

WEDA Eastern Chapter Regional Workshop 2012

# Borrow Sources of the Future

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Miami, Florida  
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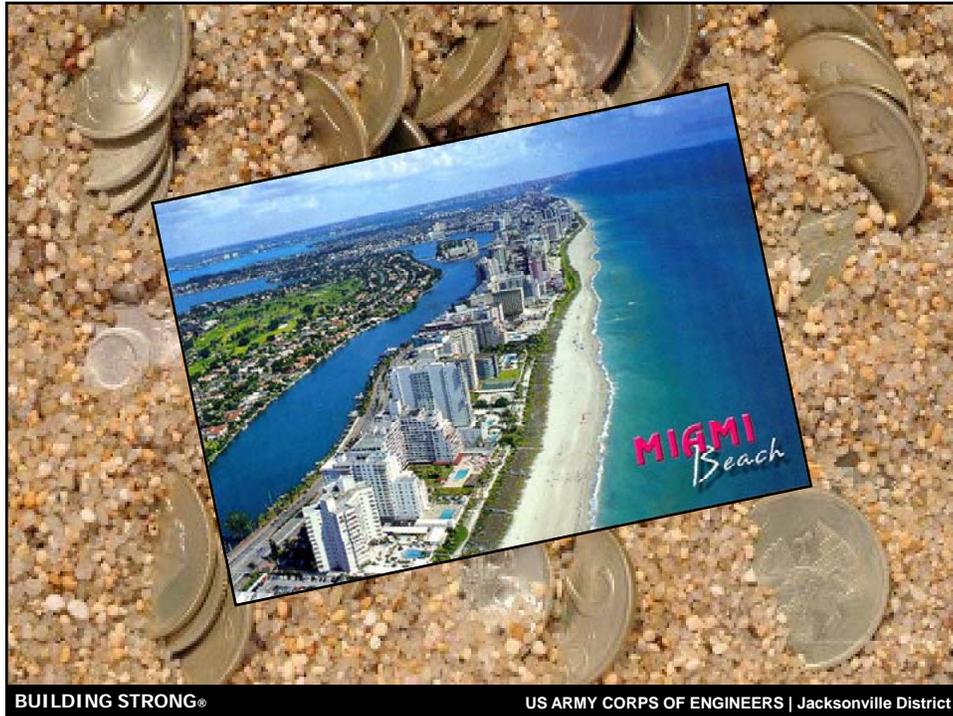
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## Agenda

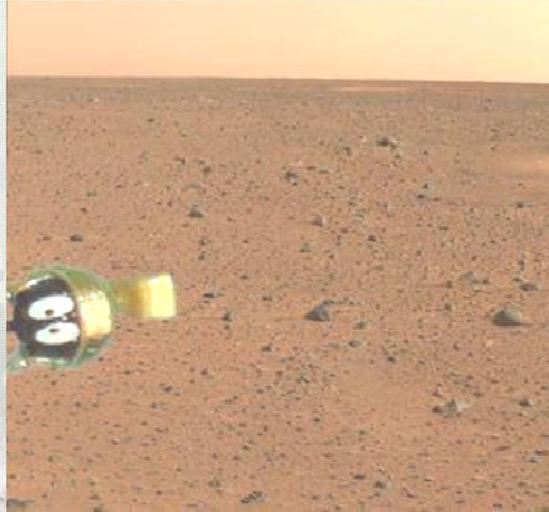
- ✓ Why do we care?
- When is the future?
- Dade County as an example
- Constraints
- Florida examples
- Next Steps

An hourglass is shown on a sandy beach with some grass. The ocean is visible in the background. The hourglass is made of wood and glass, with sand inside.

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# When is the Future?



