

# Monterey Bay Aquarium Seafood Watch®

## Seafood Watch® Standards Revision FAQs

The Monterey Bay Aquarium Seafood Watch program updates its standards every four to five years to ensure they reflect the most up-to-date scientific thinking on sustainable seafood production. Seafood Watch's sustainability standards are used to conduct voluntary and non-voluntary assessments of global fisheries and aquaculture operations, empowering consumers and businesses to make informed seafood choices and to provide producers and managers with a snapshot of their operation's sustainability status and areas for improvement. The standards reflect the full spectrum of environmental performance. The current revision cycle began in September 2015 and will end in December 2015.

### Which standards did you revise?

Three standards and a separate criterion underwent review and revision during the current cycle:

- Standard for Fisheries
- Standard for Aquaculture
- NEW: Standard for Salmonid Fisheries
- NEW: Criterion for Greenhouse Gas Emissions

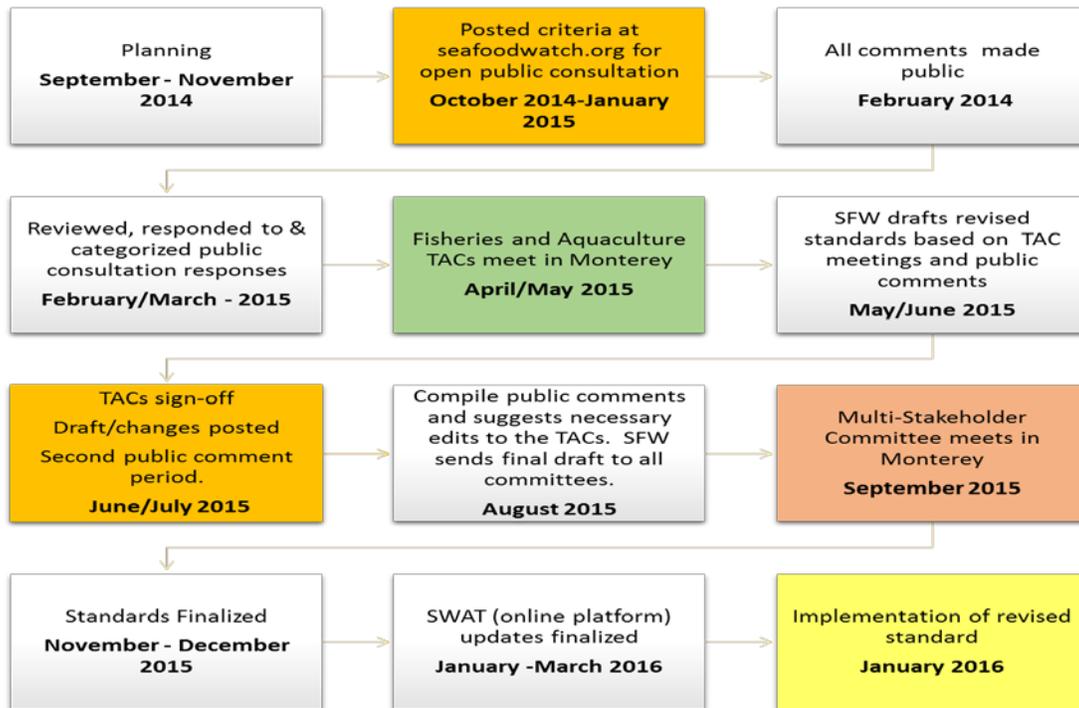
### What process did you follow?

