



Native Women's
Association of Canada

L'Association des
femmes autochtones
du Canada

New Guiding Principles for Modernizing Fish Habitat Offsetting and Banking

WHAT-WE-HEARD REPORT

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Fisheries and Oceans
Canada

Pêches et Océans
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INTRODUCTION

Overview

In an effort to improve the conservation and protection of fish and fish habitats across Canada, Fisheries and Oceans Canada (DFO) is modernizing its offsetting and banking policies. Consequently, in the summer of 2023, the DFO embarked on [WAVE 3](#) engagements as part of the process of developing [Guidelines for Establishing and Managing Fish Habitat Banks](#) and [Measures to Offset Impacts to Fish and Fish Habitat](#) Under the [Fisheries Act](#) of Canada.

1. **Offsetting:** refers to any action that can be taken to offset or counterbalance the negative effects of a proposed project on fish and fish habitat.
 - Offsetting could include actions to restore or enhance a fish habitat or other measures that may benefit fish or fish habitats.
2. **Habitat banking:** involves the creation of one or more conservation projects (measures to restore or improve fish habitats in an area) to offset anticipated adverse impacts on fish and fish habitat from a future development project.
 - The benefits derived from the conservation projects will be deposited as habitat credits in a fish habitat bank.
 - The habitat credits from the development project can be used when an authorization request is made to offset any adverse effect on fish habitats related to the proposed project.

The DFO has established **eight** guiding principles related to habitat offsetting and banking including:

- Principle 1:** Offsetting is last in a Hierarchy of Measures
- Principle 2:** There are limits to what can be offset.
- Principle 3:** The benefits from offsetting measures must counterbalance the impacts.
- Principle 4:** Measures to offset are in addition to what would have otherwise occurred
- Principle 5:** Offsets should be located to optimize ecological outcomes, taking into account the needs of rights holders and resource users.
- Principle 6:** Measures to offset should generate self-sustaining benefits.
- Principle 7:** Time lags between the impact and results of offsetting should be avoided or minimized.
- Principle 8:** Indigenous Peoples should be engaged.

Methods

To ensure that the perspectives of Indigenous Women, Girls, Two-Spirit, Transgender, and Gender Diverse+ (WG2STGD+) Peoples are included in the DFO's policies and programs to improve the management of fish and fish habitats, NWAC hosted two roundtable discussions on the **New Guiding Principles for Modernizing Fish Habitat Offsetting and Banking**.



Two Virtual
Roundtable
Discussions



Discussion 1
August 28, 2023
24 participants



Discussion 2
August 31, 2023
13 participants

The two virtual roundtable sessions were conducted at the end of August. Twenty-four (24) people attended the first session while 13 people attended the second session. Each session lasted approximately 2.5 hours. The virtual discussions were hosted on Zoom by a panel including a Facilitator, Knowledge Keeper, the Senior Director for Environmental Policy at NWAC, and a representative from the DFO. Each session began with an opening prayer followed by an overview of the eight principles for **Modernizing Fish Habitat Offsetting and Banking**. The Facilitator then engaged the participants in a guided discussion. Using a PowerPoint presentation, each principle was presented to the participants in turn. Participants were then allowed to share their perspectives on each principle.

EXECUTIVE SUMMARY

This report represents the output from the two roundtable discussions related to the DFO's **New Guiding Principles for Modernizing Fish Habitat Offsetting and Banking**. The report includes an outline of each of the eight guiding principles for habitat offsetting and banking, questions related to each principle and the responses of participants to each of the eight guiding principles and questions. The information shared by participants in the roundtable discussions would help to inform the DFO's new proposed changes identified under the fish habitat protection provision of the [Fisheries Act of Canada](#).

Overall, participants were generally quite supportive of each of the eight guiding principles. However, they expressed some concerns and hesitations about proponents implementing these rules in practice. There were clear themes in their feedback across the eight guiding principles:

Engagement with Indigenous communities should happen early and be continuous.

Throughout the conversations, participants reiterated the importance of engaging meaningfully with Indigenous communities from the very beginning of a project. This they indicated will set the foundation for the project as a whole and will create space for the inclusion of Indigenous knowledge and begin a relationship-building process. Participants insisted engagement should happen early, often and be ongoing. This means including a broad engagement and community-based approach to collecting perspectives, rather than collecting the views of one or a few representatives. They believe that a variety of Indigenous voices within communities need to be heard to understand the impact at all levels. The consensus is that Indigenous communities should not just be consulted but involved throughout the entire process. Involving Indigenous communities from the beginning will also allow for Two-Eyed Seeing wherein traditional Indigenous knowledge can work in tandem with Western science.

Communication should be clear and transparent to create a long-lasting partnership.

