# Governance Principles

# Running Tide's Governance Principles for Responsible Climate Intervention

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Running Tide is on a mission to restore ocean health, rebalance the carbon cycle, and revitalize coastal communities. We deploy comprehensive solutions for ocean-based carbon removal, biodiversity enhancement, and ecosystem restoration, which are based on best available science and first-principles engineering, and measured and monitored via our cutting-edge data collection and analysis systems.

Our work is designed with the express intention to mitigate the ongoing rapid and accelerating decline of ocean health (a "negative baseline") through positive interventions that have the potential to reach a climatically relevant scale.

This document provides an overview of Running Tide's Governance Principles, which are structured to ensure that our work has its intended positive impact on the ocean and the communities in which we operate. It is also being released against the backdrop of widespread flooding in the US Northeast, an all-time heat spike in the Atlantic Ocean, and historical temperature records falling across the globe on a near-daily basis.

# 1. Our Governance Approach

## Defining Governance

Governance refers to the rules, decision-making processes, and practices for managing collective matters. It also includes the mechanisms to hold individuals and organizations accountable for their decisions.

Examples include corporate governance – i.e., the rules, regulations, and practices by which a company is managed and operated – and international governance, such as the United Nations' role as a global convener to bring public and private actors together to address global threats. Within the context of carbon removal, governance concerns the rules, protocols, and decision-making and oversight processes by which interventions designed to positively impact the climate are transparently researched, introduced, and scaled.

At Running Tide, we think about governance in terms of the processes we implement, the actions we take, and the oversight mechanisms we develop – internally and as an industry – to ensure that our work has its intended net positive effect. This includes building and maintaining our social license to operate, developing close working relationships and open lines of communication with scientific leaders, policymakers, and the communities in which we work, and engaging with a range of stakeholders to appropriately weigh any potential risks associated with our activities against the baseline risk of inaction.

## Our Responsibility

The need for carbon removal at a massive scale to avoid the worst impacts of the climate crisis is well documented, consensus science.

The ocean is a global commons and the center of our climate system. Our responsibility is to the ocean, the communities we work with, the people doing the work, and our government, academic, and corporate partners who enable this work

to be done. We see our Governance Principles as a means by which to create accountability for that responsibility as we follow a staged progression towards scale.

While this framework details the principles we follow to ensure we act responsibly in achieving our intended positive impact, it is also reflective of our belief that **we have a responsibility to act**. Our work, and the principles we commit to adhere to, are contextualized against the known risks of inaction and the rapidly declining baseline state of the ocean. Managing these dual responsibilities is a balance; we take the minimal incremental risk per step as we progress our work, but also take those steps as quickly as possible, at the fastest pace that our analysis, iteration, and learning loops can match.

We understand that as a leader in the rapidly growing field of carbon removal, the principles we set are likely to be scrutinized, refined, and adopted by others who follow and build upon our work, helping to set the bar for other practitioners. We hope this is a framework others will follow – both because we believe operationalizing these principles is required to do this work effectively, and because it creates a shared platform against which the success of this work can be evaluated and measured. With the end goal of mitigating climate change, the success of one is the success of all.

# 2. Governance in Practice

For any framework to be successfully implemented – by Running Tide or at the industry level – suggested principles and practices must reflect the reality of the climate crisis, with an eye towards responsibly progressing carbon removal approaches that demonstrate measurable impact from early-stage research to a climatically relevant scale. Put differently, effective frameworks **must be designed to enable positive action for activities that can meaningfully contribute to our collective climate goals**.

Running Tide's governance framework is designed to be applicable from initial research up to scaled operations, and comprehensive of the environmental, ecological, and social implications of our activities. The principles within this framework, detailed below, have been developed to ensure they are actionable and enforceable from the start.

Built on the foundation of best available science, these principles are broken down into seven sub-categories of action, detailed below. More details on our current carbon removal system design (referenced throughout) can be found here.

