

Flooding Hazards and Floodplain Management



Acknowledgements

- Department of Community Affairs (DCA)
<http://www.state.nj.us/dca/>



- Jacques Cousteau National Estuarine Research Reserve
www.jcnerr.org



- Bruce Wallauer and Jim Watt – NJDEP Floodplain Management



- Richard Ehinhorn - FEMA



Course Expectations

Time Commitment Summary

1. Course Overview, Forces on Flooded Buildings (1 hour)
2. Floodplain Mapping (1 hour)
3. Design and Construction Standards on Floodplains and The Relationship of Floodplain Management and the Construction Office (1 hour)
4. Local Administration of the Floodplain Program (1 hour)
5. New Jersey's Land Use Regulations For Floodplain Areas (a.k.a – Stream Encroachment) (1 hour)

Course Expectations

Interactive Resources

- During this course, you will be presented with a variety of resources for information. Some of those resources will be in the form of links on websites outside the course. For example:
 - You will be provided with a link to the DEP website to download some forms



Course Expectations

Interactive Requirements

- The following tutorial will walk you through the steps to access information on various websites, and ensure that your computer system is capable of viewing the material.



Course Expectations

Interactive Requirements

- Here is a link to a letter from the NJDEP Commissioner. Click on the link below to ensure you can download the letter

www.njfflood.org/docs/jacksonletter200602.pdf



After you click on the link, move to next slide
(even if the link does not work for you)

Course Expectations

Interactive Requirements

Now that you have ensured your computer is compatible with the necessary external websites, documents, and resource formats, you may continue with online course.



Course Expectations

End of section quizzes

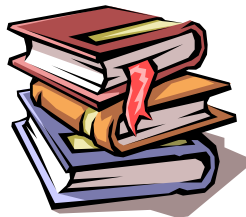
- At the end of each of the following sections, you will be presented with a brief 5-10 question online quiz that will assess the knowledge you gained from the content provided. These quizzes will need to be successfully completed to continue in the program.



Course Expectations

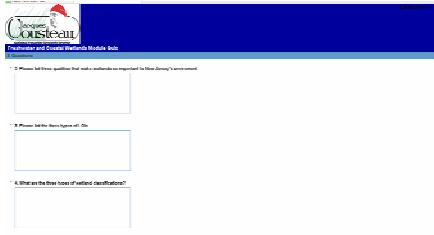
End of section quizzes

- Any written or online sources may be used to answer the questions, as the goal of the program is to not only teach the concepts but demonstrate where additional information may be found.
- The quizzes will be accessed through a web link at the end of each module.



Quizzes

Here is an example of a quiz like the quiz you will be required to complete. The questions will be all short answer.



Course Expectations

Certification Requirements

To receive certification for the successful completion of this online course, you will need to complete the following:

1. Completion of each of the sections of the online course
2. Completion of each of the online quizzes
3. Completion of the end of course survey



Forces of Floods on Buildings

This introductory section will give you the sense of why there is the need for floodplain management.





This home is built across two flood zones. The home must be built to the most restrictive requirements.



Even public buildings must meet the minimum requirements of the NFIP.



With new construction techniques and code requirements, problems of the past are being eliminated.



Long Beach Island – March 1962



Long Beach Island – March 1962



Long Beach Island – March 1962









Overwash in 1992 due to Improper building setback



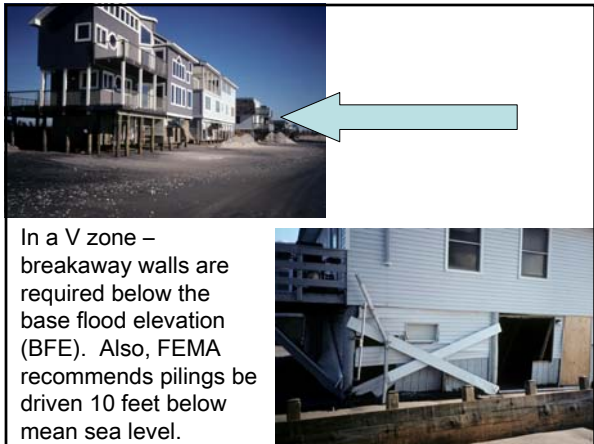
This is an example of why all structures should be anchored to resist lateral movement, collapsing and flotation



