JAPANESE 2011 TSUNAMI DEBRIS REPORT FROM PACIFICA – December 2016

Probable and confirmed 2011 Japanese Tsunami Debris finds around Mussel Rock, near Daly City/Pacifica, California.

Photos of many of the items mentioned can be found here: <u>http://www.flickr.com/photos/sixbyfire/albums/72157656407384251</u> TinyURL link for same: <u>http://tinyurl.com/zsg37jc</u>

On July 27th, 2013, the first of many probable pieces of 2011 Japanese Tsunami Debris was found south of Mussel Rock near the "Secret Waterfall" area during a monthly Pacifica Beach Coalition cleanup event. The item was an orange "fish crate" with numerous Japanese markings and writing molded into it. There was a spray painted red character or symbol on the side, however, it was badly faded and could not be linked or confirmed to any one location or ship in Japan.

Thankfully the Daly City/Pacifica area has not seen the influx of Tsunami Debris like Oregon, Washington, Alaska, and the west coast of Canada have seen. That being said, since the 2013 find numerous pieces of probable Tsunami Debris have washed up here, however, as of the end of 2016, only one piece found in 2015 was able to be confirmed as coming from Japan as a result of the 2011 Tsunami.

In August of 2014 a 22' long fiberglass boat washed up near Avalon Canyon in Daly City. The boat's data plate was intact, however, any other markings or boat/owner name were damaged and no longer legible. Only a small yellow decal with Japanese writing was uncovered, which when translated said: "please place tanks here", which led members of the Pacifica Beach Coalition to assume that perhaps the boat was used for diving.

In May of 2015 several net floats were found near the "Secret Waterfall" area and in June of 2015 a blue "fish crate" was found in the Golden Gate National Recreation area of Ocean Beach in San Francisco. On July 25th, 2015 a green crate was found north of Mussel Rock at the base of the sea wall which holds back the old Daly City landfill. This was found during another monthly Pacifica Beach Coalition cleanup event. The crate had clear markings and by September 2015, this piece was confirmed by NOAA, via the Japanese Consulate and Japanese Government as coming from the 2011 Tsunami. These are the characters on the green crate: 山田港照丸. 山田 means Yamada, which is a city in the Iwate Prefecture in northern Japan that was hard hit by the 2011 Tsunami, 港 meaning Port, and 照丸 being Terumaru, the name of a fishing vessel. It should be noted the previous two pieces of confirmed Tsunami Debris in California were both fiberglass boats/skiffs, one found in Crescent City in 2013 and one found in Humboldt County in 2014.

The largest influx of probable Tsunami Debris happened mid June of 2016, when no less than 50 pieces of plastic crates, net floats, buoys, bottles, lids, caps, and one fish basket washed up along an area stretching from Fort Funston in San Francisco south to Mori Point in Pacifica. One member of the Pacific Beach Coalition searched nearly five miles of accessible beaches (the total distance of shoreline is about seven miles, not all of it is accessible) in a two week period and removed more probable Tsunami Debris in those two weeks than had previously been found the previous five years. Several of the pieces had unique markings, however, none were unique enough to be confirmed as Tsunami Debris.

On August 27th, 2016 a large green plastic pallet with KRS markings (KRS is a logistics company in Japan) was found north of Mussel Rock during a monthly Pacifica Beach Coalition cleanup event. Although the pallet had spray painted markings, they were later determined to be the date the pallet was placed in service at KRS and not any unique logistics ID. KRS was contacted directly and while they confirmed their warehouse in Sendai was damaged/destroyed in the 2011 Tsunami, they couldn't confirm the green plastic pallet actually came from there and wasn't washed overboard from a ship or was lost at the docks as opposed to coming from the 2011 Tsunami.

Since an influx of Tsunami Debris was expected to hit Northern California many members of the Pacifica Beach Coalition as part of regular clean up events or on their own have been on the front lines of finding and removing not just probable Tsunami Debris, but all marine debris and other garbage and trash, including tires, that have washed ashore in the Daly City/Pacifica area and several areas in and around Half Moon Bay.