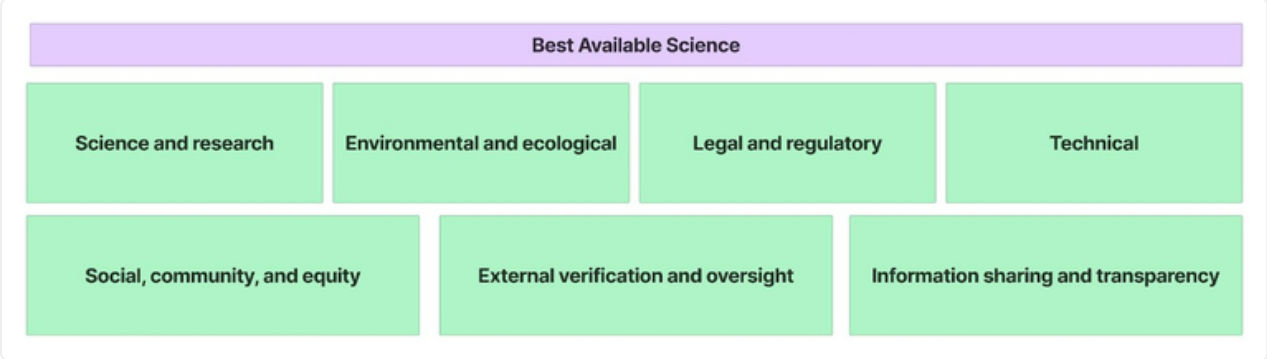


Figure 1 – Running Tide Governance Framework.

Failure to adhere to these principles poses a number of risks - including the ability for our carbon removal work to have its intended positive effect.

## Best Available Science

The foundation of our governance approach is the concept of “best available science,” an established practice in natural resource management that ensures an activity evolves to match the best current available understanding of Earth systems.

Conventionally accepted sources of scientific information are understood to be constantly evolving. Decisions regarding the management of natural resources and interventions in nature must be made utilizing the best information available, both to enhance collective understanding and avoid unnecessary risks. Building around best available science also activates a knowledge “flywheel”, encouraging novel research and data sharing that moves collective knowledge forward and begets additional research. As knowledge increases, uncertainty around the impact of a potential intervention is reduced through action, the activity is adapted, and the approach is updated as needed.

In line with the scientific method, best available science emerges not from any single source, but from a number of independent processes that include a statement of objectives, a clear conceptual framework, rigorous analysis, sound logic, and documentation of methods, results, and summaries that have been subjected to rigorous evaluation by scientific peers. Such processes have been generally accepted and well-established across virtually all fields of science.

This concept is applied to all aspects of Running Tide’s work, whether in the laboratory setting or the open ocean, and at all stages from early research to climatically-relevant scales.

# Governance Principles

The key categories for Running Tide’s Governance Principles are outlined below, with specific examples of how we demonstrate these principles in our research, system design, deployments, and other areas of our work. A summary table of our principles is provided as an appendix at the end of this document.

# 2.1 Science and research

Is the project based on foundational science? Has the project identified key research questions and developed plans to address them?

## Our principles

- Our system must be built on the foundation of best available science.
- Research is focused on questions that will reduce scientific uncertainty, with the end goal of identifying solutions that can effectively mitigate climate change.
- Research will be conducted with scientific integrity.
- Research plans are documented and publicly available to advance collective knowledge.
- Research is iterative and follows a staged progression towards scale, starting with laboratory and/or small scale controlled pilot experiments.

## How we demonstrate these principles

- Prior to beginning research, Running Tide assembled a "Foundational Science Overview", which was shared with our independent Scientific Advisory Board and scientific partners, as well as a technical white paper that describes our approach – and the science that informs it – in detail.
- Running Tide has released a Carbon Removal Research Roadmap, which details how past research conducted informs current and future research plans and what key questions our research is designed to answer. Several active projects in progress with external research partners to advance scientific understanding are also detailed. These research plans are regularly reviewed with our Scientific Advisory Board and Ocean Visions, who convenes the Board.
- Conducting research deployments requires formulating well-informed "priors" to monitor and determine if, where, and why trials deviate from expectations based on controlled or laboratory experiments previously conducted.
    - As an example, in-house advection modeling based on publicly available datasets and real-world tests of our verification hardware systems directly

