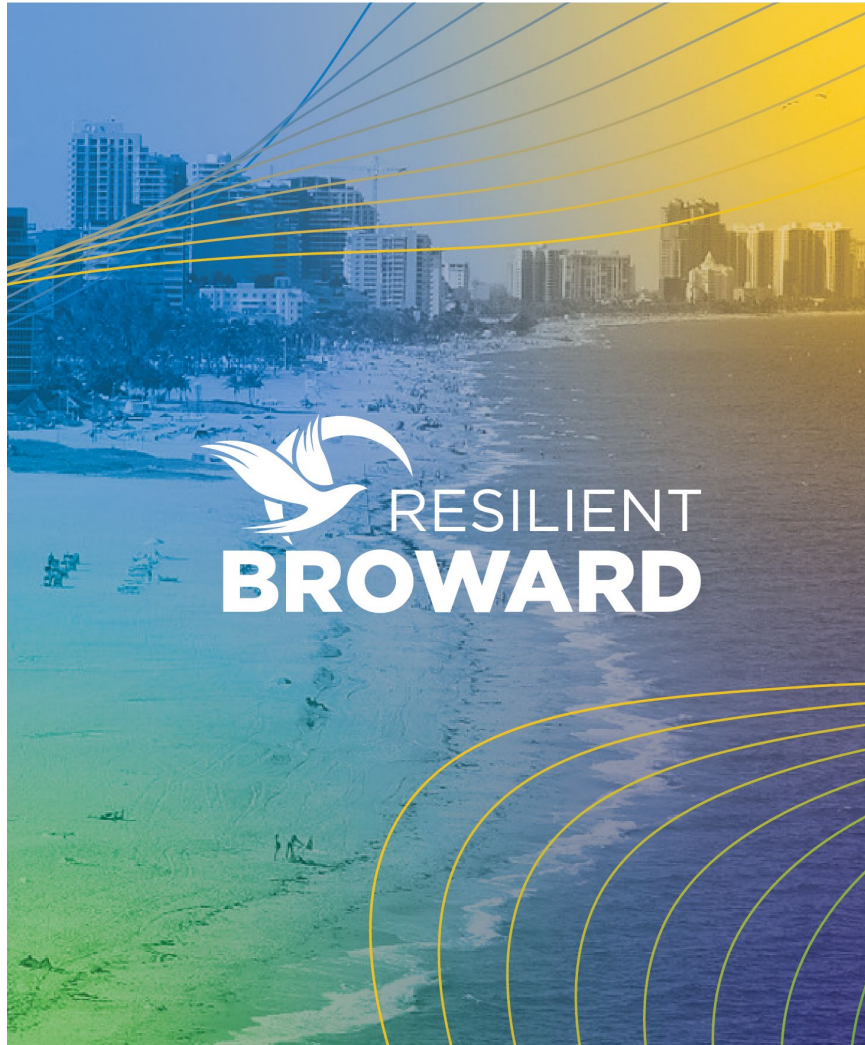
May 22, 2023



Outline

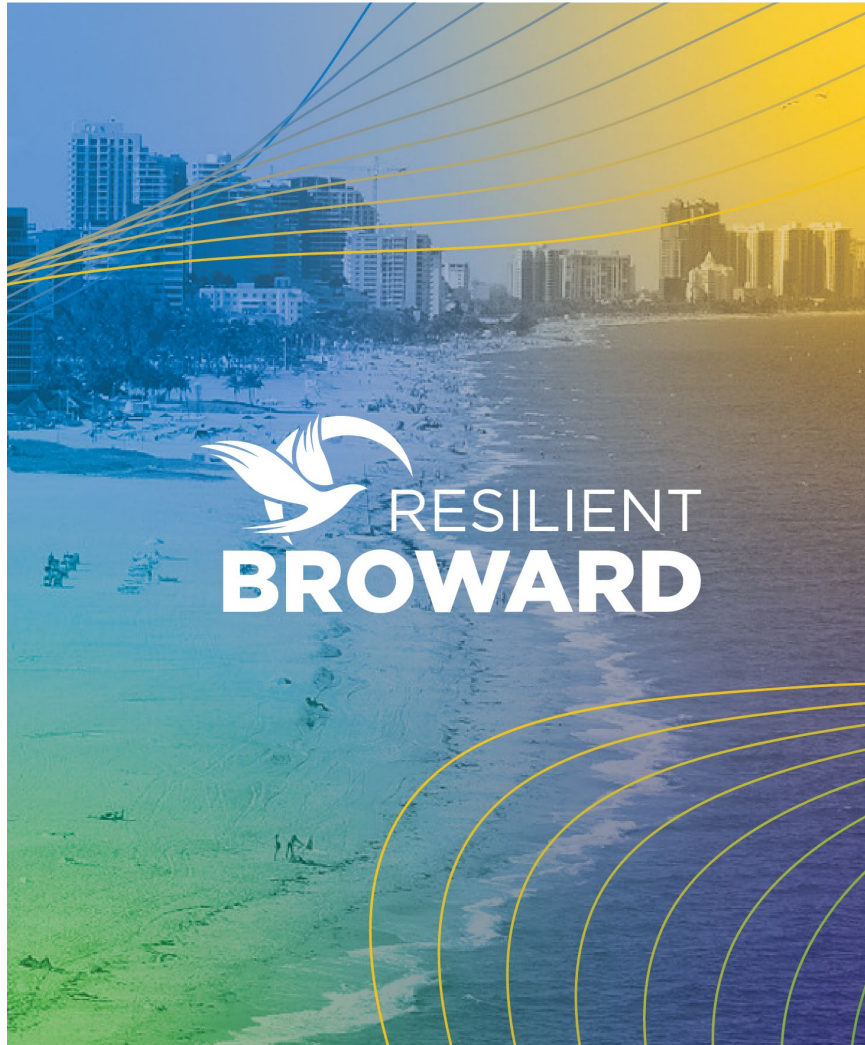


- 1** Introduction to County Risk Assessment and Resilience Plan (J. Jurado)
- 2** Intent of Stakeholder Review (Hazen)
- 3** Overview of Hydrologic Modeling Effort (Hazen)
 - Model Origin and Evolution
 - Current Model and Scenarios Analyzed
 - Introduction to Review Tool
- 4** Review of Model Results (All – Breakout Rooms)
- 5** Concluding Thoughts and Next Steps (Hazen and G. Mount)



