



OCEAN WISE RAPID ASSESSMENT STANDARD (RAPSTA)

Canadian Fisheries Results
for 2023

February 14, 2023

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RAPID ASSESSMENT STANDARD (RAPSTA) | CANADIAN FISHERIES RESULTS FOR 2023

FOREWORD

Over the past two decades, Ocean Wise has worked to make sustainable seafood a reality for Canadians. We work with the latest scientific information to assess fisheries environmental impact and through our network of partner businesses we identify the best performing fisheries with the Ocean Wise symbol; making it easy for consumers to identify those options that ensure the future health of our oceans.

However, the complexity and sheer number of distinct fisheries globally makes assessment challenging, time-consuming and costly. This is especially true with smaller-scale fisheries where data limitations can pose a significant challenge. To address this, the concept of a 'rapid assessment' methodology – one that operates at the speed of business, is less cumbersome and less costly, yet maintains scientific rigor - has been brought forward, however it has proven to be a difficult nut to crack.

Until now. The Ocean Wise science team – past and present – have been working to find a solution to this challenge and to come up with a rapid assessment approach that would allow for more fisheries, especially those operating at smaller scales, to be scored for environmental performance. With this, we are pleased to announce Ocean Wise's new Rapid Assessment Standard (RAPSTA).

RAPSTA will allow for the assessment of more Canadian fisheries, providing businesses and consumers with more sustainable seafood options. Over time, we believe that this truly unique rapid assessment approach will enable us to engage with more Canadian fisheries and allow us to track improvements over time.

Congratulations to the team for their hard work on putting this all together, with special acknowledgements to Dr. Laurenne Schiller who came up with the methodology, and Samantha Renshaw who put it all together and saw it to fruition.

Sincerely,

Mike McDermid

Director, Ocean Wise Fisheries & Seafood Initiative

EXECUTIVE SUMMARY

With 35% of global fish stocks experiencing overfishing and an additional 65% maximumly exploited, it is critical that governments, businesses and seafood consumers work together to restore abundance and promote sustainable fisheries (FAO 2022). Over 3 billion people worldwide depend on these fisheries as an important source of protein and a critical economic resource. To support a sustainable fishing industry in response to depleting fish stocks and increasing demand for seafood, several organizations (including Ocean Wise, the Marine Stewardship Council and Seafood Watch) offer eco-labeling programs that make it easy for consumers to purchase from sustainable sources.

Since 2005, the Ocean Wise Fisheries and Seafood Initiative has helped Canadians choose sustainable seafood by producing a list of 'Ocean Wise Recommended' products. To provide sustainable recommendations in an efficient and effective manner, Ocean Wise relies on data from third parties, including the Monterey Bay Aquarium Seafood Watch Program, which utilizes a sustainability standard combining indicators of stock health, impacts on other species and ecosystems, and fisheries management to assess the performance of a given fishery. Assessments like this can be costly and time consuming, and they typically focus primarily on large-scale fisheries and those which source substantial global markets (e.g. the United States). Historically, due to data and capacity limitations, there were a significant number of Canadian fisheries (primarily small-scale operations) for which an assessment has not been conducted by Seafood Watch nor Ocean Wise. Even more concerning is that less than one third of fish stocks in Canada are considered biologically healthy (Oceana 2022a). Recognizing the importance of small-scale fisheries and the need to understand the sustainability of domestic Canadian seafood, Ocean Wise has developed a new Rapid Assessment Standard (RAPSTA) to create a more comprehensive set of ratings for fisheries across the country.

To develop Ocean Wise's RAPSTA methodology we leveraged the publicly available dataset from the annual Fishery Audit conducted by Oceana Canada, a global leader in marine conservation advocacy. Based on stock assessments and other fisheries management criteria, made possible by data provided by Fisheries and Oceans Canada (DFO), the Oceana Canada Fishery Audit has become the go-to resource for evaluating the health of Canadian fish stocks. By pairing the Fishery Audit dataset with existing Ocean Wise data about the sustainability of Canadian fisheries we have developed a methodology to quickly assess each stock included in the Oceana Canada dataset. Outcomes from RAPSTA provide sustainability ratings for new species and fisheries, many of which come from small-scale fisheries that have otherwise been precluded from sustainability programs and certifications because of cost and effort. In total, 135 new ratings for Canadian fisheries were generated with 17 fisheries (13%) achieving Ocean Wise Recommended status. RAPSTA matched with 84% accuracy to existing OW recommendations once redundant or inaccurate stocks were removed. In fact, OW Recommended options paired with 100% accuracy to existing assessments. Overall, RAPSTA scores were found to be more precautionary than full assessments.

With the addition of RAPSTA to the Ocean Wise program, we are now able to provide a novel set of ratings for Canadian fisheries annually. We are especially excited by RAPSTA's potential to provide our team with ratings for small-scale fisheries not previously available to Ocean Wise. The future of RAPSTA is to continue to use this one-of-a-kind tool to engage with fisheries across the country to look for areas of improvements and continue to provide consumers with the best available science on seafood sustainability in Canada.

BACKGROUND

Since 2005, Ocean Wise Fisheries and Seafood Initiative has been committed to ensuring Canadians have access to recent and standardized information on the environmental impact of fisheries operating within Canadian waters and globally. Ocean Wise provides ratings for these fisheries based on the assessment criteria and associated Standards written by the [Monterey Bay Aquarium's Seafood Watch Program](#). The [Seafood Watch Standard for Fisheries](#) is used to quantitatively score for ecological impacts of a given fishery: target stock health (Criterion 1), the impacts of fishing gear on other species (Criterion 2), management (Criterion 3), and marine habitats (Criterion 4). This standard for wild capture fisheries is developed and maintained by Seafood Watch and considered by Ocean Wise as best practice for holistically assessing seafood's ecological sustainability. Although Seafood Watch has provided assessments for hundreds of fisheries, an ongoing limitation for Ocean Wise is the focus of Seafood Watch assessments on fisheries with high importance to the US market. As a result, Ocean Wise does not have a complete set of ratings for fisheries in Canada, especially small-scale operations.

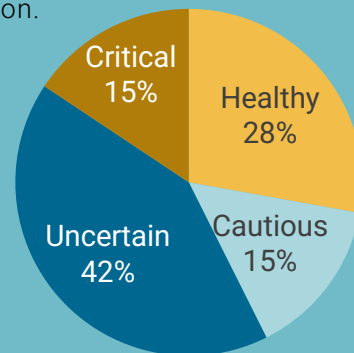
Oceana is a global leader in marine conservation and advocacy. Within Canada, the program has established itself as an important voice for science-based marine biodiversity protection, especially in the context of fishery impacts and marine protected areas. Since 2017, [Oceana Canada](#) has published an annual [Fishery Audit](#) of fish stocks in Canada based on Fisheries and Oceans Canada (DFO) stock assessment data and management plans. This resource currently amalgamates measures of target stock health as well as other key indicators for 230 stocks across the country and is the most comprehensive publicly available database of its kind for Canadian fisheries. The 2022 iteration highlights that only 27.8%¹ of stocks in Canada are currently biologically healthy and less than 20% of depleted stocks have comprehensive time-bound rebuilding plans.

