

Hawaii Catastrophic Hurricane Readiness Response Planning

Senate Committee on Public Safety and Military Affairs

February 17, 2009



HEMA

Background

Legislature Joint Committee Briefing – Sep 05	
National Plan Review (NPR)	Jan 06
NPR External Evaluation	Apr 06
FEMA Catastrophic Planning Funds	May 07
FEMA-State Planning Initiative	May 08
Catastrophic Disaster Plan	May 09



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Catastrophe vs. Disaster

■ A Catastrophic Incident:

- A sudden event which results in tens of thousands of casualties and tens of thousands of evacuees
- Response capabilities and resources of the local jurisdiction will be overwhelmed
- Characteristics of the precipitating event will severely aggravate the response strategy and further tax the capabilities and resources available to the area
- Life saving support from outside the area will be required, and time is of the essence
- Likely to have long-term impacts within the incident area as well as, to a lesser extent, on the Nation.



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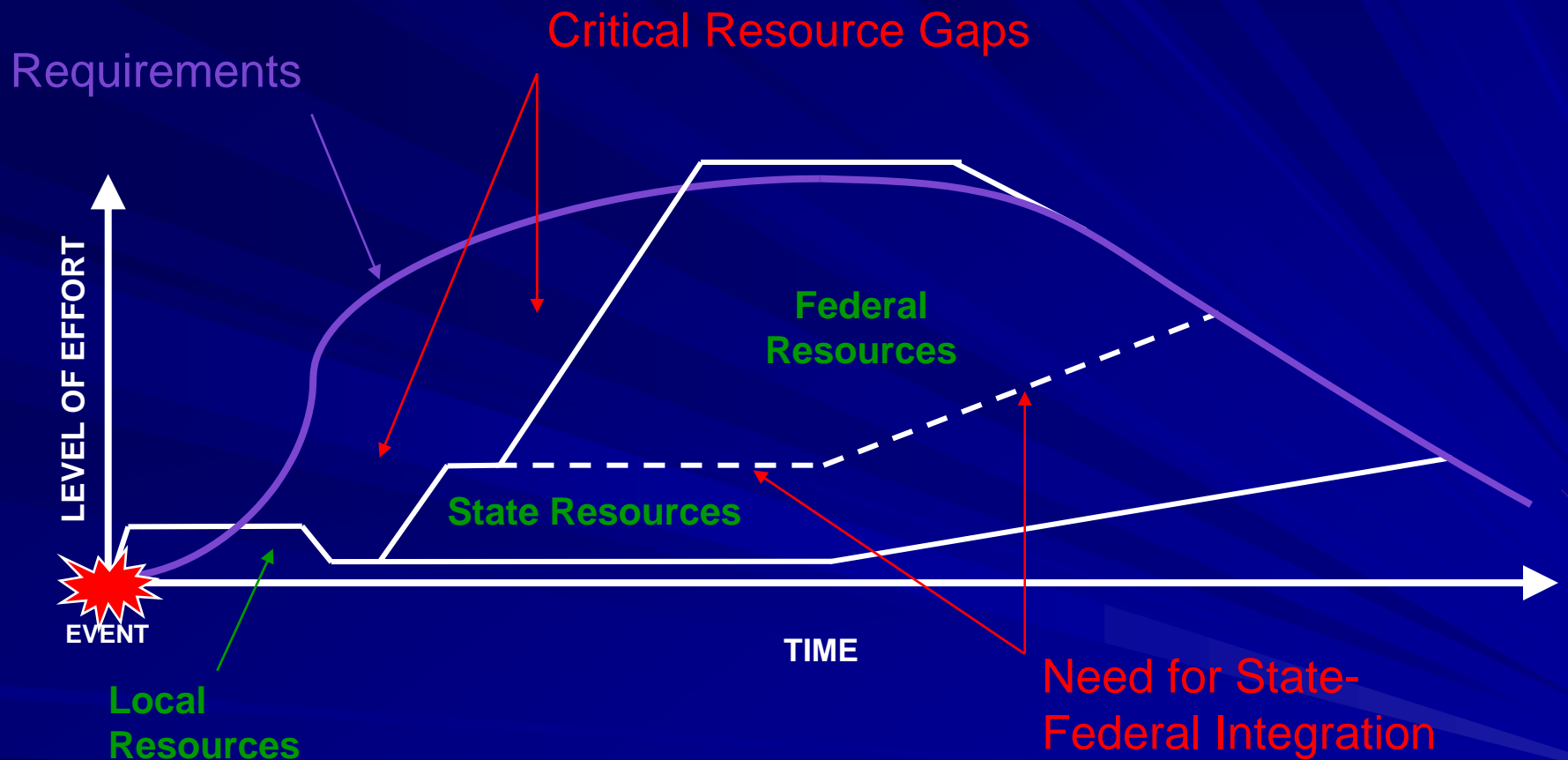
Catastrophe vs. Disaster

