U.S. – MEXICO – CANADA AGREEMENT SEA TURTLE BYCATCH REDUCTION AND PROMOTION OF SUSTAINABLE FISHERIES



BACKGROUND

Mexico provides critically important marine and nesting beach habitat for six of the seven species of the world's sea turtles. Two of the most iconic of these species, the North Pacific loggerhead and the East Pacific leatherback turtle, are listed as U.S. under endangered the Endangered Species Act. In recent decades, both species have suffered major population declines in the annual number of nesting females at their respective nesting rookeries. Mortality from fisheries bycatch continues to be the greatest threat to these populations. Reducing bycatch mortality will involve numerous government, academic, and NGO stakeholders in the U.S. and Mexico, as well as communities and fishers that directly interact with turtles. The ultimate goal of this effort is to develop approaches that promote sustainable fishing practices and livelihood opportunities that result in healthier sea turtle populations and marine resources to support coastal Pacific communities throughout Mexico.



MAIN OBJECTIVES

The USMCA Sea Turtle Bycatch Reduction Project is a U.S.-Mexico collaborative effort to recover North Pacific loggerhead sea turtles and East Pacific leatherback sea turtles, and likely other sea turtle species, by reducing sea turtle bycatch in gillnet and longline fisheries through rapid bycatch assessments, information exchanges with fishers and fisheries management entities, development and expansion of alternative livelihoods that unsustainable decrease fishing pressures, and fostering the adoption mitigation innovative bycatch of technologies and turtle-friendly fishing practices by artisanal gillnet and longline fishers in Pacific Mexico. These efforts relate to USMCA Articles (Sustainable 24.18 **Fisheries** Management) and 24.19 (Conservation of Marine Species), and will promote healthy sea turtle populations and longlasting, sustainable fisheries practices that do not harm non-target species.

GOAL 1

Improve understanding of the location and causes of loggerhead and leatherback bycatch mortality through rapid bycatch assessments in coastal communities.



- Develop socially appropriate interview protocols and questionnaires to characterize the nature and frequency of fisheries interactions with loggerhead and leatherback turtles.
- Conduct rapid bycatch assessments in up to 25 coastal fishing communities along the Pacific coast of Mexico.
- Identify areas with the greatest bycatch impacts to loggerheads and leatherbacks.

Goal 1 outcomes so far:

Actions for Years 1-3:

- Working with social scientists, we have adapted a survey questionnaire for use in coastal fishing communities throughout Mexico that will produce results that can be compared to similar data collection efforts throughout the East Pacific region.
- We have identified communities in which we will conduct bycatch surveys, and have started to engage with community leaders to ensure successful implementation of surveys.

GOAL 2

Engage with selected communities where bycatch is highest via Fisheries Learning Exchanges to foster dialogue for learning about what bycatch reduction strategies and approaches are most feasible and have most potential to be permanently adopted.

Actions for Years 1-3:

 Visit communities to cultivate trust and exchange ideas among fishers and across communities.





 Introduce new bycatch reduction technologies and discuss alternative livelihoods that will reduce fishery-sea turtle interactions.

Goal 2 outcomes so far:

• We have identified communities that are good candidates for Fisheries Learning Exchanges. Fisheries learning exchanges are anticipated to commence during late in Year 1 of the project.

GOAL 3

Develop, test, and implement bycatch reduction technologies identified during community and fisher engagement.

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LOOKING FORWARD

NOAA and USTR will continue to work with the Mexican Government and our project partners to promote sustainable fisheries practices and sea turtle conservation in Mexico. This will involve seeking technological fixes to fishing gear and adjustments in fishing reduce methods to fisheriesturtle bycatch interactions and increase sea turtle survival. Coupled with fostering alternative livelihoods that reduce fishing pressure, this project will continue to pursue holistic bycatch fishing solutions that engage communities, scientists, and management entities in efforts to recover loggerhead and leatherback sea turtles in the Pacific.

Actions for Years 1-3:

- Work with fishers to outfit nets with solar-powered lights and/or configure fishing gear in ways discussed during Fisheries Learning Exchanges.
- Conduct capacity building to train fishers in the use of solar-powered lights for net illumination (a technology that has been shown to reduce bycatch in other fisheries).
- Trials and fisheries engagement will continue throughout the project.

Goal 3 outcomes so far:

 We have identified communities that are potentially good candidates for bycatch reduction technology testing. Fisheries gear modifications and trials are anticipated to commence during Year 2 of the project.

GOAL 4

Work further with these communities to promote a communitybased, sea turtle programmatic strategy describing sustainable fishing practices such as permanent adoption of bycatch reduction technologies and alternative livelihoods that reduce unsustainable fishing pressure on sea turtles and other valuable marine resources.

Actions for Years 1-3:

- Community ambassadors will work with fishers to create local capacity to troubleshoot any issues with the continued use of the bycatch reduction technologies.
- Coordinate with communities to ensure that project findings and recommendations are shared to promote adoption of the most effective sea turtle bycatch reduction measures for each fishery and each community.
- Identify locally relevant incentives to promote the medium to long-term adoption of bycatch reduction practices.
- Assess the success of each locally implemented strategy, as well as the perceptions of community members.

Goal 4 outcomes so far:

• Community visits have commenced and fishers have been made aware of the project goals. These visits are the first of many, and are intended to cultivate trust with, and adoption of bycatch reduction strategies, by local communities.

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