

Fishery Improvement Project Workplan

Mexico Gulf of California Swimming Crab

Pot / Trap / Ring Net

2026 – 2029 Comprehensive FIP Workplan

Prepared for:

Direct Source Seafood
Alimentos del Mar de Norte America

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Background

The Gulf of California swimming crab FIP started in 2009 under the coordination of the Sustainable Fisheries Partnership (SFP). FIP coordination and leadership were transferred to the industry in January 2015. From 2015–2017, the FIP focused on strengthening supply chain compliance with fishery regulations — particularly minimum legal size, protection of egg-bearing females, and full observance of the seasonal closure. Additional efforts promoted the implementation of the fishery management plan.

In the first half of 2017, a new pre-assessment was conducted. Results were used to validate fishery improvements and to develop a workplan for the 2017–2020 period. During 2018–2020, despite financial constraints, the project completed four of the six proposed actions. Following major supply chain adjustments and the 2020 COVID-19 contraction, the FIP was upgraded to a Comprehensive FIP for the 2020–2025 period.

This document presents the updated 2026–2029 Comprehensive FIP Workplan, developed based on the Three-Year Audit Report (May 2026) and the SCS Global Services Pre-Assessment (December 2025). It addresses all outstanding gaps and new priority actions required to achieve an unconditional MSC pass across all Performance Indicators (PIs) under the MSC Fisheries Standard v2.01. Participants are confident that by the end of this workplan period, the fishery will achieve a score of 80 or higher on all MSC performance indicators.

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Acronyms

CONAPESCA	National Fisheries Commission
FAO	Food and Agriculture Organization of the United Nations
FIP	Fishery Improvement Project
IMIPAS	Mexican Institute for Sustainable Fisheries and Aquaculture Research
MSC	Marine Stewardship Council
PI	Performance Indicator
PRC	Pesca Responsable y Comercio Justo
UoA	Unit of Assessment

Definition of the FIP Unit of Assessment (UoA)

The FIP Unit of Assessment (UoA) includes the target stock(s), fishing method or gear, and fleets, vessels, individual fishing operators and other eligible fishers pursuing that stock.

UoA Element	Description
Target species	<i>Callinectes bellicosus</i> (Warrior swimcrab), <i>C. arcuatus</i> (Cuata swimcrab)
Stock(s)	Gulf of California stocks
Fishing gear type	Crab traps, pots and rings as described in NOM-039-PESC-2003
Fishing fleet	Small-scale producers with commercial fishing license for the crab fishery off the shores and estuaries from Puertecitos, Baja California to Playa Ceuta, Sinaloa in the Gulf of California (~2,000 vessels)

Principle 1: Sustainability of Fish Stocks

Action number and name	Action 1. A robust harvest strategy is in place and responds to the status of the stocks.
Action Goal	To transition from conceptual reference points and generic harvest control rules to formally adopted, pre-agreed decision rules embedded in regulatory instruments; and to demonstrate through independent peer review and simulation testing that the harvest strategy is robust to uncertainty.
Action Description	The 2026 Audit and December 2025 Pre-Assessment confirmed that the core stock assessment deliverable (Balmori-Ramirez et al., 2024; Rivera-Parra et al., 2022) was completed and that $B/BMSY \sim 1.0$ and $F/FMSY \leq 1.0$ for both target species. However, reference points remain generic ($K/2$, $r/2$) and have not been formally adopted into the CNP or Fishery Management Plan. Harvest Control Rules (HCRs) are expressed only as a conceptual equation without explicit triggers. This action formalizes the harvest strategy by incorporating reference points into management instruments, defining explicit pre-agreed HCRs, commissioning independent external peer review of the 2024 assessment, and initiating a Management Strategy Evaluation (MSE) or simulation testing exercise. These steps are required to advance PIs 1.2.1 and 1.2.2 from 60-79 to ≥ 80 , and PI 1.2.4 toward ≥ 80 .
Expected Completion Date	December 2028
Priority	High
Responsible Parties	PRC (lead); ALMAR, Task Force (supporting); IMIPAS, CONAPESCA
MSC PIs Addressed	1.1.1, 1.2.1, 1.2.2, 1.2.3, and 1.2.4

