## 7. WATER SOURCE DEVELOPMENT

## 7.1 GENERAL

## Table 7.1.1 Water Source Information

i Con	incial Water Supply, Sewerage And tent: Water Source - General Infor	mation	rian (PW4SP)		Page: 1 of 1
Data	Collection Level: Provincial	Province No.:	124		Date:
Reg	ion Number: XI	Province Name	: Davao Del Sur		Filename: Water Source Form Number: P.4.1
	Type of Water Source	Character 1	Shallow Well	Deep Well	Spring
	Total number of water sources	Number	1,927	2,096	436
Imple-	Government Agency	Number	I,116	2,096	436
<u>ا چا</u>	E Private	Number	811		
5	Level I	Number	1,927	2,073	392
Level	Level II	Number		5	
	Level III	Number		18	40
	Water District	Number		5	4
	MEO/CEO	Number			-   <u>1</u>
	RWSA	Number	······································	11	1
đ	BWSA	Number			25
Ownership	Institution	Number			
ð	Commercial Establishment	Number		4	
	Industrial/Agricultural Undertakir	{		· · · · · · · · · · · · · · · · · · ·	·····
	Public (Domestic)	Number			
	Private (Domestic)	Number	1,116	2,076	408
		Number	811		
5	Submersible/Turbine			23	
actic	Centrifugal	Number			_
Abstraction	Handpumo	Number	3,116	2,073	
∢	Bucket & Rope	Number			
•	Free Flowing	Number	-		436
	Drinking	Number	1,927	2,096	436
ខ្ល	Washing/Bathing	Number	1,927	2,096	436
Usage	Gardening/Irrigation	Number	1,927	2,096	436
	Big-Scale Irrigation	Number			
	Production	Number			
	No Quality Problem	Number			
	High Iron/Mag. Content	Number			436
ality	High Chloride Content	Number			
Water Quality	Turbidity/Colored/Smell	Number			
Vale	Polluted/Contaminated	Number		·······	
~	Chlorinated	Number			
	Treated	Number			328
	Seasonal Production	Number			328
Б	Average Capacity < 100 m <sup>3</sup> /day	Number			· · · · · · · · · · · · · · · · · · ·
Production			1,927	2,073	433
Prod	Average Capacity >= 100 m <sup>3</sup> /day	Number		23	3
	Number of Household < 5	Number		· · · · · · · · · · · · · · · · · · ·	
<del></del>	Number of Household >= 5	Number	17,551	10,276	11,103

onta-	tial Water Supply, Sewerage And Sani t: Water Source - General Information	tation Sector	Plan (PW4SP)	·			Page: 1 of 1	
onen bta C	ollection Level: Provincial	100	10				Date:	
	Number: XI		Province No : Province Name			···	Filename: Wate	
	Name of Municipalities	Character	Bansalan	. 06140 DC1 30		Digos	Form Number:	P.4.]
	Type of Water Source	Number	Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	
	Total number of water sources	Number	13	47	<u> </u>	350		Spring
5	Government Agency	Number	8	47	10	255	378	31
mentor	Private	Number	5	[		95	373	31
	Level 1	Number	13	47		350	374	
Level	Level II	Number	· · · · · · · · · · · · · · · · · · ·				1	30
L	Level III	Number		}		·	3	1
	Water District	Number			<u>-</u>		3	
	MEO'CEO	Number	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		·	• • • • • • • • • • • • • • • • • • • •
	RWSA	Number		·-··	• • • • • • • • • • • • • • • • • • • •	-	···· ·····.	
9	BWSA	Number				·		
Ownership	Institution	Number		····				
ð	Commercial Establishment	Number						
	Industrial/Agricultural Undertaking	Number		•••••••				
	Public (Domestic)	Number	8	47	10	255	375	·····
	Private (Domestic)	Number	5			95	3/3	31
	Submersible/Turbine	Number		-•			3	
ou	Centrifugal	Number			·····	·· [ • • •		· ·
Abstraction	Handpump	Number	13	47	·	350	275	····
۸bs	Bucket & Rope	Number						
	Free Flowing	Number			. 11	• <u>]</u>		
	Drinking	Number	13	47	11	350	378	31
	Washing/Bathing	Number	13	47		350	378	31
Usage	Gardening/Irrigation	Number	13	47	11	350	378	31
J	Big-Scale Irrigation	Number				-		31
	Production	Number						
	No Quality Problem	Number						
	High Iron/Manganese Content	Number					· ··	
()ile	High Chloride Content	Number	· · · · · · · · · · · · · · · · · · ·					
Š.	Turbidity/Colored/Smell	Number	· ] · · · · · · · · · · · · · · · ·					
Water Quality	Polluted Contaminated	Number		· • · • •			··	
-	Chlorinated	Number			 11			
	Treated	Number			······	·	3	31
	Seasonal Production	Number	1			+		
tion	Average Capacity < 100 m <sup>3</sup> /day	Number	13	47		350	378	
Production	Average Capacity >= 160 m <sup>3</sup> /day	Number	[				3	31
Å.	Number of Household < 5	Number		····		·		
	Number of Household >= 5	Number	125	705	2,939	3,920	6,449	450

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rovin	cial Water Supply, Sewerage And Sa	nitation Sec	tor Plan (PW45	P)			Page: 1 of 1	<b></b>
onler	t: Water Source - General Inform:	ation					Date:	
ata C	ollection Level: Provincial		Province No.:	the second s			Filename: Wate	
egior	Number: XI		Province Name	State of Sta	ហ	i.	Form Number:	P.4.1
	Name of Municipalities	Character	Don Marcelino			Hagonoy		
1	Type of Water Source	Number	Shallow Well	Deep Well	Spring	Shallow Well 81	Deep Well	Spring
	Total number of water sources	Number	<u>72</u> 40	13	100	43	305 303	
mentor	Government Agency	Number Number	<u>40</u> 32	13	100	38	303	
<u>н</u>	Private	Number	72		99	81	301	
ē	Level I	Number					••••••••••••••••••••••••••••••••••••••	
Level	Level II				1		2	
	Level III	Number		·			2	
	Water District	Number	<b>_</b>				1	
	MEO/CEO	Number						
	RWSA	Number					3	
hip	BW\$A	Number	]					
Ownership	Institution	Number						
ð	Commercial Establishment	Number		{	İ			
	Industrial/Agricultural Undertaking	Number						
	Public (Domestic)	Number	40	13	100	43	303	
	Private (Domestic)	Number	32			38	2	
	Submersible/Turbine	Number	1				4	
ភ	Centrifugal	Number	-	ţ	<b>-</b>			
Abstraction	Handpump	Number	72	13	···	81	301	
bstr		Number		i				
<	Bucket & Rope	Number		ł	100			l
	Free Flowing	Number	72	13	100	81	305	
`	Drinking	Number			100	81	305	
20	Washing/Bathing	Number	72		100	81	305	
Usage	Gardening Irrigation		1	13			1 303	
	Big-Scale Irrigation	Number						
	Production	Number						i
	No Quality Problem	Number	·					•
~	High Iron/Manganese Content	Number	. <b>.</b>	<u> </u>				
ți e	High Chloride Content	Number						
Water Quality	Turbidity/Colored/Smell	Number	·					: •
Vate	Polluted/Contaminated	Number		i				
2	Chlorinated	Number	•					
	Treated	Number	-	Ţ		·		
	Seasonal Production	Number	r	1	1			
00	Average Capacity < 100 m <sup>2</sup> /day	Numbe	72	13	100	81	301	
Production	Average Capacity >= 100 m <sup>3</sup> /day	Numbe	r	- <u> </u>	]		4	
Par	Number of Household < 5	Numbe			-			1
	Number of Household >= 5	Numbe	r 632	195	1,450	683	13,000	1

46.00.2

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Provin	cial Water Supply, Sewerage And Si at-Water Source - General Informat	anitation Se	ctor Plan (PW4	ISP)			Page: 1 of 1	
	ollection Level: Provincial	ion	Province No .:	1134		· · · · · · · · · · · · · · · · · · ·	Date:	
	Number: XI			1124 e: Davao Del Si	<u>ــــــــــــــــــــــــــــــــــــ</u>	·	Filename: Wat Form Number	
	Name of Municipalities	Character	Jose Abad San		<u></u>	Kiblawan	POIN NUMBER	r.4.1
	Type of Water Source	Number	Shallow Well		Spring	Shallow Well	Deep Weil	Spring
_	Total number of water sources	Number	90	83	5	148	99	6
mentor	Government Agency	Number	40	83	5	53	98	6
mentor	Private	Number	50			95		
	Level1	Number	90	83	5	148	98	5
Level	Level H	Number						1
	Level III	Number			/		1	
	Water District	Number			· ·		l	
	MEO/CEO	Number						
	RWSA	Number			:			
dida	BWSA	Number						
Ownership	Institution	Number	·					
¢.	Commercial Establishment	Number						
	Industrial/Agricultural Undertakin	Number						
	Public (Domestic)	Number	40	83	5	\$3	98	6
	Private (Domestic)	Number	50			95	1	
	Submersible/Turbine	Number					1	
ction	Centrifugal	Number						
Abstraction	Handpump	Number	90	83	· · · · · · · · · · · · · · · · · · ·	148	98	
2	Bucket & Rope	Number			- <u> </u>			
. <u> </u>	Free Flowing	Number	····		5			6
	Drinking	Number	90	83	5	148	99	6
80	Washing/Bathing	Number	90	83	5	148	99	6
Usage	Gardening/Irrigation	Number	90	83	5	148	99	6
	Big-Scale Irrigation	Number						
	Production	Number						
	No Quality Problem	Number					· · · · · · · · · · · · · · ·	
5	High Iron/Manganese Content	Number		·				
Jual	High Chloride Content	Number						
Water Quality	Turbidity/Colored/Smell	Number					: •	
ž	Polluted Contaminated	Number			·			
	Chlorinated	Number		]			<b>k</b>	
-	Treated	Number	<u> </u>	<u> </u>			ļ	
£	Seasonal Production	Number						
Production	Average Capacity < 100 m <sup>3</sup> /day	Number	90	83	5	148	98	6
rodu	Average Capacity >= 100 m <sup>3</sup> /day	Number	· · · · · · · · · · · · · · · · · · ·				1	L
G,	Number of Household < 5	Number	<u> </u>					• • • • • • •
	Number of Household >= 5	Number	650	1,245	75	890	4,752	90