The low coverage of Ocean Wise ratings for Canadian fisheries (by number) suggests Canadian consumers do not presently have access to sufficient information to make informed decisions on seafood sustainability. Ocean Wise currently provides 201² ratings for wild Canadian seafood of which only 32% are Ocean Wise Recommended. Unfortunately, Canadian ratings account for less than 6% of all Ocean Wise ratings. Further, based on the findings of the 2022 Oceana Fishery Audit, there appear to be few sustainable options for consumers wishing to purchase Canadian-caught seafood. Thus, merging the market availability of seafood with information on the ecological impacts of these fisheries is necessary. Herein we provide a detailed look at a new methodology to assess the sustainability of Canadian fisheries using the publicly available data from the Oceana Canada Fishery Audit by comparing it against the Seafood Watch Standard for Fisheries and existing Ocean Wise Canadian assessment data.

THE STATE OF CANADIAN FISHERIES 2022

In the Oceana Canada Fisheries Audit, stocks are assigned a status of Healthy, Cautious, Uncertain, or Critical according to the health of each population.

In 2022, less than one third of fish stocks in Canada are Healthy. The status of many stocks remains unknown.



Credit: Oceana Canada (2022b)¹

1. Based on the total number of stocks available for the 2022 Fishery Audit (n = 230). Oceana Canada uses stock indicators that are consistent year over year to provide comparative time series data (n = 194). Here we present summarized data relative to all stocks analyzed using the RAPSTA methodology
2. This includes Seafood Watch assessments only. Ocean Wise provides an additional 71 ratings for Marine Stewardship Council certified Canadian fisheries.

METHODS

Dataset Pairing

Two data sets were used for RAPSTA: the 2022 Oceana Fishery Audit and Ocean Wise Canadian ratings database (December 2022). Since the Seafood Watch Standard includes criteria for target stocks as well as gear impacts, we paired the two databases together to obtain all possible Stock-Species-Ocean-Gear combinations. To do this, we linked the Latin names of the species between the two datasets and applied the potential fishing gears for a given Stock-Species-Ocean based on the existing Ocean Wise data to the Fishery Audit data for these species. In cases where species were in the Fishery Audit but not in the Ocean Wise database, reasonable judgments were made based on similar species in the region (e.g. crustaceans were paired with trap and bottom trawl gears, forage fish were paired with purse seine, etc.). This pairing relied on gear-types defined from Seafood Watch reports so some terms were slightly redundant (e.g., purse seine vs. seine nets) but both were retained to ensure species were matched as close as possible to like-fisheries already in the Ocean Wise database.

Manual verification of Ocean Wise ratings for each Stock-Species-Gear combo was performed. Cases where a full Seafood Watch assessment was available or a stock was certified by the Marine Stewardship Council (MSC) were noted for accuracy comparisons. Given that RAPSTA was generated from the Fishery Audit dataset, there may be some fisheries for which an Ocean Wise rating exists but went unrecognized in the Fishery Audit Dataset (e.g. salmonid fisheries, kelp fisheries).

Note: below, we discuss the methodology used to obtain RAPSTA scores from the Seafood Watch Fishery Standard, but we do not discuss in detail the content of the Seafood Watch Standard itself. If you would like to learn more about the criteria in this Standard and all associated scoring, please visit the Seafood Watch website (<https://www.seafoodwatch.org/>).

“The objectives of RAPSTA are to give Canadians a more complete understanding of domestic seafood sustainability and fill gaps in our ability to provide recommendations for smaller-scale fisheries.”

Sam Renshaw

Science Lead, Ocean Wise Fisheries &

Criterion 1 | Species Abundance

Applying the Seafood Watch Standard to Fishery Audit data for Criterion 1

There are two sub-criteria in Criterion 1 (Target Stock Health): Abundance and Fishing Mortality. Four successive filters were used to determine scores for Criterion 1.1 (Abundance) based on the drivers of this criterion in the Seafood Watch Standard. First, all species in the Fishery Audit database underwent screening for existing Committee on the Status of Endangered Wildlife in Canada (COSEWIC) ‘Threatened’ or ‘Endangered’ listings or potential as invasive species. These are elements required for a comprehensive assessment of fishing impact on a given stock through the Seafood Watch Standard. This information (including the most recent year of COSEWIC assessment, if applicable) was added to the data set.

The first filter applied to the data set for Criterion 1.1 (‘C1.1. base’) scored each stock based on its 2020 Fishery Audit status (i.e. ‘STATUS’). Using the scores from the Seafood Watch Standard as a guide, ‘Healthy’ stocks were assigned a score of ‘5’, ‘Cautious’ stocks were assigned a score of ‘3.67’, ‘Uncertain’ stocks were assigned a score of ‘2.33’ and ‘Critical’ stocks were assigned a score of ‘1’.

The second filter applied for Criterion 1.1. ('C1.1 ETP') used the additional COSEWIC information to refine the score from 'C1.1 base'. Here, all species currently listed as 'Threatened' or 'Endangered' by COSEWIC received a score of 1.

The third filter evaluated the age of 'C1.1 ETP' relative to 'C1.1 base' as well as the age of the most recent stock assessment (or relevant indicators) overall. In cases where the stock assessment date was more recent than the COSEWIC assessment and the stock assessment was more recent than 2018, the 'C1.1 base' scores were deemed more accurate than the COSEWIC report.

The final filter assessed whether species were native or invasive. Any invasive species received a score of '5', otherwise, the score calculated in the third filter was retained as the final score for C1.1.

Three successive filters plus additional manual review were used to determine scores for Criterion 1.2 (Fishing Mortality) based on the drivers of this criterion in the Seafood Watch Standard. The first filter applied ('C1.2 base') evaluated whether either current fishing mortality or exploitation rate was estimated in the most recent stock assessment. If both of these were unknown (i.e. 'No'), a score of 3 ('Unknown') was assigned.

The second filter refined the outcome of 'C1.2 base' based on whether the known fishing mortality was 'Uncertain'. These stocks were also assigned a score of 3. From here, the third filter applied ('C1.2 Assessment') to the outcome of 'C1.2 'Unknown' tested to ensure the most recent stock status information was no older than 2018.

There was insufficient information to apply a comprehensive filter to all remaining 'TBD' stocks so the scores for these stocks were evaluated manually by using information in the Fishery Audit database (i.e. EXP_RATE_COMMENTS and F_COMMENTS) and, when necessary, by reading the most recent stock assessment provided in the Fishery Audit database. This was the only instance in the RAPSTA process where this type of manual review was used to score a sub-criterion.

Criterion 2 | Bycatch

Applying Ocean Wise averages to Fishery Audit data for Criterion 2

The score for 'Bycatch' in the Ocean Wise database was averaged for each 'Location' (e.g. Pacific, Atlantic, Gulf) and 'Method' (e.g. Trap, Bottom Trawl, Purse Seine) combination to determine scores for Criterion 2 (Bycatch). These averages were then applied to the Gear-Location combinations for each stock in the Fishery Audit data. In cases where no score was available for a specific Gear-Location combination in the Fishery Audit data, the closest match was used (e.g. Atlantic – Bottom Trawl was equivalent to Atlantic – Trawl (Bottom/Demersal)).

The four criteria Ocean Wise uses to assess fisheries sustainability are:



Criterion 3 | Management

Applying the Seafood Watch Standard to Fishery Audit data for Criterion 3

There were five sub-criteria for Criterion 3 (Management Effectiveness). Criterion 3.1 (Management Strategy and Implementation) for a given stock was deduced through the application of four successive filters. The first filter applied to Criterion 3.1 was linked to the result of Criterion 1. If the score of Criterion 1 was equal to 5, a score of 'HE' (Highly Effective) was applied to the stock. Criterion 1 scores greater than or equal to 2.3 were assigned 'ME' (Moderately Effective), those less than or equal to 2.3 were assigned 'IE' (Ineffective).

