Chapter 4

**Natural Environment**

**NATURAL ENVIRONMENT**

***Soil Types***

There are four (4) soil types found in Mangaldan namely: San Manuel Silt Loam, San Manuel Fine Sandy Loam, Bantog Clay Loam and Hydrosol. These soil types are seen in (Map No. 03-Soil Types). The Soil type by area, location and description is hereby presented:

**1. Bantog Clay Loam**

This covers the most extensive area including the barangays of Lanas, Talogtog, Maasin, Guilig, Malabago, Anolid, Bari, Banaoang, Alitaya and Amansabina at an estimated area of 1,892.124 hectares.

This type of soil is part of the Bantog soil series described as follows: the surface is brown clay loam, fine textured and slightly sticky. It contains brownish red steaks. The depth is 25 to 30 centimeters. The subsoil is dark brown to light brown to yellowish brown, heavy clay loam to clay. The depth is brown to reddish brown clay and is sticky and plastic with no concretions.

Rice is the principal crop of this soil. Corn, sugarcane, mango and vegetables are also grown. This can be cultivated safely using easily applied conservation practices. The land is flat and the main problem is drainage because of poor soil permeability or shallow water, therefore, will require simple drainage. It is also prone to occasional overflow or crops occasionally damaged.

**2. San Manuel Silt Loam**

This type of soil belongs to San Manuel Soil series generally described as follows: the surface is grayish brown to pale brown, loose and friable silt loam. The depth is from 25 to 40 centimeters, the subsoil is brownish gray to light brown with streaks of yellowish brown, friable and fine granular silt loam. The depth is 70 to 100 centimeters from the surface. The substratum is yellowish brown to light reddish brown fine sandy loam to fine sand to medium sand.

Lowland rice, sugarcane, root crops, vegetables and some fruit trees are the main crops suited for this type of soil. It can be cultivated safely and extensively to crops with ordinary practices. It has the most widely adaptable uses and can be farmed easily. It is level or nearly level land with deep, productive, easily worked soils, well-drained and not subject to frequent overflows. San Manuel silt loam comprises a strip running diagonally from the north to the southern part of Mangaldan passing through the barangays of Bateng, Pogo, Palua, Bantayan, Talogtog, Salay, Lanas, Navaluan, Osiem, Landas, Amansabina, Guiguilonen, Guesang, David and Poblacion at an estimated area of 1,442.58 hectares.

**3. Hydrosol**

Hydrosol soil occupies a small portion along the Paldaquit and Manguiragday Rivers in Barangays Bateng, Talogtog, Maasin, Lanas and Anolid for an estimated area of 477.776 hectares.

This type of soil is suitable for aquatic agriculture, fish production, oyster beds, salt beds, mosses and nipa palms production.

**4. San Manuel Fine Sandy Loam**

This covers the Northeastern part of the town including the barangays of Pogo, Salaan, Inlambo, Tebag, Palua, Nibaliw, Macayug, Guiguilonen, Embarcadero, Navaluan and Osiem for an estimated area of 947.12 hectares.

