South Florida Resilient Redesign II

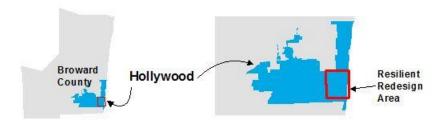
Hollywood

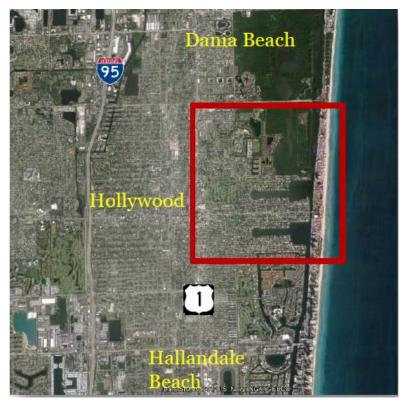
7th Annual SE Florida Regional Climate Leadership Summit December 3, 2015



Introduction: City of Hollywood

- Established in 1925
- 31 square miles
- 148,000 residents
- Economic Drivers:
 - Corporate headquarters,
 - Tourism,
 - Healthcare





Hollywood Vision



"Classic American downtown with an international accent"

"World class coastal destination"

Urban Design



Historic Downtown



Hollywood Beach Broadwalk



Modern

Organized Planning and Investments: Hollywood Master Plan



A Complex Landscape

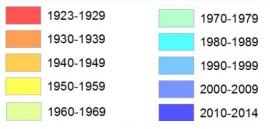
- Diverse Socio-economics
 - Property values: \$50K-\$10M+
- Mixed Land Use
- Designated Historic Properties
- Low Land Elevations
 - Subject to flooding and surge



Property Age



Actual Year Building was Built

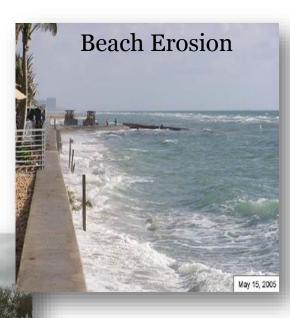


Inundation 2 feet SLR Rise

Planning Challenges

- Low elevations
- Older infrastructure
- Flooding
- Rising groundwater
- Rising sea levels
- Traffic congestion
- Beach Erosion

Storm-induced Flooding



High Tide Flooding



In 45 years things can radically change...

...and now they are changing at an even more accelerated rate.

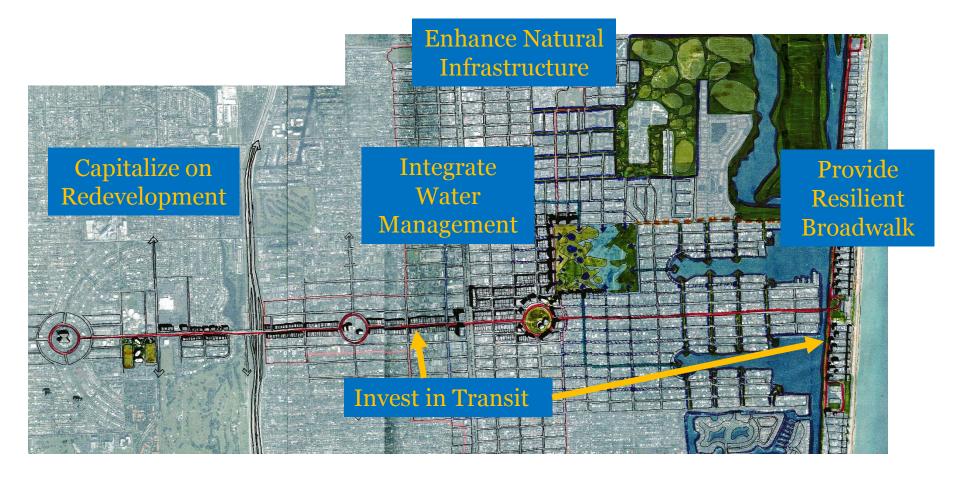


Focused on Community A Destination Today and Tomorrow



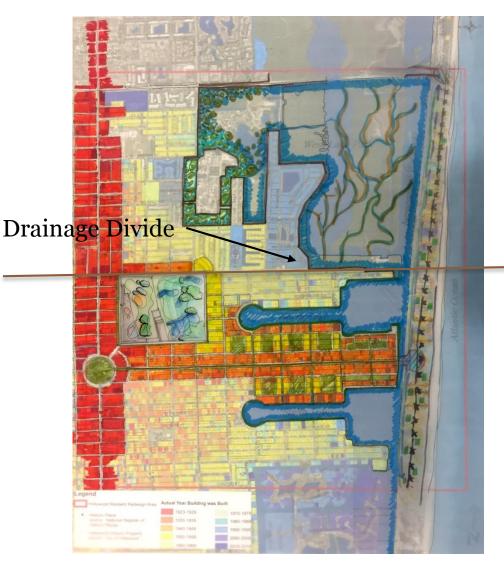
STATISTICS AND MADE IN CONTRACTOR

Hollywood: Resilient Design Concepts



Holistic Water Management Approach

- Infrastructure connectivity
- Wetland rehydration and enhancements
- Roadways as drainage conduits (green streets)
- Construction of a Hydric Park
- Repurposing of ocean outfall for floodwater discharges



