

Factors Affecting the Decision to Preserve Building Remains at an Earthquake Site

A Case Study of the Submerged Houses in Kogomo Community, Japan

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1. Objectives

Many local governments are considering preserving the remains of buildings damaged by the Great East Japan Earthquake as memorial sites. Obstacles to such preservation include the difficulty in coming to an agreement with affected landowners, remains being in the way of reconstruction projects, and the challenges of maintaining the remains in the long term. However, although many of the remains are quickly disappearing, an increasing number of quake-struck areas are proactively opening their remains to the public to attract tourists and educate people about disaster prevention.

Understanding why some areas have historically succeeded in preserving memorial sites may help us evaluate whether areas affected by the Great East Japan Earthquake, as well as other or future disasters, should preserve their remains. Therefore, this paper aims to determine how and why the disaster-affected area of the Mid Niigata Prefecture Earthquake in 2004, specifically, the area of the submerged houses in Kogomo (Kogomo Earthquake Memorial Park, hereafter “the Memorial Park”), was preserved despite protests and other obstacles.

2. Overview

2-1. Overview of the Memorial Park

The Memorial Park, located at point 1 of the Mid Niigata Prefecture Earthquake in 2004 Memorial Corridor, comprises a total of eight quake-affected houses and memorial remains from the Mid Niigata Prefecture Earthquake in 2004. The area was submerged because of a river blockage caused by a landslide after the earthquake. The images of the Kogomo Earthquake Memorial Park is shown in Fig 1, the location of the Kogomo Earthquake Memorial Park is shown Fig 2, and an overview of the Memorial Park is shown in Table 1



Fig 1. The image of the Kogomo Earthquake Memorial Park

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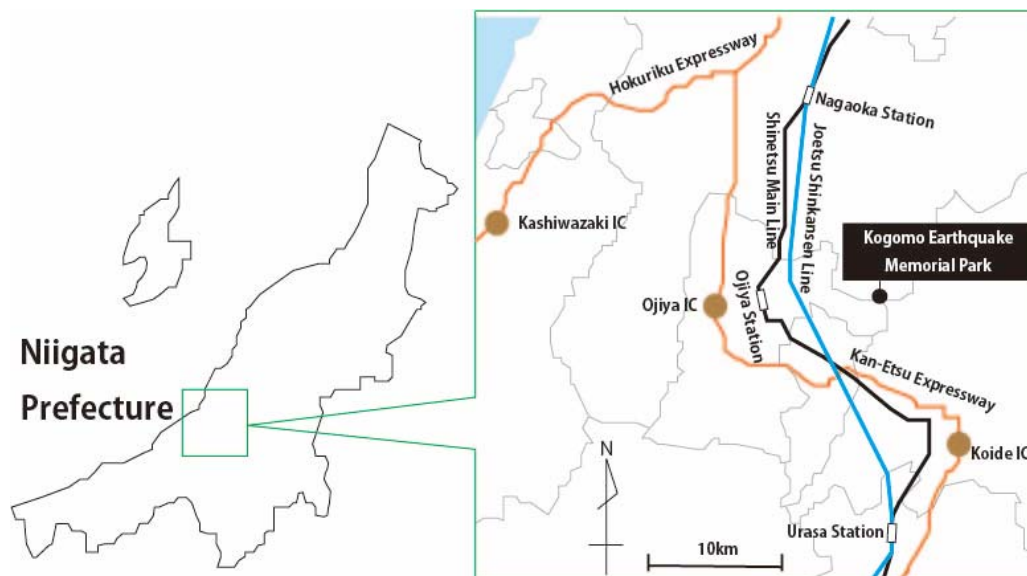


Fig 2. The location of the Kogomo Earthquake Memorial Park

Table 1. Overview of Kogomo Earthquake Memorial Park

Name	Kogomo Earthquake Memorial Park
Since	October 21, 2011
Exhibition Content	A total of eight quake-affected houses that were submerged because of a river blockage caused by a landslide after the earthquake
Site owner	Publicly-owned land (owned by Ministry of Land, Infrastructure, Transport and Tourism)

2-2. The development history of the Memorial Park

A survey with the Chuetsu Organization for a Safe and Secure Society, the administrator of the Memorial Park, was conducted to collect information on the Memorial Park's development history. As mentioned above, the remains in the Memorial Park were 8, out of an original 14 submerged houses. The submersion was caused by the blockage of the neighboring Imo River due to a landslide after the earthquake. It was subsequently decided to implement a countermeasure against the blockage to prevent further disasters in the river's lower course. Erosion and sediment control were planned in Yamakoshi village, the area where the Kogomo community is located. The work was originally to be conducted by the Niigata Prefectural Government. However, the governor appointed the Yuzawa Sabo Office of the Ministry of Land, Infrastructure, Transport and Tourism, because of the urgent need for erosion and sediment control.

Although these types of construction projects are normally subject to legal procedures such as providing explanations for construction and purchasing contracts with land owners, the construction in this case was implemented even before obtaining every owner's consent because immediate action was required at the site. The Japanese government purchased the submerged land and houses. Another difference was that the Yuzawa Sabo Office, as the responsible constructor, cleared the land on behalf of the owners due to the danger of erosion at the site.

Normally, landowners hand over the land after tearing down buildings and clearing the land.

The submerged Kogomo region, consisting of the affected areas in Nagaoka city, Ojiya city, and Kawaguchi-machi (later merged into Nagaoka city), was considered one of the memorial sites for the Mid Niigata Prefecture Earthquake in 2004 as a part of the fundamental plan for maintenance of disaster memorial sites by the Council for the Chuetsu Memorial Corridor of the Chuetsu Organization for a Safe and Secure Society. The council requested local residents to preserve submerged areas. A leader in the region, as well as many local residents, was initially against the request, but eventually complied. The council also requested the responsible constructor, the Yuzawa Sabo Office, to preserve some affected sites. Consequently, the Yuzawa Sabo Office decided to keep 'not preserve' 8 out of 21 houses because of difficulties in operating heavy equipment at the submerged site and requests from local residents for the disaster memorial project. The submerged site was later officially designated as the Kogomo Earthquake Memorial Park, one of the memorial points along the Chuetsu Earthquake Memorial Corridor. It opened to the public on October 21, 2011.

3. Conclusion

This survey of the Mid Niigata Prefecture Earthquake in 2004 revealed some factors affecting the choice for preserving some building remains in the quake-struck areas as memorial sites. It is important to not make any impetuous decisions concerning whether to tear down or keep affected buildings. The development history shows that maintaining long, persistent, and constructive discussions with people involved in the project are the key factors.

Keywords: *memorial remains, the Kogomo Memorial Park, submerged houses*

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