To build and sustain relationships with Indigenous communities, there needs to be clear communication to build trust. Communication needs to be simple and concise to allow people at all levels of the community, particularly youth and Elders, to understand. Communication also needs to go beyond simply stating the solution – community members need to know why that solution is the best one. Participants expressed the importance of providing evidence when sharing updates and information about new methods or projects. They indicated that they cannot be expected to trust claims at face value and expressed the need for government and organizations to demonstrate that intended outcomes are possible and have occurred in similar situations. Indigenous participants view evidential support and community-friendly language as ways to show respect to their communities.

Implementation is a key to success – while Principles look optimal in theory, many question their efficacy in practice.

Although participants generally support the eight guiding principles, some concerns were raised about potential loopholes and lack of follow-through from government or industry parties. Guidelines need to be extremely clear leaving little room for interpretation. Participants believe that clear regulations and regulatory agencies will play an important role in ensuring that proponents are fully meeting the legal requirements for protecting fish and fish habitats. Participants also recognize that offsets take time to create the desired outcomes. They shared past experiences where new measures were put into place and left alone. As a result, many participants believe that these offset projects should be measured and assessed on an ongoing basis to ensure they are delivering the intended outcomes. More importantly, Indigenous participants believe they should be included in the maintenance of initiatives or projects in their communities to ensure the accountability of proponents.

Government and industry must respect and value Indigenous knowledge and traditions as a first step in the process.

Throughout the engagement sessions, participants repeatedly expressed the importance of not just consulting with Indigenous Peoples, but listening, valuing and applying the Indigenous perspectives collected. Incorporating Indigenous research methods and knowledge into the process is essential, and so is incorporating and abiding by various Indigenous seasonal calendars or traditional teachings. It is not just about collecting Indigenous perspectives but implementing them into the guidelines. Participants also mentioned the diversity of traditions and perspectives among Indigenous Peoples and the importance of seeking multiple Indigenous perspectives.

Prevention should precede mitigation – working to avoid negative impacts on aquatic habitats should be the priority, with off-setting as a last resort.

In response to the eight principles, participants continuously noted the importance of prevention before mitigation. They see off-setting as a last option and hope for governments and organizations to understand this as well. While this idea was clear within the principles themselves, it was a common thread that was mentioned throughout the discussions and is important to reiterate. Prevention will be a result of early consultations with Indigenous communities, as they will be able to provide insight early on. It will also come from the proper implementation of the guiding principles. Participants noted that restoration is not always possible in some cases and that being proactive about the possible impacts of projects and setting up prevention measures will eliminate the need for offsetting.

DETAILED FINDINGS

Principle 1: Offsetting is last in a Hierarchy of Measures

- a. Proponents should prioritize measures to avoid and mitigate adverse effects on fish and fish habitats.
- b. Restoration of aquatic ecosystems can be difficult and uncertain, so it is better to keep them intact to the extent possible
- c. Proponents should avoid working in or near water, whenever possible.
- d. Adverse effects on fish and fish habitat can be mitigated by reducing their spatial scale, duration and intensity.
- e. Proponents are required to demonstrate that measures to AVOID are applied first, then measures to MITIGATE have been fully considered before contemplating measures to offset.

Question: What process should be used to ensure that proponents demonstrate that they have avoided and mitigated possible impacts on fish and fish habitats?

KEY DISCUSSION POINTS: Principle # 1

Overall, participants agree that offsetting should be used as a last resort, and this principle encourages proponents to consider different options before offsetting.

"I like this principle because it causes us to reflect on all the different things that could be done before you even get to that point. ... this is usually on the forefront of the discussions of how we are going to do a compensation plan or the many options of putting in a road or something like that. ...this is a good principle that it is the last resort. Try not to disturb it if you do not have to is what I am trying to get at."

Meaningful Involvement of Indigenous Communities

Indigenous participants believe their knowledge should be included early on, thus providing traditional knowledge keepers and Elders with the opportunity to assess the land and identify any traditional plants and animals that might exist. Participants emphasized that inclusion must go deeper than consulting, stressing the need to engage Elders and the broader community. They listed many examples from personal experience, where the community's views opposed the singular representative that was consulted.

"In terms of community engagement, ...[there should be]...First Nations involvement, not just consultation. Have our traditional knowledge keepers and elders assess the area as well..."

"...communication and community engagement before projects being approved and groundbreaking starts. Not leaving it up to one individual, or chief and council to make the choices. From experience in our community, consultations normally take place with one individual who doesn't come back to the community and consult with the rest of our community to hear everyone else's thoughts and concerns. So, community engagement and communication are a major concern of mine and getting input from our youth, elders, knowledge keepers, fishermen/women and everyone in between."

“A meeting with the elder’s council of the area, even if not on registered First Nation land. They understand the area for a long time and understand the way the earth moves and creatures interact.”