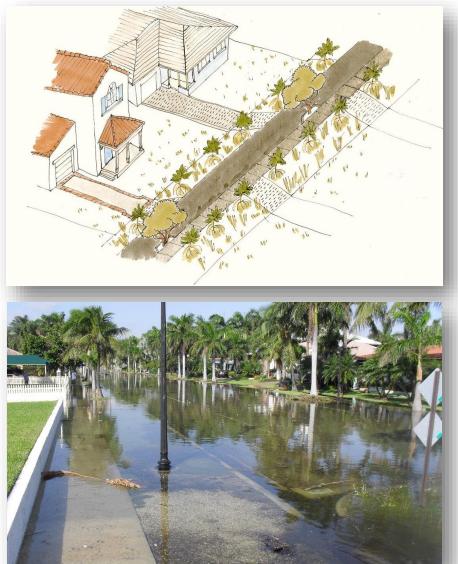
Water Management Detail

- Raise sea walls
- Install pumps
- Raise and reduce road width for storage
- Redirect tidal and stormwater to lined hydric park
- Actively discharge tidal/storm water via outfall

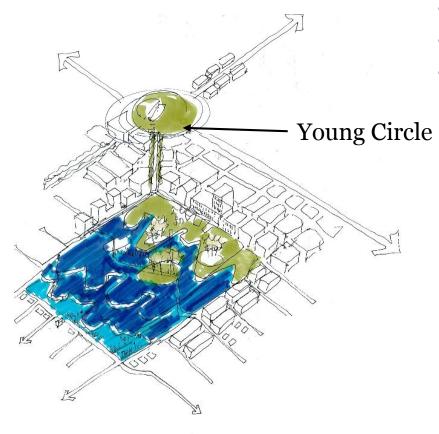


Neighborhood Resilience Strategy

- Elevate converted oneway roads
- Create brackish bioswales
- Install grated driveways for residential access
- Incentive/require additional on-site storage



Hydric Park and Center: Mid-term flood mitigation



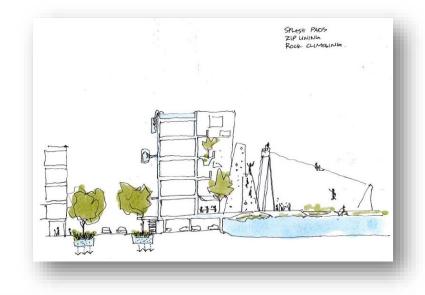
Concept:

- Repurpose golf course
- Berm and line for water storage
- Create natural area /wetland
- Provide public use



Hydric Park Features

- Expanded downtown district
- Edge amenities
- Combined art, entertainment and natural areas







Hydric Park Possibilities



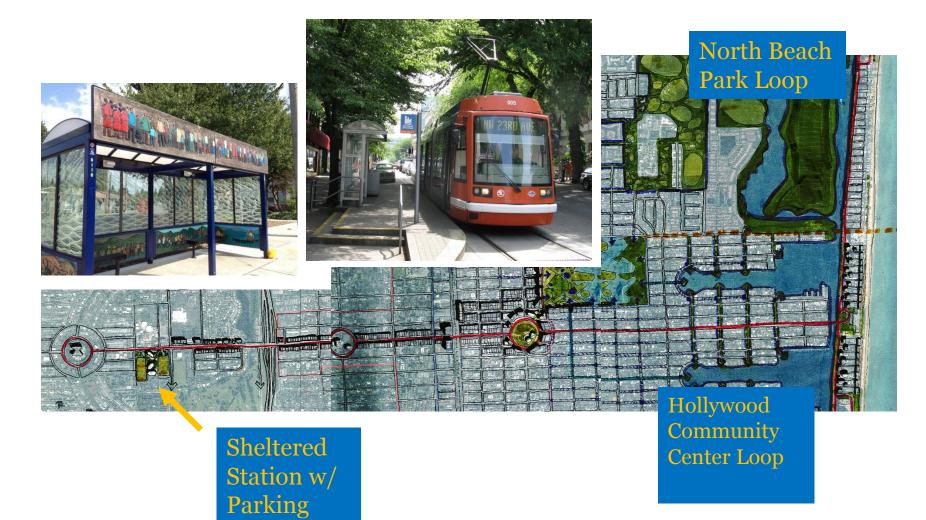
Urban Wetlands Park – Nugegoda, Sri Lanka





