



ARCTIC AND WESTERN ALASKA AREA COMMITTEE

01 November 2022

Microsoft Teams Meeting ID: 223 719 225 878 **Passcode:** eNzfhB **Teleconference:** +1 (907)-202-7104 **ID:** 174 887 444#

AWA-AC@uscg.mil

PURPOSE

- Area Committee
 - Prepare the Area Contingency Plan (ACP)
 - Advise Federal and State OSCs
 - Conduct outreach activities
- Area Committee Meeting
 - ACP task development
 - Clearing house for planning and response related news
 - Maintain currency of stakeholder points of contact
 - Foster collaborative relationships
 - Keep those interested informed
 - Provide opportunity for input and comment
 - Invite new members
 - Enhance equal awareness of the ACP and preparedness for an incident

AREA COMMITTEE MEETING AGENDA

1300 -1325: Introductions/OSC
Opening Comments

Business Meeting

1325 - 1400: Subcommittee Status
Report

1400 - 1405: *Break*

Pollution Response Topics

1405 - 1420: Response Highlights

1420 - 1435: Risk Assessment
Methodology

1435 - 1450: UAS GRS Validation
Exercise

1450 - 1500: *Break*

NGO Reports

1500 - 1520: Cook Inlet Regional Citizens
Advisory Council

1520 - 1540: Prince William Sound
Regional Citizens Advisory Counsel

1540 - 1600: Northern Alaska
Environmental Center

1600 - 1620: Arctic Domain Awareness
Center

1620 - 1640: Ted Steven's Center

1640 - 1700: Public Comment/Closing
Remarks/Discuss Next Meeting

INTRODUCTIONS

- Please state your name, community or organization, and position, as applicable
 - Around the room
 - Online (names displayed)
 - On the phone, but not online
- On-Scene Coordinator Introductions and Opening Comments
 - Anna Carey (Central) – ADEC
 - Kimberley Maher (Northern) - ADEC
 - Bernie Nowicki (Western) - ADEC
 - CAPT Leanne Lusk – Coast Guard Sector Anchorage

AWA AC BUSINESS MEETING

Subcommittees Status Reports (5 min):

- Area Contingency Plan (ACP) Administration: CWO Bryan Klostermeyer/Victoria Colles
- Geographic Response Strategies (GRS): LTJG Madeline Romito/Mike Donnellan
- Exercise and Training: LT Josh Gross/ TBD
- Regulator Advisory and Coordination: CDR Chris Svencer/Sarah Moore
- External Communications: LT Case Kuikhoven/Allison Natcher

Steering Committee Report (5 min)

- Charter Updates
- Administrative Items
- Look ahead

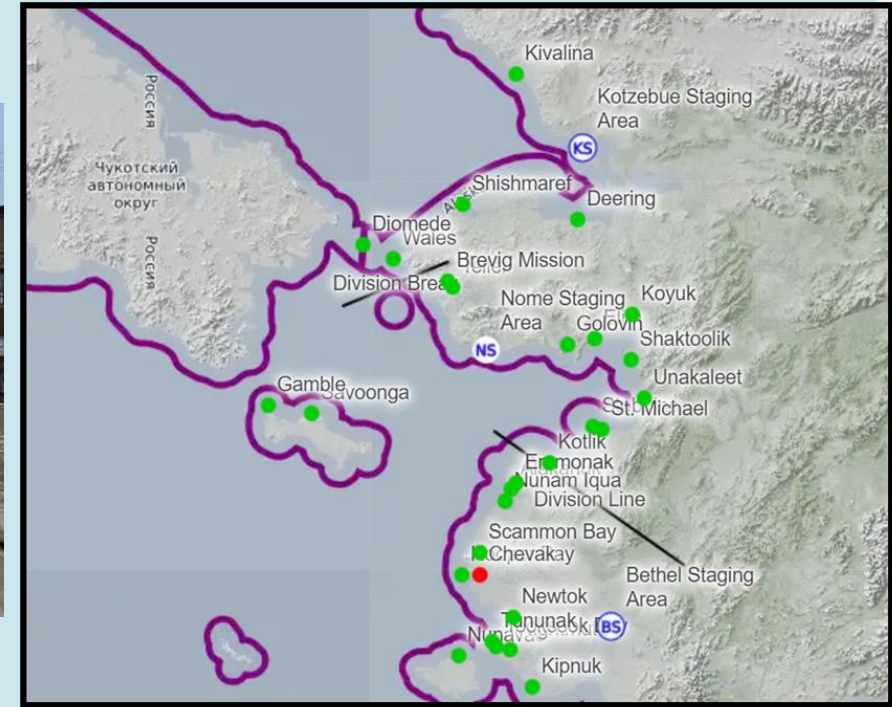


ARCTIC AND WESTERN ALASKA AREA COMMITTEE

Pollution Response Topics:

Response Highlights

TYPHOON MERBOK



September 2022: Typhoon Merbok hit Western Alaska and the Bering Strait 90 mph winds, 50 ft seas, and significant storm surge. A disaster was declared and State EOC activated to respond to flooding, damages, and debris. Coast Guard Sector Anchorage stood up an Incident Management Team for initial assessment and identified response priorities. Leveraged relationship with National Guard to get CG responders to 32 villages less than a week following the storm.

TYPHOON MERBOK



To assist with interagency coordination, ADEC had liaisons in both the State Emergency Operations Center and in the USCG Incident Management Team.

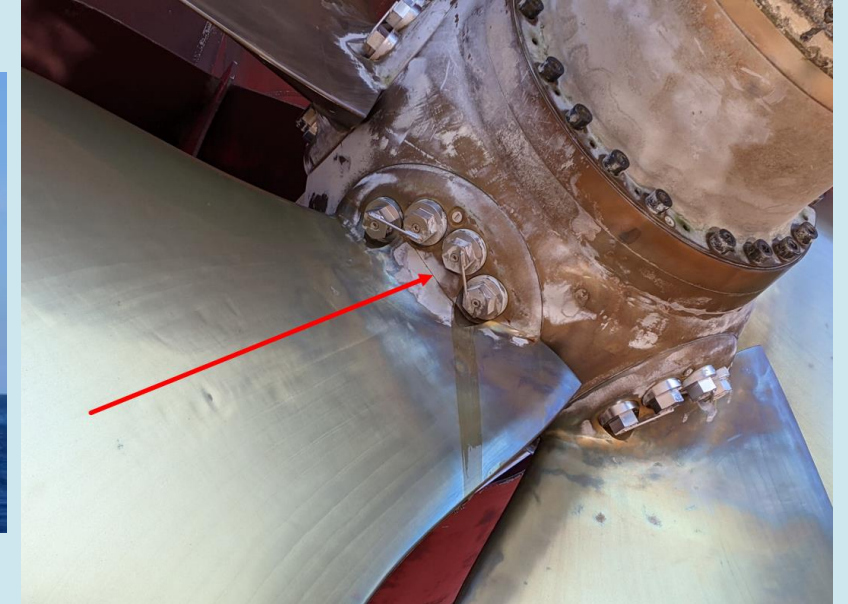
ADEC responders deployed to the Seward Peninsula to assist with community concerns of vapor intrusion and contamination spread by the storm around schools, homes, and drinking water sources. ADEC coordinated with individual communities to assist with accessing spill response supplies.

F/V PACIFIC SOUNDER



June 2022: The 89ft fishing vessel ran aground on Unimak Island near Sennett Point, carrying an estimated 21,000 gal of diesel. The owner hired Resolve Marine who reported light sheening in the area, deployed boom, and lightered all recoverable fuel off the vessel. They had planned to salvage the vessel, but weather did not allow for operations to proceed safely. Owner plans to resume salvage plans in the Spring, CG is coordinating monthly to monitor status of the vessel over the winter.

M/V MAUNALEI



August 2022: Enroute to Anchorage, vessel's controllable pitch propeller began discharging lube oil at a rate of approx 6 gal/hr. CG and ADEC consulted stakeholders and determined the economic impact of denying the vessel entry outweighed the threat to the environment. Vessel was directed to hire tugs and OSRO for escort, and press release was issued for public awareness. 72 gallons were estimated to have been discharged during transit of Cook Inlet in vicinity of multiple fisheries.