- **Catastrophic Plans are a specialized type of emergency plan**
 - Directed at specific scenarios, both incident type and location
 - Integrated Concept of Operations for local, regional, State, area regional, Federal regional, and the NRF
 - Horizontally integrated: Across agencies and organizations at the same level of government
 - Vertically integrated: Across Federal, State and local entities



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Execution: Catastrophic Disaster Operations – Sequence of Response



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Catastrophic Incident Base Plan (CONOP)

- Unified Federal and State operations
 - Leadership and management
 - Resource allocation
 - Information sharing/situational awareness
 - Joint coordination and communications
- Relationship between Federal (NRF) and State systems
- All Hazards Approach

Hurricane Landfall: Southern Oahu Annex (CONPLAN)

- Situation based on severe direct hit scenario
- Establish Centers of Gravity, and Determine Courses of Action
- Pre-Landfall Response activities
- Post-Landfall Response and initial recovery - 60 days
- Engage Work Groups in specific areas

Hurricane Landfall: Southern Oahu Annex (CONPLAN)

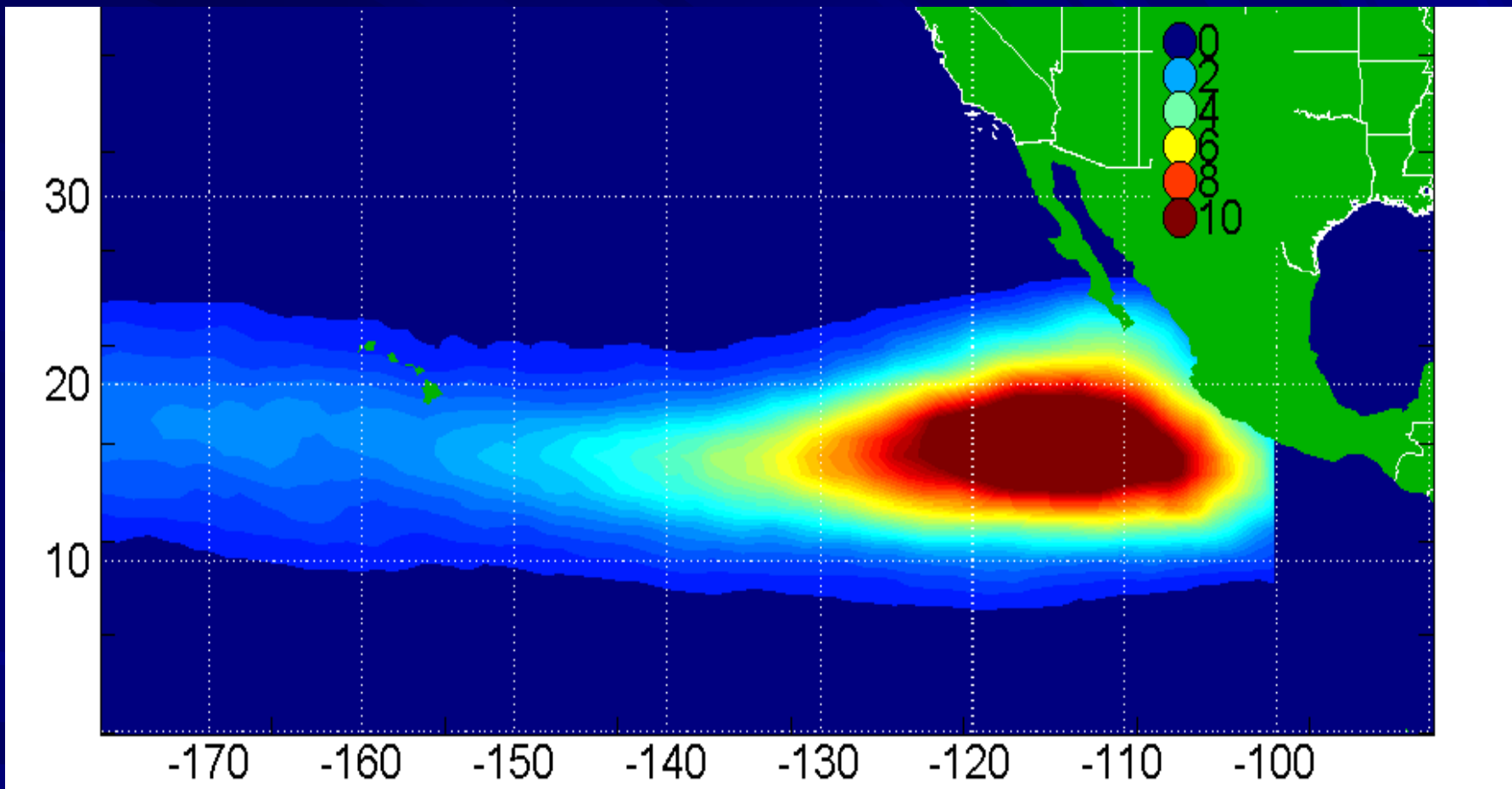
- Identify National resources based on projected needs of the region
- Identify potential execution sites:
 - Mobilization centers, staging areas, and Points of Distribution
 - Temporary housing sites
 - Debris staging and disposal areas
- Develop execution schedule