1

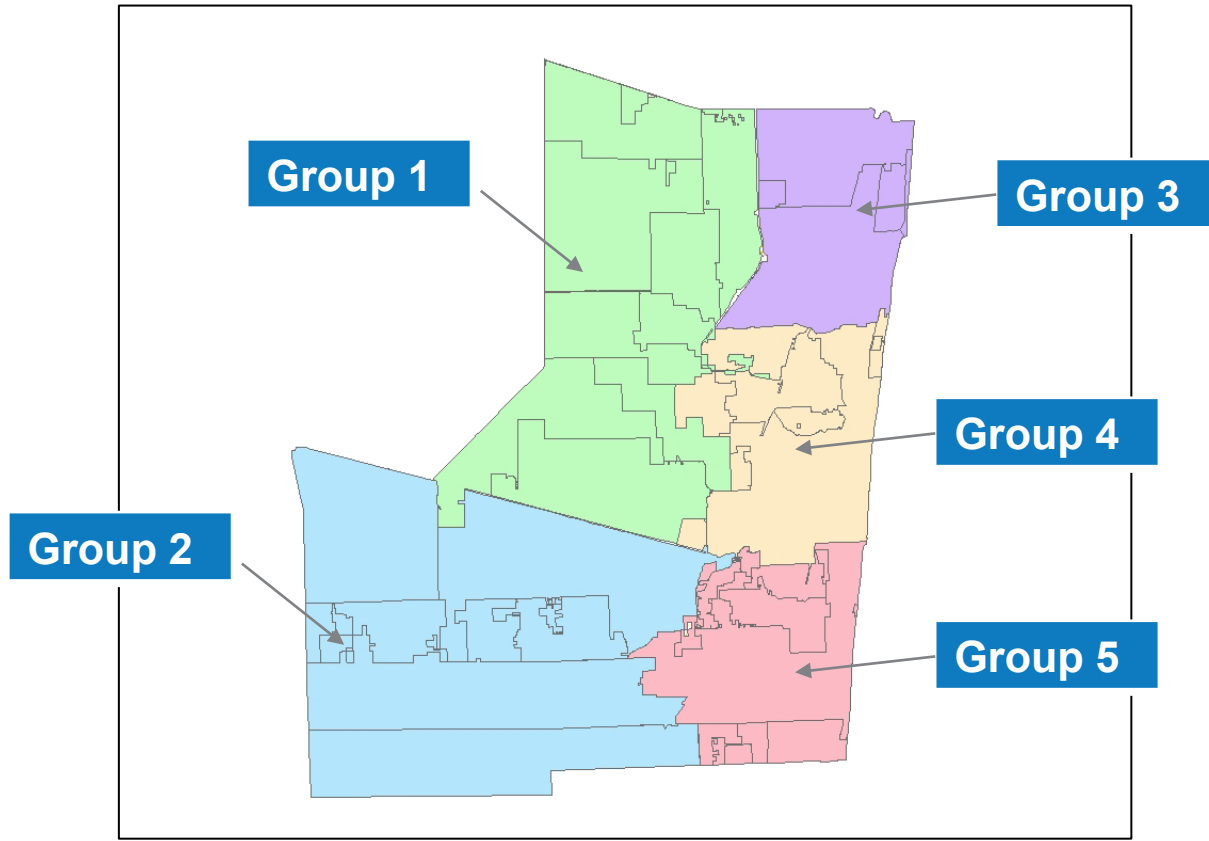
Introduction



2

Intent of Stakeholder Review

Sub-regional Stakeholder Review Workshops will help fine tune model and inform adaptation strategy utilization



Five meetings
will be held
in **May/June**

The grouping of Stakeholder entities is noted below

GROUP 1

1

North Lauderdale
Coral Springs
Coconut Creek
Tamarac
Parkland
Plantation
Lauderhill
Margate
Sunrise
Seminole Tribe of Florida
NSID WCD
Old Plantation WCD
Plantation Acres WCD
Pine Tree WCD
Cocomar WCD
Turtle Run WCD
Sunshine WCD
Coral Springs WCD
Coral Bay WCD
Cypress Cove WCD
North Lauderdale WCD

GROUP 2

2

Davie
Southwest Ranches
Weston
Pembroke Pines
Miramar
Cooper City
South Broward WCD
Indian Trace WCD
Bonaventure WCD
Central Broward WCD
Tindall Hammock WCD