ARCTIC AND WESTERN ALASKA AREA COMMITTEE

IMO'S Oil Spill Risk Evaluation and
Assessment Of Response Preparedness
Model

MANUAL ON
Oil Spill Risk Evaluation
and Assessment of
Response Preparedness
2010 EDITION

IMO MANUAL

For purchase at:

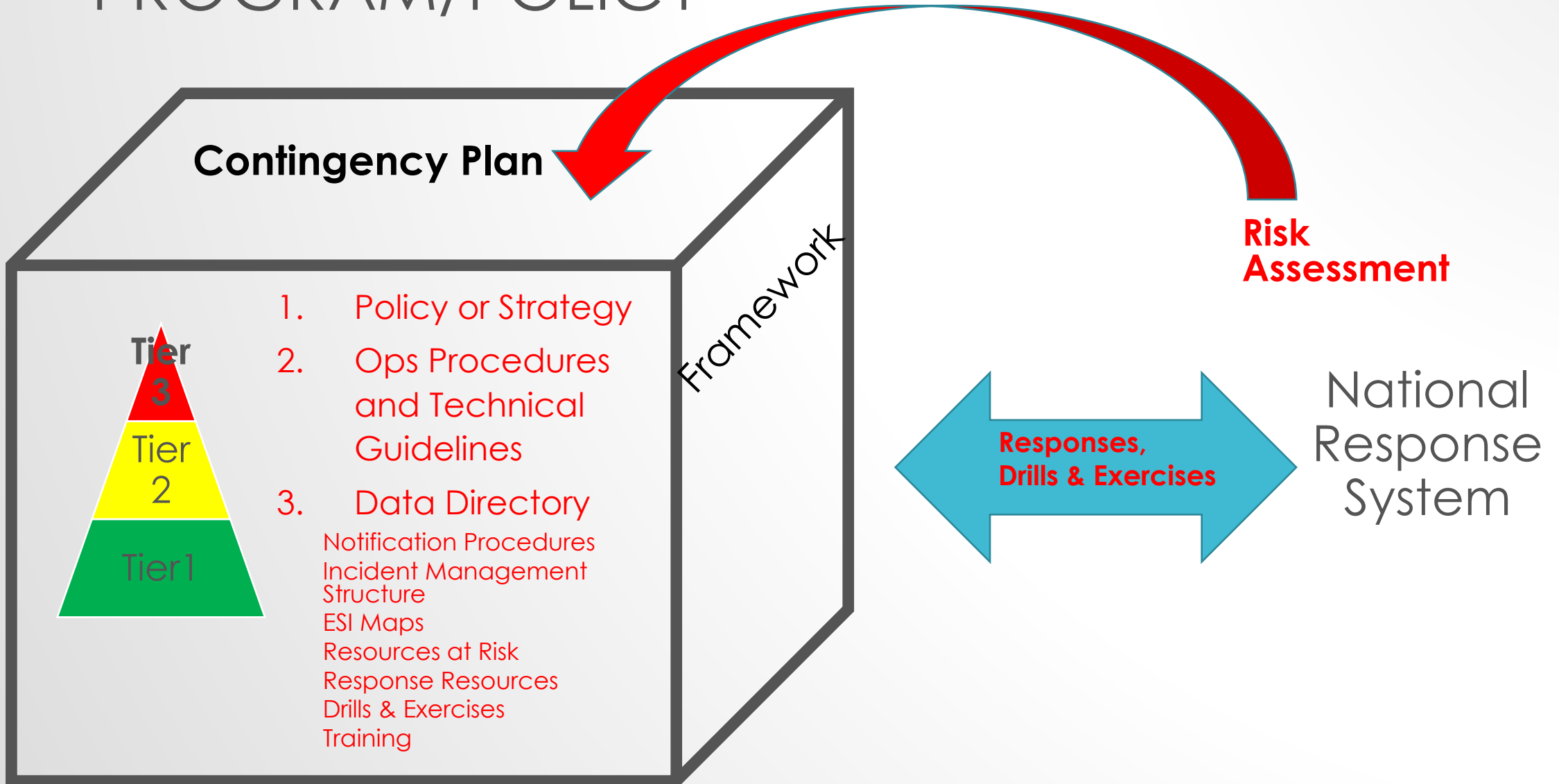
<https://www.imo.org/en/publications/Pages/CatalogueAndBookCodeLists.aspx>



OBJECTIVES

- Overview of IMO model for risk assessments
 - Methodology for determining likelihood and consequence.
 - Identification of known hazards.
 - Identification of resources at risk (environmental and human use)
 - Evaluation of scenarios using likelihood and consequence to determine total risk for each scenario.

