MSEP Email Newsletter (December 2019) – special edition.

RELEVANT INFO

The EU Council is meeting on 16/17th of December to set total allowable catches (TACs) for the North Sea and Northeast Atlantic. There are the final TACs that will be agreed before the EU's deadline to end overfishing (F<Fmsy) by 2020.

- **The advice**
    - Latest ICES advice
    - TAC proposal from the European Commission

- **Summary of key implications and supporting research**

Environmental implications

- New paper in the journal of Ecological Indicators finds that biodiversity tipping points occur at even lower levels of fishing pressure (<0.6*Fmsy)
- New paper in the journal of Frontiers in Ecology and the Environment finds that improved management is the main driver behind recovery of Northeast Atlantic fish stocks
- New working paper by the Institute for the Oceans and Fisheries at the University of British Columbia argues that ending overfishing can mitigate impacts of climate change
- Paper in the ICES Journal of Marine Science finds that fishing in the lower MSY range has only small reduction in yield but a large reduction in risk of stock collapse

Socio-economic implications

- New NEF blog argues that large TAC reductions need to be implemented through a 'just transition'
- Paper in the journal of Marine Policy find that reaching MSY has larger economic benefits the faster the transition takes place
- Information on the economic performance of the UK fishing fleet are available from Seafish and of the whole EU fishing fleet from STECF

Legal and political implications

- New article from the Economist Group's World Ocean Initiative covers the race for MSY and the legal implications
- NEF blogs for EU Observer covers the precedent not meeting the 2020 deadline would have for other EU policies
- Who has been setting TAC above advice? See NEF's 'Landing the blame' report series and Client Earth's new report investigating information from freedom of information requests

- **EU Agriculture and Fisheries Council**, 16-17 December 2019 https://www.consilium.europa.eu/en/meetings/agrifish/2019/12/16-17/

- **Coastal Futures** – 15th & 16th January 2020 - at the Royal Geographical Society http://coastal-futures.net/conference-information

- **Oceans Past VIII Conference** - Historical perspectives on marine ecosystems, fisheries, and futures. May 10th to 13th 2020, Oostende, Belgium https://www.ices.dk/news-and-events/symposia/Pages/OceanspastVIII.aspx

- **ECSA 58** - EMECS 13. Hull, UK - September 2020 https://ecsa.international/event/2020/joint-ecsa-58-emecs-13-conference-hull-september-2020

- **The International Symposium for Society & Resource Management** (ISSRM). Cairns, Australia - June 22-26 2020. https://www4.iasnr.org/international-symposium-on-society-and-resource-management-issrm/

- **Client Earth report: Taking stock - are TACs set to achieve MSY?**
  This report assesses the progress made to date towards ending overfishing in the EU by 2020 at the latest, as agreed in the last reform of the Common Fisheries Policy (CFP) in 2013. The core analysis presented focuses on a subset of the Total Allowable Catches (TACs) agreed for the years 2015 to 2019 at the yearly December Council meetings. On this basis, it identifies a number of key issues which the Commission and the Council, as well as individual Member States, will need to address as a priority to meet the 2020 MSY deadline and allow all stocks to recover in line with the CFP's requirements. In particular, this report sets out to:

  - Assess the extent to which the proposed and agreed TACs follow the underlying scientific advice, and to which the TACs agreed by EU ministers follow those proposed by the Commission, and highlight any trends or patterns regarding areas where progress is still lacking (see section 4);
  - Evaluate which Member States have demonstrably pushed for higher than scientifically advised TACs throughout the December Council processes in 2016, 2017 and 2018; and which arguments and evidence they have brought forward to justify this (see section 5);
  - Make recommendations for how decision-makers should address the outstanding issues identified by this report in order to ensure that their TAC decisions for 2020 and beyond are fully in line with the CFP's objectives and requirements (see key recommendations on p. 6 and at the end of sections 4 and 5).

  Key findings include the following:

  - Progress since 2015 towards setting TACs in line with scientific advice has been very limited, with more than half of the TACs assessed still exceeding advice for 2019.
  - The Commission and the Council have followed advice less consistently for data-limited stocks subject to precautionary rather than MSY-based advice, even though the CFP's MSY objective applies to all harvested stocks.

- Certain Member States have been more vocal than others in pushing for higher than scientifically advised TACs. Vocal Member States include France, Ireland, Spain, the United Kingdom, Portugal, Belgium and Denmark, whereas the Netherlands, Germany and Sweden have remained mostly quiet throughout the December Council processes in 2016, 2017 and 2018. Nevertheless, all of these Member States have received shares of TACs exceeding scientific advice, meaning they are all to blame for unsustainable TACs.

