Practical Risk Management

The Joys of Running With Scissors

Tom Unger

2018 Mountaineers Leadership Conference

Practical Risk Management

•Identify Risk

•Manage Risk

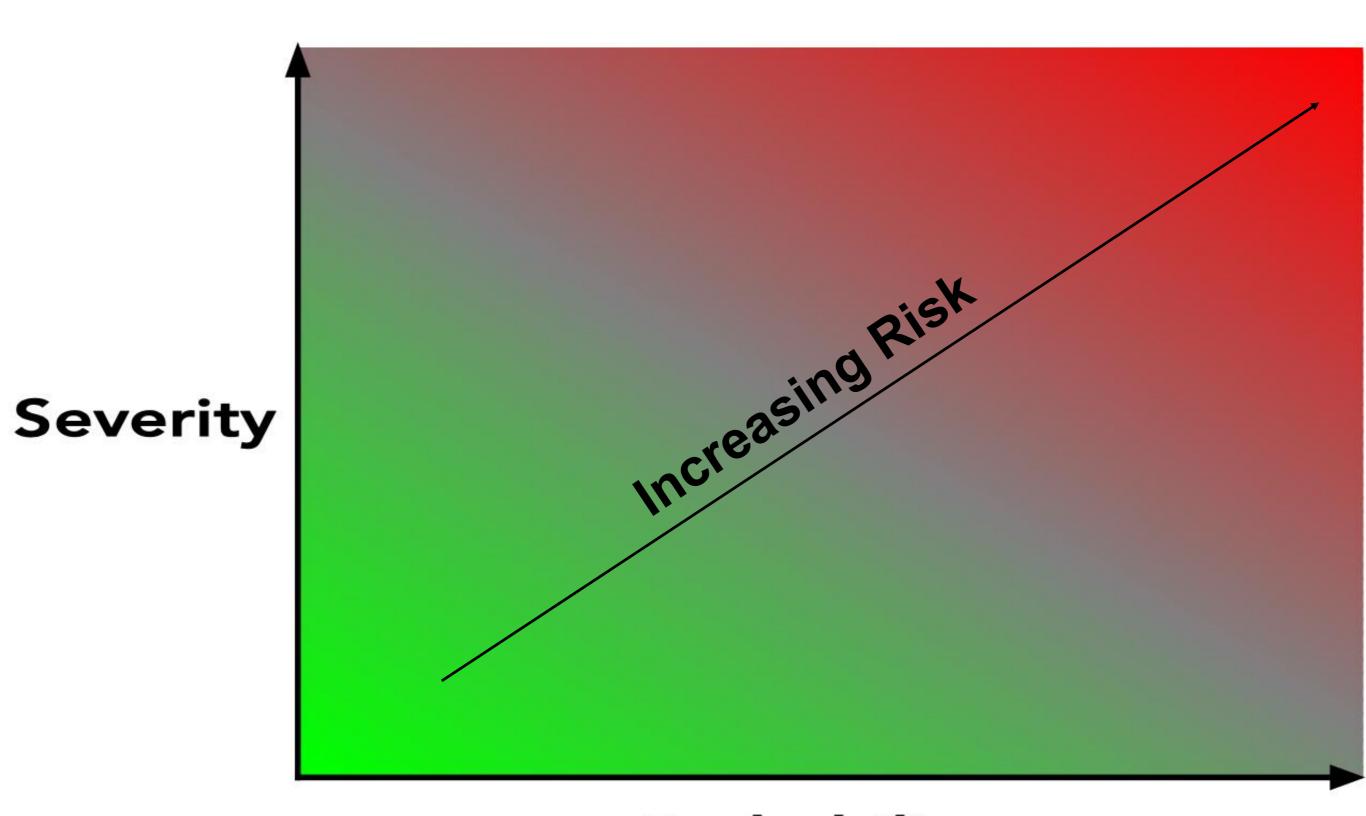






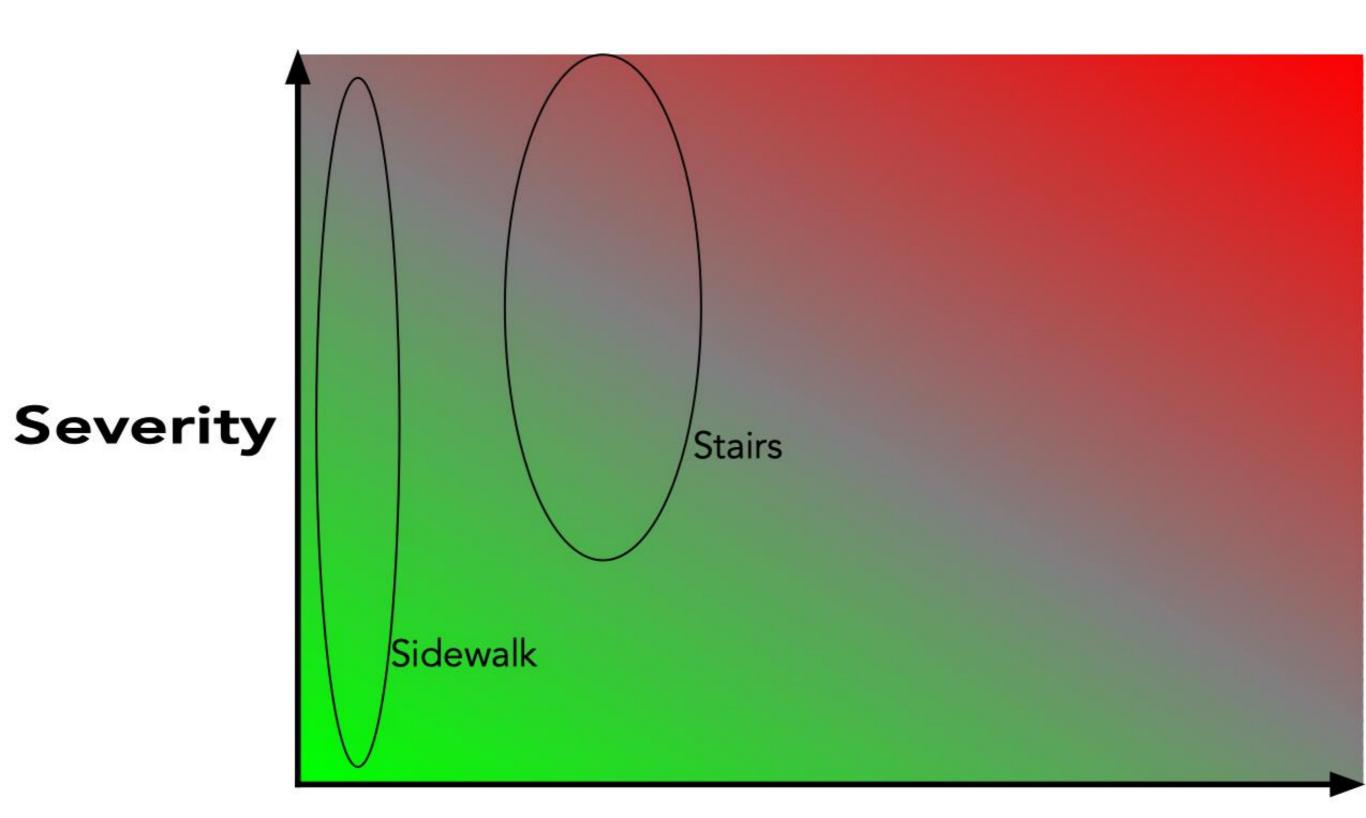
Identify Risk

- Education
- Experience
- Ability to project into the future

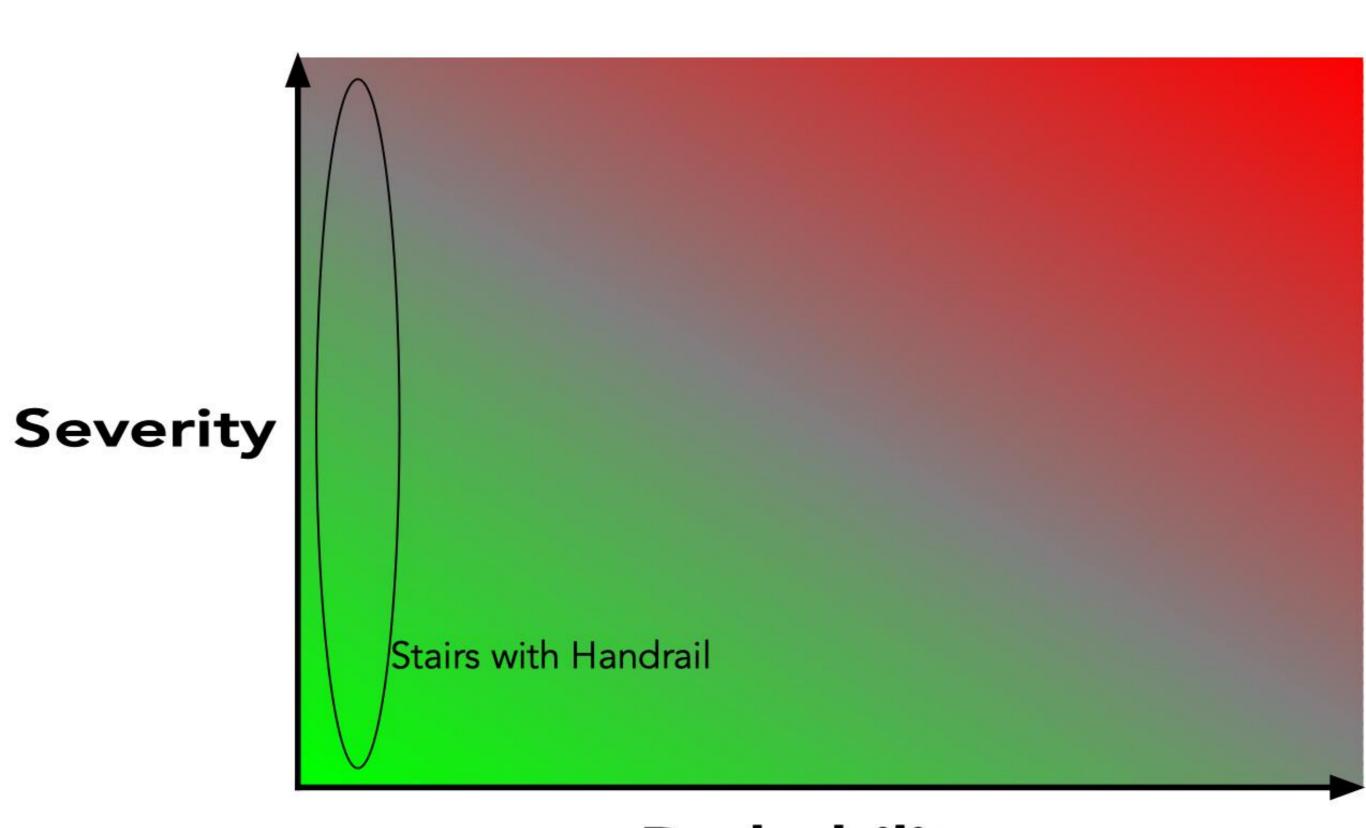


Probability



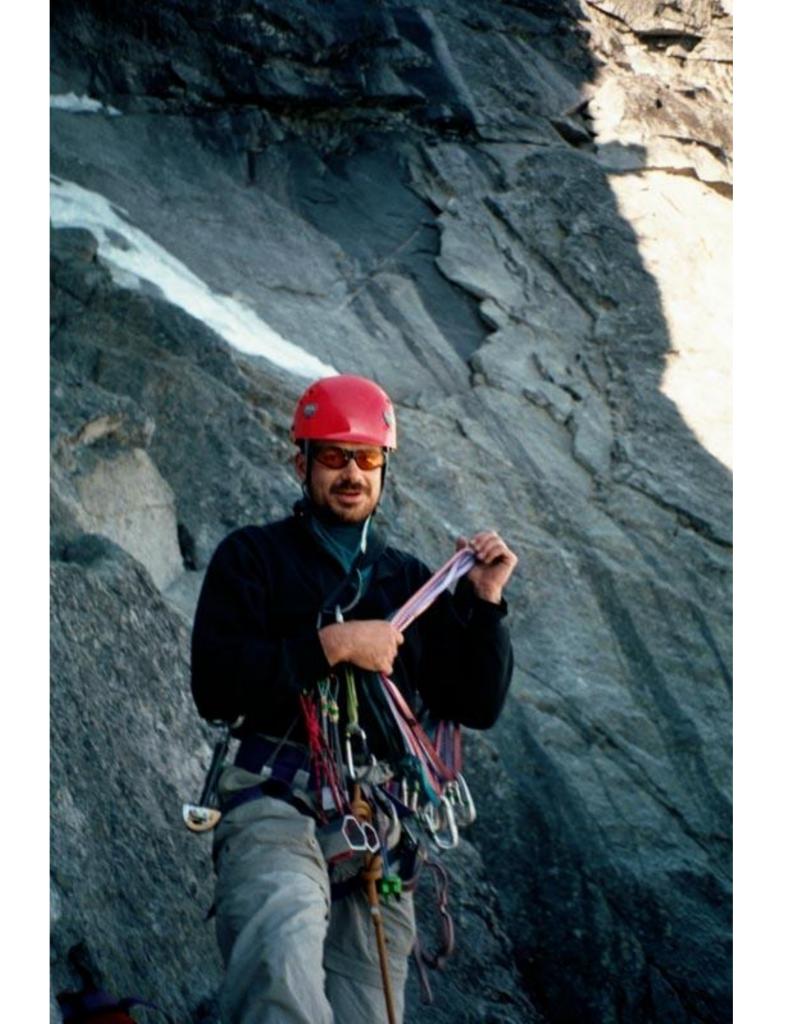


Probability

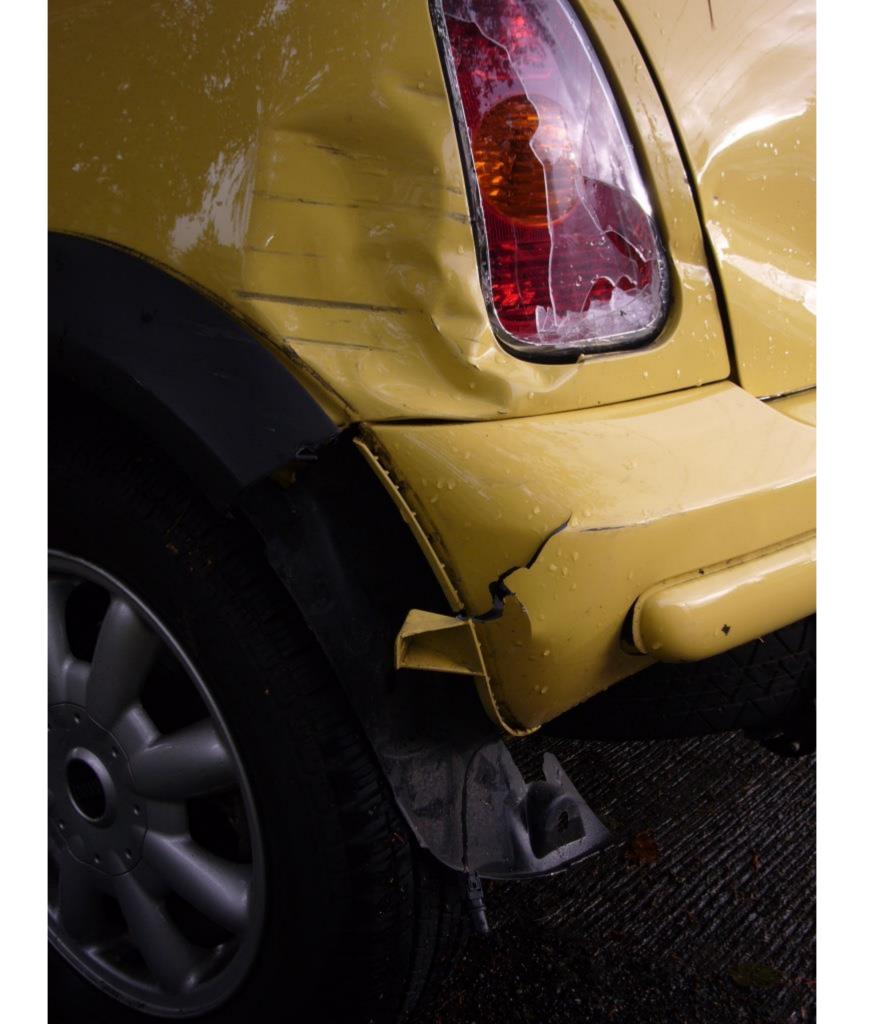


Probability

