

Safe Kayaking Guiding Principles

Presented by Keith Braun (TRAK Kayak Pilot / Paddle Canada)



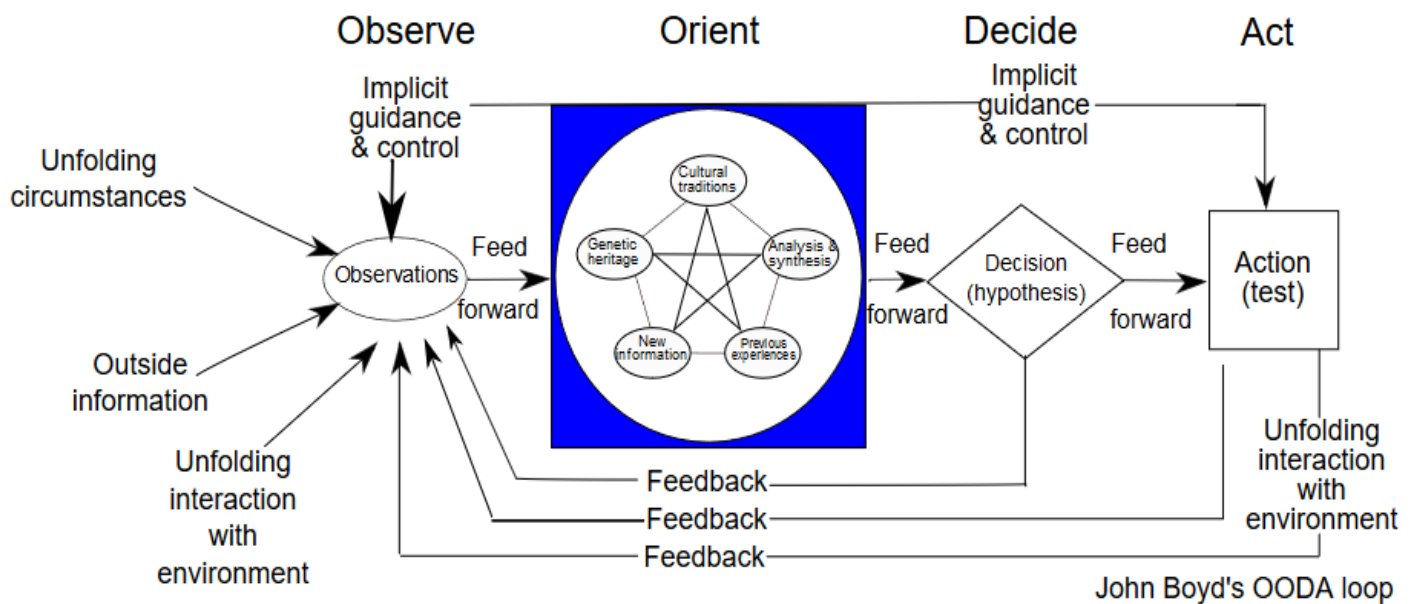
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BEYOND the BOAT

