The Sinking City

Engineers Propose New Plan to Keep Venice Afloat

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Venice, Italy, is well-known throughout the world for the canals that carve through the city. The winding waterways provide a breathtaking backdrop for Venice's amazing architecture.

But the water that makes Venice famous is also its curse. During some high tides, the nearby Adriatic Sea laps dangerously at the city, flooding historic landmarks such as St. Mark's Square.

Built on a series of islands, Venice is slowly sinking into the sea, dropping about 1.57 inches a year. By the end of the century, scientists warn, the city could be completely submerged.

Now engineers have come up with a new plan to keep the famous city afloat-adding more water.

Fighting Water With Water

Water may seem like the last thing Venice needs, but Giuseppe Gambolati says the plan could be instrumental in stopping the city from drowning. Gambolati, a professor at the University of Padua, is leading the project.

In fact, Gambolati says, the plan could actually *raise* Venice by 1 foot-the same amount the city has dropped over the past 300 years.

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In Venice, a maze of long canals takes the place of roads.

Gambolati and his team of engineers and geology experts hope to pump seawater more than 2,000 feet underneath the city. The seawater would expand the sand under Venice, eventually lifting the top layer of soil, they say.

"If the [test] project proves successful, we will see an immediate benefit, even though [it will be] gradual," Gambolati told the *Associated Press*. He estimates that "the complete elevation will be achieved in around 10 years."

A Sinking Feeling

Some people think Gambolati's idea doesn't hold water. Michele Jamiolkowski, an engineering professor at Turin Polytechnic University, says Gambolati's plan is unrealistic. "We are really in the area of science fiction," he says about the plan. He warns that it would cost millions of dollars and might raise the city only a few inches.

Other people worry that the seawater could cause parts of the city to rise higher than other areas, damaging priceless buildings. "Venice is in a delicate situation," says Giovanni Mazzacurati, the president of the New Venice Consortium. "Should parts of [the city] be elevated in a different way, this would cause the city to crumble."

Despite the risks, everyone agrees that saving the sinking city is imperative. "If we let Venice fall into the sea, the world would lose a tremendous part of [history]," says Melissa Conn of Save Venice, a group dedicated to helping preserve the city.

Stemming the Tide

Seawater isn't Venice's only hope. City officials are already hard at work on another rescue plan: building giant floodgates to protect the city.

The plan is called MOSE, after Moses, the biblical figure who called upon God to part the Red Sea. It calls for hinged gates to be built in the lagoon just off Venice. The hollow steel panels would lie flat on the lagoon floor during normal weather. They would swing up to form a protective wall during dangerously high tides.

Officials expect the $5.2 billion project to be completed in the few years.

Name: _____ **Date:** _____

1. Venice is _____ of the Adriatic Sea.

    A. northeast

    B. southwest

    C. northwest

    D. southeast

2. _____ has/have studied engineering.

    A. Neither

    B. Michele Jamiolkowski

    C. Both

    D. Giuseppe Gambolati

3. In the sentence, "The winding waterways provide a breathtaking backdrop for Venice's amazing architecture," the following is *not* an opinion:

    A. the architecture is amazing.

    B. the waterways are winding.

    C. the backdrop is breathtaking.

    D. none of the above.

4. The following is an opinion:

    A. Gambolti thinks adding more water will save Venice from sinking.

    B. This plan is unrealistic.

    C. People are worried that water will damage the buildings.

    D. All of the above.

5. Water could raise the city by one foot. Is this a fact or opinion? Explain.