GROUP 3

3

Pompano Beach
Deerfield Beach
Hillsboro Beach
Lighthouse Point
Broward WCD

GROUP 4

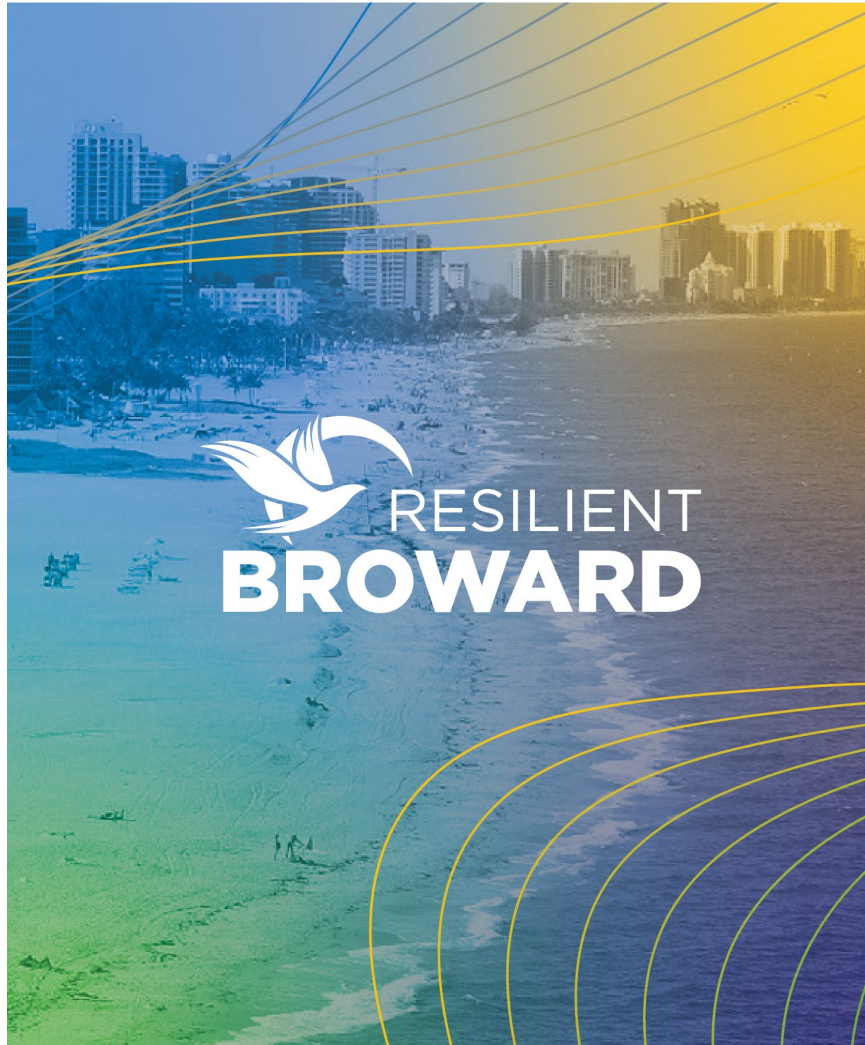
4

Fort Lauderdale
Lauderdale Lakes
Wilton Manors
Lauderdale-By-The Sea
Sea Ranch Lakes
Lazy Lake
Oakland Park
Lauderdale Isles WCD

GROUP 5

5

Dania Beach
Hollywood
Hallandale Beach
West Park
Pembroke Park
Seminole Tribe of Florida
Oakridge WCD
Twin Lakes WCD

