

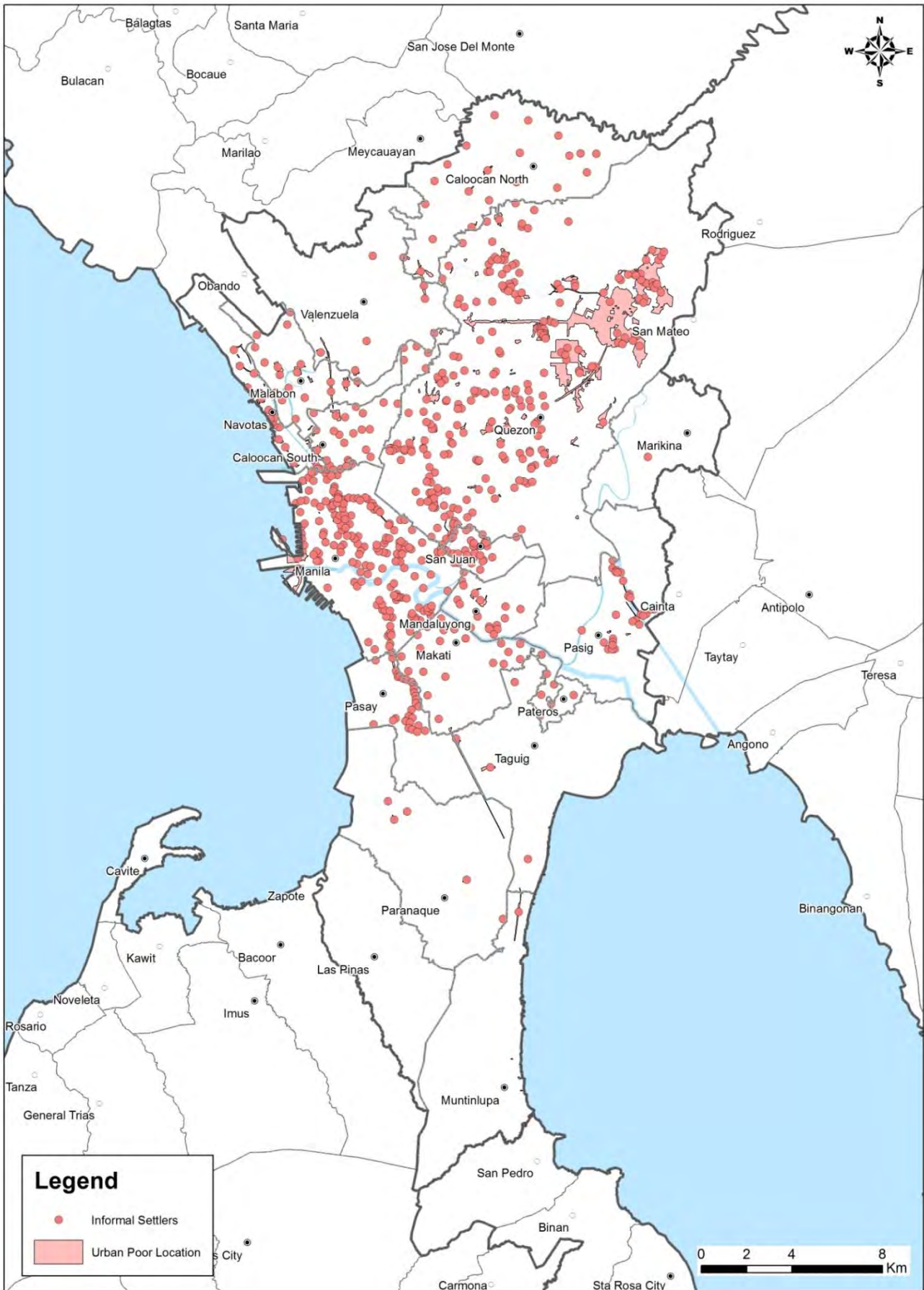
4 SOCIO-ECONOMIC CONDITIONS

4.1 Data Sources

This chapter reports on the distribution of informal settlers, poverty incidence, conditions of infrastructure services, as well as the distribution of special economic zones.

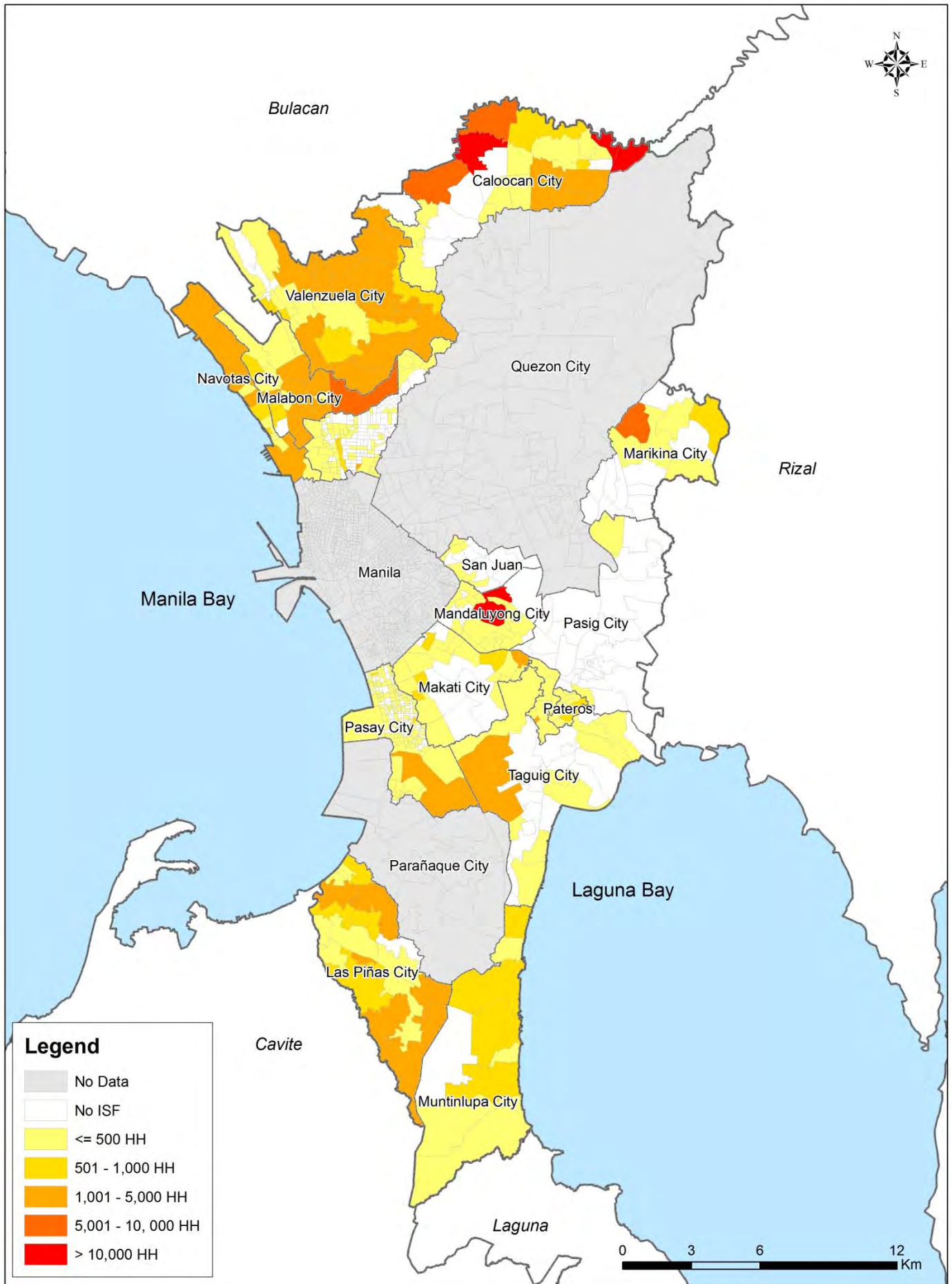
- (a) **Distribution of Informal Settlers:** The locations of informal settlers were identified by several projects in the past. The data collected in this study is from the “Metro Manila Urban Services for the Poor Project” (2006) by the Asian Development Bank (ADB) and the “Study on Climate Change Impact over Asia Mega Cities Phase 2” (2008) by the Japan Bank for International Cooperation.
- (b) **Number of Informal Settler Families:** The number of informal settler families by barangay was provided mainly by the local government units (LGUs) in Metro Manila. However, the data at the barangay level is not available for the cities of Quezon, Manila, and Paranaque.
- (c) **Poverty Incidence:** The data for the provincial level is available only in the *2009 Official Poverty Statistics of the Philippines* published by the National Statistical Coordination Board (NSCB).
- (d) **Conditions of Infrastructure Services:** This data is only available from the NSO’s *2000 Census of Population and Housing*.
- (e) **Location of Special Economic Zones:** The Philippine Economic Zone Authority (PEZA) publishes a list of operating and declared economic zones.

Figure 4.1 Distribution of Informal Settlers in Metro Manila



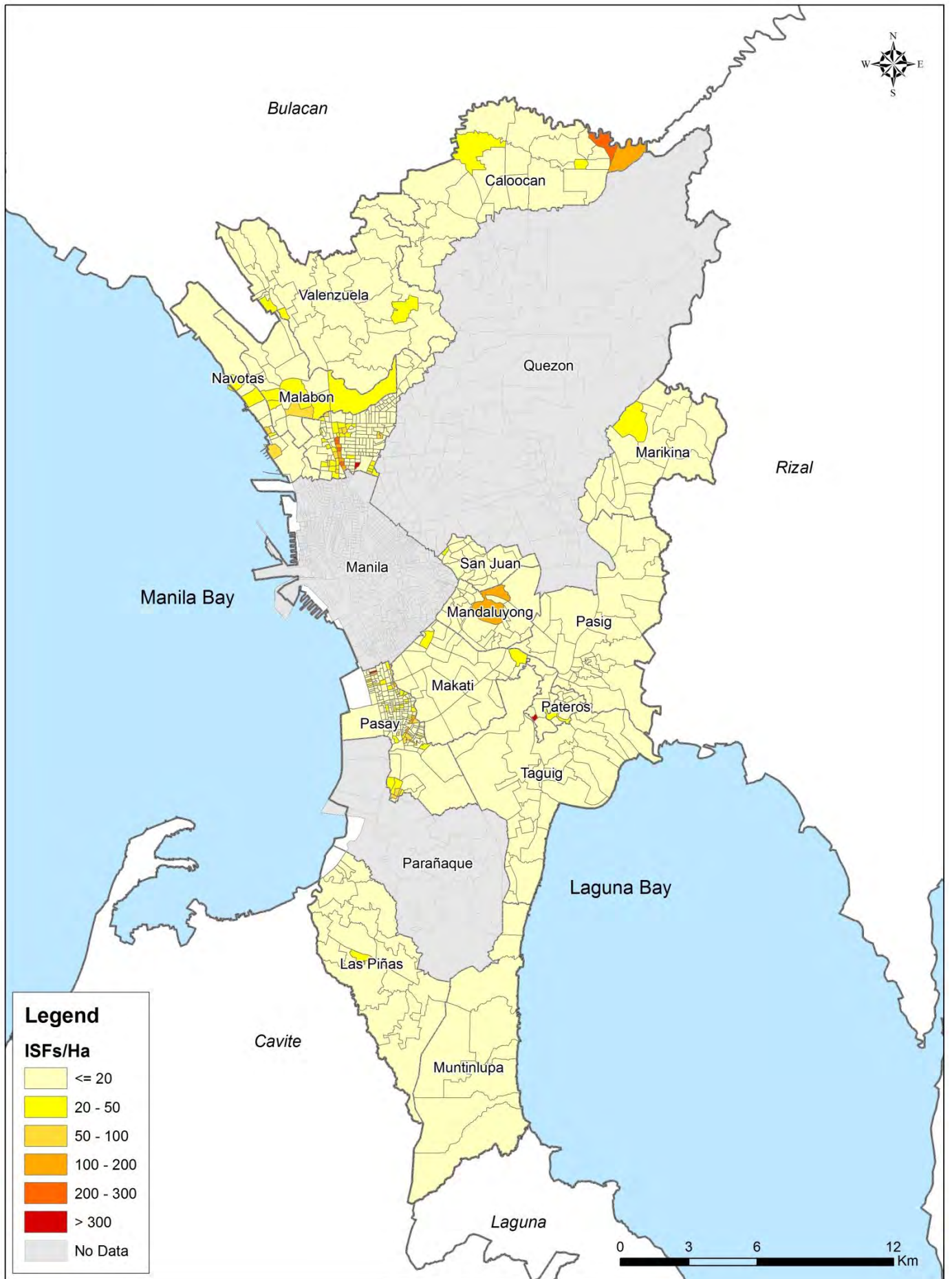
Source: Metro Manila Urban Services for the Poor Project (ADB, 2006)/ The Study on Climate Change Impact over Asia Mega Cities Phase 2 (JBIC, 2008).