Hurricane Annual Odds of Occurrence by Saffir/Simpson Category, Incorporating NASA and HHRF Sponsored Research

Hurricane Category	Sustained Wind	3 -sec. Peak Gust	Anywhere in Hawaii	Kauai County only	Oahu only	Maui County *	Hawaii County *
1	74 to 94 mph	82 to 108	1 in 25	1 in 120	1 in 80	1 in 60	1 in 60
2	94 to 110 mph	108 to 130	1 in 50	1 in 335	1 in 320	1 in 185	1 in 135
3 or 4	110 to 155 mph	130 to 191	1 in 75	1 in 500	1 in 400	1 in 300	1 in 200
Any Hurricane	Greater than 74 mph	Greater than 82	1 in 15	1 in 75	1 in 55	1 in 40	1 in 35

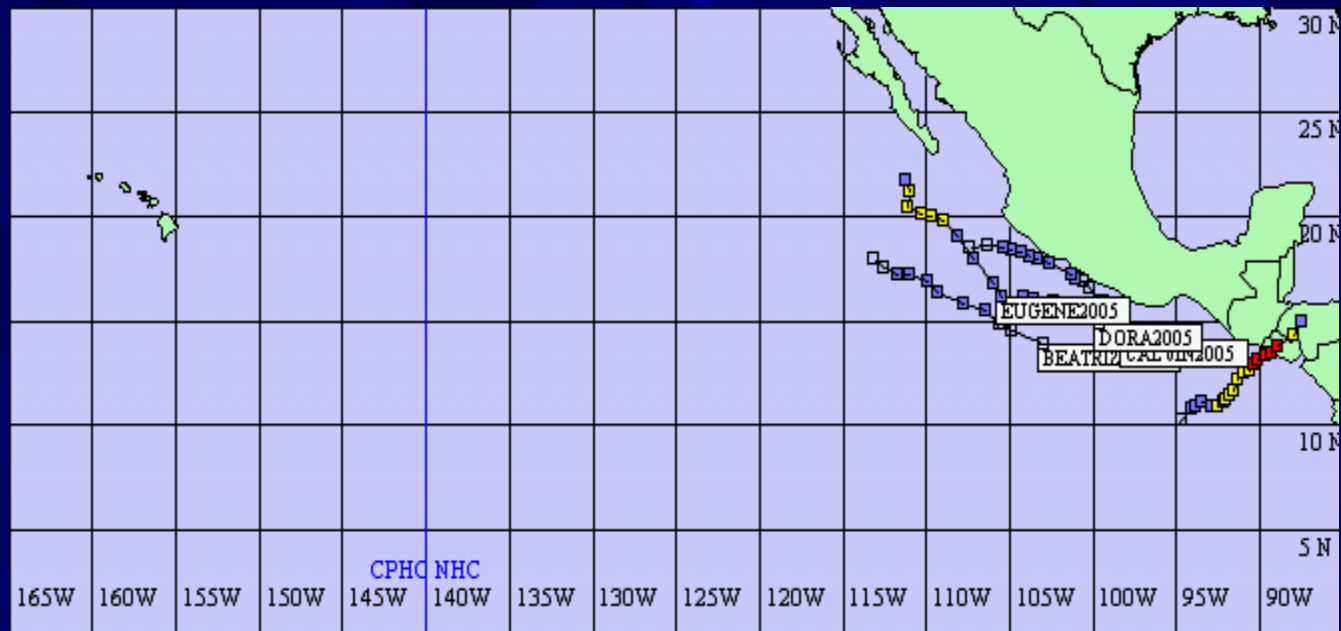
*(Odds for the islands of Maui and Hawaii are subject to some further refinement of the NASA analysis)

