

Palm Beach County

Understanding the CEMP one section at a time

III. Hazards Analysis



Together, Emergencies Are Managed



Objectives

- III. A. Learn about different types of core hazards, the importance of listing them, and what the facility should include.
- III. B 1 Provide specific information concerning the facility for the number of beds, maximum number of clients, and average amount of clients for those in the EOC who need to arrange for assistance.
- III. B 2 Understand the types of residents that will be served by the facility and need assistance in case any issues arise.
- III. B 3 Identify the hurricane evacuation zone that the facility is in so that the EOC knows which facilities are preparing to evacuate
- III. B 4 Locate the flood zone which the facility is located in
- III. B 5 Identify the proximity of the facility to a railroad or major transportation artery to determine the straight line distance in case a cloud is formed from hazardous material
- III. B 6 Indicate if the facility is located within the 10-mile or 50-mile Emergency Planning Zone of a Nuclear Power Plant in case of a radioactive release



Note:

- This Presentation is held to assist you in compliance with:
- Florida Administrative Code: 27P-20, 59A-3.078, 59A-4.126, 59A-4.1265, 59A-5.018, 59A-16.107, 59A-16.107(10), 59A-26.020, 59A-36.019(1), 59A-36.019(2), 59A-36.025, 59A-36.025(2), 65E-9.005(10), 65G-2.010
- Florida Statutes: §252.38(e), §393.067(8), §394.879(1)(d), §395.1055, §395.1055(1)(c), §400.23(2)(g), §400.967, §400.967(2)(g), §400.998(3)(g), §400.9982(2)(e), §429.929(1)(g), §429.41(1), §429.41(1)(b)



III. A. What are the facility hazards?

- From the crosswalk: “Describe the potential hazards that the Facility is vulnerable to such as hurricanes, tornadoes, interruption of municipal water supply, flooding, acts of terrorism, fires, hazardous materials incidences from fixed facilities or transportation accidents, proximity to a nuclear power plant, power outages during severe cold or hot weather, etc. (***Indicate past history and lessons learned.***)”

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 - B 6 Nuclear Facility 50 mile Emergency Planning Zone (EPZ)



Why is a list of hazards important, and what should the facility include?

- It is important to look at those items or issues that could cause severe disruptions to the normal operations of the facility. For example power outages, elopement, and fires.
- Facilities should include natural hazards, technological hazards, and human caused hazards in a list of hazards.



Core Hazards

- Three Kinds of Hazards
 - Natural Hazards
 - Severe Weather
 - Floods
 - Fire
 - Communicable Diseases
 - Technological Hazards
 - Transportation
 - Hazardous Materials
 - Nuclear Power Plant (St Lucie Nuclear Power Plant's 10 and 50 mile EPZ (Emergency Planning Zone))
 - Human Caused Hazards
 - Domestic Security
 - Workplace violence
 - Active Shooter



Natural Hazards

- Natural Hazard: The generally accepted definition of a natural hazard is: “A natural phenomenon that might have a negative effect on humans or the environment.”
- Natural hazard events can be classified into two broad categories: geophysical and biological.
- Some examples of natural hazards include Severe Weather, Flood, Fire, Communicable Diseases, earthquakes, tsunamis, droughts and wildfires



TECHNOLOGICAL HAZARDS

Technological Hazard: The UNISDR (United Nations office of Risk Reduction) **definition** of **technological hazards** refers to **hazards** that stem from **technological** or **industrial** conditions

Examples of technological disasters include: industrial pollution, nuclear radiation, toxic wastes, dam failures, transport accidents, factory explosions, fires, and chemical spills

HUMAN CAUSED HAZARDS

- Human Caused Hazards: Man-made disasters have an element of human intent, negligence or error involving a failure of a man-made system, as opposed to natural disasters resulting from natural hazards.
- Such man-made disasters are crime, arson, civil disorder, terrorism, war, bomb threats, suspicious packages and letters (e.g. anthrax), biological / chemical threat, cyber attacks, etc.

REVIEW OF CORE HAZARDS

- Three Kinds of Hazards
 - Natural Hazards
 - Severe Weather
 - Floods
 - Fire
 - Communicable Diseases
 - Technological Hazards
 - Transportation
 - Hazardous Materials
 - Nuclear Power Plant (St Lucie Nuclear Power Plant's 10 and 50 mile EPZ (Emergency Planning Zone))
 - Humans Caused Hazards
 - Domestic Security
 - Workplace violence
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Lessons Learned

- Hurricanes are not the only reason to activate the CEMP
- Each time the Plan is activated there will be something, a glitch, or an idea that could make the plan work more smoothly the next time.
- The glitch, idea, problem, or other unexpected situation during the plan activation has the potential to make the plan better for the next activation. This is called a lesson learned and is a very important step in the CEMP development over time.
- It just makes sense to after each activation have a discussion on what went well, what didn't, are there better ways to do what facilities do in a time of disaster? These are the Lessons learned.
- It makes sense to try and keep an area where these observations and any resulting change in how the facility behaves during an activation. Suggestion, Keep them year to year, every time the plan was activated.