Subsequently, the second and third filters applied to Criterion 3.1 evaluated whether all stocks that originally scored 'HE' also had harvest control rules (i.e. target and limit reference points; Upper Stock Reference Point and Limit Reference Point). If these management targets were present, a score of 'HE' was retained, if absent, they were downgraded to a score of 'ME'.

The final filter applied to Criterion 3.1 assessed whether stocks for overfished species (where C1.1=1) had a rebuilding plan. If these stocks did not, they were given a score of CR ('Critical'). Importantly, fisheries that score 'CR' for C3.1 also score 'Critical' overall.

Scores for Criterion 3.2 (Bycatch Strategy) were determined similarly using the Gear-Location combinations from Criterion 2. If the Criterion 2 score > 4.9, the fishery received a score of 'HE'. 'ME' was applied to stocks with Criterion 2 scores 1.2-4.9 and 'IE' was applied to those stocks with Criterion 2 scores < 1.2.

Criterion 3.3 (Scientific Data Collection and Analysis) was assessed by filtering for stocks with full stock assessment and/or fishery indicators updated within the last five years (i.e. no stock status metrics older than 2018) as well as observer coverage onboard fishing vessels to ensure adequate verification of catch and bycatch data. Fisheries for stocks with assessments within five years and where at-sea monitoring was 100% (either through a remote system or onboard observer) received a score of 'HE'. All other fisheries received a score of 'ME' for this criterion.

To evaluate Criterion 3.4 (Enforcement of and Compliance with Management Regulations), fisheries were evaluated on logbook content and dockside monitoring. Those fisheries where logbook data (including bycatch) was collected (i.e. LOG CODE= Y-BY) and which had 100% dockside monitoring (i.e. DOCK CODE = Y-100) were awarded a score of 'HE' and all other fisheries received a score of 'ME'.

Criterion 3.5 (Stakeholder inclusion). This was the only sub-criterion for which all stocks received the same mid-range score. Since this sub-criterion is not a key driver of the Criterion 3 final score, this decision would have little impact on whether a fishery would receive a final score of 3 or 4 but it did prevent any fishery from scoring 5. Upon review, there were no fisheries that scored 'HE' for all other four sub-criteria (C3.1-C3.4) so in the case of this RAPSTA assessment, this decision for C3.5 had no impact on the final overall score for Management.



Criterion 4 | Effect on Habitat

Applying Ocean Wise averages to Fishery Audit data for Criterion 4

Similar to the method for scoring Criterion 2, the average score for 'Habitat Impacts' in the Ocean Wise database was averaged for each 'Location' and 'Method' combination. These averages were then applied to the Gear-Location combinations for each stock in the Fishery Audit data to score Criterion 4 (Impacts on Habitat and Ecosystem).

Final score calculation and associated ratings

As per the Seafood Watch Standard, the overall score for all fisheries was calculated as the geometric mean of the four criteria. All fisheries that equaled or exceeded a score of 2.8 overall were deemed Ocean Wise Recommended ('OW') and those that did not reach this score were Not Recommended ('NR'). As mentioned above, regardless of the scores for other criteria, if a fishery scored 'Critical' on management, it could not receive a 'OW' recommendation.

A FISHERY MUST SCORE 2.8 OR HIGHER IN ORDER TO BE OCEAN WISE.



The Seafood Watch Standard (and RAPSTA) scores will capture fisheries out of 5. We use a binary system in order to keep things simple for business partners and consumers.

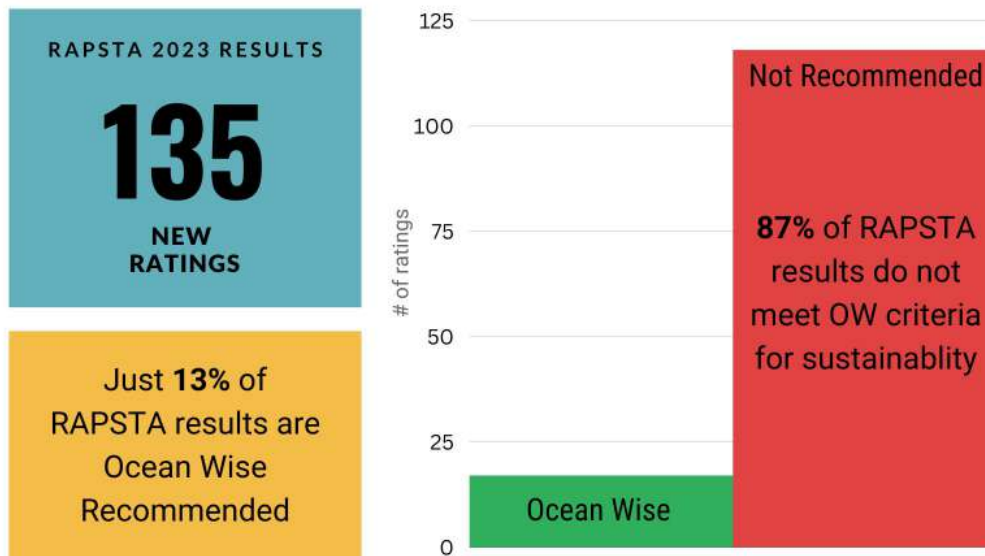
RESULTS

New Ratings

RAPSTA generated 199 new (potential) ratings relative to the original Ocean Wise database for Canadian fisheries based on the stock and species information provided by the Oceana Fishery Audit (Table 1). Despite this high total number of ratings generated through RAPSTA based on the 230 original Fishery Audit stocks, they are deemed 'potential' as certain Gear-Species-Location combinations may not actually exist. Since gears were paired with likely species based on existing Ocean Wise ratings for these species (i.e., demersal trawls for groundfish species, traps and pots for crustaceans, etc.) these combinations are possible yet some regions may not have these gears in use for the species in the dataset (i.e., just because gillnets could be used to catch Arctic cod does not mean that a fishery using gillnets to catch Arctic cod currently exists in practice). These possible combinations were investigated to the best of our ability to determine a final list of 135 fisheries that are highly likely to exist (Table 1).

Accuracy of RAPSTA scores

Outputs of RAPSTA paired with 70% accuracy to existing Ocean Wise ratings previously generated using the full Seafood Watch Standard (i.e., 141 of 199). Most incorrectly matched RAPSTA-Ocean Wise ratings based on the Seafood Watch Standard were for species caught in association with Pacific Ocean rockfish bottom trawl fisheries—the main driver here being different Criterion 1 (Stock Health) scores based on the Seafood Watch report from 2016. RAPSTA correctly matched 88 of 107 (84%) Ocean Wise recommendations when not including species from the BC Groundfish and any fishery whose status is currently Under Review by Ocean Wise (ex. Pacific herring) or has a Seafood Watch assessment pending publication, suggesting this method is highly robust for most species and gears Canada-wide. RAPSTA results which generated an 'OW Recommended' score were 100% accurate to existing assessments, while 'NR' results were 82% accurate. This means that while RAPSTA was consistent in matching overall Ocean Wise Recommended and Not Recommended statuses, final numerical scores generated through RAPSTA were overall biased toward more conservative (i.e., lower) values relative to existing Ocean Wise ratings. Multiple fisheries scored 'Critical' for management (Criterion 3) on account of stocks for overfished COSEWIC-listed species lacking a recovery plan. Overall, however, there was no other distinguishable pattern to this trend by region or by gear making it impossible to address comprehensively for all stocks and species. Therefore, the final 'OW' or 'NR' rating rather than the numerical score appears to be a better way of determining the effectiveness of the RAPSTA approach and communicating associated recommendations.



