Summer Haven Resiliency Coalition (SHRC)

Mission Statement	Membership
SHRC will achieve restoration, revitalization and resiliency of these	Friends of Summer Haven River, SHRC includes: SHRC members, &
ecosystems, infrastructure & properties :	Summerhouse Beach & Racket Club
Summer Haven River	 North Summer Haven Rep: Terry Parker, Angela Pate
	Historic Summer Haven Rep: Eric Cardenas
Matanzas Inlet	Barrataria Island Denise Cochran, Scott Siemens
Summer Haven Beaches	 South Summer Haven Brian Love, Pamela Stewart
Pellicer Creek	 Summer Island Lynette Hendricks
AIA and other roads	 Matanzas Inlet Park Todd Recicar
Summerhouse	 Summerhouse Dina Elani , Joshua Simons

SHRC Resiliency Plan

Goals: An engineered plan of integrated dunes, armaments, parks, & parking qualified for state, federal and nonprofit funding to add financial, recreational and ecological value to St. John's County.

- Excavate the Summer Haven River (Public) restore flow asap Capture sand to fortify the river basin. (Goal: 60 Days)
- Beach Expansion, Dunes, Renourishment (Public & Private)
 Min 12' Elevated berms, Beach expands east. (Goal: 60 Days)
 Summerhouse and all of Summer Haven Beaches
 See proposed Phases below
- 3. <u>Buried Double Seawall 35' underground with top dune</u>
 (Public & Private) see <u>Example</u> from County procured Interra Report below
 From the northern Historic district to the south county line.
- 4. River Revetment (of best type likely not rock) (Public) east side of Summer Haven River where needed but west of Seawall keep sand on beach!
- 5. County Park with parking (Public) Summer Haven River Park
 - Park with parking between R201 & R-202 on A1A on County land - with a Summer Haven River walkover.
 - Second Park and parking south of R-208.
- 6. Resiliency & Renourishment Program (example: 50 Year USACE program)
 Includes all public properties the above with ongoing maintenance & beach renourishment.



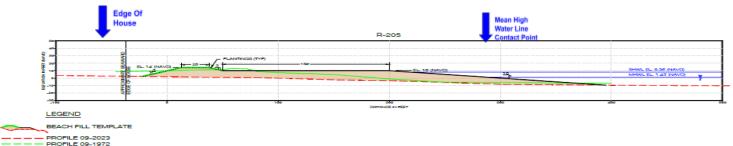
Beach & Dune Phases (Interra Report 2023):

Phase 1 South Area - (R-204.5 to R-208).

Southern most home, then north, to first county lot (private funding)

- 12' Elevated berms east of homes, expand beach 150' to 200' to where MHWL is shown below (Interra Report)
- Excavate sand west of south bridge + Flagler dredged sand, (Flagler and FIND funding potentials)

Concept only.



Phase 2 Middle Area - 5 Private Empty Houses, 10 private lots, 3 county lots (R-202 to 204.5)

(public/private funding, <u>USACE</u> potential for public)

- Existing Community of Homes MSTU district with funds to achieve goals.
- Houses 12' elevated berm, Lots raised to 9' elevation

Phase 3 North Area - 12 Public Lots only (R-200 - R-202)

• 12' elevated berm on lots

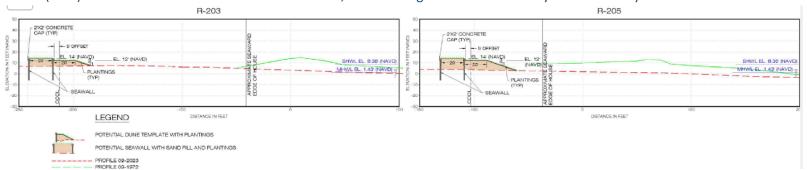
Example: Structured Nourished Dune – (Intera Report 2023)

"5.2.2 Beach and Dune Nourishment – Dune will have "... an elevation of +14 ft ... seaward of the line of coastal construction ... approximately 40 ft east from the edge of the five isolated houses." Also "a 150-ft wide beach crest at elevation +10 ft ... with a ... seaward slope ... matching existing grade." This dune has "an approximate fill density of 150 cy/ft for a total ... approximately 1.5 million cubic yards."



Example: Double Seawall with fronting small dune – (Intera Report 2023)

"5.2.1 Seawall - requires the County to obtain easements", SHRC can assist (as did South Ponte Vedra / Vilano Beach). The seawall is "consists of two steel sheet piles tied together with tie rods and concrete caps. ... elevation of +14 ft." and "a small dune ... elevation of +12 ft ..., a crest width of 20 ft, and a 3H:1V seaward slope." "Given the large distance (20 ft) between the two walls and their elevations, overwashing of the double wall system is unlikely to occur."



River Sand Allocation

West of North bridge sand goes to Summerhouse

West of Southern bridge sand goes to Flagler, contingent on Flagler offshore dredging sand coming to us Beneficial for better sand quality.

Advance the strategies for the private property owners in Phase 2

to create win/win with the County and residents and implement it.

- 8 private homes and 13 private lots are currently being discussed. Finalize! Implement!
- Residential Market value estimated at over \$15 million using current sales which is not aligned with Property Appraiser "Just Market Value of \$ 3.14 million"

River Revetment Options

Explore new Technology

- Cobble Berms cobble-sized rocks mimic storm beaches, wave energy dissipates in cobble movement
- Non-Corrosive Gabions and Gabion Mats
- Trap Bags
- Marine Mattress or Marine Cells
- Latest Geotextile Tubes