Figure 4.2 Number of Informal Settler Families in Metro Manila by Barangay



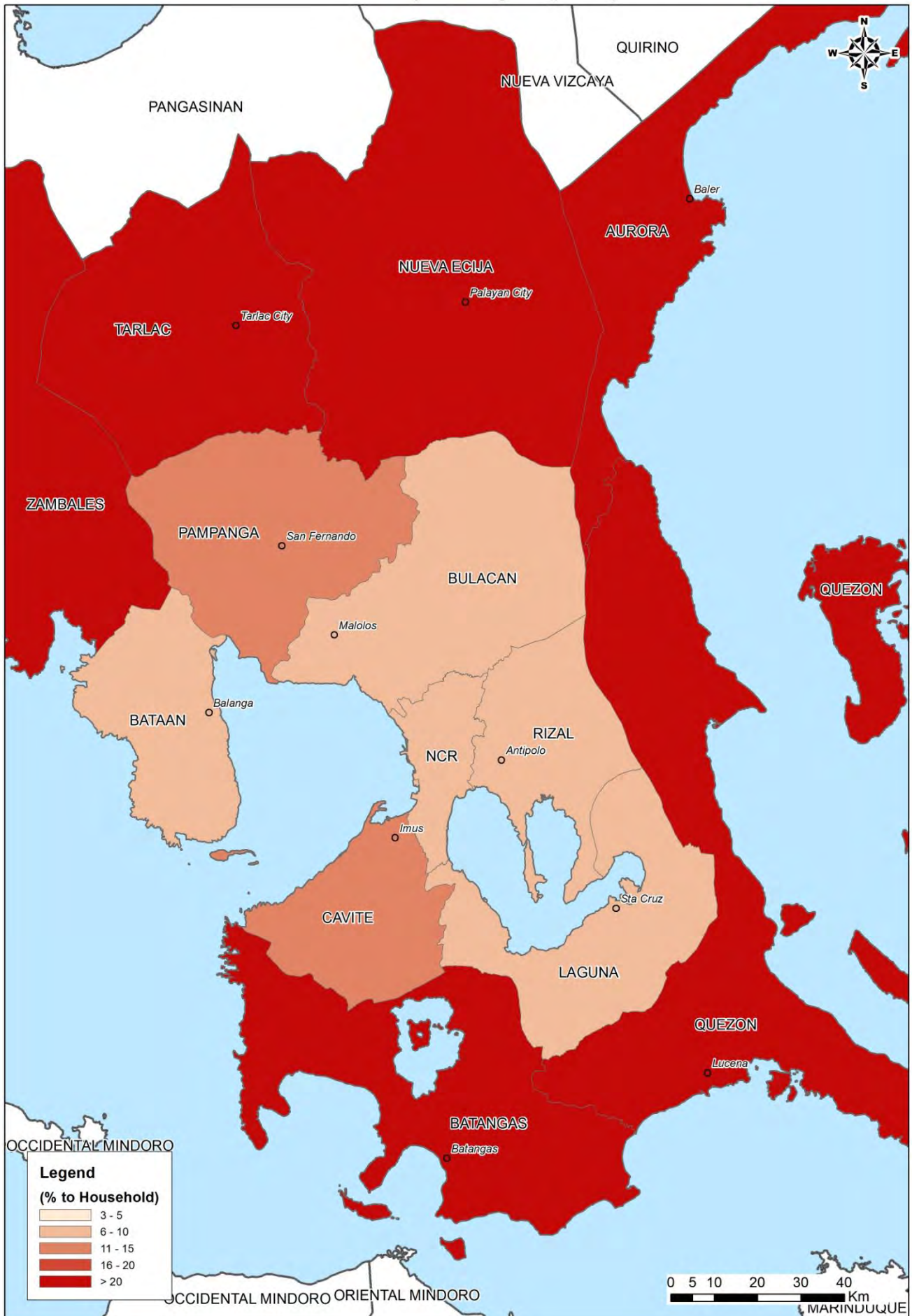
Source: Local Government Units (LGUs) of Metro Manila/ JICA Study Team.

Figure 4.3 Number of Informal Settler Families per Hectare in Metro Manila by Barangay



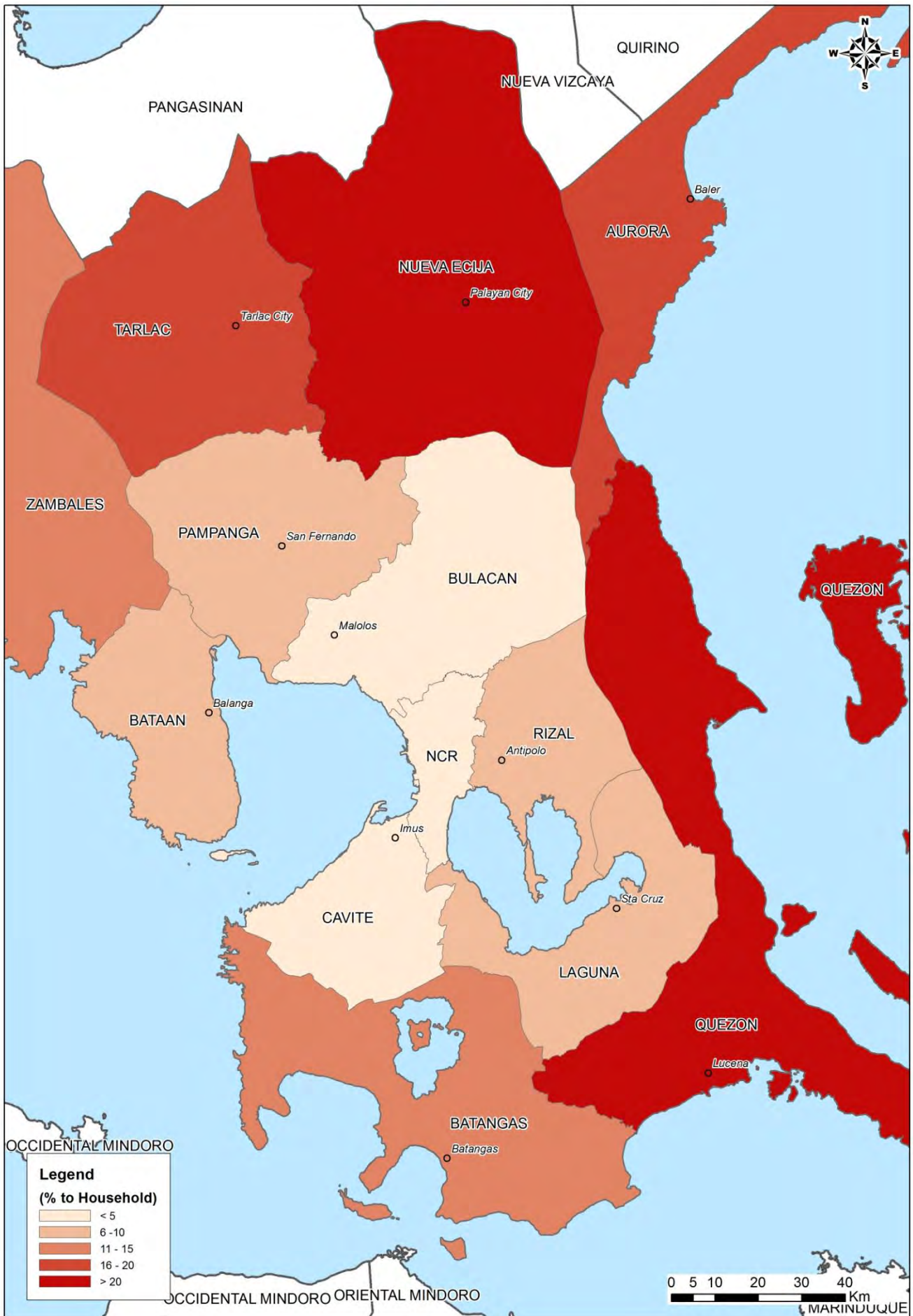
Source: Local Government Units (LGUs) of Metro Manila/ JICA Study Team.

Figure 4.4 Poverty Incidence in the Greater Capital Region in 2000 by Province



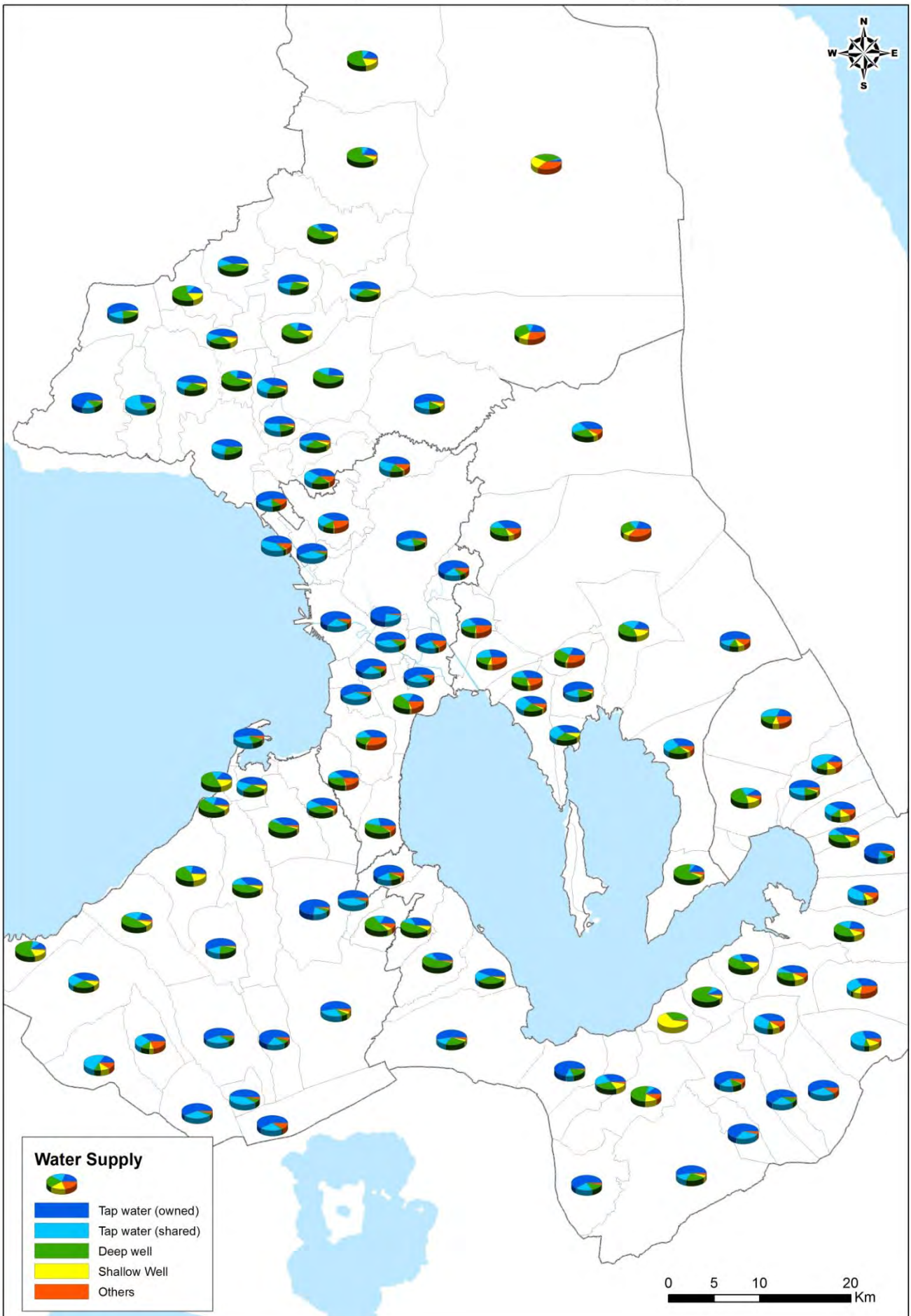
Source: 2009 Official Poverty Statistics of the Philippines (NSCB).

Figure 4.5 Poverty Incidence in the Greater Capital Region in 2009 by Province



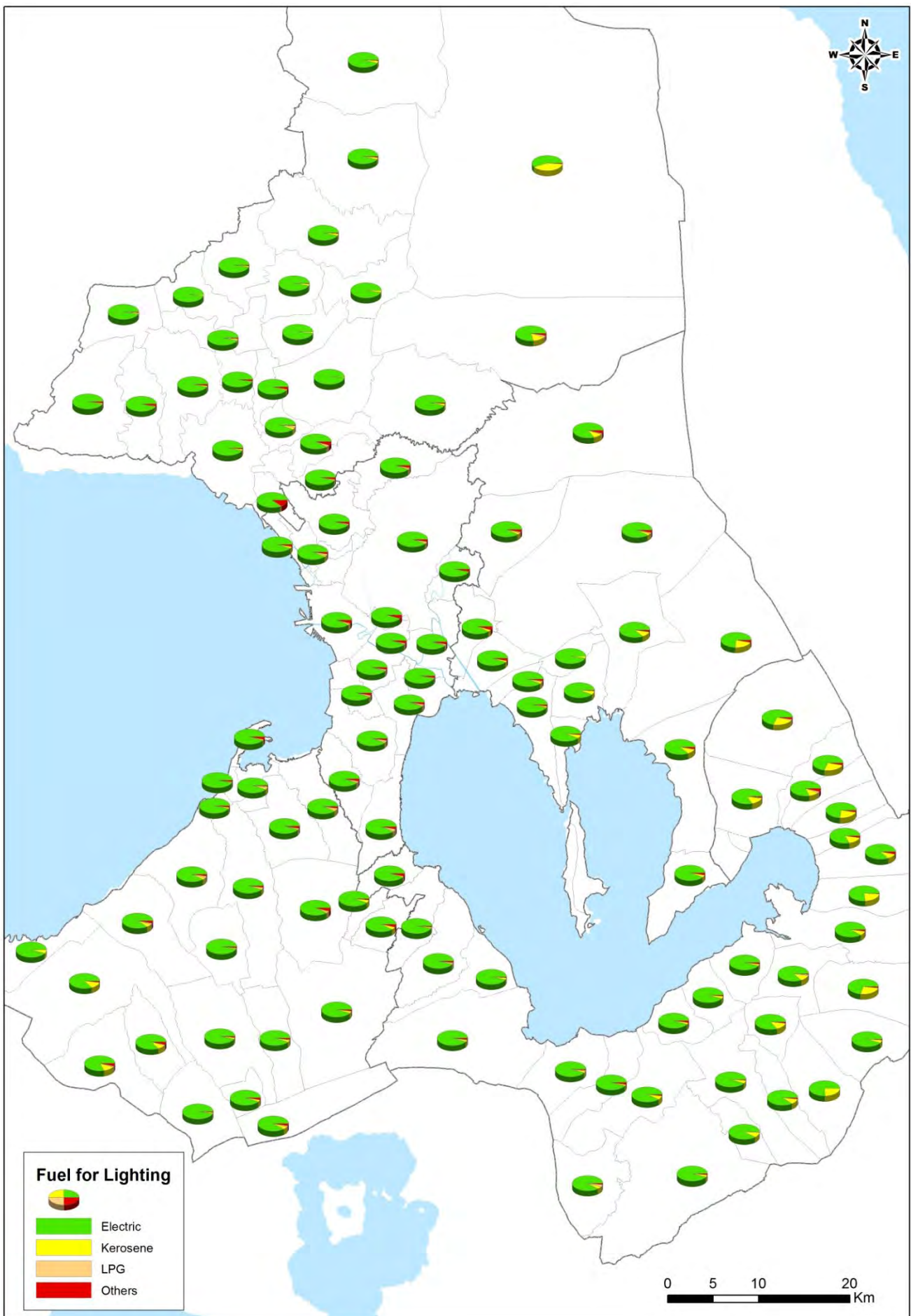
Source: 2009 Official Poverty Statistics of the Philippines (NSCB).

