Data

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| --- | --- | --- | --- | --- | --- |
|  | Category 1 | Category 2 | Category 3 | Category 4 | Category 5 |
| Probability  (290/290) | 117/290 = 40.344% | 76/290 = 26.206% | 76/290 = 26.206% | 18/290 = 6.206% | 3/290 = 1.034% |
| Personnel needed  (employees+ volunteers+  Federal personnel) | +3400  +0  **total: 3,400** | +6800  +7,500  **total: 14,300** | +10200  +15,000  **total: 25,200** | +13600  +30,000  **total: 43,600** | + 17,000  +60000  **total: 77,000** |
| households who need supplies (immediately) about 67,890 total households expected to stay | 10%\*67890=  **6789** | 30%\*67890=  **20,367** | 50%\*67890=  **33,945** | 70%\*67890=  **47,523** | 90%\*67890=  **61,101** |
| **Supplies**  **( 1 week)**  1.water (a gallon of water per day per person), average people per household in Florida (2.61)  2. food (3 meals a day  3. decontami-nation  Kits/first aid (1 per household) | Water- 124,035.03  Gallons  (6789\*2.61\*7) | Water- 372,105.09  gallons | Water-  620175.15  Gallons | Water- 868,245.21  Gallons  4020 pallets (385,888 cases) | Water- 1,116,315.27  gallons |
| Food- 372,105.09 meals  (6789\*2.61\*3\*7) | Food- 1,131,113.97 meals | Food- 1,860,525.45 meals | Food- 2,604,736 meals  =567 pallets of food | Food-  3,348,945.81 meals |
| Decontamination /first aid kits- 6789 kits | Decontamination /first aid kits-  20367 kits | Decontamination /first aid kits-  33945 kits | Decontamination /first aid kits-  47523 kits | Decontamination /first aid kits-  61,101 kits |
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* Probability based on the total number of hurricanes that hit U.S. mainland from 1851 to 2015 by category strength (https://www.cnn.com/2013/05/31/world/americas/hurricane-statistics-fast-facts/index.html)
* Households who need supplies immediately-based off expected people not to evacuate and the
* 30,000 federal personnel is based off – averaged amount of federal personnel from 3 different category 4 hurricanes (http://whnt.com/2017/10/10/harvey-irma-maria-and-nate-four-storms-one-brutal-hurricane-season/)
* Volunteers needed based off 17,000 volunteers requested to help for category 5 hurricane (https://www.orlandoweekly.com/Blogs/archives/2017/09/07/orlando-will-need-volunteers-for-shelters-heres-how-you-can-help)
* Nuclear Replenishment needed approximately 33,000 gallons
* Population w/in 10 miles 206,595 people
* Population w/in 50 miles 1,271,947 people
* 176,515 people expected to stay behind and not evacuate
* 420,000 people were ordered to evacuate