	ial Water Supply, Sewerage And		Sector Plan (P	W4SP)			Page: 1 of 1	
	: Water Source - General Inform	nation	Davida - N				Date:	
	Mection Level: Provincial Number: XI		Province No.: Province Name				Filename: Wat Form Number	
KCE IOII	Name of Municipalities	Character	Magsaysay			Malalag	ronn wurder	: r.4.1
	Type of Water Source		Shallow Well	Dcep Well	Spring	Shallow Well	Deep Well	Spring
	Total number of water sources	Number	45	271	24	130	129	10
ទី ទី	Government Agency	Number	16	271	24	63	129	10
Imple- mentor	Private	Number	29			67		
	Level I	Number	45	270	8	130	127	9
Level	Level II	Number			15		1	1
	Level III	Number		1	1		2	
	Water District	Number						
	MEO/CEO	Number						
	RWSA	Number		1	16			
dirt	BWSA	Number						
Ownership	Institution	Number			ŀ		2	
ð	Commercial Establishment	Number						
	Industrial/Agricultural Underta						ļ	
	Public (Domestic)	Number	16	271	23	63	127	10
	Private (Domestic)	Number	29			67		
ç,	Submersible/Turbine	Number		1			2	
Abstraction	Centrifugal	Number						
strac	Handpump	Number		271		130	127	
4	Bucket & Rope	Number	· • · · · · · · · · · · · · · · · · · ·					
	Free Flowing	Number		ļ	24			10
	Drinking	Number	45	271	24	130	129	10
9	Washing/Bathing	Number	45	271	24	130	129	10
Usage	Gardening/Irrigation	Number	45	271	24	130	129	10
	Big-Scale Irrigation	Number	·					
	Production	Number		ļ	ļ			
	No Quality Problem	Number		l				
· ->	High Iron/Manganese Content	Number	·	L				
ualit	High Chloride Content	Number			ļ			• • • • • • • • •
er Quality	Turbidity/Colored/Smell	Number	·	<u> </u>				
Wate	Polluted/Contaminated	Number	·	<b>_</b>				
	Chlorinated	Number	-1		24			10
	Treated	Number		ļ			2	<u> </u>
	Seasonal Production	Number		<u> </u>	ļ			ļ
tion	Average Capacity < 100 m <sup>3</sup> /da	-		271	23	130	127	10
Production	Average Capacity >= 100 m <sup>3</sup> /			<b>i</b> <u>1</u> .	<b> </b>		2	
žď	Number of Household < 5	Number		<u> </u>				<b>.</b>
	Number of Household >= 5	Number	r 269	30,200	820	1,012	8,460	165

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Conter	cial Water Supply, Sewerage And State: Water Source - General Informat	initation Se	ctor Plan (PW4	SP)			Page: 1 of 1	
Data C	offection Level: Provincial	ion	Desidence Martin				Date:	
Regior	Number: XI		Province No.: Province Nam	1124 - Davao Del	Sur		Filename: Wa	
	Name of Municipalities	Character		V. Darao Der	001	here	Form Numbe	r: P.4.1
	Type of Water Source	Number	Shallow Well	Deep Well	Spring	Matanao Shallow Well	Deep Well	Spring
	Total number of water sources	Number	86	151	154	187	148	<u>əpring</u> 10
Imple- mentor	Government Agency	Number	32	151	154	98	148	10
ΞĔ	Private	Number	54			89	······ ··- ··	
5	Levell	Number	86	148	148	187	145	8
Level	Level II	Number			6		1	
	Level III	Number		3			2	2
	Water District	Number						
	MEO/CEO	Number		· · · · · · · · · · · · · · · · · · ·	1		·	
	RWSA	Number		3	2			
ship	BWSA	Number						
Ownership	Institution	Number			····		· · · · ·	•••••••••••••••••••••••••••••••••••••••
ó	Commercial Establishment	Number			•	· · · · · ·		······
	Industrial/Agricultural Undertakin	Number						
	Public (Domestic)	Number	32	148	151	98	146	
	Private (Domestic)	Number	54		······································	89		•
	Submersible/Turbine	Number		3			2	
tion	Centrifugal	Number		·····				
Abstraction	Handpump	Number	86	148	•·	187	146	
Ŝ	Bucket & Rope	Number				······	· · · · · · · · · · · · · · · · · · ·	
	Free Flowing	Number			154			
	Drinking	Number	86	151	154	187	148	10
ų.	Washing/Bathing	Number	86	151	154	187	148	10
Usage	Gardening/Irrigation	Number	86	151	154	187	148	
	Big-Scale Irrigation	Number		<del>-</del>				10
	Production	Number				· · · · · · · · · · · · · · · · · · ·		
	No Quality Problem	Number			·			
	High Iron/Manganese Content	Number			·····			
ality	High Chloride Content	Number						
Water Qu	Turbidity/Colored/Smell	Number				···-··		
Wati	Polluted Contaminated	Number				·····		
	Chlorinated	Number			·		1	i
	Treated	Number		3				10
	Seasonal Production	Number						
tion	Average Capacity < 100 m <sup>3</sup> /day	Number	86	148	154	187	- 147	
Production	Average Capacity >= 100 m <sup>3</sup> /day	Number		3	······ ······	·····		10
Prc	Number of Household < 5	Number					· - ·	
	Number of Household >= 5	Number	534	13,500	2,355	1,559	12,400	
		· <u> </u>		l.			12,100	150

	ncial Water Supply, Sewerage And S		Sector Plan (P	W4SP)			Page: 1 of 1	·
	nt: Water Source - General Informat	lion					Date:	
	Collection Level: Provincial		Province No. Province Nat	: 1124 ne: Davao Del	Sur		Filename: Wat Form Number	
ncgio		Character	and the second se	114. D3140 DCI		Sta. Cruz	It offit Humoer	
	Type of Water Source		Shallow Wel	Deep Well	Spring	Shallow Well	Deep Well	Spring
. 1	Total number of water sources	Number	107	90		67	68	38
<u>s</u> 5	Government Agency	Number	58	88		45	68	37
Imple-	Private	Number	49	2		22		
	Level 1	Number	107	88		67	67	29
[	Level II	Number					L	8
-	Level III	Number		2				1
	Water District	Number	1					
	MEO/CEO	Number						1
	RWSA	Number		l				
e e	BWSA	Number			··· — — —	- <b> </b>		
Ownership	Institution	Number		1		-		
ð	Commercial Establishment	Number						
	Industrial/Agricultural Undertakin	Number	· · · · · · · · · · · · · · · · · · ·			-		
	Public (Domestic)	Number	58	88		45	67	37
	Private (Domestic)	Number	49			22		
	Submersible/Turbine	Number	·	2			1	
io i	Centrifugal	Number						
Abstraction	Handoump	Number	107	88		67	67	
Abs	Bucket & Rope	Number					1	
l	Free Flowing	Number						38
	Drinking	Number	107	90	1	67	68	38
	Washing/Bathing	Number	r 107	90	1	67	68	38
Usage	Gardening/Irrigation	Number	r 107	90	1	67	68	38
, <u> </u>	Big-Scale Irrigation	Numbe	r 🔤		1			
	Production	Number	r l					
	No Quality Problem	Numbe	r					1
	High Iron/Manganese Content	Numbe	r					
Aile	High Chloride Content	Numbe	r l					
Water Qua	Turbidity/Colored/Smell	Numbe	1					:
Wate	Polluted/Contaminated	Numbe	r					
	Chlorinated	Numbe	a					38
	Treated	Numbe	r	2			1	· · · ·
	Seasonal Production	Numbe	a 📃 👘					i
5	Average Capacity < 100 m <sup>1</sup> /day	Numbe	ar 107	90		67	67	37
Production	Average Capacity >= 100 m <sup>3</sup> /day	Numbe	x	2			1	
P.S.	Number of Household < 5	Numbe	я				1	l
	Number of Household >= 5	Numbe	er 919	3,895		697	321	1,5