Figure 4.6 Sources of Water Supply in Mega Manila in 2000



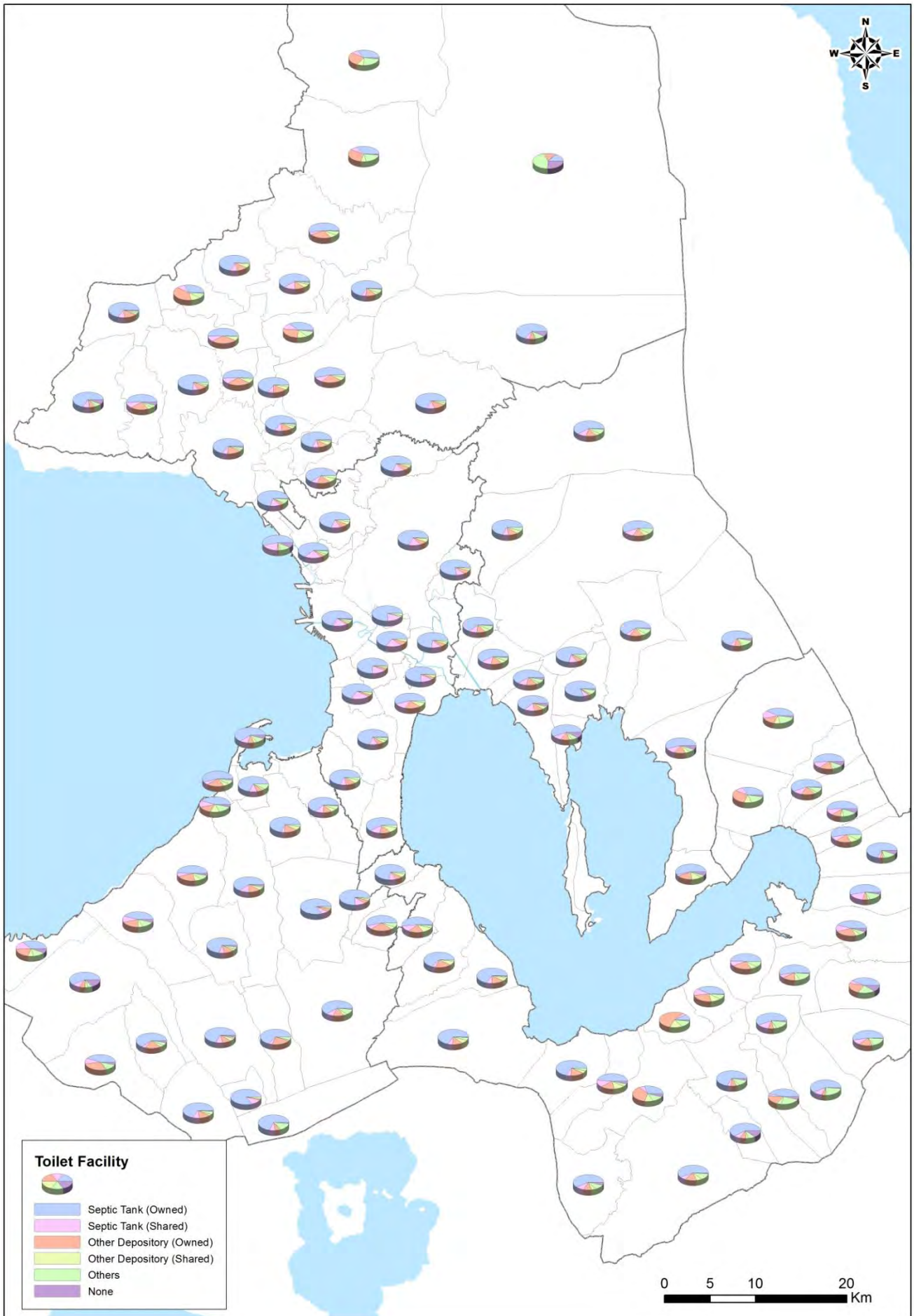
Source: 2000 Census of Population and Housing (NSO).

Figure 4.7 Fuel Used for Lighting in Mega Manila in 2000



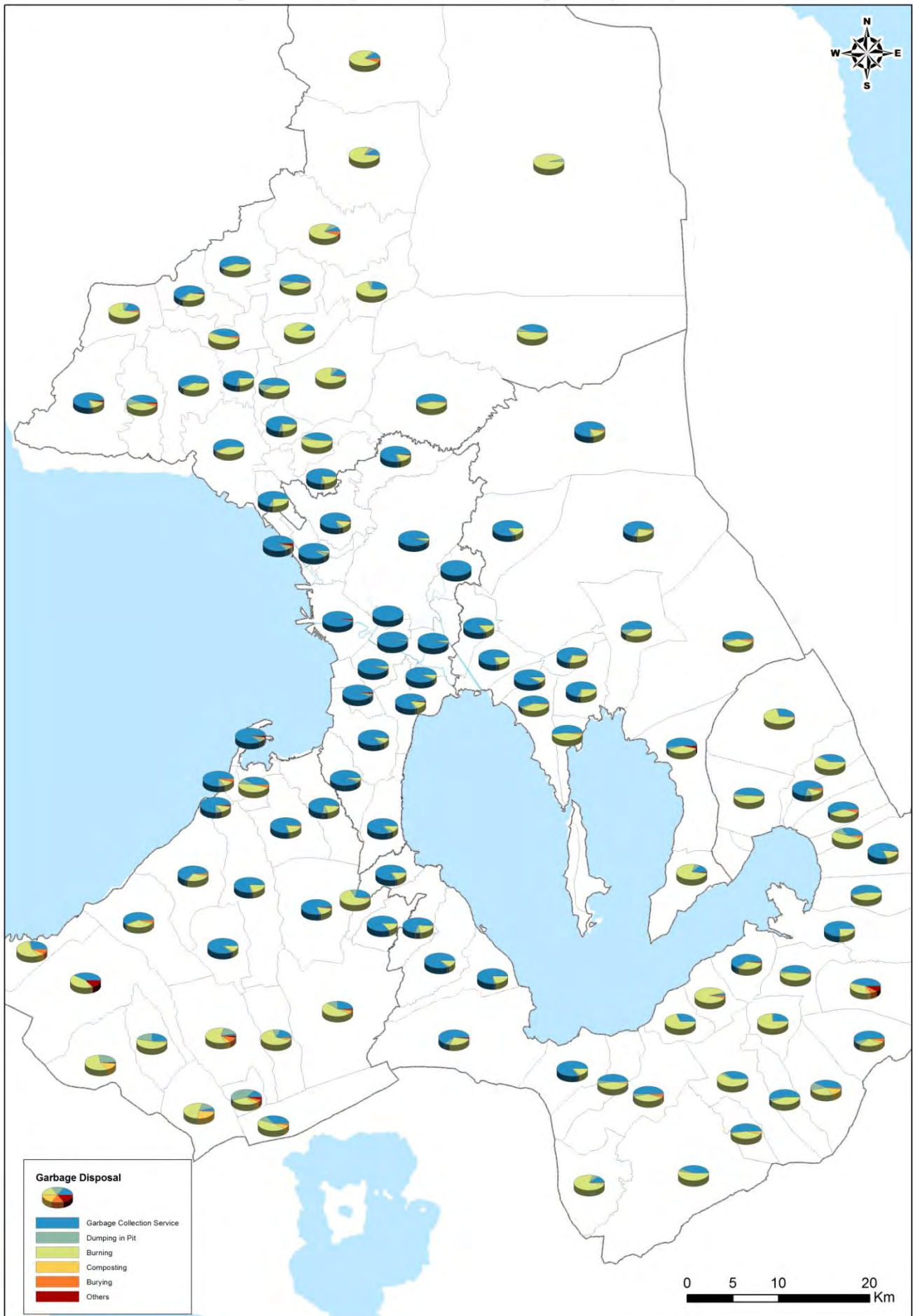
Source: 2000 Census of Population and Housing (NSO).

Figure 4.8 Types of Toilet Used in Mega Manila in 2000



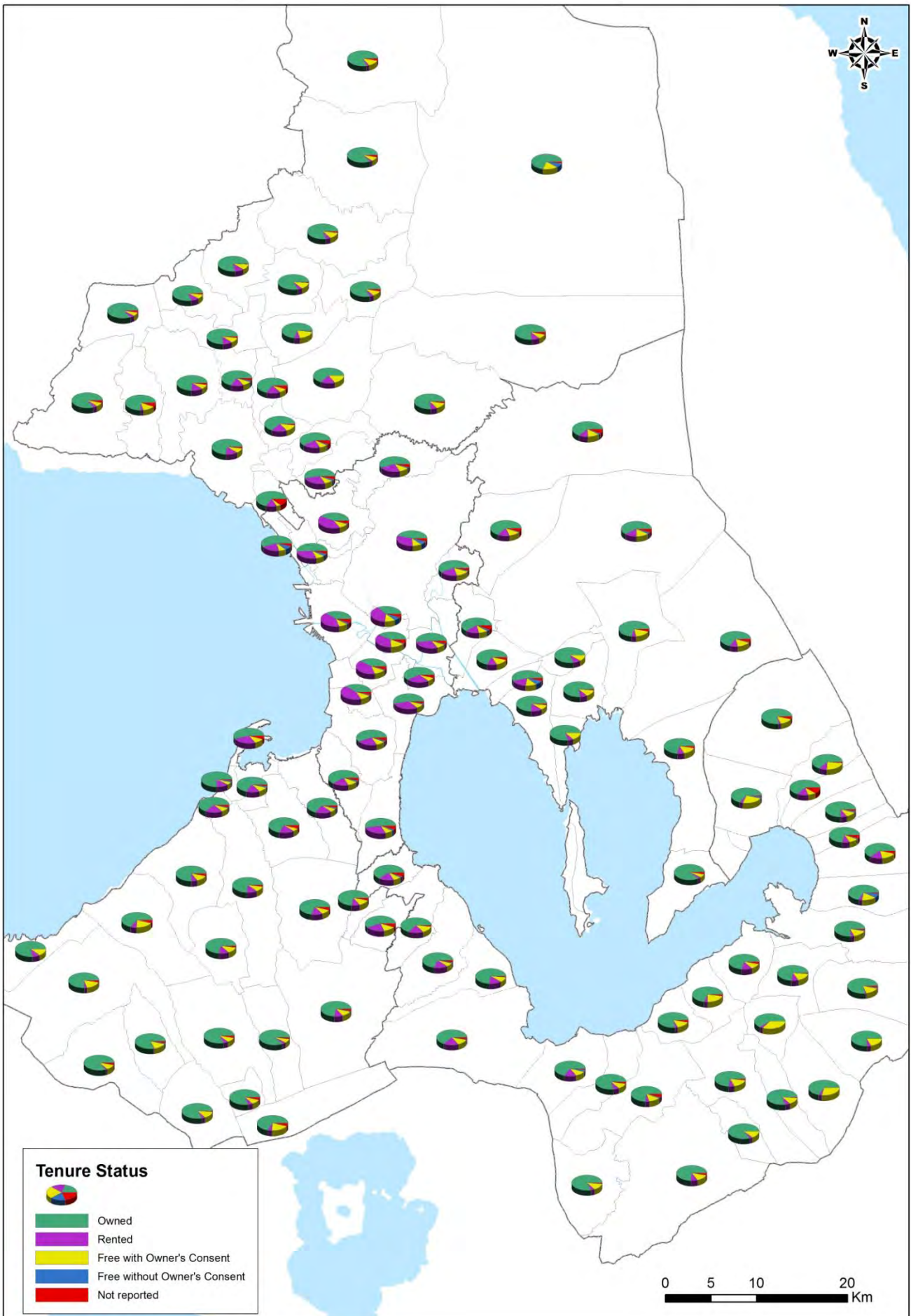
Source: 2000 Census of Population and Housing (NSO).