Understanding Risk

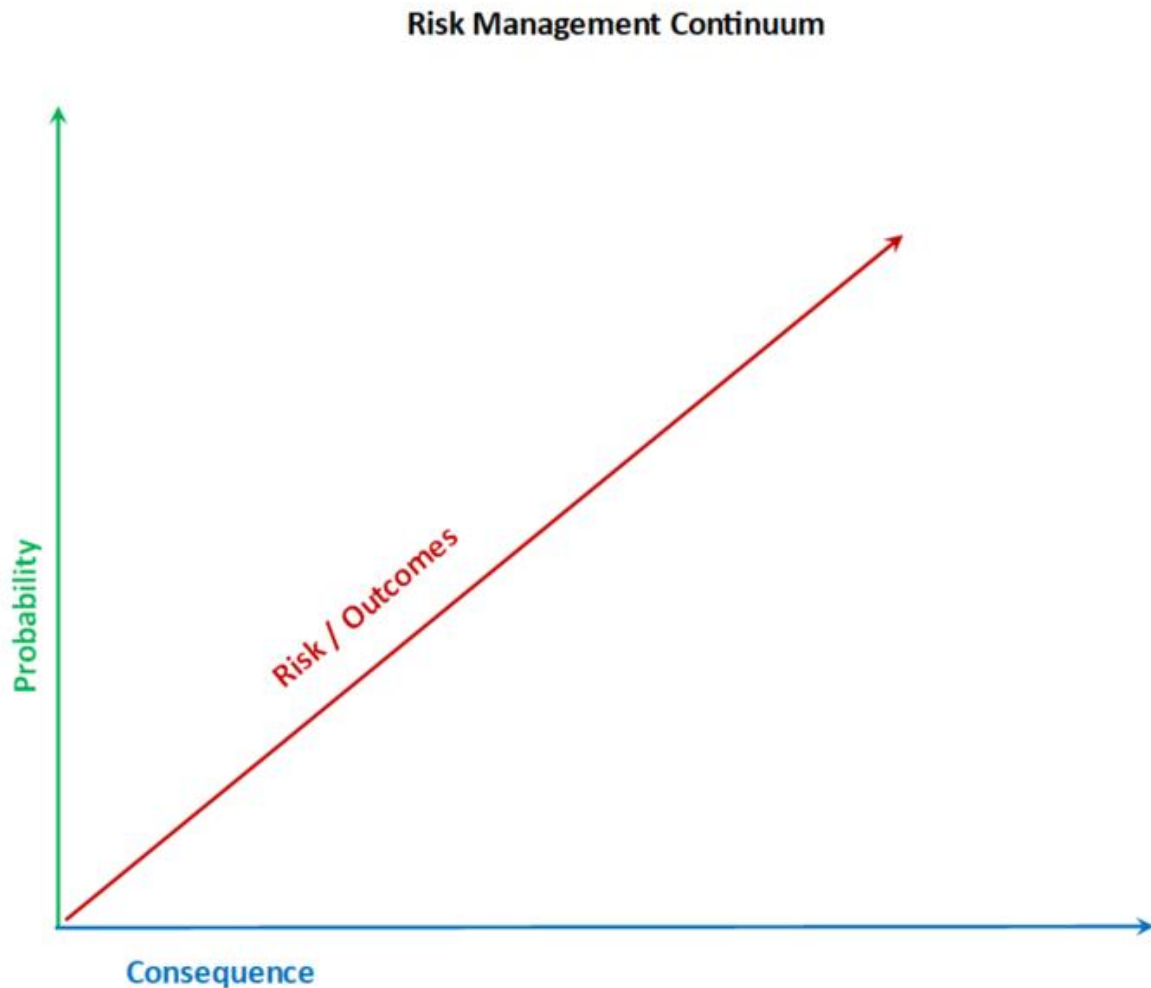
- There are a lot of complex Risk Management models such as the OODA Loop created by Colonel John Boyd
- Thankfully we're going to Keep it Simple.... Why?



Sources: www.paddlecanada.com www.topkayaker.net / <https://kayakessentials.wordpress.com/2014/01/17/safer-sea-kayaking-guiding-principles/> / www.trakkayaks.com / www.seakayakermag.com / www.skabc.org Keith Braun (Paddle Canada Instructor)

Understanding Risk

- Keeping it simple helps us (especially those of us over 50) retain information and better apply it later.
- Simple Put.....



- Many of us remember the **The Conscious Competence Ladder**
 - **Unconsciously unskilled** – you don't know that you don't have this skill, or that you need to learn it.
 - **Consciously unskilled** – you know that you don't have this skill and need to learn it.
 - **Consciously skilled** – you can now consciously demonstrate the skill with some level of competence.
 - **Unconsciously skilled** – you can now unconsciously demonstrate the skill with complete competence.

