

Chesapeake Bay vulnerable to climate change

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Historians say the Chesapeake Bay has changed since Capt. John Smith first landed at Jamestown four centuries ago.

And scientists say it will change again by the end of this century. They believe that a rising, warming ocean with more acidic waters will carve out a different estuary. They say these changes will disrupt the huge diversity of marine life that depends on it.

"It will be quite a bit different," said Robert Latour. Mr. Latour is a fisheries scientist at the Virginia Institute of Marine Science in Gloucester Point. "I imagine the coastline will be a little bit different. Some projections put the Florida Keys underwater in 100 years, and we're pretty low-lying. In the fish populations, there will be winners and losers."

The bay is a vital space for numerous spawning species. It serves as a nursery for others and an important migratory route for many more. Latour suspects native oysters, already hurt by overfishing and disease, could be hard-hit. And blue crabs, once plentiful, could become scarce.

"We're starting to see blue crabs moving north in areas that we hadn't seen them," Latour said. "So there's been a general shift in fishes, too."

But the bay is just one example, scientists say, of how a warming Earth will have real impacts at the local level. A new report released this week by the U.N. Intergovernmental Panel on Climate Change has more examples. "The report concludes that people, societies and ecosystems are vulnerable around the world. But with different vulnerability in different places," said Chris Field, co-chairman of the working group behind the study.

According to the report, climate change isn't something coming down the pike; it's already here. The report shares examples of climate change on every continent and in every ocean. Experts point to wildfires in the western U.S., record rains in England, extreme heat waves and droughts, changes in wind patterns, stronger coastal storms and cyclones.

The IPCC says the world, in many cases, is "ill-prepared for risks from a changing climate." The IPCC urges "smart actions" now to decrease those risks. They suggest that people curb emissions, decrease unavoidable damage and learn to adapt to a rapidly changing world. The report says that as the planet warms the risks to mankind increase.

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