Education



Experience







Experience -> Judgement

Judgement to

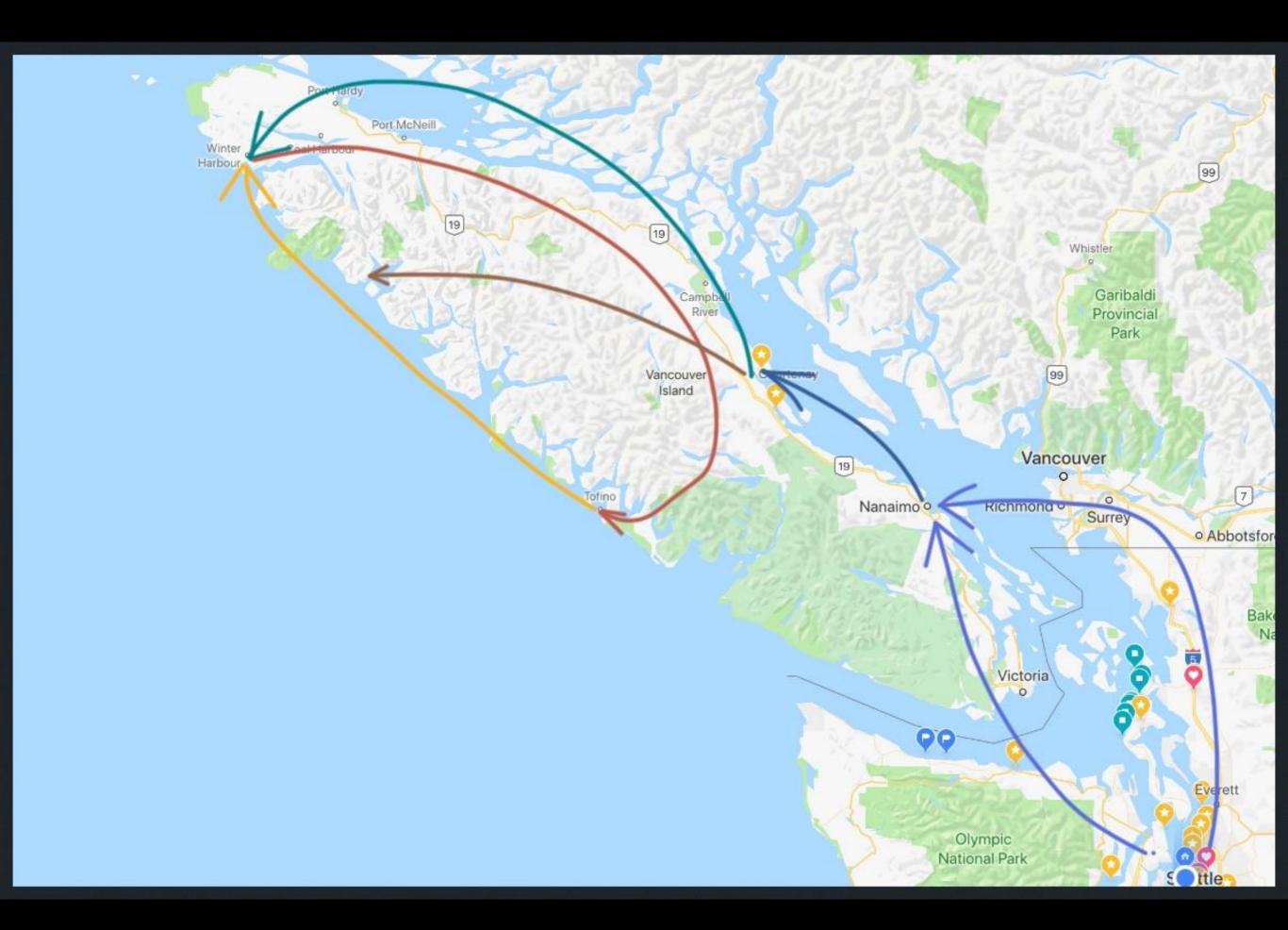
- Identify risk
- Identify when conditions are developing
- Identify how to avert problems

Experience

Judgement Gained

Following Passively following Learning from other's Student judgement Learning from other's Actively following judgement Learning from Passively leading "incidents" Refining your own Actively leading judgement

Ability to project into the future



What could go wrong with that?