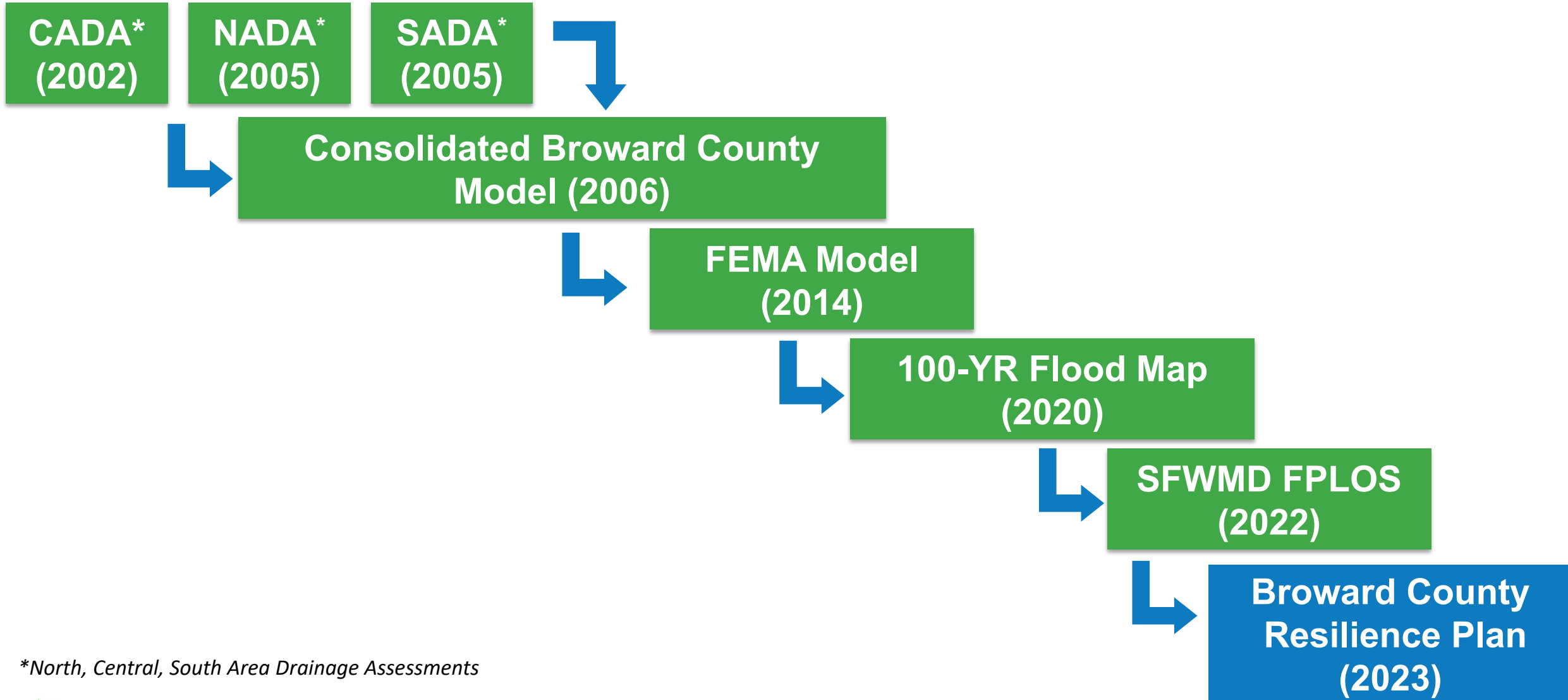


3

Overview of Hydrologic Modeling Effort