Of the new assessments, 17 were 'OW Recommended' and 118 were 'NR'. Most 'NR' combinations were driven by ineffective scores for management of target species (especially in the case of COSEWIC-listed species and a lack of associated robust recovery plan) or low bycatch scores (especially in the Atlantic Ocean due to concerns over fixed gear interactions with endangered whales). Stocks for which a rating could not be deduced included HAGFISH4VWX5Z and HAGFISH4T (hagfish (*Myxine glutinosa*)) and PISP_SCAL_PAC and PISP_SCAL_PAC (Pink & Spiny Scallop (*Chlamys rubida* & *Chlamys hastata*), since the gear used to catch these species (barrels & butterfly trawl respectively) were too dissimilar to other gears in the existing Ocean Wise database (i.e., no Criteria 2 or 4 scores could be applied). Stocks listed as 'Uncertain', received the second lowest score in RAPSTA outcomes. In order to assign a more accurate scoring, a full stock assessment is needed to understand the health of each species and stock.

Species-Gear-Location combinations that fit under an existing certified MSC fishery were excluded along with fisheries where a 'Draft' Seafood Watch assessment is currently under review. For this iteration of RAPSTA the Salmon Appendix included in the 2022 Fishery Audit was not used. In cases where a Seafood Watch report exists or is later released for a RAPSTA-based rating, the Seafood Watch assessment score will always supersede the RAPSTA-based Ocean Wise rating. The same applies for fisheries certified by the MSC.

What does this mean for Ocean Wise Partners?

Ocean Wise partners will be able to apply the Ocean Wise symbol to Ocean Wise Recommended RAPSTA fisheries following the same branding guidelines for other Ocean Wise recommendations, with the understanding that this suite of new assessments is subject to change annually (as opposed to a more typical 5 year timeline with full Seafood Watch assessments).



What does this mean for Canadian consumers?

With RAPSTA, we are now able to more quickly and efficiently provide Canadians with the information they need regarding the sustainability of domestic fish stocks. Although RAPSTA scores indicate many fisheries in Canada are operating below the level Ocean Wise considers sustainable, these data points are a critical piece of the puzzle that until now, were unavailable to partners and consumers. With RAPSTA outcomes, Canadian seafood ratings now account for 11% of all Ocean Wise datapoints. In fact, across all Canadian ratings in the Ocean Wise database (including newly generated RAPSTA results) just 29%³ are OW Recommended. This is broadly consistent with Oceana's findings that only a third of fish stocks in Canada are currently healthy (Oceana 2022a). This means it is more important than ever for consumers to consider where their seafood is coming from.

The good news is there are several steps for consumers who are concerned about the sustainability of the seafood they eat. First, choosing products branded with the Ocean Wise symbol ensures that item has been properly audited by our team as a biologically sustainable stock, harvested in a fishery that is well managed and having little or no effect on the wider ecosystem. Second, if the information isn't readily available on packaging, we encourage consumers to ask questions about the species name and what methods were used to harvest the seafood in question. Accessing the Ocean Wise seafood search function on our website can help consumers make an informed decision. Finally, supporting efforts to improve fisheries management and protect our fish stocks, like those outlined by Oceana Canada, help to drive change at the highest levels of government.

3. Including Seafood Watch and MSC data.



THE FUTURE OF RAPSTA

Until now, Canadians had a limited scope of ratings for seafood caught in national waters. Fortunately, RAPSTA will allow new fisheries and stocks to be easily evaluated with each new Fishery Audit from Oceana Canada. New Ocean Wise ratings will be generated each year based on annual Fishery Audit results. During this process, the latest data available to inform Criteria scores (primarily 2 and 4) will be used to generate current and accurate ratings year over year. Whenever possible, conducting a full assessment for fisheries in Canada will remain best practice. Thus, RAPSTA is not intended to replace or duplicate such assessments, nor is RAPSTA.

RAPSTA will ultimately become a valuable tool for tracking the environmental performance of Canadian fisheries and their associated improvements over time. As new recommendations continue to become available for smaller-scale fisheries through this new methodology, we hope RAPSTA will serve as a tool to engage more closely with small-scale producers and businesses across Canada. Given the large proportion of results that are “NR” we are optimistic that we can help fisheries improve ratings over time through the work of the Ocean Wise Fisheries and Seafood Initiative to not only protect and restore ecosystems, but to secure strong coastal livelihoods into the future.

In April 2022, changes to the Fisheries Act brought about a legal requirement to implement rebuilding plans for all Critically listed stocks. Currently less than a fifth of critically listed stocks have a rebuilding plan in place (Oceana Canada 2022). Improvements to fisheries management will benefit the overall well-being of Canadian fish stocks and we expect that as more rebuilding plans are put in place, the outcomes of RAPSTA will trend towards increasing numbers of OW Recommended options.

To our knowledge, RAPSTA is the first of its kind to produce rapid assessments for sustainable fisheries. The flexibility of this methodology will allow us to adapt the framework over time to expand rapid assessments beyond Canadian fisheries and into other geographies where suitable data is available. Equipped with this valuable new tool, it is our goal at Ocean Wise to continue to provide even more sustainable seafood recommendations in our efforts to combat overfishing and promote positive change in our world’s oceans.

OCEAN WISE REPORT

Table 1: List of new Ocean Wise ratings generated through RAPSTA (C1 = stock health, C2 = bycatch, C3 = management effectiveness, C4 = habitat impacts). Ratings highlighted in Orange under 'Ocean Wise Common Name' are ratings that will replace current, outdated Ocean Wise records.

Ocean Wise Common name	Scientific Name	Method	Stock ID Oceana	Ocean	Stock Details	C1 FINAL	C2 FINAL	C3 FINAL	C4 FINAL	FINAL RAPSTA SCORE	RAPSTA OW Rec Status
Capelin	<i>Mallotus villosus</i>	Purse Seines	CAPE_23KLPs	Atlantic	Capelin SA2+3KLPs	2.64	1.62	3.00	3.42	2.57	Not Recommended
Capelin	<i>Mallotus villosus</i>	Seine Nets	CAPE_23KLPs	Atlantic	Capelin SA2+3KLPs	2.64	1.92	3.00	3.67	2.73	Not Recommended
Capelin	<i>Mallotus villosus</i>	Traps (Barriers, Fences, or Weirs)	CAPE_23KLPs	Atlantic	Capelin SA2+3KLPs	2.64	1.53	3.00	3.24	2.50	Not Recommended
Capelin	<i>Mallotus villosus</i>	Purse Seines	CAPE_4RST	Atlantic	Capelin 4RST - East Coast, Gulf of St. Lawrence	2.64	1.62	3.00	3.42	2.57	Not Recommended
Capelin	<i>Mallotus villosus</i>	Seine Nets	CAPE_4RST	Atlantic	Capelin 4RST - East Coast, Gulf of St. Lawrence	2.64	1.92	3.00	3.67	2.73	Not Recommended
Capelin	<i>Mallotus villosus</i>	Traps (Barriers, Fences, or Weirs)	CAPE_4RST	Atlantic	Capelin 4RST - East Coast, Gulf of St. Lawrence	2.64	1.53	3.00	3.24	2.50	Not Recommended
Clam, Intertidal	<i>Nuttallia obscurata</i>	Hand Implements	INCLA_NCHW_RAZOR	Pacific	Intertidal Clam (North Coast Haida Gwaii Razor)	1.73	5.00	0.00	4.00	0.00	Not Recommended
Clam, Intertidal	<i>Venerupis philippinarum</i>	Hand Implements	INCLA_NCHW_RAZOR	Pacific	Intertidal Clam (North Coast Haida Gwaii Razor)	1.73	5.00	0.00	4.00	0.00	Not Recommended
Cod, Arctic	<i>Boreogadus saida</i>	Trawls (Bottom / Demersal)	ARC_COD	Arctic	Arctic Cod	2.64	1.00	3.00	2.50	2.11	Not Recommended
Crab, Arctic	<i>Hyas coarctatus</i>	Pots	RO_TO_CRAB_NL	Atlantic	Toad and Rock Crab - Newfoundland and Labrador region	2.64	1.00	3.00	3.40	2.28	Not Recommended
Crab, Arctic	<i>Hyas coarctatus</i>	Traps	RO_TO_CRAB_NL	Atlantic	Toad and Rock Crab - Newfoundland and Labrador region	2.64	1.70	3.00	3.50	2.62	Not Recommended
Crab, Spider	<i>Hyas araneus</i>	Pots	RO_TO_CRAB_NL	Atlantic	Toad and Rock Crab - Newfoundland and Labrador region	2.64	1.00	3.00	3.40	2.28	Not Recommended
Crab, Spider	<i>Hyas araneus</i>	Traps	RO_TO_CRAB_NL	Atlantic	Toad and Rock Crab - Newfoundland and Labrador region	2.64	1.70	3.00	3.50	2.62	Not Recommended
Cusk	<i>Brosme brosme</i>	Gillnets (Set / Anchored)	CUSK_4VWX5Z	Atlantic	Cusk - NAFO Divisions 4VWX5Z	3.32	0.95	3.00	3.12	2.33	Not Recommended

