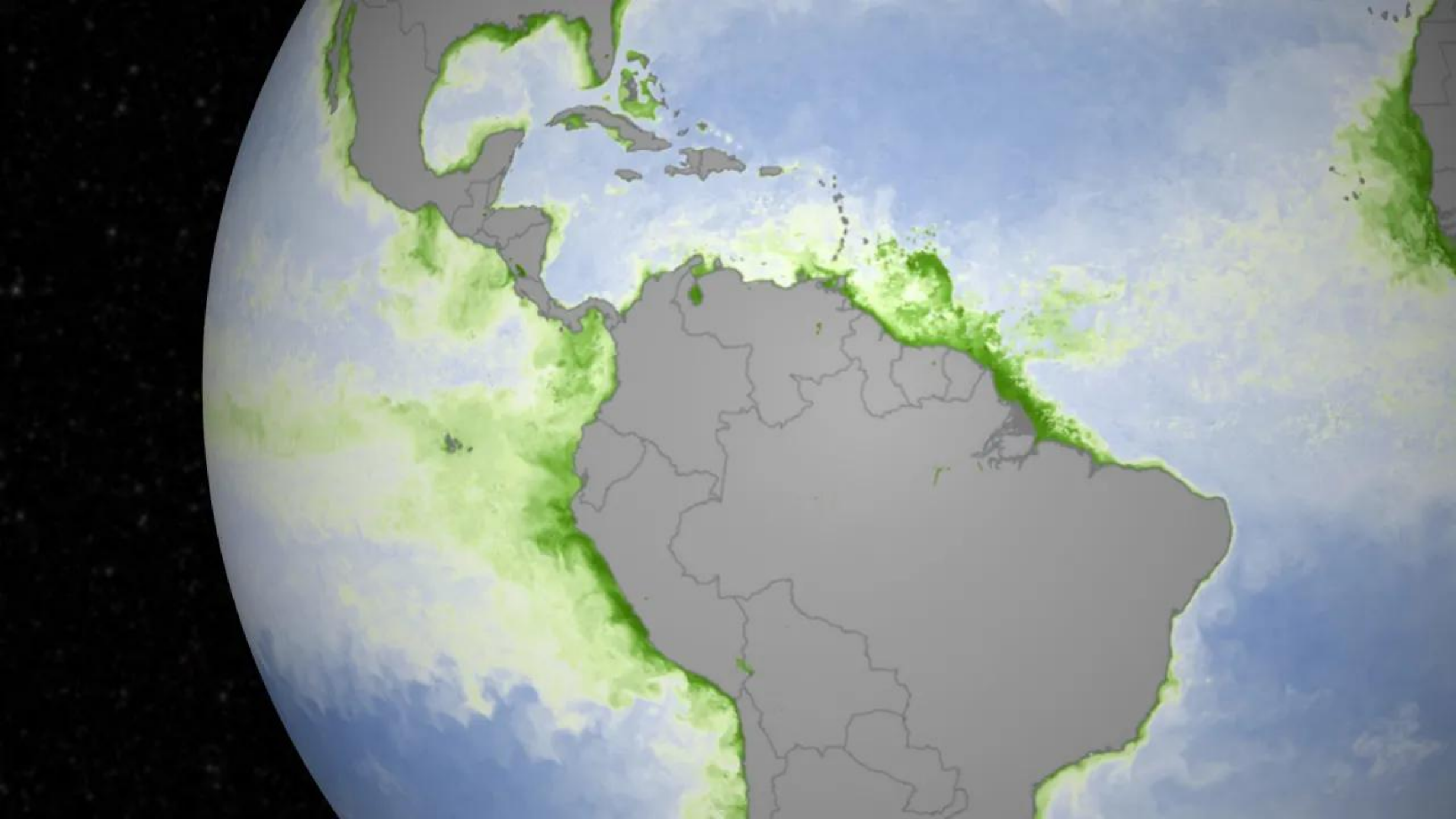

1
00:00:04,640 --> 00:00:02,119
the impacts of an El Nino are seen all

2
00:00:06,860 --> 00:00:04,650
over the world one that's perhaps most

3
00:00:09,379 --> 00:00:06,870
easily visible from space is the change

4
00:00:11,720 --> 00:00:09,389
in ocean color that indicates the change

5
00:00:13,749 --> 00:00:11,730
in populations of microscopic marine

6
00:00:16,609 --> 00:00:13,759
plants called phytoplankton

7
00:00:18,490 --> 00:00:16,619
phytoplankton are tiny organisms that

8
00:00:21,500 --> 00:00:18,500
make up the base of the marine food web

9
00:00:23,810 --> 00:00:21,510
during an El Nino warm waters from the

10
00:00:25,939 --> 00:00:23,820
western Pacific migrate eastward towards

11
00:00:27,769 --> 00:00:25,949
South America blocking the supply of

12
00:00:30,380 --> 00:00:27,779
nutrients from the lower depths of the

13
00:00:31,959 --> 00:00:30,390

ocean to the sea surface this causes

14
00:00:34,400 --> 00:00:31,969
significant losses in phytoplankton

15
00:00:37,130 --> 00:00:34,410
populations particularly along the

16
00:00:38,950 --> 00:00:37,140
equator towards South America this

17
00:00:41,410 --> 00:00:38,960
decline echoes through many species

18
00:00:44,330 --> 00:00:41,420
small fish that feed on phytoplankton

19
00:00:46,639 --> 00:00:44,340
starve this affects everything from

20
00:00:49,130 --> 00:00:46,649
penguin and iguana populations in the

21
00:00:51,709 --> 00:00:49,140
Galapagos to governments managing

22
00:00:53,779 --> 00:00:51,719
fisheries this view from NASA satellites

23
00:00:55,790 --> 00:00:53,789
helps us to understand the role of ocean