

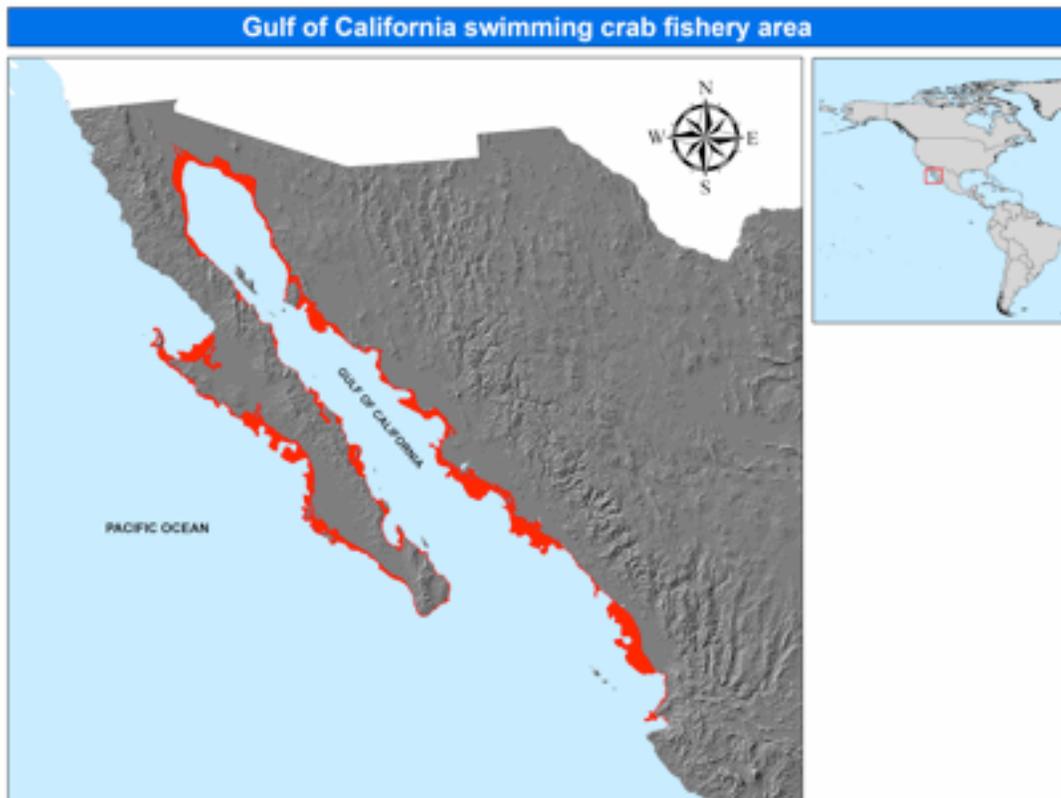
Gulf of California Swimming Crab Fishery Improvement Project Archive Date: January 2015

The Gulf of California Swimming Crab FIP transitioned from SFP to Desarrollo Integral de Jaiba de Mexico (DIMEX) in January 2015. The following FIP report reflects the status of the FIP at the time of transition. DIMEX had not yet posted a public FIP report when this report was archived.

Species: swimming crab (*Callinectes bellicosus*, *Callinectes arcuatus*)

FIP Scope/Scale: Fishery level, two species

Fishery Location: Northwest México



FIP Participants

- [Ocean Technology Inc.](#)
- Desarrollo Integral de Jaiba de Mexico SA de CV

Other Stakeholders

- [INAPESCA](#)
- [Comunidad y Biodiversidad AC \(COBI\)](#)
- [Centro Intercultural de Estudios de Desiertos y Océanos](#)
- Universidad Autónoma de Sinaloa
- Universidad de Sonora
- Instituto Politécnico Nacional

Sustainability Information:

For sustainability information for this fishery on FishSource see:

[Callinectes bellicosus](#)

[Callinectes arcuatus](#)

Date Publicly Announced: 2008

FIP Stage: 4, FIP is delivering improvement in policies or practices

Current Improvement Recommendations:

- Request the implementation of a management plan
- Request the legal verification of fishing gear
- Improve the landings registry and provide information to INAPESCA for stock evaluations

Background:

The increase in the demand of swimming crab meat in the United States and the fluctuations in their domestic fishery have led to an increase in demand from other countries in Asia and Latin America, with Mexico being one of the leading exporters to the USA. For example, in 1995, Mexico was the first country in Latin America and second worldwide to export crab products, with 1,500 tons of crab meat with a value of \$1.6 million.