Confirmed 2011 Japanese Tsunami Debris found July 25th, 2015

Date: Fri, 4 Sep 2015 23:47:35 -0700 Subject: Re: Possible tsunami crate all cleaned up From: <u>sixbyfire@gmail.com</u> To: helennicely@hotmail.com

Trying to think about what to say about our finds. More than a few of us have found items that no doubt came from the tsunami, but they didn't have enough markings or the right kind of markings to be confirmed. Many of the items show the same type of wear or sea growth, plastics get very dull and white, while the gooseneck barnacles cling to the sides. Most marine debris we see here from the US looks like its just recently been lost, the plastic cleans up well and they don't usually have a lot of marine growth on them.

When I first spotted the green crate I wasn't sure it was anything different than we'd found before. We have found numerous crates and bait containers and I always get excited when I find one intact, but as I approached this one all of a sudden, even under the marine growth, I could see the Japanese Kanji and knew we had something special. Of course I didn't know what any of it meant, but less than 12 hours later, thanks to the internet, we had the markings translated and had located a blog from a fisherman that had pictures of the ship with the same markings as the crate.

This is the first confirmed tsunami debris in the Bay Area, and so far, as far as I've been able to tell, is the southernmost confirmed tsunami debris in the continental United States.

Straight line travel from the docks in the Town of Yamada in the Iwate Prefecture to coordinates where this was found in Daly City, California is exactly 4,902 miles, though this likely traveled much further. Maximum days at sea, if it washed up the morning we found it is 1,597 days at sea. I personally believe this washed up no more than a day before we found it, and probably the previous high tide. It wasn't very high up into the rip rap given the waves we had at the time. The area it was found in is a little bit of a lower area of rip rap, sort of a valley with the rip rap higher to the north and south, it was in a perfect spot not to be seen from more than like 50' away if you were standing on the rip rap, and it also wasn't visible from the trail above the rip rap.

Feel free to use any photos here: <u>http://www.flickr.com/photos/sixbyfire/albums/72157656407384251</u> If you need full resolution ones, let me know, but honestly, the one with Paxton and me that you took is probably the best one.

Being only the third confirmed piece of 2011 Japanese tsunami debris in the State of California makes this a special find, but in reality its a grim reminder to the devastation that happened in Japan as a result of the earthquake and tsunami. In the Town of Yamada, which only has a population of 16,000 people, over 600 died and over 200 were reported missing as a result of the earthquake and tsunami. In the Iwate Prefecture, which is where Yamada is located, over 4,500 people died and over 2,500 people are still missing. And the Iwate Prefecture is one of only three Prefectures in Japan which were hit hardest by the earthquake and tsunami.

By Jeff Christner

RECENT DISCOVERY

As recent as August 2014, a fiberglass skiff possibly from Japan, which may or may not be from the 2011 tsunami disaster, washed ashore at Mussel Rock (near Avalon Canyon in Daly City). The PBC site team discovered the skiff and went the extra mile to alert proper authorities to begin to identify and arrange for its removal. It is yet to be determined if the skiff displaying Japanese writing originates from the 2011 tsunami. Although, anything coming from waters with foreign organisms (aquatic invasive species) growing on it would be a similar risk to our fragile coastal environment. It is the third boat to come to shore in California since 2011, and is an example of how the PBC and authorities are reacting as they would to any tsunami-related debris. It was evaluated for radiation, although the risk is unlikely given that the debris entered the ocean days or even weeks before the Fukushima Daiichi nuclear plant went into meltdown and subsequent leakage occurred after the tsunami spread debris far and wide. It is

expected the Japanese consulate will receive information on the findings to reach out to the government of Japan to try to identify an original owner and determine whether the boat was lost during the tsunami.

2013 JTMD CLEANUP PROGRAM RESULTS

During the first year of the JTMD Cleanup Program led locally by the PBC in 2013, more than 575 volunteers participated at Linda Mar State Beach and Mussel Rock. PBC Site Captains Helen Nicely, Jim and Ana Fithian, Tom Whittaker and Debbie Kane led a volunteer crew who included Pacifica residents Liz Murtagh and Tim Sutton, 4-H Club, Boy Scout Troop 74, Genentech employees and Good Shepherd School. Their total collection amounted to 1,749 lbs of trash and 194 lbs of recycles. While Linda Mar did not report any findings of possible tsunami debris, the Mussel Rock crew discovered a large styrofoam-type float, lumber that could have been part of a dock, and a bait trap with Japanese inscription. All reports on the findings followed a protocol to the CCC and NOAA.