““In my area, one of our first nations is having to fight against their own chief and council. The people DO NOT want fish farms in our ocean area and the chief and council are trying to allow them to keep doing fish farms in the Discovery Passage area. My point here is that even when contacting the community and the First Nations, even the same members from one band can have completely different views. but the elders all agree NO FISH FARMS, elder knowledge should be included in processes.”

Conducting and Sharing Environmental Impact Assessment (EIA)

Participants believe EIAs should be carried out, and that these or any other assessments should be made available to the public. To be useful for participants, assessments should outline potential impacts on fish and fish habitat, quantification and severity of these impacts, and assessments of the specific species that may be affected, as well as an evaluation of potential cumulative effects. It is also important that the results of these assessments be shared publicly and disseminated within the affected Indigenous communities.

“... an EIA that outlines potential impacts on fish and fish habit, quantification of the extent and severity of these impacts, assessment of the specific fish species and life stages that may be affected, and evaluation of potential cumulative effects.”

“Also, if there are tests being taken during that environmental impact assessment, to have the results and information available to the public.”

“Environmental impact assessment is also key!”

Clear Requirements, Thorough Reviews, Advisory Boards

Participants also stressed the importance of clarifying expectations for proponents. They believe the requirements proponents are expected to meet should be clear, without room for interpretation. To ensure this, they suggest including succinct lists of requirements, mandating up-to-date contact information for parties involved, and creating a rule stating that draft documents will not be accepted, only final documents. This will ensure all assessments have been conducted and finalized and all requirements are fully met. These rules can prevent proponents from finding and using loopholes. Along with these proposed rules, participants believe regulatory agencies should be reviewing and approving proposed measures to ensure they meet legal requirements and are sufficient in protecting fish.

“Regarding processes, pproponents should include an advisory board of community members of various backgrounds which includes, youth, elders, council members, knowledge keepers, and community members with the environmental background to be fully informed of past, present and future health of the water environment.”

“Regulatory agencies should review and approve the proposed measures to confirm that they meet legal requirements and are sufficient for protecting fish and their habitat and also proponents should strive to avoid impacts on fish habitat whenever possible by adjusting project designs, locations, or methods.”

“...include a simple bullet point list of what is acceptable and what is not. For example, draft documents will not be accepted, and submissions from proponents must be final documents will all the outlined requirements present as well as contact information for the parties involved hopefully for accountability, especially when there is turnover in those organizations. This is an issue in my community. We have

turnover with no overlap process, so the new staff are unaware of any progress or incomplete projects. There needs to be some type of contact with the prior knowledge and answers for enquiries.”

“I think this is a great principle. If I have anything to add, it would be making it clear that the proponent will be required to demonstrate fully before their project begins so that there is certainty throughout the whole project. A big pet peeve is when there are loopholes [in the wording]. Such as, “begin to demonstrate” instead of “fully demonstrate”. In my experience, many individuals or organizations can be sneaky and say they completed what was asked of them because the policy requirements were not clear on full requirements which allowed them to cut corners with no accountability.”

Principle 2: There are limits to what can be offset.

- a. There are some areas or types of aquatic habitat that are rare, and of exceptional ecological or cultural value or are particularly difficult to replicate artificially.
- b. If measures to offset would not adequately counterbalance the impacts on such areas or habitats, then the proposed harmful impacts should be considered unacceptable, and an authorization refused.
- c. Any work or activity that could jeopardize the survival and recovery of a listed aquatic species at risk will not be approved under the Species at Risk Act.

Questions: Which aquatic habitats should be considered rare and of exceptional Indigenous ecological and cultural value? What factors should be used to determine if an aquatic habitat will be difficult to replicate artificially?

KEY DISCUSSION POINTS: Principle # 2

Cultural value of aquatic habitat

Participants generally agree that the cultural value of aquatic habitats in Indigenous communities is important, but they feel it can be overlooked when new projects are considered.

"The one piece that really grabs my attention in this principle is the cultural value. Consultation in this province is not the best it can be. Historically, a lot of things have been pulled out of the North so most of the regulatory agencies or people that are working with permitting or any government bodies are now located in Prince Albert or South of Prince Albert. Everything was moved to the southern parts of the province which has created a huge disconnect with what is happening up here and with people, the cultural importance. There is a huge mistrust, especially with provincial governments... I think that the cultural value piece is something that is sometimes missed. There is so much focus on the Western science model of determining if something is rare, important, or exceptional and not necessarily putting an emphasis on Indigenous and land user knowledge. That is a very useful part of learning about the areas."

"I want to share my hesitation around these principles. I am from [Indigenous word] territory. Both the Columbia and the Fraser River run through my territory, and they are both salmon spawning grounds. They are a species with significant cultural value. We are arguing, at least in the Okanogan, that there is to be one species of salmon that should listed as a species-at-risk."