"Those who cannot remember the past are condemned to repeat it."--George Santayana, The Life of Reason, 1905.



III. B. Provide site specific information concerning the facility to include:

1. Number of facility beds, maximum number of clients on site, average number of clients on site.

- It is important to gauge the size of the population (Clients) .
- The average is important because the number may fluctuate over time, but the average provides an idea of the size of the population to those in the EOC who may need to arrange for assistance.



- III. B. 2. Type of residents/patients served by the facility to include but not limited to:
- a. Patients with Alzheimer's Disease
 - b. Patients requiring special equipment or other special care, such as oxygen or dialysis
 - c. Number of patients who are self sufficient
- Important so there is a basic understanding of the kind of people who need assistance at the facility should any issues arise (e.g special transportation or special equipment needs)
 - This is a simple counting issue.
 - This number could change on an annual basis depending on the population, so **this is one issue that needs to be updated yearly.**

III. B. 3. Identification of the hurricane evacuation zone the facility is located in

- This is important because the facility needs to know if it is in a hurricane evacuation zone, and what zone the facility is in so if an evacuation order does come to pass, the EOC needs to know what facilities are preparing to evacuate.
- The Evacuation Zone is no longer associated with a specific hurricane category. That is old information and needs to be updated.
 - The storm surge varies by storm. Some storms are very slow moving storms and have a surge zone that is much different than a faster moving storm.
 - Therefore facility operators must understand the new storm surge evacuation zones so they will know how to react when a storm approaches.
 - www.pbcgov.org/dem then click on **Know Your Zone!** (Half way down the page on the right.



Hurricane Evacuation Zone

- Approximately half way down on the right is this picture:



- Click on it! And it takes you to:



PALM BEACH COUNTY
Discover the Palm Beaches...
the Best of Everything

Search...

Public Safety - Emergency Management

Home - About Us - Programs & Services - Know Your Zone - Emergency - Preparedness - Employee Corner -

Ready PBC



your personal preparedness plan and disaster supply kit



>> **OFFICIAL PALM BEACH COUNTY HURRICANE PLANNING GUIDE** <<

>> Spanish | >> Creole

Accessibility help? Contact us at PBcaccessibility@pbcgov.org.

[KNOW YOUR ZONE MAP](#) | [ACTIVATION LEVEL DESCRIPTIONS](#)

- 1** Make A Plan
- 2** Build A Kit
- 3** Get Involved
- 4** Be Informed

CURRENT STATUS OF: [SHELTERS](#) [STORES](#) [GAS STATIONS](#)

Hurricane Evacuation Zone Look-up Tool

*Do not use punctuation in search - Example: 20 S Military Trail or 20 South Military Trail

[View larger Hurricane Evacuation Zone map >>](#) (Opens link in new window)

For **FLOOD** Zone Look Up map [Click HERE >>](#) (Opens link in new window)

[Contact Us](#)

[General Information/Questions](#)



