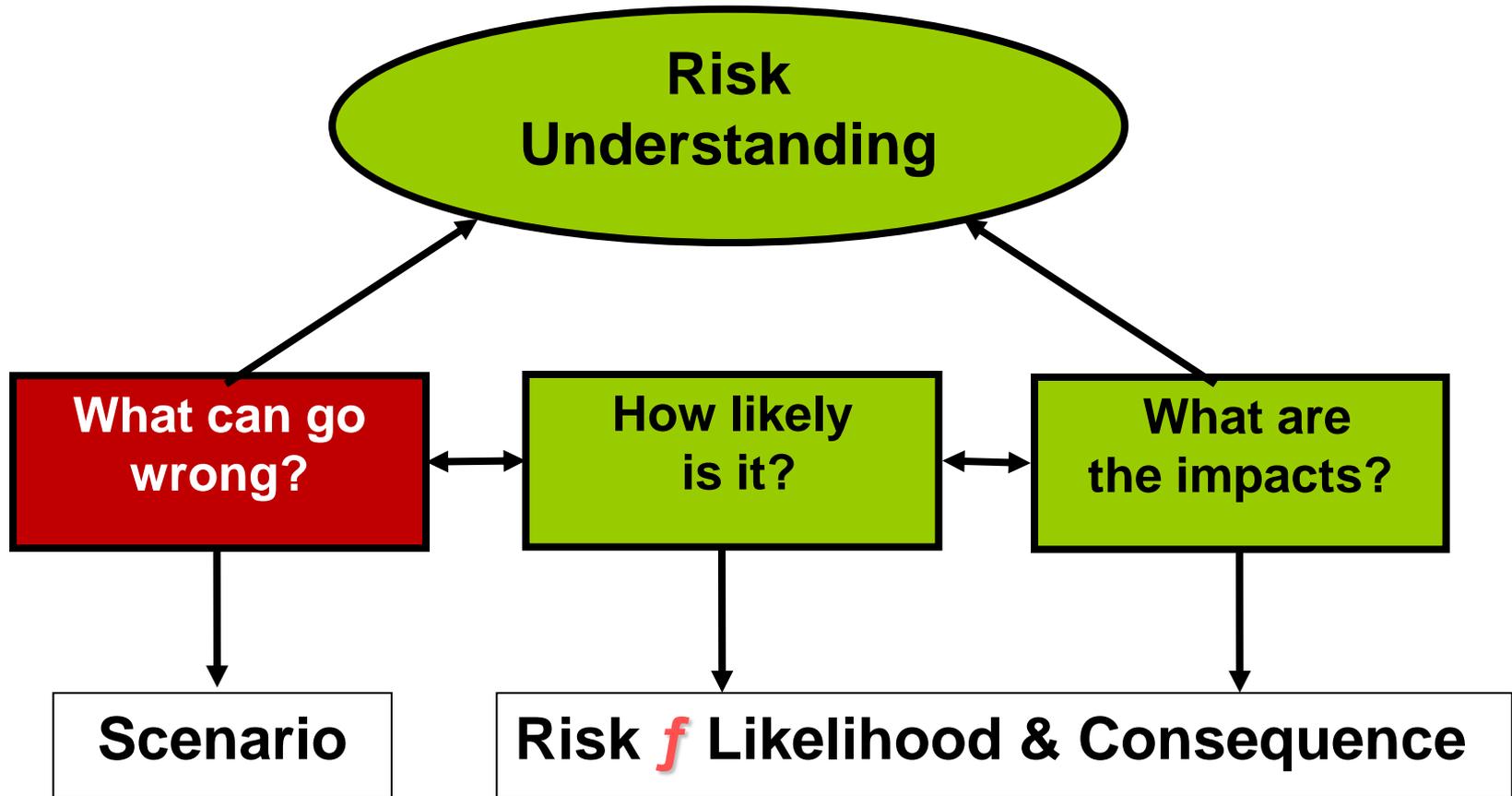


USCG

A Risk Governance Issue: Common Standards



Basic Elements of Risk



Incidents

- **Grounding**
- **Collision/Allision**
- **Flooding/sinking**
- **Fire/explosion**
- **Personal injury/illness**
- **Oil spills**
- **Discharge of debris/sewage**
- **Accidental Release of HAZMAT**
- **Species damaged by marine operations**
- **Invasive species introduction**
- **U.S. EEZ encroachment**
- **Fish stock non-sustainability**
- **Global IUU Fishing**
- **Drug smuggling**
- **Illegal migrant entry**
- **Seasonal conditions affecting waterways**
- **Failure to Support Combatant Commander**
- **Failure to Provide Polar Region Presence**
- **Periodic/expected natural disaster**
- **Non-maritime incident affecting a waterway**
- **Attack on Port Infrastructure**
- **Transfer of WMD**
- **Transfer of Terrorist**
- **Failure to Provide International Disaster Support**



Communities

- **Vessels**

- **Commercial Fishing Vessel**
- **Freight Barge**
- **Freight Ship**
- **Industrial Vessel**
- **Offshore Supply Vessel**
- **Passenger (6 or Fewer)**
- **Passenger (More Than 6)**
- **Public Tankship/Barge**
- **Public Vessel, Unclassified**
- **Recreational**
- **Research Vessel**
- **School Ship**
- **Tank Barge**
- **Tank Ship**
- **Towing Vessel**

- **Facilities**

- **Deepwater Port**
- **Fixed Platform**
- **Marina**
- **Unregulated Facility**
- **MARPOL Reception**
- **Waterfront Facility**



Likelihood

- Range of frequency categories capture how often a loss (adverse event) occurs
- Several potential outcomes for the same incident

Frequency Score Descriptions	Frequency Scores
Continuous	730 events per year
Daily	365 events per year
Weekly	52 events per year
Monthly	12 events per year
Quarterly	4 events per year
Annually	1 event per year
Decade	1 event per 10 years
Half-century	1 event per 50 years
Century	1 event per 100 years
Millennium	1 event per 1,000 years



Standard Consequence Measures

Category	Deaths & Injuries	Economic Impact	Environmental Impact	National Defense	Symbolic Effect
5	>1000 Deaths or Serious Injuries	> \$1 Billion	Complete destruction of Ecosystem over large area	Creates critical long-term vulnerabilities to defense	Destruction of unique America icon(s)
4	101-1000 Deaths or Serious Injuries	\$101 Million - \$1 Billion	Complete destruction of Ecosystem in small area	Creates critical, short-term defense vulnerabilities	Destruction of important, internationally known, American symbols
3	11-100 Deaths or Serious Injuries	\$11-\$100 Million	Long-term damage to a portion of the Ecosystem	Long-term disruptions to military actions	Major damage to, but not destruction of, nationally important, symbols
2	1-10 Deaths or Serious Injuries	\$1-\$10 Million	Short-Term, Serious damage to the Ecosystem	Short-term disruptions to military actions	Major damage to or destruction of regionally important symbols
1	No deaths, Only minor injuries	<\$1 Million	Minimal, Local Impact to Ecosystem	No serious military or defense impact	Major damage to or Destruction of locally important symbols



What's a life worth?

1. No National Standard

- DOT - \$3.0 Million
- EPA - \$9.1 Million
- FDA - \$7.9 Million
- DHS - \$6.3 Million

2. Politically “Loaded” Value Question

3. But ... necessary to calculate and compare “apples to apples”

4. Common measure is \$\$\$\$\$



Other Necessary Standards

- **Threat**
- **Vulnerability**
- **Resilience**



Questions?