Lack of follow-through and misuse of Principle

Although participants are generally supportive of principle two, they expressed some hesitations about this rule in practice. They showed concerns about whether this principle could be used as a loophole for large corporations or projects. Some have experience with proponents doing the work of collecting Indigenous perspectives but providing no follow-through on what they heard from communities. This was a significant concern when it came to large projects:

“How would the principle be used to refuse a project such as the trans-mountain pipeline. Is it even possible? I have a lot of hesitation and anxiety around this because I see a lot of harmful impacts already. I could see this being used as another loophole to go forward with these major projects that are harmful to our species.”

“When these corporations want Indigenous knowledge, many people feel like it is just checking a box. They do the meeting and hear the words, but there is no follow-up.”

“Chief and council want it, and it is all about money. It is not about the fish and the community; the elders do not want it. And so, when you do the community involvement, it is sometimes hard because it's like, oh, well, do you go to the chief? And do you get they are okay about it, but the community is not?”

When asked if there are aquatic habitats that should be considered rare and of exceptional value, participants listed the following habitats as examples:

- **Coral Reefs**

“Coral reef is an example of a sensitive ecosystem prone to ecological perturbation. Any slight change in temperature and pollution will cause coral bleaching. Which is bad for the aquatic ecosystem.”

- **Archaeological sites near waterways and wetlands**

“..... many archaeological sites are located near waterways and wetlands and are irreplaceable. So many have been damaged or destroyed already. This principle has the ability to lend protection to these sites as well.”

- **Habitats containing rare plant and animal species.**

*“For my reserve, they just enhanced the riverbank because the dam flooded the traditional land we gathered, hunted, and picked fiddleheads on. Also, without consulting our people, they dump a bunch of rocks all along the riverbank, and we have a very rare plant called the **Ferberch Laoswart** [sic], which is endemic to only this part of the area in the world. It only grows here; they dump those rocks without consultation or questions. And I know this was years ago, but things like that had to be protected and should be still protected.”*

Factors Indigenous participants believe should be considered when determining the value of the land or habitats include the following:

- **Elder Knowledge**

“I think these conversations should be broader and done in person by going into communities, rather than via Zoom as many of our elders have “louder” voices as they have the knowledge of the lands as they do go out hunting and fishing as ways of survival.”

- **The complexity of the ecosystems**

“No work should be done if it takes an artificial replication. Factors for consideration: Complexity of the ecosystem, species diversity, habitat size and scale, water quality and hydrological dynamics, long-term stability, human-induced stressors, cost and resource constraints, and monitoring efforts. All that to say we are in a technologically advanced space and time but I'm not sure if artificial replication is going to be welcomed.”

- **Maintenance and Accountability**

“When it comes to implementation, we definitely need accountability at a community and individual level... especially for First Nations moving towards land code. It will take a long time, but we need our own people in all our own communities taking accountability and making good choices in terms of affecting our environment. We also need many people to help enforce these principles for those who won't take accountability. Which will have to come from a community/individual level.”

Principle 3: The benefits from offsetting measures must counterbalance the impacts.

- a. The benefits from measures to offset should counterbalance the harmful impacts by compensating for the loss itself, the associated uncertainty of success, and the time required for offsetting measures to be fully functional.
- b. Measures to offset can either support the same fish life processes as those that are impacted by the proposed works, undertakings or activities (in-kind or like-for-like) or can undertake restoration that would result in more habitat that is rarer or limiting than the habitat being impacted (trade-up or better than like-for-like).
- c. If a work, undertaking, or activity is likely to have adverse effects on aquatic species at risk, the offsetting measures must provide benefits to the same species, based on the objectives of the Recovery Strategy and Action Plan for that species.

Question: Should social and or economic trade-offs be included in determining the benefits and impacts of offsetting measures on fish and fish habitat?

KEY DISCUSSION POINTS: Principle # 3

Compared to other principles discussed, participants expressed greater uncertainty about Principle 3. Concerns were related to the language used within the principle itself the scope of the project and the potential impact at hand.

Community-based language

When discussing Principle 3, some concerns were raised about the language used, linking complicated language to a lack of respect for Indigenous communities.

"We are kinesthetic learners...Indigenous people are being given these big words and these significant equations to confuse us. Because of this complex communication, we have historically lost our land, treaty rights, and ancestral heritage rights...Therefore, your wording has to be very practical, where it is not just basic, but it is very community-based, where someone ten years old will understand what you mean to someone who is an elder....We are community-based and want our children, adults, youth, and Elders to understand it."

"If your language is not English and your first language is ancestral, you will have difficulty comprehending what offsetting and trade-off means."

Understanding the scope of activities and impacts considered

Concerns were also raised about calculating impacts from offsetting and the type of activities and impacts that must be considered:

"My only concern when we say this is, how big of a project and how much damage are we talking about? I do not want to make it a slippery slope where they could slip in something. What I am trying to understand when we are talking about offsetting, the process of how we are going to fully understand the activities and the impacts to make sure we do not create a bigger monster than what we had."

