



Catalyzing the Growth of Electronic Monitoring in Fisheries: Impacts of Covid-19

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Background on Electronic Monitoring

Every day, millions of fishing vessels ply the oceans to harvest seafood that helps feed the world's almost 8 billion people. The enormous challenge of protecting the productivity of the oceans while also safeguarding the livelihoods of the millions of people who work along the seafood value chain through traditional tools of data collection can be expensive and imprecise. The result is annual losses of \$83 billion USD in global fisheries from insufficient management, accompanied by a gradual decline in the health of fish stocks and the marine environment.¹

Electronic Monitoring (EM) can provide the detailed information fishery managers need to solve their data and compliance challenges. EM uses an integrated system of on-board cameras and sensors that record fishing activity and extract data. This powerful tool can enable more targeted, cost-efficient management strategies and create opportunities for seafood industry stakeholders to drive improvements in their operations and demonstrate legality and sustainability to the seafood marketplace.²

Covid-19 and Electronic Monitoring

The novel coronavirus (Covid-19) pandemic has caused shocks to the global food supply chain and introduced unique challenges to the fishing industry. In response to Covid-19, fishery management bodies around the world have been suspending human observer requirements. This is an essential step to protect the health of observers, captains, crew, and other workers, but it is opening the door to widespread illegal activity on the water and limiting the collection of scientific data. Concerns are mounting that these suspensions could backslide into permanent cuts in on-the-water monitoring, and major retailers and seafood companies are worried about the additional risk this creates in their supply chains.

But the situation is also highlighting the value and resilience of EM. For example, while NOAA has suspended human observer requirements in response to Covid-19, vessels with electronic monitoring are unaffected (Box 1).^{3,4} This is strengthening demand for the tool. In May 2020, a group of some of the world's largest retailer's brands, and seafood companies banded together to call for regional fisheries management organizations to make EM an accepted alternative to human observer coverage in tuna fisheries.⁵

1. World Bank Group, "The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries," 2017, <https://openknowledge.worldbank.org/bitstream/handle/10986/24056/9781464809194.pdf>

2. Philip Christiani et al., "Precision Fisheries: Navigating a Sea of Troubles with Advanced Analytics" (McKinsey & Company, 2019), <https://www.mckinsey.com/~media/McKinsey/Industries/Agriculture/Our%20Insights/Precision%20fisheries%20Navigating%20a%20sea%20of%20troubles%20with%20advanced%20analytics/Precision-fisheries-Navigating-a-sea-of-troubles-with-advanced-analytics-vF.ashx>

3. NOAA Fisheries, "Emergency Measures to Address Fishery Observer Coverage During the COVID-19 Coronavirus Pandemic." March 27th, 2020. <https://www.federalregister.gov/documents/2020/03/27/2020-06426/emergency-measures-to-address-fishery-observer-coverage-during-the-covid-19-coronavirus-pandemic>

4. NOAA Fisheries, "Notice of Waiver of Observer and Catch Monitor Coverage Requirements." April 17, 2020. <https://www.fisheries.noaa.gov/bulletin/notice-waiver-observer-and-catch-monitor-coverage-requirements>

5. Sustainable Fisheries Partnership, "WalMart, Major Retailers Call for Governments to Ensure Sustainably Produced Tuna During Covid-19." May 7th, 2020. <https://www.sustainablefish.org/News/Walmart-Major-Retailers-Call-for-Governments-to-Ensure-Sustainably-Produced-Tuna-during-COVID-19>

While Covid-19 is building demand for EM, it is also having enormous impacts that will influence the ability to turn that interest into progress. For example:

- **Retailers** are emerging as winners from the pandemic as they are experiencing unprecedented demand with shelter-in-place orders. This increased demand is likely to persist, even after economies start to open back up. With strong balance sheets and more market power, retailers will become an even more important sector for driving sustainable fishing, fair labor practices, and 100 percent monitoring on the water.
- **The fishing industry** is being hit hard by Covid-19. While there are some bright spots (e.g., high demand for shelf-stable tuna), reports of price declines, challenging logistics, and economic pain are widespread. When we emerge on the other side of the pandemic, the economic condition of fisheries will inhibit the political feasibility of top-down EM mandates, and likely require more collaborative approaches, incentives, and cost sharing.

- **Governments** are spending at unprecedented levels to keep their economies afloat. There will be additional rounds of recovery spending and finding ways to direct some of these funds to support the fishing industry and linking it with increased monitoring requirements may be an opportunity. On the other hand, fisheries agencies will likely be even more resource constrained for the foreseeable future, limiting their ability to take on new programs.
- **International cooperation** is moving ahead, but an endless stream of web meetings and calls is unlikely to build the same level of trust, and facilitate the complex negotiations required to move issues forward in RFMOs. If in-person meetings resume in the near-term, this is unlikely to have a major impact on advancing EM, but a prolonged shutdown or waves of shutdowns will likely slow progress on many RFMO priorities, including EM.
- **Philanthropy** is still in a strong financial position with US equity markets recovered to the same levels they were at before the pandemic. The global economy is in a precarious spot though, and a more severe or prolonged market decline could inhibit their spending capacity and financial support for EM.

BOX 1

NOAA Fisheries Waiver of Observer Requirements in West Coast Fisheries

“As part of our response to the COVID-19 pandemic... NOAA Fisheries is temporarily waiving the requirement for commercial fishing vessels and first receivers in west coast fisheries to carry a fishery observer or have a catch monitor...”

This waiver does not apply to trips that are currently underway at sea with an observer onboard or to electronic monitoring (EM) requirements. For vessels using electronic monitoring, this waiver applies to human observers only.”



Onboard fisheries observer. Photo: NOAA