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 $\sum_{i=1}^{n}$ 

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onte	ncial Water Supply, Sowerage And nt: Water Source - General Inform	ation		101)	· · · · · · · · · · · ·		Page: 1 of 1 Date:	
Data (	Collection Level: Provincial	······································	Province No :	1124			Date: Filename: Wa	lor Source -
cgio	n Number: XI		Province Nam	e: Davao Del S	lur		Form Number	
	Name of Municipalities Type of Water Source	Character	Sta. Maria			Sulop		
	Total number of water sources	Number Number			Spring	Shallow Wel	I Deep Well	Spring
5 ō	Government Agency	Number	316 220	185	33	235	97	1
umpie- mentor	Private	Number	·	185		- 145	97	1
·		F	96			90	I	
Level	Levell	Number	316	184	32	235	96	
2	Level II	Number			<b>I</b>			
<u> </u>	Level III	Number		1				
	Water District	Number					1	
	MEO/CEO	Number						
	RWSA	Number		1	1			······
Ownership	BWSA	Number					· • · · · · · · · · · · · · · · · ·	<b>I</b>
vucu	Institution	Number					-	• •
õ	Commercial Establishment	Number						
	Industrial/Agricultural Undertaki	Number				· · · · · · · · · · · · · · · · · · ·	· • · · · · · · · · · · · · · · · · · ·	
	Public (Domestic)	Number	220		33	145		
	Private (Domestic)	Number	96			90	96	
	Submersible/Furbine	Number			··· <b>-</b> ···· <u>-</u> ·	50		
õ	Centrifugal	Number					· · · · · · · · · · · · · · · · · · ·	
Abstraction	Handpump -	Number	316	184			·	<b>.</b>
Abst	Bucket & Rope	Number			· · · · ·	235	96	
•	Free Flowing	Number	··					
					33	L		1
	Drinking	Number	316	185	33	235	97	1
Osage	Washing/Bathing	Number	316	185	33	235	97	l
Š	Gardening/Irrigation	Number	316	185	33	235	97	
	Big-Scale Irrigation	Number						
	Production	Number				· · · · · · · · · · · · · · · ·	1	·-···
	No Quality Problem	Number				· · · · · · · · · · · · · · · · · · ·		
እ	High Iron/Manganese Content	Number				··	₽ — · <b>-</b> - · · · · · · · · · · · · · · · · · ·	
uality	High Chloride Content	Number	····		· · · · · · · · · · · ·			
Water Qu	Turbidity/Colored/Smell	Number						
Wat	Polluted Contaminated	Number				······		· · · ·
	Chlorinated	Number		<b></b>	33			
	Treated	Number	·					
	Seasonal Production	Number					<u>├</u> <u> </u>	11
ត	Average Capacity < 100 m <sup>3</sup> /day	Number	316	195				
rroquetton	Average Capacity >= 100 m <sup>3</sup> /day	Number			33	-235	96	_ <u> </u>
ğ	Number of Household < 5	Number				·		· _ · • · · •
							· · · · · · · · · · · · · · · · · · ·	
l	Number of Household >= 5	Number	3,396	7,150	495	2,265	1,340	350

	incial Water Supply, Sewerage And S ent: Water Source - General Informa		Sector Plan (F	W4SP)			Page: 1 of 1 Date:	
	Collection Level: Provincial		Province No	1124			Filename: Wat	er Source x
Regi	on Number: XI		Province Na	me: Davao Del	Sur		Form Number:	
	Name of Municipalities	Character	Sarangani	· · · · · · · · · · · · · · · · · · ·				
	Type of Water Source	Number	Shallow Well	Deep Well	Spring	Shallow Well	Deep Well	Spring
L.,	Total number of water sources	Number		23	13			
Imple- mentor	Government Agency	Number		23	13			
E E	Private	Number						
	Level I	Number		23	12			
Level	Level II	Number			1			
	Level III	Number						
	Water District	Number						
	MEO'CEO	Number	1				·	
	RWSA	Number			1			•
.e	BWSA	Number						
Ownership	Institution	Number						··· · ·
ð	Commercial Establishment	Number			• • • • • • • • • • • • • • • • • • • •	·	∮	
	Industrial/Agricultural Undertaki	Number		-	···• -••			
	Public (Domestic)	Number		23	12		<u> </u>	
ĺ.	Private (Domestic)	Number	·					
	Submersible/Turbine	Number					<u> </u>	
E	Centrifugal	Number	·   ·				<u> </u>	· · · ·
Abstraction	Handpump	Number	·	23			{	
-tso		Number	·			-	<u>  </u> ii	
	Bucket & Rope	Number						
<b> </b>	Free Flowing	Number	}	23		-	<u> </u>	
	Drinking							•
5	Washing/Bathing	Number	<b> </b>	23				
Usage	Gardening/Irrigation	Number		23	13			
	Big-Scale Irrigation	Number			· • • · · · · · · · · · · · · · · · · ·		<b> -</b>	
	Production	Number		4				
	No Quality Problem	Number	<b>_</b>					
	High Iron/Manganese Content	Number						
Water Quality	High Chloride Content	Number					1	
1 S	Turbidity/Colored/Smell	Number						
Wat	Polluted/Contaminated	Number			·			
	Chlorinated	Number			В			
	Treated	Number						
	Seasonal Production	Number				1		
Б	Average Capacity < 100 m <sup>3</sup> /day	Number	1	23	13			
Production	Average Capacity >= 100 m <sup>3</sup> /day	Number	1				1	• • •
Por	Number of Household < 5	Number				-		
j,	Number of Household >= 5	Number	1	368	195			

	Topographic Map (1:250,000)				
		NAMRIA	topographic contours, natural	highest pcak, major river basins	river networks, base maps,
	Daniel A sussesses and a first		Walch ways, road, clc.		inver basins of province
1.	Naple Assessment of Water	NWKB	groundwater availability, well	well description, specific capacity,	grounwater potential
	Supply Sources		data and inventory	static water levels, well depths	arca map
	Individual Well Information	NWRB	well location, well information	well depths, water levels, well	individual well location
1	Uatabase			location	Com
	Groundwater Resources	NWRB	groundwater availability area.	resistivity survey results notential	mantal area for high
	Investigation		salt water intrusion.	area for high violating walls calt	
			resistivity results	The second second weils, said	yteiuing weils, sait water
S.	Geological Man of the	BMGS	lithologic dimeturing and		Indusion areas
			DUE LIOPHOLDSID STRATOTION	geologic lormations of the province	provincial geologic maps
			structural features of the		•
			<b>Philippines</b>		
é.	Philippine Water Resources	NWRB	stream flow and lake and	flow rate measurements and	river discharoes in the
	Summary Data		nver stage	drainage areas of major nivers of	
				the moving	
2	Road Nervork Man of the				
	around a second a stap of the	-neo, reo,	municipal boundaries	boundaries, location of	base mcps, municipal
Γ				barangays	boundaries
	r casiolity Study of Sungao	SMWD/LWUA	recommended water sources	well data information, water level	groundwater potential
T	Metro Water District(SMWD)		for MSWD		area man
	Water Quality Analysis Result	<b>D</b> MMD	water quality results	water quality	urater and lite enor
ġ	Assessment of the impact of	SMWD	extent of mercury pollution	I nothing caused his	
	Mat-I gold mining workings on	Surigao City 1996	of Surieao River and the		
	surface waters and nearshore				or sungao City
	environment of Surigao City				• •
<u> </u>	Individual Well Inventory	DPWH-DEO	well location well information		
2			Т		individual well location map
ł.	Ya divide a true to the part of the second s	20110		water quality evaluation	water quality map
			well location, well information	well depth, water levels	individual well location map
	Spring inventory	Agusan del Sur	location of springs, discharge	spring data analysis	spring inventory report

Table 7.3.1 Major References

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continue next page

DPWH-DEO,well location. well informationwell depths. Water levelsDavao del Surlocation of springs, dischargespring discharge, locationDavao del Surgeologic informationgeologic formations of the provinceWater quality resultswater qualitywater qualityDavao Orientalwell locationgeologic formationDavao Orientalwell location, well informationwell location, well depthsDavao Orientalpumping test resultswater qualityNEDA Regional Officegeneral information ofsurface water, groundwater resources,November 1997water resourceswater quality and quantity
Sur         location of springs, discharge           geologic information         water quality results           D,         geologic information           D,         geologic information           nal         water quality results           pumping test results         water quality results           gional Office         general information of           1997         water resources
geologic information       water quality results       D.     geologic information       Real observation     well location, well information       ntal     pumping test results       water quality results     water resources       gional Office     general information of       1997     water resources
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water resources

Table 7.3.1 Major References (Cont.'d)

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		WELL NO.	DATE	DEPTH	TMS	DISCHARGE	DRAWDOWN	SPCCP	USAGE	REMARKS
MUNICIPAL	TOCATION	(mbes)		(E	(mbgs)	(1ps)	(u)	(1)sdl)		
		0110 0763	93/11/60	46.03	27.43	0.94		3.130		
Bansalan	74 Southeast	7010- M JO	00101 700	UP ELL	47.99	1.89	0.76	2.480	~	
Bansalan	Bansalan W.W.	CTONT#M N		84.88	27 44	3.16				
Bansalan	Bansalan W.W. #2	NW200512	0,1000	00.40	101 4	0.63		2.100		
Bansalan	Bo. Barayong	NWS19808	80/27/01		00001	0.5.0		0.550		
	Bo. Blocon	NW206181	08/11/61	00.77		0.57		1 890		
Rancalan	Bo. Casuga	NW206182	08/29/61	9.70	1771			024.0		
	Ro Dalawinan	NW206282	06/05/62 -	10.37	5.49	0.38		224.0		
		BPW-8754	04/15/26	36.58	26.52	0.94		nco.,		
		NW206010	01/24/63	9.75	6.09	0.31		0.510		
Banšalan	BO. Naicg	02020/07/07	09/22/11	7.62	2.13	0.44		2.200		
Bansalan	Bo. Kialeg	17077111	19/01/10	6 70	15.24	0.63		0.200		
Bansalan	Bo. Kinuskusan	10410 A V	0010100		1571	1 26		0.410		
  -	Bo. Mabuhay	NWS12975	86/01/10	10.02		200		1 460		
	Bo Mahinda	BPW-6067	03/12/54	79.27	73.17			0.0.1		
		BPW-6148	08/28/54	50.00	42.68	0.63		600.0		
Bansalan	DO, Wanaya	RPW-8757	09/30/56	65.85			-			
Bansalan	Bo. Marber	2267 1100	DAVIAISE	12 21	5.48	0.94		1.540		
Bansalan	Bo. Matanao	0010-M-19	0711120		24.45	0.95		1.560		
Bansalan	Bo. Miral	104C-W-35I	+0.0 1/00			120		0.140		
Bansalan	Bo. New Clarin	BPW-12036	90/61/00	1/0		400		1540		
Bansalan	Bo. New Visayas	BPW-8755	05/11/56	06.21	77.					
Bencalan	Bo. Rizal	NW206283	07/20/62	18.29	77.1			0000		
Describe	Ro. Sar Mimiel	NW206018	09/12/26	39.63	26.83	/0.0		NC7.0		
	D. Cinautilan	BPW-5892	12/26/53	18.29	12.20	0.95		7001		
	DOI 01114W136115	NWS19808	10/24/58	8 23	6.10	0.63		2.100		
	bo. Barayong	19671SMN	02/19/58	6.70	15.24	0.63		0.200		
	Bo. Kinuskusan	1011C#/MN		94.50	88.42	0.95	0.61	1.550		
Bansalan	Buenavista	1711744.01		k7 07	41.16	0.32	3.20	0.100		
Bansalan	Kanapolo	1 CON74 M V	01/10/103	0.75	00 9	0.31		0.510		
Bansalan	Kialeg	N W ZUOULU	0.124.00	C / L	110	40		2.200		
Bansalan	Kıaleg.	NW206059	10/77/11	70',		250	0.5 6			
Banvalan	Km: 69 Matanao	NW206017		35.06	C6.12					
Bancalan	Mahubav	S£661#MN		32.01	   	27.51				
		NW#12036		6.71		0.32				
Dansalan		RPW-9753	03/14/56	16.02	41.76	0.95				
Bansalan	ropiacion	120#MM		51.22	11.85	0.95	0.61	1.550		
	Sinaragan									