Know Your Zone



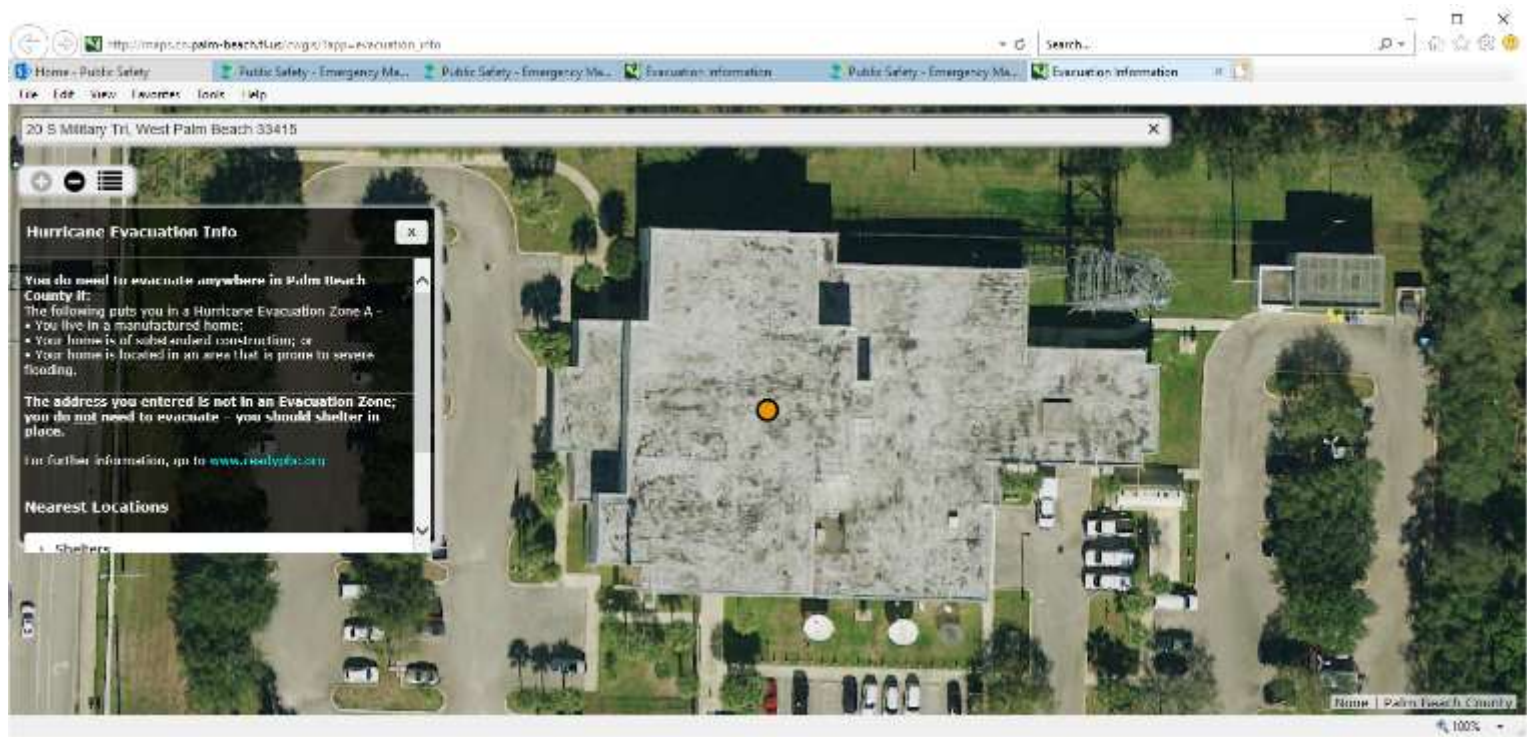
Search by name or address

+ - ☰



1. Enter facility address in this box, (e.g. 20 S Military Trail)

- Enter the address in the box that says *“Search by name or address”* **Just** put in the address – forget the name!
- I typed in 20 S Military Trail and got this:





Hurricane Evacuation Info

You do not need to evacuate anywhere in Palm Beach County if:

- You live in a manufactured home;
- Your home is of substantial construction; or
- Your home is located in an area that is prone to severe flooding.


The address you entered is not in an Evacuation Zone; you do **not** need to evacuate – you should shelter in place.