Figure 4.9 Methods of Garbage Disposal in Mega Manila in 2000



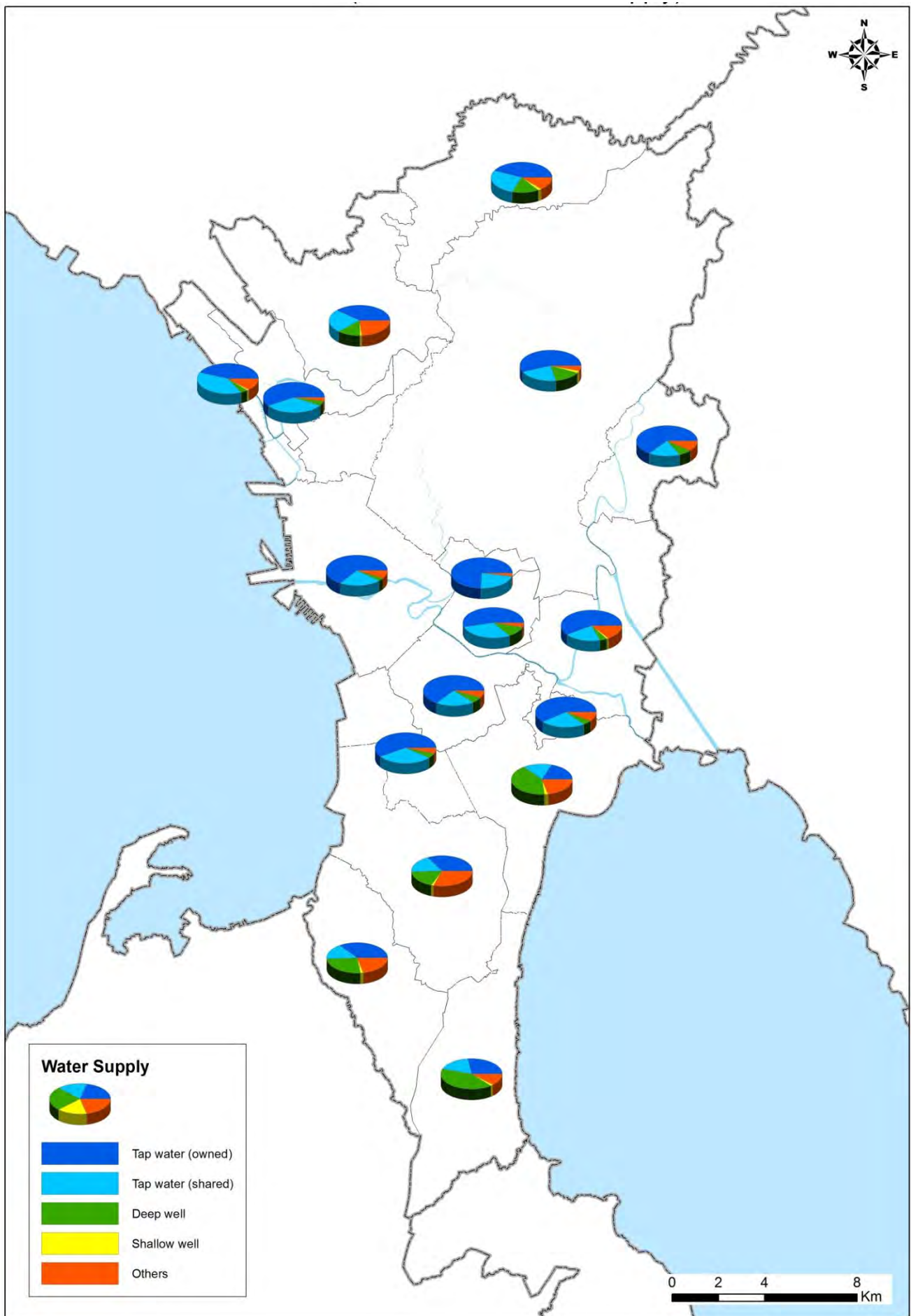
Source: 2000 Census of Population and Housing (NSO).

Figure 4.10 Housing Tenure in Mega Manila in 2000



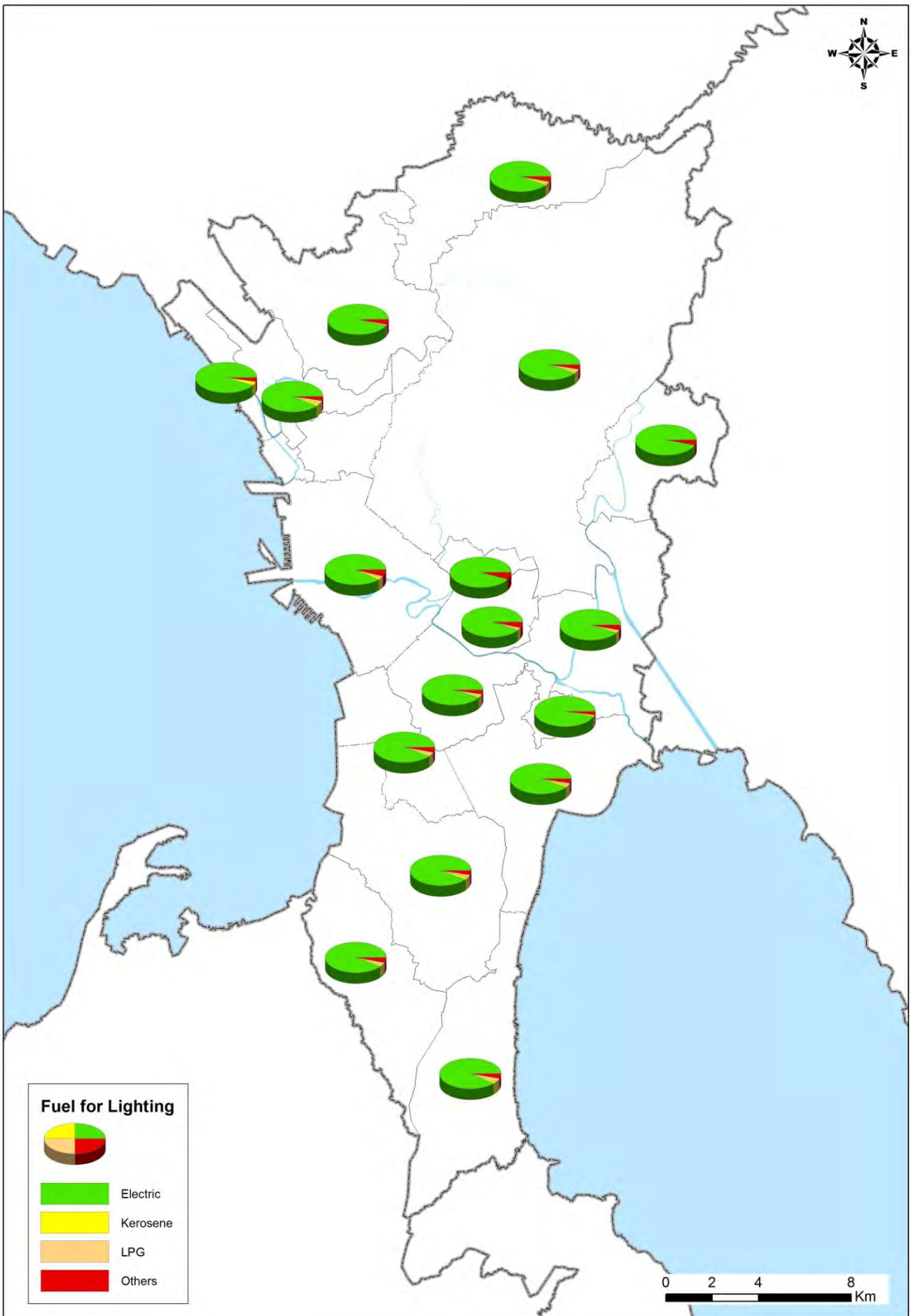
Source: 2000 Census of Population and Housing (NSO).

Figure 4.11 Sources of Water Supply in Metro Manila in 2000



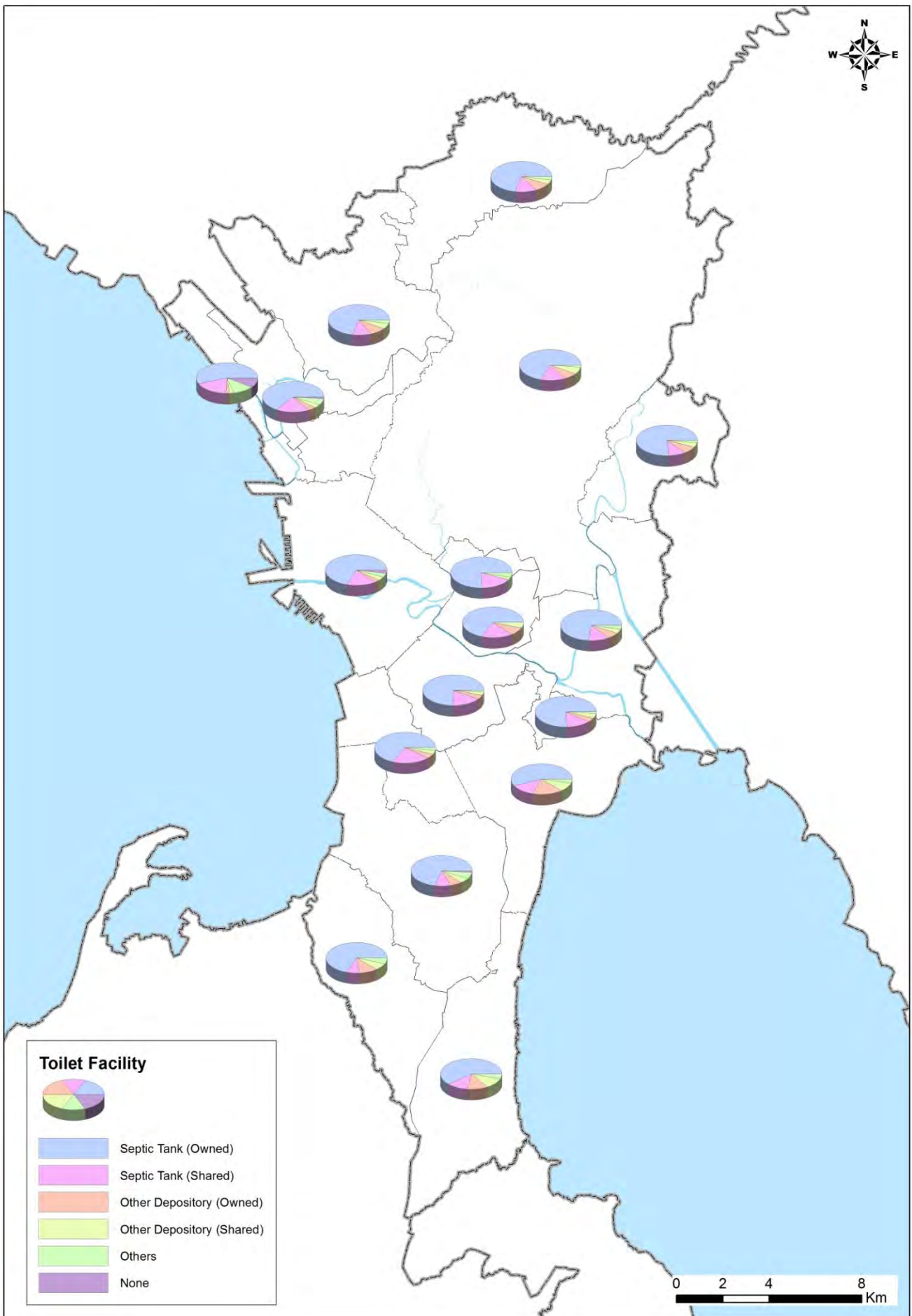
Source: 2000 Census of Population and Housing (NSO).

Figure 4.12 Fuel Used for Lighting in Metro Manila in 2000



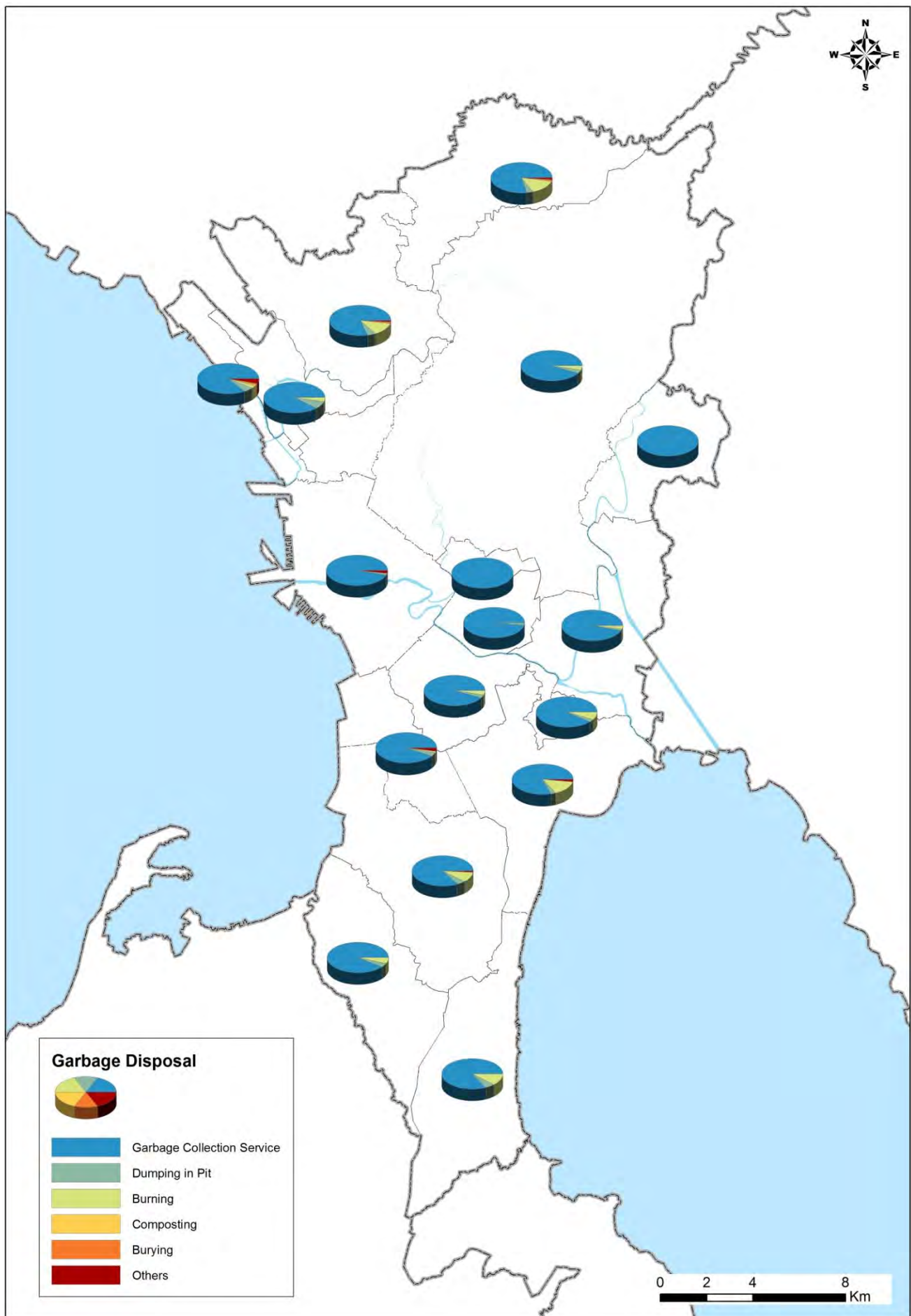
Source: 2000 Census of Population and Housing (NSO).