Table 7.3.2 Well Inventory by Municipality

	1 CCATION	WELL NO.	DATE	DEPTH	SWL	DISCHARGE	DRAWDOWN	SPCCP	USAGE	REMARKS
MUNICIPAL		(mbgs)		(m)	(mbgs)	(lps)	(u)	(lps/m)		
Darres City.	Acseis Km 17 Runswan	BP205912	65/81/60	90.66	43.29	0.37	. 6.17	0.060		
		BPW#5232	11/10/50	225.00	1 22	0.38				
Davau City		NW#20669		64.02		1.14		-		
	Aguau	0CUCHWN		50.32	0.61	0.51	10.31	1.660		
Davao City	Agdao Beach	60074MN			020					
Davao City.	Agdao Public Market	N W#20666		20.21	20.0	250	<u>1 - 1</u>	0620		
Davao City	Angalan Ands Tugbok	NW#20613	08/04/61	50.61	41.46	07.0		020.0		
Davao City	Arisano Nafed Abaca Project	NW#5345		91.46	1.83	3.16		0.430		
Davado Cito	Racanca	86E9#WN		13.72	01.9	0.95				
	Barrish Sharra	BPW#6248	10/14/50	37.50	3.66	0.76		2.530		
Davao City	Detro Doemit	TE82#WdB	12/15/53	42.68	21.95	1.26	1.83	0.690		
		NUL# 5258		26.22		1.58				
Davao City		VULTHINGU	N0/01/5A	OF OF	0151	2.65				
Davao City	Hajada :	5504 M 30	03/00/00	10 55	4 57	316	7.62	0.414		
Davao City	Bajada	CC4+1 MJA	90770/60	10.20						
Davao City	Bajada, Davao Regional Hospital	BPW20612	05/18/61	78.35	10.70	20.6				
Davao City	Bajada, Regional Medical & Training Center	NW206414	12/09/64	72.26	11.58	2:52				
Davao City	Banokal Población	NW#14820		15.24	4.57	0.44				
David City	Bankerohan Market	NW206616		25.30	4.57	0.76		1		
Davad City	Barbershar Dublic Market	7931#WN		31.10	6.10	2.65	3.68	0.720		
Vao City		BP206213	11/07/62	57.92	45.73	0.41	1970	0.670		
Davao City	DOIS DAILU LAVAUL CALINAL	NW#18153		60.98		0.95				
Davao City	Blacochon	COTOT #M N		12 33	15 67					
Davao City	Biao Bulog Tugbok	T6C07#MN		1/ 00	10.00	07 1	<u>.</u>			
Davao-City	Biao Escuela	BPW#5290	03/29/51	22.87	8.84	96.1				
Davao City	Biao Guianga School	BPW10154	04/30/56	61.00	46.70	ck.0				
Vao CitV	Biao Malagos	BPW45950	02/01/54	35.37	21.34	0.95				
Davadr	Biao Malueboe	NW206325		64.02	33.54	0.35				
Davan City	Biao Maluebog	NW206325	- 12/09/63	46.34	33.54	0.35	0.61			
Daves	Riao Talandano	BPW10155	05/31/56	34.75	19.82	1.24		0.533		
Dava of the	Biao Tanda	NW#10157		61.28		26.0				
		NW1 1444	00/20/58	77 74	28.96	0.44	3.14	071.0		
Davao City	Bo. Acamini, Bunawan				14 04	1 07				
Davao City	Bo. Bago Bangkas Toni	ACIU1-WN	10/01/20							
Davao City	Bo. Bago Gallera	BPN#5280	08/14/50	24.70		00.1				
Davao Citv	Bo. Bago Oshiro	BPW#5538	10/10/52	27.74	5.49	1.14	4.56			
Davao City	Bo. Barutor 2. St.	BPW#5702	02/19/53	26.50	. 12.81	1.26		0.380	~-+	
Davao City	Bo. Bizo Buloo	T NW-20591	09/11/20	56.70	35.67	0.44			-	
Va0 (11)	Do Riso Tanda Tushok	BPW10156	07/18/56	53.35	39.94	2.52	36.00			
Davao Lity.	DO. DIAU ANIUA LUGOON	NW/-14910	01/10/52	2 63	3.66	0.61				
Davao City	Bo, Dumalag, Matina Aplaya	N W-14614	10/17/10	10.1		351		1	· #	
David Chi	190 113200 J	I BPW#4240 1	07/1/10		117				~4	

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MUNICIPAL	rouron	WELL NO.			240			(m/m)	2000	
		(mbgs)		(m)	(mbgs)	- (sdi)		Ż		
	Do Malimitan	BPW#5601	01/15/53	89.02	67.99	0.76	:			
Davao City	DO. Mangatolik	BPW#5864	01/08/54	34.75	19.21	1.26				
Davao City	Bo. Manuci riantation	NW706038-	08/30/60	10.37	1.52	0.44				
Davao City	150. San Vicenic Crossing	NW-21022	04/06/59	77.13	54.27	0.50	0.75			
Javao Lity.	Bo. Simsimon, Bunawan	OCAN#/WOO	11/30/48	24.40	4.57	1.26	1.52			
Davao City	Bo. Tibungco	DI WHAT	10/20/56	9.76	2.0	0.50	0.61	0.820		
Davao City	Bo. Tibungco Proper, Markel Site	010+1 M 19	0012017	14 58						
Davao City	Bo. Upper Budbud, Bunawan	BP206012	07/20/00	127.02	F\$ AC	1.26	1.52	0.830		
Davao City	Bo. Wangan	BPW36019	4071750	60'6C	20.04	361	1 52	ŀ		
Javao Citv	Bo. Nixes Caliran	BPW#6387	03/29/55	26.22		07.1				
and Chr.	Budhud	BPW#5199	04/19/50	24.40	10.4	c0.0				
	DudbudOumalao	BPW#S452	10/06/50	33.54	21.34	6.0	10.0			
	Decode Contract	NW#21024		42.10	21.34	0.44	19.0			
avao City	Budbud-Quitatao, bunawan	LYY J#/MQC	06/07/52	35.06	1.52	.0.16	0.62	0.260		
Davao City	Bunawan	1464W10	201010	46.04	39.33	1.58	1.84	0.860		
Davao City	Bunawan	PHCCHW18	7771160		24.98					
avao City	Cabantian	11200ZMN			2010	0.44	05.0	1 470		
Davao City	Cabantian Communal Km. 9	NW-21025	06/15/59	86:05		10 C				
Civil Civil	Cabantian Km. 10	BPW#5320	10/04/57	70.43	00.98	50.0				
Davido City	Cabantian Km. 12	BPW#5294	07/31/51	88.41	68.60	0.03		1		
	Cohomian-Y m 2	NWSA5352	11/15/51	54:88	30.49	0.95	10.1			
Javao City	Cadaditati Nulli V	NW# 5728		128.05	114.33	0.76				
DAVAG LILY		BPW#8064	10/26/56	47.56	45.73	3.79	3			
Davao City	Caorc	- EAN HUW		49.40	2.74	3.79				
Davao City	Cadre Site		11/2/67	196.12	4.88	3.16	4.27	0.740		
Davao City	Cadre Site	20101-M N	1007/11	244 001						
AND CITY	Calinan Balintawan	BPW#6389	CC/C1/71	76.30	07 10		6.40	0.050		
Davao City	Calinan Lower Tamugan	BPW20833	80/51/60	00.00	14.02	200	0.45	ĺ		
Davao City	Calinan Monteverde	NW206338	05/15/64	45.75	12.00	AU.0				
Davao City	Calinan Sirib	BPW#6385	01/29/55	74.08						
Davao Citv	Calinan Suarez	BPW#6388	08/31/55	137.80	17:171					
Davao Ciru	Calinan Subasta	BPW#6384	11/15/54	30.48	13.821			001 0		
David City	Calinan Tansing	BPW#16313	07/11/58	41.15	35.97	0.94				
	Calman I inner Lacson I	NW-20649	02/28/65	79.27	4	0.63	40.7	0.410		
Davad City	Callaura Flementary School	BP206264	10/31/62	8.53	3.96	0.63		:		
avau city	Carlinon Condo	BPW20835	02/20/59-	50.61	42.68	0.76		0.500		
Davao Lity	Catalutati Utanut	NW-20636	05/23/63	52.74	39.63	0.25				-
		BPW#5266	12/31/50	32.62	15.85	0.88	1.49			
		-92902-MN	11/19/62	31.10	12.80	3.16	4.86	0.650		
Davao Lity		1090C#Mda	03/15/60	37.19	19.21	0.56	0.92			
Davao City	Cogon Subasta, Calinan									