informs where our research projects are deployed to target ideal biomass sinking locations.
    - Similarly, the results from laboratory and controlled coastal experiments and modeling directly inform both our system design and proactive mitigation measures for research projects. As an example, an initial design for a “long line” carbon buoy tested by Running Tide in 2020 and 2021 provided significant efficiencies in terms of macroalgae yield (high yields were observed in fixed research locations with low wave energy, high-nutrient conditions), but presented potential challenges at scale in terms of deployability and potential ecological impacts (both in the ocean and within the supply chain) based on scientific review. Though these reviews determined the risk was minimal, and long lines are commonly used in marine aquaculture, we tested a number of more conservative alternative approaches, leading to the development of the lower density, distributed carbon buoy designs used in research deployments today.
- Running Tide has provided the Government of Iceland (the site of our initial research projects) with Project Design Documents detailing our research plans. We share quarterly updates to Iceland’s Marine & Freshwater Research Institute and Environment Agency, both of whom we are in continuous contact with throughout the research program. These regular updates are a required mechanism through which we can demonstrate scientific rigor and maintain our permission to operate.

As our work progresses, we aim to identify additional avenues through which to publicly share the results and data from our ongoing research. We are open to all suggestions for effective information sharing that are widely utilized and respected within the scientific community.

# 2.2 Environmental and ecological

Has the project effectively considered the potential environmental and ecological impacts of planned activities, and been designed to proactively mitigate risks?

## Our principles

- Environmental risk is mitigated wherever possible through the design of the system deployed (i.e., “mitigation through system design”).
- Proactive environmental risk assessments must be conducted prior to planned deployments. Processes must be implemented for ongoing monitoring, assessment, and data collection of potential risks identified.
- Monitoring plans must be shared and reviewed by an independent Scientific Advisory Board or similar impartial expert body prior to planned deployments.
- Methods for the accurate assessment of ecological impacts are informed by ongoing research and continuously refined based on best available science.

## How we demonstrate these principles

- Potential negative environmental impacts are proactively mitigated or avoided in advance of research deployments through both system design and environmental risk assessments and screening. The system must have no more than “a minor or transitory effect on the marine environment” when evaluated against the baseline of declining ocean health, in line with the environmental assessment guidance from the recently adopted High Seas Treaty.
    - Running Tide’s current research deployments have been designed to mitigate and avoid environmental risks, particularly in relation to material distribution and density, as materials deployed passively float for days to weeks, dispersing over many miles, before eventually sinking. Additional information on this risk mitigation can be found in the “System Design” section of our Framework Protocol.
    - Our comprehensive environmental screening process for materials used in research projects includes elemental analysis, testing for contamination, heavy metal, and toxicity, and material reactivity testing. Results from these

screenings are compared against acceptable concentration guidelines allowed by law to ensure that concentrations do not pose an environmental hazard. Any materials that exceed these thresholds are disqualified from potential use. This material evaluation and screening process is laid out in detail in our Responsible Sourcing Strategy, which provides guidelines for how the materials we use are sourced in environmentally responsible ways and mitigate and avoid potential environmental risks.

- Running Tide has also released a review of the environmental assessment related to our Iceland work – i.e., a comprehensive risk assessment of potential ecological impacts – which has been independently reviewed by Deloitte and our Scientific Advisory Board, and benefitted from comments made by several members of the Deep Ocean Stewardship Initiative (DOSI) Climate Change working group.
- Running Tide regularly consults and collaborates with external environmental subject matter experts. For example, Running Tide has multiple active benthic research projects ongoing in partnership with leading scientific and oceanographic organizations, including Ocean Networks Canada and the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, designed to answer key questions about our material interactions and potential future ecological risks in the benthos.
- As planned for during the experimental design phase of our current and forthcoming research projects, Running Tide has a range of ongoing monitoring processes in place:
    - To evaluate potential impacts in the pelagic environment, baseline water samples are collected during research deployments to gather information about open ocean water conditions, including pH and nutrient levels.
    - Verification hardware sensors are also deployed to monitor physical oceanographic parameters (wave height, currents, and more), chlorophyll levels, and collect in-situ imagery to evaluate float time and performance of distinct carbon buoy compositions in varied weather and wave conditions, and enable comparison against models.
    - Ongoing benthic surveys are in place to evaluate biodiversity impacts over time, expected carbon durability and remineralization rates, and additional factors.