Figure 4.13 Types of Toilet Used in Metro Manila in 2000



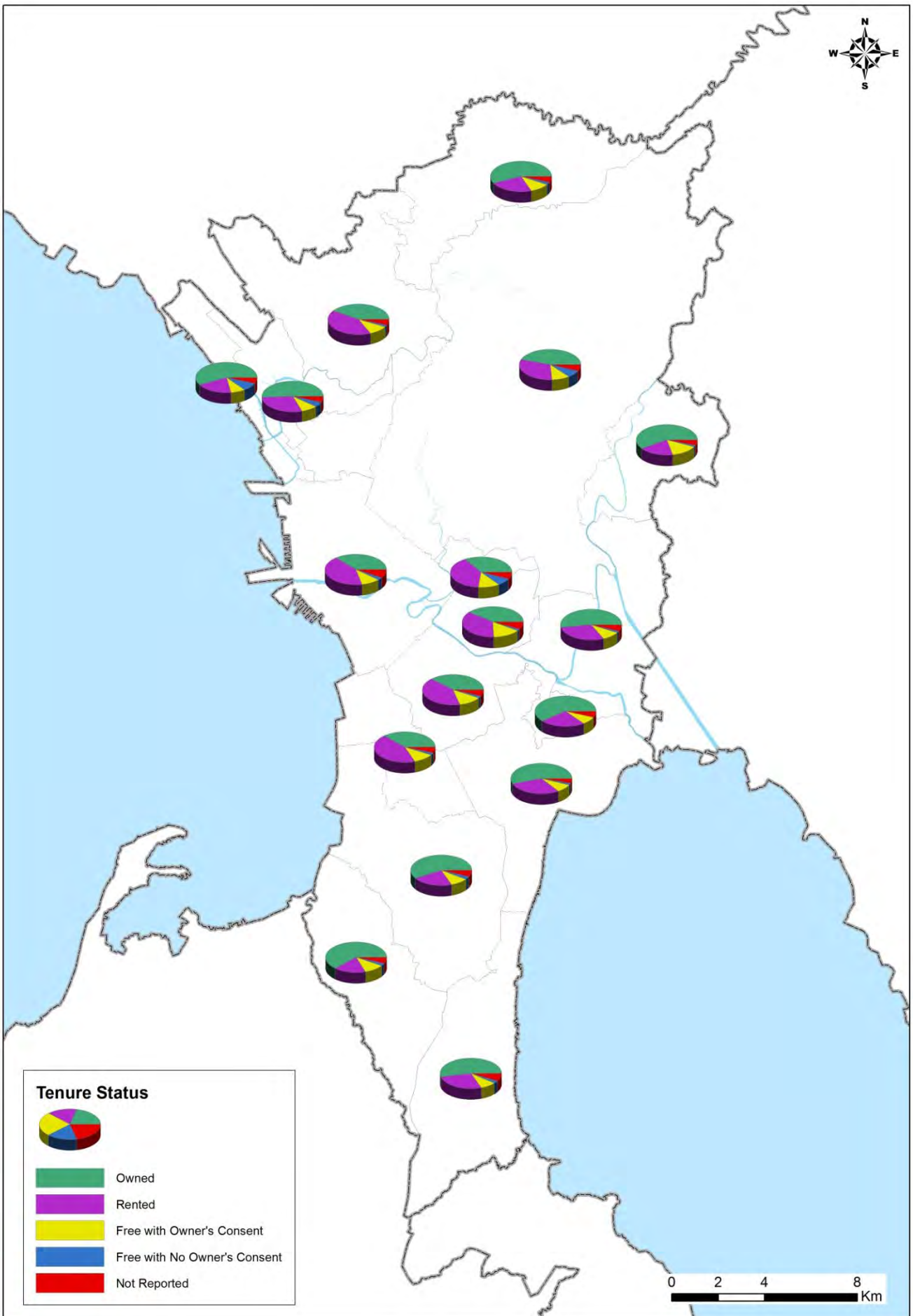
Source: 2000 Census of Population and Housing (NSO).

Figure 4.14 Methods of Garbage Disposal in Metro Manila in 2000



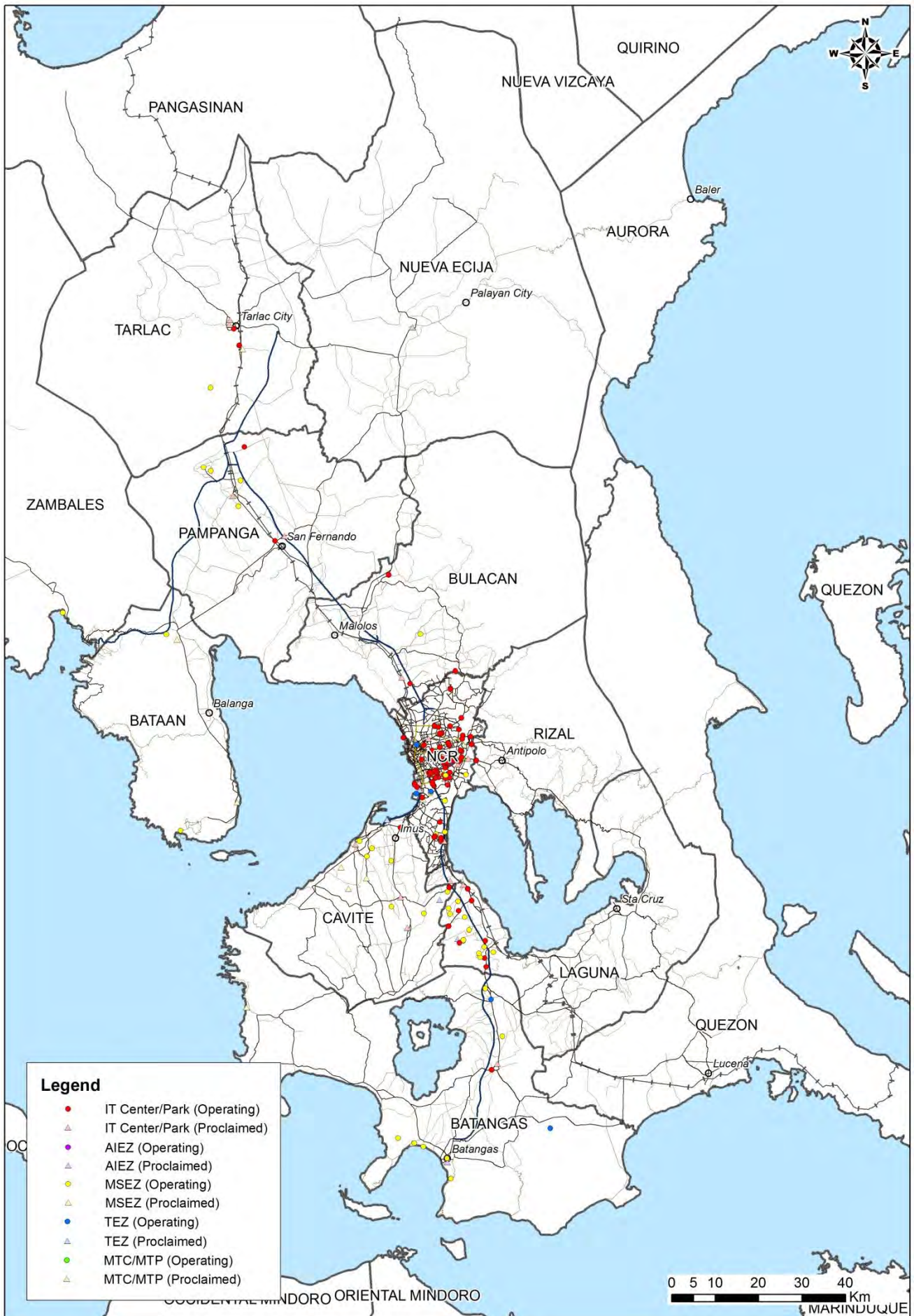
Source: 2000 Census of Population and Housing (NSO).

Figure 4.15 Housing Tenure in Metro Manila in 2000



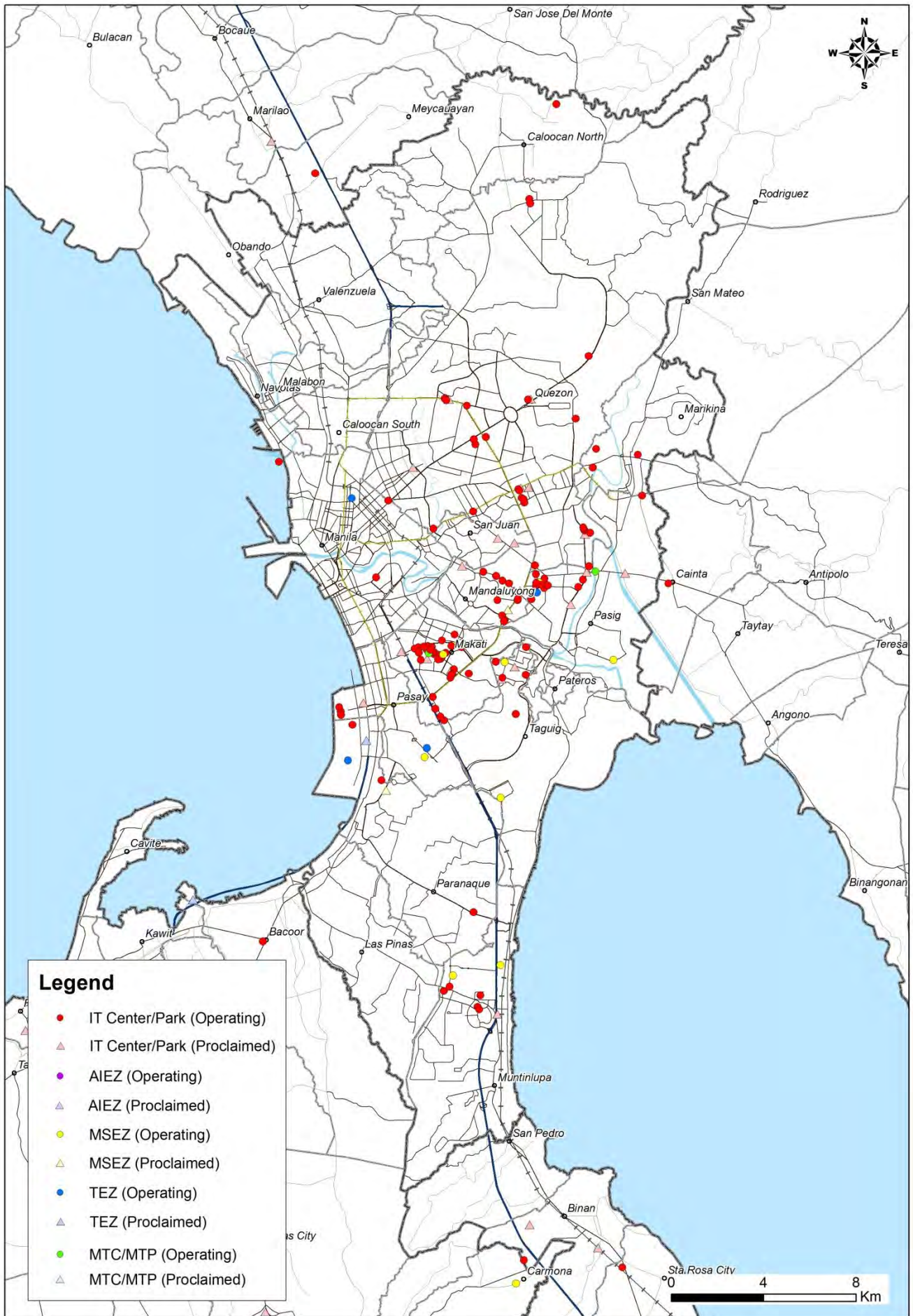
Source: 2000 Census of Population and Housing (NSO).

