To address the main discussion points for this deliverable we conducted a short group survey to gain insights from the wide range of experiences our pod members have had working with communities of color. Below we have incorporated specific examples from this survey with our broader discussion of the main questions and provide several recommendations for improving future projects conducted in collaboration with communities of color. *Survey responses are in blue.*

- **Audit of previous interactions with communities of color at our organization:**
  - The majority of our Pod has extensive experience working with communities of color (6 of 9 respondents, mostly local research groups though, not always "indigenous people"). These experiences range from remote work in Africa (e.g., Botswana, Tanzania) and Pacific Islands to rural communities in Southern California. We provide several excerpts from survey responses regarding what was/is their contribution to the research project, from project conception to potential publication?:
    - supervision of entire project, conception, field work, analytical work and publication
    - I am a collaborator on a project led by a graduate student (her thesis) involving efforts to aid an indigenous community in Chile who reached out to scientists to design a strategy to monitor groundwater quality and quantity, since their water supply is under threat from lithium mining.
    - It depends. Typically their contribution has been related to help with logistics or field operations, and then only by the locals directly involved with/employed by the research station. In one case, there are local researchers who will be included as co-authors on any related publications. BUT an important note is that those local
      - lead author of project and manuscript
      - Project development, provide logistical and bureaucratic assistance, secure permits, students and techs for fieldwork, data analysis and publication.

- **What worked well in these interactions?**
  - Broadly, we found that interactions were most successful when members of a local university or organization were involved in the project. Further, the best experiences occurred when researchers engaged openly and honestly with local communities and made sure to share or explain the findings of their work. We provide a few survey responses as specific examples:
    - it's a great human experience
    - opportunity to engage with local communities in-person and in a hands-on way (better learning outcomes)
– without local involvement there is no way we could do the research: they know how their communities work, and they have local scientific knowledge that can't be gathered from literature.

● What did not work well, and how can this be better addressed in future plans?

  ○ One of the primary challenges in working with communities of color is trying to match local needs and interest with those of researchers. In such cases, it is important to engage key stakeholders as early in the project development as possible. This will help ensure that the results of the project address the primary research questions while also providing maximum benefit to the communities.

  ○ Another potential challenge is when there are more than one local community (e.g., “local” vs. indigenous). There may be tensions or different interests of these communities that are unknown to outside researchers. Engaging proactively with local researchers can be essential for navigating interactions between or across these groups. Also, you can define an expected code of conduct with local collaborators prior to beginning the project so that all team members are aware of the appropriate expectations.

*We provide a few survey responses as additional, specific examples:*

– It’s a great experience, but the challenges are a little different. for example, students from different backgrounds will have different educational levels / math skills, so you will need to be patient in this process – collaborating with a community could present a conflict of interest, but I think that acknowledging an unbiased scientific strategy up front (and adhering to it) should alleviate this concern

– I have a lot of concerns about the practicality of it and appropriateness to all situations. I see the benefits of gaining access to local knowledge, improving relationships between the local and scientific community, and in promoting and supporting diversity in STEM. That's the value to the scientist. The community benefits by getting access to expert knowledge, access and training in the sciences, and exposure to different fields of study. But there are potentially a lot of difficulties that are prohibitive. It may depend on the objective, but in my experience it takes a lot of time and effort to bring them into the conversation in a meaningful way because they're starting at a very different baseline understanding of how our science typically 'works'.

– expectations for compensation that we cannot honor. They assume that coming from a wealthy country we have unlimited resources at our disposal. This leads sometimes to misunderstandings and bad feelings.
• Are there ways to improve the outcome of projects already undertaken?

  ○ One of the best ways to improve the outcome of projects already completed is to reach out to key members of the local groups involved and share with them the data or published paper. If the paper has not yet been published, making sure to acknowledge assistance, permitting, and permissions is strongly encouraged. In some instances, including local collaborators or students as authors of papers is a great way to build collaborations and capacity.

  ○ Another way to improve ongoing or completed projects is to provide financial support for local collaborators or students to attend a conference or visit a US institution. These experiences provide valuable networking and learning opportunities for members from less privileged communities or institutions. Using travel funding from existing grants, writing in these expenses to future proposals, or helping apply for travel-specific grants are ways to support these efforts. At WHOI specifically, there is the Mary Sears Travel Fellowship that can be used to support international colleagues coming to visit or work at WHOI.

• Are there specific resources or guidelines that are needed to improve the process for planning ahead and working with communities of color?

  ○ One key observation from our Pod discussion is that there are many resources on this topic that already exist. So individual institutions should not necessarily reinvent the wheel. Additionally, there are experts and scholars who work directly on these topics and could be valuable resources worth consulting.

  ○ Karen Bailey at Univ. Colorado is one example:
    [https://www.colorado.edu/envs/karen-bailey](https://www.colorado.edu/envs/karen-bailey)

  ○ Additional things that may be helpful for helping design inclusive and effective research programs with communities of color are:
    - A general document outlining expectations and available resources
      § This can emphasize decency, humility, and generosity as essential attitudes for working with communities of color
      § Authorship and/or acknowledgements guidelines and reporting expectations (e.g., permit numbers included in publications).
      § Requiring that projects at contact at least 1 local organization of university prior to the start of a project
      § Each university or department can provide a web page or document that provides a variety of helpful resources that cover topics related to working with communities of color (e.g., ANSC Research Ethics)
      § Increased accountability for outreach and broader impact statements made on proposals. If NSF does not require detailed accounting of how a project’s activities met or exceeded the promised broader impacts perhaps institutions or departments can do that.
Regarding this very last point, we asked our pod “If relevant, do you feel like local communities have been/are included in the broader impacts of your proposals in a meaningful way that builds on the community’s identified needs and concerns?”, and here are some examples of responses:

– We are trying our best, but the impact isn’t as big as it could be with a community effort behind this..
– Not directly, unfortunately.
– Mostly, but I would like to have more contact with educators when writing broader impacts proposals that are aimed at providing K-12 geoscience educational opportunities
– Not really. We often give lip service to how our research improves the community in some way, but there is little direct translation to those communities.
– I have the feeling that, in some instances, the "broader impacts" of our proposals may be promising more outcomes for the community than we are actually planning to do, somehow to help the proposals to get through. Which is definitely not a good thing.

- Other general recommendations include:
  - Make every effort to learn about the culture or people you are working with and try to connect over non-science topics such as food or music
  - In projects or places that it can be challenging to connect with or engage the local community project leaders should contact long-standing NGOs or researchers that have worked in the area. This can help people make connections to the proper people or to enter a new location showing proper respect and collegiality with existing organizations.