EU decision-makers have so far failed to beat the 2020 deadline, but it is not too late to meet it by setting sustainable TACs in line with scientific advice and the legal requirements in 2019. This report provides some key pointers to help the Commission, the Member States and the Council as a whole to focus their attention in this final push towards ending overfishing, and to enable Members of the European Parliament to get involved in this crucial phase. https://bit.ly/35oee3Z

- **Ecosystem-based fisheries management requires broader performance indicators for the human dimension.**
  Ecosystem-based fisheries management (EBFM) is a globally mandated approach with the intention to jointly address ecological and human (social-cultural, economic and institutional) dimensions. Indicators to measure performance against objectives have been suggested, tested, and refined but with a strong bias towards ecological indicators. In this paper, current use and application of indicators related to the human dimension in EBFM research and ecosystem models are analysed. It is found that compared to ecological counterparts, few indicators related to the human dimension are commonly associated with EBFM, and they mainly report on economic objectives related to fisheries. Similarly, in the most common ecosystem models, economic indicators are the most frequently used related to the human dimension, both in terms of model outputs and inputs. The prospect is small that indicators mainly related to profitable fishing economy are able to report on meeting the broad range of EBFM objectives and to successfully evaluate progress in achieving EBFM goals. To fully conform with EBFM principles, it is necessary to recognise that ecological and human indicators are inter-dependent. Moreover, the end-to-end ecosystem models used in EBFM will need to be further developed to allow a fuller spectrum of social-cultural, institutional, and economic objectives to be reported against.
  https://www.sciencedirect.com/science/article/pii/S0308597X18309126

- **Progress on Implementing Ecosystem-Based Fisheries Management in the United States Through the Use of Ecosystem Models and Analysis**
  Worldwide fisheries management has been undergoing a paradigm shift from a single-species approach to ecosystem approaches. In the United States, NOAA has adopted a policy statement and Road Map to guide the development and implementation of ecosystem-based fisheries management (EBFM). NOAA's EBFM policy supports addressing the ecosystem interconnections to help maintain resilient and productive ecosystems, even as they respond to climate, habitat, ecological, and social and economic changes. Managing natural marine resources while taking into account their interactions with their environment and our human interactions with our resources and environment requires the support of ecosystem science, modeling, and analysis. Implementing EBFM will require using existing mandates and approaches that fit regional management structures and cultures. The primary mandate for managing marine fisheries in the United States is the Magnuson-Stevens Fishery Conservation and Management Act. Many tenets of the Act align well with the EBFM policy, however, incorporating ecosystem analysis and models into fisheries management processes has faced procedural challenges in many jurisdictions. In this paper, we review example cases where scientists have had success in using ecosystem analysis and modeling to inform management priorities, and identify practices that help bring new ecosystem science information into existing policy processes. A key to these successes is regular communication and collaborative discourse among modelers, stakeholders, and resource managers to tailor models and ensure they addressed the management needs as directly as

possible.
https://bit.ly/2JAfVCC

- **Property rights and the protection of global marine resources**
  Managing global marine resources by assigning property rights could align economic and conservation incentives, but only if unauthorized resource use is deterred. Exclusive Economic Zones (EEZs) are country-level property rights to marine resources, covering approximately 39% of the ocean's surface and accounting for more than 95% of global marine fish catch. However, EEZs might not be respected by unauthorized resource users because the cost of monitoring and enforcing such large areas may be prohibitive. Here we provide the first evidence that EEZs are in fact respected by unauthorized resource users. Using global, high-resolution fishing effort datasets and the ecologically arbitrary boundaries between EEZs and the high seas, we find that unauthorized foreign fishing is 81% lower just inside EEZs compared to just outside. Consistent with the high cost of enforcing EEZ boundaries, this deterrence effect is concentrated in EEZs that are most valuable near their boundaries. Our results suggest that property rights institutions can enable effective governance of global marine resource use.
  https://www.nature.com/articles/s41893-019-0389-9

- **Marine Protected Areas: Science, Policy and Management**
  Marine Protected Areas: Science, Policy and Management addresses a full spectrum of issues relating to Marine Protected Areas (MPAs) not currently available in any other single volume. Chapters are contributed by a wide range of working specialists who examine conceptions and definitions of MPAs, progress on the implementation of worldwide MPAs, policy and legal variations across MPAs, the general importance of coastal communities in implementation, and the future of MPAs. The book constructively elucidates conflicts, issues, approaches and solutions in a way that creates a balanced consideration of the nature of effective policy and management.
  Those involved with the designation, implementation, management or science of MPAs, from individuals, though marine sector NGOs and other organizations to university and research centre libraries will find it an essential work.
  https://www.elsevier.com/books/marine-protected-areas/humphreys/978-0-08-102698-4

- **NEF media capture in UK fisheries** https://neweconomics.org/2019/09/media-capture-in-uk-fisheries
- **BLUE NEW DEAL Action Plan** – 'Turning back to the sea'
- **NEF BRIEFING: Low Impact Fisheries** – Definition and criteria for the UK Fisheries Bill
- **NEF Economics in policy making briefings**
- **MSEP legacy:** A marine economics handbook for NGOs
- **NEF 'A fair fishing deal'** http://neweconomics.org/2017/09/fish/?_sft_latest=research
- Find out more about **NEFs work with the fishing community in Eastbourne.** Film here

- **Follow the MSEP on twitter @MarineEconomics**

- If you have any research, articles or information that relates to socio-economic studies in the marine environment please share them with the network

Thanks, Chris @ **NEF**