



# **Sharing the Experience: Local Government Considerations in Determining Sand Sources for Beach Projects**

**Florida Shore & Beach Preservation  
Association  
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## Longboat Key Experience - 2016

- Limited off shore sand source of acceptable quality located a long distance off shore (no bid/one bid - high mobilization costs)
- Severely eroded areas
- Immediate need for approximately 650,000 cubic yards
- Inlet dredging and truck haul costs = \$27.85/Yard (hard costs only)



**Where will the sand come from?**

**What will it look like?**

**How much will it cost?**



# Where will your sand come from?

- Unlimited offshore supply of great quality sand that is easy to permit
- Offshore sand of marginal quality
- Inlet sand of good quality that isn't claimed by your neighbor
- No acceptable offshore or inlet sand
- Upland sand source



# The Sand Quality Continuum

Everybody is Happy!	Most are OK	Most are Unhappy	No one is Happy!
You are a hero!	You can keep your job for now	Send out resume	You are fired!



## How much will it cost?

- Inlet sand “all in” costs 2016  
\$13 – \$20 / cubic yard
- Offshore Sand “all in” costs 2016  
\$25 - \$30 / cubic yard
- Truck Haul Sand “all in” cost 2016  
\$40 - \$60 / cubic yard



# ADVANTAGES/DISADVANTAGES BY SAND SOURCES



# INLET/PASS DREDGING

**\$13 - \$20/cubic yard**

## ADVANTAGES

- SOURCE CLOSE TO BEACH
- SMALLER DREDGE EQUIPMENT (HYDRAULIC DREDGE)
- LEAST EXPENSIVE

## DISADVANTAGES

- LIMITED SAND SUPPLY
- EXTENSIVE PERMITTING
- PIPELINE ON BEACH
- WEATHER DEPENDENT
- 24/7 OPERATION





## Inlet/Pass Dredging





## Inlet/Pass Dredging







## Inlet/Pass Dredging





## Inlet/Pass Dredging







# OFFSHORE DREDGING

**\$25 - \$30/cubic yard**

## ADVANTAGES

- BEST SUITED FOR LARGE SAND PROJECTS
- HIGH VOLUME PRODUCTION
- LITTLE OR NO IMPACT TO UPLAND OWNERS/ TRAFFIC

## DISADVANTAGES

- LARGE MOBILIZATION COSTS
- PIPELINE ON BEACH
- PERMIT REQUIREMENTS OF BORROW SITE
- 24/7 OPERATION
- YOU GET WHAT YOU DREDGE



## UPLAND SAND SOURCE (A.K.A. TRUCK HAUL)

### \$40 - \$60/cubic yard

#### ADVANTAGES

- VARIOUS SAND SOURCES
- UNIFORM PRODUCT (COLOR, GRAIN SIZE)
- EASIER PERMITTING
- NEARLY UNLIMITED SAND SUPPLY
- DAYLIGHT WORK ONLY

#### DISADVANTAGES

- IMPACT TO TRAFFIC AND ROAD NETWORK
- NOISE
- DUST CONTROL
- NEED ACCESS FROM MAIN ROAD TO BEACH
- COSTLY
- COSTLY
- COSTLY



# **Truck Haul Nourishment**



# TOWN OF LONGBOAT KEY













## TOWN OF LONGBOAT KEY















## Project Sand Delivery





## Load Ticket Confirmation







## 2016 Sand Sources – Immokalee Mine





## First Completed Section of Project Beach



April 5, 2016



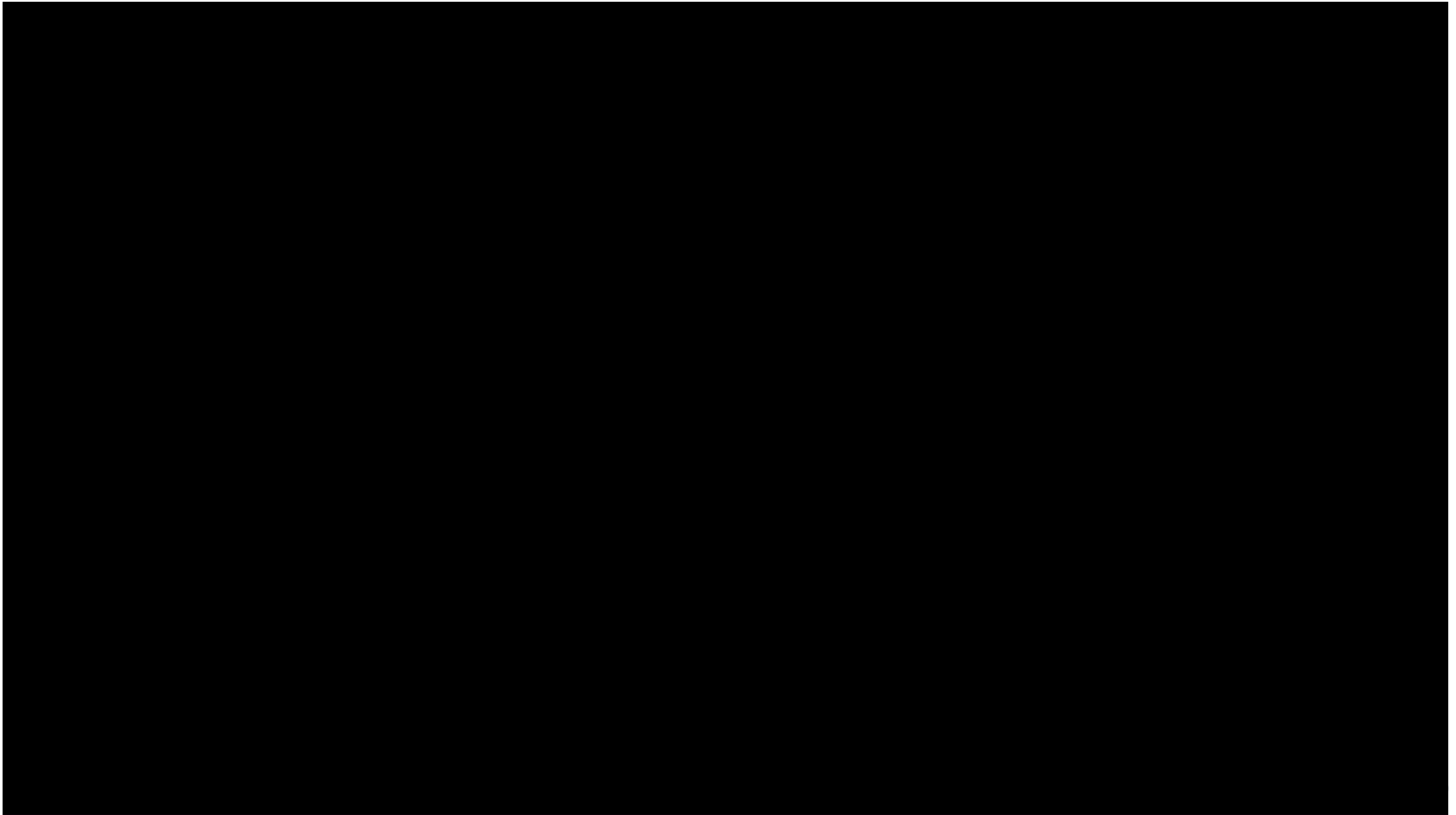
April 27, 2016







# TOWN OF LONGBOAT KEY





**Thank You**

**Questions?**