"Is 'offset' being used/interpreted as an activity to compensate for residual, unavoidable harm?"

Designated Areas & Restricted Access

Aside from these concerns, some participants shared examples of specific measures that can help repopulate fish, e.g., restricting access to habitats. Participants believe designating specific areas for research will leave other parts of the habitat unbothered, allowing the ecosystem to thrive.

"I think it would be very beneficial if the authorized officials, like scientific researchers, are only authorized to work in a designated lake or a body of water to have access to that just to avoid any interruptions of offsetting measures. This would help to repopulate the fish."

"In the areas where there are rare species or lakes or waters are not utilized as much, if the government has researchers doing work in that designated area should not be accessible only for the authorized officials to avoid interruptions."

Public Education

Some participants also expressed caution around taking too much land, saying they would like to see greater public education for a variety of learners.

"The more land we take, the more we will lose in the long run, i.e., water, animals, fish, trees & the air that we breathe. I firmly agree with you educating, informing, creating awareness for indigenous communities, via newsletters to be submitted on their websites or paper newsletters delivered in the communities, to educating, informing, creating awareness curriculum for all learners and educators."

Net Ecosystem Gain

Other participants said they would like this principle to encourage greater adherence to the practice of leaving the land better off than how it was found, in other words, creating a net positive impact.

"I would like to see this principle lean more towards 'leave it better than how you found it' as opposed to counter-balancing. I am on the side of better than like-for-like. Especially given the uncertainty of success with anything in life. Which it seems like this is where the principle is going - apologies for any misunderstanding - but it seems to be in the right direction anyway."

Principle 4: Measures to offset are in addition to what would have otherwise occurred.

- a. Measures to offset must be specifically intended to result in conservation gains beyond what would otherwise be achieved by planned or ongoing activities.
- b. This means additionality is measured against what would have occurred in the absence of the offsetting requirement.
- c. E.g., remediation or rehabilitation required as part of a project or to bring a structure into compliance is not considered an appropriate offsetting option.
- d. Proponents may choose to incorporate their offsetting measures into the design of their project, provided that the measures are over and above what is required to fulfill the function of the project and are being done mainly to benefit fish and fish habitat.

Question: How should we differentiate between conservation gains from measures to offset and conservation benefits that would have occurred in the absence of offsets?

KEY DISCUSSION POINTS: Principle # 4

Prevention Before Restoration

When discussing Principle 4, participants often mentioned the difference between prevention and restoration, and how the former should always be the priority. Participants had doubts about restoration being effective, or even possible, in some cases and felt that prevention was a better solution.

“An ounce of prevention is much more worthy than the restoration itself. Therefore, prevention measures put in place beforehand do not need restoration measures. And the same with offsets.”

“Restoration isn't feasible in most cases though, but using preventive measures would be a better option as the environment is changed/changing on a daily basis (storms forest fires so on). We had a dam in our community, and it was removed. But all the sediment built up from all the years the dam was there is now in our river.”

Lack of Evidential Support

Participants also expressed a need for evidence to support various solutions, including offsetting. They did not just want to be told that offsetting is a measure that will help to sustain aquatic habitats, they want to be shown. Demonstrating the impacts and benefits is essential.

“I realize offsetting is a viable solution. However, because I was saying we are visual learners, when you are doing your presentation, give at least four examples because four is a ... medicine wheel, four types of numbers, four examples in the world where offsetting was utilized and the benefits to it and the structural costs and logistics. You need to have evidential support.”

“You have to have more concrete evidence than that because I am Indigenous.”

“Most colonized people do not have the evidential support because they are not respected enough.”

Two-Eyed Seeing Research

Participants also believe that two-eyed seeing would be useful in making these decisions about conservation gains and benefits from offsets. This requires approaching issues using both Indigenous ways of knowing and Western science and includes more than just consulting Indigenous Peoples in the process but involving them in a more in-depth way. Two-Eyed Seeing would allow Indigenous Peoples to work with organizations on the projects to determine the best solution.

“Using that two-eyed seeing is so important in our research. Our elders and knowledge holders hold more weight to me than scientists who come into our communities. Our people have lived off the land and hold a closer connection to the land and have seen the impacts and changes throughout the years.”

“... It would be so nice if we could find a way for these studies could be done using both Indigenous knowledge and Western knowledge as well.”

Corporate Responsibility in Counterbalancing Negative Impacts of Offsets

Participants also believe the organizations implementing the offsets must be responsible for managing any negative impacts the offset might cause.

“Organizations responsible for offsetting should be responsible for the negative impact of the offsetting by showing environmental responsibility to counterbalance the harmful effects of the offsetting. A huge amount of resources should be dedicated to the target fish being impacted the most by the negative impact of offsetting.”

