The Great East Japan Earthquake and Tsunami Records of Miyako City

Vol. 1, History of Tsunami (Summary Version)- English Edition



Miyako City Iwate Pref.

The Great East Japan Earthquake and Tsunami Records of Miyako City

Vol. 1, History of Tsunami (Summary Version)- English Edition









Description of cover photos

(Top from the left)

- Tsunami by the Sanriku Earthquake in 1896, at Hitachihama, Kuwagasaki Tsunami by the Sanriku Earthquake in 1933, at Taro Elementary School
- Tsunami by the Chilean Earthquake in 1960, at Current National Highway Route No. 45, Takahama

(Bottom)

- Tsunami by the Great East Japan Earthquake in 2011. View of Tsukiji from the City Hall (p. 8)

Foreword

Masanori Yamamoto, Mayor of Miyako City



In publishing *The Great East Japan Earthquake and Tsunami: Records of Miyako City. Vol. 1, History of Tsunami (Summary Version)*, I would like once again to pray for the souls of those who fell victim to the tsunami disaster.

With more than three years having passed since the disaster of Mar. 11, 2011, I also wish to express my deep gratitude to people from the national government, prefectural government, municipal governments inside/outside the prefecture, and various organizations, as well as volunteers for the enormous assistance and cooperation.

Having formulated the Miyako City Great East Japan Earthquake and Tsunami Revival Plan in Jul. 2012, we at Miyako City are working for restoration with our three pillars of revival being "Restoration of Housing and Life," "Industrial/Economic Revival," and "Building Safe Communities." For "Building Safety Communities," which is one of the three pillars, we have defined "Succession of Memory of Disaster to Future Generations" as the direction of our work. We will preserve and compile records of the tsunami disaster and disseminate the information.

For contents of Vol. 1 (Summary Version), "Part 1: The Great East Japan Earthquake and Tsunami" contains *Special Photographic Issue: Tsunami* of the newsletter *PR Miyako*, and various data on the Great East Japan Earthquake and Tsunami, such as a summary of damage by the earthquake and tsunami. At the end of the volume is a chronological report of earthquakes and tsunamis in the Miyako region, which has been compiled from various historical materials and documents.

As a corpus of records and data of tsunami damage in our City, I am sure that this volume will endure a long, effective use for study on development of disaster-resistant towns and awareness-raising/educational activities on disaster prevention.

In closing, I would like to heartily thank the members of the Miyako City Great East Japan Earthquake and Tsunami Records Editorial Committee, including Chair Yoriko Kanda and Vice Chair Masaaki Minami, for the kind services, as well as every individual from related organizations who provided cooperation in collecting materials and records.

Sep. 2014

Preface

Yoriko Kanda

Chair of the Miyako City Great East Japan Earthquake and Tsunami Records Editorial Committee Professor, Faculty of Humanities, Keiwa Gakuen College

As we are going to press with *The Great East Japan Earthquake and Tsunami: Records of Miyako City.* Vol. 1, *History of Tsunami (Summary Version)*, I would like to pray for the souls of those who fell victim to the tsunami disaster. I would also express sympathy for people who are still having a hard time and pray that they can return to the normal daily life as early as possible.

My research has kept me connected to Miyako City for over 30 years. As many of my friends and acquaintances have suffered from the tsunami disaster, I have a personal feeling that the whole event is by no means unrelated to myself, which prompted me to participate in this project.

As a sequel to The Great East Japan Earthquake and Tsunami: Records of Miyako City. Vol. 1, History of Tsunami, the Miyako City Great East Japan Earthquake and Tsunami Records Editorial Committee plans to publish Vol. 2 of The Great East Japan Earthquake and Tsunami: Records of Miyako City in fiscal 2015. Mainly using the method of folklore studies, we interviewed people in various positions to learn how they acted when they were hit by the disaster, and their opinions backed by actual experiences as to how one should have acted and how they had wanted those around them to act. We listened to and put down their ideas on matters, such as how to respond in a disaster area and what the logistics support should be in an effort to record the experiences of people.

