

FEMA Engineered Beaches  
**Tips for the Post-Storm  
Reimbursement Process**

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# What Beaches are Eligible for Replacement of Sand Loss?

## Key eligibility points:

- Can't be a Corps of Engineers Project
- Must be the responsibility of an eligible applicant
- Must be designed and maintained
- Only incident-related damage is reimbursed



Public Assistance Program  
and Policy Guide

FP 104-009-2 / April 2018



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### Documentation Supporting Eligibility of a Beach

To document eligibility of a beach as a designed and maintained facility, the Applicant should provide the following information:

- All design studies, plans, construction documents, and as-builts for the original nourishment;
- All studies, plans, construction documents, and as-builts for every renourishment;
- Documentation and details of the maintenance plan, including how the need for renourishment is determined and funded; and
- Pre-and post-storm profiles that extend at least to the seaward edge of the sub-aqueous nearshore zone (closure depth, usually -15 to -20 feet). (See Figure 15)

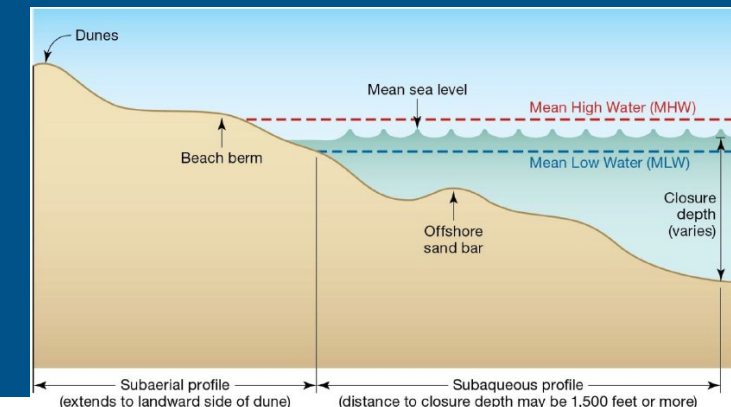
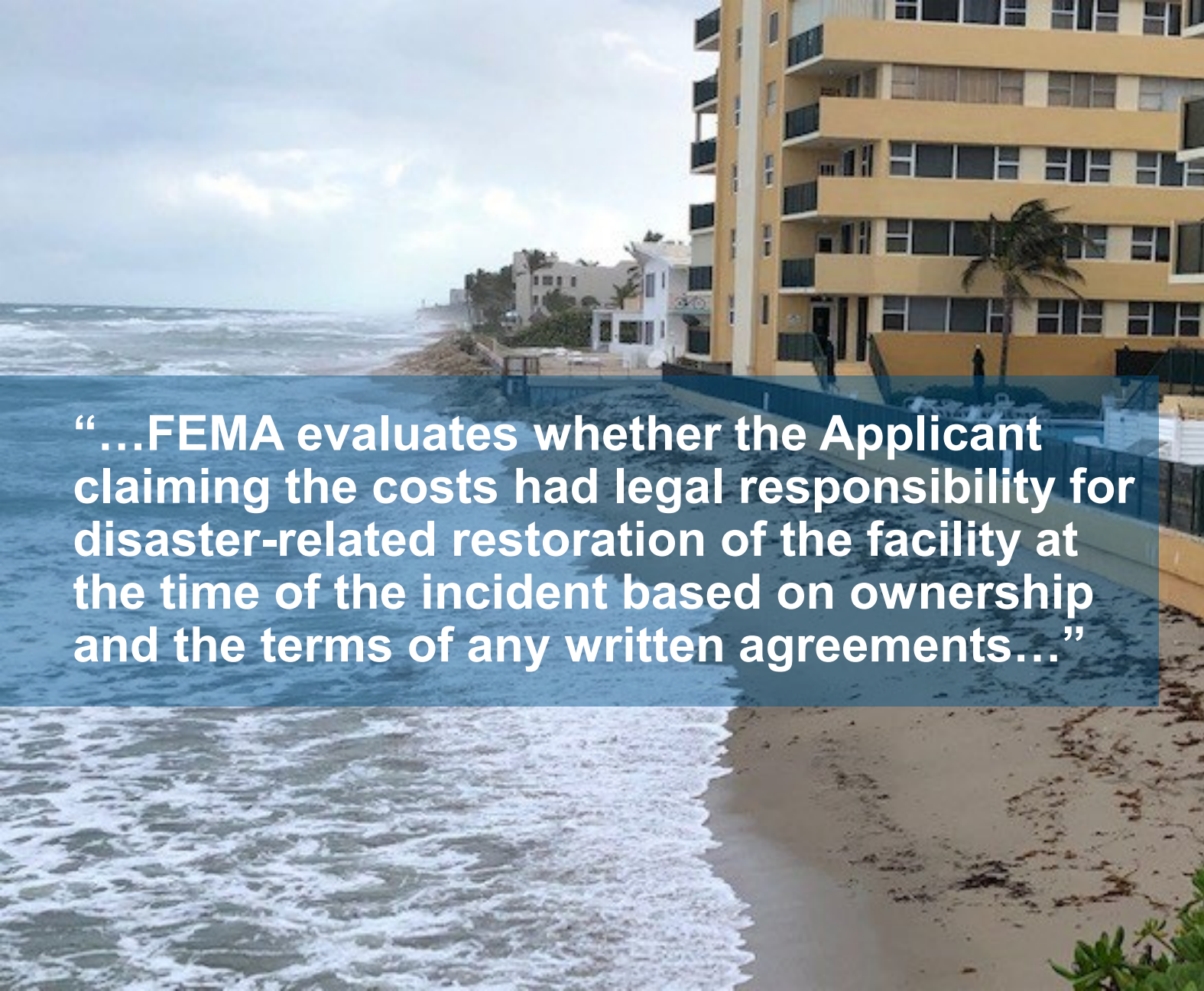


