

## 8. Other River Intake Sources

Productions from river intake sources have been measured for a certain period of time by WASA. The production records are shown in Tables 8.1 to 8.10. As the climate pattern is clearly divided into two seasons, productions from the river sources which have no impoundment are largely affected by the rainfall pattern. Productions tend to fall during the several months in the dry seasons.

Fig. 8.1 shows estimated production during the drought defined as 5 year recurrence interval (20 % probability) of the waterworks for which sufficient production records were available.

Table 8.1 Aripo Waterworks Production Record (in monthly average production m3/d)

Listed Production : 15,900 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1979									Inception -->	1,836		11,844	
1980	11,658	10,581	10,235	10,508	9,690	10,385	9,245	8,685	9,726	8,908	9,804	9,708	9,928
1981	8,372	6,031	6,258	9,708	9,099	10,013	9,594	9,713	9,313	10,331	7,817	10,454	8,892
1982	8,172	9,566	7,603	7,369	7,517	8,830	9,479	8,329	10,391	9,754	9,197	8,590	8,733
1983	9,173	8,138	5,470	7,623	8,974	9,142	4,649	6,973	8,367	9,508	7,945	10,377	8,028
1984	10,292	10,139	10,266	8,304	10,005	10,485	8,560	9,970	9,588	9,543	6,906	9,946	9,500
1985	10,037	10,349	9,236	10,579	9,020	10,130	8,455	8,593	10,133	8,852	10,526	9,353	9,605
1986	10,634	9,881	9,031	9,805	9,354	9,370	10,145	9,987	9,451	8,084	9,308	9,731	9,565
1987	10,164	11,489	9,231	8,476	7,721	7,649	8,777	8,777	10,123	9,343	9,976	9,980	9,309
1988	9,220	10,496	8,970	7,718	4,725	7,440	8,945	8,238	8,571	8,178	9,069	8,788	8,365
1989	10,088	9,917	9,590	10,217	7,813	8,014	7,924	7,924	8,988	9,491			
AVERAGE	9,782	9,659	8,589	9,031	8,392	9,146	8,577	8,721	8,605	9,199	8,238	9,877	9,103
MINIMUM	8,172	6,031	5,470	7,369	4,725	7,440	4,649	6,973	8,367	8,084	1,836	8,590	
MAXIMUM	11,658	11,489	10,266	10,579	10,005	10,485	10,145	9,987	10,391	10,331	10,526	11,844	

AVERAGE OF JUNE, JULY, AUG. SEP. OCT. NOV. DEC.

AVERAGE OF JAN. FEB. MAR. APR. MAY

AVERAGE OF TWO LOWEST PRODUCTION MONTHS  
IN DRY SEASONS

Table 8.2 Acono Waterworks Production Record (in monthly average production m3/d)

Listed Production : 2,100 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1979	2,127	1,450	1,845	1,554	1,164	991	1,486	1,463	1,595	1,400	1,450	1,041	1,554
1980	2,182	2,004	1,513	1,373	1,873	2,213	2,145	1,873	2,254	1,754	2,113	2,041	1,945
1981	2,249	2,250	2,075	2,080	1,946	1,939	2,312	1,262	2,079	1,833	2,113	2,068	2,017
1982	2,274	2,148	1,938	1,536	1,486	1,362	2,141	2,107	2,084	2,280	2,342	2,174	1,989
1983	2,207	2,277	2,077	1,158	886	1,033	1,296	2,014	2,288	1,841	1,585	2,129	1,733
1984	2,323	3,055	2,016	1,865	1,540	2,320	1,660	1,753	2,323	1,921	2,183	2,136	2,091
1985	2,230	2,275	2,350	2,428	1,793	2,124	2,177	2,263	2,314	2,160	2,340	2,157	2,218
1986	2,226	2,503	2,018	1,610	1,201	1,561	1,968	1,677	2,409	2,222	2,306	2,226	1,994
1987	2,350	2,095	1,442	1,065	748	795	1,199	2,218	2,095	2,019	2,262	2,100	1,699
1988	2,279	2,145	2,077	2,277	2,143	1,135	2,026	2,026	2,212	2,328	2,262	2,100	2,065
1989	2,258	2,306	1,945	1,710	1,513	1,609	1,880	1,910	2,229	2,040	2,156	2,129	1,974

AVERAGE OF JUNE, JULY, AUG, SEP, OCT, NOV, DEC. 1,993 m3/d  
 AVERAGE OF JAN, FEB, MAR, APR, MAY 1,946 m3/d  
 AVERAGE OF TWO LOWEST PRODUCTION MONTHS 1,543 m3/d

DRY SEASON MIN 748 m3/d  
 MAX 3,055 m3/d  
 AVG 1,946 m3/d  
 RAINY SEASON MIN 795 m3/d  
 MAX 2,409 m3/d  
 AVG 1,946 m3/d

Table 8.3 Caura Waterworks Production Record (in monthly average production m<sup>3</sup>/d)