- The same concept can be applied to Risk Management.....
- NOTE: The best Risk Management is Risk Prevention through proper planning.
- **The Risk Prevention / Planning Ladder**
 - **Unconsciously unprepared** – you don't know that you need to prepared
 - **Consciously unprepared** – you know that you need to prepared but are too complacent to be prepared
 - **Incompetently prepared** – you know that you need to prepared and you are prepared with an inadequate level of completeness / competence.
 - **Competently prepared** – you know that you need to prepared, and you are completely prepared with full level of competence.

So, what is competence in sea kayaking preparedness:

A full understanding of:

- **Your primary and secondary plans c/w**
 - Contingencies
 - Timeline(s)
 - Way Points Etc.
- **Your Environment:**
 - Air Temperature
 - Wind
 - Water Temperature
 - Water Characteristics
 - Swell
 - Current
 - Tide
 - Traffic
 - Natural Hazards
 - Weather / Barometric Pressure
 - Remoteness Etc.
- **Your Equipment**
 - Boats / Paddles / PFDs
 - Safety / Rescue Gear
 - First Aid
 - Immersion Gear

Your People

Skills / Experience

Pre-requisites

Age / Medical Conditions / Disabilities / Abilities / Limitations

Personal Preparedness

Emergency contact info

Communication Etc.

Yourself

Skills / Experience / knowledge / limitations

Intuition

Attitude Etc.

PLAN ➡ EDUCATE ➡ EXECUTE ➡ REVIEW

PLAN

It cannot be overstated the importance of good pre-trip planning. For the experienced & highly trained sea kayaker, proper equipment & planning + sea state assessment, route choices and pod management often becomes second nature. Although this intuitiveness is great when paddling alone or with similar paddlers, but when paddling with a larger or less experienced group, there needs to be a more proactive approach to managing the group. For this reason, leadership of the group should be assigned, preferably to the most competent paddler with the most familiarity of the waters being paddled. This delegation preferably should occur at the planning stage of the paddle in advance of the actual paddle. Most often, especially amongst friends, paddlers with good intentions “guide” others onto the water without taking into consideration the formalities that should occur before the trip is underway along with apply good safety principals while on the water. This lack of planning can lead to unsafe situations on the water.

Route Choice:

- A Good route choice involves a suitable paddling area for the expected conditions and the ability of the group. Within this overall paddling area, if we ‘shape a good course’ from ‘safe zone’ to ‘safe zone’, we can plan a paddling experience that accomplishes the goals of the day. This involves:
 - Be realistic in the overall float plan which is well within the scope of the group.
 - Choose direction of float plan in accordance to the expected wind & currents.
 - Ie. don’t plan a return at the end of a long day pushing against strong wind or current.
 - Selection of a safe entrance point at a suitable time preferably with conditions that can offer a gradual increase to the maximum sea state suitable for your weakest paddler within the group.
 - Good selection of suitable waypoints or predefined locations for specific purposes c/w flexibility to adjust according to group necessities. Ie.
 - rest points in sheltered water
 - safe landing zones
 - predetermined safe meeting zones to stop & reassess before proceeding into more challenging waters.
 - Consideration of the developing sea state, weather, tide, current etc throughout the day.
 - Special consideration of pending commercial boat traffic ie. Ferry crossings.
 - If the least experienced group member is unable to paddle effectively in the conditions of the planned paddle, the safety of the entire group is compromised. Plan trips that meet the needs of the weakest paddler.
 - If your paddler list is unknown at the time of planning, it’s even more important to well inform your group in advance of the paddle of what to expect.

