

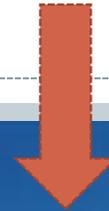
# Defense Board Recommendation 2014-1



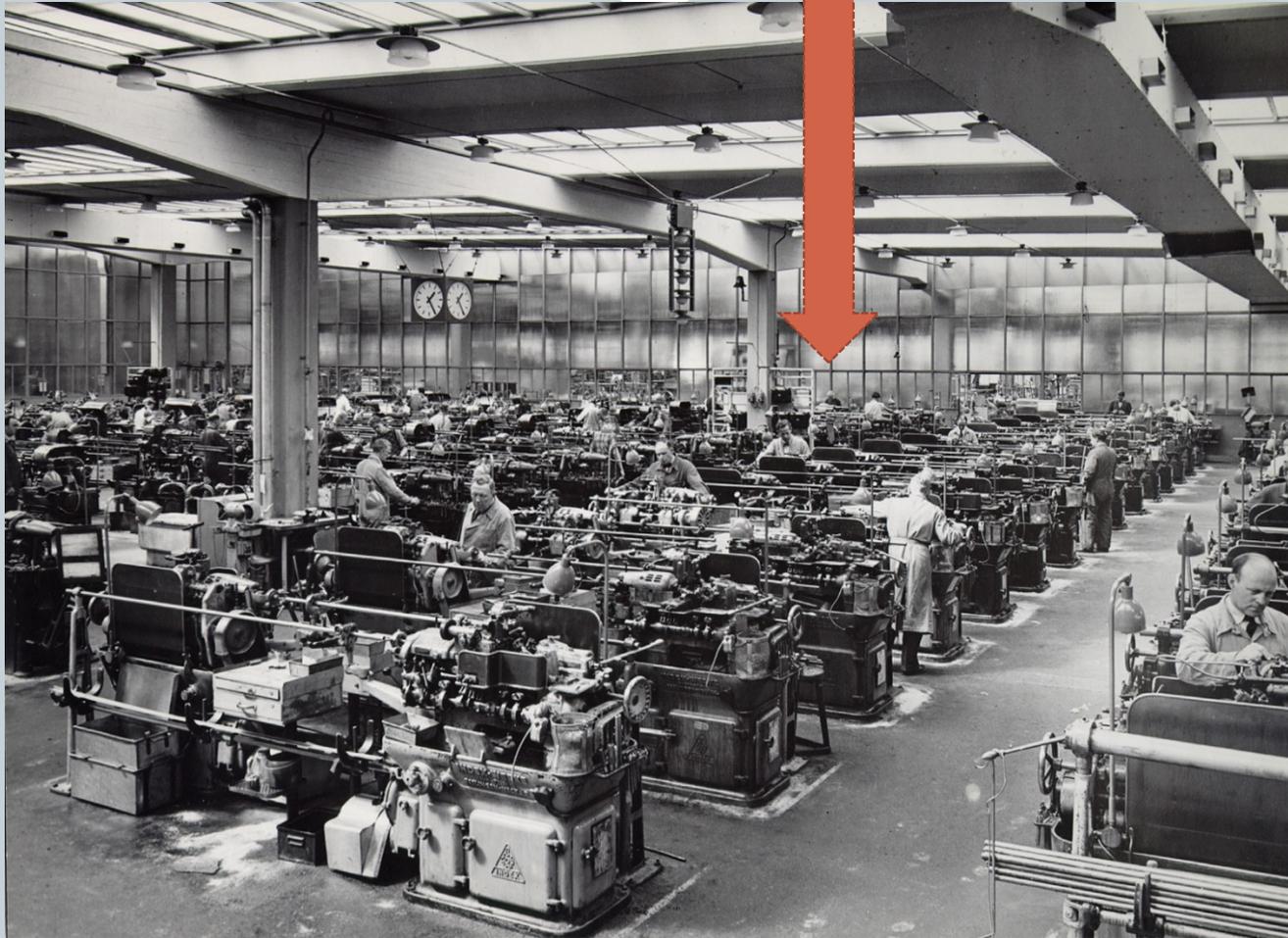
**BILL FROH**  
**OFFICE OF EMERGENCY MANAGEMENT**  
**DOE/NNSA**

**MAY 5, 2015**

You are here



I am here



# DNFSB Recommendation 2014-1 Parade of Documents



**Wednesday, September 3rd, 2014**

**Recommendation Delivered to DOE**

**Tuesday, September 23rd, 2014**

**Rec 2014-1 Printed in Federal Register**

**Monday, December 1st, 2014**

**DOE Response Printed in Federal Register**

**Wednesday, April 29th, 2015**

**DOE Implementation Plan Received**

*“Recent high visibility, high consequence accidents”*



- **March, 2014: Defense Nuclear Facilities Safety Board communicates to the Secretary of Energy its concerns regarding shortcomings in the response to a truck fire and radioactive material release event at WIPP**
- **DOE Accident Investigation Board documented these shortcomings in its report**
- **Board says many of the site-specific response issues noted at WIPP also exist at other sites**

*“momentum for continuous improvement has faded”*



- Board interest in state of emergency preparedness and response predates Fukushima
- 1998: Board issued Recommendation 98-1\*
- 1999: Board published Tech-21\*\*

\* Recommendation 98-1 is titled, *Resolution of Issues Identified by Department of Energy (DOE) Internal Oversight*.