Long Branch 1992 - This next set of images show a home from various angles. Even homes outside the flood hazard area suffer from storm damage

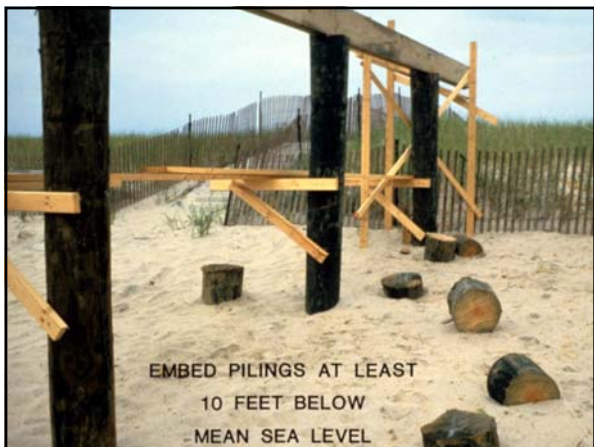












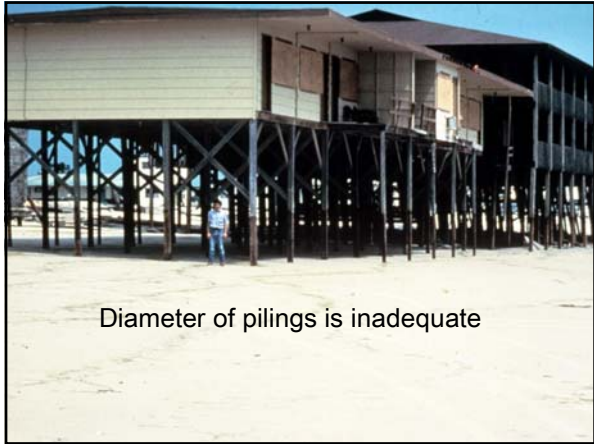


Avoid creating an NFIP basement which is sub grade on all four sides.

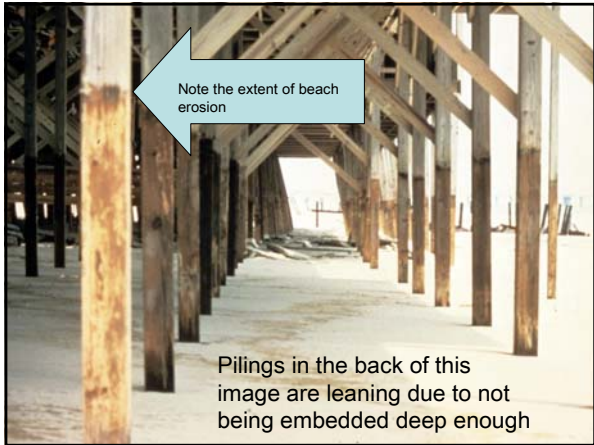


All structures need to be adequately anchored.



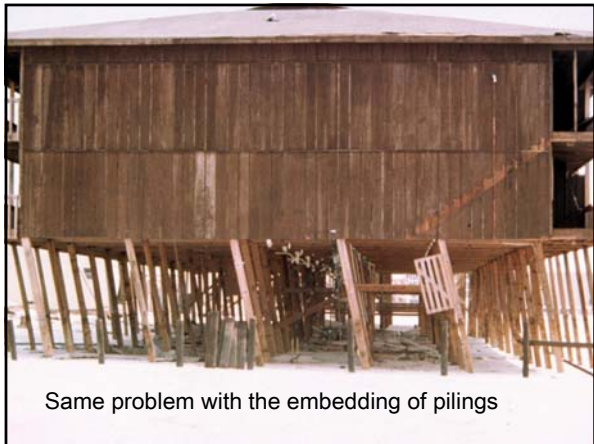


Diameter of pilings is inadequate



Note the extent of beach erosion

Pilings in the back of this image are leaning due to not being embedded deep enough



Same problem with the embedding of pilings



This next series of slides is affectionately called "chain saw massacre".