Pre-trip information:

- Share everything pertaining to pre-determined float plan:
 - Meeting location
 - On the Water (OTW) time
 - Planned Route(s) with 2ndary plans c/w:
 - Map references
 - Distances measured
 - Waypoints c/w purpose ie: rest stops, rock gardening location(s) etc.
 - Time on the water
 - Determine expected Sea State:
 - Wind Forecast - www.windy.com + www.sailflow.com
 - Swell Forecast - www.surf-forecast.com + <https://weather.gc.ca/marine>
 - Tide and Current information <https://tides.gc.ca/eng/data> + <https://sailwx.info/tides/>
 - Pre-requisites of the paddle. ie:
 - Required skills
 - Required experience
 - Safety Equipment:
 - Proper boat that meets the demands of the water being paddled
 - Complete list of Property safety / rescue & environment gear required
 - Food & Beverages (no drugs / alcohol)
 - A special note on Immersion Gear:
 - The 1 – 10 – 1 Rule: If you capsize and end up in cold water without immersion gear you have:
 - 1 minute to bring your breathing under control so you can function.
 - 10 minutes before you lose effective mobility, so you need to get back into your boat or on to land quickly.
 - 1 hour before you lose consciousness due to hypothermia
 - See Gear List pdf.
 - Expectations of the speed of the group. ie minimum of paddling 3 nautical miles per hour consistently for ____ hours. Make reference to any crossings in the float plan along with how far each crossing is and sea state expected for each crossing.
 - Any other relevant information the participants should know.

Know your paddlers:

- Paddlers can present many characteristics we can all relate to or remember at some point in our personal journeys:
 - Overconfident
 - Independent
 - Little or no intuitiveness to the factors that differentiate a safe environment from and unsafe environment.
 - Differing attitudes toward risk
 - Some with high risk tolerance c/w little respect for the sea

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- Some with low risk tolerance c/w a lot of respect for the sea
- Some with fear / trepidation who hide their fear
- Plus, Differing training / skills
 - Some with high levels of training, skills & experience. These are obvious considerations for leadership roles.
 - Some with adequate levels of training, skills & experience for the paddle planned.
 - Some who are going beyond their skill level, but who are physically able and keen to learn & progress in their skills & experience.
- To begin getting to know your paddlers, have them complete a basic profile c/w:
 - Their paddling experience ie:
 - Formal training / certificates they have accomplished
 - Types of water they are confident in
 - List of trips they've completed
 - When they last paddled
 - Can they perform a wet exit c/w self-rescue
 - Their expectations of the paddle
 - Any reservations they may have?
 - Past Medical History:
 - Date of Birth
 - Allergies & Medications
 - Emergency Contact Information
 - Relevant current medical history ie. recent injury or current impairment.
 - Relevant past medical history ie. heart attack, asthma, epilepsy, disability.
 - Ensure all necessary medication is brought with them.

The above can be accomplished by creating your plan & having the participants complete a simple paddler profile. We have samples or you can create an online plan via: www.adventuresmart.ca 😊

EDUCATE:

Launch briefing (before every paddle including each morning on multi-day trips):

- This is your chance to have your say before the sea has it's say! Once on the water, a good briefing is virtually impossible.
- Expect the unexpected ie. unexpected participants.
 - If so, interview the participant(s) to confirm confidence / competence / readiness
 - Be ok with declining participation or re-aligning the plans according to the weakest link (with the groups approval, but remember good leadership doesn't necessarily mean democracy, you may have to make the last call)
 - Compare the predicted sea state with the actual sea state.
 - If everyone is well in their comfort zone, you can afford a more relaxed approach – if paddlers are more challenged, we will need to be more disciplined in our group management.
 - Review the float plan and adjust according to the current reality of the water and ability of the group.

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- Confirm everyone is properly equipped, prepared and feeling good about the paddle.
- Confirm all safety gear is present
- Review communication guidelines ie: stay within verbal distance + Radio channels to be monitored + hand / paddle / whistle signals on the water.
- Assign leader responsibilities.
- Assign paddling partners or groups if needed. (No less than groups of 3 paddlers)
- Review the float plan(s) c/w waypoints and the purpose of each.
- Answer any questions participants may have.
- If a participant arrives without the required pre-requisites defined in the pre-trip information, don't hesitate to decline their participation to preserve the integrity of the group / paddle.