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## SE Florida 50 yr Sediment Needs

County	50-Year Volume Need (cy)	Borrow Area Beach Quality Sand Volumes (cy)				Volume Balance (cy)
		Category 1 (Proven)	Category 2 (Potential)	Category 3 (Unverified)	County Total	
St. Lucie	18,017,487	17,218,750	41,600,000	188,582,413	58,818,750	40,801,263
Martin	22,111,000	24,781,000	0	282,733,583	24,781,000	2,670,000
Palm Beach	45,577,000	12,039,000	42,307,000	63,951,826	54,346,000	8,769,000
Broward	11,650,000	988,400	0	5,116,691	988,400	-10,661,600
Miami-Dade	14,968,300	0	0	0	0	-14,968,300

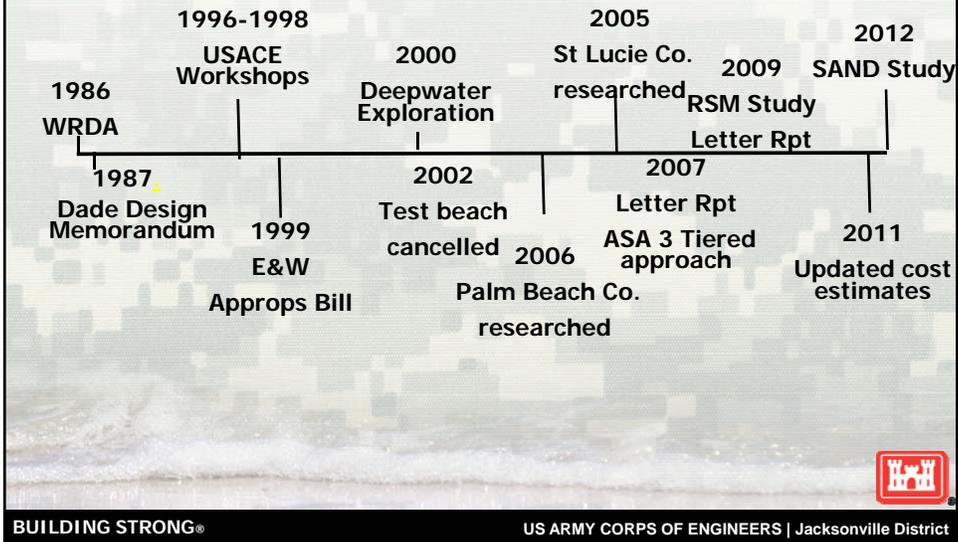
In Southeast Florida  
the Future is Now!