Action	Tasks / Milestones	Responsible (Lead)	Responsible (Supporting)	Target Date
Action 1. A robust harvest strategy is in place and responds to the status of the stocks.	1.1 Confirm updated reference points (BMSY, FMSY) from Balmori-Ramirez et al. (2024) as the basis for the formal harvest strategy submission to CONAPESCA / IMIPAS.	PRC	Task Force	Dec 2026
	1.2 Review current FMP and CNP and identify the regulatory pathway to formally incorporate reference points; prepare a technical dossier for CONAPESCA submission.	Task Force	PRC / ALMAR	Mar 2027
	1.3 Define explicit, pre-agreed Harvest Control Rules: specify management actions (e.g., TAC reduction, effort freeze, emergency closure) triggered if CPUE, biomass, or catch indices fall below defined thresholds.	Task Force	PRC	Jun 2027

	1.4 Complete an independent external peer review of the 2024 Balmori-Ramirez et al. stock assessment	PRC	ALMAR	Sep 2027
	1.5 Initiate a Management Strategy Evaluation (MSE) exercise to demonstrate the harvest strategy's performance and robustness to uncertainty under alternative stock hypotheses.	Task Force	PRC	Mar 2028
	1.6 Work with CONAPESCA to formally publish adopted reference points and HCRs in DOF via CNP update or FMP revision.		PRC	Sep 2028
	1.7 Promote the improved harvest strategy and HCRs to fishery participants.	ALMAR	PRC	Dec 2028

Action number and name	Action 2. Expand and operationalize the UoA data collection program			
Action Goal	To implement a continuous, systematic, fishery-dependent and fishery-independent data collection program covering the full Unit of Assessment, generating representative information to support stock assessments, bycatch monitoring, ghost fishing estimation, and habitat impact evaluation.			
Action Description	A standardized data collection protocol was agreed at the August 2020 FIP meeting, and scattered monitoring exists at selected sites (e.g., Puerto Penasco). However, the 2026 audit identified the absence of operational program as the most critical outstanding gap, affecting scores across multiple PIs (1.2.3, 2.1.3, 2.2.3, 2.3.3, 2.4.3, 2.5.3). Key gaps include: (i) no representative bycatch data across the whole UoA; (ii) no ghost fishing monitoring; (iii) no fishery-independent abundance indices; and (iv) no GPS-based gear deployment data for habitat overlap analysis. This action operationalizes the protocol UoA-wide, establishes at-sea observer or logbook coverage, creates a ghost fishing monitoring program, and collects spatial data on gear use.			
Expected Completion Date	January 2029			
Priority	High			
Responsible Parties	FIP Participants (lead); PRC, IMIPAS (supporting)			
MSC PIs Addressed	1.2.3, 2.1.3, 2.2.3, 2.3.3, 2.4.3, 2.5.3			

Action	Tasks / Milestones	Responsible (Lead)	Responsible (Supporting)	Target Date
Action 2. Expand and operationalize the UoA data	2.1 Finalize and distribute the standardized biological-fishing data collection protocol to all major landing sites in Sonora and Sinaloa.	Task Force	PRC	Mar 2027

collection program	2.2 Execute annual data collection protocol with at-sea observer coverage or validated fisher logbook systems at representative sites across the full UoA.	Task Force	PRC / IMIPAS	Jul 2027
	2.3 Include a ghost fishing monitoring program: collect data on gear loss numbers, recovery/retrieval rates, and estimate ghost fishing mortality by gear type (traps vs. rings).	Task Force	PRC	Sep 2027
	2.4 Collect GPS-based fishing location data from a representative sample of vessels to quantify the spatial extent of gear interaction with main habitat types and sensitive areas.	FIP Participants	PRC	Sep 2027
	2.5 Develop or contribute to a fishery-independent abundance index (e.g., CPUE standardization, survey design) to supplement landings-based assessments and reduce reliance on model assumptions.	Task Force	IMIPAS	Mar 2029
	2.6 Continue and expand genetic / metapopulation analyses on the Sinaloa side to resolve stock-structure uncertainties relevant to the harvest strategy.	Task Force	PRC	Dec 2028
	2.7 Analyze all collected data annually and generate standardized reports for input to stock assessments, PI scoring, and FisheryProgress submissions.	Task Force	PRC	Ongoing