First Nations Exemptions

Participants were curious about their role and responsibilities with projects because First Nations are exempt from holding fishing licenses in certain provinces.

“First Nations in Ontario are exempt from holding fishing licenses to my understanding, with proof of providing their status cards, are they also exempt from doing any projects? This goes for all other provinces and territories.”

Youth Engagement

Engaging youth was seen as an important aspect in getting future generations to know more about offsets and getting them to care about the projects happening at home, in their communities.

“Using social media to engage youth, if we can get the next generations to know more, care more! Social media is good for the younger generations for sure, and I agree with paper newsletters and such for communities where the internet is expensive or where it's remote.”

Other participants did not feel the need to engage in further discussion about the Principle.

I feel like this [principle] is fairly straightforward and there is not really a lot to elaborate on

Principle 5: Offsets should be located to optimize ecological outcomes, taking into account the needs of rights holders and resource users.

- a. Offsets should usually be located close to the impact to maintain ecosystem function and integrity and benefit rights holders and resource users, but in some circumstances, it may be appropriate to undertake measures to offset at a more distant location, e.g., there are few meaningful offsetting opportunities available nearby.
- b. Measures to offset should be applied to complement and contribute to local, regional, or Indigenous fish and fish habitat conservation and restoration priorities.
- c. For aquatic species at risk, offsets must be located to support population and distribution objectives.

Question: What ecological or other considerations (e.g., social, economic) should be used to determine the choice of an offset location?

KEY DISCUSSION POINTS: Principle # 5

Case-by-case Approach

Participants did not list a set of considerations for choosing offset locations because they believe each case will be unique, requiring a case-by-case approach.

"I think it would be a case-by-case. You do not have a cookie-cutter solution for everybody's problem. Everybody and every situation is going to be different."

Follow-up on intended outcomes

Participants expressed the importance of following up on offset location decisions after they have been made and implemented, including site visits during and after work has been completed. This also speaks to the relationship-building component mentioned in other parts of the discussion and shows how important it is to close the feedback loop.

"Should there be a point, or somehow highlight that the offset is working? There are areas that have had some work done, but it has not done anything. It has just been left. They did this thing, and it is five years later, and no one has ever been back to make sure that it has been productive...Where is the follow-up in the outcome?"

"I also think measures to offset MUST be applied to implement Indigenous fish and fish habitat conservation and restoration priorities, as offsetting is always going to occur on unneeded territory."

Potential conflicts of interest

One participant was curious about potential conflicts of interest that may arise if the proponent is the government, and they were advised that the decisions can be taken to judicial review.

"What if the proponent is the government of Canada, for instance, the transmountain pipeline and there is a conflict of interest."

Principle 6: Measures to offset should generate self-sustaining benefits.

- a. Measures to offset should result in self-sustaining improvements beyond the harmful impacts of the works, undertakings or activities being authorized.
- b. The design of the offset should be such that the restored or enhanced ecosystem will behave and function with a similar level of natural variability as a natural system.
- c. An offset should not require perpetual ongoing maintenance.
- d. Active maintenance in the short to medium term is acceptable while new ecosystem components become established and fully functional.

Question: How could we ensure that measures to offset result in self-sustaining benefits consistent with Indigenous ecosystem values and Indigenous fish and fish habitat protection practices?

KEY DISCUSSION POINTS: Principle # 6

Relationship building

Participants see relationships between proponents, governments, and Indigenous communities as the key for self-sustaining benefits. Building long-term relationships requires working together from the beginning of a project, being transparent and clear with communication and information, and continuing to engage with communities throughout the entire process. They also mentioned involving the community at all levels – from youth to Elders – to engage them in the process and allow them to learn about what is being done and how they can support. Participants also expressed a desire to be involved in the maintenance of initiatives to ensure accountability.

“I think this comes to the engagement and relationship-building piece that is another area that is lacking between Indigenous nations and government. From the work that I have done, I am seeing that industries and companies are trying to be a bit more proactive on engagement. For it to be self-sustaining and long-lasting, we need follow-up. We need a relationship because there is so much information that could be shared if there was a stronger relationship. You might not have an offset abandoned because it is forgotten about. I think a big piece is the importance of engagement and of relationship with local land users and Indigenous people.”

“How will it remain undisturbed if the youth retaliate and destroy it, so they cannot have exact measurements in the future? That is what I think about it. So maybe by including some youth in the construction or participation, they'll feel that ancestral ties are creating a future.”

“I think relationship building is super important. I think that piece is often overlooked by the Government of Canada, DFO, and proponents.”

“That would take years if not generations to measure results. ... to be sure of protection practices. Everyone needs to be included no matter what.”

“Engage Indigenous communities from the beginning, have long-term plans and funding in place and include long-term capacity development plans.”

