



### 2.4.1 RIVERS AND BAYS

There are 13 river channels and seven (7) marine bays or fishing grounds in the Province. Marine water stretched to about 210 kilometers of shorelines. This benefited the 13 coastal municipalities with 113 coastal barangays.

**Table 2-5 Names of Rivers and Bays and Location**

<b>Name of Rivers</b>	<b>Location</b>
1. Lambuyogan River	Alicia
2. Kabasalan River	Kabasalan
3. Dumaguit River	Kabasalan
4. Bacalan River	Naga
5. Guintolan River	Malangas
6. Malongon River	Malangas
7. Lipakan River	Malangas
8. Dumaguit River	Malangas
9. Sugba River	Malangas
10. Kima River	Payao
11. Balian River	Payao
12. Gusau-an River	Siay
13. Palomoc River	Titay
14. Tungawan River	Tungawan
15. Sibuguey River	Buug, Diplahan, Siay, Imelda, Payao
16. Sanito River	Ipil
17. Bacalan River	Ipil
18. Kasigpitan River	Olutanga
19. Gandaan River	Olutanga
<b>Name of Bay</b>	<b>Location (Municipality)</b>
1. Tigbucay Bay	Tungawan
2. Looc Labuan Bay	Tungawan
3. Busan Bay	Tungawan
4. Sibuguey Bay	Tungawan, R.T. Lim, Ipil, Naga, Kabasalan, Siay, Payao
5. Locsico Bay	Payao
6. Tantanan Bay	Alicia
7. Panca Bay	Olutanga
8. Sauno Bay	Alicia
9. Dumanquilas Bay	Alicia, Malangas, Buug, Olutanga

Source: PPDO, Zamboanga Sibugay



## **2.4.2 GROUNDWATER**

The province of Zamboanga Sibugay is divided into three (3) sub-areas indicating groundwater availability.

### **2.4.3 GROUNDWATER AVAILABILITY IN THE PROVINCE**

#### **(1) SOLO SHALLOW WELL AREA**

There is a limited area in the province where shallow wells are being tapped. These are mostly found on the western and eastern part. The aquifer being tapped consists of unconsolidated river and coastal deposits mud, silt, sand, gravel and other organic remains.

The risk of shallow wells includes pollution from septic tank. The construction of the future wells should be located up gradient from the existing septic tanks to prevent the contamination of the water pumped from the well. In addition, the law should be follow wherein no septic tank should be constructed within a radius of 25m.

#### **(2) DEEP WELL AREA**

Most deep well areas are found at the central and south-southeastern part of the Province. Various Miocene to Pleistocene sedimentary formation like sandstone, conglomerate and limestone underlies these areas. Fractured volcanic rocks may be water bearing as well. Deep well areas can have the occurrence of shallow wells.

#### **(3) DIFFICULT AREA**

The Province most difficult areas occur where there are impermeable igneous and metamorphic rocks. The water sources in these areas are normally springs. Groundwater may occur in areas where there is a high density and inter-connectivity of fractures and joints.



Table 2-6 Ground water Development Potential in the Province

Area	Groundwater Development Potential	Area Feature
Lowland Coastal Area	This area is classified both as deep and shallow well areas. Recent unconsolidated sediments comprise the shallow well areas, while deep well areas are underlain by both clastics and limestone. Productivity of both deep and shallow wells may range from low to high. Saltwater intrusion is a primary concern of deep well areas near the coast (excessive pumping of wells), especially in urban areas. Spring may occur in the deep well areas (limestone).	This area is very limited in extent. Elevation is from 0 to 100 masl.
Upland, Hill Area	This portion is comprised of both deep well and difficult areas. Deep well areas mostly tap clastics and limestone for their aquifer while fractures and faults govern the movement of groundwater in the difficult areas. Spring flow is dependent on the infiltration of rainwater. Springs may be numerous depending on the density and interconnectivity of fractures. Tapping of springs is recommended in the difficult areas.	Elevations range from 100m to 500m.
Highland Area	This area is not suitable for well development because of its elevation, although wells may be productive. Springs are recommended instead. Rocks in this portion are mostly consolidated igneous and metamorphic rocks.	Elevations are greater than 500m.

Source: Provincial Water Supply, Sewerage & Sanitation Sector Plan for the Province of Zamboanga Sibugay

## 2.5 DRAINAGE/FLOOD CONTROL

Sibuguey Valley is the major flood prone area in the Province of Zamboanga Sibugay due to the narrow and irregular characteristics of the Sibuguey River. In addition to this, the denuded watershed in the area causes siltation in the drainage and irrigation facilities. A proposal has already been formulated for the Integrated Flood Control Project of Sibuguey Valley to properly manage and control flooding.

## 2.6 FISHING GROUNDS

There are nine (9) bays and thirteen (13) coastal municipalities of the province. These are the municipalities of Buug, Mabuhay, Olutanga, Talusan, Malangas, Alicia, Siay, Naga, Kabasalan, Ipil, R. T. Lim, Payao and Tungawan. The long stretches of coastal areas cover Sibugay, Dumanguillas and Sibulon Bays. The island municipalities are Mabuhay, Olutanga and Talusan.