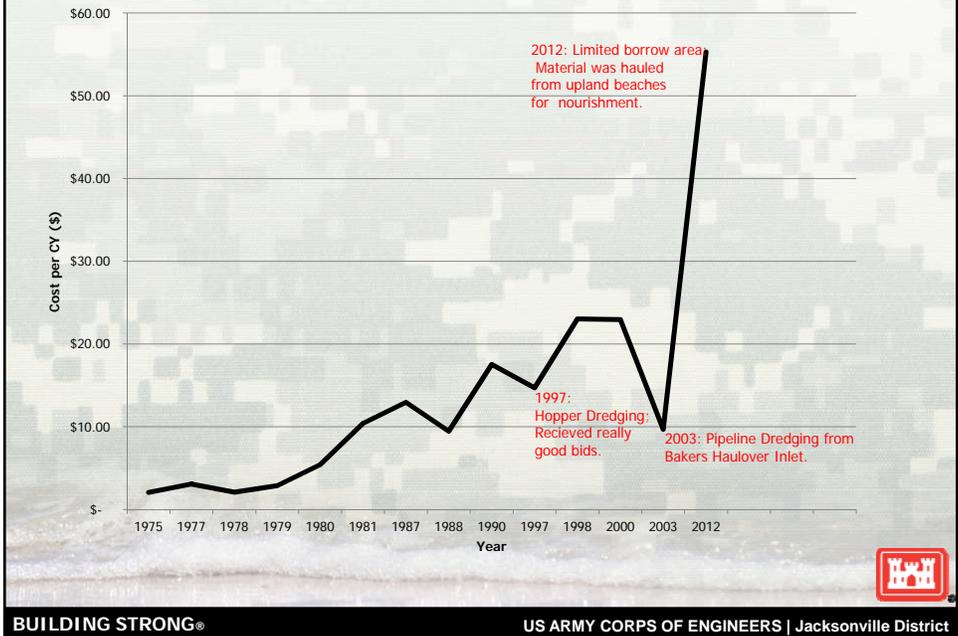
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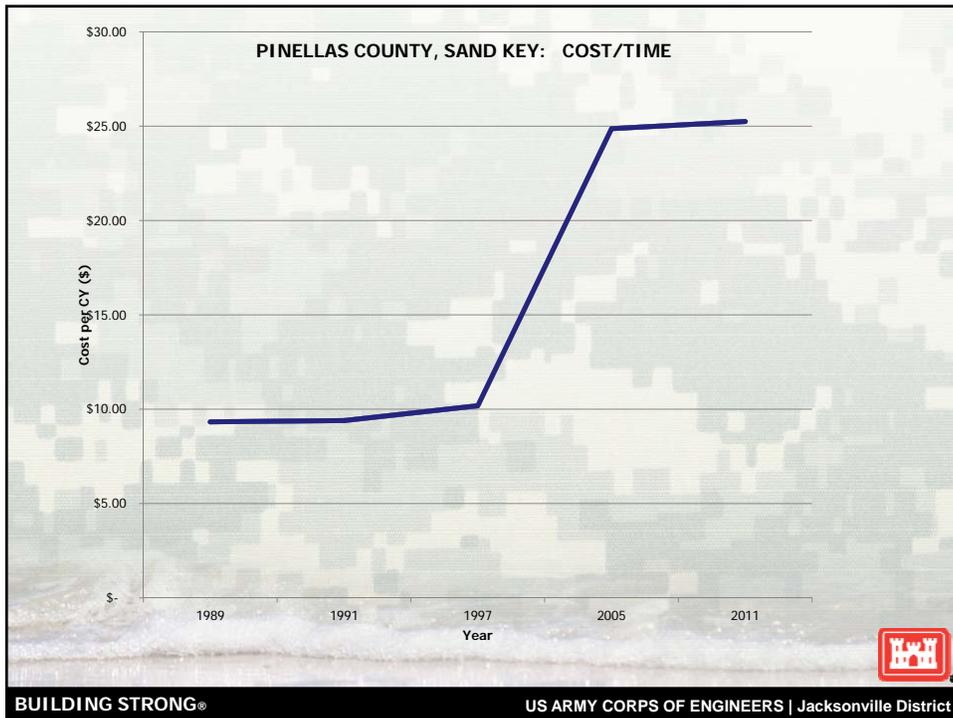
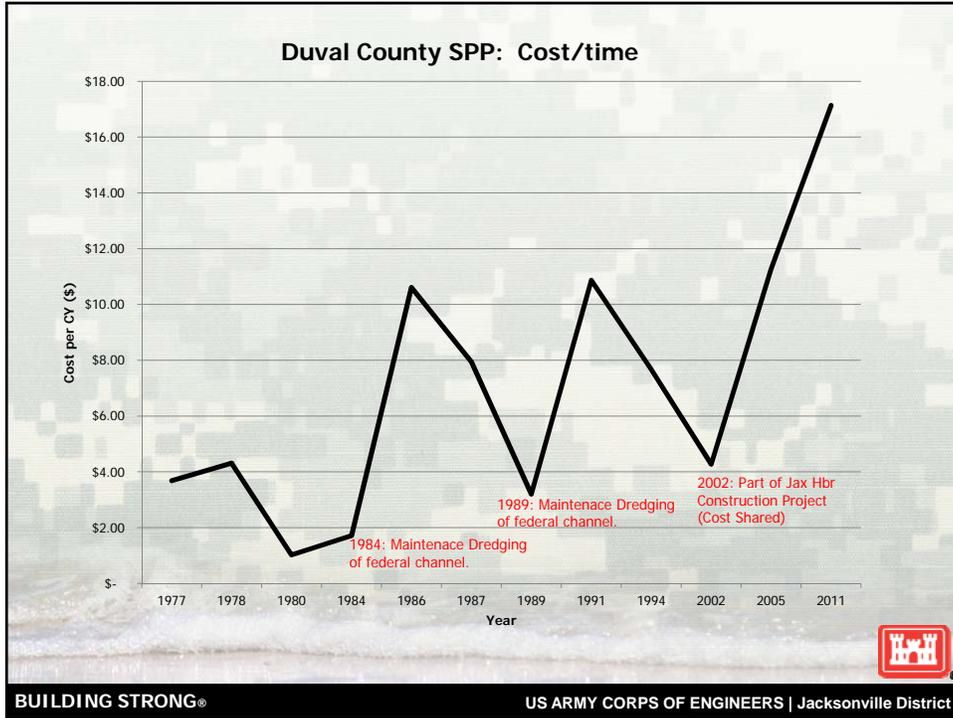
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# Dade Borrow Search Sequence of Events

