



# **RISK MANAGEMENT LESSONS FROM BAJA ROAD SIGNS**

Eric Boggs

















Signs can help us see

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CLI  
CHE

GA  
RIENTE  
★  
JON  
PETOX

OBEDEZCA  
LAS SEÑALES





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NO MALTRATE  
LAS SEÑALES



Translation: Obey/ Don't Mistreat/  
Respect the signs

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Interpretation:

What signs do we use as educators that have become our risk management symbols?

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Interpretation: Do our participants make the same meaning we do from these symbols?

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“Symbols—such as signs, —help people understand the world. Symbols provide clues to understanding experiences. They convey recognizable meanings that are shared by societies.”

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— George Lakoff, *Metaphors We Live By*

“All teaching is teaching of either things or signs, but things are learnt through signs”

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— Saint Augustine

# Metaphors as pedagogy

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“Human thought processes  
are largely metaphorical.”

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— George Lakoff, *Metaphors We Live By*



**CURVA PELIGROSA**  
**A 500 m**







Symbol: Social Proof Bias

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“New metaphors are capable of creating new understandings and, therefore, new realities... in the case of poetic metaphor, language is the medium through which new conceptual metaphors are created.”

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— George Lakoff, *Metaphors We Live By*

MAS VALE TARDE  
QUE NUNCA



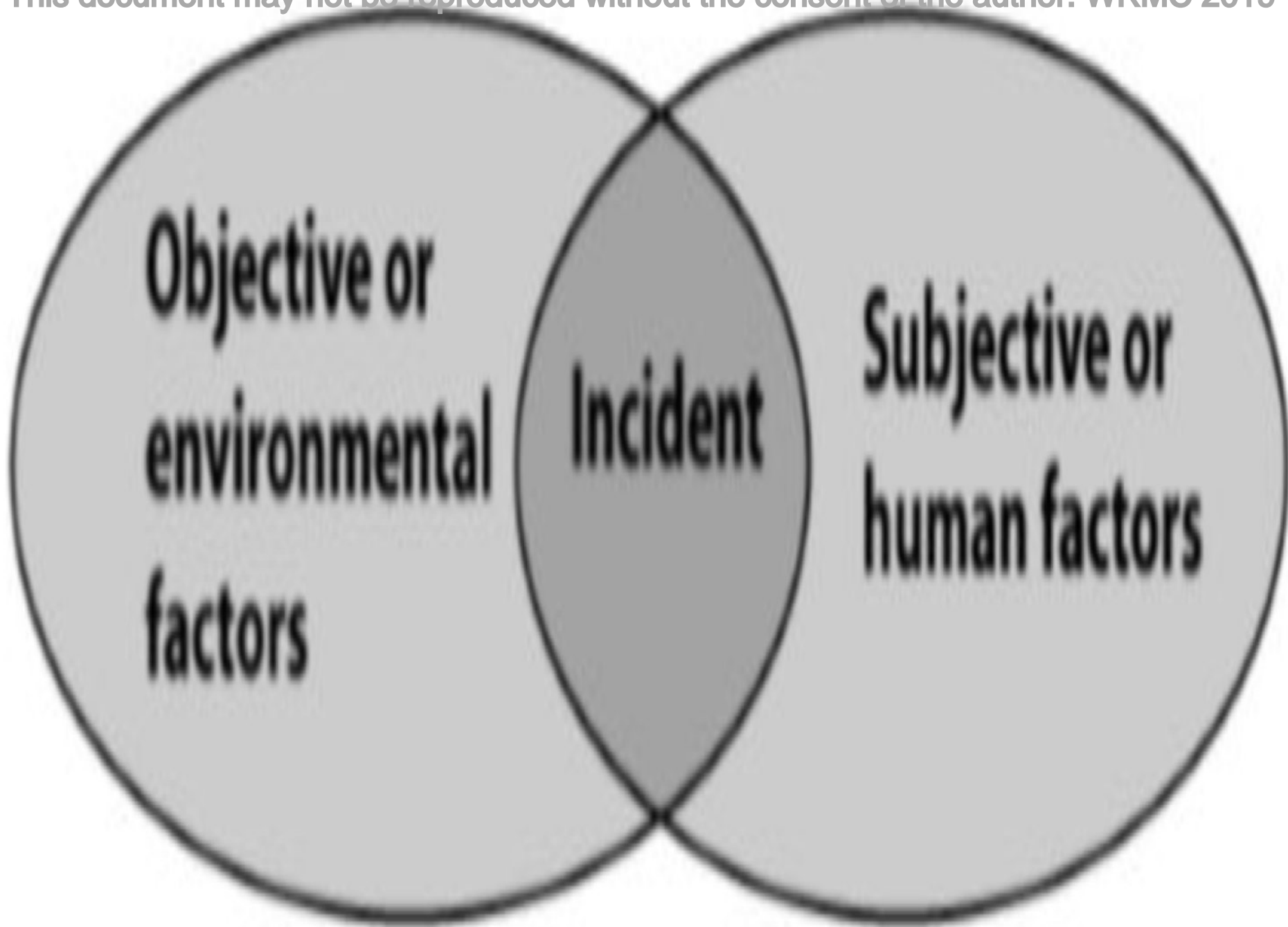
Translation: “Better late than never”

