



**Intercepting plastic waste from rivers  
Request for Proposals (RFP)**



**Submission deadline: 12 July 2019**

## About the Benioff Ocean Initiative

The [Benioff Ocean Initiative](#) is a center for applied ocean research based at the University of California Santa Barbara. The purpose of the Benioff Ocean Initiative is to leverage the power of research to solve ocean problems and inspire the replication of these successes.

## UC Santa Barbara/Benioff Ocean Initiative + Coca-Cola Foundation Partnership

UC Santa Barbara's Benioff Ocean Initiative and the Coca-Cola Foundation have each committed \$1.5 million USD to create a \$3 million USD fund to be held at UC Santa Barbara to fund activities described in this RFP.

## River Plastic waste: Problem and Opportunity

Plastic waste has become a grave new threat to ocean health and to communities and coastal economies dependent on healthy oceans. The great majority of this plastic flows from land to the ocean in rivers. Indeed, up to 275 metric tons of plastic on average are estimated to enter the oceans from rivers every hour. Recent research has suggested that a large amount of this plastic waste enters the oceans via only a small number of rivers. This creates an exciting opportunity to strategically design and deploy cost-effective, high-impact interventions to catch plastic waste in rivers before it enters the ocean. While there is a strategic opportunity to capture plastic waste in key polluting rivers, there is great value in developing tools and techniques for intercepting plastic in any river worldwide where plastic waste is an issue.

## Proposal Goals

We invite collaborative teams to submit proposals for funding of pilot projects that are aligned with **both** of the following goals:

1. Effectively deploy a physical plastic waste capture system, in a river anywhere in the world, that will **intercept a significant amount of plastic waste in that river before it reaches the ocean**. These proposed river plastics capture system should consider the most effective techniques for plastic interception in the proposed

river system. The complexity of engineering solutions can range from traditional to novel.

2. Effectively **leverage the plastic intercepted by the capture system to communicate about the problem of plastic waste** to the community where the intervention is based. In this way, the intervention itself should provide data and inspiration to community partners to empower them to consider taking action in one or more of the following areas: local infrastructure for waste management and recycling, local engagement and behaviors associated with the generation of plastic waste, local policy governing waste management or plastic waste, or regional industry standards associated with plastic waste.

While it is vitally important to immediately slow or stop the flow of plastic waste from rivers to the ocean, the Benioff Ocean Initiative recognizes and emphasizes that there are myriad actions to address the global problem of plastic waste, beyond the context of rivers. The opportunity to capture plastic waste in rivers, however, provides a strategically important opportunity to meaningfully reduce plastic emissions from rivers to the ocean. What is more, river plastic captured can provide data, and therefore a story, describing the problems of plastic waste that may serve to inspire public and private change in respect to the production of plastic waste and disposal, change that will be required to systematically reduce new inputs of plastic waste.

### **Team composition**

Collaborative teams should include representation from all or most of the areas listed below, with a non-governmental (or similar organization) serving as the team leader. This team leader will submit the proposal, directly receive award funds, and redistribute funds throughout the team for project purposes. Government advisors will act only in a logistical support or advising capacity and will not be eligible to receive funding as the lead team member. While this conformance to this structure is preferred, alternate leadership structures may be proposed.

Teams must include strong leadership from the regions where the river plastic intervention strategy is planned. International collaboration is welcomed, and all facets of a proposal, including team composition, are improved by the inclusion of diversity.

1. *Non-governmental organization* (or similar; e.g. non-profit organization, for-profit charitable company) which will convene, organize, and oversee activities of all partners in the collaborative team, as well as receive and manage project funds. This partner will therefore serve as the grantee and project lead on finances, project execution, and reporting on project success.
2. *Governmental advisor* (e.g. local, regional, or country-level) that hold the jurisdiction to permit a plastic waste intervention strategy in the river of interest. The same governmental advisors should be well-positioned to use data from the plastic capture system to shape regional plastic waste management.
3. *Communication specialists* that will mobilize incoming data on plastic captured to identify the sources and routes by which plastic waste comes to that river. These communication specialists will then design and implement an outreach campaign to broadcast this story with whatever means are locally most effective and appropriate, with the goal of empowering local communities to access and use information on plastic waste in their environment to address this problem: from household- to regional- level change in behavior, waste management practices, and policy change.
4. *Engineers* to design and implement the physical river plastic waste capture system.
5. *Watershed or other environmental scientists* to advise or conduct *in situ* research to guide elements of the plastic waste capture system, such as the best location for the installation of the system in the river given local hydrology, methods of monitoring plastic waste capture over time, and preventing harm to river wildlife.