Hurricane Frequencies Based on 1,000 Years of Simulation for the East & Central Pacific Region

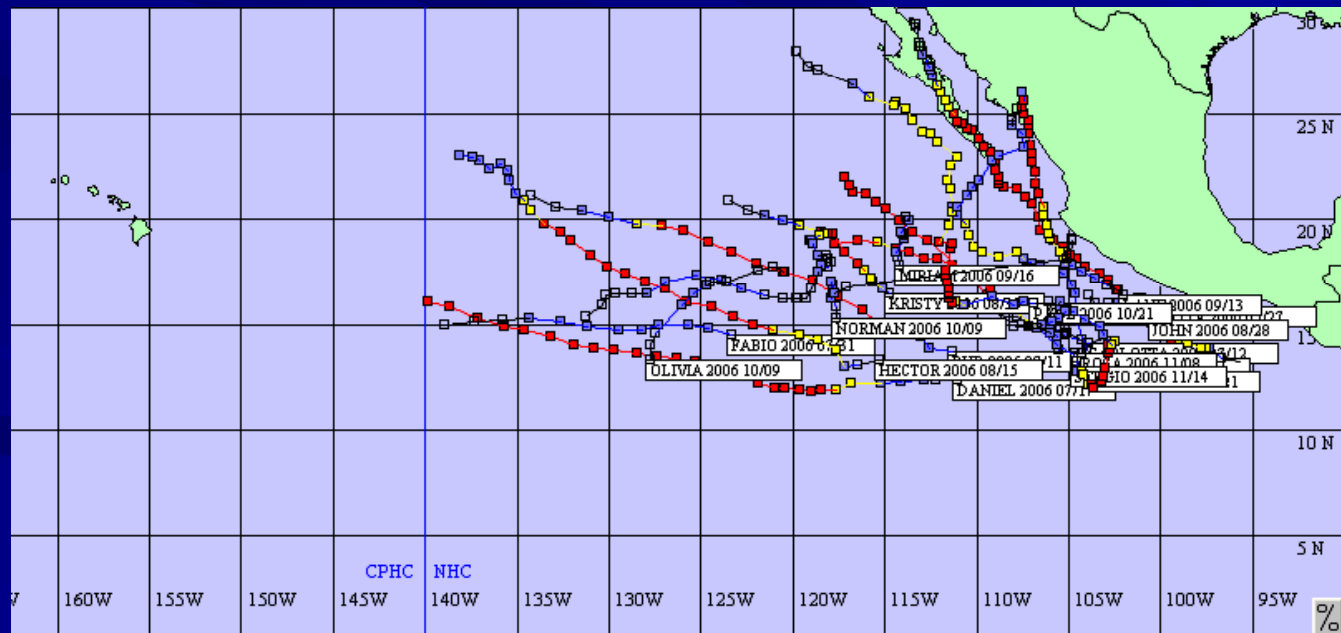


Contours show number of times a hurricane passes within 75 Nm per 10 yrs. (intensity >74 mph sustained wind speed)