The fishery is valued in Mexico at \$170 million, with a production of 18,000 tons of fresh product, of which 60 percent came from the Pacific coast, particularly the Gulf of California. The swimming crab fishery in the Gulf of California is of great importance to small-scale fishers in the months before and after the peak of the shrimp fishery (September to November). An estimated total of 2,193 fishing boats (locally named *pangas*), including 4,386 fishers and 139 fishing permits, were active in the Gulf of California. These *pangas* are mainly from the three swimming crab (or *jaiba*) producing

states – Sinaloa, Sonora, and Baja California Sur. These states fished 90 percent of the catches in the Gulf of California (Sinaloa, 45%; Sonora, 33%; and Baja California Sur, 7%).

The fishery is regulated by a Mexican Official Standard (NOM) which includes minimum legal size requirements and restrictions on fishing gear (type and number/vessel), egg bearing females, and type of bait. The NOM also controls the total amount of fishing gear in the main three jaiba production states (70,800 in Sinaloa, 43,600 in Sonora, and 8,000 in Baja California Sur). For the rest of the states (Baja California, Nayarit, and Jalisco) the restriction on fishing gear depends on the technical opinion of the National Fisheries Institute (INAPESCA).

INAPESCA defines the fishery as at maximum sustainable yield (MSY) and recommends against an increase in fishing effort in the three swimming crab fishery states.

FIP Objectives:

- Promote continuous monitoring of the fishery to maintain an up-to-date environmental impact evaluation
- Promote implementation of the fishery management plan
- Prepare the supply chain for the MSC full assessment process

Progress Update:

2008

- SFP and Ocean Technology Inc. agreed to collaborate in the FIP.

2009

January – March

- MSC pre-assessment agreed and contracted with MRAG-Americas having Ocean Technology Inc. as client.
- Fishery public information available was collected for the pre-assessment.

April – December

- MSC pre-assessment conducted by MRAG-Americas and FIP members.
- Desarrollo Integral de Jaiba de Mexico (DIMEX, Processor) became FIP participant.

2010

January – March

- MSC pre-assessment final report delivered to Ocean Technology.
- FIP Workplan designed and agreed based on the pre-assessment findings.
- FIP agreed on the fishery and fishery bycatch monitoring protocol developed by INAPESCA, COBI AC, and CEDO.

April – December

- Fishery Management Plan planning process started with the leadership of INAPESCA and COBI AC.
- Northern Sonora segment of the fishery stock assessment report delivered for revision.

2011

January – March

- Stock assessment for the Northern Sonora region concluded.

April – December

- FIP with support from INAPESCA and CIBNOR (Centro de Investigaciones Biologicas del Noroeste) started the fishery and bycatch monitoring covering all of the fishing grounds.
- Fishery management plan, including public audiences with stakeholders, process concluded. INAPESCA started to develop the final draft.

2012

January – March

- The fishery management plan proposal was finished and presented to the National Commission of Fisheries and Aquaculture (CONAPESCA) for their revision.
- Fishery and bycatch monitoring in southern Sonora and Sinaloa portion of the fishery to cover all of the fishing grounds concluded. INAPESCA/CIBNOR started the development of final report.
- Detailed workplan for 2012 publicly available.

April – June

- FIP participants held a meeting with CONAPESCA officers to request legal verification of suppliers fishing gear and enforcement on minimum legal size requirements on the landing places.

- Evaluation of fishery impacts concluded:
- 31 species were identified in the fishery bycatch.
- None of the species in the fishery bycatch is cataloged protected, endangered, or threatened; or is under some protection category. The most abundant group was that of mollusks (80% - mainly composed of the *Phyllonotus erythrostomus* snail), followed by the fish, crustacean, and elasmobranch groups.
- The elasmobranch group is composed by stingrays of the *Urobatis*, and *Urolophus* genus, neither being commercial or protected species.
- On average, 182 grams of fishery bycatch are obtained per each kilogram of crab fished, but this amount varies between communities and the type of fishing gear employed, the ring-net being the one that captures less fishery bycatch. This value is low in comparison with other fisheries that employ traps throughout the world (e.g., Alaskan crabs and the Pacific and Hawaiian lobster).

July – September

- Stock assessment for the Southern Sonora-Sinaloa portion of the fishery started by the Universidad Autónoma de Sinaloa and CIBNOR
- Report on fishery bycatch translated into English and publicly available
- The political transition process within federal government has delayed the stock assessment workshop due to INAPESCA involvement in that process. The workshop was rescheduled for April 2013.

October – December

- Fishery management plan concluded. Delivered to CONAPESCA for its final review and publication.

2013

January – March

- FIP sent letter to the new CONAPESCA commissioner to present the project, request a meeting to discuss the improvements needed and request the fishery management plan formalization.
- FIP sent letter to Sinaloa state government to request their collaboration to implement training programs to fishermen on the regulations and capture post-harvest handling.