As our work progresses, we will layer on additional monitoring capabilities designed to enable in-situ monitoring over longer periods of time and allow for more intensive

sampling. This will include the utilization of ocean autonomous and remotely operated vehicles (AUVs and ROVs), hardware sensor development and dematerialization, and additional open ocean nutrient sampling.

# 2.3 Legal and regulatory

Does the project have clear permission to operate and an understanding of the legal and regulatory frameworks that impact the proposed activities?

## Our principles

- Clear permitting or permission to operate must be secured from relevant jurisdictions prior to planned deployments.
- Any potential conflicts with other ocean users must be evaluated and effectively managed.
- Where possible, Running Tide will advocate for regulation to enable the responsible implementation of positive interventions.
- The precautionary principle is considered in relation to our responsibility to act and the declining baseline state of the ocean.

## How we demonstrate these principles

- Running Tide's current research projects are conducted under Icelandic jurisdiction within their exclusive economic zone (EEZ) with the full approval of the Icelandic government and all relevant environmental agencies via a permit. The Icelandic government determined that the permit, which allows for research deployments over a four year period, is compliant with all international obligations and relevant treaties, including the United Nations Convention on the Law of the Sea (UNCLOS) and the London Convention/Protocol, which Iceland is a party to.
- Running Tide states within our Framework Protocol that "clear permitting and permission to operate at the relevant local, state, federal, tribal, and international levels must be demonstrated prior to planned deployments". Projects that do not meet this requirement are not eligible to move forward.
- Running Tide's evaluation of the international legal frameworks and open ocean carbon removal regulatory considerations that impact our work will be publicly available in the coming weeks, which we plan to maintain and update regularly. Within both that legal evaluation and our Framework Protocol, we clearly

document how the precautionary principle is effectively applied within the context of our work. It is our belief that the precautionary principle, enshrined in international legal frameworks, suggests nations also have a legal responsibility to act, and requires that they must do everything in their power to prevent the known consequences of climate change on the ocean and terrestrial ecosystems.

- Running Tide will continue our work of advocating for the creation of clear regulatory and permitting frameworks that enable our work, in the United States and abroad.

As Running Tide's current research deployments are at a small scale and conducted in the open ocean outside of shipping lanes or areas of traditional commercial activity, our interactions and potential conflicts with other ocean users has been limited to date. We expect this to become an increasing area of focus as our geographic footprint expands. Additionally, we understand that the legal landscape related to carbon removal and ocean-based activities can change rapidly and will require us to adapt in order to maintain conformance with relevant laws and regulations.

# 2.4 Technical

Do those conducting the project activity possess the technical capacity to understand project impacts, and effectively monitor and measure results?

## Our principles

- We must demonstrate a level of technical expertise required to fully characterize the potential impacts of our intervention prior to deployment.
- The quantification tools we use must enable comprehensive monitoring of risks specific to the system deployed, both during and after deployments.
- We must maintain the technical capability to fully understand the impacts of our work and refine the system based on the data collected.
- Measurement and monitoring instruments and models used in conducting research and/or evaluating results must be described as it relates to their role in quantification, and independently validated where appropriate.
- Technology systems must be tested, documented, and verified with sample data prior to being used in planned research projects.
- Where possible, subject matter expertise relevant to each component of the system deployed should be developed and resourced in-house. Where this expertise does not exist, collaboration with external researchers and subject matter experts is required.

## How we demonstrate these principles

- Running Tide's technology stack, which is primarily developed in-house, enables rigorous monitoring and the ability to evaluate the effects of an intervention. Many of these components are described in detail in our Framework Protocol.
- Running Tide has significant in-house expertise for components critical to our carbon removal system, including a full oceanography and ocean modeling team, in-house laboratories with the capacity to conduct all necessary environmental and ecological screening, and regular verification hardware system testing to confirm open ocean viability.

- Specific instruments used on a per-deployment basis are detailed in each Deployment Report, along with an in-depth description of models used and how they inform quantification results.
- Prior to conducting initial research projects, Running Tide successfully completed three separate deployments of fully operational verification hardware systems into the North Atlantic, providing real-time ocean data and in-situ imagery over multiple months. More information on these specific trials is linked here, and a more comprehensive history of our verification hardware testing can be found in the “Open Ocean Observation Platforms” section of the Framework Protocol.
- In addition to our documentation, Running Tide has also released several videos related to our quantification approach, linked here and here.