EXECUTE (Pod Management)

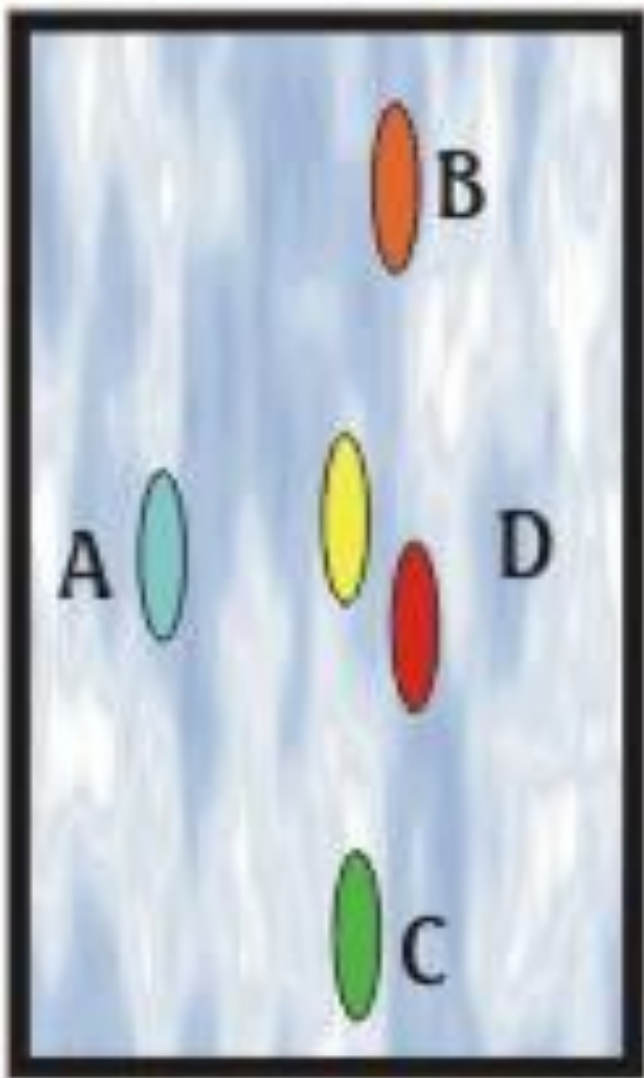
➤ **Group Dynamics:**

- Know your role and stick to it. Leadership vs participant.
- Know who your partner is (if applicable) and stay close
- Know your participant count and regularly count the paddlers to ensure all are accounted for.
- Anticipate throughout the day. Conditions may change rapidly. The best leader can anticipate changes and adapt quickly to those changes to ensure safety of the entire group.
- Be Flexible. Plans are meant to be broken, so be ok with adjusting the plan throughout the day
- Gain consensus through good communication throughout the day. 99% of people are ok with change when they understand the need for the change.



➤ Positioning & Line of Site:

- Paddlers tend to spread out on the water. It is better to keep a close group, rather than all spread out. The general rule is if I can't hear you verbally, you're too far away.