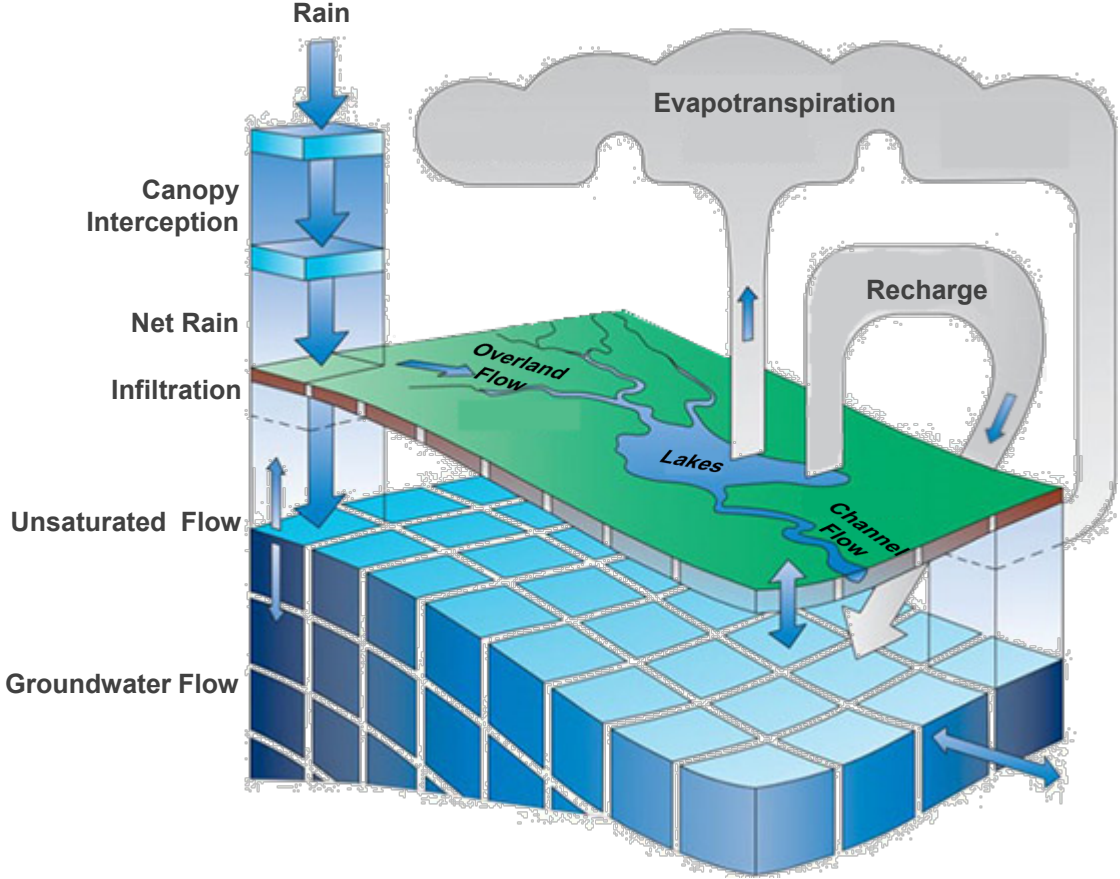
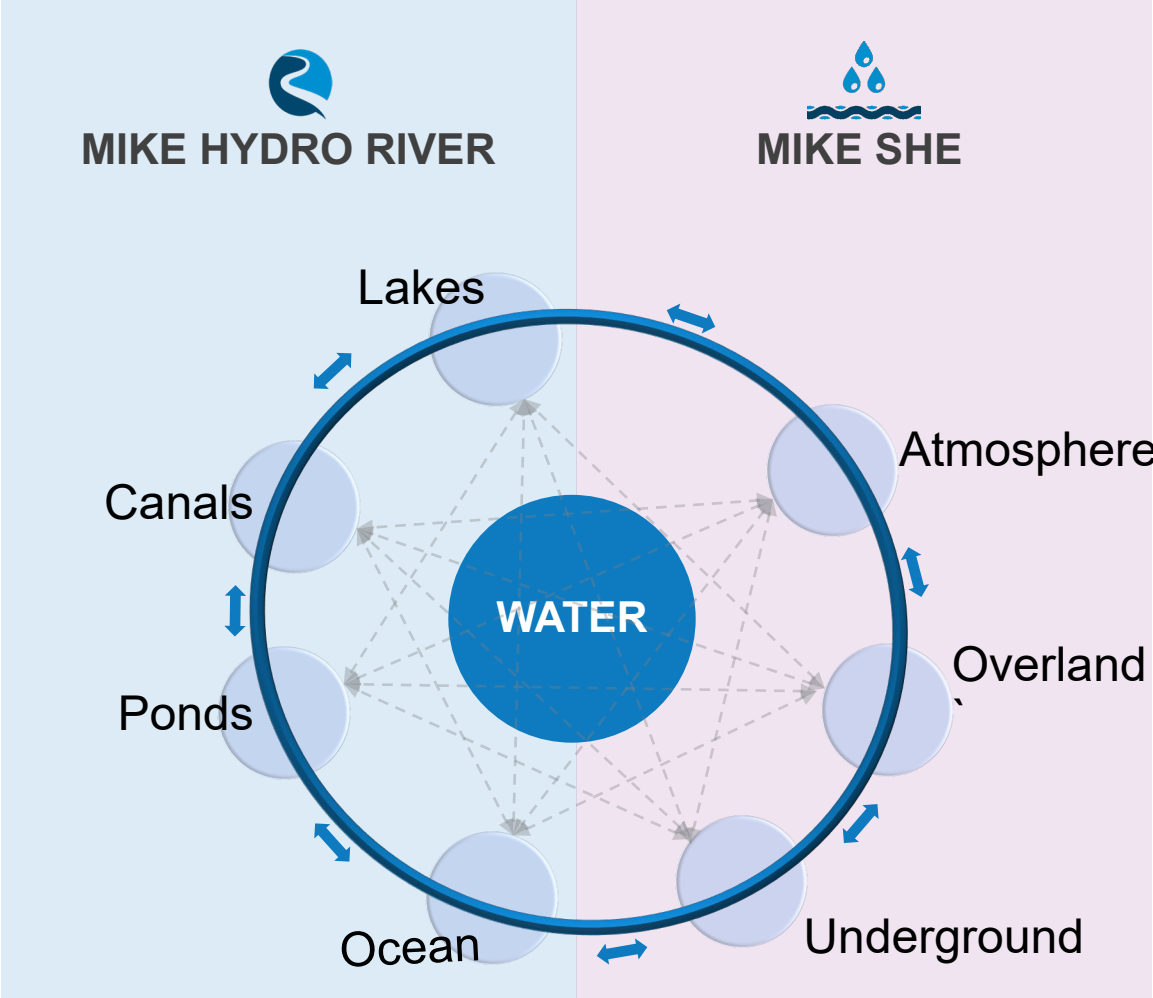
Model Origin and Evolution