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Symbol: Subjective Hazards

Schedule Pressure

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Translation: Cow

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Interpretation: Past is a poor predictor of the future

# Symbol: Familiarity Bias

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“A reliable way to make people believe in falsehoods is frequent repetition, because familiarity is not easily distinguished from truth.”

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– Daniel Kahneman

Thinking, Fast and Slow

# Tool: Likelihood vs. Consequences

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ZONA DE TOPES  
A 500 m





A 200 m



MEXICO  
307  
E

MEXICO  
307  
E

N 144







A 200 m



MEXICO  
307  
E

MEXICO  
307  
E

N 144



DANGER CA  
24 100V

Translation: Speed Bump

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Interpretation: Obstacles are learning moments



*“The impediment to action advances action.  
What stands in the way becomes the way.”*

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*-Marcus Aurelius*

**DISMINUYA SU  
VELOCIDAD**



Translation: “Diminish your velocity”

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Symbol: “Move slow to move fast”

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Slowing down = Biases go down

Judges // Police Officers

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A photograph of a road sign in a desert landscape. The sign is white with black text and is mounted on two metal posts. The background shows a vast, arid landscape with sparse vegetation, a clear blue sky with some clouds, and distant mountains. The overall scene is brightly lit, suggesting a sunny day.

**CON ALTA VELOCIDAD  
AUMENTA SU INSEGURIDAD**

Tool:

Develop neutralizing routines for managing your “decision state”

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Identify: Vulnerable Decision Points

*“Develop simple decision rules for tasks that must be done under time pressure or with little information”*

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NO TIRE BASURA





**ISCT**  
**CONSERVE LIMPIA LA CARRETERA**



Translation: “Don’t throw garbage”

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# Symbol: Subjective Hazards Communication and Feedback

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“Low levels of psychological safety can create a culture of silence. They can also create a Cassandra culture – an environment in which speaking up is belittled and warnings go unheeded.”

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– Amy C Edmondson, *The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth*

“If we want people to fully show up, to bring their whole selves including their unarmored, whole hearts—so that we can innovate, solve problems, and serve people—we have to be vigilant about creating a culture in which people feel safe, seen, heard, and respected.”

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-Brené Brown,

Dare to Lead: Brave Work. Tough Conversations.  
Whole Hearts.

What tools do you use to promote communication?

