



1

00:00:00,090 --> 00:00:04,100

More than a decade has passed since the waters

2

00:00:04,120 --> 00:00:07,500

of the Colorado have reached the Sea of Cortez.

3

00:00:07,520 --> 00:00:13,100

During that time, the lower reaches of the river have seen a decline in the amount of healthy vegetation.

4

00:00:13,120 --> 00:00:16,180

But a historic agreement between the U.S. and Mexico

5

00:00:16,200 --> 00:00:22,310

provided a pulse of water to flow down the riverbed and into the delta region.

6

00:00:22,330 --> 00:00:26,730

The lower Colorado River straddles the border between Mexico and the U.S.,

7

00:00:26,750 --> 00:00:33,880

and the two countries are collaborating to study the hydrologic and ecosystem effects of the pulse flow.

8

00:00:33,900 --> 00:00:36,390

For several weeks in the spring of 2014,

9

00:00:36,410 --> 00:00:39,410

a pulse of water passed through the Morelos Dam

10

00:00:39,430 --> 00:00:42,220

totalling 130 million cubic meters,

11

00:00:42,240 --> 00:00:46,430

enough to fill 52,000 Olympic swimming pools.

12

00:00:46,450 --> 00:00:50,490

The water quickly filled the formerly dry riverbed.

13

00:00:50,510 --> 00:00:54,500

Much of the water soaked into the ground in the first half of the journey,

14

00:00:54,520 --> 00:01:00,100

replenishing the supply of ground water. From there it is able to nourish and revitalize

15

00:01:00,120 --> 00:01:05,500

the trees, shrubs, and grasses in the riparian corridor surrounding the river.

16

00:01:05,520 --> 00:01:08,680

Scientists with the U.S. Geological Survey

17

00:01:08,700 --> 00:01:14,810

are using data from satellite observations to track how the vegetation responds

18

00:01:14,830 --> 00:01:21,570

Data from Landsat 8 shows a 40% increase in green vegetation where the surface water flowed

19

00:01:21,590 --> 00:01:25,990

and an overall 23% increase throughout the riparian corridor.

20

00:01:26,010 --> 00:01:35,490

The difference between 2014 and 2013 is most noticeable in the wetlands of the lower delta region.

21

00:01:35,510 --> 00:01:41,000

Going forward, scientists from both countries will continue to study the impact of the pulse flow;

22

00:01:41,020 --> 00:01:45,010

looking to see whether new trees and shrubs take root,