History of the Broward County Model (2002-2023)



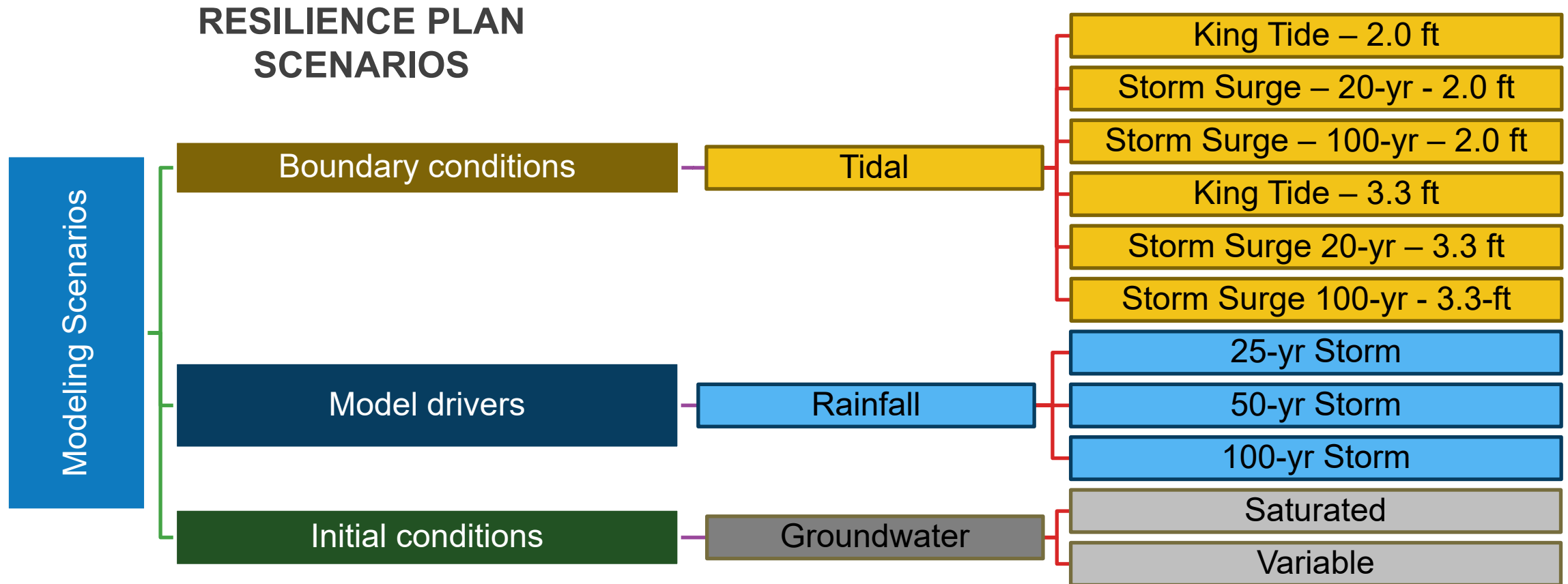
**North, Central, South Area Drainage Assessments*