\*\* Tech-21 is short for Technical Report -21, *Status of Emergency Management at Defense Nuclear Facilities of the Department of Energy*.

# Fukushima

## March 11, 2011



# The 3 Questions



# The First Question



- *Does DOE provide facility workers, response personnel, and emergency management decision makers with adequate direction and guidance to make timely, conservative emergency response decisions and take actions that focus on protection of the public and workers?*



# First Question: Observations



- **Technical Planning Documents**
  - Hazard Assessments
  - Emergency Action Levels
  - Protective Actions
  - Severe Events
- **Training and Drills**
- **Exercises**

## The Second Question



- *Does DOE provide adequate equipment and hardened facilities that enable emergency response personnel and emergency management decision makers to effectively respond to emergencies and protect the public and workers?*



# Second Question: Observations



- **Facilities and Equipment**
  - Problems with survivability, habitability, and maintenance
  - Problems with communications and notification systems



# The Third Question



- *Do the contractor assurance systems and DOE oversight provide an effective performance assurance evaluation of emergency preparedness and response?*

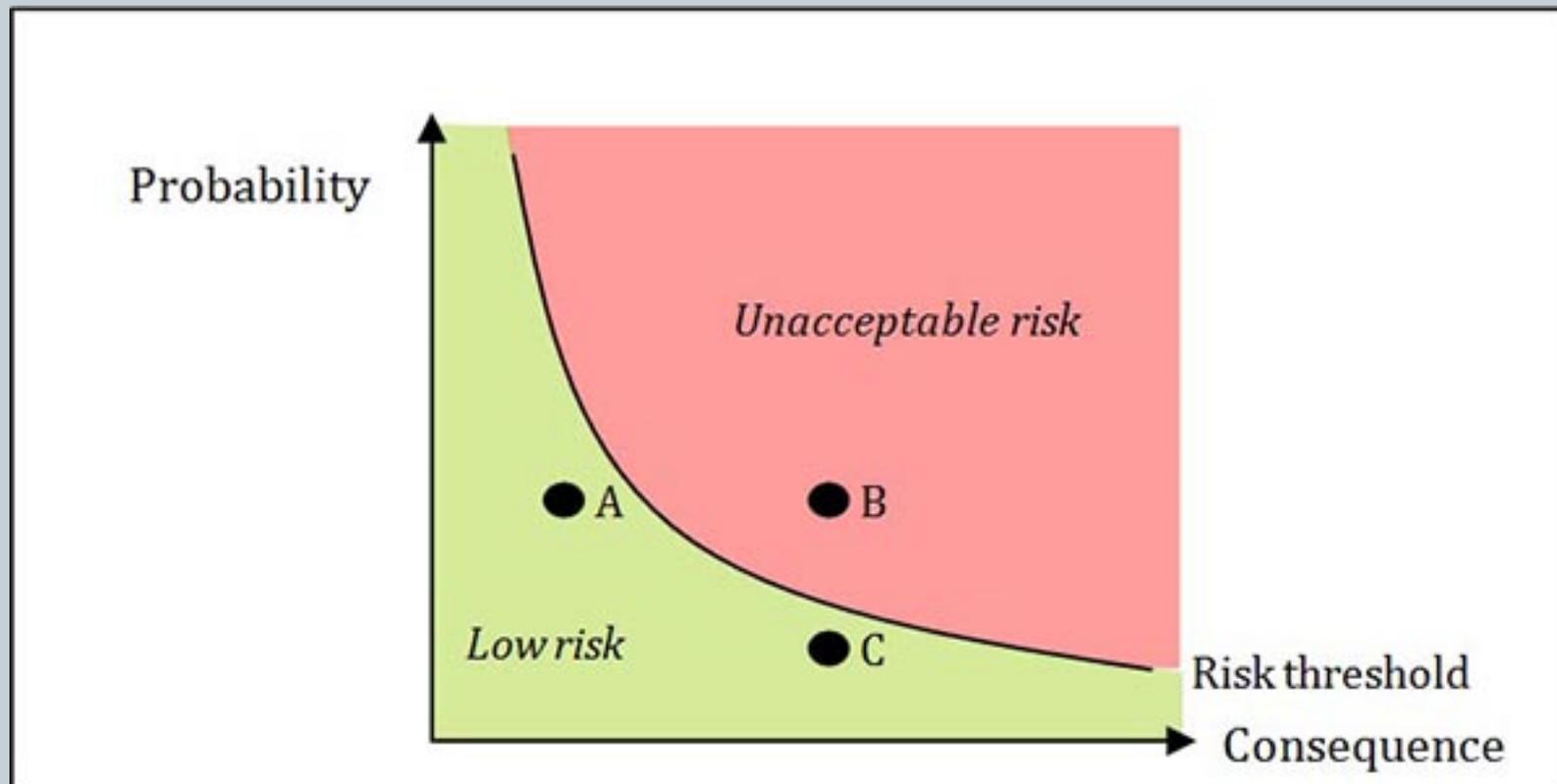


# Third Question: Observations



- **Oversight and Assessment**
  - Federal Independent Oversight
  - Federal Line Oversight
  - Contractor Oversight

# Severe Events



# Asteroid?



# Mars Attacks!?



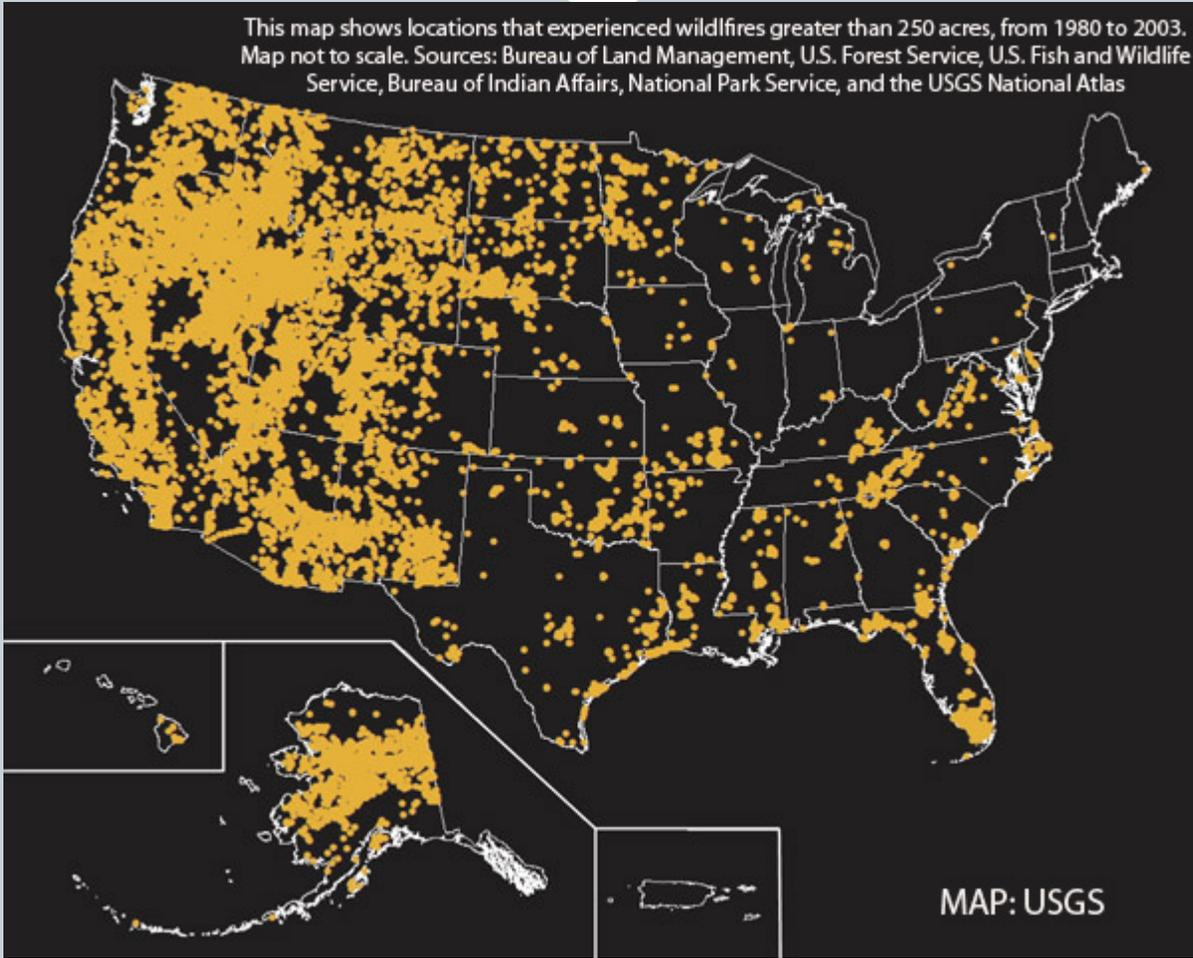
# Wildland Fire?