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# PLAN DE CONTINGENCIAS

I

**I.- QUE HACER CUANDO OCURRE UN SINIESTRO**  
EN TERMINOS GENERALES AL OCURRIR UN SINIESTRO HACER LO SIGUIENTE

- 

**MANTENER LA CALMA PARA PENSAR MEJOR**
- 

**APAGAR EL SWITCH GENERAL**
- 

**DAR LA ALARMA**

**BOMBEROS, PROTECCION CIVIL, ETC.**

- 

**EXTINTOR**

**USAR LOS EXTINTORES PARA CUALQUIER CONATO DE INCENDIO**
- 

**AISLAR EL AREA CON LOS BIOMBOS**
- ARREGLE EL DESPERFECTO A LA BREVEDAD POSIBLE**

II

TIPO DE SINIESTRO	COMO ACTUAR
 <p><b>DERRAME ACCIDENTAL POR MANGUERA DE DISPENSARIO SUELTA</b></p>	<ol style="list-style-type: none"> <li>1. CERRAR LA VALVULA DE CORTE RAPIDO EN LA BASE DEL DISPENSARIO.</li> <li>2.- AISLAR EL AREA CON LOS BIOMBOS.</li> <li>3.- USAR LOS EXTINGUIDORES PARA CUALQUIER CONATO DE INCENDIO</li> </ol>
 <p><b>DISPENSARIO DANADO O ARRANCADO DE SU BASE</b></p>	<ol style="list-style-type: none"> <li>1.- VERIFICAR LA VALVULA AUTOMATICA DE CORTE RAPIDO ( SHUT OFF ) HAYA CERRADO DETENIENDO EL FLUJO COMBUSTIBLE HACIA LA MANGUERA.</li> <li>2.- USAR LOS EXTINGUIDORES (2) QUE ESTAN EN LA ISLA SOLO DE SER NECESARIO.</li> <li>3.- CERRAR LA ISLA CON LOS BIOMBOS.</li> </ol>
 <p><b>CHOQUE DE VEHICULOS EN EL INTERIOR DE LA ESTACION</b></p>	<ol style="list-style-type: none"> <li>1.- USAR EXTINGUIDOR DE POLVO QUIMICO (DEBE HABER 2 DE 9 KG. EN LA ESTACION).</li> </ol>
 <p><b>EN CASO DE: TROMBA INUNDACION</b></p>	<ol style="list-style-type: none"> <li>1.- ACCIONAR EL INTERRUPTOR DE ENERGIA ELECTRICA DE EMERGENCIA ESTA SEÑALADO COMO:</li> </ol>  <ol style="list-style-type: none"> <li>2.- USARLO SOLO EN CASO DE FUERZA MAYOR</li> </ol>

III

**AL DESCARGAR EL AUTOTANQUE SIEMPRE ESTARA VIGILANDO UN OPERADOR CUYA RESPONSABILIDAD ES:**

**MANIOBRA DE DESCARGA DEL AUTOTANQUE**



(A) VERIFICAR QUE SE HAYA VACIADO POR COMPLETO EL CONTENIDO DE LA PIPA

(B) EN CASO NECESARIO CERRAR LA DESCARGA

(1) CUANDO SE HAYA LLENADO EL TANQUE A SURTIR EVITANDO DERRAME DE GASOLINA



(2) OCURRA UN CHOQUE DE VEHICULOS

(3) SE HAYA CHOCADO CON EL DISPENSARIO



(4) CUANDO LLEGUE UNA MOTOCICLETA CON EL MOTOR FUNCIONANDO CERCA DEL AREA DE DESCARGA



ANTE CUALQUIER SITUACION DE RIESGO PARA:

- LA ESTACION DE SERVICIO
- LOS CUENTES
- EL PERSONAL QUE AHI LABORA

EL EQUIPO CONTRA INCENDIO DEBE CHEGARSE PERIODICAMENTE

- EXTINTOR
- HIDRANTE
- SEÑALES

**AL TUMBAR UN DISPENSARIO**

10. APAGAR SWITCH GENERAL SEÑALADO COMO PARO DE EMERGENCIA.
20. USAR EXTINGUIDOR DE SER NECESARIO.
30. AISLAR EL AREA CON BIOMBOS.
40. CHECAR QUE LA VALVULA DE SEGURIDAD HAYA FUNCIONADO

**PEQUEÑO DERRAME DE GASOLINA**



- 1) EXTENDERLA CON ESCOBA

**GRANDE DERRAME DE GASOLINA**



- 1.- DISTRIBUIRSE VARIOS OPERADORES A LO LARGO DEL DERRAME PARA TRATAR DE SECABO Y EVITAR.