Problem	Manage		
No passport	Double check passports		
Ferry full	Ferry reservations		
Hotels full	Hotel reservation		
Did not receive package of food	Talked to Postmaster in Kyuquot		
Lost on way to Winger Harbor	Road map to Winter Harbor		
Flight reservation lost	Confirmed float plane flight		
Plane can't fly	Bring overnight gear to Tofino		
Something Else	Canadian cell phone coverage		

WANCE-LAUNCH	3
CAMP-TOFING	2 3
LOAD	2
TOFWO DUKE	3.5
BUFFER	675
C12055 WG	2
PUR	2.5

4:00	6:30
6:00	8:30
9:00	11:30
11:00	1:30
2:30	5:00
3:15	5:45
5:15	7:45
7:45	10:15

Always thinking:

"What could go wrong?"

Management

- Buffer
- Swiss Cheese
- Not writing the Report
- Inserting Options

<u>Buffer</u>

Time

Equipment

Add in extra:

Fitness

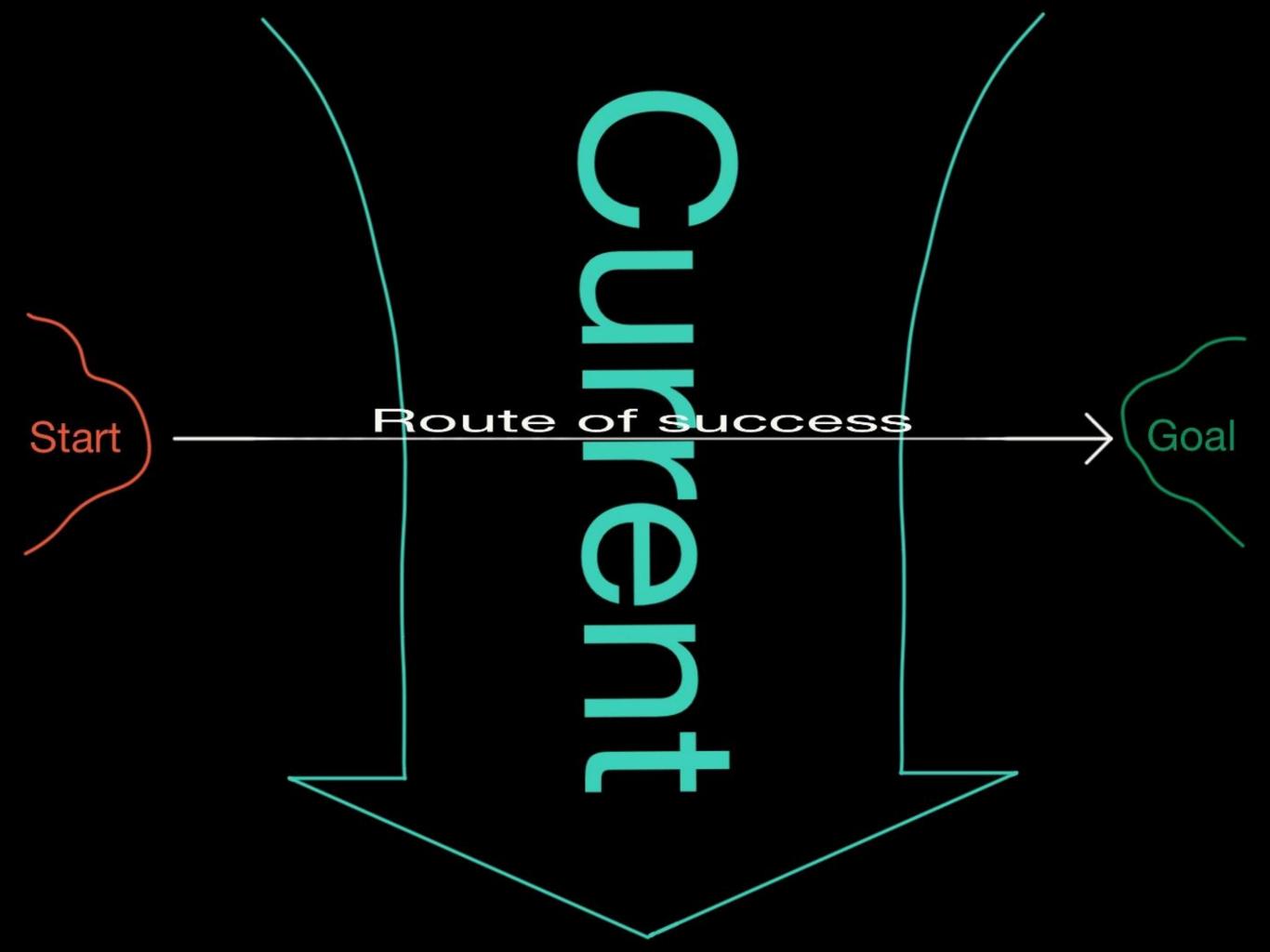
Ability

Procedures



Route of success





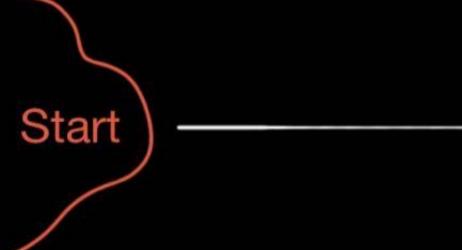
Zone of Ensured Success



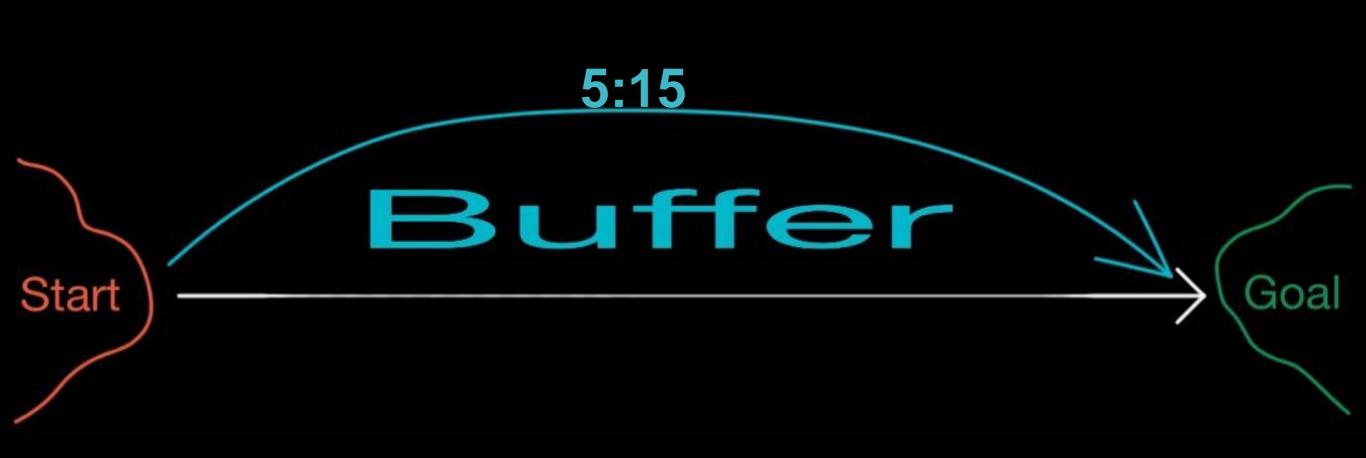
Zone of Missing Goal

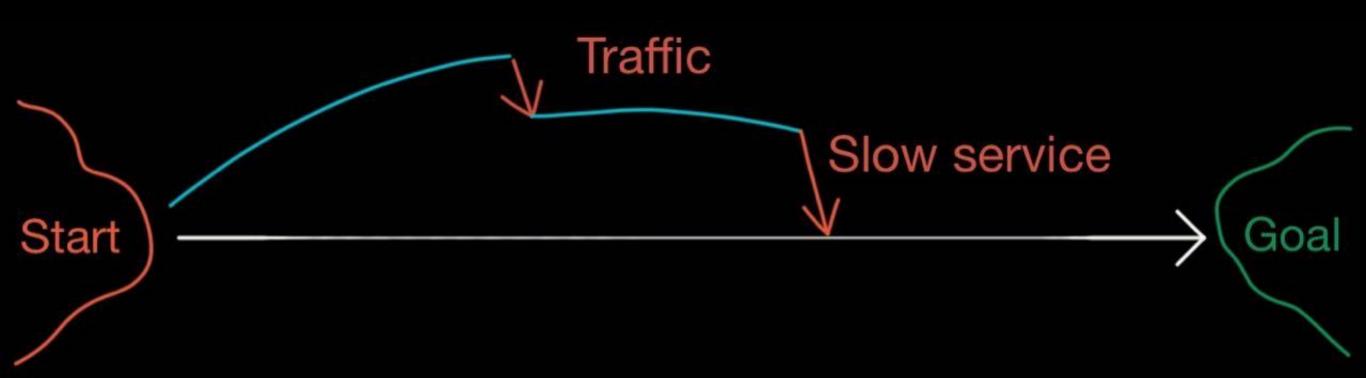


Dinner at 5:15 or 5:30?



