

Second Anniversary of the March 11, 2011 Great Eastern Japan Earthquake and Tsunami

By Rick Wilson, California Geological Survey

Note: CGS Senior Engineering Geologist Rick Wilson wrote this blog while in Japan as a guest of the Earthquake Engineering Research Institute and other international organizations.

I am in Japan to take part in a week-long workshop to see how recovery efforts are proceeding in the aftermath of the devastating March 11, 2011 Great Eastern Japan Earthquake and Tsunami. On the two year anniversary of the tsunami, which killed nearly 20,000 people in Japan, I visited Ishinomaki City with two colleagues -- Rob Olshansky of the University of Illinois and Kanako Iuchi of Tohoku University. It is believed that nearly 4,000 people perished in Ishinomaki City during the tsunami, making it one of the worst-hit communities in the country.

One of the more heart-wrenching stories came from Okawa Elementary School on the outskirts of the city. The tsunami completely destroyed the school and killed 74 of 108 students and nine of 13 teachers and staff. Although the school had about 50 minutes to evacuate before the tsunami arrived, almost all of the students and teachers took an evacuation route that ended with tragic results. If the school staff had chosen



a more direct path to high ground, like the hillside near the campus (see photo above), they would have likely survived. The parents of the children who died at Okawa have made a point that they want other people around the world to learn from the mistakes made on the fateful day.

After seeing Okawa, we visited the main part of the Ishinomaki City flooded by the tsunami. This area was once a thriving residential and industrial section of the city. For the past two years, however, the area has remained barren of redevelopment as the national and local governments decide how to proceed on rebuilding (see the picture at the top of the next page).

On the two year anniversary of the tsunami, people still mourning the loss of their loved ones visited the area burning incense in remembrance.

My colleagues and I also took part in a large community memorial service for the victims. With more than 3,000 people in attendance in Ishinomaki City, local, regional, and national dignitaries reverently



Once a thriving community, Ishinomaki City has yet to be redeveloped after the tsunami. Rick Wilson photos

paid their respects. Tens of thousands of white flowers decorated the stage and surrounded a large inscribed monument (see photo below). A video feed from a similar ceremony in Tokyo showed Japan's Prime Minister Abe and Emperor Akihito giving their condolences. At 2:46 p.m. -- the exact time of the March 11, 2011 earthquake -- a moment of national silence was observed.

Although these ceremonies were very awe inspiring and beautiful, my hope is that we don't have to hold a memorial service to honor tens of thousands of deaths after a future tsunami ... especially in the U.S.

With National Tsunami Preparedness Week coming up, I hope every person who lives, works, or visits the coast will take a little time to better understand the tsunami hazards in their area. If you live in California, where the tsunami hazard varies along the coast, you can visit www.tsunami.ca.gov or <http://myhazards.calema.ca.gov> to see tsunami inundation maps for your community and learn more about what you can and should do. Help protect yourself and your family. Please don't wait until it is too late.