OCEAN WISE REPORT

Cusk	<i>Brosme brosme</i>	Longlines	CUSK_4VWX5Z	Atlantic Cusk - NAFO Divisions 4VWX5Z	3.32	0.95	3.00	3.12	2.33	Not Recommended
Cusk	<i>Brosme brosme</i>	Trawls (Bottom / Demersal)	CUSK_4VWX5Z	Atlantic Cusk - NAFO Divisions 4VWX5Z	3.32	1.00	3.00	2.60	2.26	Not Recommended
Flounder, Blackback	<i>Pseudopleuronectes americanus</i>	Trawls (Bottom / Demersal)	WINFLO_23KL	Atlantic Winter Flounder 23KL	2.64	1.00	3.00	2.60	2.13	Not Recommended
Flounder, Blackback	<i>Pseudopleuronectes americanus</i>	Trawls (Bottom / Demersal)	WINFLO_4T	Atlantic Winter Flounder 4T	1.73	1.00	1.00	2.50	1.44	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Trawls (Bottom / Demersal)	WIFLO_23KL	Atlantic Witch Flounder - 23KL	1.73	1.00	1.00	2.60	1.46	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Seine Nets	WIFLO_23KL	Atlantic Witch Flounder - 23KL	1.73	1.92	1.00	3.67	1.87	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Trawls (Bottom / Demersal)	WITFLO_3NO	Atlantic Witch Flounder - 3NO	3.32	1.00	3.00	2.60	2.26	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Trawls (Bottom / Demersal)	WITFLO_3Ps	Atlantic St. Pierre Banks (NAFO 3Ps)	2.64	1.00	3.00	2.60	2.13	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Seine Nets	WITFLO_3Ps	Atlantic St. Pierre Banks (NAFO 3Ps)	2.64	1.92	3.00	3.67	2.73	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Trawls (Bottom / Demersal)	WITFLO_4RST	Atlantic Witch Flounder 4RST	3.32	1.00	3.00	2.50	2.23	Not Recommended
Flounder, Yellowtail	<i>Limanda ferruginea</i>	Longlines	YEFLO_3LNO	Atlantic Yellowtail Flounder - 3LNO	3.87	0.95	3.00	3.12	2.42	Not Recommended
Flounder, Yellowtail	<i>Limanda ferruginea</i>	Trawls (Bottom / Demersal)	YEFLO_4T	Atlantic Yellowtail flounder - Southern Gulf of St. Lawrence (NAFO 4T)	1.73	1.00	0.00	2.50	0.00	Not Recommended
Flounder, Yellowtail	<i>Limanda ferruginea</i>	Seine Nets	YEFLO_4T	Atlantic Yellowtail flounder - Southern Gulf of St. Lawrence (NAFO 4T)	1.73	1.92	0.00	3.57	0.00	Not Recommended
Flounder, Yellowtail	<i>Limanda ferruginea</i>	Trawls (Bottom / Demersal)	YEFLO_5Z	Atlantic Yellowtail Flounder - 5Z	2.64	1.00	3.00	2.60	2.13	Not Recommended
Grenadier, Roundnose	<i>Coryphaenoides rupestris</i>	Trawls (Bottom / Demersal Otter)	GREN_23KL	Atlantic Grenadier - 23KL	1.73	1.00	0.00	2.60	0.00	Not Recommended
Grenadier, Roundnose	<i>Macrourus berglax</i>	Trawls (Bottom / Demersal Otter)	GREN_AT_ARC	Atlantic Roughhead Grenadier Atlantic and Arctic	2.24	1.00	0.00	2.60	0.00	Not Recommended
Hake, Silver	<i>Merluccius bilinearis</i>	Trawls (Bottom / Demersal)	SIHAKE_4VWX	Atlantic Silver Hake 4VWX	3.87	1.00	3.00	2.60	2.34	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Gillnets (Set / Anchored)	WHHAKE_3NOPs	Atlantic White Hake - 3NOPs	3.41	0.95	3.00	3.12	2.35	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Longlines	WHHAKE_3NOPs	Atlantic White Hake - 3NOPs	3.41	0.95	3.00	3.12	2.35	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Trawls (Bottom / Demersal)	WHHAKE_3NOPs	Atlantic White Hake - 3NOPs	3.41	1.00	3.00	2.60	2.27	Not Recommended