Our activities are not limited to putting down what we heard from people. Planning to insert personal accounts that have been already written by individuals, we are also collecting such writings. Furthermore, we wish to archive images (video footage and photos) of the days after the tsunami disaster for preservation as well. To this end, the editorial committee collects material not only together with many fellow researchers but also in collaboration with members of a local non-profit organization "Stand Up! Taro, Miyako" as well as members from the monthly town magazine *Miyako My Town*. We are making efforts in hopes that these Records will help Miyako City in overcoming this disaster and making itself a disaster-tolerant town.

Praying that everyone can return to the normal daily life as early as possible, we will continue our data gathering activities.

Hoping for Revival of Miyako City

Masaaki Minami

Vice Chair of the Miyako City Great East Japan Earthquake and Tsunami Records Editorial Committee Professor, Department of Civil and Environmental Engineering, Faculty of Engineering, Iwate University

Three years have already passed since the Great East Japan Earthquake. The unprecedented disaster brought monstrous damage to Miyako City. Many precious lives were lost, numerous buildings and facilities damaged or carried away, and the townscape completely disfigured in some neighborhoods.

From that time on, people in disaster areas have undergone immeasurable suffering and moments of sadness in day-to-day life. Under such circumstances, residents, local administration, and supporters have held a number of discussions to envision and create a future life and townscape, formulating plans for revival and putting them into practice.

The principal task of compiling the history of Miyako City would be to capture as historical records how people in Miyako have endured sadness and are making progress to start a new life. These records will allow generations after generations to learn about the monstrosity of tsunami disasters, how to prevent/mitigate a tsunami disaster, how to build a disaster-tolerant town, and how to develop and implement revival plans. We will obtain irreplaceable wisdom as a person and as a society from the way people carve out their lives in the wake of this massive disaster.

These records will inform us about what preliminary measures to take with respect to major disasters that are expected to take place in our country at the level of individuals, households, local communities, urban infrastructure facilities, and legal systems, as well as about how to respond in the event of a recurrence of a major disaster. At the same time, these records will bring to our minds the sanctity of many people's lives who fell victim to the Great East Japan Earthquake and Tsunami together with a prayer for the repose of their souls.

Due to my personal connection to Miyako for about 10 years starting before this tsunami disaster, I have been given a role in compiling the history of Miyako City. I have frequently visited with students for study purposes the Taro neighborhood renowned as the town of tsunami disaster prevention. We had surveyed the elevation of the land and the distribution of residents. We had just started in Jan. 2011 a project on tsunami evacuation exercises suitable for each individual with more than 100 residents participating in the project. The road to tsunami disaster prevention, which people of Miyako have been pursuing, continues onward. I sincerely pray that this continuous effort will bring wisdom and hope for mankind.

The Great East Japan Earthquake and Tsunami Records of Miyako City.

Vol. 1, History of Tsunami (Summary Version) -English Edition — Table of Contents —

Foreword	Masanori Yamamoto, Mayor of Miyako City	3
Preface		
	co City Great East Japan Earthquake and Tsunami essor, Faculty of Humanities, Keiwa Gakuen College	4
Hoping for Revival of Miyako Cit	у	
Records Editorial Committee Profe	e Miyako City Great East Japan Earthquake and Tsunami essor, Department of Civil and Environmental Engineering, ersity	
Special Photographic Issue: Tsu	nami (<i>PR Miyako</i> , Jun. 1, 2011.) ·····	7
1. Overview of Earthquake and	Tsunami	20
(1) Overview of Earthquake		20
(2) Overview of Tsunami		23
2. Overview of Damage		27
(1) Inundation and Land Subs	idence	27
(2) Casualties and Building Da	amage	27
(3) Overview of Damage in N	Niyako City ······	27
3. Status of Responses to the G	Great East Japan Earthquake and Tsunami	35
4. Number of People Killed and	Missing	38
5. Number of Houses Destroye	d	40
6. Total Estimated Amount of D	Damage	42
7. Chronology of Earthquakes a	and Tsunamis in the Miyako Region	45
References		49
Miyako City Great East Japan Ear	thquake and Tsunami Records Editorial Committee	51