As our work progresses, we have identified a clear need to increase our in-situ measurement capacity, gaining additional visibility into what is occurring in the ocean in real time (and over longer periods of time). We will maintain a strong focus on the dematerialization of our sensor systems to reduce size, improve efficiency, and scale sensors to production, while staying in line with our ecological impact design philosophy to maximize information gained with the minimum possible footprint.

# 2.5 Social, community, and equity

Have those conducting the project worked with all relevant local and community stakeholders to educate, engage, and garner feedback on plans and research?

## Our principles

- Where possible, we target our work to benefit communities among the most vulnerable to the impacts of climate change, and where the greatest socioeconomic, mitigation, and adaptation benefits can be realized.
- Communities impacted by our work, including coastal and indigenous communities, must be meaningfully engaged prior to conducting research, and longer term engagement strategies must be developed. Running Tide must provide mechanisms for ongoing feedback and grievance resolution with affected communities.
- Assessments of potential community impacts must be conducted and monitored over the life of a project. Where possible, these assessments should include quantitative metrics.

## How we demonstrate these principles

- Running Tide operates in communities that are at the frontline of the climate crisis, including working waterfronts and forest communities. It is Running Tide's responsibility to make sure our impact on communities is positive, to take proactive measures to support the maintenance and resilience of healthy communities, and to ensure that the perspectives and guidance of community leaders are sought out and integrated into the project and operational decisions.
- To date, the primary community in which we operate in Iceland is Akranes, a historical fishing town. We have engaged directly with town leaders and the broader community to design and refine our plans and proposed research, including through town halls and local meetings, site tours, and speaking directly with leaders from potentially impacted fishing industries. Throughout our prior and ongoing engagement with the community, we have received positive feedback about our work in the area, in particular as a new opportunity

to utilize the community's experience and skills in maritime operations, natural resource management, and ocean sustainability practices.

- After initial consultation, there has not been concern to date from other sectors, such as commercial shipping, as research projects are conducted in the open ocean outside of shipping lanes, and the carbon buoys of our system design are small and distributed. In fact, many of our research activities in Iceland are deployed in partnership with a leading global shipping company, Eimskip.
- Running Tide measures and will report on baseline socioeconomic impact metrics related to project activities at the end of each deployment season, including job creation, economic development, impact on local income disparity, and more. Over time, we will integrate this reporting into deployment-specific metrics.

As our work progresses, we will expand our quantitative socioeconomic impact reporting to establish baseline conditions in the communities we touch. Additionally, because Running Tide's current operations are localized, direct engagement and feedback mechanisms with the communities we touch to date has been fairly straightforward, and any grievances or concerns raised by members of the community can be addressed directly to the Running Tide team. We anticipate the need to build more expansive and robust feedback and grievance mechanisms as we expand geographically. Similarly, while tribal nations or indigenous people are not present in Iceland, we expect this to be a significant area of focus going forward.

# 2.6 External verification and oversight

Have those conducting the project ensured that independent expert parties can effectively review and validate the project work, approach, and results?

## Our principles

- Creation of an independent Scientific Advisory Board or similar oversight body to evaluate project approach and research plans.
- Environmental evaluations must be reviewed by independent third parties, and be made available for review.
- Quantification protocols and processes should be peer reviewed by industry experts and open for public feedback and consultation.
- Audits must be conducted on at least an annual basis by a qualified, impartial third party to confirm work conforms to criteria dictated by our Framework Protocol and results are accurately reported.
- Where they exist and are deemed appropriate, projects should follow established industry standards, such as GHG Protocol Inventory Best Practices and ISO standards.

## How we demonstrate these principles

- In early 2022, prior to conducting any research deployments, Running Tide stood up an independent Scientific Advisory Board, convened by Ocean Visions, with whom we are in regular communication around planned research, quantification considerations, and data sharing, amongst other relevant topics. This Board reviewed the plans and protocols for our current research projects prior to their deployment.
- As mentioned above, our assessment of environmental exposures related to current research projects have been independently reviewed by Deloitte, our Scientific Advisory Board, and members of the Deep Ocean Stewardship Initiative (DOSI) Climate Change working group, and are publicly available via our website.