Goal





Time Buffer

WANCE-LAUNCH	2	i eccept	4:00	6:30
CAMP-TOFING	3		6:00	8:30
LOAD	2		11:00	1:30
TOFWO DWKE	3.5		2:30	5:00
BUFFER	675		3:15	5:45
CROSSING	2	HALLE	5:15	7:45
PWR	2.5		7:45	10:15

Fitness Buffer

- Endurance to paddle 15nm days in sequence
- Flat water pace of 3.7kt
- Strength to paddle into 15kt wind at 3.0kt

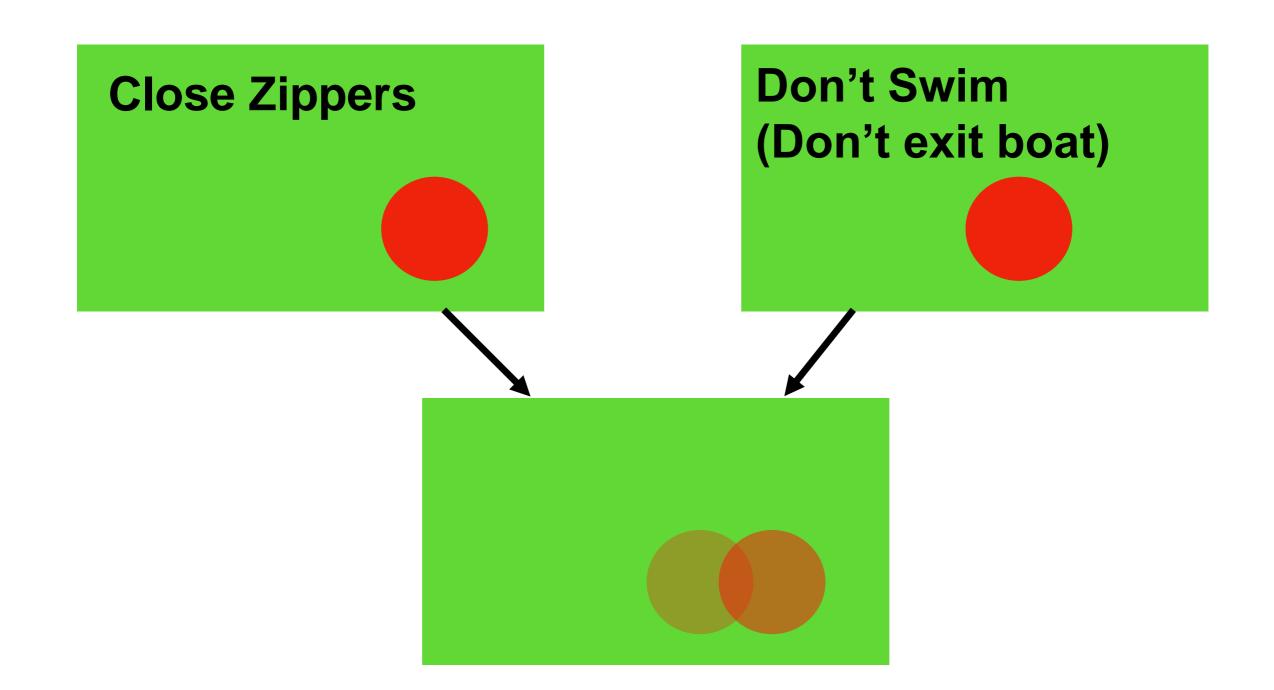
Always thinking:

"How can I pad this out?"

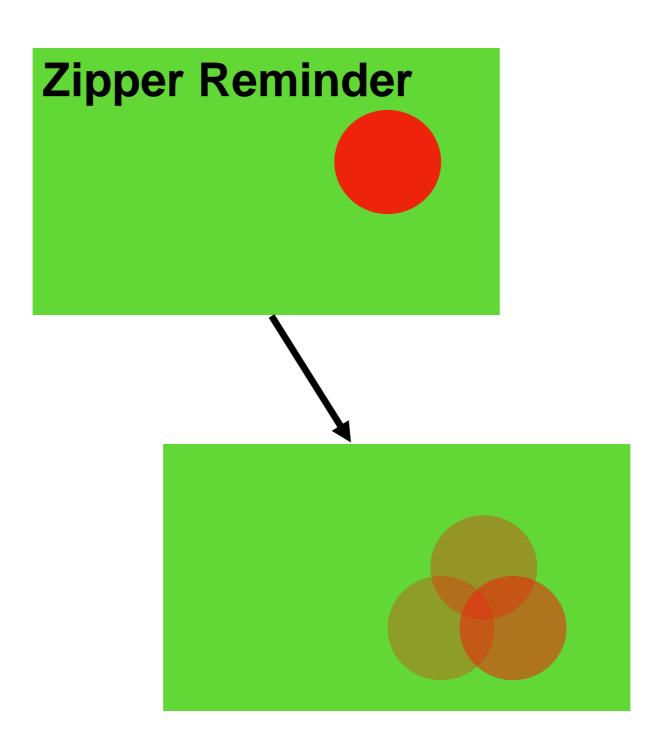
Swiss Cheese

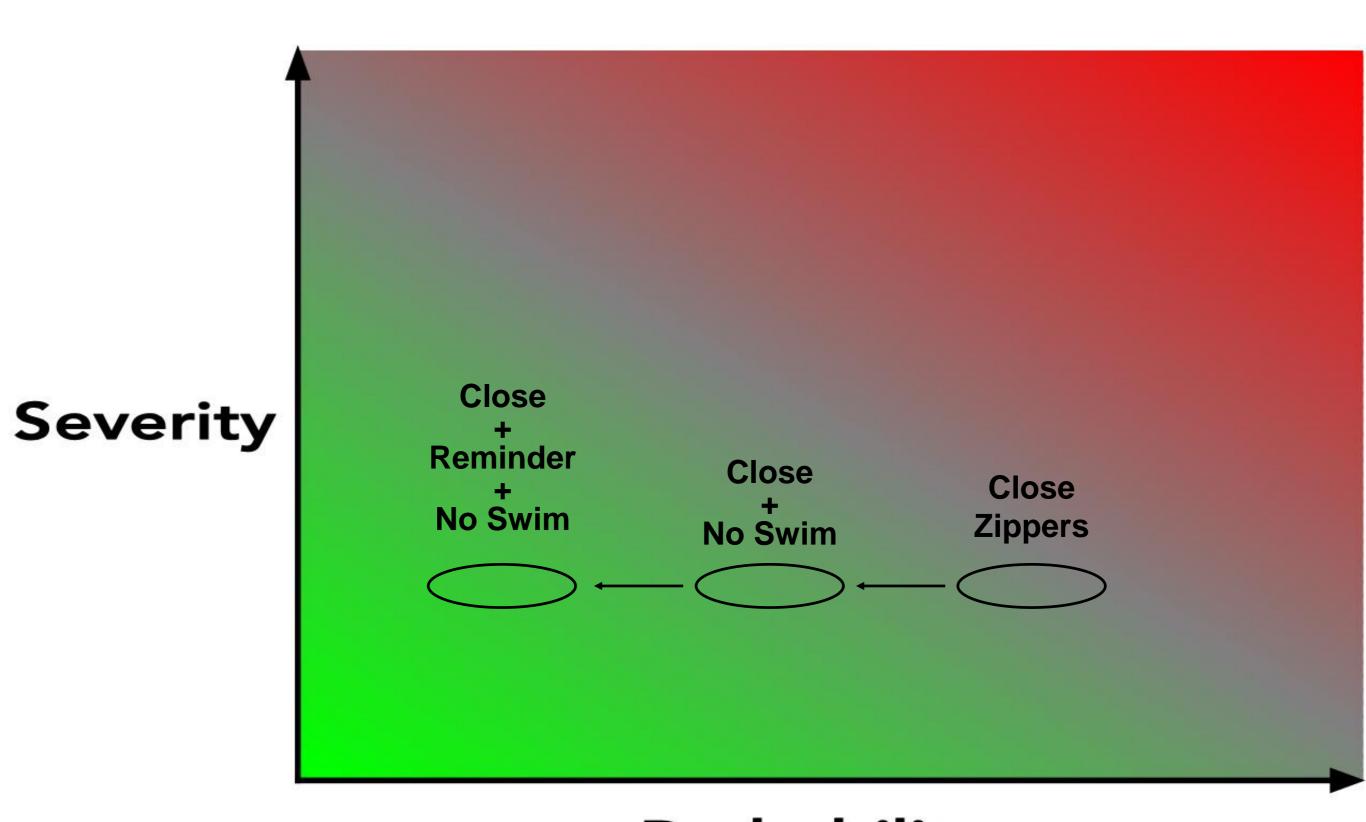
Layering Protections

Keep Water Out of Dry Suit



Keep Water Out of Dry Suit





Probability

Rappel Safety

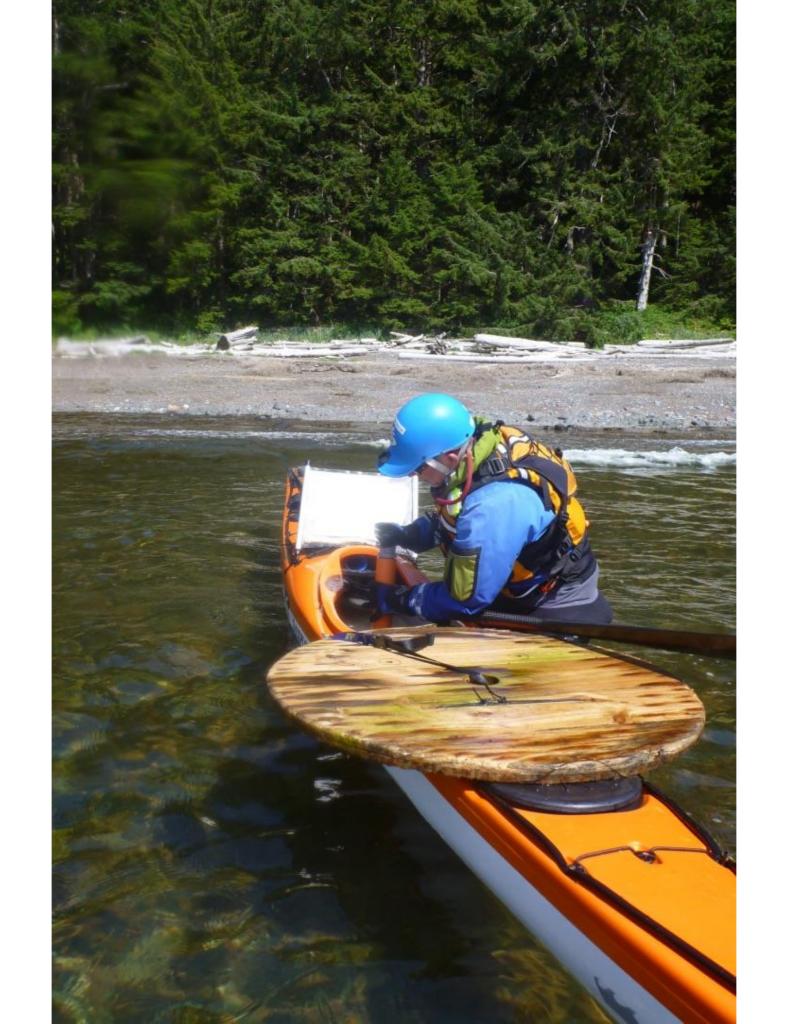
- Develop personal rappel set up procedure
- Double check self
- Partner check
- Backup system

Always thinking:

"What redundancy can I layer in here?"