**Funding and budget:** Up to \$3.0 million will be awarded in installments to one collaborative team to design and implement a pilot plastic waste intervention strategy, both to effectively capture plastic and also create change inspired by the plastic waste captured that can address issues associated with plastic waste production waste management in and around that river. We anticipate that the largest portion of this funding will be disbursed in the first year of funding to support physical capture system installation and establishment of the communication/outreach program, with the remaining funds disbursed over the next three years of funding to support capture system and communication/outreach program maintenance. **Funding may include the following costs:**

- Project administration
- Permitting costs
- Personnel costs
- Research costs associated with determining best locations within a river system to install a river plastic waste capture system
- Costs associated with design, construction, operation, and maintenance of the river plastic waste intervention
- Costs associated with data collection of harvested plastic waste
- Communication campaign costs

While the Benioff Ocean Initiative has not allocated funds for costs beyond the scope of those listed above, teams may provide sources of additional costs for consideration within their budgets. These costs must be extremely compelling, well-justified, and must not detract from responsibly funding the core aims of intercepting plastic waste and communicating about this waste. Examples of these types of cost categories include :

- Costs associated with research and construction of new infrastructure associated with reuse, recycling, or disposal of intercepted plastic waste
- Costs of general river plastics research that does not directly support the goals defined above for the implementation of the river plastic waste capture system and associated communication strategy

Projects that can leverage funding from the Benioff Ocean Initiative to extend existing funding opportunities aligned with RFP goals or to secure new funding commitments will be favorably reviewed.

### **RFP Deadline**

Proposals must be submitted through the Benioff Ocean Initiative online portal by 6:00PM PDT on July 12, 2019.

### **Project timeline**

Proposals must share a detailed timeline for the rapid but effective installation of a river plastics capture system and the deployment of the associated communication

campaign. Pilot projects that budget for the maintenance of a pilot project for 3 years or greater after installation will be favorably reviewed.

## **Permitting**

Permitting will be an essential step in deploying a physical capture system in a proposed river site. Proof of permitting or demonstration of a viable permitting process is therefore required with each submission. If already obtained, competitive proposals will include copies of the permits themselves. However, if obtaining permits themselves will not be possible during the timeframe of this RFP, competitive proposals will include *either* a clearly mapped out description of the permitting process required to obtain said permits, *or* a letter(s) of support from the local government to the proposed intervention site indicating a clear pathway to successful permitting. If the coordinating party for the collaborative team is not based in the region where the river plastics intervention will be based, clear statements of invitation to carry out proposal goals in the region from governmental advisors or other local partners may be optionally included in the proposal submission.

## **Measuring captured plastics**

Proposals must include a plan to collect data on the types of plastic waste collected by a pilot river plastics capture system. These data on the type and volume of plastic intercepted by the river capture system should directly shape the project communication plan. A tenable and financially viable plan for data collection on captured plastics in any given river context must be documented in the proposal.

## **Regions of interest**

Proposals are welcomed from teams focused on a focal river **in any region of the world**. Proposals do not need to be submitted from top-ranked high plastic emissions rivers. However, proposals are especially encouraged from focal rivers that meet both of the following criteria:

1. River is situated in a region that can be shown to have high concentrations of plastic waste or in which plastic waste presents a particularly high threat to communities or local ocean health.

2. River plastic capture systems are planned near a city or settlement of a size that could stand to meaningfully collaborate with communications specialists on the proposal team to use the data and story of the plastic waste collected in capture system to address regional problems with plastic waste. The communication strategy discussed below would be localized to be shared with this focal audience.

### **Communication strategy**

Of equal or greater importance to the successful interception of plastic waste in a river via capture system is a strategy to empower local partners to constructively shape local behavior and policy concerning plastic waste. A communication campaign must be developed and properly financed in the budget to emphasize the importance of this facet of the pilot project. The communication campaign should be specifically targeted to effectively communicate in a culturally relevant way to the local audience where the river intervention pilot is situated. Data on plastic waste collected by the river plastic capture system must be used in some fashion by the communication strategy.

### **Processing plan for intercepted plastic waste**

Each proposal must include a detailed action and funding plan that will be taken by the project to reuse, recycle, or dispose of as responsibly as possible the plastic waste collected by the river plastics capture system. Pilot projects that are co-located with facilities or infrastructure to constructively handle the plastic waste via the plan outline will be viewed favorably.

### **Additional project considerations**

Competitive proposals should also include consideration of some of the following elements:

1. Jobs to operate and maintain the intervention should be drawn from local workforce.
2. The costs and engineering complexity of the capture system should be considered in context, with the aim to maximize the replicability of successful elements for this pilot project to other river systems by identifying those river characteristics (biology, hydrology, sociology) that influence the capture system's design.

3. To maximize the probability that successes in this pilot project may be replicated, facets of hardware, software, and communication strategy design that are constructed to be openly shared will be viewed favorably. Confidential or proprietary elements of a river plastics strategy should not be shared in a proposal, though proposals that include confidential or proprietary elements are still eligible to apply with those confidential elements noted as such.

4. Continuation of the intervention strategy (e.g. continued plastic collection, continued outreach/education, eventual removal of plastic capture system due to reduced plastic inputs, etc.) after the funding period is over is crucial. Proposals should therefore include a statement describing the submitting team's plan for sustaining the strategy's goals beyond the four years of support offered by BOI.

**Proposal submission portal:**

Proposals can be submitted via this form: <https://boi.ucsb.edu/river-plastics-rfp>

**Questions and further RFP communication:**

A public webinar regarding this RFP will be hosted by the Benioff Ocean Initiative on May 29, 2019. Those planning to apply to the RFP are encouraged to sign up to the [Benioff Ocean Initiative mailing list](#) to receive updated notifications regarding the RFP. Please email questions or communications regarding the RFP to: [boi-contact@ucsb.edu](mailto:boi-contact@ucsb.edu)