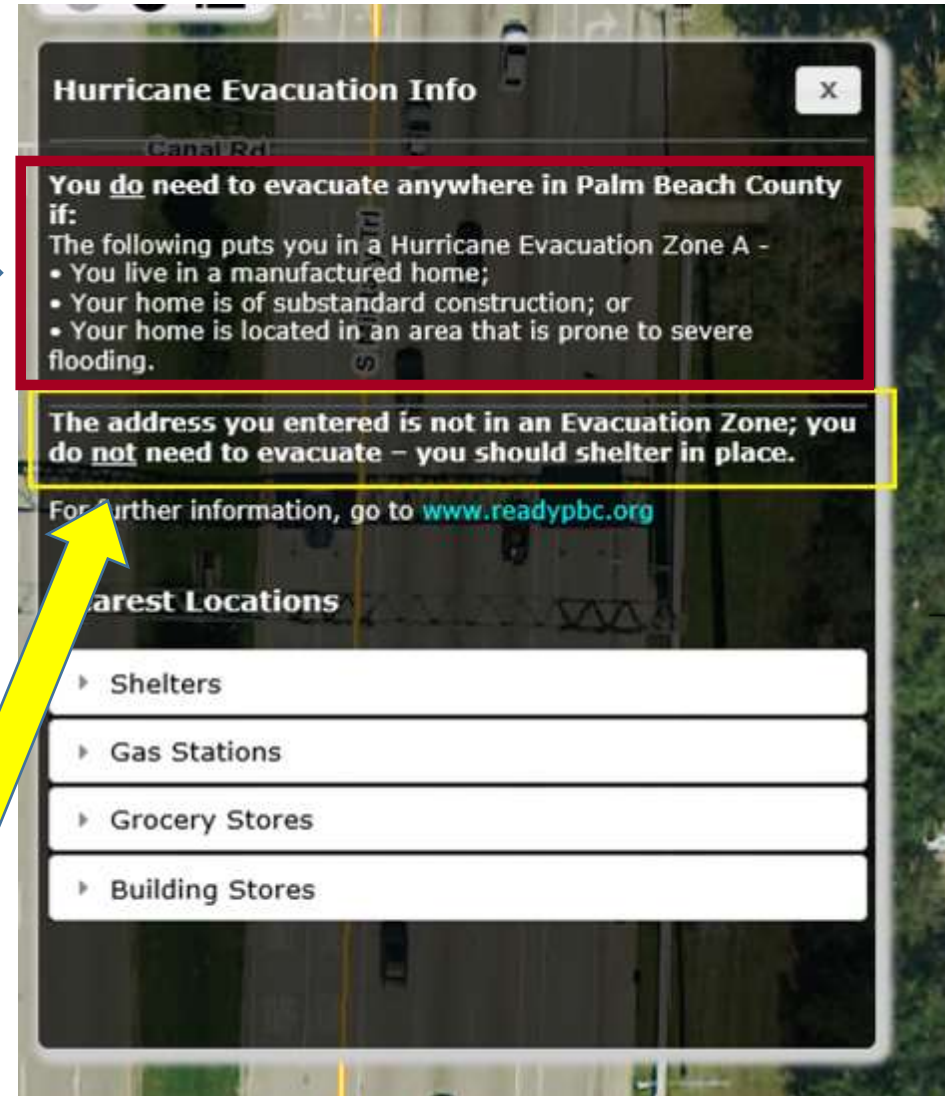
For further information, go to www.readypbc.org

Nearest Locations

- Shelters
- Gas Stations
- Grocery Stores
- Building Stores

Hurricane Evacuation

- Hurricane Evacuation Zone A refers to **ONLY**:
 - Manufactured homes (Mobile homes) 
 - Buildings of substandard construction
 - Areas prone to severe flooding
- Note, the top of the black box says “You do need to evacuate ...” that is **Not** the Evacuation zone!
- I put in a yellow box where the evacuation zone for this address is located.
- This facility does not have to evacuate in a hurricane!
 - See the yellow box



1/27/2023

Division of
Emergency
Management



This is the Black Box for an evacuation address:
“S Flagler Dr. 2900 Blk”

S Flagler Dr 2900 Blk

Hurricane Evacuation Info

You do need to evacuate anywhere in Palm Beach County if:

- The following puts you in a Hurricane Evacuation Zone A -
- You live in a manufactured home;
- Your home is of substandard construction; or
- Your home is located in an area that is prone to severe flooding.

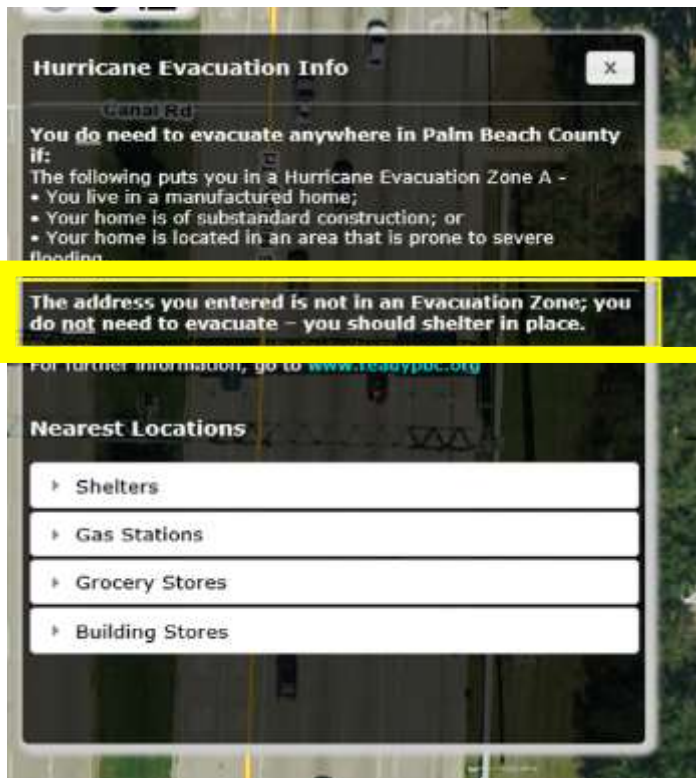
The address you entered puts you in a Hurricane Evacuation Zone C

Residents that live within this zone should evacuate when a Zone C Evacuation Order is announced by public safety officials.