Figure 15. Typical Beach Profile

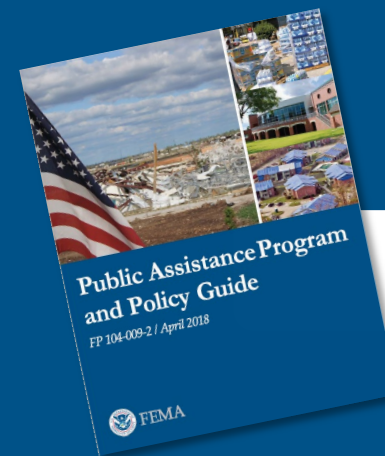


“...FEMA evaluates whether the Applicant claiming the costs had legal responsibility for disaster-related restoration of the facility at the time of the incident based on ownership and the terms of any written agreements...”

## Problem:

An erosion control project can include more than one applicant

- Who gets the money?
- Interlocal agreements are necessary

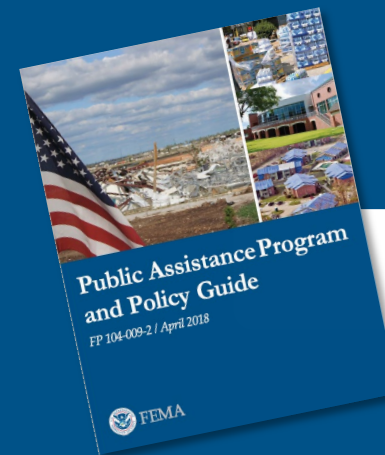


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“If the facility is under construction by a contractor at the time of the incident, FEMA reviews the contract to determine whether the Applicant is legally responsible for the repair of damage caused by the incident.”