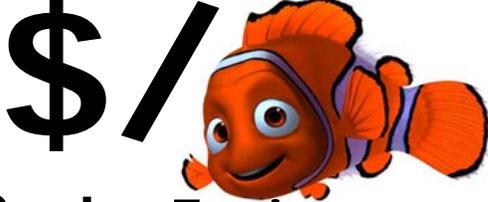


### Dade County SPP: Cost/Time





## Borrow Area Constraints

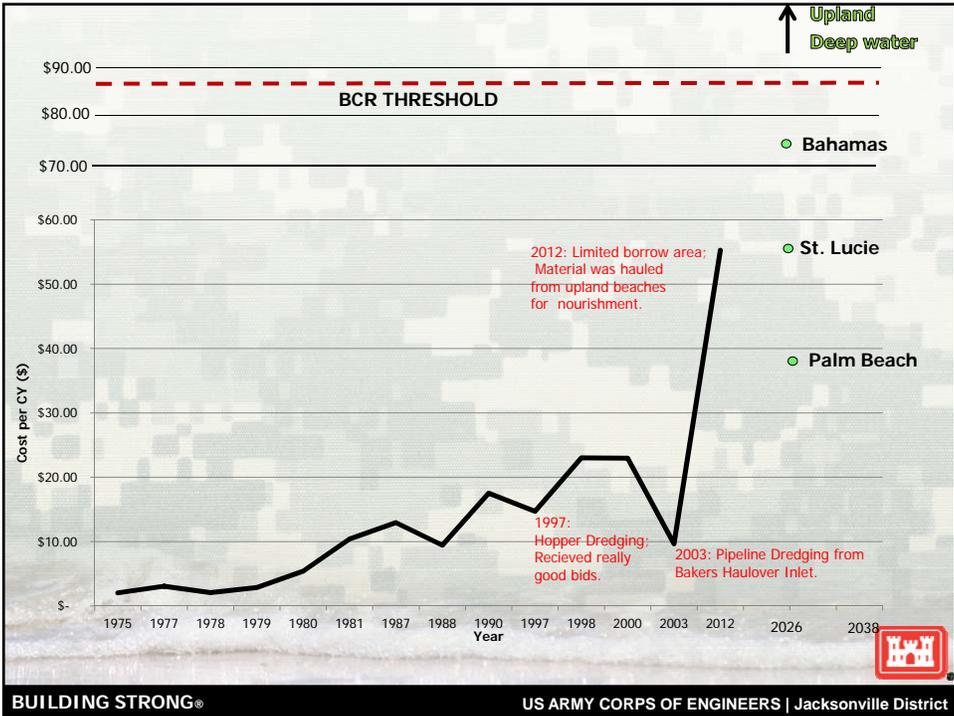

  
**Cost      Environment**



## Dade County Potential Borrow Area Costs

Possible Sources	Volume Available (cy)	Total Cost (per cy)	Notes
Palm Beach County	6M	\$38	• Met with Strong Opposition from officials and public
St. Lucie County	34 M	\$56	• Met with Strong Opposition from officials and public
Bahamas	Large	\$77	<ul style="list-style-type: none"> <li>•Conferee Report H8842 states that no fed funds will be used on foreign sources unless ASA provides written cert. that domestic sources are not available.</li> <li>•Dredging industry concerns</li> </ul>
Upland Sources	Large	\$156	<ul style="list-style-type: none"> <li>•High Cost</li> <li>•City of Miami limits amount of sand that can be trucked in</li> </ul>
Deepwater	Large	\$342	•Material is 10-12% fines and DEP mandates 5%.