MUNICIPAL	LOCATION	WELL NO.	DATE	DEPTH	TMS	DISCHARGE	DRAWDOWN	SPCCP (Inc/m)	USAGE	REMARKS
		(mbgs)		ົຍ)	(1230m)	(edi)	(11)			
Davao City	Communal School Site	BPW16314	07/09/57	43.60		0.63		0000		
Davao City	Communal Upper Tibungko	11691-MN	02/13/57	41.16	33.23	0.63	00.12	070.0		
Davao City	Crossing Bayabas. Toril	BPW#4958	05/06/49	43.59						
	Cuchon Bino	NW#10153		46.34	36.89	\$6.0				
		PLEADCWW	18/29/63	40.24	3.05	0.38				
Davao City	Daliao Beach, John	100071110	EYC1/CV	25.8	181	0.31	6.20	0.050		
Davao City	Dahao Cirl Scout Kegional Camp	DF W 2001	07170			20				
Davao City	Daliao Public Center	BPW#4934	03/09/49	30.49	++		101			
Davao-City	Davao Experimental Sanitation, Bago	BPW20605	11/25/60	35.98	21.14	19.9				
Davao City	Davao General Hospital	BPW12044	09/15/56	4.57	0.91	66-0	10'0	toc-i		
Davao Cire	Davao Penal Colony	NW# 5376 -		111.28	3.66	2.08				
	Diet Hall Toel	NW#20621	02/08/62	50.00		3.78				
	Dominant Posts	BPW#6383	08/24/54	44.21	28.96	1.14	1.83	0.621		
Davao City:		. UOCOMINGO	33/CV/EU	CC 7C	18.601	0.95	1.83	0.520		
Davao City	Gumalang, Calinan	- DCCOM A JC	13/00/20	115 25	48.78	0.63		0.410		
Davao City	Indangan	DI WH24/1	10160100							
Davao City	Indangan	6/7C #MN				0.50	190	0 820		
Davao City.	Indangan Grande	NW-21026	00/16/35		+1.70			0.52.0		
Davao City	Indangan Grande Km. 16	NW205911	08/21/59	64.02	44.81					
Davao City	Indangan Malagamot	BPW20604	09/02/60	53.96	47.56	0.50		0.00		
Davao City	Joacquin Primary School, Calinan	NW206113		64.02	41.16	0.38				
Davao City	Km. 6 Buhangin	NW# 5369	•	41.77	21.34	66.0		0.020		
Davad City	Km. 9 Puan	BPW#5262	11/29/50	42.07	1.22	1.57		2.570		
Davade	Km. 9 Theatto	1853 #MN		18.30	6.10	1.26		0.220		1
Davao City	Lacson Elementary School, Calinan	NW206212		92.00	16.77	0.51	0.93	0.550		
Davan Cirv	I anu-lanu St. A edao	NW206614		65.69		3.16				
Damacing		BPW#5167	01/24/50	86.89			-			
Davao Citor		BPW#5267	12/02/50	32.01						
Davao City	Libay Toril	NW206214	02/25/63	27.44	1.22	0.38				
Darrad City	l transm	BPW#5185	05/16/50	18.29	1.52	\$6.0	0.30	3.160		
Darad City	Tinaman Taranti	NW# 5818		20.73	2.44	0.95				
O CITY	Taure Mahaner	19101-WN	10/1/57	46.04	22.87	1.26	1.52	0.63.0		
Davao Ciry		1 COUCININ	C3/30/90	50.00	19 61	0.44	1	0.480		
Davao Lity		11/2007 14 1	1000000	01.02	102 11	1.58				
Davao City	Lubogan Crossing	007C#M.19	01101120			290		0 340		
Davao City	Ma-a School Site	BPW 14821	10/07/70	50.00				+   		
Davao City	Madapon Reservoir	BPW#5634	55/60/10	0.72	C0.45					
Davao City	Madapon Reservoir	BPW#5749	05/11/53	47.50	34.76	9.'9		017-0		
Davao City	Magsaysay Elementary School, Toril	NW206327	09/24/63	31.07	5.49	1.89	1	2.070		
				24 25	07 64	290	54	0.4101		

Davao City Mahayag Eler Davao City Mahayag Eler Davao City Manay Pamp Davao City Manambulan Davao City Manabulan Davao City Manabulan Davao City Mana Aplay Davao City Mana Blvd. Davao City Mana Pang Davao City Mana Pang Davao City Manao Eq	Mahayag Mahayag Elementary School Mamay Pampanga Manambulan Manambulan Tugbok Manambulan Tugbok Manaambulan Tugbok Manaambulan Tugbok Matina Elementary School, Bunawan Matina Pangi Matina Pangi School Site Matina Pangi School Site	(mbgs) NW# 5217 NW# 5217 BP206011 BP206011 BPW5452 NW#10160 NW206719 BPW45486 NW# 6395	UVI EVICO	(m) 44.21	(mbgs) 42.68	(1ps) (21	(m) 1.54	(lps/m) 0.410		
	ag ag Elementary School y Pampanga noulan noulan Tugeok ue Elementary School, Bunawan g Aplaya Com. School Blvd. Pangi School Site	NW# 5217 NW#20671 BP206011 BPW5452 NW#10160 NW206719 BPW#5486 NW# 6395	09/20/20	44.21	42.68	1.50	1.54	0.410		
	ag Elementary School y Pampanga nbulan nbulan Tugbok ue Elementary School, Bunawan u Beranary School Pangi School Site Pangi School Site	NW#20671 BP206011 BPW5452 NW#10160 NW206719 BPW#5486 NW# 6395	02/02/60			V-U2				
	y Pampanga nbulan nbulan ue Elementary School, Bunawan ue Ranga Com. School Buna School Site Pangi School Site	BP206011 BPW5452 NW#10160 NW206719 BPW#5486 NW# 6395	07/20/00	60.98	38.72					
	nbulan nbulan Tugbok ue Elementary School, Bunawan ug Ranga Com. School Bangi School Site	BPW5452 NW#10160 NW206719 BPW#5486 NW# 6395		42.07	26.22	0.44	1.22	0.360		
	nbulan Tugbok ue Elementary School, Bunawan is Aplaya Com. School (Blvd. Pangi School Site	NW#10160 NW206719 BPW#5486 NW# 6395	08/02/52	66.77	51.22	1.26	3.94	0.320		
	ue Elementary School, Bunawan 6 Aplaya Com, School (Blvd. Pangi School Site	NW206719 BPW#5486 NW# 6395		68'19	45.43	0.63	3.31	0.190		
	g Aplaya Com. School Blvd Pangi School Site	BPW#5486 NW# 6395		8.84	5.49					
	Aplaya Com. School Bivd. Pangi School Site	NW# 6395	08/06/52	106.71						
	i Aplaya Com. School Blvd. Pangi Pangi School Site			21.65	2 44	3.14			-	
	Blvd. Pangi Pangi School Site	BPW12045	10/09/56	4.87	1.52	0.63	0.60	1.050		
	Pangi Pangi School Site	NW# 5316		44.24	25.91				-	
	Pangi School Site	BPW14817	11/12/56	9.75	2.43	0.50	0.30	1.660		
		BPW14818	02/06/57	21.65	2.13	0.95				
	Mindanao Equipment, Depot	NW#20665		18:30	1.22		-			
		BPW#5281	15/60/£0	26.96	14.94	1.58		1.040		
	Mudiang Elementary School	BP206014	04/22/60	36.58	31.40	0.44	5.50	0.080		
	Mudiang Elementary School, Bunawan	NW206414		66.16	31.40	0.44	5.50	0.080		
	Mudiane Indanean	NW206013		39.63	29.88					
	ž*	BPW#5382	02/14/52	38.11	28.35	1.26	4.50	0.280		
	Naming-Tagakpan	BPW20615	01/15/62	54.44	41.15	0.63	1.54	0.410		
	National Highway, Bo Tibungco	BPW#4820	11/30/48	24.40	4.57	1.26	1.52	0.830		
		BPW#5576	10/15/52	28.96	6,10	3.09	1.22	2.530		
	Near City High School	NW# 4749		26.22		1.89				
	New Lilidan, Bunawan	NW-21023	04/01/59	47.26	27.44	0.44	0.92	0.480		
	Pakiputan St., Bo, Sasa	BPW#5385	04/03/52	21.34	1.83	7.57				
	nga	BPW#5261	11/04/50	30.49	-					
		BPW#5321	07/20/50	24,40	0.61	3.16	1.22	2.590		
	Pangyan, Calinan	NW206610		79.30	68.60					
Davao City Piedad, Torik	Torik	BPW20622	03/06/62	25.00	13.11	0.44	19.0	0.720		
Davao City Poblacion	LO CONTRACTOR OF CONTRACTOR	NW#20675		60.98	37.50					
Davao City Poblacio	Poblacion, Agdao	NW206324	09/27/63	57.93	1.52	0.76				
	Public Center, Daliao	BPW#4934	03/04/49	38.11	2.43	0.75				
	Public Market Km. 18 Bo. Toril	BPW#4890	02/15/49	30.48	4.52	1.26	0.61	2.060		
	Quezon Elementary School	NW#20673		3.05	0.76			•		
	0.	BPW#5421	05/80/60	92.99	18.29	0.44	3.14	0.140		
		BPW#5402	05/02/52	50.91	44.82	1.26	2.42	0.520		   
		BPW16313	04/11/57	16.46		0.63				•
	Sirawan Elementary School	NW206714		8.84	6.40	0.32	0.31	1.040		