## Problem:

- Beach projects under construction can be a problem
- Force majeure



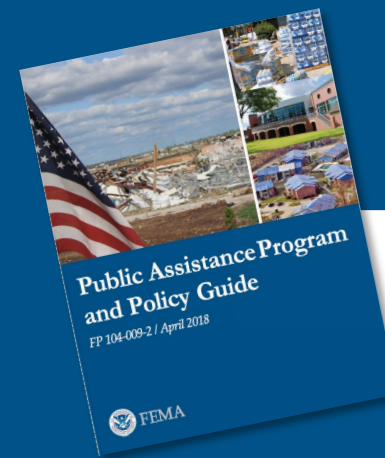
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The beach must be  
“...constructed by the placement  
of imported sand—of proper  
grain size—to a designed  
elevation, width, and slope.”

## Problem:

- Inlet bypass projects don't meet the design requirements
- Small “bayside park” beaches may not be designed to a cross section

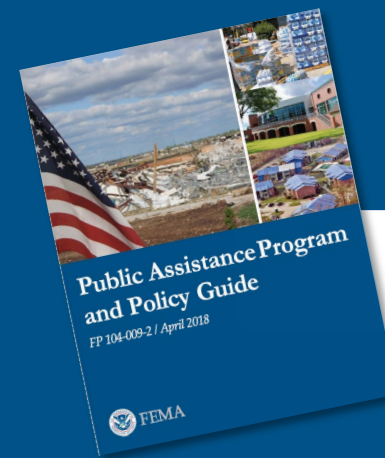


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FEMA must determine that  
“the Applicant has established and adhered to a maintenance program involving periodic renourishment with imported sand to preserve the original design”.

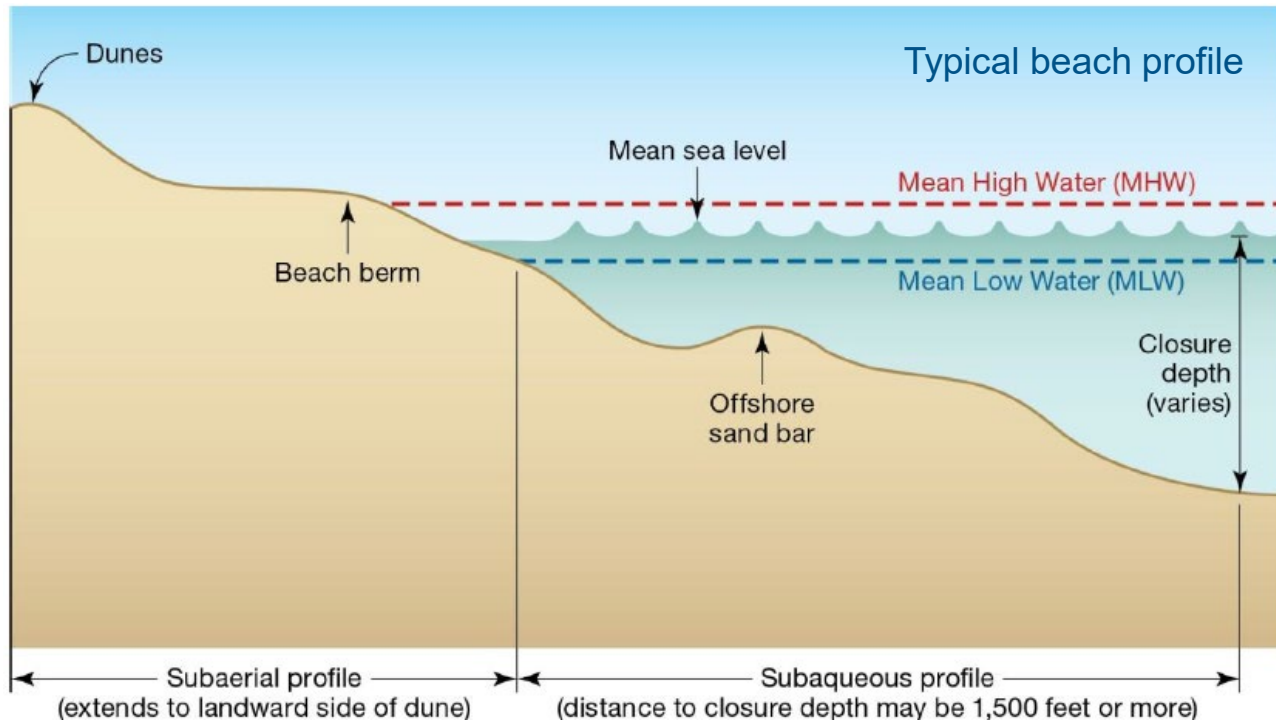
## Problem:

- Some beaches are not maintained
- Beaches must have a maintenance program
- Should include budget, schedule, potential sand sources
- Plan must be followed
- Nourishment must be with “imported” sand



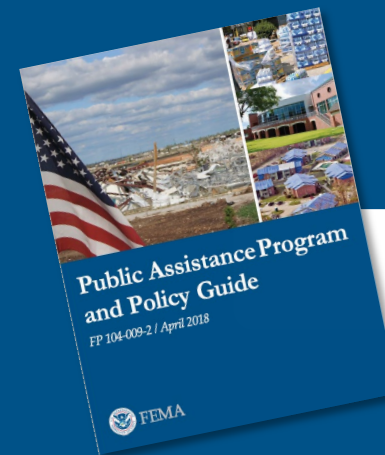
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**“The amount of sand eligible for replacement is limited to the amount lost as a result of the incident. FEMA uses the pre-and post-storm profiles of the beach to determine the eligible volume of sand for replacement.”**



## Problem:

- pre-storm profiles to closure depth are not available
- annual profiles
- closure depth must be established
- sand loss must be adjusted for background erosion



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**“FEMA must review each PA project to ensure the work complies with applicable Federal environmental and historic preservation (EHP) laws and their implementing regulations, and applicable EOs.”**

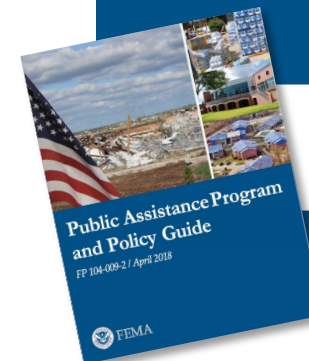
Project  
schedule

Permits active

Sand source/  
compatibility

## Problem:

- Permits have become inactive
- Sand source has not been identified
- Offshore: provide latitude/longitude of the corners
- Onshore: “beach-quality sand will be used for replacement of the incident-related loss and will be obtained from a properly licensed, permitted and qualified supplier of the material.”
- Coastal barrier resource units



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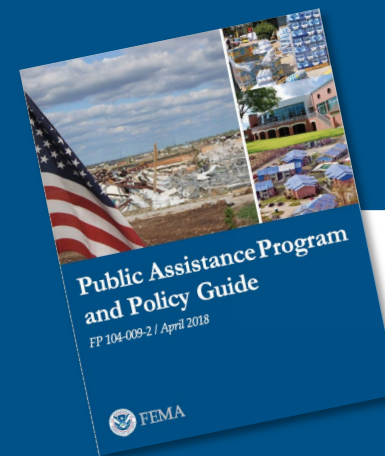
**“FEMA uses the Applicant’s cost estimate if the estimate... Is reasonable.”**

**A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the Applicant makes the decision to incur the cost.**



## **Problem:**

- High cost of dredge mobilization vs. small quantity of sand loss
- Combine projects when possible