PREPAREDNESS AND RESPONSE PROGRAM/POLICY



DEFINING TERMS



Source



Hazard



Event



Frequency



Probability



Likelihood

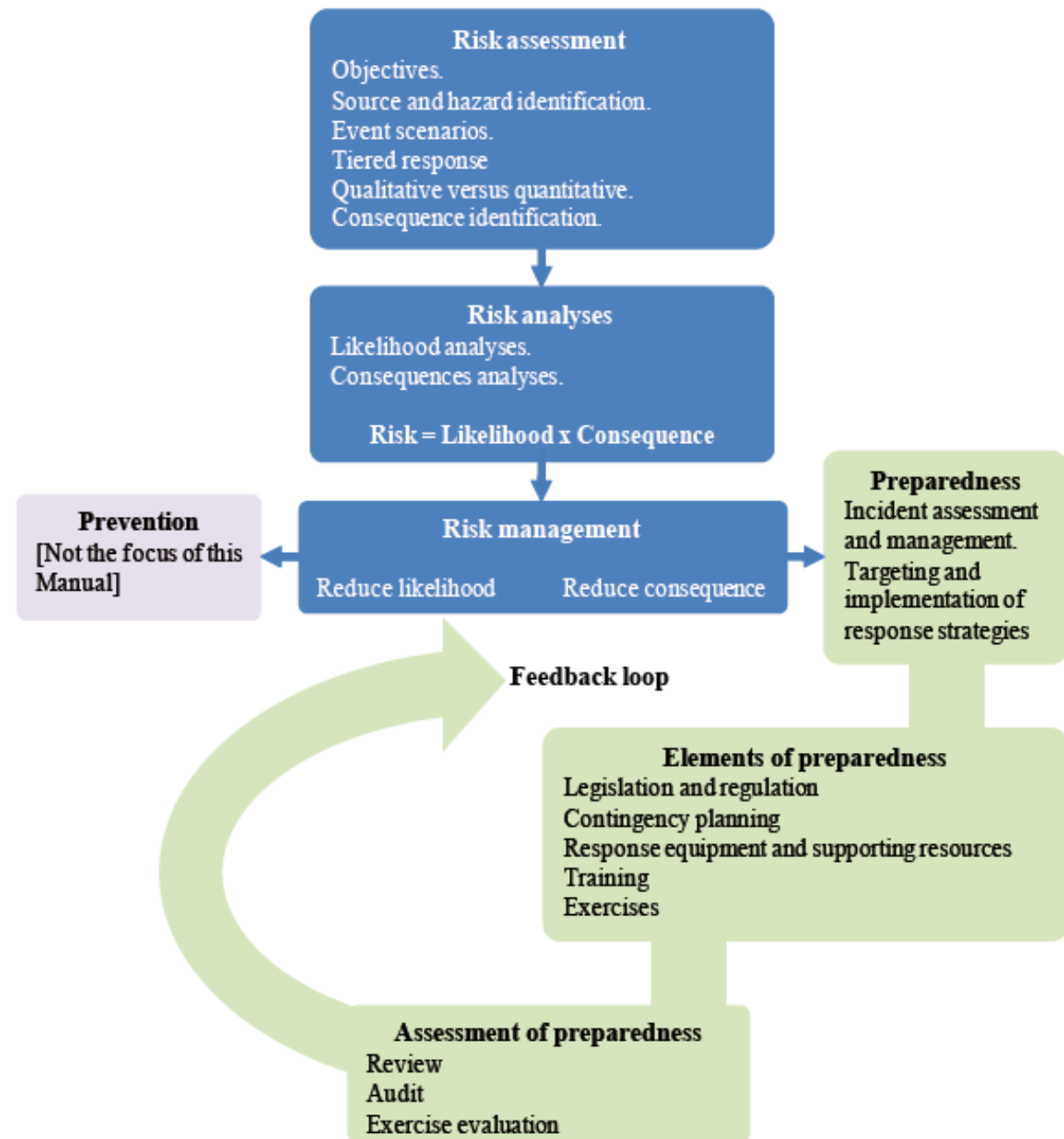


Consequence

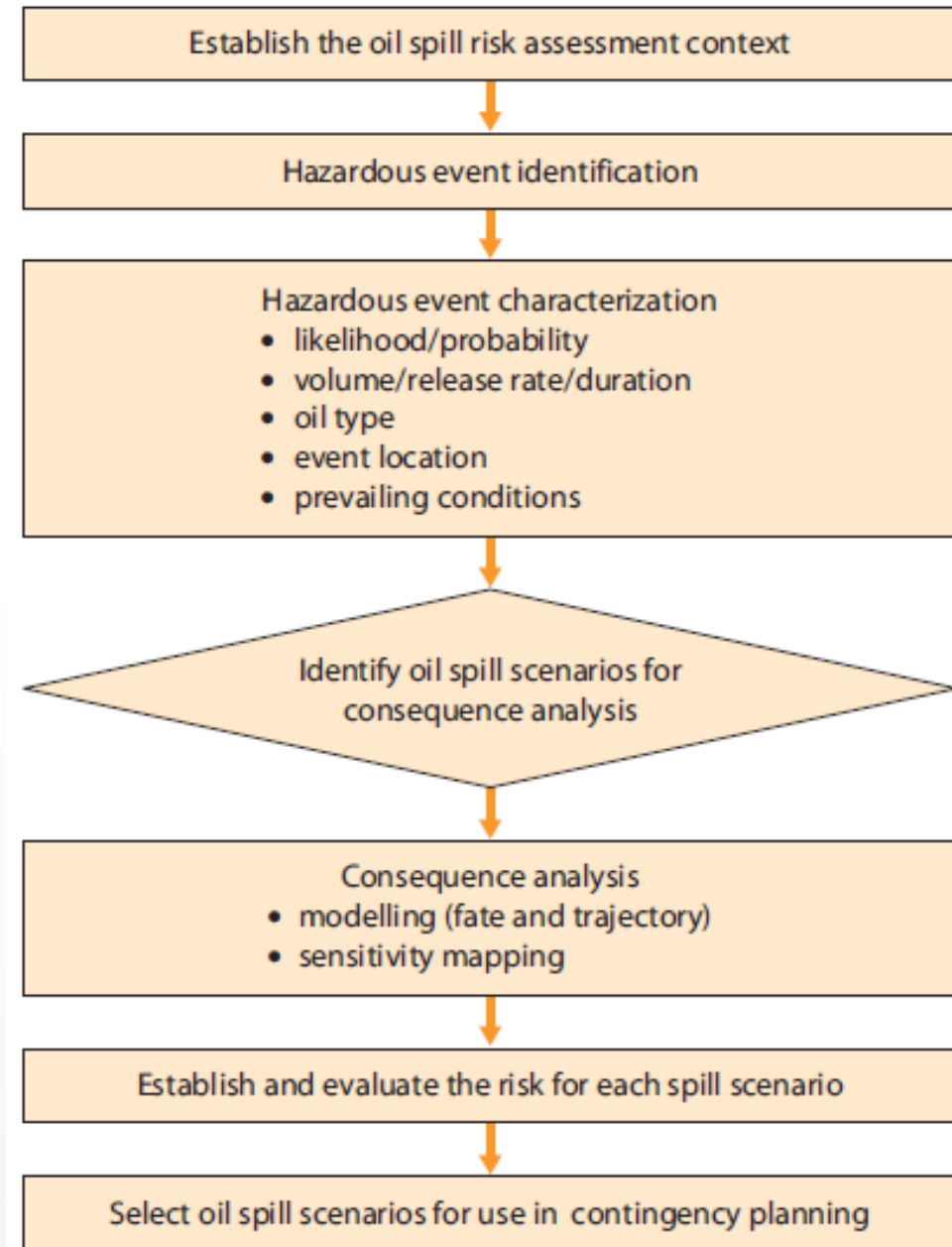


Risk

RISK ASSESSMENT PROCESS



RISK ASSESSMENT PROCESS



Scenario information to be determined

- Event
- Likelihood (frequency/probability)
- Oil type
- Volume
- Duration of release
- Behaviour of spilled oil
- Location of event
- Prevailing hydrodynamic and environmental conditions
- Trajectory and fate
- Geographic zone of potential spill impact
- Environmental and socio-economic sensitive resources at risk and potential consequences if impacted.

Analysis

- What can go wrong?
- What is the chance that it could happen?
- What type of oil and how much of it could be released?
- Where could it happen and what are the local conditions?
- Where could the spilled oil go and how might it behave in the environment?
- What impacts could it have and how severe could the consequences be?