Not Writing the Report

Projecting in the to future



A decision was taken to strap a flat board onto the back of the victim's kayak.

The victim was then allowed to paddle separate from the group...



A decision was taken to have all party members paddle into the current and capsize.

The current was at max flow and strong eddies soon separated the individuals

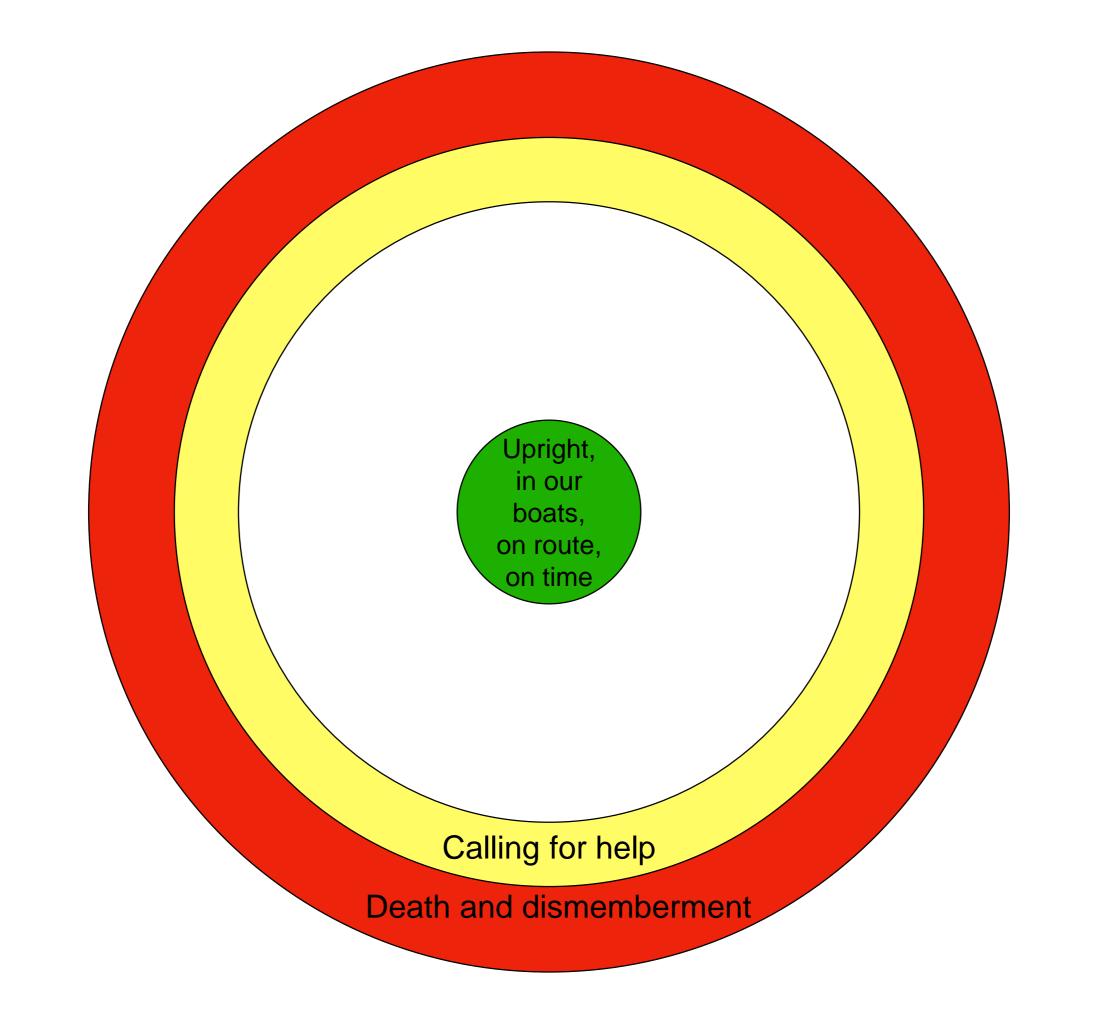
Leaders failed to recognize that the victim was having difficulty.

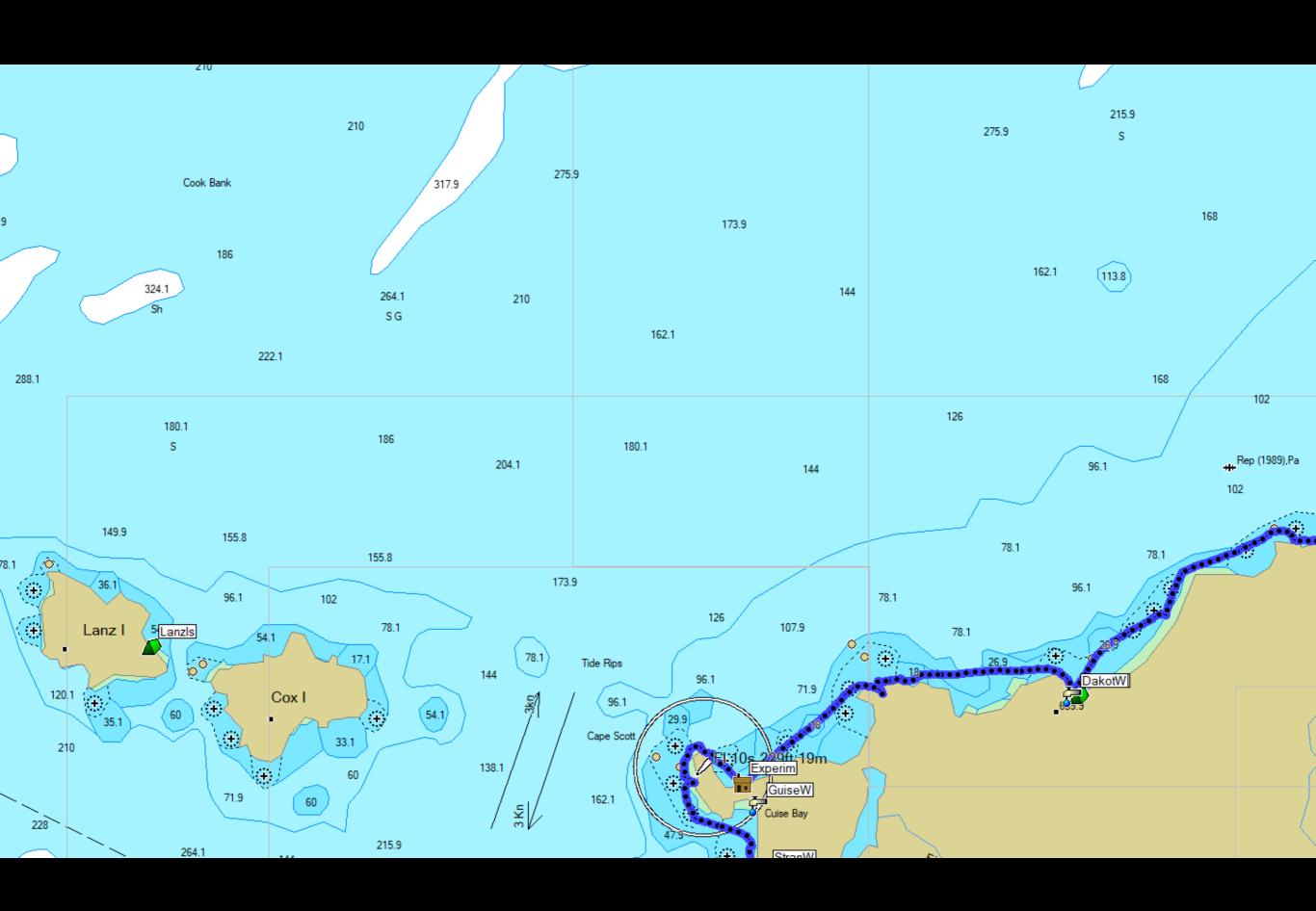
A decision was taken to have all members the students paddle into the current and capsize.

Always thinking:

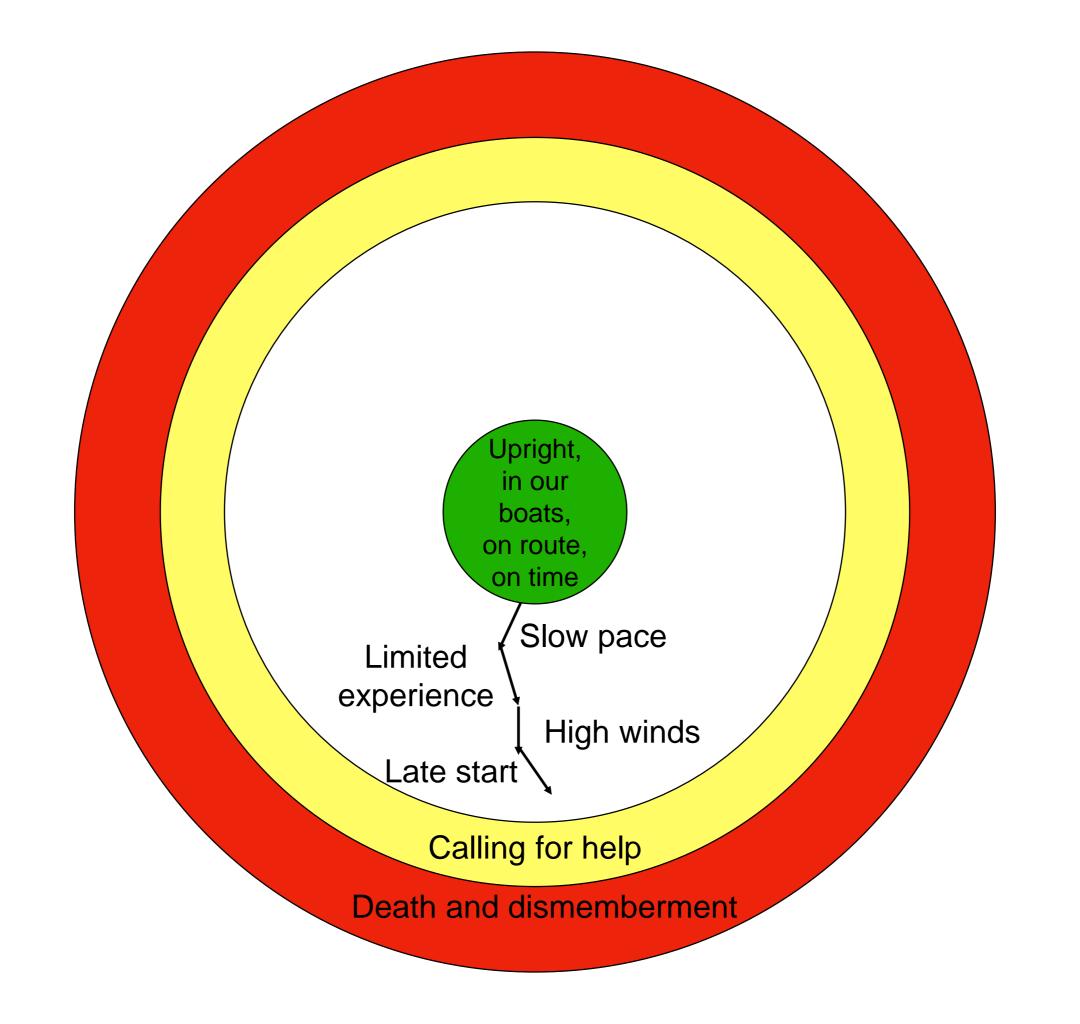
"What chain of causes is developing?"