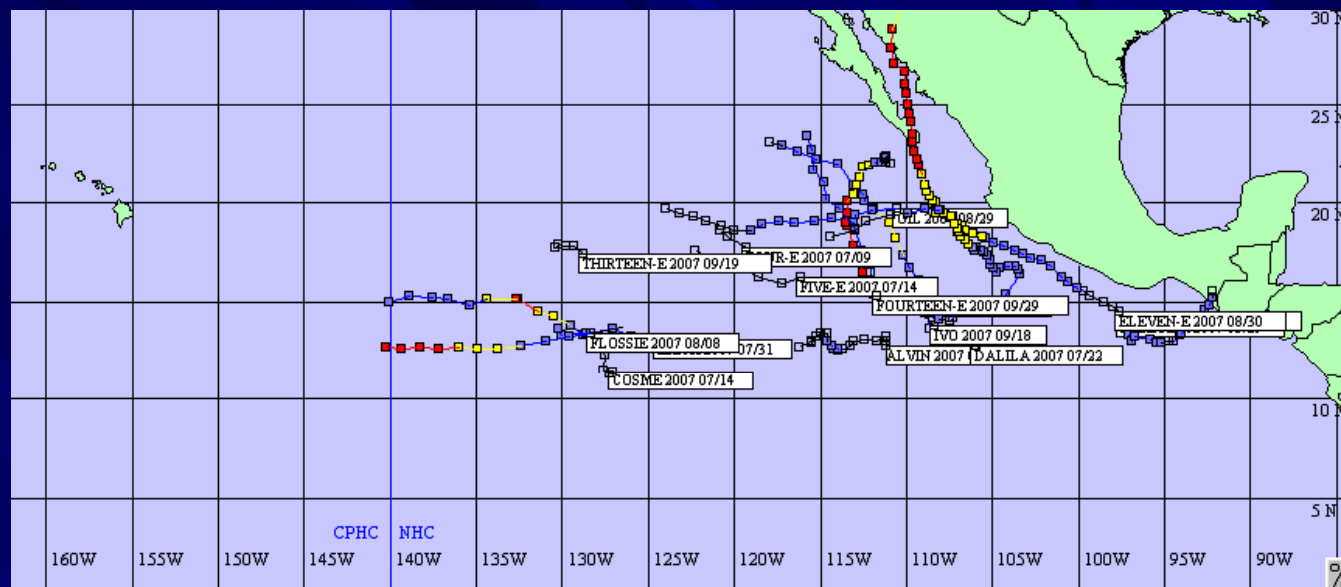
2005 Storm Tracks (5 Named Storms)



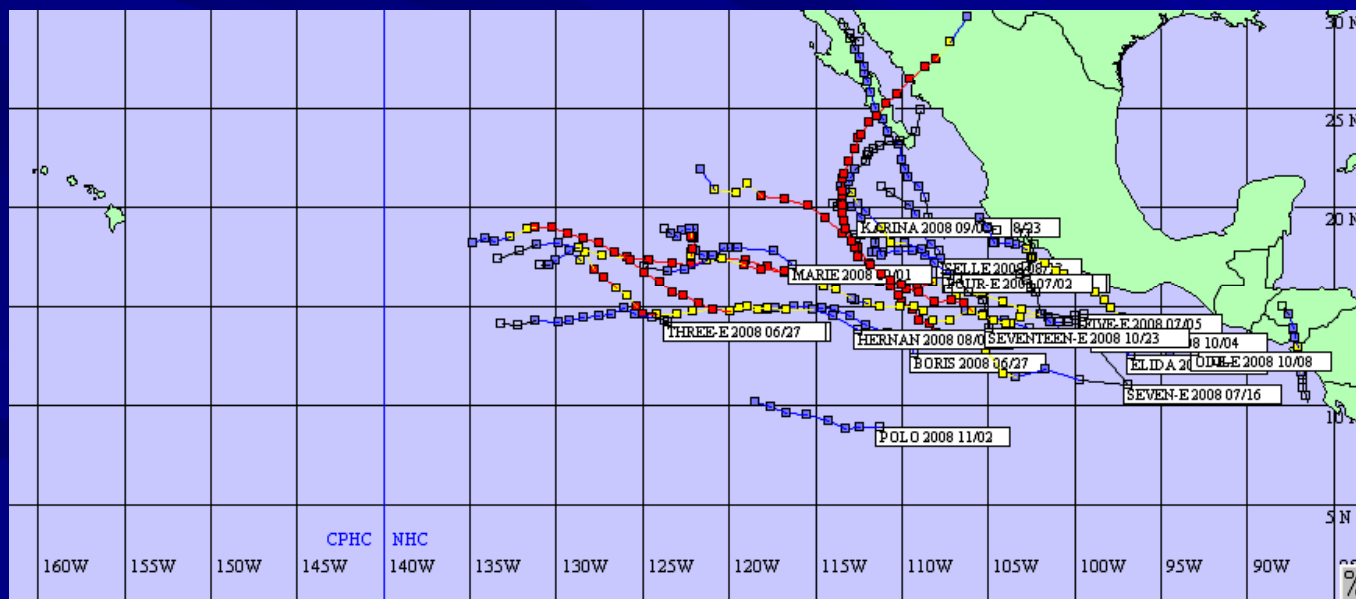
2006 Storm Tracks (19 Named Storms)