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MUNICIPAL	LOCATION	WELL NO.	DATE	DEFTH	SWL	DISCHARCE	NWOUWANU	22.2	SAGE	
		(mbgs)		(E)	(mbgs)	(lps)	(a)	(ips/m)		
Davao City	Sitio Mulig	NW# 5044		59.45	45.73					
Davao City	So. Beach, O. Blvd.	NW#20661		3.35	1.83					
Davao City	So. Beach. O. Blvd.	NW#20662		3.20	1.68					
Davao City	So. Bunawan	1615 #MN		21.34	19'0	3.16	0.61	5.170		
Davao City	So. Lacson, Gumalang	NW206513		76.22	68.60		-			
Davan City	Sta. Cruz. Bunawan	BP205914	09/13/60	100.61	35.06	0.44	5.50			
Davao City	Tacunan School Tuebok	NW206313	E9/E1/80	64.02	33.54	0.44	0:30			
Davao City	Tarakoan	NW#20614		56.71	31.10	0.51	0.93	0.550		
Davao City	Tagakoan Crossing	BPW#5354	12/22/51	60.98	45.73	1.14	4.56			
Davad City	Tagakban Proper	BPW#5331	10/04/51	56.71	28.96	10.1		. 1		
Davao City	[Tarakhan Schoo]	BPW#5308	15/16/20	54.88	16.77	0.88				
Davao City	Tavakoan Tuebok	NW#20614		40.55	31.10	0.51	0.93	0.550		
Davao-City	Taciuno Toril	NW#10159		82.60	69.21	0.95				
Davao City	Talandano	BPW#5302	05/28/51	36.62	18.29	1.26		1.660		
Davao City	Talisav Beach, Toril	NW206331	12/23/63	45.42	2.44	0.50	0:30			
Davan City	Talomo	BPW#5274	02/24/81	97.56	1.52	0.76				
Davac City	Talomo Calinan Camp 2	BPW#6382	06/23/54	25.00	12.19	0.94				
Davao City	talomo Cap 2	BPW#6386	02/23/55	23.17	9 14	0.94	1.54			
Davao City	Talomo Plant 3. Catalunan Pequeno	BPW20603	08/02/60		26.83	1.38				
Davao City	iTalomo Plant Mintal	BPW20602	06/03/60		20.73	1.89				
Davao City	Talomo-Calinan Camp (	NW# 6128			27.74	0.95	1.22			
Davao City	Tambungan School Site	NW#14822		5.49	1.22	0.44	0:30			
Davao City	Tibungco School Site	BPW16312	03/18/57	15:57	4.87	0.63	0:30			
Davao City	Tibungco South	BPW12982	<i>19/51/50</i>	13.72	1.52	0.31	0.61	0.510		
Davao City	Tugbok	BPW#5291	04/28/51	36.58	1.83	101	1.22	0.830		
Davao City	Tungkalan Toni	NW#10157		115.85	99.70	0.95	1.83			*****
Davao City	Twin River, Tugbok	NW-20834	01/15/59	85.37	76.22	0.63	1.54	0.410		
Davao City	Upper Gatungan, Bunawan	BP206015	01/04/61	41.76	34.14	2.13				
Davao City	Upper Manamisula, Tugbok	NW206111	08/18/61	71.65	56.40	0.76				
Davao City	Upper Sambunotan, Acasia	NW206621	05/11/67	64.02	45.73	0.38		0.080		
Davao City	Upper Talandang	NW206112	19/01/60	44.21	25.91	0.50				
Davao City	Upper Talandang Biao	NW#20612		80.49	25.92	0.51		0.550		
Davao City	Upper Tibungeo	NW-20679		31.07	16.76	0.44	1.57	0.280		
Davao City.	Upper Tugbok District	NW-20836	09/13/59	80.49	57.01	0.50		0.270		
Davao City-	Ventura, Calinan	NW-20592	09/10/10	64.32	58.53	0.44	1.83	0.240		
Davao City	Western Tibungco	BP205913	12/02/59	54.87	22.86	0.50	0.61	0.820		
		NAWASA		10.67	2 44	0.63	0.69			

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MUNICIPAL	LOCATION	WELL NO.	DATE	DEPTH	JW2	DISCHARGE	DRAWDOWN	SPCCP	USAGE	REMARKS
		(mbgs)		(E)	(mbgs)	(lps)	(m)	sql)		
Malalag	Sta. Maria	NW#12964		9.45	1.22	1.22	0.30			
Malalae	Sta. Mania	NW-12964		9.45	1.22	1.22	0:30	:.660		
Malalag	Sta. Maria Proper	10861#MN		21.34	0.92	0.92	1.54	0.330		
Malalag		BP206083	19/08/61	8.53	4.26	4.26	0.66			
Malalag	Tubig	1002WN	03/23/62	25.91	9.14	9.14	4.89	060.0		
Malalag	Upper Dalagbong Ibo	NW#19804		31.1	12.81	12.81				
Malita	Bagsar	NW#14598		10.67	2.13	0.63	3.00	0.210		
Maliza	Baluntaya	NW206240		22.87	10.06	0.44	1.52	0.290		
Malita	Bankerahan Market	NW206616	03/13/67	28.35	4.57	0.76	3.04	0.250		
Malita	Bankerahan Public Market	NWS15697	11/21/59	30.49	6.10	2.65	3.68	0.720		
	Bo. Alibongog	NW206340	12/15/63	13.41	2.44	0.50	0.61	0.820		
	Bo, Baluntaya	NW206340	11/15/62	22.86	16.76	0.31	0.61	0.510		
	Bo. Bayabas	NW206066	11/03/60	21.34	11.58	0.44	0.61	0.720		
Malita	Bo. Bito	BP206131	-19/16/10	16.76	9.14	0.44	0:30	1.460		
Malita	Bo. Bito	BP206136	19/50/60	21.95	16.16	0.38	0.61	0.620		
Malita	Bo. Cabitucan	NWS20786	10/13/58	12.19	7.62	0.44	0:30	1.460		
Malita	Bo. Elib	NW206135	19/11/80	27.13	21.95	0.38	0.30	1.270		
Malita	Bo. Inaburan	BP206079	12/29/60	16.46	8.53	0.44	0.30	09471		
Malita	Bo, Kibulacan	- 26612SMN	04/16/59	21.34	16.76	0.44	0.30	1.460		
Mahta	Bo. Kidaladong	BP206132	05/31/61	19.51	14 63	0.32	116.0	0.350		
Malita	Bo. Kidaladong	NWS20787	11/22/58	19.82	9.14	0.44	1.52	0.290		
Malita	Bo. Kinangan	BP206133	06/07/61	7.52	3.66	0.44	0.30	1.470		
Malıta	Bo. Lapued	NW206328		- 1 - 1 - 1						
Mahita	Bo. Lower Pangian	NWS20644	03/15/64	23.78	6.10	0:00	0.30	1.670		
Malita	Bo, Masandig	BP206134	05/06/61	24.40	7.62	05.0	0.61	0.820		
Malita	Bo. Pangian	BP206078	11/20/60	24.40	20.40	0.32	0.30	1.060		
Malita	Bo. Pangian	NW206138	12/11/61	11.89	4.98	0.44	0.61	0.720		
Malita	Bo. Sikalig	NW206139	12/31/61	9.45	3.66	0.50	0.30	1.670		
	Bo. Site Bolila	NW#14605		16.77	11.89	0.63	1.21	0.520		
Malita - 🔅	Bo. Tala	NW206238	10/17/62	28.44	22.56	0.38	19:0	0.620		
Malita	Bo. Talogoy	NW206231	09/14/62	14.02	8.84	0.50	0.41	1.220		
Malita	Bo. Talucansa	NW206239	10/31/62	9.45	1.22	16.0	0.61	0.510		
	Bo. Tibulog	NWS20789	09/81/10	7.62	4.27	0.44	0.30	1.460		
Malita	Bo. Tical	NWS20788	09/01/10	15.85	11.58	0.44	19'0	0.720		
	Bo. Tigyab	NW206237	09/29/62	6.71	1.52	0.50	0.30	1.660		
Malita	Bo. Tigyab	NWS21991	04/30/59	13.72	9.14	- 0.44	19.0	0.720		
Malita	Bo. Timeg	BPW20645	05/15/67	25.91	16.76	0.32	5.33	0.060		

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MUNICIPAL	LOCATION	WELL NO.	DATE	DEFIN	2×L	DISCRARGE	NWOUN AND		USACE	
		(mbgs)		( <b>m</b> )	(mbgs)	(lps)	(u)			
Mabia	Bo. Upper Ticulon	NW206322	£9/1£/80 -	22.87	10.10	0.44				
Malita	Bo. Kisik	NW206077	10/12/60	26.22	12.20	0.38	-			
Malita	Calare	NW#16725		10.98	6.10	0.63		0.690		
Malita	Felis	NW#14603	:	12.20	0.61	0.76		1.240		
Malita	Lacaron	NW#14599		8.54	0.61	0.76	-	2.480		
Malita	Lanipao	NW#14601		10.67	4.88	0.63		0.690		
Malita	Lindasan.	NW#14602		8.54	5.18	0.63	5.73	0.110		
Malita	Lower Binangan	NW206515		8.84	4.27	0.32				
Malita	Lower Kidapalog	NW#20657		20.73	3.96 E	0.51		1.660		
Malita	Malita Central School	NW206076		11.28	1.52	0.44		1.450	F	
Malita	Mana Elementary School	NW#16726	:	10.67	1.22	0.76		2.480		
Malita	Market Site	NW#14596		10.98	0.61	0.76		0.500		
lalita	Panonsot	NW#16728		7.62	3.05	0.57	0.61	0.930		
Malita	Poblacion	NW#14597		8.54	0.92	0.63	1.21	0.520		
Malita	Poblacion	NW#14604		10.98	1.83	0.57	0.31	1.860		
Malita	Sino Tubalan Sulok South	NW206342	01/13/64	22.87	9.15	44.0	0.61	0.720		
Malita	So. Sumpit	NW#20657		67.99	. 6.10	0.38	1.52	0.250		
Molita	Sulok North Tubalan	NW206333	04/21/64	11.58	6.10	0.44	0.30	1 470		
Malita	Talagutong Elementary School Site	NW#16729		20.43	12.20	0.57	1.54	0.370		
Malita	Talaud	NW#16724	:	13.72	10.67	0.57	0.31	1.860		
Mahta	Tibulog	NW#20789		7.62	4.27	44.0				
Malita	Tical	NW#20788		15.85	11.59	0.44	0.61	0.720		
Malita	Ticulon Elementary School	NW206086	1 0/27/60	56.7	1.22	0.57		0.470		
Mahta	Tigyab Proper	NWS20672	02/16/67	16.77	1.22	0.32		0.520	• • •	
alita	Tingolo	NW#16727		18.30	12.81	0.63	0.60	1.040		
Malita	Upper Inaburan	NW206418	11/24/64	40.85	34,14	0.31	1.24	0.250		
Matanao	Bagumbayan	NW206263	09/10/62	33.54	12.80	0.50	2.38	0.210		
Matango	Balon-Buri	NW206144		17.40	13.57	24.0	0.15	2.900		
Matanao	Bo. Camanchiles	NW206332	01/30/64	36.58	24.10	0.32	1.52	0.210		
Matanao	Bo. La Suerte	NW206262 -	07/16/62	28.96	9.76	4	0.00	0.490		
Matanao	Bo. San Jose	NW206185	19/62/60	18.29	6.40	0.63	0.30	2.100		
Matanao	Bo, San Vicente	- NWS20627 -	03/08/63	107.90	96.03	. 0.63	3.31	0.190		
	Bo. Binaragan	BPW-8751	12/24/55	51.21	38.10	. 0.94	0.60	1.560		
	Bo. Sinawilan	NW206017	02/21/60	35.06	21.95	0.35	4	0.143		
	Camanchiles	NW206337		36.59	24.09	0.32	1.52	0.210	ļ	
Matanao	New Visayas No. 3	NW206184	19/12/60	20.73	5.49	0.63	0.30	2.100		
	Bo Cuihing	APW-6151	12/18/54	15.24	6.10	0.95	0.31	3.104		