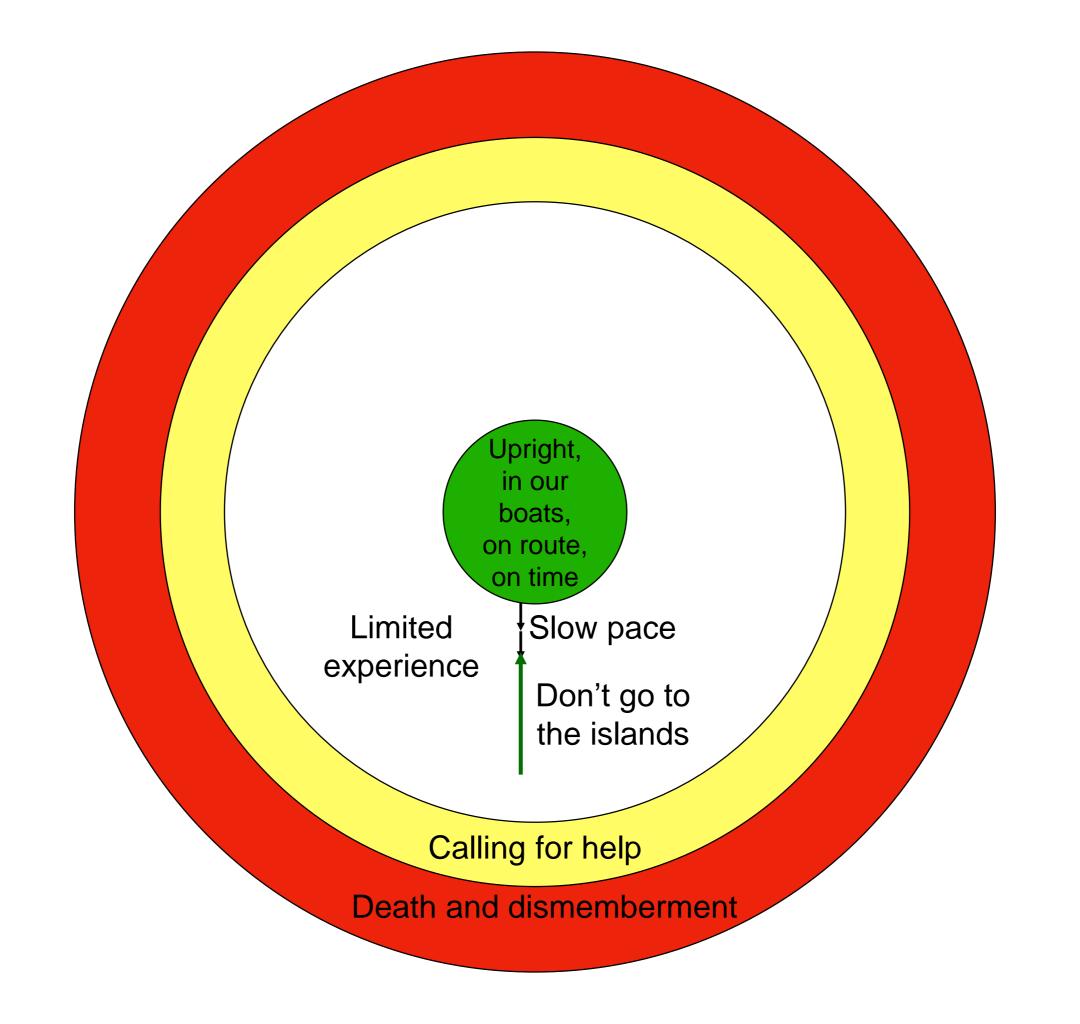
Inserting Options

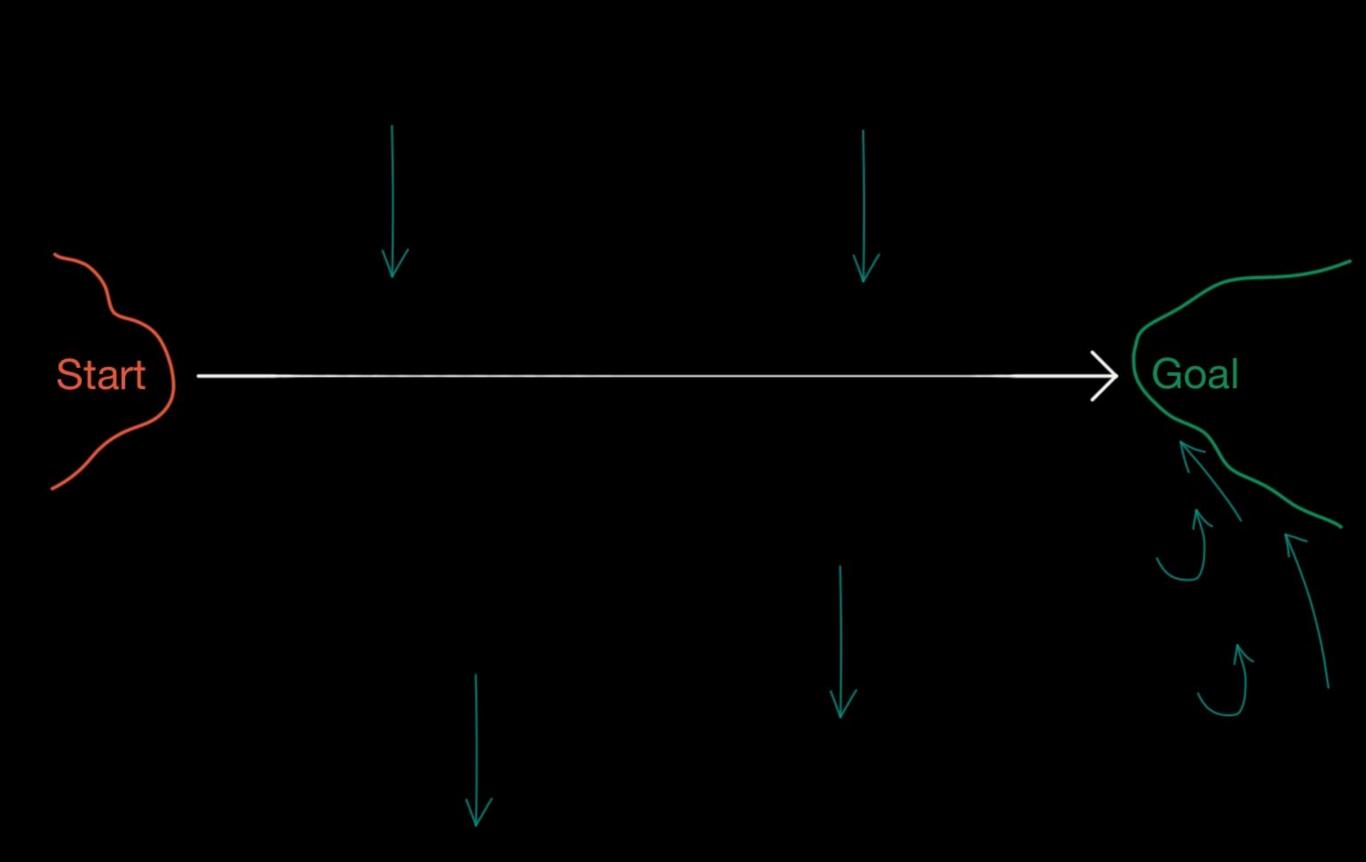


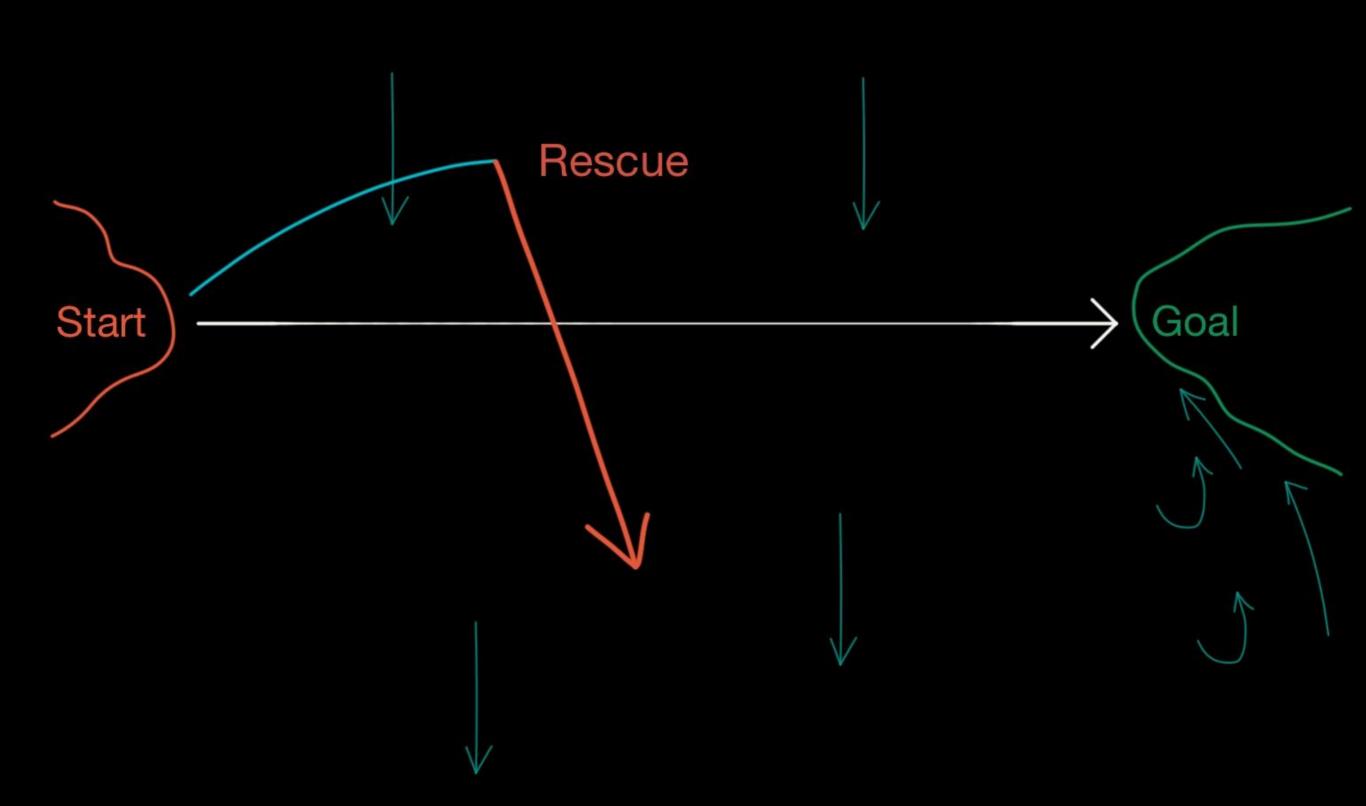


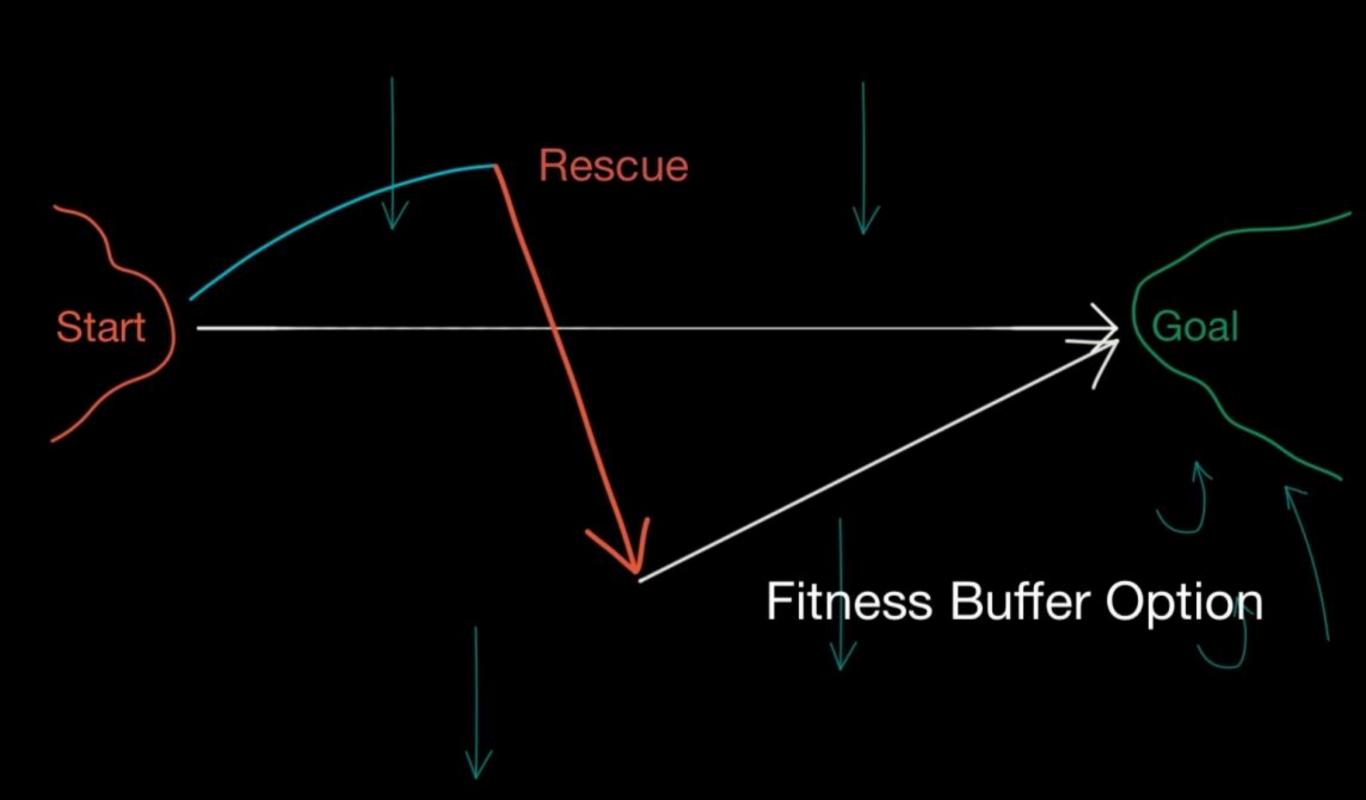


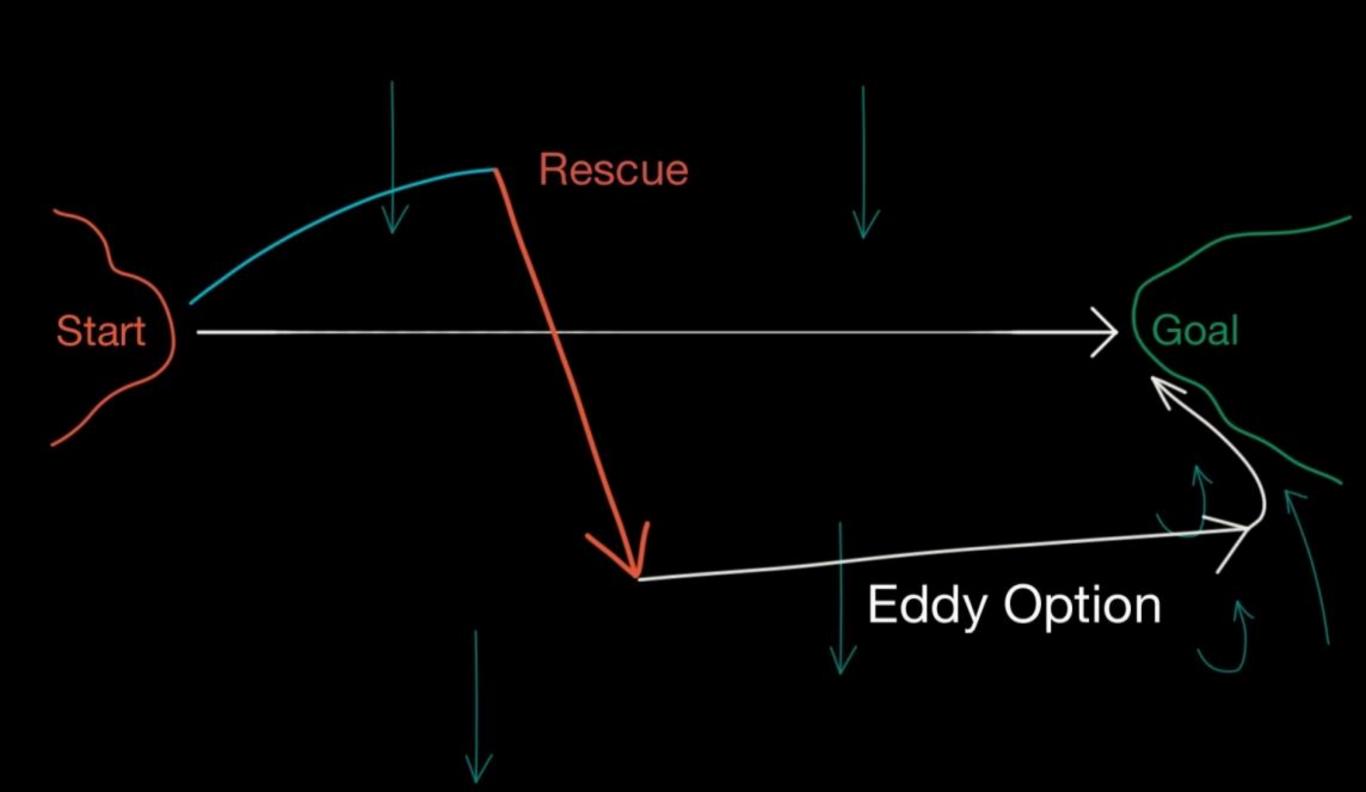


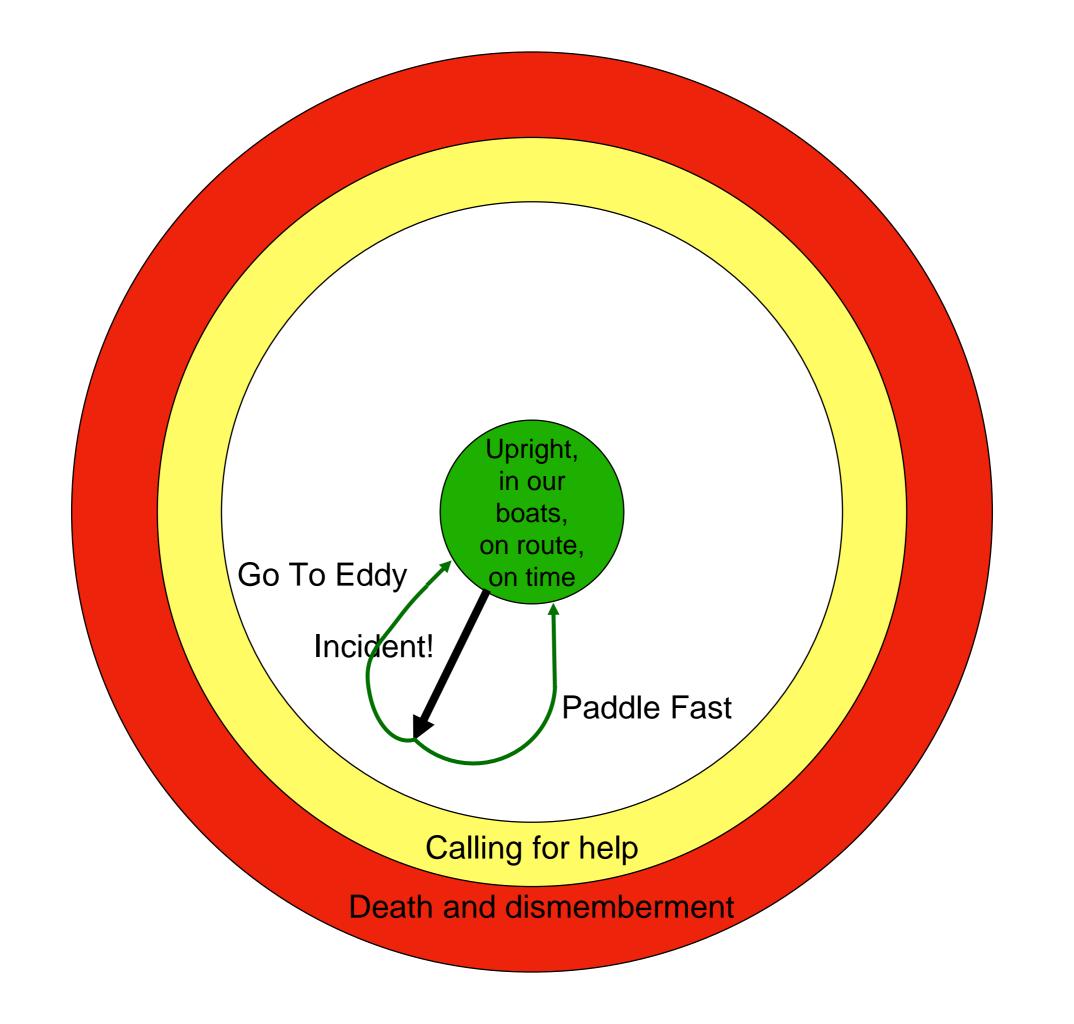












Train In

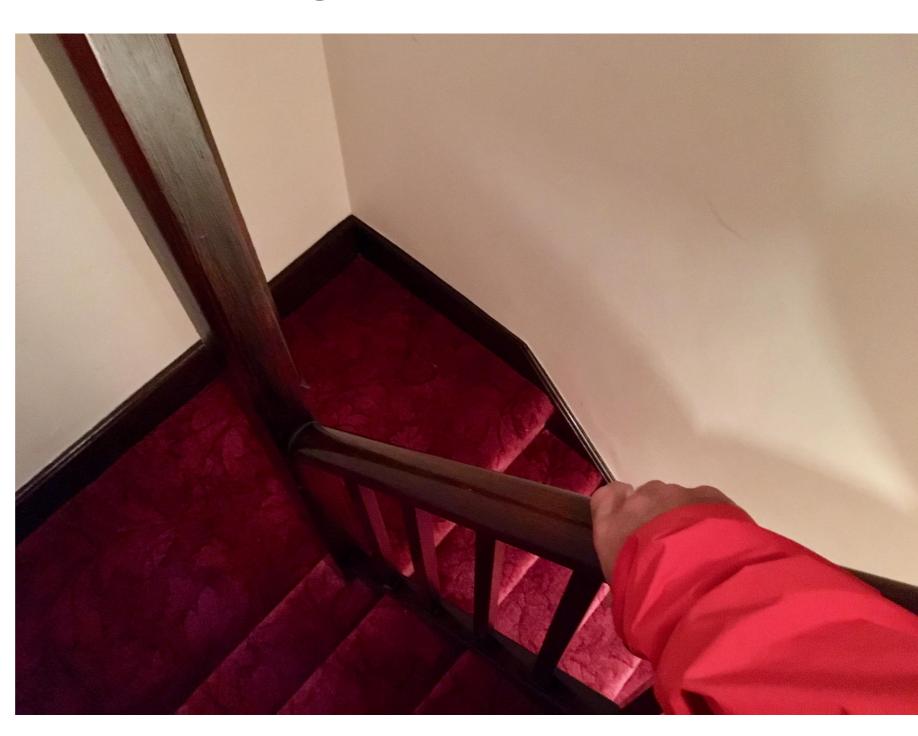
- Noticing when we leave green zone
- Identifying options for white zone
 - Prepared options
 - Improvised options

Always thinking:

"What are my options?"

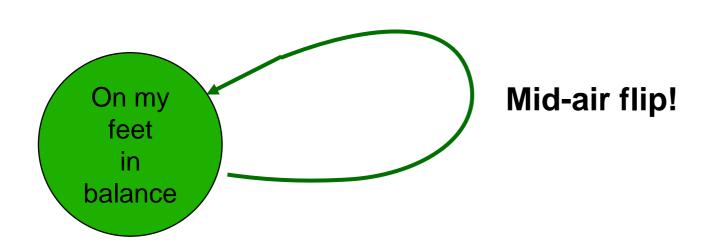
Buffer and Swiss Cheese Keep us in the green zone





Not Writing the Report Identifies when we have left green zone

Options Move us back to green zone



Risk Tolerance



Goal Induced Blindness