Please listen to local media outlets and follow the instructions of public safety officials for evacuation information. When informed of the specific evacuation instructions to follow, if

Compare two Addresses

20 S Military Trail



186 Monceaux Rd (Corner of Flagler)



How does the facility put this in the plan?

- An evacuation zone map is not needed.
- Simply state:
 - This facility is in hurricane evacuation zone A **OR**
 - This facility is in hurricane evacuation zone B **OR**
 - This facility is in hurricane evacuation zone C **OR**
 - This facility is in hurricane evacuation zone D **OR**
 - This facility is in hurricane evacuation zone E **OR**
 - This facility is in hurricane evacuation zone L **OR**
 - This facility is **not** in a hurricane evacuation zone

III. B. 4. Identification of which flood zone the facility is located in as identified on a Flood Insurance Rate Map (DEM-Zone only, no map. Reference MSC.FEMA.GOV).

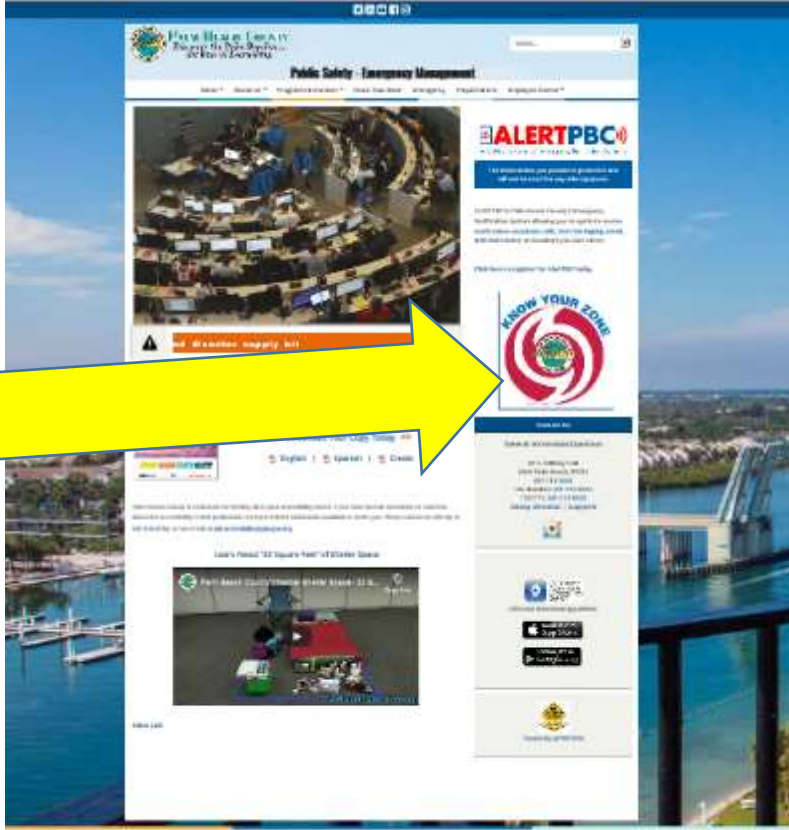
- Go to the PBC Emergency Management Home Page: www.pbcgov.com/DEM
- Then click again on **Know Your Zone!** (Half way down the page on the right.)
- Here is the picture of Know Your Zone



Here is a picture of the EM website

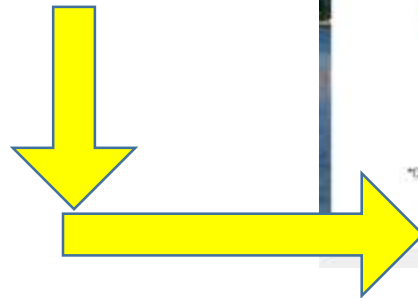
www.pbcgov.com/DEM

Click on THIS



Flood Zone Map

- Identification of which flood zone the facility is located in as identified on a Flood Insurance Rate Map.
- Click on: “For FLOOD Zone Look Up Map Click Here”



Public Safety - Emergency Management

Ready PBC

your personal preparedness plan and disaster supply kit

OFFICIAL PALM BEACH COUNTY HURRICANE PLANNING GUIDE

KNOW YOUR ZONE MAP | ACTIVATION LEVEL DESCRIPTIONS

1 Make A Plan 2 Build A Kit 3 Get Involved 4 Be Informed

CURRENT STATUS OF: SHELTERS STORES GAS STATIONS

Hurricane Evacuation Zone Look-up Tool

For FLOOD Zone look up map Click [HERE](#)