- Our Framework Protocol went through an extensive peer-review process in which Running Tide solicited and integrated feedback from leading experts across more than 25 carbon removal, oceanographic, environmental, and climate organizations, and was reviewed by Deloitte for adherence to ISO Standard 14064-2. Virtually all of the publicly available documentation we release, including our Responsible Sourcing Strategy and Research Roadmap, have gone through similarly thorough, though less extensive, reviews.

There is a clear gap in the existing carbon market infrastructure related to effective oversight and auditing. Depending on the project type, such as with ocean-based approaches, auditors and similarly experienced third parties who can provide sufficient assurance and oversight may not yet exist. It is incumbent upon carbon removal practitioners to provide visibility into quantification and carbon accounting approaches, such that external parties can develop the ability to provide effective oversight over the work.

# 2.7 Information sharing and transparency

Has the project demonstrated the necessary level of transparency around processes, plans, and results such that reviewers and the public can effectively evaluate them?

## Our principles

- Data sharing builds trust, encourages action, and furthers our collective knowledge towards the goal of mitigating climate change.
- To further collective knowledge, Running Tide commits to sharing our research results, and ensuring that data and outcomes are transparent and available for the public and decision makers.
- Deployment-specific documentation will be public or available upon request.
- Supplier attestations are required for raw material sources, as well as records of material source locations and transportation details.

## How we demonstrate these principles

- Running Tide has shared, and will continue to share, data from our research projects. As mentioned above, we have established a quarterly data sharing and consultation process with relevant government agencies in Iceland. We are launching a Running Tide document library to provide a centralized location for our scientific work, system design, and quantification approach.
- All documentation Running Tide provides to the Icelandic Government is available upon request.
- As detailed in our Responsible Sourcing Strategy, Running Tide suppliers are required to provide attestations specific to materials sources as proof of baseline conditions, particularly in regards to the alternative end-state of residue inputs. This includes records of the origin of material sources, transportation details, and any associated emissions, which are available upon

request. As part of our Supplier Code of Conduct, Running Tide also holds the “right to audit” suppliers or inspect suppliers’ facilities to confirm compliance.

- Running Tide will host any credits generated in a publicly viewable database, providing a single source of truth and maintaining a record that will live in perpetuity.

Running Tide engaged with our Scientific Advisory Board and a range of external parties such as NOAA around the best external location to share data from our ongoing research projects, and we are open to suggestions for any appropriate sites that are widely utilized and respected within the scientific and policy communities.

# 3. Going Forward

It is our intention that these principles will be tested, iterated on, and improved as we learn from our initial operationalized research projects. The ability of the carbon removal industry to effectively govern itself and to set clear rules of the road for how to demonstrate responsible action in the absence of governing bodies is key, particularly in a market that is still establishing compliance mechanisms and working to build trust. Adhering to clearly defined principles, such as those laid out in this document, will help the carbon removal market to incrementally scale the solutions we need while reducing scientific uncertainties.

Above all, our industry must orient itself towards the scale required to solve the problem – billions of tons of carbon removed annually. Inaction is not an option, and rapid emission reductions, while essential, will not be enough on their own. If we are not looking at the reality of this crisis head-on and evaluating decisions against the clear risks of inaction, we will miss our limited window to take meaningful action, and the ability to scale promising solutions while we still have time.

Running Tide is committed to doing this work and helping to build the technology and infrastructure that helps carbon removal solutions succeed – but we can't do it alone. We are constantly seeking new avenues to share and improve our methods and impact, and to build our capacity to heal the ocean. We are eager to work with partners and collaborators from every sector.

We welcome and encourage all feedback on this governance framework – please feel free to get in touch at contact@runningtide.com.

