The MOSES Project

Specific Purpose: To inform you how the MOSES project will help solve Venice’s flood problem.

Central Idea: Today I will inform how the MOSES project will help solve Venice’s flood problem.

Introduction

I. "Venice! Venice! When thy marble walls are level with the waters, there shall be a

cry of nations o'er thy sunken halls, a loud lament along the sweeping sea!"

II. These words come from *Ode to Venice*, written by the English poet Lord Byron in

July 1818, according to Robert Gleckner.

III. Like Byron, I knew Venice faced destruction by the floods it has suffered from more

and more since 1818.

IV. I have done my research.

V. Today I will inform how the MOSES project will help solve Venice’s flooding

problem.

(Transition: Let’s start by looking at the flooding problem.)

Body

I. According to *The Times*, Venice would flood about seven times a year 100 years

ago, but today it floods more than a hundred times a year.

A. *The* *Globe and Mail* reports that “between 1931 and 1945 … there were eight

high tides” more than three and a half feet above average sea level.

B. *The Washington Post* reports that the famous Venetian tourist attraction, the

Piazza San Marco flooded about 20 times a year in the ‘50s, but in the ‘70s the

Piazza flooded 1,013 times.

C. But the flood that seems to have been the one to prompt a widespread cry for a

solution is the one that happened on Nov. 4, 1966, according to *The Independent*.

1. On that day, high tides, river flows and a strong wind raised the level of

Venice’s canals more than 6 feet.

2. “It was the worst flood in the city's history. Thousands of residents were

pinned in their homes for days, and art works valued at $6 bn…,

stored on ground floors or in cellars, were ruined.”

3. According to *Current Events*, “Power failed and gas tanks broke. Thousands

of drowned rats floated into the canals. Rats that survived scurried up the

sides of buildings, terrorizing stranded residents.”

D. As Lord Byron had prophesized, there came “a cry of nations” that the flooding

be brought under control.

(Transition: The solution to Venice’s problem came to be known as MOSES, which is certainly a play on the Biblical story of Moses parting the waters of the Red Sea.)

II. MOSES is the acronym for electro-mechanical experimental model according to the

*Toronto Star*.

A. The *Ottawa Citizen* says that MOSES is made up of 79, 330-ton hinged-gates.

1. The gates remain below water when not needed.

2. These are placed along the three inlets leading into the Venice lagoon.

B. The *Globe and Mail* says that each “flap-like” gate is 66 feet long, 56 feet high,

and 12 feet wide.

1. “When filled with water, it rests flat beneath the waves, connected by

giant hinges to a recessed foundation on the lagoon bed.”

2. Technicians on the mainland will be responsible for monitoring flood

conditions and activating MOSES.

C. According to *Civil Engineering*, when the gates are filled with water, they will

lie horizontally along a concrete foundation set in the lagoon’s floor.

1. When needed, “the gates can be raised in about half an hour.”

2. When raised, it is at a 40 to 50 degree angle, which is sufficient to block high

water.

Conclusion

I. Today we have learned about the problem of flooding in Venice and how the

MOSES project will help solve the problem.

II. Thank you.

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