Figure 4.16 Location of Special Economic Zones in the Greater Capital Region in 2012



Source: Philippines Economic Zone Authority (PEZA).

Figure 4.17 Location of Special Economic Zones in Metro Manila in 2012



Source: Philippines Economic Zone Authority (PEZA).

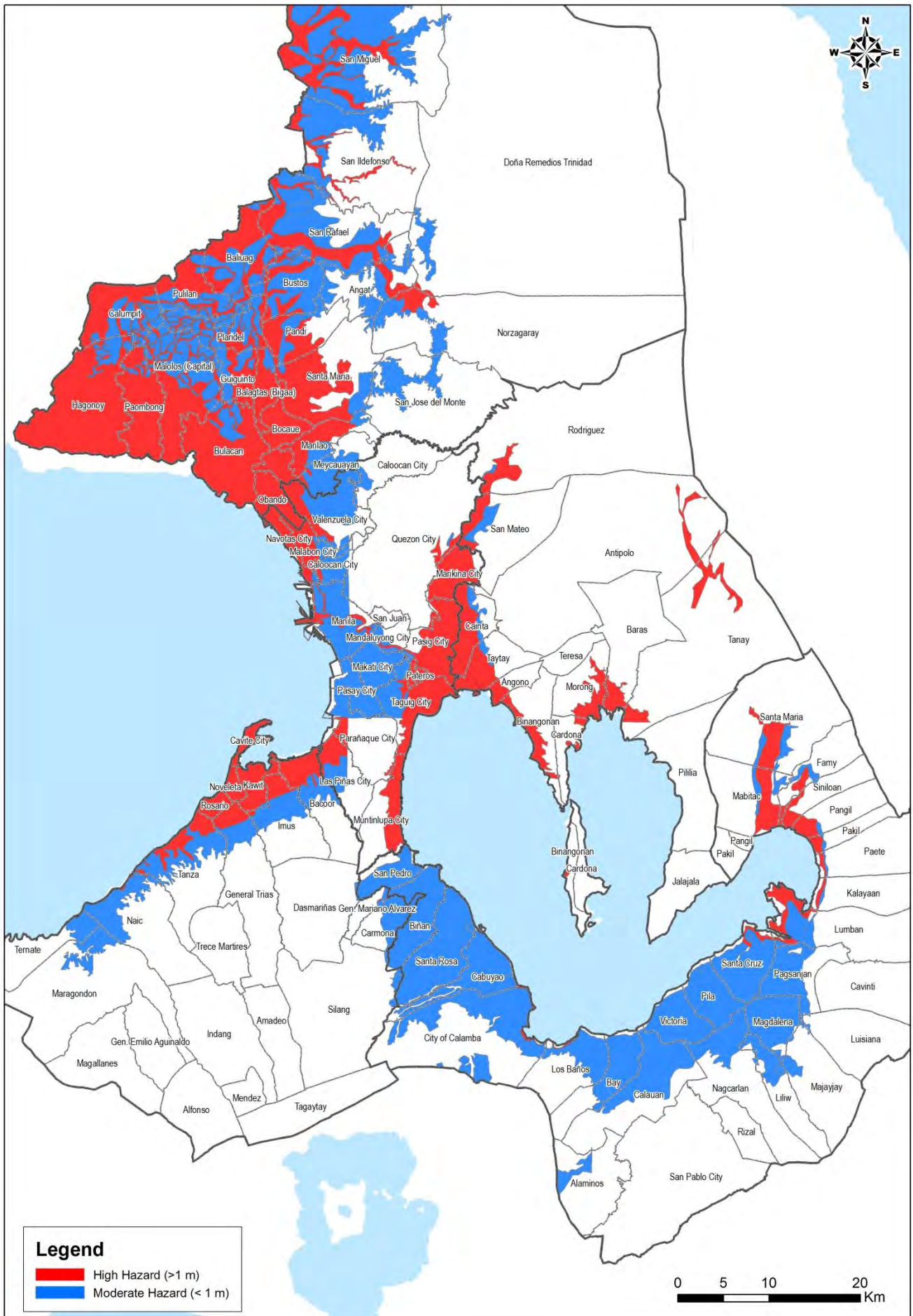
5 HAZARD RISK AREAS

5.1 Data Sources

The major natural disasters which were considered in the study as posing to Mega Manila are floods, landslides, and earthquake. In order to come up with a comprehensive assessment of hazard risks, hazard maps were overlaid to make multihazard maps.

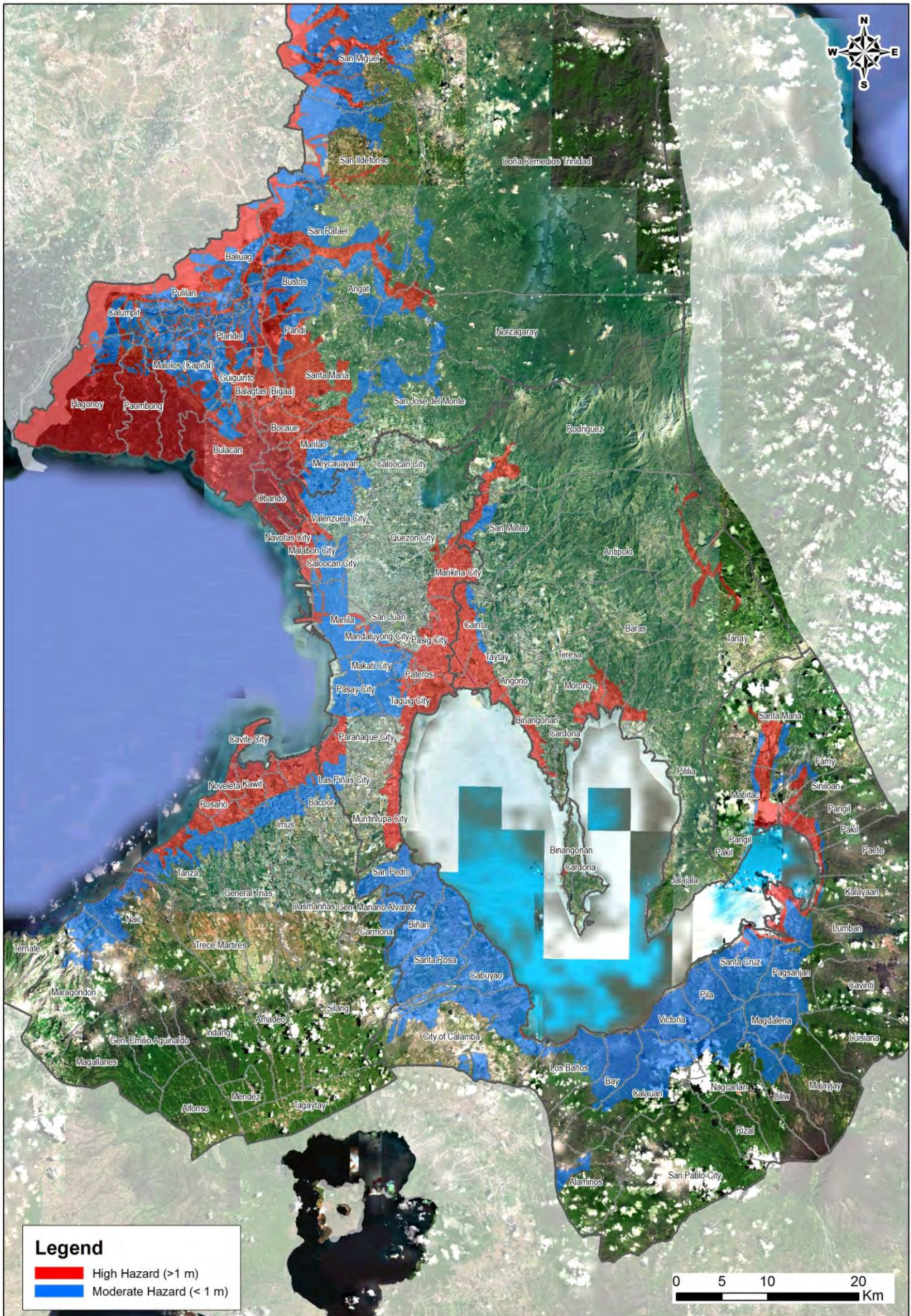
- (a) **Flood-prone Areas:** Data as of 2012 came from the geological database information system of the Mines and Geosciences Bureau (MGB).
- (b) **Landslide-prone Areas:** Data as of 2012 came from the geological database information system of the MGB.
- (c) **Earthquake-prone Areas:** Data came from the JICA-funded study entitled "Earthquake Impact Reduction Study for Metropolitan Manila" (2004).
- (d) **Multihazard Risk Areas:** Based on the above data, the JICA Study Team produced a map showing areas at risk from multiple hazards.

Figure 5.1 Flood Risk Areas in Mega Manila by City/Municipality



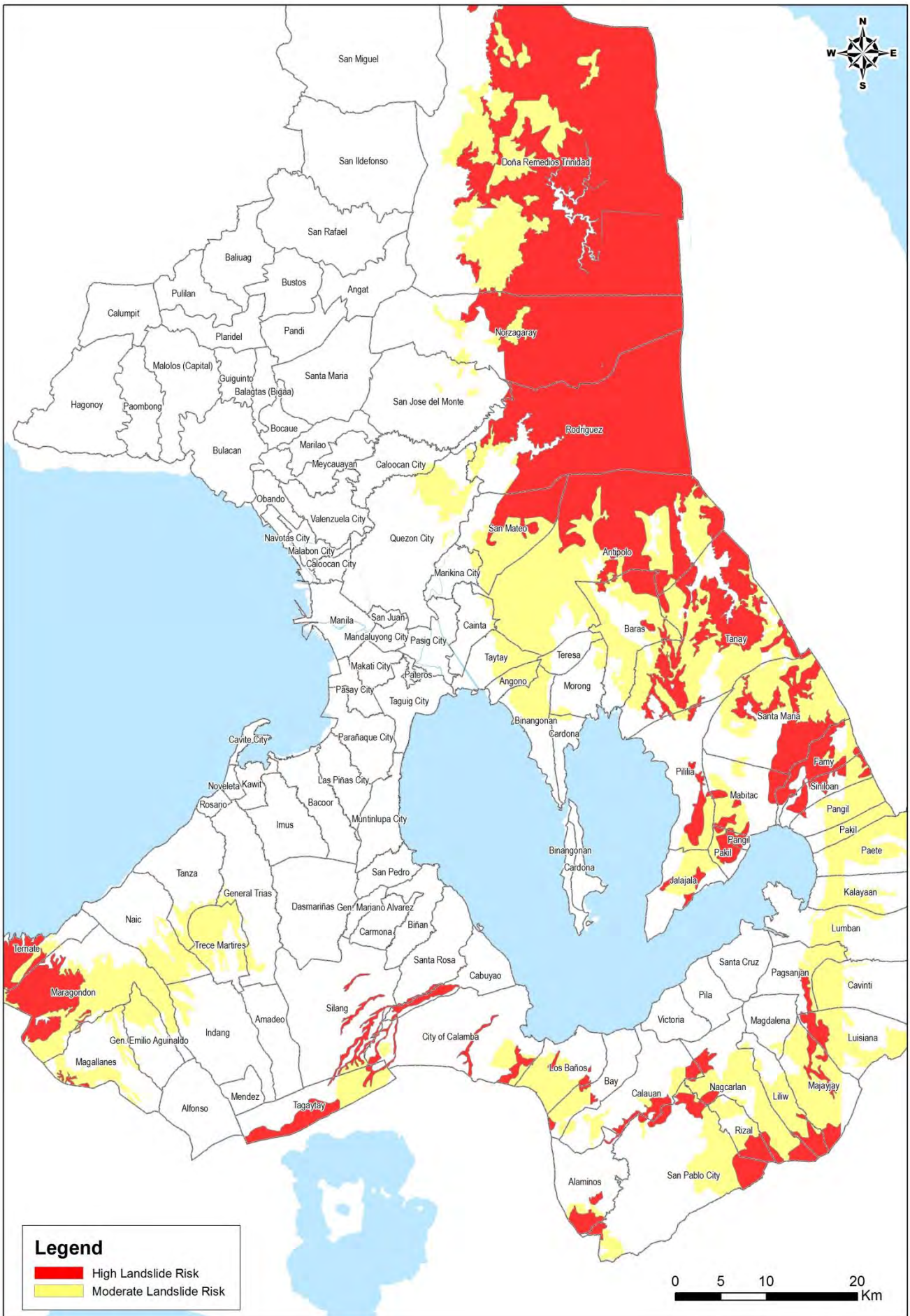
Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB).