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MUNICIPAL	LOCATION	WELL NO.	DATE	DEPTH	TMS	DISCHARGE	DRAWDOWN	srccr	USAGE	KEMARKS
		(mbgs)		(m)	(mbgs)	(lps)	(m)	(lps/m)		
Padada	Bo. Limonzo	BPW		65.24	5.80	0.95	16.0	1.040		
Padada	Bo. Limonzo	NW206149	19/62/60	29.57						
Padada	Bo. Malinao	BP206141	19/61/10	13.71	7.31	0.44	0.30	1.470		
Padada	Bo. Piape	BP206011	12/31/60	4.57	1.06	0.44		1.460		
Padada	Bo. Solon Valc	BPW-6151	11/18/54	18.29	3.66	0.65	1.53	0.415		
Padada	Katipunan School Site	99861#MN		19.52	2.13					
Padada	Kiblawan	NW#12969		32.01	5.49	0.38		0.180		
Padada	Lower Limonzo	NW206150	11/24/61	7.62	1.52	0.50	0.30	1.680		
Padada	Padada Water Works	NWS20623	04/12/62	19.61	2.13	2.52		5.600		
Padada	Padada Water Works	NWS20624	04/30/62	20.43	2.13	2.52		5.520		
Padada	Poblacion	BPW-6152	03/16/55	107.32	6.10	1.58		2.590		
Padada	Poblacion	NW206056	07/25/60	64.63	3.96	0.37		0.610		
Padada	Sulop	NW# 4616		34.76	1.52	2.52		0.920		
Padada	Talad Elementary School	NW#12968		14.02	2.44	0.38	0.31	1.240		
Sta. Cruz	Bo. Astorga	NWS206062	01/10/01	12.19	1.21	0.44		1.460		
Sta. Cruz	Bo. Baclayan	BPW-4530	03/31/48	25.61	0.30	0.09		0.150		
Sta. Cruz	Bo. Baroy	NWS14956	01/18/57	48.78	12.50					
Sta. Cruz	Bo, Bato	BPW-5430	08/06/52	51.22	39.63		0.43	-		
Sta. Cruz	Bo. Darong Landing	BPW14954	01/14/57	38.11	4,88					
Sta, Cruz	Bo. Inawayan	NWS14957		•	51.82		0.04			
a. Cruz	Bo. Lamiam Darong	NWS14958	05/03/57	19.81	1.82			•••		
Sta. Cruz	Bo. Lumboy	BP206055	19/81/10	7.01	1.52		1.05			
Sta. Cruz	Bo. Quinokal	BPW14953	12/05/57	16.76			2.93		-	
Sta. Cruz	Bo. Tibalagan	BPW-4529	01/22/48	35.06	24.40		3.10			
A. Cruz	Coronon	NW#14955		19.82	17.38			-		
	Tzum Beach	NW206063	-19/51/10	13.71	1.52		1.46			
Sta. Mana	Poblacion Sta. Maria			100.00		1.26				
Sulop	Bagumbayan	NW206084	08/12/60	25.30	16.76	0.50		0.540		
Sulop	Bo. Kiblagon Elementary School	NW206165	09/23/61	48.78	17.68	0.44		0.280		
	Bo. Tanwalang	BP206142	02/01/61	15.54	6.40	0.50		1.660		
- - -	Kiblawan	NW206148	11 - 1 - 1 1	32.93	21.95	0.5	1.00	0.500		
	Manual ****	BP206146	.19/51/90	33.53	22.95	0.5		0.320		
	Maylangit Primary School	NW206143		18.29	0.61	0.44	1.83	0.240		
	Poblacion	BPW-4616	05/21/48	34.76	1.52	2.52		0.920		
	St. Nino	NW206147		33.84	23.48	0.44	0.30	1.450		
	Talsa Elementary School	NW206145	•	13.42	3.05	0.50				

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Region Number: XI No. Sampling Site					Provincial Number:	Number:		
Vo. Sampling Site					<b>Provincial</b>	Provincial Name: Davao del Sur	ao del Sur	
	Samoling Date	ЪН	Color	Turbidity	Fe	Mn	Coliform Bacteria	Total Bacteria
		<b>.</b>	(PCU)	(UTA)	(mg/liter)	(mg/liter)	(count number x100)	(count number)
	Anni 15 1008	71		0.6	0.0	0.00	10.000	100
Astorga, Sid. Ciuz				107	00	00.0	5.000	50
2 Barayong, Magsaysay							5 000	\$0
3  Kinuskusan, Bansalan	April 17, 1998	1.7		9.0	0.0	3.0	2.20	
A Narvaca Magcaycay	April 17. 1998	7.9		10.3	1.0	0.00	3,000	0£
		7.9		8.1	0.0	0.00	10,000	100
	Variation 1	73		2.9	1.0	0.00	3,000	30
0 Batangon, Binaton, Dugus					00	00.0	3.000	30.2
7 Kapatagan, Digos	April 21, 1998	<b>C.</b> /						4.7
8 Matri Rinaton Dioos	April 21, 1998	7.5	•	10.4	1.0	0.00	5,000	00
	Anril 17 1998	20		76	0.0	00*00	5,000	50
	Ammil 17 1008	7.8		14.4	0.0	0.00	3,000	30
	0001-10 E	01		¢ 1 1	20	0.00	1.000	10
11 Ibo, Sta. Maria	April 24, 1998	1.0		***	) ( ) )		000	
12 Lawa, Don Marcelino	April 24, 1998	- <b></b>		1.4	0.0	0.00		10
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Table 7.3.3 Water Quality Analysis Data

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mphin	Sampling Water Sources: Deep Wells (Level I / II / I	(111)				Provincial Number	Number:		
gion N	Region Number: XI					<b>Provincial</b>	Provincial Name: Davao del Sur	o del Sur	
0.	Sampling Site	Sampling Date	Нq	Color (PCU)	Turbidity (FTU)	Fe <sup>.</sup> (mg/liter)	Mn (mg/liter)	Coliform Bacteria (count number x100)	Total Bacteria (count number)
-	Astorga. Sta. Cruz (L.II)	April 15, 1998	7.8		1.2	0.0	1.00	3.000	30
~	Magsaysay, Pob. Magsaysay (L.II)	5	- 8,4		7.8	5.9	0:00	10,000	100
m	Mabini Ext., Digos	April 17, 1998	8.1		11.1	1.0	0.00	3.000	30
4	Cabligan, Matanao WW	April 17, 1998	8.3		5.8	0.0	00.0	1,000	10
ŝ	Old capital, Matti WW	April 24, 1998	7.3		21.5	1.0	0.00	10,000	100
9	Kapoc Matanao (L.I)	April 17, 1998	7.7		13.5	0.0	00.0	5,000	50
-	Poblacion, Matanao (L.II)	April 17, 1998	9.37		7.5	0.0	00.0	3,000	30
8	Poblacion, Malita (L.II)	April 24, 1998	8.5		2.2	0.0	00'0	30,000	300
6	Pamungor Malita (L.I)	April 24, 1998	8.2		21.4	13.0	0.00	100	10
2	Lacaron, Malita (L.I)	April 24, 1998	7.9		2.8	0.0	00'0	1,000	10
	New capital, Matti, Digos WW	April 24, 1998	7.3	-	18.0	0.0	0.00	30,000	300
12	Matth Bliss, Digos	April 24, 1998	7.3	-	4.7	0.0	0.00	10,000	100
13	Astorga Phase II, Sta. Cruz WW	April 24, 1998	7.3		28.1	0.0	0.00	3.000	30
-14	Poblacion, Sta. Maria WW	April 24, 1998	8.5		8.2	0.0	0.00	3,000	30
15	Poblacion, Padada W.W	April 24, 1998	8.4		5.7	1.0	0.00	10,000	100
10	Poblacion, Sulop-WW	April 24, 1998	8.5		16.2	0.0	0.00	N.A.	No detected
17	Piape, Padada WW	April 24, 1998	8.5		4.5	0.0	0.00	10.000	100
18	Malalag W	April 24, 1998	8.1		8.8	0.0	00.00	000"01	100
19	Sta. Maria (L.II)	Aprīl 24, 1998	8.5		5.4	1.0	0.00	30,000	300
20	Poblacion, Sulop (L.I)	April 24, 1998	8.2		10.5	0.0	00.0	3,000	30
21	Ibo, Sta. Maria (L.I)	April 24, 1998	8.4		6.6	0.0	0.00	10,000	100
22	Balutakay, Hagonoy	April 24, 1998	8.5		4.5	0.0	0.00	1,000	10
23	Zone I, Digos (L.I)	April 24, 1998	8		6.2	0.0	0.00	3,000	30
24	Aplaya Guihing, Hagonoy WW	April 24, 1998	8		3.2	0.0	0.00	3.000	30
52	Kiblawan Water District (L.III)	April:24,-1998	8.3		2.3	- 0.0 -		5.000	50
1	Sinayawan, Hagonoy WW	April 30, 1998	7.9		2.4	0.0	0.00	3,000	30
27	Poblacion, Hagonoy WW	April 30, 1998	7.4		4.5	0.0	0.00	1,000	10
38	Lapulabao Hagonoy (L.I)	April 30, 1998	6.7		4.5	0.0	00'0	1.000	10
	Guihing Hagonoy Water District (L.III)	April 30, 1998	8.4		4.0	0.0	0.00	3.000	30
30	Poblacion, Hagonoy WW	April 30, 1998	7.7		2.0	0.0	0.00	10,000	100
31	La Union, Hagonoy (L.I)	April 30, 1998	8		34.0	0.0	0.00	1,000	10
32	San Agustin (L.I)	May 7, 1998	7.5		4.9	0.0	00.0	N.A.	XX X