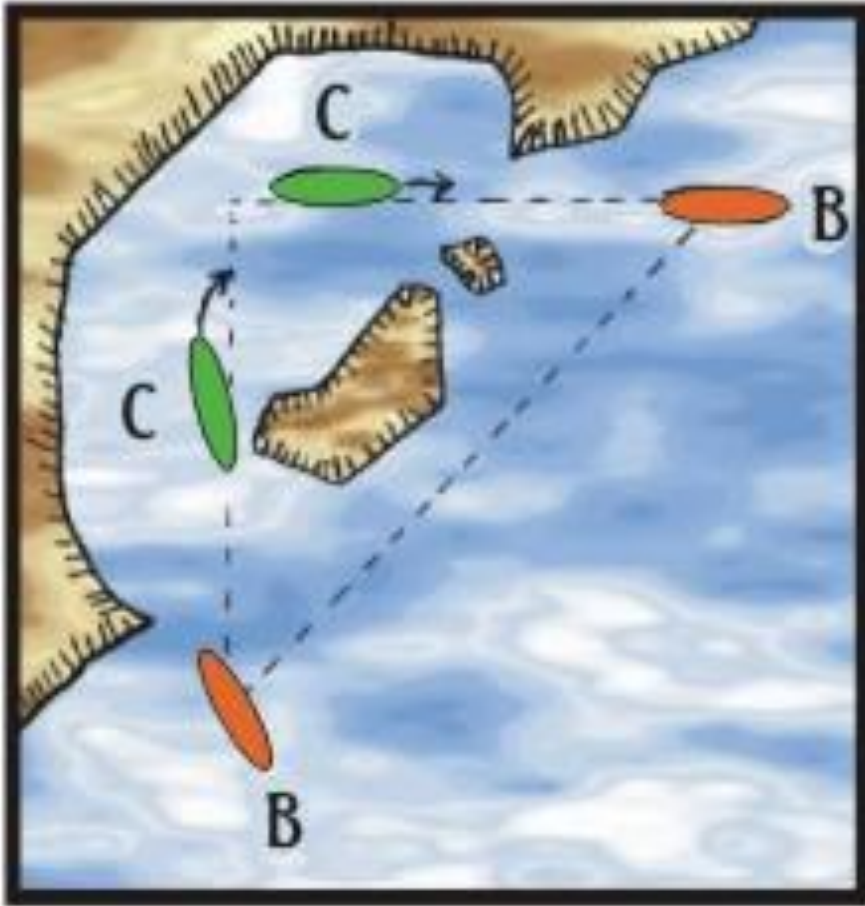
The **Group Leader or Instructor (A)** can lead better from the side, so they can see the group, communicate well and catch up to, or drop back to anyone who would need some help, has a question or wants some pointers. They should be between the group and any potential hazard to keep the group clear of the hazard.

The **Lead Kayaker (B)**, at the head of the pack, is a designated leader who knows the float plan and can navigate with chart and compass if needed. The Lead Kayaker also sets the pace suitable to the slowest paddler in the group. Preferably they should have a radio to communicate with the Group Leader or Instructor.

The **Sweep Kayaker (C)**, last in the pack, should be a strong skilled paddler ready to help group members as needed. Sweep Kayakers should be prepared with appropriate safety and rescue gear and know how to use it. Preferably they should have a radio to communicate with the Group Leader or Instructor.

The **Participants (D)** gathers toward the center of the group while keeping a safe distance from one-another & not passing the Lead or falling behind the Sweep.

Rock gardens involve very divergent water, requiring multiple skills to deal with waves, swell, overflows, currents and eddies and more.



The **Group Leader** or **Instructor** can position himself freely to make his presence where needed and/or act as a Safety Boater.

Safety Boaters (B) can position themselves outside the rock garden to keep an eye on the group and watch for in-coming sets. In some multiple entry gardens Safety Boaters can be positioned in a manner that can observe the interior of the garden and the other Safety Boaters, allowing for head counts in and out.

One-way gardens and sea caves will require an in-and-out application, while large expansive gardens with multiple entries will require a spot to spot application with **Lead & Sweep** paddlers.

(C) are the **Participants** that enter the garden and face the challenges inside one at a time.

Rivers or Tidal Currents will require a formation similar to that used in open water, while incorporating elements of rock garden formations.

Use a **Lead** (a skilled paddler able to make decisions on navigating the section) and **Sweep** (a strong paddler able to assist those who have capsized or fallen behind) to keep the group together.