"You can not get a person to understand that which their plan for happiness depends on them not understanding"

The party was tired due to several long days of paddling.

Projected arrival in camp indicated a busy evening completing chores

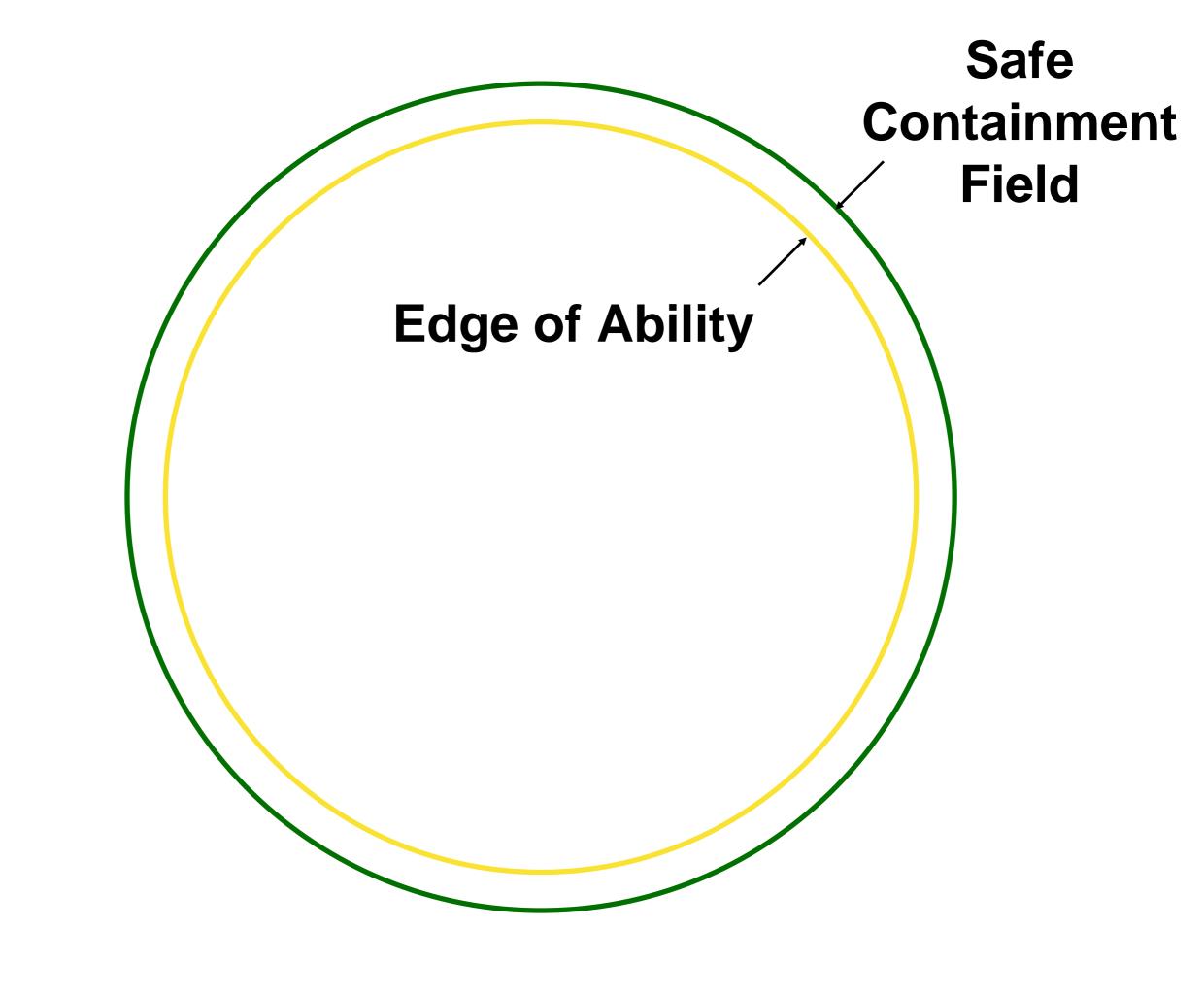
The the leader decided push on to Experiment Bite to position the group for crossing to Scott Islands...

Experience Judgement **Analysis**

Judgement To

•Identify Risk

•Manage Risk





Methodology

Always thinking

Buffer

→

How can I pad this out?

Swiss cheese

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What redundancy can I layer in here?

Not Writing the Report



What chain of causes is developing?

Inserting options



What are my options?