Figure 5.2 Satellite Image of Flood Risk Areas in Mega Manila



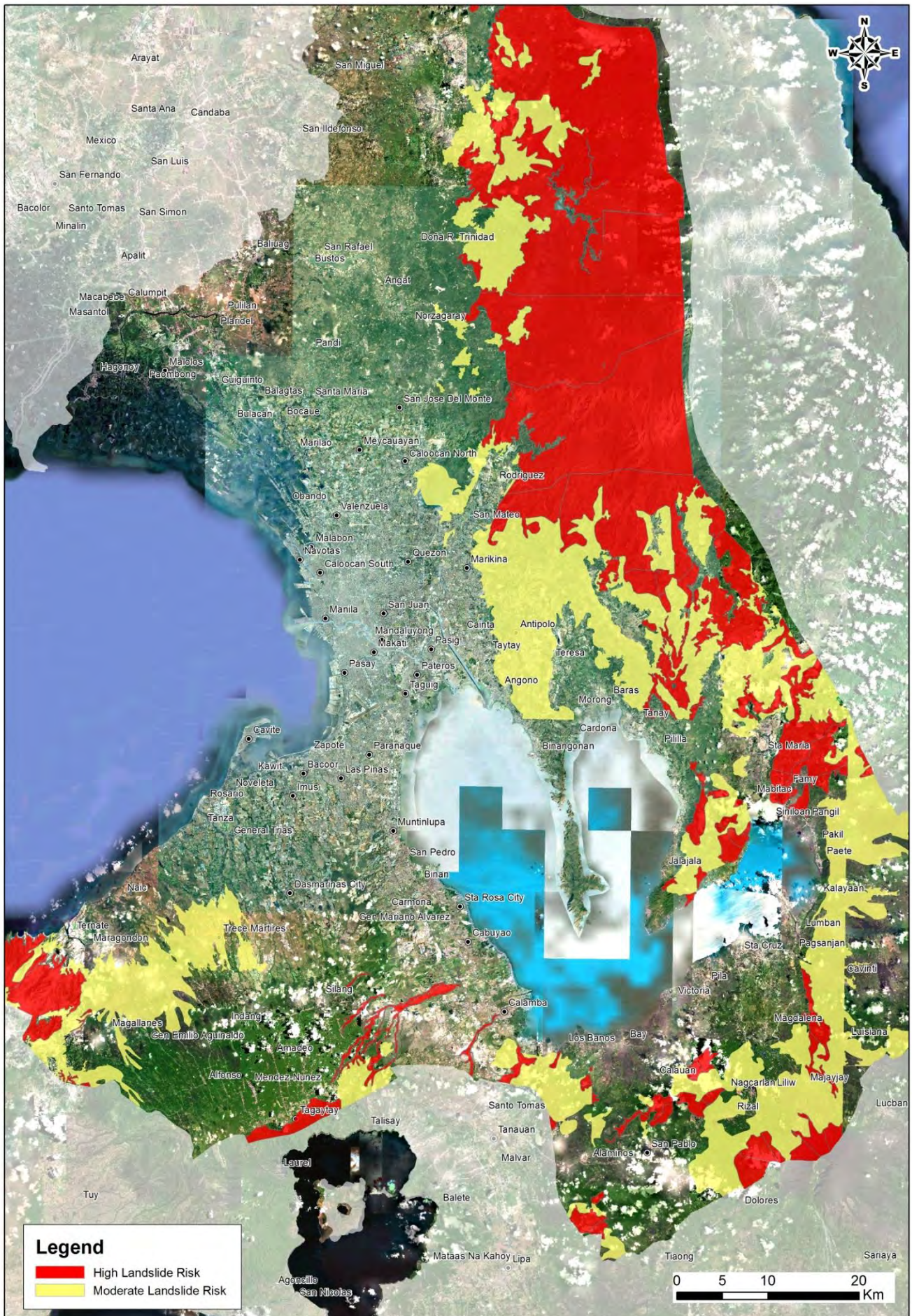
Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB)/ Google Earth Image.

Figure 5.3 Landslide Risk Areas in Mega Manila by City/Municipality



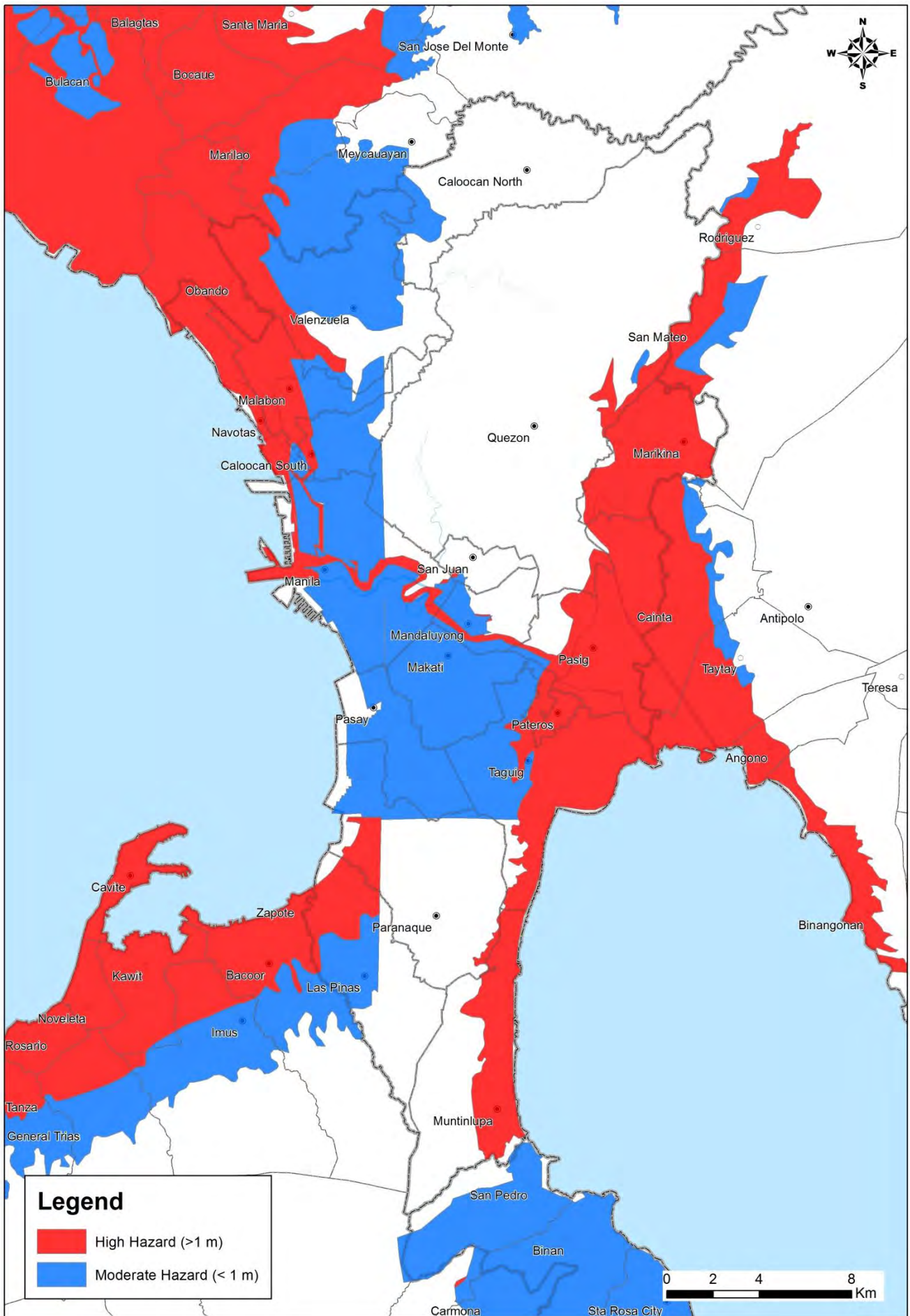
Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB).

Figure 5.4 Satellite Image of Landslide Risk Areas in Mega Manila



Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB)/ Google Earth Image.

Figure 5.5 Flood Risk Areas in Metro Manila by City/Municipality



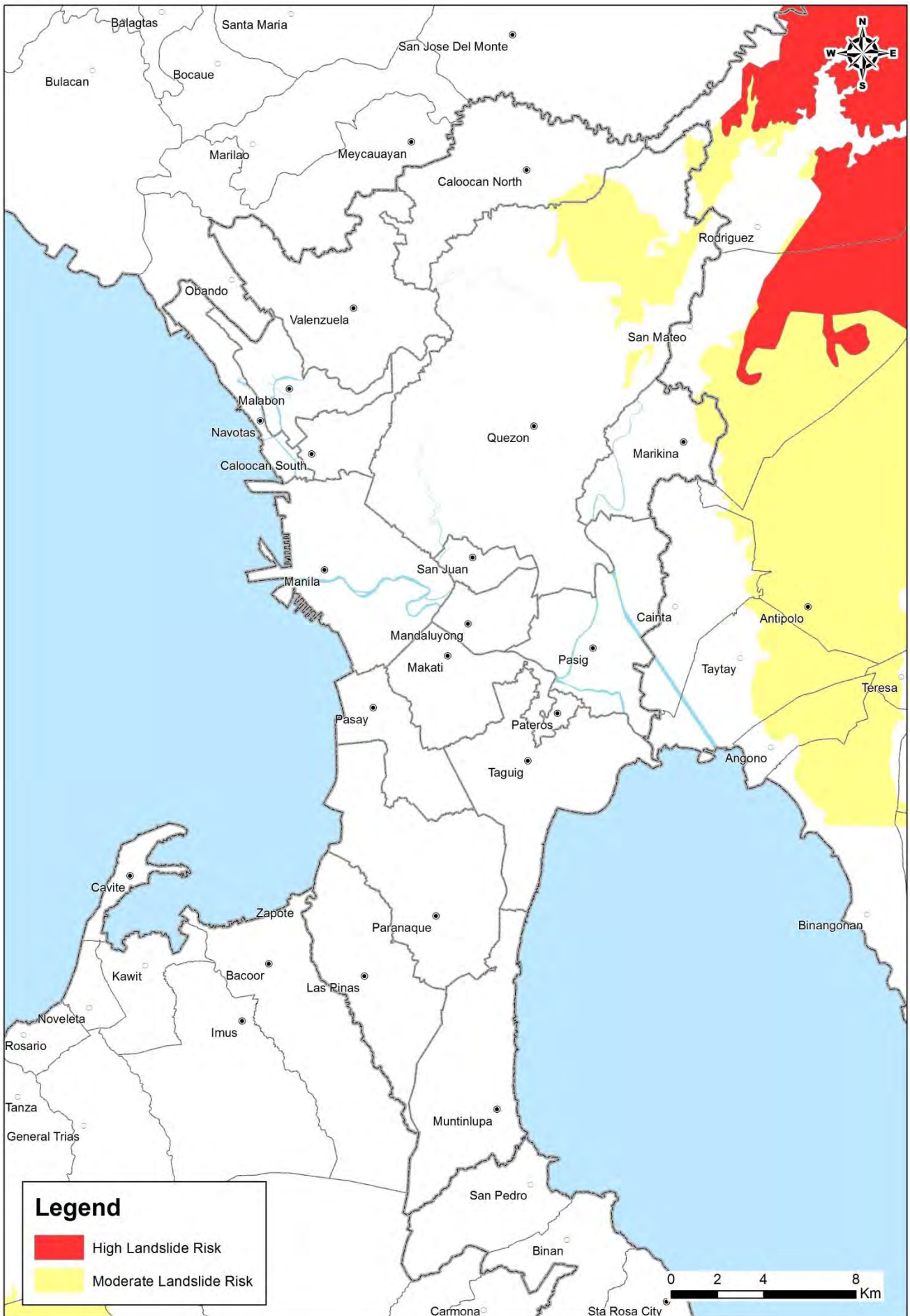
Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB).

Figure 5.6 Satellite Image of Flood Risk Areas in Metro Manila



Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB)/ Google Earth Image.

Figure 5.7 Landslide Risk Areas in Metro Manila by City/Municipality



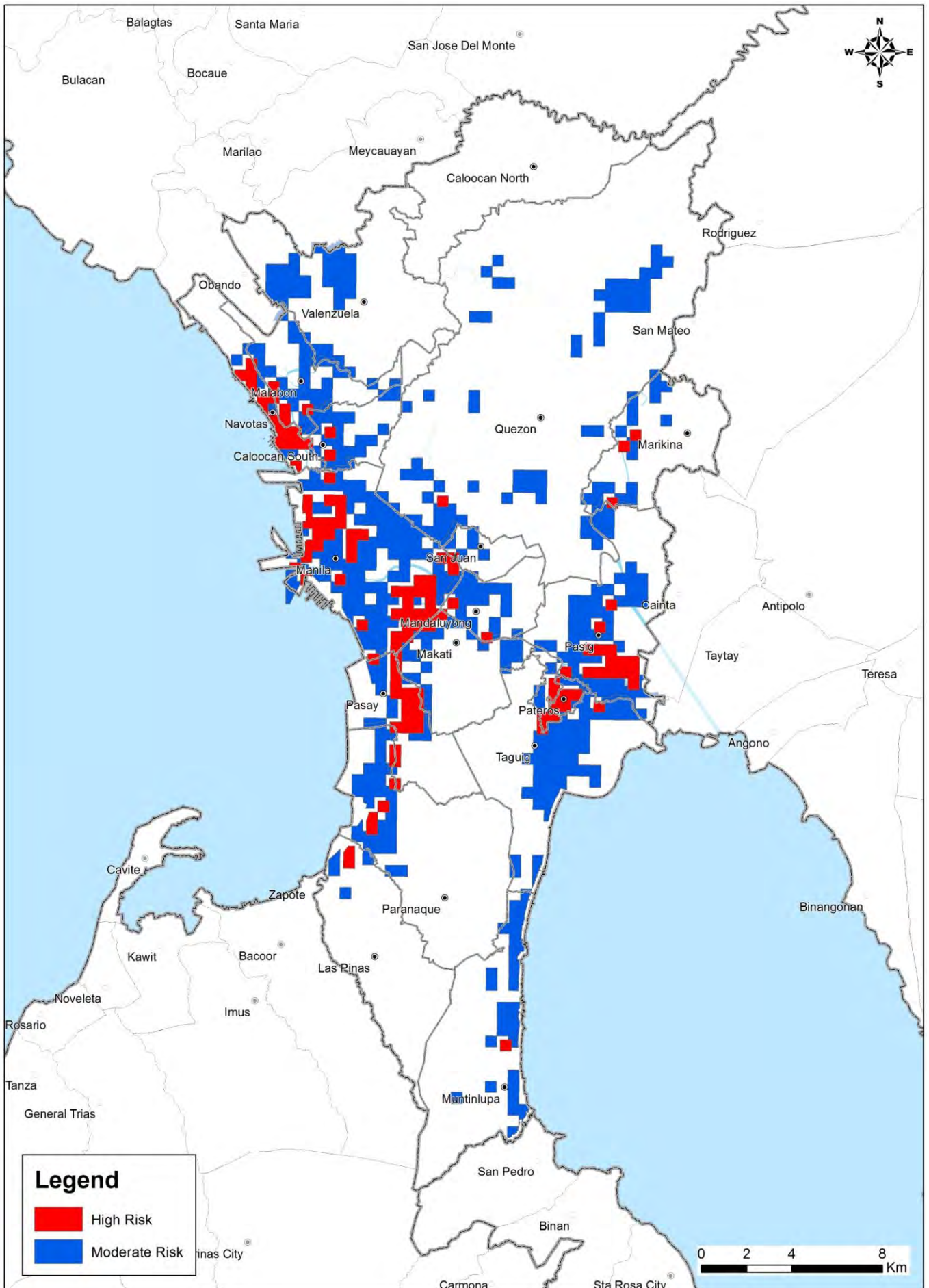
Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB).