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Hake, White	<i>Urophycis tenuis</i>	Gillnets (Set / Anchored)	WHHAKE_4RS	Atlantic	Northern Gulf of St. Lawrence (NAFO 4RS)	1.73	0.95	0.00	3.10	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Longlines	WHHAKE_4RS	Atlantic	Northern Gulf of St. Lawrence (NAFO 4RS)	1.73	1.45	0.00	3.12	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Trawls (Bottom / Demersal)	WHHAKE_4RS	Atlantic	Northern Gulf of St. Lawrence (NAFO 4RS)	1.73	1.00	0.00	2.50	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Gillnets (Set / Anchored)	WHHAKE_4T	Atlantic	White Hake 4T - Southern gulf of St. Lawrence	1.73	0.95	0.00	3.10	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Longlines	WHHAKE_4T	Atlantic	White Hake 4T - Southern gulf of St. Lawrence	1.73	1.45	0.00	3.12	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Trawls (Bottom / Demersal)	WHHAKE_4T	Atlantic	White Hake 4T - Southern gulf of St. Lawrence	1.73	1.00	0.00	2.50	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Gillnets (Set / Anchored)	WHHAKE_4VW	Atlantic	White Hake Eastern Scotian Shelf (NAFO Divs. 4VW)	1.73	0.95	0.00	3.12	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Longlines	WHHAKE_4VW	Atlantic	White Hake Eastern Scotian Shelf (NAFO Divs. 4VW)	1.73	0.95	0.00	3.12	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Trawls (Bottom / Demersal)	WHHAKE_4VW	Atlantic	White Hake Eastern Scotian Shelf (NAFO Divs. 4VW)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Gillnets (Set / Anchored)	WHHAKE_4X5Zc	Atlantic	White Hake Western Scotian Shelf, Bay of Fundy and northern Georges Bank (NAFO Divs. 4X5Zc)	1.73	0.95	0.00	3.12	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Longlines	WHHAKE_4X5Zc	Atlantic	White Hake Western Scotian Shelf, Bay of Fundy and northern Georges Bank (NAFO Divs. 4X5Zc)	1.73	0.95	0.00	3.12	0.00	Not Recommended
Hake, White	<i>Urophycis tenuis</i>	Trawls (Bottom / Demersal)	WHHAKE_4X5Zc	Atlantic	White Hake Western Scotian Shelf, Bay of Fundy and northern Georges Bank (NAFO Divs. 4X5Zc)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Lumpfish	<i>Cyclopterus Lumpus</i>	Gillnets	LUFISH_4RS_3Pn	Atlantic	Lumpfish - Gulf of St. Lawrence-NAFO Divisions 4RS and Subdivision 3Pn	1.73	1.00	0.00	1.90	0.00	Not Recommended
Lumpfish	<i>Cyclopterus lumpus</i>	Gillnets	LUMP_2GHL	Atlantic	Lumpfish - 2GHJ	1.73	1.00	0.00	1.91	0.00	Not Recommended
Lumpfish	<i>Cyclopterus lumpus</i>	Longlines	LUMP_2GHL	Atlantic	Lumpfish - 2GHJ	1.73	0.95	0.00	3.12	0.00	Not Recommended
Lumpfish	<i>Cyclopterus lumpus</i>	Trawls (Bottom / Demersal)	LUMP_2GHL	Atlantic	Lumpfish - 2GHJ	1.73	1.00	0.00	2.60	0.00	Not Recommended
Lumpfish	<i>Cyclopterus lumpus</i>	Gillnets	LUMP_3KLP	Atlantic	Lumpfish - 3KLP	1.73	1.00	0.00	1.91	0.00	Not Recommended

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Lumpfish	<i>Cyclopterus lumpus</i>	Longlines	LUMP_3KLP	Atlantic Lumpfish - 3KLP	1.73	0.95	0.00	3.12	0.00	Not Recommended
Lumpfish	<i>Cyclopterus lumpus</i>	Trawls (Bottom / Demersal)	LUMP_3KLP	Atlantic Lumpfish - 3KLP	1.73	1.00	0.00	2.60	0.00	Not Recommended
Monkfish	<i>Lophius americanus</i>	Gillnets	MONK_3LNOPs	Atlantic Monkfish - 3LNOPs	3.32	1.00	3.00	1.91	2.09	Not Recommended
Monkfish	<i>Lophius americanus</i>	Trawls (Bottom / Demersal)	MONK_3LNOPs	Atlantic Monkfish - 3LNOPs	3.32	1.00	3.00	2.60	2.26	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Bottom / Demersal)	AMPLA_23K	Atlantic Labrador NE Newfoundland (NAFO 23K)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Bottom / Demersal)	AMPLA_3LNO	Atlantic Grand Banks (NAFO 3LNO)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Midwater / Pelagic)	AMPLA_3LNO	Atlantic Grand Banks (NAFO 3LNO)	1.73	1.00	0.00	1.91	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Bottom / Demersal)	AMPLA_3Ps	Atlantic St. Pierre Bank (NAFO 3Ps)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Midwater / Pelagic)	AMPLA_3Ps	Atlantic St. Pierre Bank (NAFO 3Ps)	1.73	1.00	0.00	1.91	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Bottom / Demersal)	AMPLA_4T	Atlantic Plaice (American), Southern Gulf of St. Lawrence - 4T	1.73	1.00	0.00	2.50	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Midwater / Pelagic)	AMPLA_4T	Atlantic Plaice (American), Southern Gulf of St. Lawrence - 4T	1.73	1.00	0.00	1.90	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Bottom / Demersal)	AMPLA_4VWX	Atlantic Scotian Shelf (NAFO 4VWX)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Plaice, American	<i>Hippoglossoides platessoides</i>	Trawls (Midwater / Pelagic)	AMPLA_4VWX	Atlantic Scotian Shelf (NAFO 4VWX)	1.73	1.00	0.00	1.91	0.00	Not Recommended
Redfish, Acadian	<i>Sebastes fasciatus</i>	Trawls (Bottom / Demersal)	ACRED_UNIT1_2	Atlantic Unit 1 and Unit 2 Acadian redfish (<i>Sebastes fasciatus</i>)	3.32	1.00	3.00	2.60	2.26	Not Recommended
Redfish, Acadian	<i>Sebastes fasciatus</i>	Trawls (Midwater / Pelagic)	ACRED_UNIT1_2	Atlantic Unit 1 and Unit 2 Acadian redfish (<i>Sebastes fasciatus</i>)	3.32	1.50	4.00	3.00	2.78	Not Recommended
Redfish, Acadian	<i>Sebastes fasciatus</i>	Trawls (Midwater / Pelagic)	ACRED_23K	Atlantic 2+3K Acadian redfish (<i>S. fasciatus</i>)	2.64	1.50	3.00	3.00	2.44	Not Recommended
Redfish, Acadian	<i>Sebastes fasciatus</i>	Trawls (Bottom / Demersal)	ACRED_23K	Atlantic 2+3K Acadian redfish (<i>S. fasciatus</i>)	2.64	1.00	3.00	2.60	2.13	Not Recommended
Redfish, Acadian	<i>Sebastes fasciatus</i>	Trawls (Bottom / Demersal)	ACRED_UNIT3	Atlantic Unit 3 Acadian redfish (<i>S. fasciatus</i>)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Redfish, Acadian	<i>Sebastes fasciatus</i>	Trawls (Bottom / Demersal)	REDFISH_30	Atlantic Redfish spp. 30	3.41	1.00	3.00	2.60	2.27	Not Recommended
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Bottom / Demersal)	DERED_UNIT1_2	Atlantic Unit 1 and Unit 2 Deepwater redfish (<i>S. mentella</i>)	3.87	1.00	3.00	2.60	2.34	Not Recommended