Table 7.3.3 Water Quality Analysis Data



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Table 7.5.)	Table 7.5.1 Surface Water Quality	r Quality	•	-				:											
	Surface Water	Surface Water Information							Pa	Parameter						ISNA	PNSDW 1994	- 1	SW
Maior	Stream & Main	Samoling	line	Color	Ha	D.OXY.	BOB	8	Ê	MBAS	0,0	z	 Р.:	Coli.	C. C.	Ч¢ Ц	ទីដ		Pollutant
CCase Wester	· .	Incation	Date (m/d/v)		•	mg/	NE E	i/dm	mg/l	ng/l	ugn	mg/l	meA M	E INIVAN	ng/i mp/	Ê	- Vam		in upstream
DUITANC WAICH	III Thick of the		Class AA		6.5-8.5	8	-	ห	500	lia	) Du	1	nil !	50		۵ ۲		ŝ	
DENR Water	DENR Water Quality Criteria for Fresh Water	r Fresh Water	Class A		6.5-8.5	1 02	с М	<b>8</b>	1.000	0.2		10	0.1	- 11	250				
C.b., tan	A charters	Santa Cruz	15-Apr-98	,	7.3	•	•	-	•		•	•	·	20	1 			Ē	Ī
	Asiut ga	Conto Carr	17-Anr-08		08			   	•			•		1001	•	4.9:	- litt	- In	
	Kagooroo Sibutan Main	Diene					-		-						•				
		Santa Cruz	17-Apr-98	•	7.5			   ,	•	1. 1	•	•		50		8.9	ē		
		Diase		ł		-   •	-	-			 •		•		•				
sogic	Sucam-A	TOXO2		,			•		•			•			• ··				
		Malanao					-		•		1.			-	•	. ~			
		Hagonoy				•	- <b>i</b> ·							-	1			-	
	Digos Main	Digos				•	•				•			4		83	1	1	Ī
	•	Hagonoy	24-Apr-98		1.9	- -								2		0.0			Ī
Hadonov		Digos			-		•	•	: : : :		•	-			•				T
		Bansalan				•				14 - 1 1 - 1	•		-	_		-	-		Ī
		Matanao				-		•	•	•	•	•	••••		- 10			-	
-		V ALALLAVA				-	ŀ		-		-	•	-		•				
		Hagonoy					-				- 								
Padada	Marber-Maianao	Digos	-			•	,	•	•	•	-  -	 -	-	VY		186	-	-	
		Bansalan	17-Apr-98	•	7.7	•	- •	•	-	•	₹ *	•							
		Magsaysay				•	•			-	 - •	-			-	ŧ.	-	-	Ī
	~ ~	Matanao	17-Apr-98		2.9	•	*	•			1 •	 _•		00	_		Ĩ		Ī
		Padada		-		-	•	,	-	 	-	- -		-	•	-	- .		Ī
	Stream-C	Kiblawan				1	-	•	í	•	-							+	
		Padada		_		•	•	•	1	•	-			_	-				Ī
	l atian	Kiblawan	17-Apr-98		8.5	•	•	 ,	•		•		1	50	•	7.2		a	
		Padada				•	•	1	•		•	•	-	- 	•			-	Ī
	Dadada Main	Matanao				-	,	 •	-		•	•	•					~	
	Laude Mail	P-1-4					-	•	-		   ,				•		~		
		Padada						-											
Source;	Water quality results v	Water quality results were collected from respective Water Districts or analyzed by PSPT on site in the field survey using procured instruments.	spective Water Dist	tricts or a	nalyzed	by PSPT	on site i	n the fiel	d survey	using pro	cured in	strument	ŝ						

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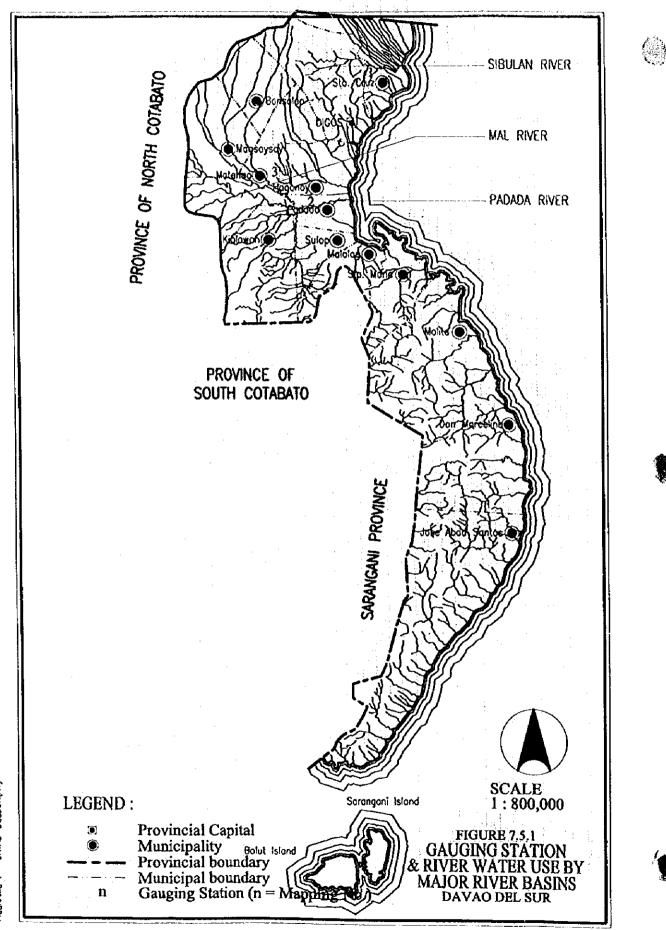
Sampling point is located at upstream boundary of each river in respective municipalities. Notes:

If several streams are present in an area, the stream nearest from populated area shall be selected. If these is no upstream, sampling point shall be selected near populated area.

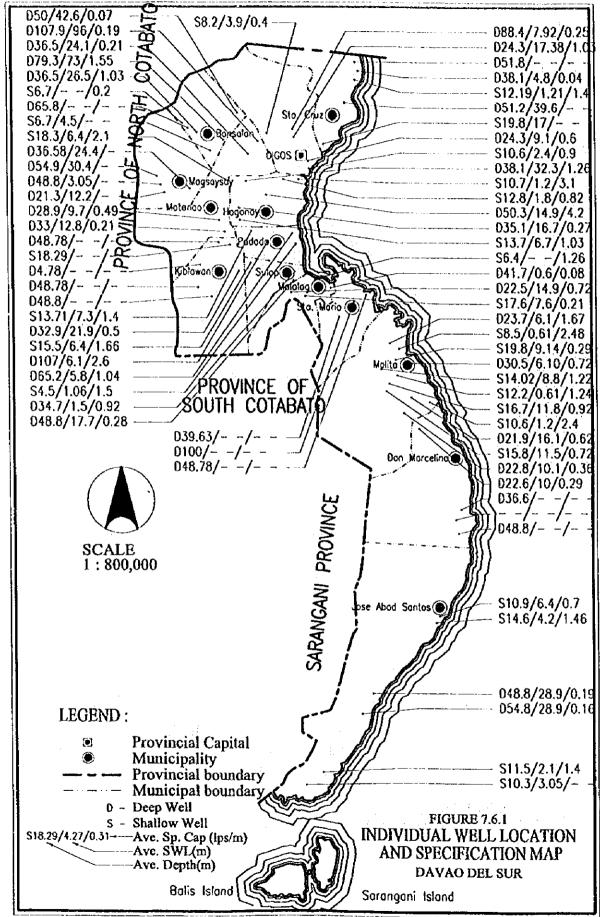
Remarks;

Class AA - Public Water Supply Class-L Intended for waters having watersheds which are uninhabited and otherwise protected and which require only approved disinfection in order to meet the PNSDW. Class A - Public Water Supply Class-II. Sources of water supply that will require complete treatment (coagulation, sedimentation, filtration & disinfection) in order to meet the PNSDW.

7 - 23



DISK NAVE : DAVAD DEL SUR(DISK1) FILENAME : DAVAD-DELSUR(A4)



DISK NAME : DAVAO-DELSUR(DISK2) FILENAME : DAVAO-DELSUR(MLSM)

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