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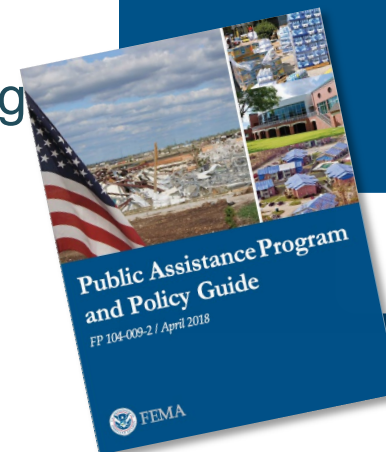
## FEMA only provides PA funding for work completed and costs incurred within regulatory deadlines... The deadline for Permanent Work is 18 months from the declaration date

- The Recipient has authority to extend deadlines for individual projects based on extenuating circumstances. It may extend... Permanent Work projects by 30 months. FEMA has authority to extend individual project deadlines beyond these timeframes if extenuating circumstances justify additional time. (PAPPG, p. 141)
- FEMA Generally Considers the Following Extenuating Circumstances Beyond the Applicant's Control (PAPPG, p. 141)

## Problem:

Beach nourishment projects often require more than 18 months to complete

- Time extensions
- Permitting or EHP compliance related delays due to other agencies involved
- Environmental limitations (such as short construction window)
- Inclement weather



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## Permanent Work (Categories C–G) is work required to restore a facility to its pre-disaster design (size and capacity) and function



### Example of Restoring to Pre-disaster Design

If a school designed for a capacity of 100 students is damaged beyond repair, the eligible funding for the replacement facility is limited to that necessary for 100 students, even if more than 100 students were attending the school prior to the event.



### Example of Restoring to Pre-disaster Function

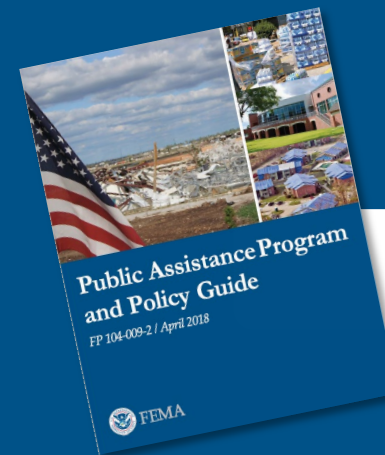
If an Applicant is using an office building as a storage facility at the time of an incident, and it is less costly to restore the facility as a storage facility, only those repairs necessary to restore it as a storage facility are eligible.

Any special lighting or wall and floor finishes that are typical of an office building are not necessary for a storage facility and, therefore, are not eligible.

## Problem:

FEMA needs documentation to show pre-disaster elements

- Planting
- Post & rope fences
- Signage
- Sand fence



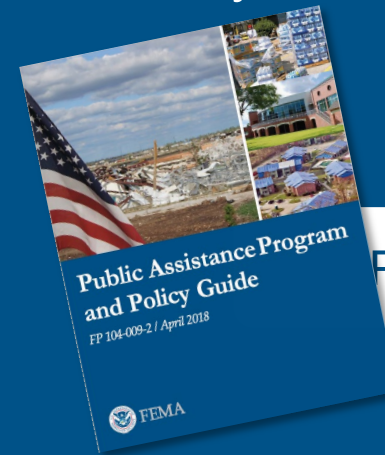
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**Applicants must comply with Federal procurement standards as a condition of receiving PA funding for contract costs for eligible work... Non-State Applicants (...local governments...) must use their own documented procurement procedures that reflect applicable State, Territorial, Tribal, and local government laws and regulations, provided that the procurements conform to applicable Federal law and standards.**

## **Problem:**

You must comply with Federal Procurement Standards

- None yet...
- However, Be Sure Your Financial Staff Review
- Procurement Disaster Assistance Team  
(<http://www.fema.gov/media-library/assets/documents/96773>)



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# Conclusion

- Who is the responsible Applicant?
- Is the beach designed?
- Is the beach maintained?
- Do you have pre- and post- storm profiles to the depth of closure?
- Where is the sand coming from?
- Are CBRS units involved?
- Will you need a time extension?
- Can you document pre-storm elements?
- Do your purchasing/procurement procedures meet federal standards