***Land Classification***

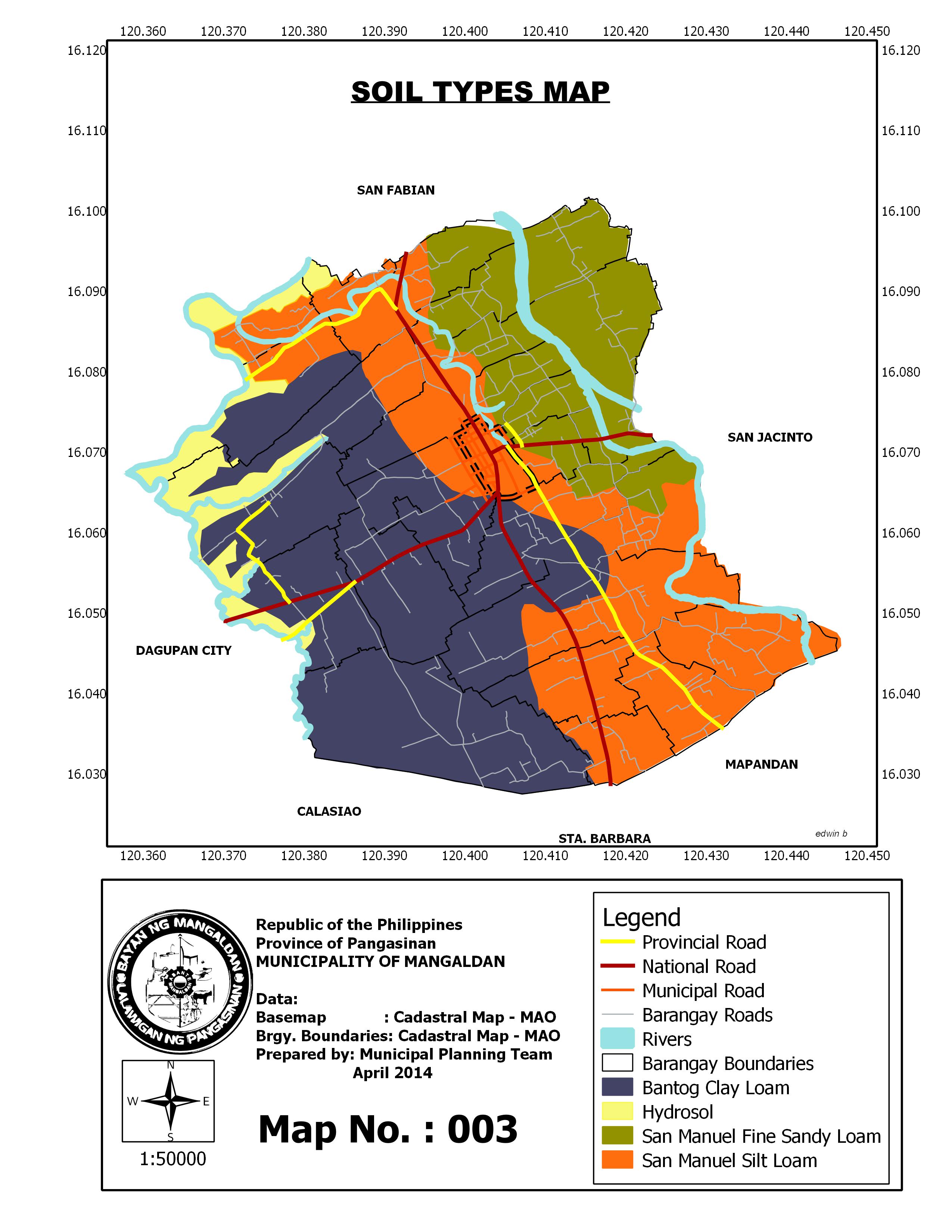
In terms of Land Capability, the municipality has three (3) types namely: Class A, Class Be and Class X. Soils belonging to San Manuel series belong to Class A, soils belonging to Bantog Clay loam belong to Class Be and hydrosol series belong to Class X. The land capability by location, area and description is shown in Table 4.

Class A lands are very good lands which can be cultivated safely requiring only simple but good farm management practices and are approximately 2,389.70 hectares. These are located mostly in Southeastern barangays. Class Be lands are good lands which could be cultivated safely requiring simple conservation practices and is estimated at 1,892.124 hectares. These are mostly in the Southwestern Barangay. Class X lands are level lands, wet most of the time and cannot be economically drained and are suited for fishponds. Generally, these classes of lands are not susceptible to erosion and cover an estimated area of 477.776 hectares such as in Barangays Talogtog, Anolid, Bateng, Bantayan, Lanas and Maasin.

**Table 4: Land Classification by Location, Area and Description**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Land**  **Classification** | **Location** | **Area**  **Hectare** | **Percentage** | **Description/**  Suitability |
| 1. Class "A" | Bateng  Palua  Bantayan  Talogtog  Salay  Salaan  Inlambo  Macayug  Tebag  Nibaliw  NavaluanGuiguilonen  Embarcadero  Osiem  Landas  Amansabina  Gueguesangen  David  Guesang  Lanas  Pogo  Poblacion | 2,389.70 | 50.21 | Very good lands which can be cultivated safely requiring simple but good farm management  practices. |
| 2. Class "Be" | Lanas  Guilig  Anolid  Malabago  Banaoang  Buenlag  Alitaya  Bari  Maasin  Amansabina | 1,892.12 | 39.75 | Good lands which can be cultivated  safely requiring simple  conservation practices. |
| 3. Class "X: | Bateng,  Talogtog  Maasin  Anolid  Lanas | 477.77 | 10.04 | Are level lands, wet most of the time and cannot be economically drained.  Suited for fishponds. |

*Source: Soil Map prepared by NEDA*



SOIL TYPES

Map No. : 03