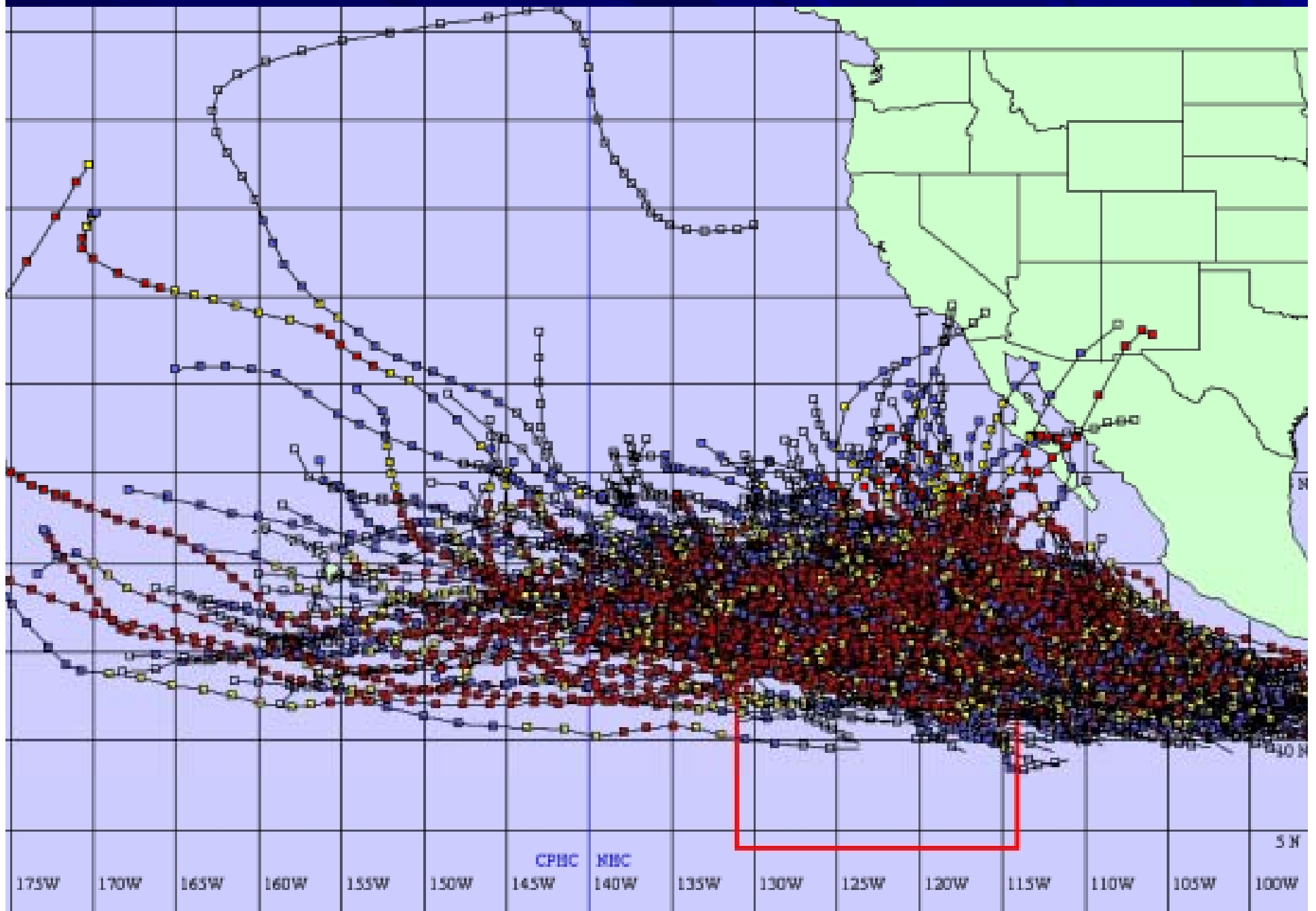
2007 Storm Tracks (11 Named Storms)



2008 Storm Tracks (16 Named Storms)



Historical Hurricane Tracks (1949-2006)