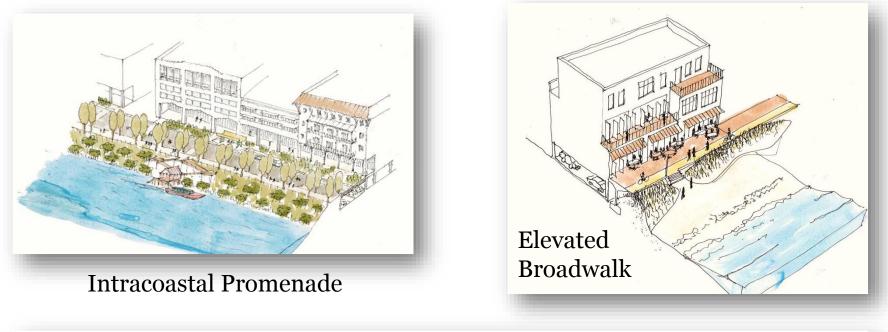
Turenscape – Qunli China

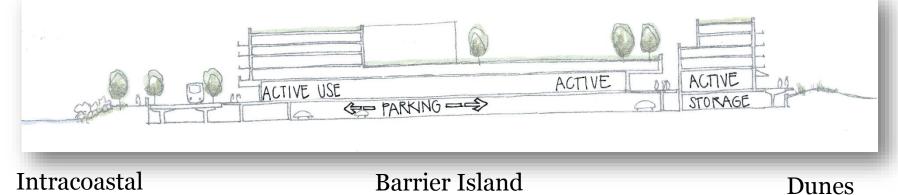
The Tan-Line: Connecting Hollywood to the Beach



Investing in the Broadwalk

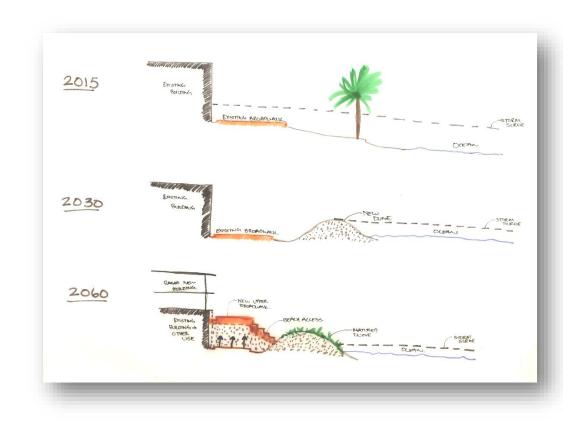
Resilient Beachscape





Resiliency Features and Strategy

- Establish protective dunes
- Enhance beach
- Guide resilient redevelopment
- Transition to elevated Broadwalk and infrastructure
- Connect to elevated "Tan Line"



Resilient Redesign Strategy

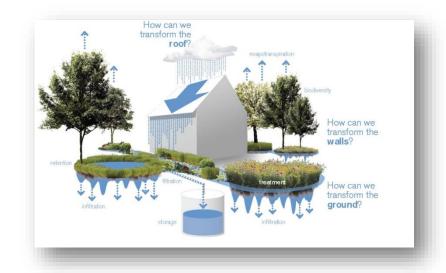
Short-term

- Sea walls and pumps
- Roads, storage, and bioswales

• Mid-term

- Transition ground floors
- Connectivity
- Address intracoastal
- Longer-term
 - Complete hydric park
 - Expand transit hubs

Intracoastal seawall





A Workable Vision for Hollywood

- Green Landscape
- Increase Storm Protection
- Integrated water storage and redistribution

- Repurposing of infrastructure
- Compatible with existing land uses
- Multi-modal emphasis
- Diverse co-benefits



Thanks to Team Members

- Samantha Danchuk, Broward County –Site Coordinator
- Jeffery Huber, FAU– Design Team Captain
- Alexandra Carcamo, City of Hollywood
- Robert Daoust, Arcadis
- Leslie Del Monte, City of Hollywood
- Francois Domond , City of Hollywood

- Susan Goldberg, Hollywood CRA
- Ricardo Lopez, UM
- Lorie Mertens-Black , City of Hollywood
- Catherine Prince, City of Fort Lauderdale
- Jack Iles, Miami Eilds
- Sara Forelle, Broward County
- Steve Joseph, City of Hollywood
- Leonard Vialpando, Broward County