Principle 2: Minimizing Environmental Impacts

Action name and number	Action 3. Evaluate and mitigate fishery impacts on associated species and the ecosystem
Action Goal	Confirm fishery impacts on primary, secondary, and ETP species, habitats, and the broader ecosystem; implement and evaluate mitigation actions where needed.
Action Description	The 2026 Audit confirms that primary species (Chinese pink snail) status is well-documented and scores ≥ 80 . Tasks 3.3 and 3.4 from the prior workplan remain incomplete. Specific outstanding gaps include: absence of a formal ghost fishing monitoring program; lack of a trophic model; outdated catch composition data (Balmori et al., 2012); and insufficient quantitative information on habitat overlap and spatial extent of gear use. This action completes carry-forward tasks and initiates new work to close information gaps driving 60-79 scores in PIs 2.4.2, 2.4.3, and 2.5.3.
Expected Completion Date	October 2029
Priority	Medium-High

Responsible Parties	PRC (lead); Task Force, ALMAR (supporting)
MSC PIs Addressed	2.1.1, 2.3.2, 2.4.2, 2.5.1, 2.5.2, 2.5.3

Action	Tasks / Milestones	Responsible (Lead)	Responsible (Supporting)	Target Date
Action 3. Evaluate and mitigate fishery impacts on associated species and the ecosystem	3.1 Update the catch composition to produce current, representative information covering Sonora and Sinaloa, replacing the 2012 Balmori et al. dataset as the primary evidence base for PI 2.1.3 and 2.5.3.	Task Force	PRC	Jun 2029
	3.2 Based on updated impact evaluation, confirm limited impacts or develop and promote specific mitigation measures (if needed)	Task Force	PRC	Sep 2029
	3.3 (if needed) Evaluate effectiveness of mitigation measures after one full fishing season and refine where needed.	Task Force	PRC	Sep 2029
	3.4 Continue promotion and testing of biodegradable / collapsible trap designs; document adoption rates and ghost fishing reduction evidence.	ALMAR	PRC	Oct 2029
	3.5 Promote update of the Fishery Management Plan (2014, no revision since publication) to include specific habitat protection provisions and formally reference current gear regulations.	ALMAR	PRC	Oct 2029

Action number and name	Action 4. Generate systematic evidence on habitat and ecosystem impacts
Action Goal	To produce updated, systematic, and representative monitoring data on spatial gear-habitat overlap, and ecosystem-level effects of the fishery.
Action Description	The 2026 Audit identifies key evidence gaps across the Ecosystem and Habitats components of Principle 2. Habitat Information score dropped due to the absence of quantitative data on the spatial extent of gear-habitat interaction. While ecosystem Information remains, score remains limited due to the lack of a current trophic model and sparse monitoring of discard and range-of-species-impacted data. This action operationalizes monitoring programs specifically targeting these gaps, and in coordination with action 2 (broad data collection) and Action 3 (impact evaluation).
Expected Completion	September 2029
Priority	High
Responsible Parties	Task Force (lead); PRC, ALMAR (supporting)
MSC PIs Addressed	2.3.2, 2.3.3, 2.4.2, 2.4.3, 2.5.3

Action	Tasks / Milestones	Responsible (Lead)	Responsible (Supporting)	Target Date
Action 4. Generate systematic evidence on habitat and ecosystem impacts	4.1 Generate updated spatial data on gear distribution and habitat overlap using GPS records from Action 2.4; map fishing effort over known VME and sensitive habitat layers	Task Force	PRC / ALMAR	Sep 2028
	4.2 Produce quantitative habitat impact assessment combining spatial overlap data, gear interaction characteristics (trap vs. ring), and habitat vulnerability classifications to evaluate compliance with PI 2.4.2 and 2.4.3.	Task Force	PRC	Mar 2029
	4.3 Develop a trophic model (or adapt an existing regional model) to characterize the ecological role of swimming crabs and primary species (pink snail) in the Gulf of California ecosystem; use to assess UoA trophic impacts.	Task Force	IMIPAS / PRC	Sep 2029
	4.4 Systematically collect and analyze discard and range-of-species-impacted data across the full UoA to identify ecosystem roles and support PI 2.5.3 advancement.	Task Force	PRC	Oct 2029