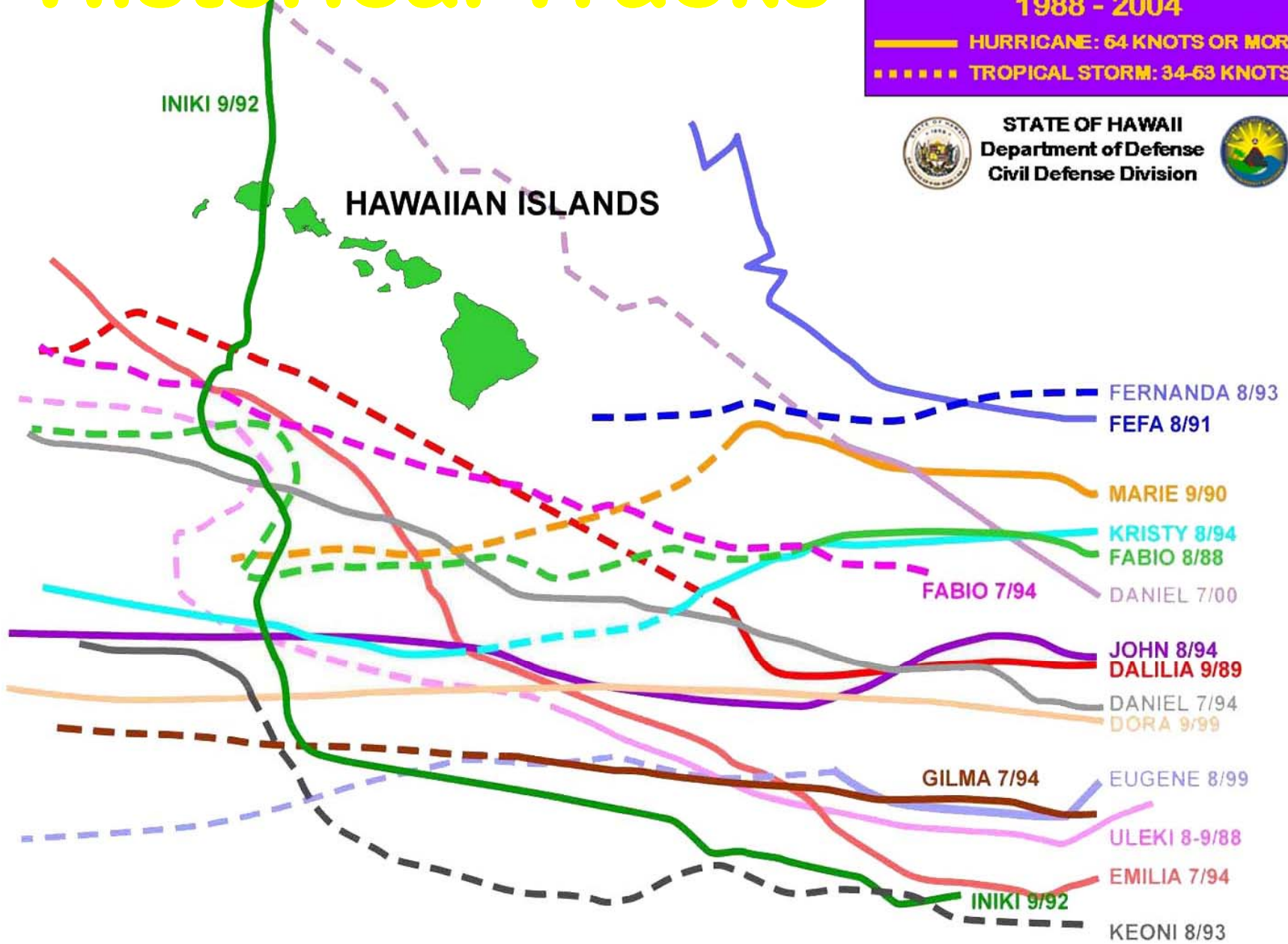
Historical Tracks

**HURRICANE TRACKS
1988 - 2004**

———— HURRICANE: 64 KNOTS OR MORE
 TROPICAL STORM: 34-63 KNOTS



STATE OF HAWAII
 Department of Defense
 Civil Defense Division



Short and Long-Term Goals

Complete and maintain plan (scalable)

Expand emergency shelter capabilities

Develop regional mutual aid agreements

Adopt stronger building codes (Commission)

Improve in-state disaster supply capabilities

Discourage coastal zone development

Harden critical infrastructure (power lines)



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Questions?