The ISEAL Alliance [Code of Best Practices for Standard-Setting](#) was used to structure the revision process to ensure the highest level of assurance that best practice has been followed. The process consisted of the following steps:

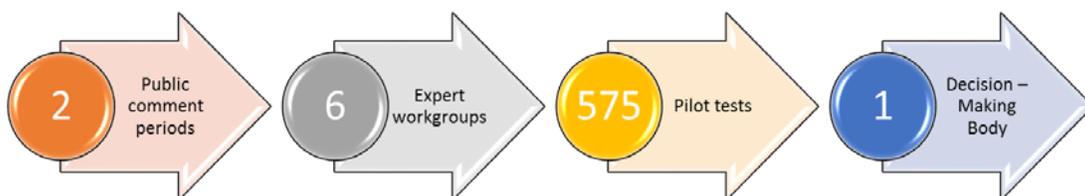
1. Seafood Watch staff propose revisions based on latest science related to sustainable seafood.
2. Proposed revisions undergo two public consultation periods: 393 comments received from 35 sets of comments, including from NGOs, industry, academia and government.
3. Seafood Watch responds to submitted comments.
4. Two technical advisory committees – one for fisheries and one for aquaculture – offer input and feedback revisions based on professional expertise and the public comments (committee members listed below).
5. Four expert working groups convened to review key parts of proposed standards: hatcheries, data deficient fisheries, greenhouse gas emissions and assessing species of exceptional importance to ecosystems (see below for members).
6. Proposed standards undergo pilot testing.

7. Multi-stakeholder group convened to review and approve changes (members listed below).

These steps and the timeline followed can be illustrated thus:



How did you incorporate the latest science and stakeholder input?



When do you plan on implementing the new standards?

Seafood Watch scientific reports released after January 1, 2016 will incorporate the new [fisheries](#) and [aquaculture](#) standards. The salmonid fisheries and greenhouse gas standards are targeted to be completed in late 2016 or early 2017.

What updates did you make to the Standard for Fisheries?

The following revisions were made to this standard:

- Increased robustness of assessment of data-poor fisheries, including:

- Incorporates a full Productivity-Susceptibility Analysis for species with unknown stock status based on the Marine Stewardship Council approach ([www.msc.org](http://www.msc.org)).
- Offers guidance to allow for the use of data-limited assessment methods in scoring. This guidance was developed with the help of the [data-limited assessment working group](#).
- Expands guidance on assessing the bycatch risk to all taxa when bycatch information is lacking. These “Unknown Bycatch Matrices” have been developed based on the peer reviewed literature database compiled by Project Global (for marine mammals, sharks, seabirds, and turtles), and are currently in technical review by bycatch experts around the world.
- Incorporated ecosystem role of forage fish into Criterion 1 and Criterion 2, accounting for the important role of these types of species in the eco-system. This was achieved by incorporating the work completed by the [Lenfest Forage Fish Task Force](#). Additional guidance for other species with exceptionally important roles in the ecosystem (apex predators, keystone species, habitat forming species, etc.) will be added as the science to support alternative reference points develops.
- Simplified categories in multiple criteria:
  - Makes assessment easier for analysts and therefore easier to keep consistent across reports.
  - Allows for fairer assessment of fisheries with non-serious endangered species interactions.
  - Clarifies “critical concerns”, which if occurring result in an Avoid recommendation regardless of the score for the other criteria.
- Incorporated discard rate into the final recommendation decision rules, such that the Criterion 2 rating for fisheries where discards are greater in volume than landings can be downgraded from green to yellow or from yellow to red.
- Incorporated the concern that a fishery should be performing well in stock status of targeted species or in management for it to be a “Best Choice.”
- Simplified eco-system based management factor because forage fish and other “exceptional species” elements have now been moved to Criterion 1 and Criterion 2.

## What updates did you make to the Standard for Aquaculture?

The following revisions were made to this standard:

- Combined all text in Background and Rationale sections into a single section and added situations in which Critical scores would be assigned within each criterion’s Background & Rationale section.
- Added specific scoring pieces into Effluent, Chemical, Habitat, and Feed for illegal activities.
- Increased the weighting for Area based management systems in the Effluent and Habitat criteria.
- Included more scoring options where information is unknown.
- The Data Criterion can now be counted as a red in Decision Rules and additional guidance was added for situations in which management/regulatory requirements are not available in the English.