# So what can we do? What are we doing?



## Regional Sediment Management



- Combine authorities, permitting and funding to integrate navigation and storm damage reduction
- Nearshore placement designs
- Material separation
- Inlets as a sand source/settling basins
- Incorporate innovation into beach design (smart use of structures)
- Work with stakeholders to find solutions
- Be Proactive



# Smart Upland Disposal



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# Stockpiling



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## Accretional Beach Borrow Areas



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## Manufactured Sand/Recycling



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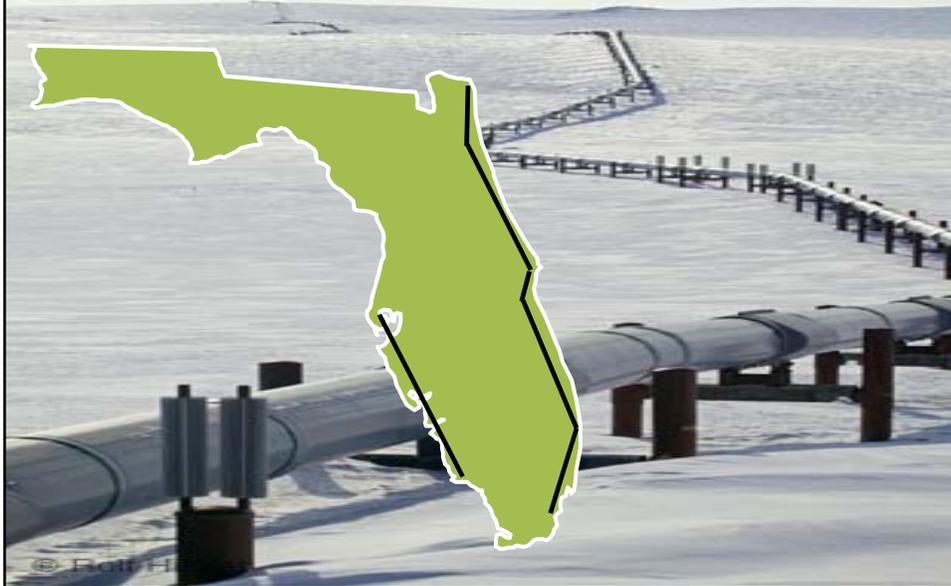
## Foreign Sand



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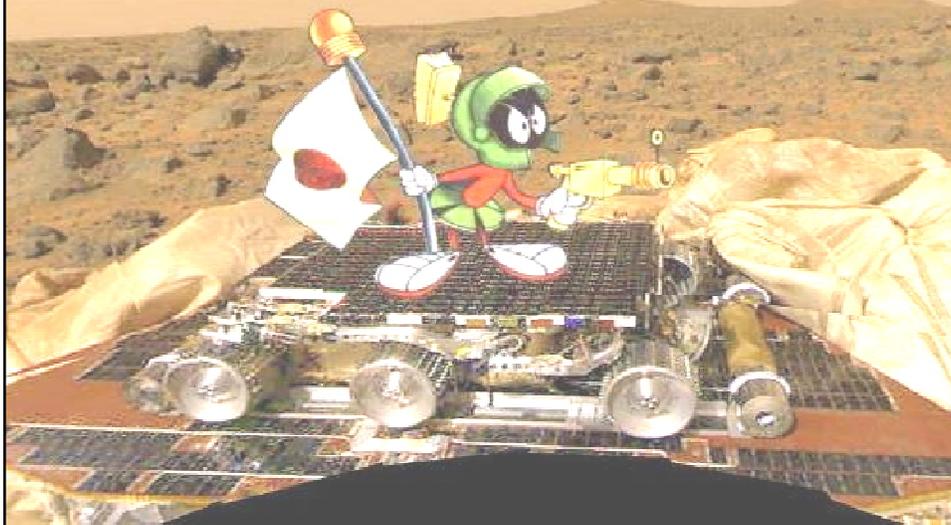
## The Hobbie Pipeline



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## The Future is now! Questions?



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