

## LIST OF FIGURES

Figure 2.1	Map of West Aceh.....	8
Figure 2.2	The Isohyet map of Aceh Province (IWACO 1993).....	9
Figure 2.3	Geologic map of the survey area Calang-Meulaboh .....	11
Figure 2.4	Hydrogeological Map of Indonesia .....	13
Figure 3.1	Flow Chart of Drastic Model.....	23
Figure 3.2	Mapping for DRASTIC Model and GIS .....	32
Figure 3.3	Methodology for Delphi-AHP-GIS .....	37
Figure 4.1	Depth to Water Table Using Modification Rosen and Widyastuti .....	39
Figure 4.2	Depth to Water Table Using Modification Piscopo (2001).....	40
Figure 4.3	Recharge Using Modification Rosen (1993) and Widyastuti (2003).....	41
Figure 4.4	Recharge Using Modification Piscopo (2001) .....	42
Figure 4.5	Aquifer Media Using Modification Rosen and Widyastuti .....	44
Figure 4.6	Aquifer Media Using Modification Piscopo (2001).....	45
Figure 4.7	Soil Media Using Modification Rosen (1993) and Widyastuti (2003) .....	46
Figure 4.8	Soil Media Using Modification Piscopo (2001) .....	47
Figure 4.9	Topography Using Modification Rosen (1993) and Widyastuti (2003) .....	48
Figure 4.10	Topography Using Modification Piscopo (2001).....	49
Figure 4.11	Vadose Zone Using Modification Rosen (1993) and Widyastuti (2003).....	51
Figure 4.12	Vadose Zone Using Modification Piscopo (2001) .....	51
Figure 4.13	Conductivity Using Modification Rosen (1993) and Widyastuti (2003) .....	52
Figure 4.14	Vulnerability Index Using Rosen (1993) and Widyastuti (2003) .....	54
Figure 4.15	Vulnerability Index Using Piscopo (2001).....	55
Figure 4.16	GUI DRASTIC-AHP.....	59
Figure 4.17	Input Data Using File Open.....	60
Figure 4.18	Output Data Using Text File (Notepad) .....	60
Figure 4.19	Save As Data In GUI .....	61
Figure 4.20	Component AHP In GUI.....	61
Figure 4.21	Copy Right In GUI .....	62

Figure 4.22	Before and After Modified Parameter Depth to Water table .....	64
Figure 4.23	Before and After Modified Parameter Topography .....	65
Figure 4.24	Before and After Modified DRASTIC Index .....	65
Figure 4.25	DRASTIC-AHP Specific Vulnerability Index Map for Nitrate .....	68
Figure 4.26	DRASTIC-AHP Specific Vulnerability Index Map for Phosphate.....	70
Figure 4.27	DRASTIC-AHP Specific Vulnerability Index Map for Magnesium .....	71
Figure 4.28	DRASTIC-AHP Specific Vulnerability Index Map for Sulphate .....	72