- Under the Effluent Criterion, calculated adjustments for new basic score (0.42) for ponds with daily exchange of <3%, restructured management questions to address cumulative issues better, added illegal activities scoring options, and added plastics as part of the effluent definition.
- Under the Habitat Criterion, changed historical impacts from 10 to 15 years (to keep pace with Ramsar) and restructured management questions to better address cumulative issues.
- Under the Chemical Criterion, implemented the requirement that the Data score for Chemical category must be  $\geq 7.5$  for Chemical Criterion to score  $\geq 8$  and included option for score increase with strong data indicating a decrease in chemical use.
- Under the Feed Criterion, revised the Critical scoring option of aquaculture operations sourcing feed ingredients from IUU fisheries to specify  $\geq 25\%$  of the fishery to be operating as IUU; this is to maintain consistency with the Seafood Watch Fisheries Criteria. Changed Fish In: Fish Out (FIFO) terminology to Feed Fish Efficiency Ratio (FFER).
- Under the Escape Criterion, separated the Recapture & Mortality scoring adjustment, such that a Recapture scoring adjustment remains in the scoring table for Factor 6.1, Escape Risk, and post-escape mortality has been incorporated in the scoring table for Factor 6.2, Invasiveness. In addition, the Native and Non-Native scoring was combined into a single table and added option for net pens to score Yellow (4 or 6 of 10) with good data over a 10 years period (Factor 6.1).
- Separated the Disease Criterion into an evidence based or risk based approach based on quality of data available (same structure as Effluent criterion).
- Added scoring options in the Disease Criterion for the existence and robustness of biosecurity management measures to prevent the occurrence and spread of disease between farm sites and from farm sites to wild species.
- Added “Critical” Category for sourcing endangered species under the Source of Stock Criterion and changed it to an exceptional criterion.

## What is the status of the Standard for Salmonid Fisheries?

This standard is currently in development with an anticipated completion date of the end of 2016. It will address the following:

- Incorporates recommendations from the Hatchery Scientific Review Group to address concerns associated with artificial production systems used to supplement salmonid stocks caught and retained in salmonid fisheries.

## What is the status of the Criteria for Greenhouse Gas Emissions?

These criteria (one to add to the Standard for Fisheries and one to add to the Standard for Aquaculture) are currently in development with an anticipated completion date of the end of 2016.

A basic description follows:

- Fisheries – GHGs assessed will include those associated with Fuel Use and Bait Use (when applicable and available).
- Aquaculture – GHGs assessed will include those associated with farm level activities and feed production, with additional GHGs to be included as information is available.
- It accounts for the carbon footprint up to the dock or farm gate.
- A unit is defined as GHG emissions/unit of edible protein.

- Value will be communicated relative to land based protein sources – namely chicken and beef.
- This will be an unscored, informational criterion for this iteration and used as a data collection tool.

## Further Information

Further information can be found on our [standards revision webpage](#).

## Technical Advisory Committees, Multi-Stakeholder Group, and Expert Working Groups

The following experts and stakeholders have generously agreed to share their insight and expertise on the Seafood Watch Technical Advisory Committees, Expert Working Groups and/or Multi-Stakeholder Group.

### Aquaculture Technical Advisory Committee

|                     |                                   |
|---------------------|-----------------------------------|
| Peter Bridson       | Seagreen Research                 |
| Alejandro Buschmann | University de Los Lagos           |
| Simon Bush          | Wageningen University             |
| Steve Cross         | University of Victoria            |
| Kevin Fitzsimmons   | University of Arizona             |
| Anton Immink        | Sustainable Fisheries Partnership |
| Dan Lee             | Global Aquaculture Alliance       |
| Dave Little         | University of Stirling            |
| Jenna Stoner        | Living Oceans Society             |
| Peter Tyedmers      | Dalhousie University              |
| Jose Villalon       | Nutreco                           |
| John Volpe          | University of Victoria            |