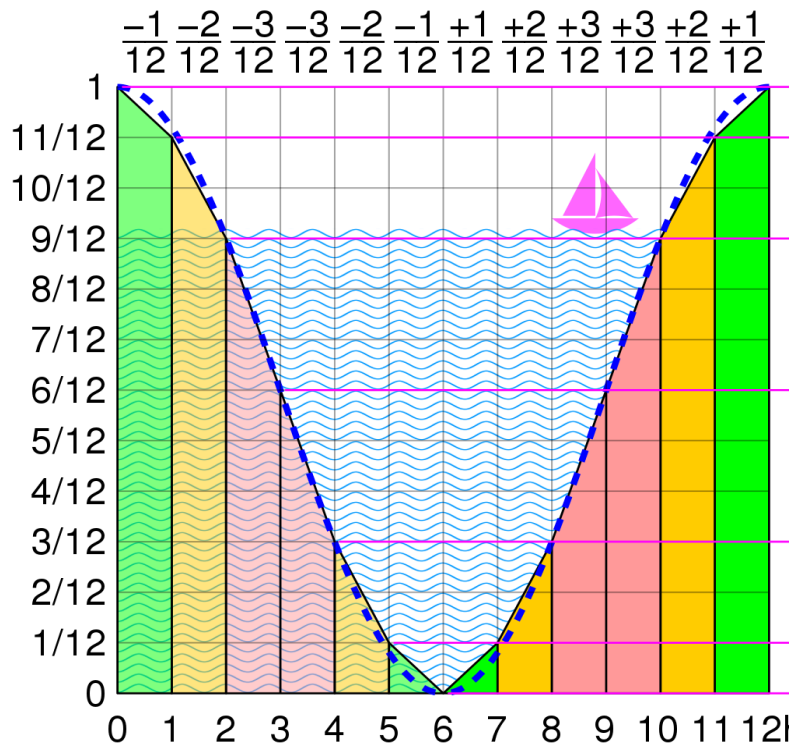
A **Group Leader** or **Instructor** can be free to apply their presence where it is needed within the pack.

Tides and Currents

www.tides.gc.ca offers tide and current times and paddlers often refer to the “Rule of Thirds (or Twelfths)” to calculate changing height or speed of tidal water.

On the water I personally find that confusing, subjective and wide open for errors. Navionics is an excellent resource for documenting incremental tidal water values along with a plethora of other valuable mariner tools.

Go to: www.navionics.com or download the Navionics mobile app.



12:00 pm	0%	SLACK Turning to flood	0 Knots
1:00 pm	50%	+ SPEED	5 Knots
2:00 pm	90%	++SPEED	9 Knots
3:00 pm	100%	+++SPEED	10 knots
4:00 pm	90%	++SPEED DECRESSING	9 Knots
5:00 pm	50%	+SPEED DECRESSING	5 Knots
6:00 pm	0%	SLACK Turning to EBB	0 Knots



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REVIEW

- We continue to develop our leadership skills by looking back at the things we did right, and the things we would have done differently, as well as getting feedback from those we lead. Having a beach debrief at the end of a paddle is an excellent habit to form. Some of the questions we can consider asking are:
- What were your highlights of the paddle?
 - What was your low point or disappointment of the paddle?
 - Did today meet your expectations?
 - Was there anything you would have changed?

Additional Resources:



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Keeping it simple:

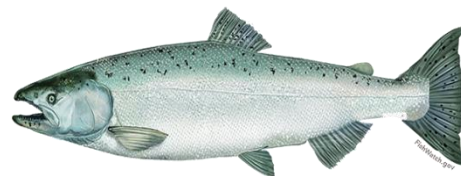
- ❖ Me
- ❖ We
- ❖ The Weather
- ❖ And the sea

- ❖ **C** = Communication
- ❖ **L** = Awareness
- ❖ **A** = Line of Sight
- ❖ **P** = Position of max usefulness

- ❖ Upward = Weather & Sea
- ❖ Outward = The Group
- ❖ Inward = Self Assessment
- ❖ Forward = Best decision(s)

- ❖ **O** = Observe
- ❖ **O** = Orientate
- ❖ **D** = Decide
- ❖ **A** = Act

- ❖ W
- ❖ T
- ❖ F



- ❖ N = No go zones
- ❖ S = Safe zones
- ❖ E = Everyone to Safety
- ❖ W = What went wrong & why?

