IDENTIFICATION

- **Scientific Name**: Trachurus murphyi
- **Species Names**: Chilean jack mackerel
- **Common Names**: Jurel (Spanish)
- **Stock Identification**: Chilean jack mackerel is widespread throughout the South Pacific and the stock structure is not clear. Research based on genetic and otolith analysis supports the existence of a single population (SPRFMO, 2013a,b), as well as a recent analysis using a biophysical model, that indicates high dispersion range and spatial overlap of modeled recruitments, which supports the existence of a single panmictic population in the SE Pacific (SPRFMO 2016). A single assessment unit is here considered given the uncertainties.
- **Of the existing five management units, the Ecuadorian (GdE 2014), the Peruvian (El Peruano 2017) and the high seas fisheries (the SPRFMO Convention area; all pelagic trawlers) are exclusively for direct human consumption; Chilean fisheries operating (the northern, XV-II regions and the central-southern Chilean, III-X regions) are mainly used for fishmeal (Quiroz 2017).**

RELATED LINKS:
- Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA)
- Ecuador Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MALAF)
- Ministry of Production - Peru (PRODUCE)
- South Pacific Regional Fisheries Management Organization (SPRFMO)

ASSESSMENT

**Strengths**
- Since 2010, the South Pacific Regional Fisheries Management Organization conducts a joint jack mackerel assessment and since 2013, catch limits are agreed for the assessment unit area and for the Convention area, in accordance with scientific recommendations.
- A recovery plan (harvest control rule) has been adopted in 2014.
- The assessment model continues to be revised and improved. Data, information, and decisions from all fishing countries are integrated into the assessment process.
- Fishing mortality has been decreasing and is well below the target level.
- Joint efforts are in place to control illegal, unreported and unregulated fishing – list of IUU vessels, a Commission Vessel Monitoring System is being implemented and work is in progress to set up an SPRFMO observer program.
- Bycatch rates of commercial species appear to be low in most fleets, but comprehensive lists of bycatch species are not known to be produced.
- No interactions of the fishery with protected species are reported but it is unclear if reporting is adequate.
- A Chilean management plan was recently published for the fishery but does not include a harvest control, which is pointed out by the SPRFMO.

**Weaknesses**
- Although efforts have continued to elucidate the stock structure, conclusive evidence is not available and further research is required, e.g. tagging experiments. There are also uncertainties in the assessment related to natural mortality, input data quality, and growth.
- The spawning stock increased compared to last years but it is still below the MSY target.
- The Ecuadorian scientific recommendation or defined TAC for the national fishery has not been available in the last years.
- Reference points are provisional and uncertainties were raised by the SPRFMO Scientific Committee about the discontinuities in the fishing mortality to be applied under the harvest control rule and the constraints in the interannual TAC variability.

**Scores**

<table>
<thead>
<tr>
<th>Management Quality</th>
<th>Management Strategy</th>
<th>Managers Compliance</th>
<th>Fishers Compliance</th>
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<tbody>
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<td>≥ 6</td>
<td>≥ 8 to 10</td>
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**Stock Health:***

- Current Health: 7.5
- Future Health: 9.2

**MSC**
- Chile Purse seine jack mackerel (jurel): MSC Certified
- EU South Pacific midwater otter trawl jack mackerel fishery: MSC Full Assessment

**Recommendations**

RETAILERS & SUPPLY CHAIN
- Work with scientists to support the continuous improvements underway in stock assessment and research on the effects of environmental variability on the population.
- Encourage the South Pacific Regional Fisheries Management Organization (SPRFMO) to set biological reference points and harvest control rules that consider the species role in the ecosystem and shifts in environmental conditions.
- Encourage SPRFMO members and cooperating non-members to fully implement and comply with SPRFMO’s Conservation and Management Measures.
- Encourage the Government of Peru to continue setting their domestic TAC.
so as not to exceed the total stock catch limit advised by the SPRFMO Scientific Committee.

- Encourage the Government of Ecuador to publish their scientific advice.
- Support the fishery to implement measures to address conditions in the MSC certification, especially to minimize fishing-related mortality of associated fish species and ETP species.

Assessment Unit Profile
https://www.fishsource.org/stock_page/756
This profile last updated on 2 July 2019
Fisheries

Within FishSource, the term "fishery" is used to indicate each unique combination of a flag country with a fishing gear, operating within a particular management unit, upon a resource. That resource may have a known biological stock structure and/or may be assessed at another level for practical or jurisdictional reasons. A fishery is the finest scale of resolution captured in FishSource profiles, as it is generally the scale at which sustainability can most fairly and practically be evaluated.

<table>
<thead>
<tr>
<th>ASSESSMENT UNIT</th>
<th>MANAGEMENT UNIT</th>
<th>FLAG COUNTRY</th>
<th>FISHING GEAR</th>
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<td>Purse seines</td>
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Management Unit

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<th>ORGANIZATION</th>
<th>FISHING AREA</th>
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