MIKE SHE – MIKE HYDRO RIVER GENERAL DESCRIPTION



MIKE SHE- MIKE HYDRO RIVER

Current Model and Scenarios Analyzed

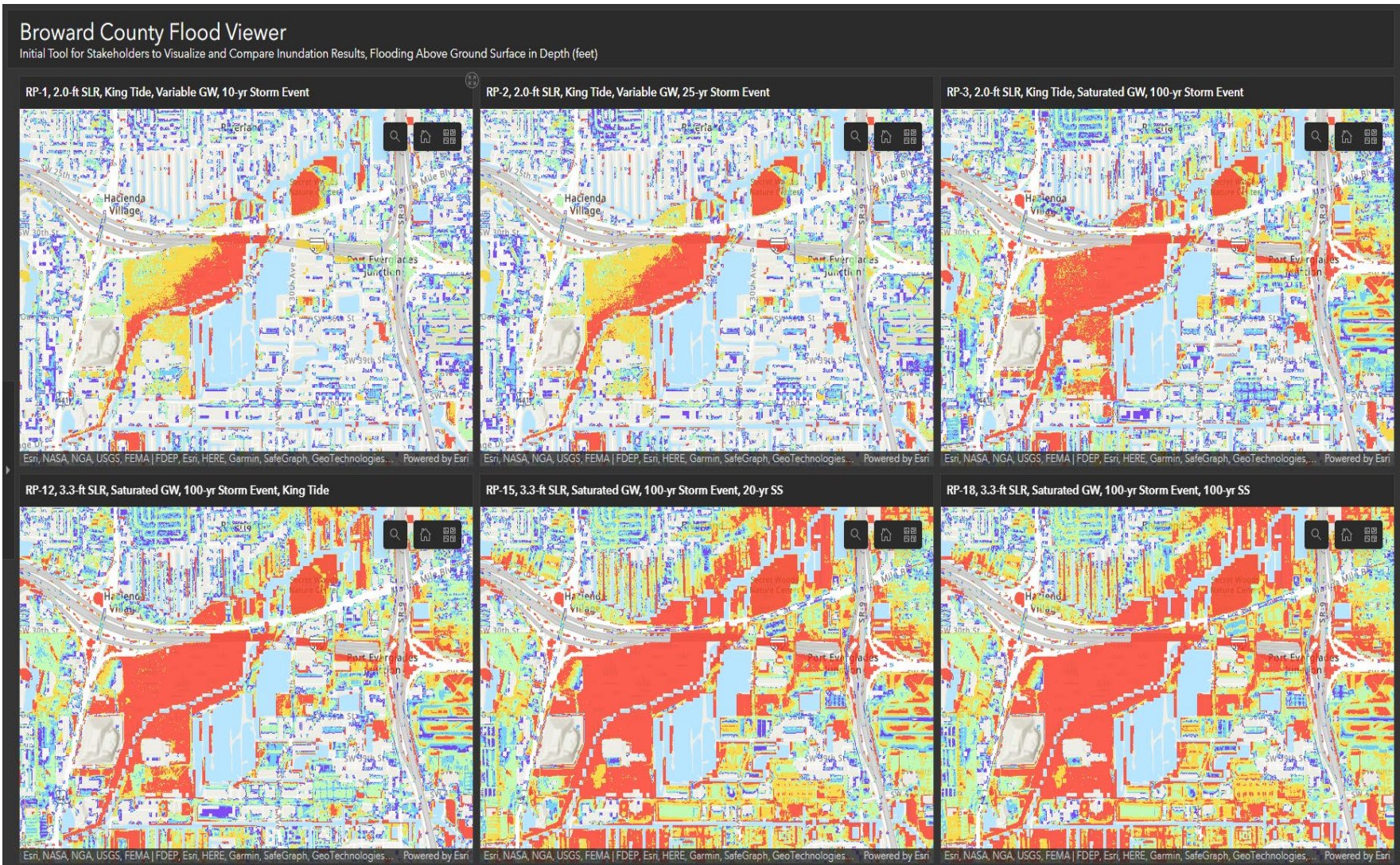


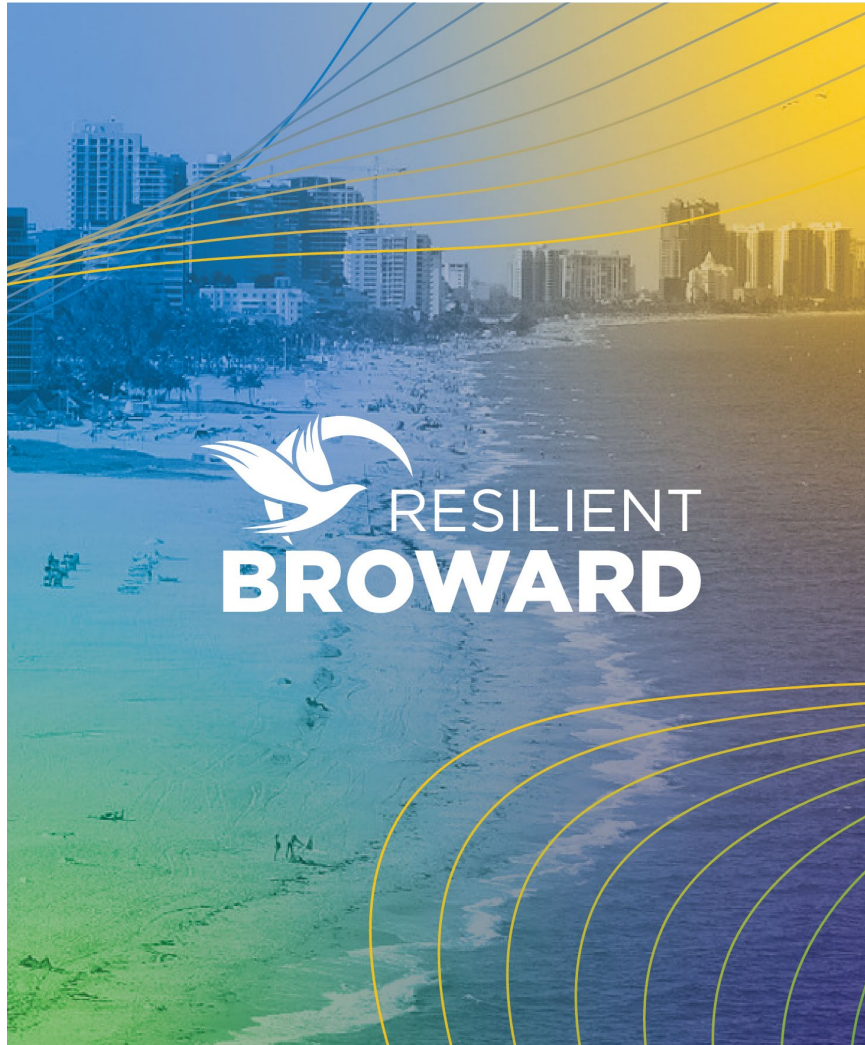
24 SCENARIOS

Current Model and Scenarios Analyzed

Scenario No.	Rainfall	Sea Level Rise Scenario	Antecedent Condition	Tidal Condition
RP-1	25-yr	2.0 ft	Variable GW	King Tide
RP-2	50-yr	2.0 ft	Variable GW	King Tide
RP-3	100-yr	2.0 ft	Saturated System	King Tide
RP-4	25-yr	2.0 ft	Variable GW	20-yr Storm Surge
RP-5	50-yr	2.0 ft	Variable GW	20-yr Storm Surge
RP-6	100-yr	2.0 ft	Saturated System	20-yr Storm Surge
RP-7	25-yr	2.0 ft	Variable GW	100-yr Storm Surge
RP-8	50-yr	2.0 ft	Variable GW	100-yr Storm Surge
RP-9	100-yr	2.0 ft	Saturated System	100-yr Storm Surge
RP-10	25-yr	3.3 ft	Variable GW	King Tide
RP-11	50-yr	3.3 ft	Variable GW	King Tide
RP-12	100-yr	3.3 ft	Saturated System	King Tide
RP-13	25-yr	3.3 ft	Variable GW	20-yr Storm Surge
RP-14	50-yr	3.3 ft	Variable GW	20-yr Storm Surge
RP-15	100-yr	3.3 ft	Saturated System	20-yr Storm Surge
RP-16	25-yr	3.3 ft	Variable GW	100-yr Storm Surge
RP-17	50-yr	3.3 ft	Variable GW	100-yr Storm Surge
RP-18	100-yr	3.3 ft	Saturated System	100-yr Storm Surge
RP-19	3-day 10-yr + 20%	2.0 ft	Variable GW	King Tide
RP-20	3-day 10-yr + 20%	2.0 ft	Variable GW	20-yr Storm Surge
RP-21	3-day 10-yr + 20%	2.0 ft	Variable GW	100-yr Storm Surge
RP-22	3-day 10-yr + 20%	3.3 ft	Variable GW	King Tide
RP-23	3-day 10-yr + 20%	3.3 ft	Variable GW	20-yr Storm Surge
RP-24	3-day 10-yr + 20%	3.3 ft	Variable GW	100-yr Storm Surge

