The return to more familiar waters
The recovery from the warm blob of 2014-2015 continued in 2018, with a return to more typical water temperatures and neutral ocean conditions that weren’t La Niña or El Niño. That is changing now, because a transition to weak El Niño conditions began in early 2019. This weak El Niño, along with other basin scale indicators, suggests productivity may continue to be constrained in the system.

The cheeseburgers are back again
Lipid-rich “cheeseburger” copepods are rebounding in response to slowly improving conditions and are likely driving increases in juvenile salmon survival. Additionally, anchovy density, sea lion numbers, and seabird numbers are also up, which suggests a healthy availability of food for fish.

Are petrale sole and sablefish breaking up? It’s complicated.
A new indicator in the report analyzes changes to the spatial distribution of sablefish and petrale sole and how those changes could affect their availability in specific ports. The results suggest that petrale sole and sablefish populations are shifting in opposite directions. A deeper dive shows that despite declines in total sablefish biomass, a southern shift of the stock may mitigate impacts to southern ports like Fort Bragg and Morro Bay. Alternately, while petrale sole is shifting north, its biomass has also grown, increasing its availability to northern and southern ports.

Cloudy with a chance of...hypoxia?
In addition to the most up-to-date information on the environment in the past year, the IEA report now includes a series of short term forecasts that provide a picture of what might be coming next for the ecosystem. One of these forecasting tools, called J-SCOPE, is predicting increased hypoxia and warmer sea surface temperatures off Washington and Oregon this summer.

2017 stuck the landing
Although trends vary by stock and fishery, overall coastwide commercial landings increased 27.4% from 2016 to 2017. Over the 2013-2017 period, total revenue across commercial fisheries was near the top of the historical range, driven primarily by hake, market squid, and crab. Revenue of groundfish (excluding hake) showed gradual increases, and revenue from commercial salmon and HMS were relatively unchanged and close to long-term averages. Recreational landings held steady too, staying within the range of recent historical landings.