Youth Involvement

Since offset projects should be long-lasting, participants believe relationship building must also involve youth. They believe youth play an important role in the maintenance and longevity of offset projects. As such, participants suggest guardian programs, summer programs, and other opportunities to involve youth as community advocates will be necessary for the success of future offset programs.

“Programs to have youth and elders work together. My band is hoping to create space for knowledge passing! a space where elders can teach youth about indigenous knowledge and tradition.”

“Empowering the youth to be water and environment advocates for their community can both uplift the youth and give them a role in the community, which has the benefit to the land but also to their self-worth, especially with mental health. The health of the land has an impact on mental and emotional health and well-being.”

“Guardian programs have been a great resource for monitoring areas and also getting youth involved in these guardian programs.”

““Summer programs, ongoing workshops, etc. are important to pass knowledge on to the youth as they are the next caretakers of the land. I was involved in a food sovereignty program with elders and I learned a lot.”

Although the engagement and relationship-building piece is often seen as lacking, two participants shared stories from when youth involvement and relationship-building were successful and impactful:

“I worked in a program as a youth in Restoring Trails, and I still tell my kids about helping when we drive by that space. That space still holds my heart....”

“I worked on a project where a traditional ecological knowledge assessment was done in tandem with an archeological assessment to create Chinook spawning grounds along the Penticton River channel... The traditional ecological knowledge assessment and the technical report worked well and complemented each other...The whole project changed because of those assessments. It turned out successful. I cannot reiterate enough how important those are.”

Difficult Access Points

Participants believe the location of offset projects is an important consideration, and proponents should consider making points of access more difficult to reach to prevent vandalism or other disturbances.

“Access points could contribute to that problem of being disturbed or vandalized. So, I think putting them in a location that's more difficult to access would help prevent some issues. It wouldn't stop all of it but it's a start.”

Traditional Ecological Knowledge Reports

Participants believe traditional ecological knowledge reports are integral in proving projects can achieve self-sustaining benefits.

“Again, I want to reiterate that traditional ecological knowledge reports are necessary. Has DFO done experiments or tests in project or offsetting ... that support or prove self-sustaining benefits?”

Principle 7: Time lags between the impact and results of offsetting should be avoided or minimized.

- a. Proponents should avoid time lags between when the harmful impacts to fish and fish habitats occur and when measures to offset are functioning effectively.
- b. When a time lag is unavoidable, additional measures to offset must be implemented to make up for the harmful impacts resulting from the time lag.
- c. Measures to offset aquatic species at risk must be implemented before the harmful impact occurs and be fully functional to avoid a temporary loss that could affect recovery.

Questions: How can we ensure that offsets are implemented without time lags that can cause harmful effects to fish and fish habitats? If a time lag is unavoidable, what additional offsetting should be implemented to compensate for the effects of the time lag?

KEY DISCUSSION POINTS: Principle # 7

Raising awareness, sharing knowledge, and considering different seasonal calendars

When considering time lags between the impact and results of offsetting, participants stressed the need to consider various Indigenous seasonal calendars or traditional teachings in addition to other timelines. To prevent time lags, participants also see a need to raise awareness, share knowledge and engage a variety of community members to ensure that a variety of perspectives and calendars are taken into consideration.

“Every nation has a calendar, like Songi’s First Nation, My Nation, the 13 Moons, and the Ajibwa calendar. We are talking about time lag, but although we have the same values, processes, and protocols, dates may differ when the tide is out, the tide is in.”

“Compare and contrast Indigenous seasonal calendars.”

“Awareness of all nations is different, which is important. Because what one nation wants is not what all nations want, sensitivity to each is important. Avoiding pen [sic] indigeneity is so important. There are big differences.”

“I’d like sharing among communities because I think there is a general lack of familiarity with conservation offsetting. So, if there are opportunities to network and learn from other community experiences, I think that would be a benefit.”

“It is important to have proper communication between and/or among involved organizations, and the locals and strict policies that need implementation to minimize harmful impacts. Include as many people as possible, especially [those] who are aware of those areas being affected and we are culturally responsible for them. Having as many people as possible aware and educated about these projects is important.”

Creation of buffer zones and temporary habitat

When time lags are unavoidable, participants suggested the creation of buffer zones to protect habitats during such lags.

“If a time lag is unavoidable, create buffer zones around the impact area to protect sensitive habitats during the time lag. These zones can serve as refuges for fish and wildlife until full offset implementation.”

Or create temporary habitats, such as fishponds or areas that can support vulnerable life stages of fish species during the time lag.”

Compensation throughout project life

Some participants believe the compensation for offsets need to match the project life expectancy. As a result, the project life expectancy should be an important consideration when determining compensation.

“What is the developer's project life expectancy? If it's 25 years, then the compensation should extend for that duration.”

Negative Impacts

Additionally, participants recognize that offsets may not always be the right solution. In situations when time lags are unavoidable, proponents might need to rethink their approach to prevent further negative impacts from happening.