April – July

The fisheries authority, upon request from crab producers, implemented, for

the first time in the fishery history, a temporary closure to protect the crab species reproduction peak.

- The initial closure designed by INAPESCA comprised the May – August period, however, producers and processors requested that CONAPESCA modify this design, since INAPESCA’s proposed closure period literally annulled the fishery, because during that period 60% of the landings are generated.
- CONAPESCA came up with a different design consisting of a total closure from May 1–June 30, followed by an only-females closure during July 1–August 31.
- FIP participants and suppliers presented to CONAPESCA/INAPESCA socioeconomic arguments against this design, which were accepted by CONAPESCA, which finally implemented the following closing structures:
 - Total closure from May 1 through June 3
 - Only-females closure from July 1 through July
 - This design was accepted and supported by the FIP participants and suppliers.

October – December

- FIP participants finalized the training for producers on the fishery regulations.
- The new stock assessment for the entire Sonora-Sinaloa region, prepared by two scientists independent to the fisheries institute, was accepted for publication in a peer review journal (expected publication in April 2014).
- INAPESCA scientists updated the fishery status analysis that will be included in the new version of the report Sustainability and Responsible Fishing in Mexico, published biennially by the Fisheries Institute.

2014

January – April

- The process to transfer the FIP leadership to the FIP participants started with training workshops on workplan (public and detailed) development, as well as on public reporting and communications.
- CONAPESCA organized a series of workshops to present the “Spatial Planning Program for the Sonora and Sinaloa Swimming Crab Fishery,” which is complementary to the Fishery Management Plan.

The Spatial Planning Program goals include the FIP's goal to achieve MSC certification for the fishery.

May – August

- The fishery management plan was finally formalized and published in the *Diario Oficial de la Federación* (DOF, the Mexican official gazette). The fishery management plan can be downloaded [here](#).

September – December

- The FIP leadership transition process was completed in November, with DIMEX assuming leadership as the industry representative in charge of FIP coordination and reporting after the publication of this (January 2015) update.
- The FIP participants approved the workplan for 2015–2017.

Gulf of California Swimming Crab FIP Detailed Information

Fishery Problem:

Summary of Fishery Status:

SFP own estimate:

| | |
|-----------------|----------------------------|
| Current Status | Status at beginning of FIP |
| Fully exploited | Fully exploited |

Other Ranking Systems: This fishery has not been rated by any other system.

FIP Progress Update:

| Results/FIP Stage | Indicator of Success | Scope/Scale | Specific Details | Date Achieved | List of Suppliers/Organizations | Source |
|---------------------------|---|-------------|-------------------------------|---------------|---------------------------------|-------------------------------------|
| FIP is launched (Stage 1) | Sustainability evaluation is publicly available | Fishery | National Fisheries Chart 2012 | August 2012 | CONAPE SCA | CNP2012 pages 45-47 |
| | Best practices guidance | Fishery | National Fisheries Chart | August 2012 | CONAPE SCA | CNP2012 pages 45-47 |

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|---|---|---------------|---|------------------------------------|------------------|--|
| | publicly available | | 2012 | | | |
| FIP is formed (Stage 2) | Suppliers are organized | Stocks/Region | Participatory process the management plan development | February 2012 | COBI INAPESCA | Management plan process |
| | Suppliers are evaluating this fishery | Stocks/Region | Bycatch monitoring to determine composition and volumes | July 2012 | INAPESCA COBI | Bycatch in the GOC crab fishery report |
| | | Stocks/Region | MSC pre-assessment | February 2010 | DIMEX | Confidential |
| FIP is encouraging improvements (Stage 3) | Workplan with annual improvement milestones is publicly available | Stocks/Region | FIP Workplan 2012 | February 2012 December 2012 | DIMEX | Workplan 2012 Detailed workplan |
| | | | FIP Workplan 2015-17 | December 2014 | | DIMEX |
| | Suppliers are engaging regulators | Stocks/Region | Fishery management plan development | December 2011 | INAPESCA COBI | Management plan process |

| | | | | | | |
|--|--------------------------|---------------|--|---------------|-----------|-------------------------|
| | | | ment process | | | |
| | | | FIP Participants contacted new CONAPESCA authorities to request meeting on the project | February 2013 | DIMEX | |
| FIP is delivering improvement in policies or practices (Stage 4) | Fisheries policy changed | Stocks/Region | Fishery management plan | December 2012 | INAPESCA | |
| | | | Fishery temporary closure | May 2013 | CONAPESCA | VEDA |
| | | | Spatial Planning Program for the Sonora and Sinaloa Swimming Crab Fishery | March 2014 | DIMEX | SAGARPA |
| | | | Fishery management plan | July 2014 | FIP | DOF |