The piling splice must be 50% or greater



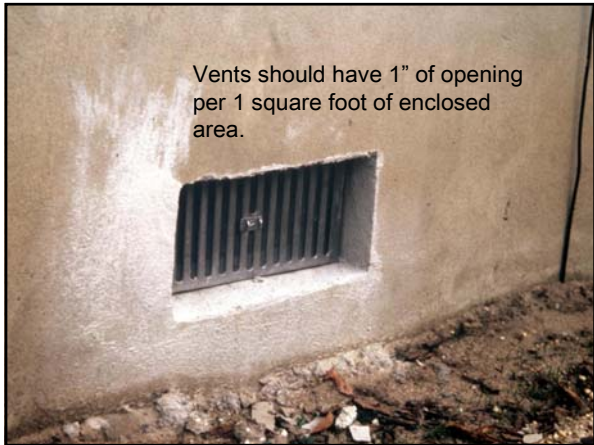
What's the problem here???















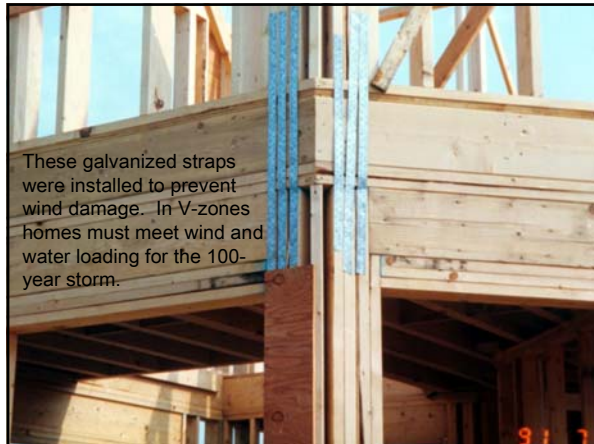








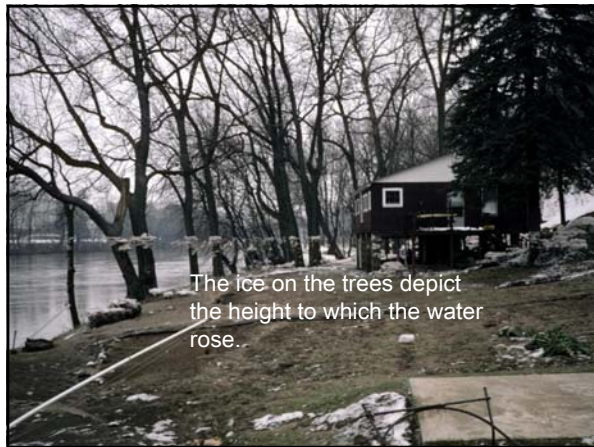






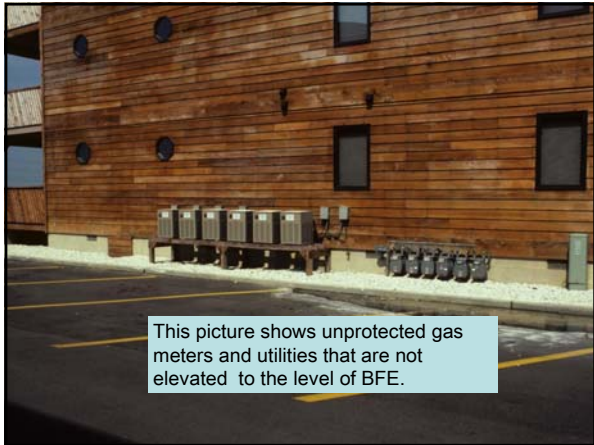














In order to move onto the next section you must complete this module's web quiz. This Quiz can be found by clicking on the link below:

www.surveymonkey.com/s.asp?u=812863436058