DATA TO COLLECT

LIKELIHOOD

Descriptive term	Likelihood ranges	
	Chance of occurring in a given year	Frequency of occurrence
Certain	>99%	Annually (at least)
Likely	50 to 99%	1–2 years
Possible	5 to 50%	2–20 years
Unlikely	2 to 5%	20–50 years
Rare	1 to 2%	50–100 years
Extremely rare	<1%	>100 years

Table 1 – *Example of qualitative likelihoods*

CONSEQUENCE

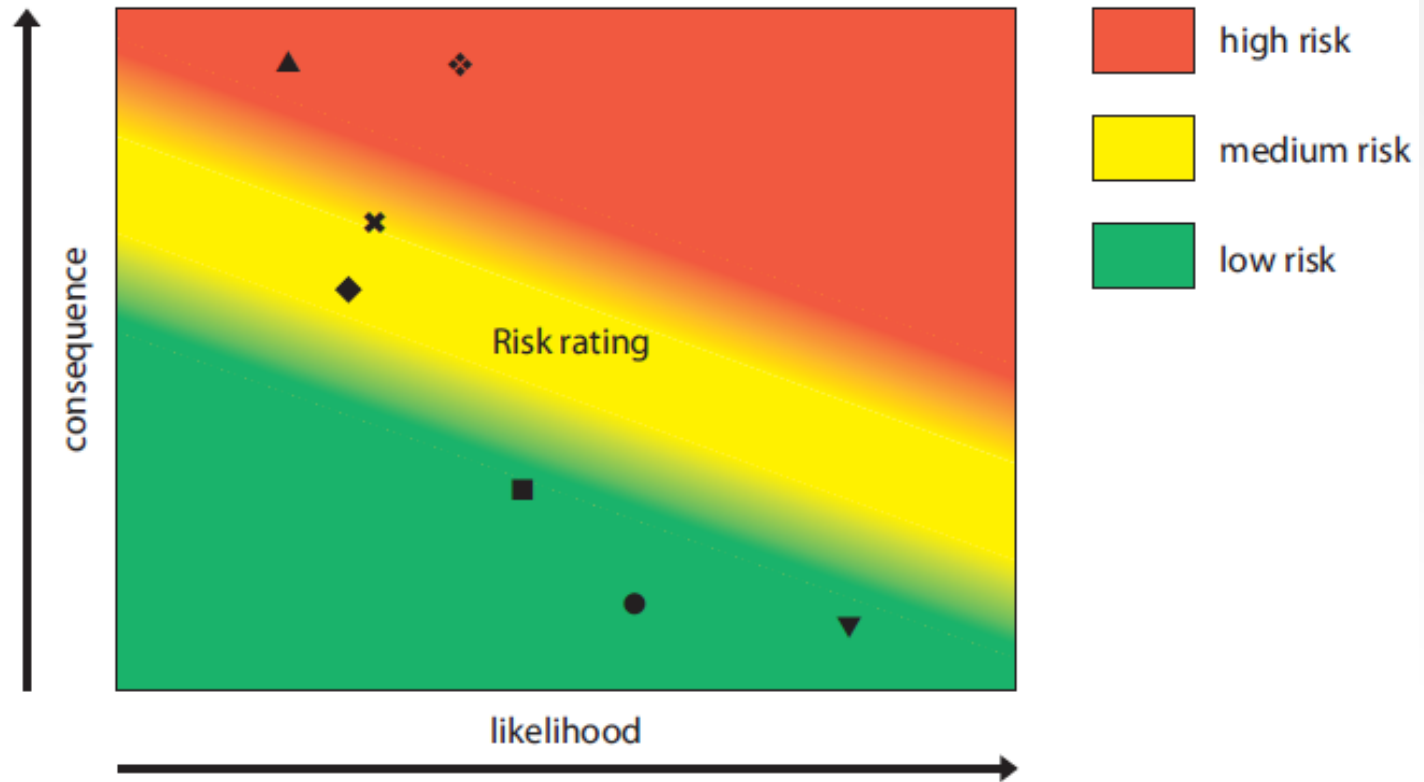
Resource category		Consequence level description				
		Very low (0)	Low (1)	Moderate (5)	Unknown or high (20)	Extreme (50)
Environment	Shoreline character	Negligible sensitivity	Low sensitivity (e.g. exposed rocky headlands, eroding wavecut platforms)	Moderate sensitivity (e.g. fine grained sand beaches, exposed compacted tidal flats, mudstone, coarse grained beaches)	High sensitivity (e.g. mixed sand and gravel beaches, gravel beaches, shelter rocky coasts, scoria)	Extremely high sensitivity (e.g. sheltered tidal flats, salt marshes, mangroves)
	Plants and animals	None or very few vulnerable species	Minor short-term impacts	Vulnerable species are generally of local value only	Limited but medium term effects	Vulnerable species are of local and regional importance
	Protected sites	No protected sites present	Scenic or wildlife management reserve	Scenic/nature reserve, wildlife refuge	Marine park, marine reserve, wildlife/marine mammal sanctuary	International protected sites (e.g. RAMSAR)
Human	Economic	No resources or activities of economic significance	Low economic significance for the region and nation	Some economic significance of the region, none nationally	High regional economic significance, some national significance	High national economic significance
	Cultural	No cultural importance	Some importance for local community, low regional significance	Important to local and regional community but low national significance	Important to local and regional community, some national significance	High national cultural significance
	Social, amenity and recreation	No community significance	Low community significance for the region and nation	Some community significance for the region, none nationally	High regional community significance, some national significance	High national community significance