Close up of What to Click on

Hurricane Evacuation Zone Look-up Tool

*Do not use punctuation in search - Example: 20 S Military Trail *or* 20 South Military Trail

[View larger Hurricane Evacuation Zone map >>](#) (Opens link in new window)

[For FLOOD Zone Look Up map Click HERE >>](#) (Opens link in new window)



Location Search

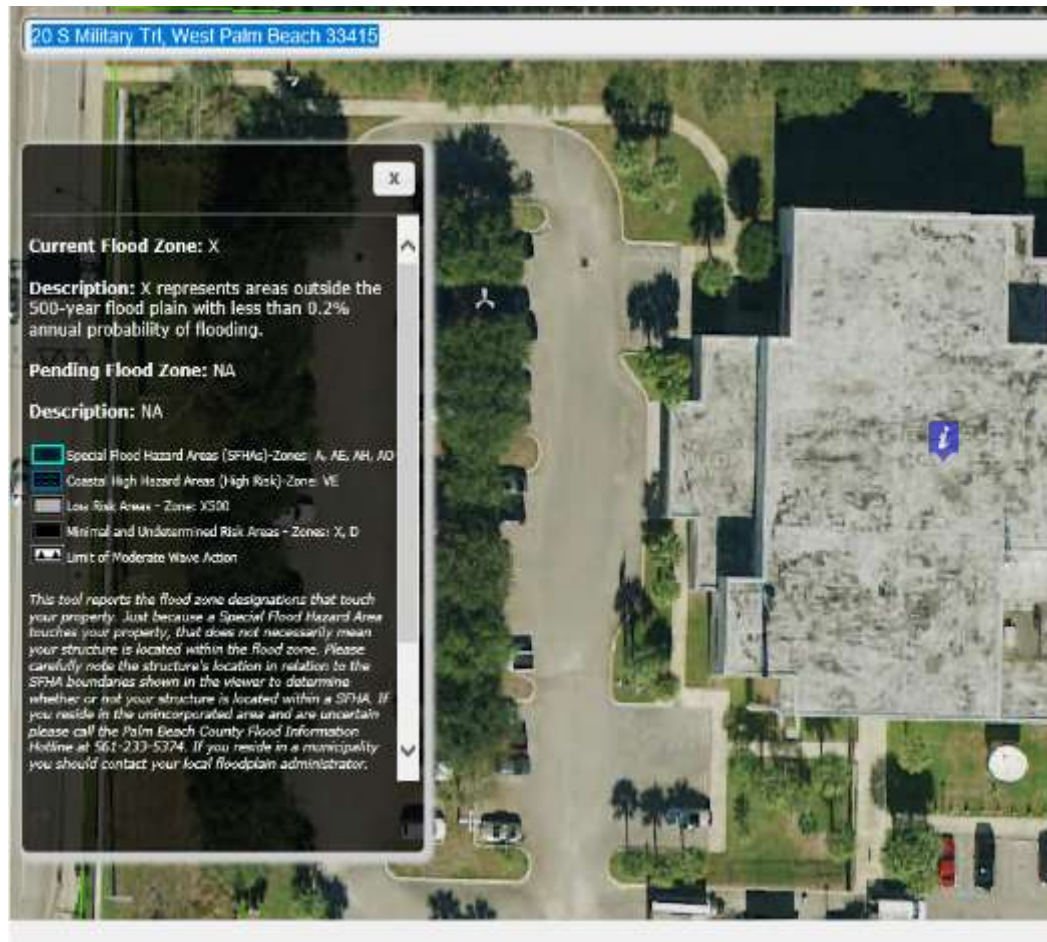


1. Enter the address in this box.
2. Push Enter



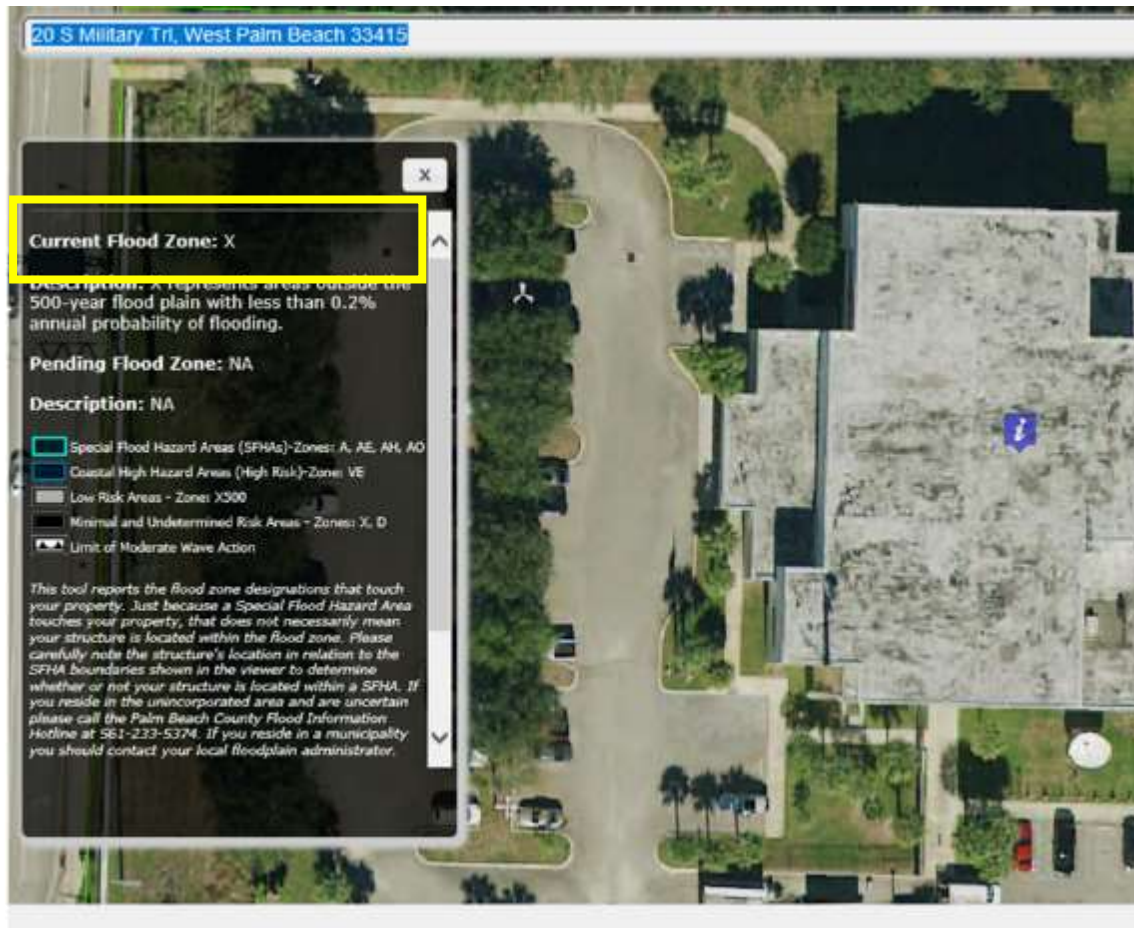
Flood Zone

- Enter the address into the box:
- I entered 20 S Military Trail
- And the map shows:

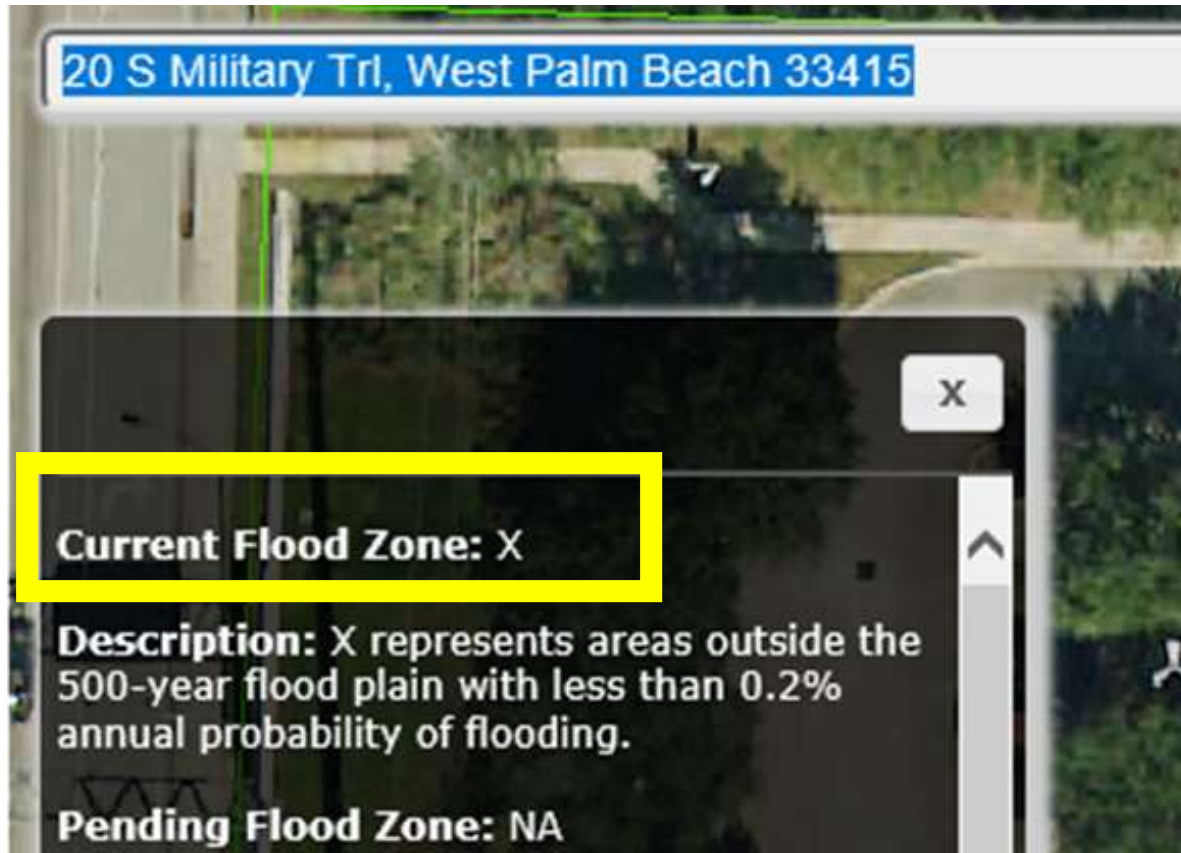


Here is the Flood Zone

- I added the Yellow Box Around the flood zone



Close up of Box
(Remember, the YELLOW box does not show on the map)



III. B. 5. Proximity of the facility to a railroad or major transportation artery (DEM- Indicate a straight line distance to first major road/ highway/ railway(s) in all four cardinal directions).

- A release of hazardous material will form a cloud.
- Remember clouds go where the wind blows them! (Which is why the straight line distance is important!)
- That is why the request for roads north, south, east, and west of the facility.
- Also, include I-95 and the Turnpike



Proximity of the facility to a railroad or major transportation artery

- Also include FEC RR and CSX RR.
 - FEC RR tracks are the tracks that run along US 1 (Central and South County) and along Alternate A-1-A
 - These tracks are the ones that transport freight and a usually very long trains
 - The CSX RR runs along I-95 through South and Central County and then in West Palm Beach they curve west to run along the Beeline highway. Most People know these tracks as the Tri-Rail or Amtrak tacks.
 - During the overnight hours these tracks are used to transport freight!



Question III. B. 5. (Roads & RR)

- Facility Must Identify Roads in all 4 cardinal directions (North, South, East, and West)
- Facility must indicate the direct line distance from the facility to the road.
- I chose 20 South Military Trail
 - Southern Blvd – 0.11 mi north of facility
 - Belvedere Road – 1.09 mi north
 - Military Trail – Fronts this road (0.09 mi west)
 - Jog Rd – 2.13 mi west
 - Congress Ave – 1.60 mi east
 - Forest Hill Blvd – 0.93 mi south
 - I-95 – 2.54 mi east; Turnpike – 3.52 mi west
 - CSX RR – 2.48 mi east; FEC RR – 3.27 mi east



III. B. 6. Identify if facility is located within the 10-mile or 50-mile Emergency Planning Zone (EPZ) of a nuclear power plant.

- The St Lucie Nuclear Power Plant is the only nuclear power plant that has an Emergency Planning Zone (EPZ) that intrudes on the county.



Nuclear Power Plant

- Facility needs to indicate in the plan if the facility is within the 10 or 50 mile EPZ of a nuclear power plant.
- The only nuclear power plant with an Emergency Planning Zone (EPZ) that includes parts of Palm Beach County is the St Lucie Nuclear Power Plant. The Power Plant is 26.9 miles north of the county boundary line.
- The only EPZ a facility in Palm Beach County is subject to is the 50 mile EPZ.
- Always state if the facility IS WITHIN or IS NOT WITHIN the 50 mile EPZ .
- Remember it must be straight-line distance because that is how a cloud of radioactive release travels!



Still have a Question?

Feel free to contact Palm Beach County Division of Emergency Management. We are not only the plan reviewer, but also your local partner and guide through the plan review process.



For plan status and scheduling meetings
contact : 561-712-6362
For submitting your plan
contact: 561-712-6400
www.ReadyPBC.com/hcemp