Figure 5.8 Satellite Image of Landslide Risk Areas in Metro Manila



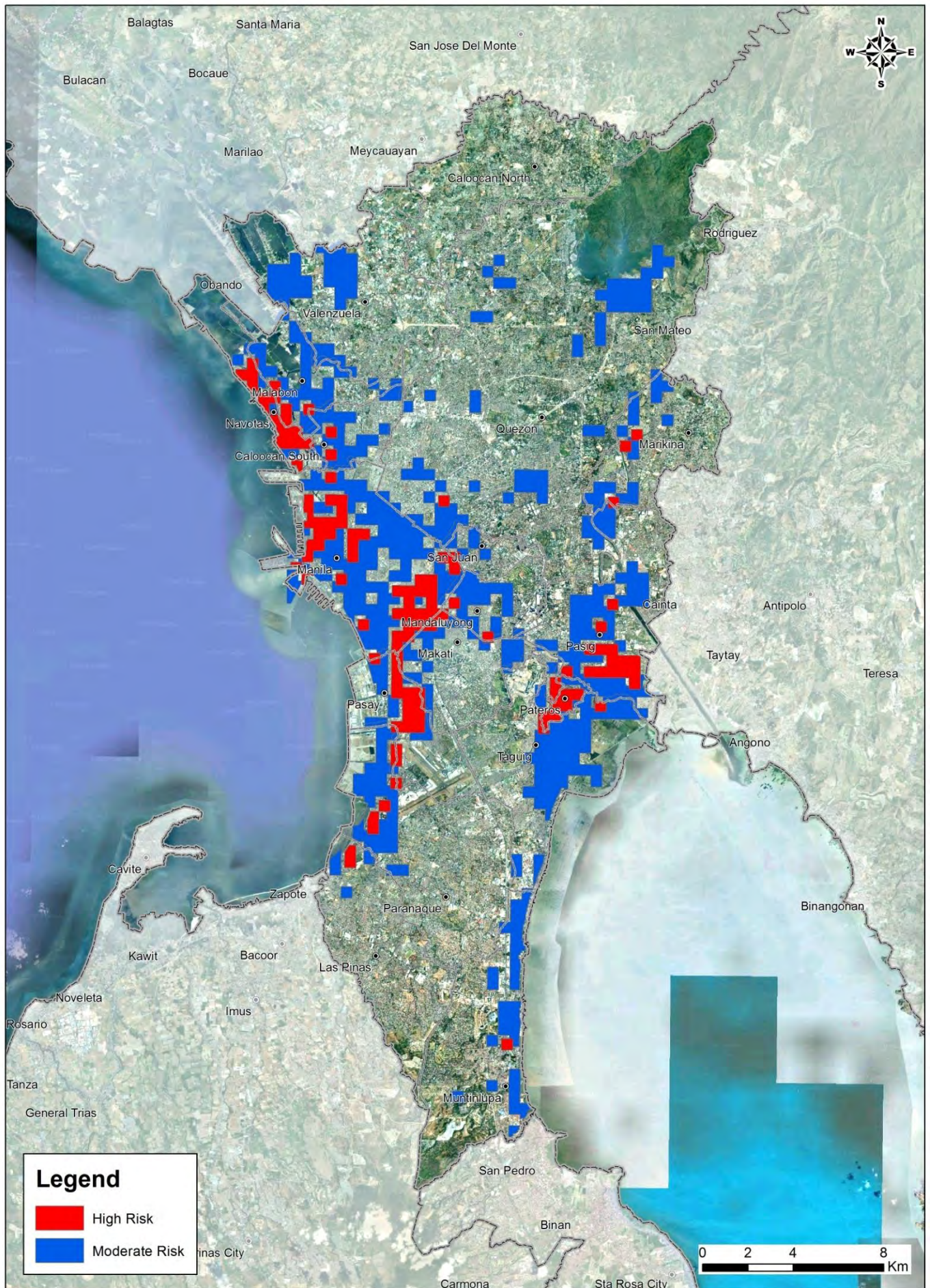
Source: Geological Database Information System of Mines and Geosciences Bureau 2012 (MGB)/ Google Earth Image.

Figure 5.9 Earthquake Risk Areas in Metro Manila by City/Municipality



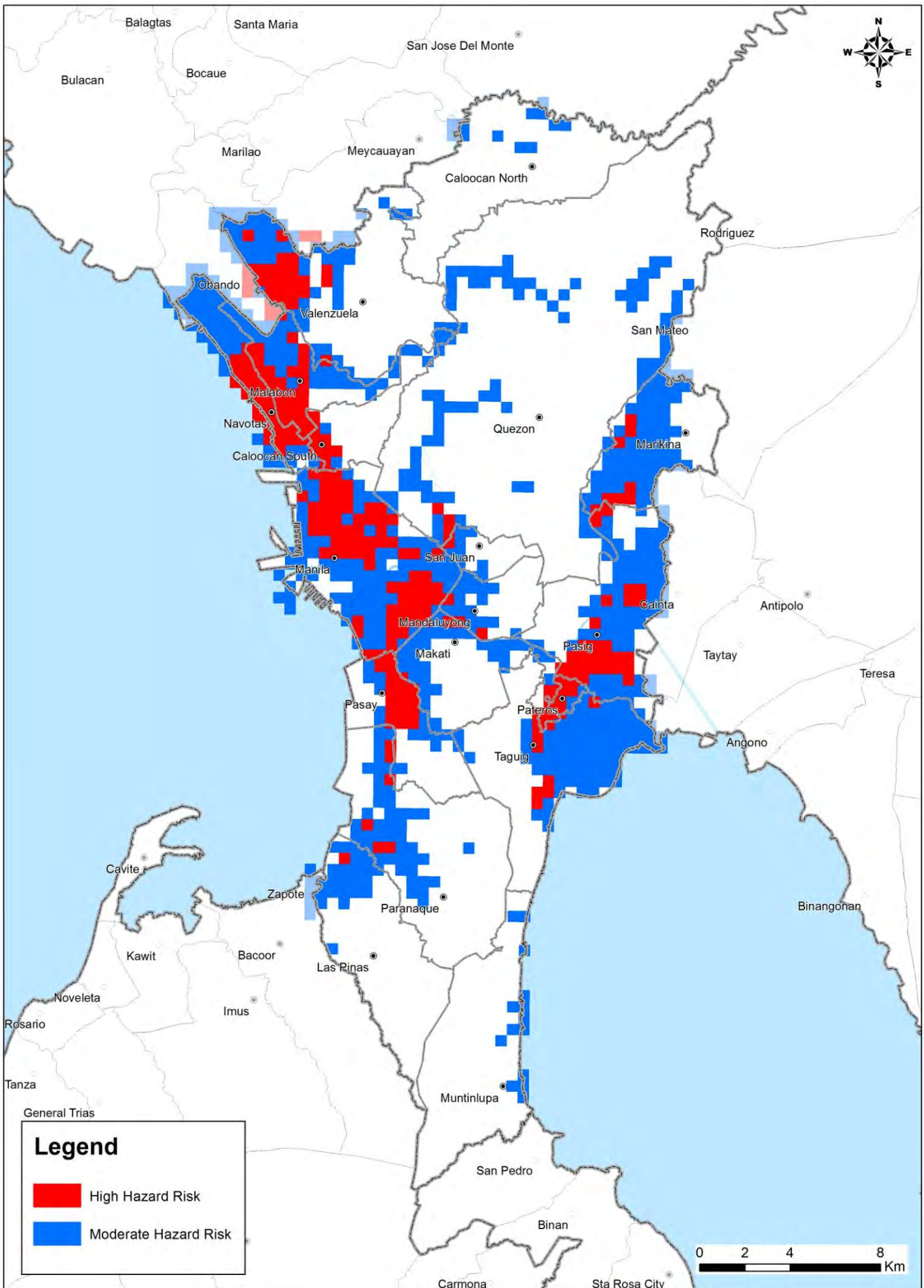
Source: Earthquake Impact Reduction Study for Metropolitan Manila (JICA, 2004).

Figure 5.10 Satellite Image of Earthquake Risk Areas in Metro Manila



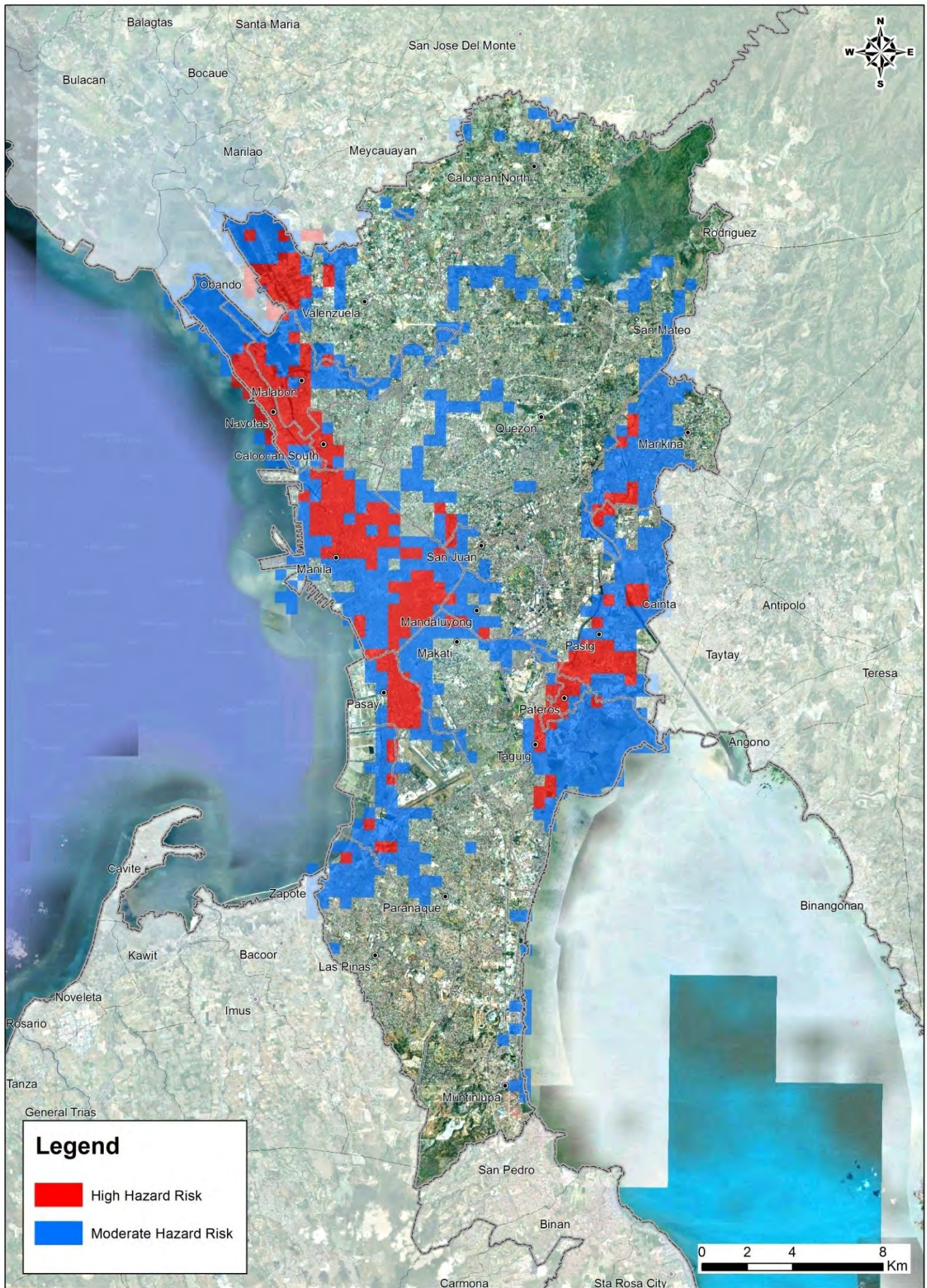
Source: Earthquake Impact Reduction Study for Metropolitan Manila (JICA, 2004)/ Google Earth Image.

Figure 5.11 Multihazard Risk Areas in Metro Manila by City/Municipality



Source: JICA Study Team.

Figure 5.12 Satellite Image of Multihazard Risk Areas in Metro Manila



Source: JICA Study Team/ Google Earth Image.