“If a time lag is unavoidable, should there even be more offsetting implemented; wouldn't it risk having a bigger negative impact?”

Principle 8: Indigenous Peoples should be engaged.

- a. Indigenous Peoples should be engaged early and often in the planning, design, implementation and monitoring of works, undertakings, and activities as well as measures to offset.
- b. Meaningful engagement helps proponents understand and address potential impacts on rights, identify potentially suitable offsetting measure sites aligning with the interests and rights of Indigenous Peoples, and may increase their overall support.
- c. Indigenous Peoples may possess knowledge relevant to the design and implementation of a proposed work, undertaking or activity and offsetting measure.
- d. DFO has an obligation to ensure impacts to Aboriginal or treaty rights are mitigated and accommodated.

Questions: What modalities, processes or governance arrangements should be used to ensure meaningful engagement of Indigenous Peoples in the planning, design and implementation of works or activities related to any measures to offset? How should indigenous interests and rights be considered and taken up during engagement?

KEY DISCUSSION POINTS: Principle # 8

Early engagement in the decision-making process

It is important to engage Indigenous people in the process early on when planning and undertaking projects. They want the opportunity to be involved at the project's conception, and their engagement should go beyond "checking a box". Engagement should be early, often, and continuous.

"To be involved and asked to be in Zoom meetings like this is a good start."

"I get that these principles are more to be guiding and not necessarily the actual project and implementation of these things.... but the actual doing part is where you do not see it happening. When it says Indigenous people should be engaged early, there needs to be that engagement happening from both government and industry. It cannot be sloughed off."

"...[engagement] has to start at the very beginning."

"Indigenous people need to be engaged from the start of a project and consulted throughout the project and into the follow-up. Not just once to check a box. Working with local First Nations, i.e.) emailing the info email and that email should be directed to the appropriate delegation."

"Indigenous people should be included from the start but, a native rep needs to have no interest in the outcome (money)."

Broad outreach in Indigenous communities & avoiding pan-Indigeneity.

Participants expect broad outreach into their communities so that a multitude of Indigenous voices can be heard. They expect the government to involve them and be accepting and respectful of traditional knowledge. Ensuring that not just one representative but many community members' voices are heard is essential. Participants are also

mindful of the risk of pan-Indigeneity when consulting with Indigenous communities – different communities will have different needs.

“You have to find out if a community is reaching out to their community members well. That is some homework you would have to do when dealing with First Nations. Did you include community input? Is there a possible way of including community input?”

“I am glad that you have your work addressing how to engage communities, and then you have to consider the uniqueness of each one of these communities that you're working with. Ideally, as a traditional person, I think there is a protocol for doing anything that has to do with the land. You have to ask for that space; you have to offer to use that space traditionally, like when you say during an engagement, it has to start at the very beginning.”

“I agree with being open and having more community involvement and a mixture of people from communities, elders, knowledge keepers, youth, guardians, chiefs and councils, fisheries departments, cultural coordinators etc. Not one individual or a select few individuals. Broaden the invitation for engagement.”

Acceptance of Indigenous knowledge and contributions

Participants expressed a disconnect between the government/industry and traditional Indigenous perspectives. Despite these disconnects or contrasting opinions, Indigenous people express the need for their voices to be heard, valued, and accepted.

“Our words must be heard, even good or bad; you need to hear them.”

“It is not like Indigenous people want to say no we cannot do these things, it is just that if the engagement is done right and done together...as partnerships, then it would be received a lot better. There is a piece missing for us in Saskatchewan, which keeps coming back to lack of engagement from the government.”

“Government and industry tend to have a point of view of short-term observations, measurements, and theoretical projections. Traditional knowledge tends to be deeper, based on multi-generational experience. The governments need to accept this perspective. My concern is that Western science is not dynamic enough and politics erode its strength.”

Loss of knowledge

An important part of accepting Indigenous knowledge is recognizing that many Indigenous communities have experienced loss of knowledge in the past. Participants believe governments and industry need to be respectful in engaging Indigenous communities and asking them to share their knowledge. Respectfully engaging Indigenous communities requires a tailored and respectful approach.

“The elders we have left hold knowledge that needs to be passed down before it is gone. They have been witnesses to the decline of our salmon due to fish farms, and they blame fish farms for the decline (as well as the loss of waterways etc.) elders have witnessed the decline due to fish farms but those words from the elders just gets put to the wayside because of chief and council wanting more \$\$.”

“Indigenous knowledge was almost lost due to residential schools; I am seeing in my area the people my age (40ish) starting to reclaim our knowledge of the land and the medicinal uses. It is amazing to see this happening but so much habitat is gone that it is hard to find some things now.”

“It's important to have proper communication between and or among the involved organizations and the locals and strict policies that need implementation to minimize harmful impacts.”