Principle 3: Management Effectiveness

Action number and name	Action 5. Compliance improvement and monitoring, control and surveillance (MCS) strengthening.
Action Goal	To demonstrate consistent, credible enforcement of fishery regulations and a measurable deterrent effect on IUU fishing within the UoA, sufficient to achieve PI 3.2.3 ≥ 80 at the next full assessment.
Action Description	PI 3.2.3 was scored 60-79 in the 2026 Audit (and <60 by SCS, 2025), representing the most significant barrier to MSC certification readiness. Evidence of systematic non-compliance is well-documented: fishing during closures, landing of undersized crabs, exceeding authorized trap limits, and government reports that current production is $\sim 60\%$ of historical levels due in part to widespread IUU activity. CONAPESCA enforcement data show active patrol activity, but jaiba-specific compliance data are absent, and there is no documented deterrent effect. This new action establishes a dedicated FIP compliance program, including a fishery-specific MCS plan, community surveillance committees, a traceability/logbook system, and regular reporting of enforcement outcomes.
Expected Completion Date	March 2029
Priority	High (critical)
Responsible Parties	ALMAR (lead); PRC (supporting); CONAPESCA, SEMAR, CSP
MSC PIs Addressed	3.2.3

Action	Tasks / Milestones	Responsible (Lead)	Responsible (Supporting)	Target Date
Action 5. Compliance improvement and monitoring, control and surveillance (MCS) strengthening	5.1 Engage CONAPESCA and SEMAR to develop a fishery-specific MCS plan for the jaiba UoA, including measurable compliance targets, reporting frequency, and coordination protocols between Sonora and Sinaloa.	ALMAR	PRC	Jun 2028
	5.2 Promote and support the formation of community surveillance committees in key production regions; document their establishment and activities.	ALMAR	PRC / CSP	Sep 2028
	5.3 Establish or improve a traceability system (e.g., electronic logbooks, enhanced Avisos de arribo) to generate jaiba-specific compliance data (landings by date/area/vessel) for reporting to FisheryProgress and audit purposes.	ALMAR	PRC / CONAPESCA	Mar 2029
	5.4 Advocate for consistent sanction application; document enforcement outcomes (number of sanctions issued, fines applied, prosecutions) specific to the jaiba fishery in Sonora and Sinaloa for each fishing season.	ALMAR	PRC	Ongoing
	5.5 Engage the FIP participants to promote a compliance culture; document FIP-driven compliance improvements and cases of voluntary self-reporting.	ALMAR	PRC / CSP	Ongoing
	5.6 Produce an annual compliance report for each fishing season (2027, 2028, 2029) summarizing patrol activity, inspections, sanctions, and trends in IUU indicators (e.g., landing of undersized crabs, trap limit violations).	PRC	ALMAR / CONAPESCA	Annual

Glossary

Pre-assessment: A pre-assessment is a preliminary evaluation of a fishery against all MSC performance indicators to provide a picture of the fishery's baseline environmental performance and challenges. A pre-assessment allows a fishery to identify any areas that need to be improved to reach an unconditional pass of the MSC standard. A pre-assessment must be completed by someone experienced with applying the MSC standard (e.g., is a [registered MSC technical consultant](#) or [accredited auditing body](#)).

Basic FIP: A fishery improvement project with time bound objectives for addressing a specific set of the fishery's environmental challenges to improve its performance against the MSC standard. Basic FIPs complete a needs assessment to understand the challenges in the fishery.

Comprehensive FIP: A fishery improvement project with time bound objectives for addressing all of the fishery's environmental challenges necessary to achieve a level of performance consistent with an unconditional pass of the MSC standard. Comprehensive

FIPs engage a party experienced with applying the MSC standard to complete an MSC pre-assessment to understand the challenges in the fishery and must have independent, in-person audits of progress against the MSC standard every three years.

Performance indicator: A performance indicator evaluates the success of a particular activity when compare against desired goals. In the case of FIPs that follow the MSC Standard, it measures the impact of the action in place against desired conditions or results.