Introduction to Review Tool



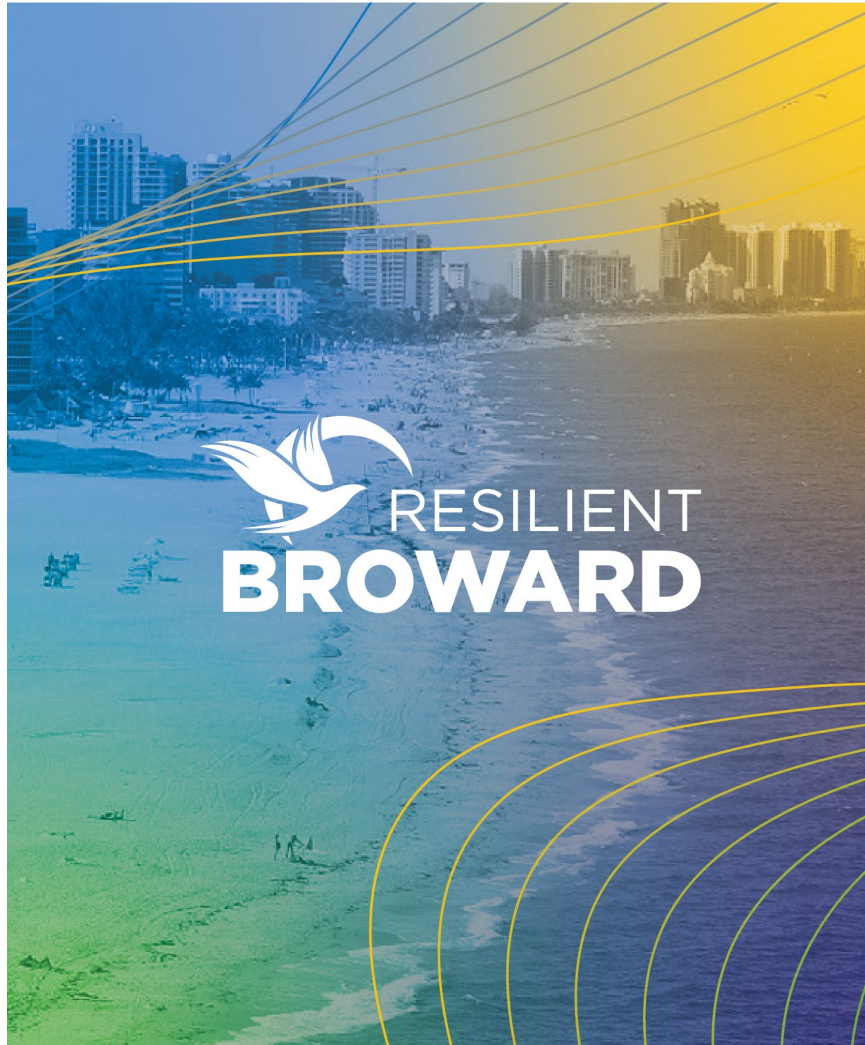


4

Review Model Results

Breakout Sessions





5

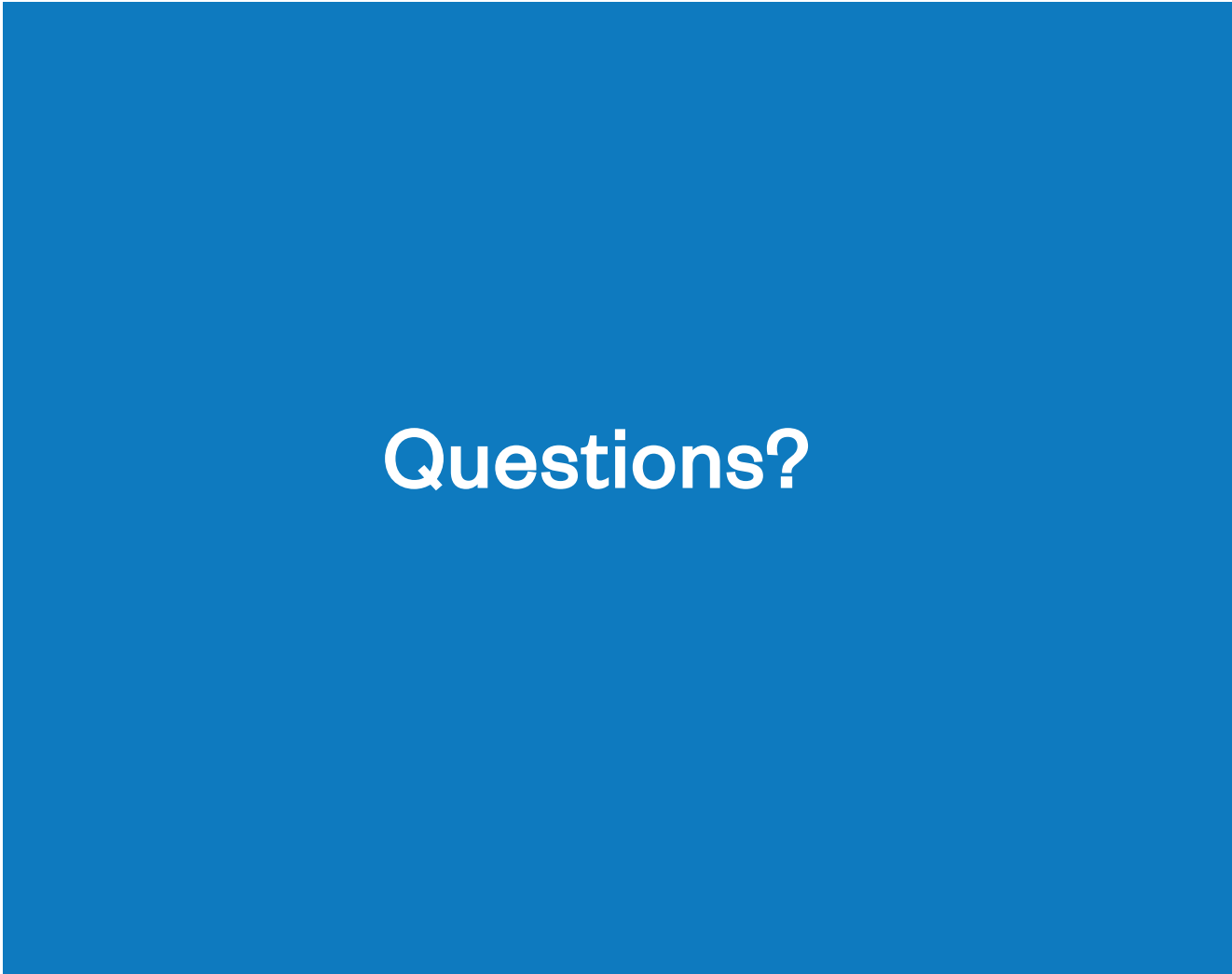
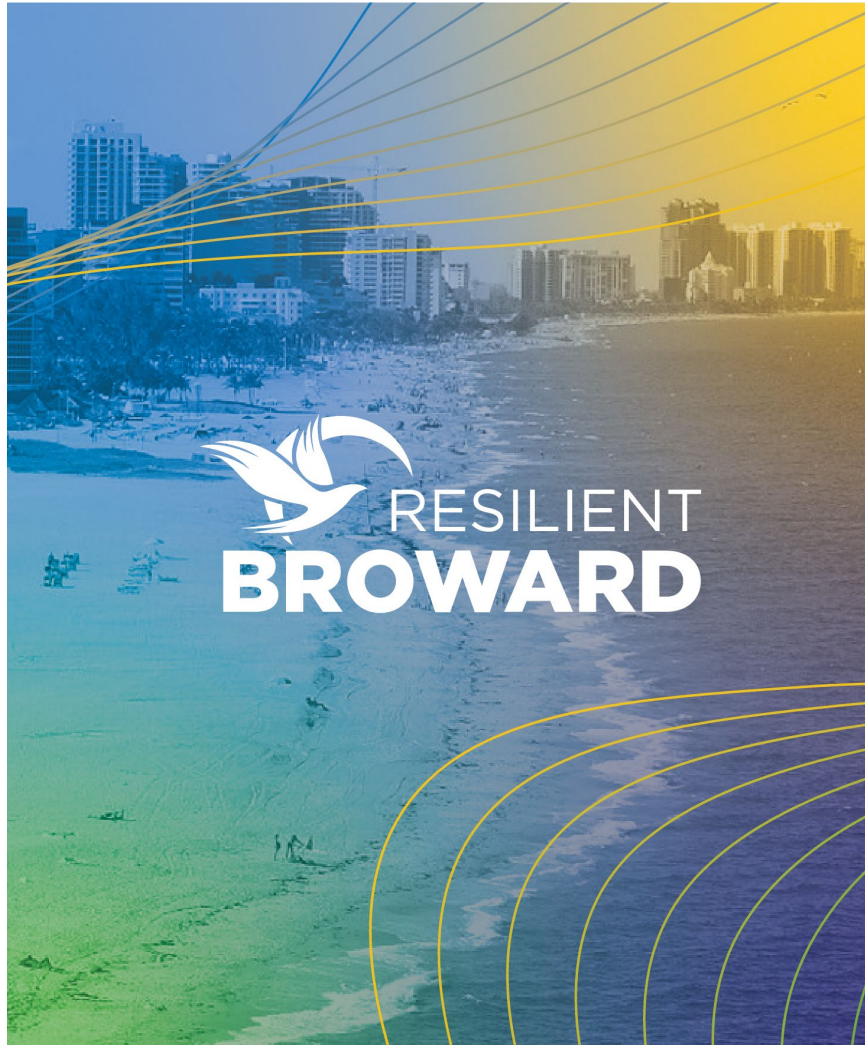
Concluding Thoughts and Next Steps

Concluding Thoughts



Next steps after Stakeholder Workshops

- Provide Stakeholders a summary of all five meetings' proceedings
- Provide a dropbox for Stakeholders' continued input (via photos, videos, flooding reports, etc.)
- Utilize this critical feedback to make prudent model adjustments
- Advance assignment and evaluation of adaptation strategies (and combinations thereof)
- Convene with you again to discuss adaptation strategies and their expected efficacy



Hazen

Thank you!