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Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Bottom / Demersal)	DEEPRED_GOLDRED_SAO	Atlantic	Deepwater Redfish and Golden Redfish	1.73	1.00	0.00	2.50	0.00	Not Recommended
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Midwater / Pelagic)	DEEPRED_GOLDRED_SAO	Atlantic	Deepwater Redfish and Golden Redfish	1.73	1.20	0.00	3.00	0.00	Not Recommended
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Midwater / Pelagic)	DERED_23K	Atlantic	2+3K Deepwater redfish (S. mentella)	1.73	1.50	0.00	3.00	0.00	Not Recommended
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Bottom / Demersal)	DERED_23K	Atlantic	2+3K Deepwater redfish (S. mentella)	1.73	1.00	0.00	2.60	0.00	Not Recommended
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Midwater / Pelagic)	REDFISH_30	Atlantic	Redfish spp. 30	3.41	1.50	3.00	3.00	2.61	Not Recommended
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Bottom / Demersal)	REDFISH_30	Atlantic	Redfish spp. 30	3.41	1.00	3.00	2.60	2.27	Not Recommended
Redfish, Golden	<i>Sebastes norvegicus</i>	Trawls (Bottom / Demersal)	DEEPRED_GOLDRED_SAO	Atlantic	Deepwater Redfish and Golden Redfish	2.64	1.00	3.00	2.50	2.11	Not Recommended
Redfish, Golden	<i>Sebastes norvegicus</i>	Trawls (Midwater / Pelagic)	DEEPRED_GOLDRED_SAO	Atlantic	Deepwater Redfish and Golden Redfish	2.64	1.20	3.00	3.00	2.31	Not Recommended
Scallop, Iceland	<i>Chlamys islandica</i>	Dredges (Vessel Towed)	SCAL_GASP	Atlantic	Gaspe Peninsula (areas 17A1, 17A2, 18B1, 18B2, 18C, 19A)	2.64	2.60	3.00	1.70	2.43	Not Recommended
Scallop, Iceland	<i>Chlamys islandica</i>	Dredges (Vessel Towed)	SCAL_MAG	Atlantic	Magdalen Islands (areas 20A, 20B, 20C, 20E and 20F)	3.32	2.60	4.00	1.70	2.77	Not Recommended
Scallop, Iceland	<i>Chlamys islandica</i>	Dredges (Vessel Towed)	SCAL_NSHORE	Atlantic	North Shore (areas 15, 16A1, 16A2, 16B, 16C, 16D, 16E, 16F, 16G, 16H, 16I, 18A, 18D), most recent SA also covered SFA 17	2.64	2.60	3.00	1.70	2.43	Not Recommended
Scallop, Sea	<i>Placopecten magellanicus</i>	Dredges (Vessel Towed)	SCAL_GASP	Atlantic	Gaspe Peninsula (areas 17A1, 17A2, 18B1, 18B2, 18C, 19A)	2.64	2.60	3.00	1.70	2.43	Not Recommended
Scallop, Sea	<i>Placopecten magellanicus</i>	Dredges (Vessel Towed)	SCAL_MAG	Atlantic	Magdalen Islands (areas 20A, 20B, 20C, 20E and 20F)	3.32	2.60	4.00	1.70	2.77	Not Recommended
Scallop, Sea	<i>Placopecten magellanicus</i>	Dredges (Vessel Towed)	SCAL_NSHORE	Atlantic	North Shore (areas 15, 16A1, 16A2, 16B, 16C, 16D, 16E, 16F, 16G, 16H, 16I, 18A, 18D), most recent SA also covered SFA 17	2.64	2.60	3.00	1.70	2.43	Not Recommended
Sculpin, Longhorn	<i>Myoxocephalus octodecemspinosus</i>	Gillnets	SCULSMB	Atlantic	Longhorn sculpin- St. May's Bay	3.32	1.00	3.00	1.91	2.09	Not Recommended
Sculpin, Longhorn	<i>Myoxocephalus octodecemspinosus</i>	Longlines	SCULSMB	Atlantic	Longhorn sculpin- St. May's Bay	3.32	0.95	3.00	3.12	2.33	Not Recommended
Sculpin, Longhorn	<i>Myoxocephalus octodecemspinosus</i>	Traps	SCULSMB	Atlantic	Longhorn sculpin- St. May's Bay	3.32	1.70	3.00	3.50	2.77	Not Recommended
Sculpin, Longhorn	<i>Myoxocephalus octodecemspinosus</i>	Trawls (Bottom / Demersal)	SCULSMB	Atlantic	Longhorn sculpin- St. May's Bay	3.32	1.00	3.00	2.60	2.26	Not Recommended

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Skate, Smooth	<i>Malacoraja senta</i>	Longlines	SMSKA_NENL_2J3K	Atlantic	Northeastern Newfoundland and Labrador (NAFO 2J3K)	2.64	0.95	3.00	3.12	2.20	Not Recommended
Skate, Smooth	<i>Malacoraja senta</i>	Trawls (Bottom / Demersal)	SMSKA_NENL_2J3K	Atlantic	Northeastern Newfoundland and Labrador (NAFO 2J3K)	2.64	1.00	3.00	2.60	2.13	Not Recommended
Skate, Smooth	<i>Malacoraja senta</i>	Longlines	SMSKA_SGOSL_4T	Atlantic	Southern Gulf of St. Lawrence (NAFO 4T)	2.64	1.45	3.00	3.12	2.45	Not Recommended
Skate, Smooth	<i>Malacoraja senta</i>	Trawls (Bottom / Demersal)	SMSKA_SGOSL_4T	Atlantic	Southern Gulf of St. Lawrence (NAFO 4T)	2.64	1.00	3.00	2.50	2.11	Not Recommended
Skate, Thorny	<i>Amblyraja radiata</i>	Longlines	THSKA_3LNO	Atlantic	Skate 3LNO	3.41	0.95	3.00	3.12	2.35	Not Recommended
Skate, Thorny	<i>Amblyraja radiata</i>	Trawls (Bottom / Demersal)	THSKA_3LNO	Atlantic	Skate 3LNO	3.41	1.00	3.00	2.60	2.27	Not Recommended
Skate, Thorny	<i>Amblyraja radiata</i>	Longlines	THSKA_4T	Atlantic	Southern Gulf of St. Lawrence (NAFO 4T)	1.73	1.45	0.00	3.12	0.00	Not Recommended
Skate, Thorny	<i>Amblyraja radiata</i>	Trawls (Bottom / Demersal)	THSKA_4T	Atlantic	Southern Gulf of St. Lawrence (NAFO 4T)	2.64	1.00	3.00	2.50	2.11	Not Recommended
Skate, Thorny	<i>Amblyraja radiata</i>	Gillnets	THSKA_3LNO	Atlantic	Skate 3LNO	3.41	1.00	3.00	1.91	2.10	Not Recommended
Skate, Thorny	<i>Amblyraja radiata</i>	Gillnets	THSKA_4T	Atlantic	Southern Gulf of St. Lawrence (NAFO 4T)	1.73	1.00	0.00	1.90	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Gillnets	WISKA_3LNOP	Atlantic	Winter skate - 3LNOP	1.73	1.00	0.00	1.91	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Gillnets	WISKA_4T	Atlantic	Winter skate - Gulf of St. Lawrence (NAFO 4T)	1.73	1.00	0.00	1.90	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Longlines	WISKA_3LNOP	Atlantic	Winter skate - 3LNOP	1.73	0.95	0.00	3.12	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Trawls (Bottom / Demersal)	WISKA_3LNOP	Atlantic	Winter skate - 3LNOP	1.73	1.00	0.00	2.60	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Longlines	WISKA_4T	Atlantic	Winter skate - Gulf of St. Lawrence (NAFO 4T)	1.73	1.45	0.00	3.12	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Trawls (Bottom / Demersal)	WISKA_4T	Atlantic	Winter skate - Gulf of St. Lawrence (NAFO 4T)	1.73	1.00	0.00	2.50	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Longlines	WISKA_4VW	Atlantic	Winter skate - 4VW	1.73	0.95	0.00	3.12	0.00	Not Recommended
Skate, Winter	<i>Leucoraja ocellata</i>	Trawls (Bottom / Demersal)	WISKA_4VW	Atlantic	Winter skate - 4VW	1.73	1.00	0.00	2.60	0.00	Not Recommended
Turbot, Greendland	<i>Reinhardtius hippoglossoides</i>	Longlines	GRHAL_0A	Arctic	Greenland Halibut - NAFO 0A	3.87	0.95	3.00	3.12	2.42	Not Recommended
Turbot, Greendland	<i>Reinhardtius hippoglossoides</i>	Longlines	GRHAL_0B	Arctic	Greenland Halibut - NAFO 0B	3.87	0.95	3.00	3.12	2.42	Not Recommended