Table 4 – Example of categories to determine qualitative consequence level

Source: New Zealand Marine Oil Spill Risk Assessment 2004*

RISK REGISTER

SCENARIO										
#	Source	Event	Oil Type	Spill Volume	Impact	Likelihood	Consequence	Risk	Response Strategies	Tiered Resources
3	Tankers	Running aground north of Bonaire	Crude (ITOPF Groups 1-4)	12,000 m ³	Significant environmental damage, Washington Slagbaai National Park, Goto Lac and Bonaire Marine Park potentially effected	1	6	High potential risk	Containment and recovery of oil, shoreline clean-up operations, aerial dispersant may be considered. Aerial surveillance and monitoring	Tier 1: All available resources Tier 2: All available resources Tier 3: OSRL
4	Cross boundary spills	Oil spills drifting from Venezuela to Bonaire	Various	Unable to estimate	Significant environmental damage to the vulnerable east coast of Bonaire including the Lac Bay RAMSAR site Government and national media interest guaranteed	2	5	Considerable risk	Containment and recovery of oil, shoreline clean-up operations, aerial dispersant application if required. Aerial surveillance and monitoring	Tier 1: All available resources Tier 2: All available resources Tier 3: OSRL
5	Tankers	Substandard vessels (maintenance, crew, etc)	Various	Unable to estimate	Environmental damage to the sensitive habitats of Bonaire	2	5	Considerable risk	Containment and recovery of oil, shoreline clean-up operations and dispersant application may be considered. Continuous monitoring and evaluation	Tier 1: All available resources Tier 2: All available resources Tier 3: OSRL
6	Yachts	Yacht rental (lack of competence) and vessel collision	Marine diesel (ITOPF Group 1)	0.1 - 0.5 m ³	Environmental consequences are limited but there is a high risk of fatalities due to the perceived lack of competence	2	5	Considerable risk	Continuous monitoring and evaluation of the situation is required until all the oil has dispersed and to ensure no further pollution	Continuous monitoring and evaluation
7	Tankers	Large number of drifting tankers drifting west of Bonaire due to absence of BOPEC anchorages (water depth)	Crude (ITOPF Groups 1-4)	12,000 m ³	Significant environmental damage, Washington Slagbaai National Park, Goto Lac and Bonaire Marine Park potentially effected	1	6	High potential risk	Containment and recovery of oil, shoreline clean-up operations, aerial dispersant may be considered. Aerial surveillance and monitoring	Tier 1: All available resources Tier 2: All available resources Tier 3: OSRL



Assess the risks: likelihood x consequence = risk rating

- = Loss of containment during fuel transfer quayside; 10 tonnes; diesel fuel
- ▼ = Small maintenance leak; 10 litres; hydraulic fluid
- ✕ = Pipeline rupture near shore; 1,000 tonnes; light crude
- = Offloading at sea; 400 tonnes; diesel fuel
- ◆ = Subsea leak; 1,500 tonnes; crude
- ▲ = Subsea well blowout; 1,500 tonnes/day for 30 days; crude oil
- ⋄ = Vessel grounding—loaded ultra-large crude carrier



QUESTIONS?

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