# Appendix: Summary of Running Tide's Governance Principles

| Category | Our principles |
| --- | --- |
| **Best Available Science** | • The foundation on which our governance approach and principles are built. An established practice in natural resource management that ensures an activity evolves to match the best current available understanding of Earth systems. |
| **Science and research:**<br>Is the project based on foundational science? Has the project identified key research questions and developed plans to address them? | • Our system must be built on the foundation of best available science.<br>• Research is focused on questions that will reduce scientific uncertainty, with the end goal of identifying solutions that can effectively mitigate climate change.<br>• Research will be conducted with scientific integrity.<br>• Research plans are documented and publicly available to advance collective knowledge.<br>• Research is iterative and follows a staged progression towards scale, starting with laboratory and/or small scale controlled pilot experiments. |
| **Environmental and ecological:**<br>Has the project effectively considered the potential environmental and ecological impacts of planned activities, both positive and negative? | • Environmental risk is mitigated wherever possible through the design of the system deployed (i.e., "mitigation through system design").<br>• Proactive environmental risk assessments must be conducted prior to planned deployments. Processes must be implemented for ongoing monitoring, assessment, and data collection of potential risks identified.<br>• Monitoring plans must be shared and reviewed by an independent Scientific Advisory Board or similar impartial expert body prior to planned deployments. |

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| | • Methods for the accurate assessment of ecological impacts are informed by ongoing research and continuously refined based on best available science. |
| **Legal and regulatory:**<br>Does the project have clear permission to operate and an understanding of the legal and regulatory frameworks that impact the proposed activities? | • Clear permitting or permission to operate must be secured from relevant jurisdictions prior to planned deployments.<br>• Any potential conflicts with other ocean users must be evaluated and effectively managed.<br>• Where possible, Running Tide will advocate for regulation to enable the responsible implementation of positive interventions.<br>• The precautionary principle is considered in relation to our responsibility to act and the declining baseline state of the ocean. |
| **Technical:**<br>Do those conducting the project activity possess the technical capacity to understand project impacts, and effectively monitor and measure results? | • We must demonstrate a level of technical expertise required to fully characterize the potential impacts of our intervention prior to deployment.<br>• The quantification tools we use must enable comprehensive monitoring of risks specific to the system deployed, both during and after deployments.<br>• We must maintain the technical capability to fully understand the impacts of our work and refine the system based on the data collected.<br>• Measurement and monitoring instruments and models used in conducting research and/or evaluating results must be described as it relates to their role in quantification, and independently validated where appropriate.<br>• Technology systems must be tested, documented, and verified with sample data prior to being used in planned research projects.<br>• Where possible, subject matter expertise relevant to each component of the system deployed should be developed and resourced in-house. Where this expertise does not |

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| | exist, collaboration with external researchers and subject matter experts is required. |
| **Social, community, and equity:**<br><br>Have those conducting the project worked with all relevant local and community stakeholders to educate, engage, and garner feedback on plans and research? | • Where possible, we target our work to benefit communities among the most vulnerable to the impacts of climate change, and where the greatest socioeconomic, mitigation, and adaptation benefits can be realized.<br>• Communities impacted by our work, including coastal and indigenous communities, must be meaningfully engaged prior to conducting research, and longer term engagement strategies must be developed. Running Tide must provide mechanisms for ongoing feedback and grievance resolution with affected communities.<br>• Assessments of potential community impacts must be conducted and monitored over the life of a project. Where possible, these assessments should include quantitative metrics. |
| **External verification and oversight:**<br><br>Have those conducting the project ensured that independent expert parties can effectively review and validate the project work, approach, and results? | • Creation of an independent Scientific Advisory Board or similar oversight body to evaluate project approach and research plans.<br>• Environmental evaluations must be reviewed by independent third parties, and be made available for review.<br>• Quantification protocols and processes should be peer reviewed by industry experts and open for public feedback and consultation.<br>• Audits must be conducted on at least an annual basis by a qualified, impartial third party to confirm work conforms to criteria dictated by our Framework Protocol and results are accurately reported.<br>• Where they exist and are deemed appropriate, projects should follow established industry standards, such as GHG Protocol Inventory Best Practices and ISO standards. |

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| **Information sharing and transparency:**<br><br>Has the project demonstrated the necessary level of transparency around processes, plans, and results such that reviewers and the public can effectively evaluate them? | • Data sharing builds trust, encourages action, and furthers our collective knowledge towards the goal of mitigating climate change.<br>• To further collective knowledge, Running Tide commits to sharing our research results, and ensuring that data and outcomes are transparent and available for the public and decision makers.<br>• Deployment-specific documentation will be public or available upon request.<br>• Supplier attestations are required for raw material sources, as well as records of material source locations and transportation details. |