



1  
00:00:09,530 --> 00:00:06,530  
Titan is the only planetary body besides

2  
00:00:11,570 --> 00:00:09,540  
earth that we know has lakes at 290

3  
00:00:13,339 --> 00:00:11,580  
degrees Fahrenheit below zero the only

4  
00:00:16,580 --> 00:00:13,349  
liquid that makes sense there is a

5  
00:00:19,189 --> 00:00:16,590  
combination of methane and ethane this

6  
00:00:20,570 --> 00:00:19,199  
lake is Ontario lacus in titan southern

7  
00:00:22,670 --> 00:00:20,580  
hemisphere it's a little smaller than

8  
00:00:24,140 --> 00:00:22,680  
Lake Michigan we've colored the lake

9  
00:00:25,820 --> 00:00:24,150  
black because we think that's probably

10  
00:00:28,160 --> 00:00:25,830  
it's real color although we don't really

11  
00:00:29,599 --> 00:00:28,170  
know for sure we've exaggerated the

12  
00:00:31,730 --> 00:00:29,609  
heights of the shoreline features to

13  
00:00:34,280 --> 00:00:31,740

make them easier to see notice these

14

00:00:36,130 --> 00:00:34,290

hills probably made of water ice see how

15

00:00:38,690 --> 00:00:36,140

the liquid is flooded up the valleys

16

00:00:39,950 --> 00:00:38,700

further north is a long smoother beach

17

00:00:41,869 --> 00:00:39,960

that looks like it's been shaped by

18

00:00:43,700 --> 00:00:41,879

waves you can see some lines along the

19

00:00:45,889 --> 00:00:43,710

beach that might be old shorelines like

20

00:00:47,650 --> 00:00:45,899

bathtub rings so we know the level of

21

00:00:50,180 --> 00:00:47,660

the lake has changed

22

00:00:52,430 --> 00:00:50,190

now we're turning east to a very obvious

23

00:00:56,360 --> 00:00:52,440

Bay that cuts into the beach so it's

24

00:00:58,520 --> 00:00:56,370

likely to be younger we'll cross over

25

00:01:00,920 --> 00:00:58,530

the lake you'll see some flooded valleys

26

00:01:02,779 --> 00:01:00,930

and in the background is a large river

27

00:01:04,880 --> 00:01:02,789

that makes a delta like the Mississippi

28

00:01:08,570 --> 00:01:04,890

River its shape means the lake is

29

00:01:10,460 --> 00:01:08,580

shallow and the river is slow Ontario

30

00:01:12,440 --> 00:01:10,470

Shores surprisingly like earthly lake