# Wildfire Map



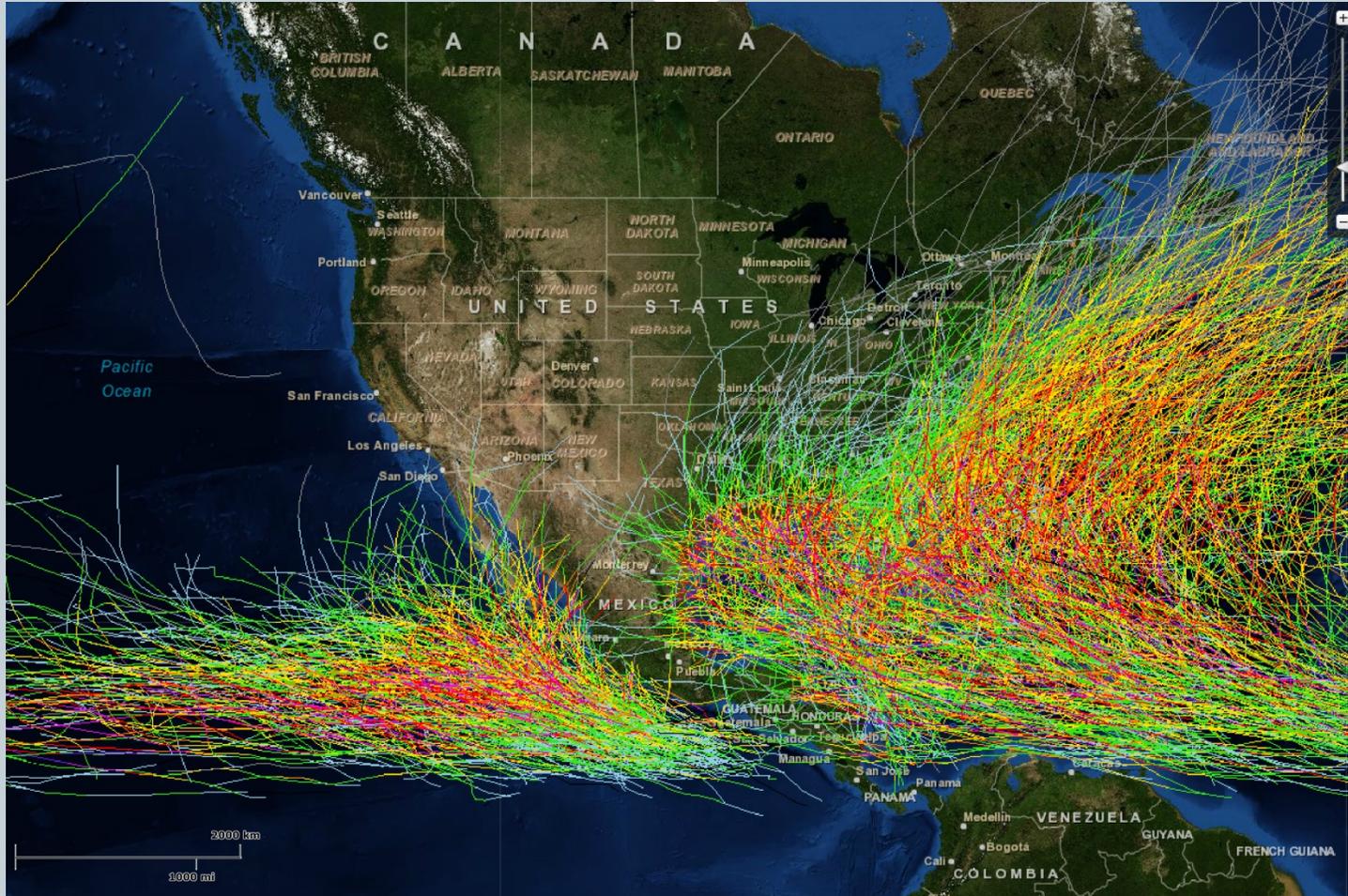
This map shows locations that experienced wildfires greater than 250 acres, from 1980 to 2003. Map not to scale. Sources: Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Indian Affairs, National Park Service, and the USGS National Atlas



# Hurricane?



# Hurricane Map



# Severe Events



- **Gaps in requirements and guidance:**
  - Clarify definition of “severe event”, i.e. how much preparation is enough?
  - Existing requirements focus on individual facilities- no direction on evaluating multi-facility events
  - No methodology for prioritizing response to multi-facility events
  - Need to incorporate self-help and basic preparedness training
  - Need to develop logistical process for providing food, water, other essentials to on-site responders

