

Diver and Crew Hazard & Risk Assessment Table

1 Identify the Hazards					
		Ice breaking under increased loading			
		Slipping on ice			
		Cold-water shock			
		Drowning			
		Diver disorientation			
		No way of getting back out			
2 Who may be harmed					
		Diver			
		Ground crew			
		Rescue workers			
3 Risk evaluation and mitigation					
			Likelihood (p)	Consequence (c)	Risk (r), where r=p x c (range: 1to25)
					Hazard mitigation/risk reduction techniques
		Before the dive			
		Misadventure!			Cold water survival training for diver and crew
		Slipping on ice / broken bones	2	2	4
		Ice breaking under weight	2	5	10
		Cold air induced hypothermia	1	4	
					Suitable clothing to provide warmth and wind protection
		The dive			
		Cold water shock including involuntary inhalation of water/suffocation	4	5	20
					Winter quality wet suit and gradual entry (not dive)
					Data: In water of 0 to 4 degC (32.5 to 40degF), time to exhaustion or unconsciousness is 15 to 30 minutes. Time to death (if you don't drown before) 30 to 90 minutes.
					Data: Diver can't get out. Should adopt a defensive posture in the water to conserve heat and summon rescue team; do not waste energy trying to climb out without support. Safety harness to tether diver and then winch from water; ground crew required to help diver escape.
		Drowning	3	5	15
					Safety harness and tether. Ground crew experienced in ice recovery. Personal flotation device.
		Risk of hypothermia and eventually death as body systems shut down	4	4	16
					Winter quality wet suit; limit time in water
		The recovery			
		Almost impossible to get out alone	4	5	20
		Risk to crew/rescuers			
					Harness and winch for extraction, fixed ladder, support crew to assist. Require adequate protective footwear and clothing. Harnesses.
		Crew falling in, hypothermia, drowning, ice breaking under increased weight			
					As for diver
4 Record your findings and implement					
		Cold water training, warm and ice-appropriate clothing and footwear, winter wetsuit, personal flotation devices, introduce alternative method for slowly entering the water, ground crew standing by, trained safety crew available, safety harness, secured safety ladders and winches. Ground crew need equipment for resuscitation and other first aid equipment and for slowly warming the diver – and they must be trained in its use. Medic standing by.			
5 Review your assessment					
	1 st Review	re-do the risk assessment taking into account the hazard/risk mitigation measures			
	2 nd Review	go home and buy your fish from a fishmonger instead			

*For this simplified risk assessment, we have used a range of 1 to 5 for likelihood where 1 is very unlikely and a range of 1 to 5 for consequence where 1 is insignificant consequence. Risk (r) is then derived by multiplying likelihood (p) by consequence (c).