### Fisheries Technical Advisory Committee

|                 |   |
|-----------------|---|
| Ashley Apel     | Fair Trade                              |
| Loo Botsford    | UC Davis                                |
| Elizabeth Brown | The Safina Center                       |
| Larry Crowder   | Center for Ocean Solutions              |
| Ginny Eckert    | University of Alaska Fairbanks          |
| Rod Fujita      | Environmental Defense Fund              |
| Chris Glass     | University of New Hampshire             |
| Martin Hall     | Inter-American Tropical Tuna Commission |

|                 |   |
|-----------------|---|
| Ellen Pikitch   | Stonybrook University                           |
| Nicole Portley  | Sustainable Fisheries Partnership               |
| Victor Restrepo | International Seafood Sustainability Foundation |
| Scott Wallace   | David Suzuki Foundation                         |

### Multi-Stakeholder Group (Approval Body)

|                    |                                      |
|--------------------|--------------------------------------|
| Christine Absil    | Good Fish Foundation                 |
| Terry Bradley      | Mount Cook Alpine Salmon             |
| Guy Dean           | Albion Fisheries Ltd.                |
| Katy Hladki        | High Liner Foods                     |
| Graham Forbes      | Greenpeace International             |
| Rebecca Goldberg   | Pew Charitable Trusts                |
| Jessica Greenstone | World Wildlife Fund South Africa     |
| Momo Kochen        | Masyarakat dan Perikanan, Indonesia  |
| Tom Kraft          | Norpac Fisheries Export              |
| Blake Lee-Harwood  | Sustainable Fisheries Partnership    |
| Fiorenza Micheli   | Stanford University                  |
| Cormac O'Sullivan  | SAI Global                           |
| Cu Thi Le Thuy     | Accreditation Services International |
| Trevor Ward        | University of Technology Sydney      |

### Expert Working Groups

#### Green House Gas Emissions Working Group

|                    |   |
|--------------------|---|
| Pete Bridson       | SFW Aquaculture Technical Advisory Committee member |
| Elliott Campbell   | University of California Merced                     |
| Rebecca Gentry     | University of California Santa Barbara              |
| Chris Glass        | SFW Fisheries Technical Advisory Committee member   |
| Martin Hall        | SFW Fisheries Technical Advisory Committee member   |
| Patrik Henriksson  | Stockholm Resilience Centre, Stockholm University   |
| Sara Hornberg      | SP Technical Research Institute of Sweden           |
| Lisa Max           | Seafood Watch (co-leader)                           |
| Brandi McKuin      | University of California Merced                     |
| Michele Stark      | SFW Aquaculture Technical Advisory Committee member |
| Peter Tyedmers     | Dalhousie University (co-leader)                    |
| Friederike Ziegler | SP Technical Research Institute of Sweden           |

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Salmonid Fisheries Standard Working Group

|                 |  |
|-----------------|--|
| Richard Beamish | Department of Fisheries and Oceans, Canada (Retired) |
| Stuart Ellis    | Columbia River Inter-Tribal Fish Commission          |
| Rich Lincoln    | Ocean Outcomes                                       |
| Nicole Portley  | Sustainable Fisheries Partnership                    |
| Jeff Regnart    | Alaska Department of Fish and Game                   |
| Greg Ruggeron   | Natural Resource Consultants                         |
| Robin Waples    | NOAA   |
| Sam Wilding     | Seafood Watch (leader)                               |
| Jeffery Young   | David Suzuki Foundation                              |

Fisheries Data-Limited Working Group

|              |   |
|--------------|---|
| Ashley Apel  | Fair Trade  |
| Loo Botsford | University of California Davis                    |
| Rod Fujita   | SFW Fisheries Technical Advisory Committee member |
| Kendra Karr  | Environmental Defense Fund                        |
| Robin Pelc   | Seafood Watch (leader)                            |
| Jono Wilson  | The Nature Conservancy                            |

*Management Considerations for Exceptional Species Groups*

|                        |  |
|------------------------|--|
| Ellen K. Pikitch       | Institute for Ocean Conservation Science<br>Stony Brook University |
| Konstantine J. Rountos |  |
| Christine Santora      |  |
| Natasha Gownaris       |  |
| Sara Cernadas-Martin   |  |