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Turbot, Greenland	<i>Reinhardtius hippoglossoides</i>	Longlines	GRHAL_23KLMNO	Atlantic (Turbot) Greenland Halibut 2-3KLMNO Labrador Shelf - Grand Bank	2.64	0.95	3.00	3.12	2.20	Not Recommended
Turbot, Greenland	<i>Reinhardtius hippoglossoides</i>	Longlines	GRHAL_CS	Arctic Greenland Halibut - Cumberland Sound	2.64	0.95	3.00	3.12	2.20	Not Recommended
Whelk	<i>Buccinum undatum</i>	Traps	WHELK_2J3K3L4R	Atlantic Whelk - 2J3K3L4R	2.64	1.70	3.00	3.50	2.62	Not Recommended
Whelk	<i>Buccinum undatum</i>	Traps	WHELK_3Ps	Atlantic Whelk - 3Ps	2.64	1.70	3.00	3.50	2.62	Not Recommended
Whelk	<i>Buccinum undatum</i>	Traps	WHELK_4Vs_4W	Atlantic Whelk- 4Vs and 4W	2.64	1.70	3.00	3.50	2.62	Not Recommended
Whelk	<i>Buccinum undatum</i>	Traps	WHELK_QC_1_15	Atlantic Whelk - zones 1 - 15, except 10	2.64	1.70	3.00	3.50	2.62	Not Recommended
Halibut, Atlantic	<i>Hippoglossus hippoglossus</i>	Gillnets	ATHAL_4RST	Atlantic Atlantic Halibut - 4RST	2.64	1.00	3.00	1.90	1.97	Not Recommended
Halibut, Atlantic	<i>Hippoglossus hippoglossus</i>	Longlines	ATHAL_4RST	Atlantic Atlantic Halibut - 4RST	2.64	1.45	3.00	3.12	2.45	Not Recommended
Halibut, Atlantic	<i>Hippoglossus hippoglossus</i>	Trawls (Bottom / Demersal)	ATHAL_4RST	Atlantic Atlantic Halibut - 4RST	2.64	1.00	3.00	2.50	2.11	Not Recommended
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Seine Nets	WITFLO_3NO	Atlantic Witch Flounder - 3NO	3.32	1.92	3.00	3.67	2.89	Ocean Wise
Flounder, Witch	<i>Glyptocephalus cynoglossus</i>	Seine Nets	WITFLO_4RST	Atlantic Witch Flounder 4RST	3.32	1.92	4.00	3.57	3.09	Ocean Wise
Barnacle, Leaf	<i>Pollicipes polymerus</i>	Hand Implements	GOBARN_CLAY	Pacific Goose barnacles - Clayoquot Sound	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Intertidal	<i>Nuttallia obscurata</i>	Hand Implements	INCLA_CC_HM	Pacific Intertidal Clam (Central Coast - Heiltsuk Manila)	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Intertidal	<i>Venerupis philippinarum</i>	Hand Implements	INCLA_CC_HM	Pacific Intertidal Clam (Central Coast - Heiltsuk Manila)	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Intertidal	<i>Nuttallia obscurata</i>	Hand Implements	INCLA_DE	Pacific Intertidal Clams - Depuration	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Intertidal	<i>Venerupis philippinarum</i>	Hand Implements	INCLA_DE	Pacific Intertidal Clams - Depuration	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Intertidal	<i>Nuttallia obscurata</i>	Hand Implements	INCLA_SCVI	Pacific Intertidal Clams (South Coast-Vancouver Island)	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Intertidal	<i>Venerupis philippinarum</i>	Hand Implements	INCLA_SCVI	Pacific Intertidal Clams (South Coast-Vancouver Island)	2.64	5.00	3.00	4.00	3.55	Ocean Wise
Clam, Pacific Geoduck	<i>Panopea generosa</i>	Diving	GEDUCK_PAC	Pacific Geoduck	3.87	5.00	4.00	3.96	4.18	Ocean Wise
Clam, Surf	<i>Spisula solidissima</i>	Hand Implements	SUCLA_5A1_5B1	Atlantic Surf Clam - Iles-de-la-Madeleine	3.41	5.00	3.00	3.06	3.54	Ocean Wise

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Cod, Arctic	<i>Boreogadus saida</i>	Gillnets (Set / Anchored)	ARC_COD	Arctic	Arctic Cod	2.64	3.16	3.00	3.00	2.95	Ocean Wise
Cod, Arctic	<i>Boreogadus saida</i>	Handlines and Pole-and-Lines	ARC_COD	Arctic	Arctic Cod	2.64	5.00	3.00	3.30	3.38	Ocean Wise
Halibut, Atlantic	<i>Hippoglossus hippoglossus</i>	Handlines and Pole-and-Lines (Hand-Operated)	ATHAL_4RST	Atlantic	Atlantic Halibut - 4RST	2.64	5.00	3.00	3.30	3.38	Ocean Wise
Oyster, Pacific	<i>Crassostrea gigas</i>	Hand Implements	PACOYST_WCVI_ECVI	Pacific	Pacific Oyster West Coast Vancouver Island (WCVI) and East Coast Vancouver Island (ECVI)	3.87	5.00	3.00	4.00	3.90	Ocean Wise
Redfish, Beaked	<i>Sebastes mentella</i>	Trawls (Midwater / Pelagic)	DERED_UNIT1_2	Atlantic	Unit 1 and Unit 2 Deepwater redfish (S. mentella)	3.87	1.50	4.00	3.00	2.89	Ocean Wise
Sardine, Pacific	<i>Sardinops sagax</i>	Purse Seines	PASAR_PAC	Pacific	Sardine (Pacific)	2.64	3.94	3.00	3.32	3.19	Ocean Wise

GLOSSARY

Term	Definition
[OW] Recommended	Meets Ocean Wise's criteria for a sustainable fishery. Scores 2.8 or higher.
[Seafood Watch] Assessment	Peer-reviewed, open-access, published literature that details the evaluation of a wild capture fishery or aquaculture operation against Criteria or Principles within a program's Standard. Herein we are referencing the process of using the Seafood Watch Program standard to determine the sustainability of a given fishery or fish stock.
Bycatch	Species unintentionally caught in a fishery.
COSEWIC	Committee on the Status of Endangered Wildlife in Canada.
Criteria	Science-based performance metrics against which the ecological sustainability of a product is determined.
Eco-certification	Procedure by which an independent auditor gives written or equivalent confirmation that a product, process, or service meets the specified environmental requirements of a third-part Standard ex. Marine Stewardship Council
ETP	Referring to Endangered, Threatened, or Protected status of a species by a conservatory entity (ex. COSEWIC, IUCN).
Method	Gear or device used to harvest fish.
Not Recommended (NR)	Does not meet Ocean Wise's criteria for a sustainable fishery. Scores below 2.8.
RAPSTA	Also known as the Rapid Assessment Standard developed by Ocean Wise.
Rebuilding Plan	A plan that aims to have a high probability of a stock growing out of the Critical Zone within a reasonable timeframe.
Recommendation	Tool for measuring and communicating fishery and/or aquaculture operation performance to government, producers, NGOs, business partners, and other stakeholders.
Reference Points	Benchmarks used to compare status of a given fish stock to a desirable state.
Score or Rating	Referring to the numerical outcome (score) of assessments (including RAPSTA) used to determine the category of recommendation status (Recommended or Not Recommended).
Seafood Watch Standard	A set of criteria used to determine the sustainability of a given seafood items.
Stock	A defined population of a species of fish.

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