

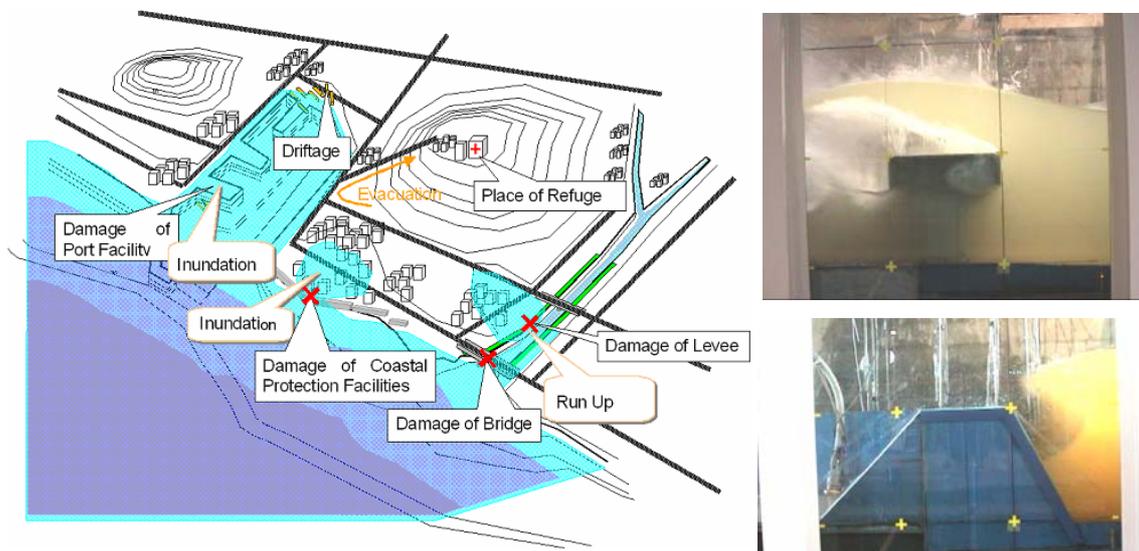
STUDY ON TSUNAMI DAMAGE MITIGATION IS NOW ACTIVELY ONGOING AT NILIM

Since 2004, the National Institute for Land and Infrastructure Management (NILIM) has been conducting research on the prevention of tsunami disasters. The objective of this work is to develop methodologies to:

- develop inundation map that shows detailed images of damaged facilities,
- assess the spread effects of facility damages and their inter-dependency, and
- formulate effective disaster prevention plans.

To estimate detailed images of damaged facilities, a series of experiments were performed to measure tsunami wave force acting on bridges and dikes using NILIM's wave channel facility. These experiments were conducted following the Indian Ocean Tsunami on 26 December 2004. A case study for an individual city is underway to analyze the spread effects of damaged facilities using the Inundation Mapping mentioned above. This research is expected to be completed in FY 2006.

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Inundation Map with Damaged Facilities

Experiments to Measure Tsunami Wave Force

A REFLECTION ON THE PANEL'S WIND ENGINEERING

Wind engineering research in the US has been historically acutely under funded despite the large annual impacts and significant potential for major storm-related catastrophic loss (as evidenced graphically in 2005 by Katrina and Rita). This situation exists in other countries as well, including Japan. The infrequent impacts of major events such as windstorms drives a need to maximize learning from any event that occurs, even in other countries. Bi-Lateral like the Panel are important in enabling the broader community to maximize learning from such events. This observation extends to wind effects on unique, major structures such a long-span bridges. Considerable synergy between the US and Japan in Wind engineering existed over the more than 30 past years as the relative few wind researchers in the US and Japan were able to effectively exchange data and ideas in a manner that promoted significant advances on both sides of the Pacific. The annual Wind and Seismic Effects Panel meetings, as well as the workshops organized under the Panel's umbrella have been instrumental in this process.

The ability to actively collaborate with researchers in other regions on topics of mutual contemporary interest offers important efficiencies strategically, and perhaps even more so in the future. The Panel has played an important role in the past, as the results from complementary research efforts have been shared and synergized. In areas of common interest, different approaches have been shared and evaluated leading to improvements in approaches used by all participants. In the future, areas of common interest can be discussed and tasks allocated to avoid duplication and the maximization of return. In the current climate of severe resource limitations, this collaborative, multi-country approach to wind engineering research will be increasingly important, and the Panel enjoys a position of leadership that can be built upon. This potential evolution of the role of the Panel from one of simply information sharing to strategic collaboration is very important. As our focus expands to include considerations of broader social impacts, the effects of which were graphically illustrated this hurricane season, the need for effective and strategic collaboration across disciplinary as well as international boundaries will become increasingly important.

The potential for Panel leadership in fostering effective collaborative activities should be leveraged to obtain support from other government agencies. While collaborations can occur without the Panel's intervention, this structure offers the strategic infrastructure which – if properly exercised – can lead to otherwise unrealizable efficiencies.

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