**TORRENTE ELECTRICA**



# - QUE HACER CUAN EN TERMINOS GENERALES AL OC

1



**MANTENER LA CALMA  
PARA PENSAR MEJOR**

“Maintain the calm in order to think better”

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Symbol: Spread Calm

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What tools do you use to train for calm?

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Ver bien para  
Servir y Producir Mejor

Translation:

“See well to serve & produce better”

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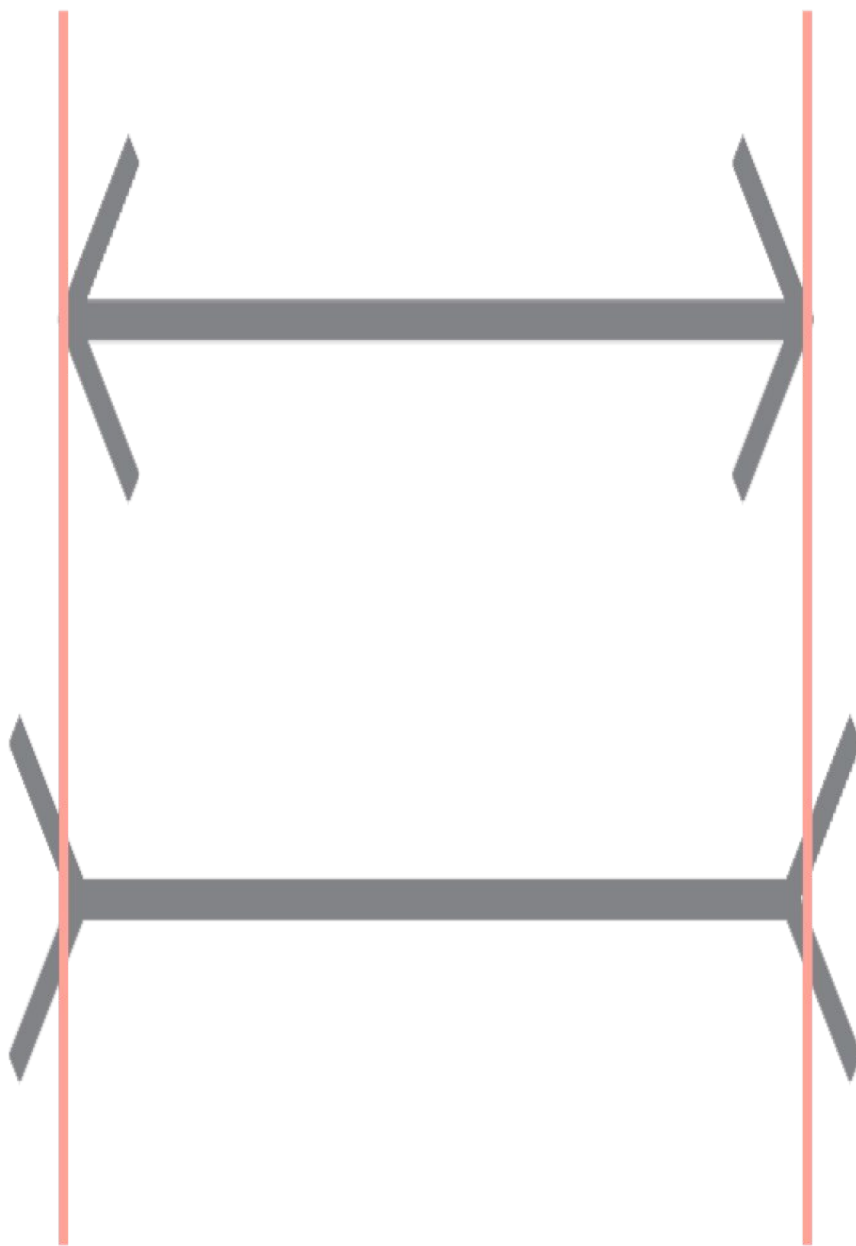
Symbol:

We with see our eyes, but also with our  
brain.

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“It’s for survival. You need to be prepared for novel experiences because often they signal danger. If you live in a jungle full of fragrant flowers, you have to stop being so overwhelmed by the lovely smell because otherwise you couldn’t smell a predator. That’s why your brain is considered a discounting mechanism.”

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— Maria Semple, *Where'd You Go, Bernadette*

“We spend most of our day perceiving taking in far more information than we can reasonably process without some shortcuts. For the majority of what we see, it’s ok to just see, to take things at their face value. But take time to learn how to see some of what you experience. You’ll be able to make better decisions, share deeper insights, and overall, enrich your understanding of the world around you”

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What tools do you use to learn to see?

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Ask stupid Questions

Seek Multiple Explanations

Challenge Assumptions

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# Seamanship

- Waves
  - Height*
  - Length and/or period*
  - Period or sets/lulls*
  - Steepness*
  - Breaking*
  - Trends*
- Tides
- Currents
- Sea state
- Water temp

## Sea Conditions

### Human Factors

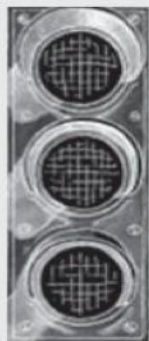
- Experience
  - Paddling experience in these conditions*
  - Recovery practice in these conditions*
- Skills
  - Comfort in these conditions*
  - Boat control, power and bracing competency*
- Communication
  - Level of honesty, listening and mutual respect*
- Attitude
  - Schedule, pressures and goals*
- Physical Strength, health and wellness
- Equipment
  - Boat design, condition and safety gear*

## Weather Conditions

- Wind
  - Direction*
  - Speed/force*
  - Fetch*
  - Duration*
- Precipitation or fog
- Cloud
  - Type*
  - Progression*
- Local patterns
- Barometer changes
- Air temp
- Weather report

## Terrain Conditions

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Pull-outs           <ul style="list-style-type: none"> <li><i>Sand or rock</i></li> <li><i>Steepness</i></li> <li><i>Exposure</i></li> </ul> </li> <li>• Commitment           <ul style="list-style-type: none"> <li><i>Cliffs</i></li> <li><i>Points</i></li> <li><i>Crossings</i></li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Hazards           <ul style="list-style-type: none"> <li><i>Shoals and bottom features</i></li> <li><i>Reefs, rocks and boomers</i></li> <li><i>Boat traffic</i></li> <li><i>Ice</i></li> </ul> </li> <li>• Protection from wind and weather</li> <li>• Remoteness</li> </ul> |
|---|--|



RED light = STOP, a hazardous situation exists.

YELLOW light = CAUTION, there is a potential hazard, too much uncertainty, or conditions are deteriorating.

GREEN light = It is OK, no hazard is obvious.



Translation: (not found)

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“Sometimes what you don’t  
do is just as important as  
what you do.”

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— Greg McKeown,

Essentialism: The Disciplined Pursuit of Less

A photograph of a yellow diamond-shaped sign on a road in a desert landscape. The sign is mounted on a metal post and has the text "What are your symbols?" written on it in black. The background shows a paved road curving to the left, a gravel shoulder, and a vast, arid desert with sparse vegetation and mountains in the distance under a clear blue sky.

What are your  
symbols?