Listed Production : 11,360 m<sup>3</sup>/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1979					668	4,554	3,959	2,854	2,891	2,854	2,950	2,958
1980	6,581	8,676	8,113	9,735	3,663	6,499	9,495	9,649	11,363	9,676	5,599	8,317
1981	10,849	10,835	11,122	9,781	9,872	9,994	9,554	9,245	8,913	9,740	7,558	9,777
1982	10,442	10,010	4,554	10,139	10,937	10,859	11,124	10,112	9,829	9,901	10,122	10,181
1983	9,834	10,212	9,900	9,907	9,290	9,948	10,081	9,870	9,689	9,966	10,233	10,045
1984	10,147	8,856	8,832	9,934	5,106	9,681	9,268	9,891	10,004	9,658	9,905	9,799
1985	9,981	10,907	9,961	10,055	9,820	11,425	9,987	10,113	10,702	10,422	10,422	9,910
1986	11,236	11,303	9,215	9,182	10,385	10,588	9,942	10,829	11,400	10,573	11,237	10,087
1987	10,328	11,901	9,878	10,313	10,747	11,393	11,028	11,294	9,498	10,547	10,036	10,040
1988	11,215	11,066	10,365	10,610	8,584	9,039	10,404	9,959	10,602	9,099	8,083	9,932
1989	10,545	10,598	9,693	10,702	9,330	9,159	9,483	9,493	6,031	10,871		9,590
AVERAGE	10,509	10,632	9,280	10,069	9,341	10,232	10,097	10,088	9,630	10,086	9,700	9,897

81-89

DRY SEASON

MIN	4,554
MAX	11,901
AVG	9,966

RAINY SEASON

MIN	6,031
MAX	11,425
AVG	9,967

AVERAGE OF TWO LOWEST PRODUCTION MONTHS 9,094 m<sup>3</sup>/d  
 OF EACH YEAR IN DRY SEASON

Table 8.4 Guanapo Waterworks Production Record (in monthly average production m3/d)

Listed Production : 11,360 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1982													
1983		7,711	7,226	7,903	7,238	6,291	6,717	7,653	7,892	7,140	7,799	7,682	7,387
1984	7,365	7,628	8,503	8,369	8,330	7,689	5,412	2,666					7,614
1985			1,135	6,478	6,487	8,120	7,292	3,883	5,697	4,564			6,326
1986			891	7,384									7,384
1987		6,444	4,772	6,759	8,745	6,623	8,777	6,967	4,685	5,219	5,297	5,200	6,317
1988	5,787	5,878	5,083	6,145	4,889	6,679	7,095	6,520	5,610	4,589	5,557	5,455	5,776
1989	7,555	8,803	7,960	8,765	8,665	8,219	8,471	8,471	9,138	10,201			8,625
AVERAGE	6,902	7,293	6,709	7,400	7,392	7,270	7,294	6,699	6,604	6,670	6,218	6,122	6,881

These figures are not included for average.

Table 8.5 Loengo/Naranjo Waterworks Production Record (in monthly average production m<sup>3</sup>/d)

Listed Production : 3,180 m<sup>3</sup>/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1980			START MAY 8		1,377	1,968	1,509	1,627	2,236	2,109	2,018	1,950
1981	2,877	3,245	2,550	2,477	3,072	3,736	3,159	2,409	3,277	3,141	3,204	2,582
1982	2,104	2,792	3,050	3,037	3,360	2,369	1,250	1,192	2,882	3,451	3,371	2,509
1983	3,726	3,726	2,524	1,755	1,089	1,939	1,930	3,170	2,948	3,315	3,395	2,734
1984	3,264	3,588	3,239	2,197	561	1,937	2,665	3,138	3,575	3,598	3,271	3,880
1985	4,332	5,014	3,405	3,006	3,445	3,122	2,493	2,867	2,781	2,575	3,664	3,352
1986	4,136	4,290	3,817	3,945	2,835	2,629	3,435	3,414	4,133	3,491	3,181	3,589
1987	3,639	4,288	2,798	2,332	1,866	2,005	2,973	2,755	3,886	3,615	3,688	3,116
1988	4,031	3,785	2,303	1,671	984	1,207	1,913	2,940	2,192	2,564	3,311	2,488
1989	3,439	3,333	1,082	3,697	3,601	3,244	3,195	3,195	3,206	3,718		3,171
AVERAGE	3,505	3,785	2,752	2,680	2,313	2,416	2,452	2,677	2,943	3,101	3,243	3,207

DRY SEASON  
 MIN 561 m<sup>3</sup>/d  
 MAX 5,014 m<sup>3</sup>/d  
 AVG 3,007 m<sup>3</sup>/d

RAINY SEASON  
 MIN 1,192 m<sup>3</sup>/d  
 MAX 4,133 m<sup>3</sup>/d  
 AVG 2,959 m<sup>3</sup>/d

AVERAGE OF LOWEST TWO PRODUCTION MONTHS OF EACH YEAR IN DRY SEASONS 2,214 m<sup>3</sup>/d

2,923

Table 8.6 Toco Waterworks Production Record (in monthly average production m<sup>3</sup>/d)

Listed Production : 4,546 m<sup>3</sup>/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1979													
1980													
1981													
1982	1,017	1,591	1,382	1,176	1,149	867	1,043	486	863	1,115	1,137	1,216	1,087
1983	740	1,061	1,268	1,476	698	1,290	1,274	1,219	1,001	1,121	1,300	1,427	1,156
1984	1,360	1,598	1,631	1,650	1,650	1,506	1,136	1,325	1,187	1,187	1,313	1,575	1,427
1985	1,600	1,600	1,435	1,548	1,529	1,337	1,346	1,224	1,207	1,161	1,161	1,124	1,356
1986	2,794	2,441	891	1,674	2,311	2,380	2,461	2,754	2,057	2,312	2,478	2,456	2,251
1987	2,437	2,694	2,168	2,214	2,259	2,347	2,181	2,301	2,594	2,293	2,489	2,489	2,372
1988	2,489	2,040	2,149	2,100	2,100	1,832	1,890	1,890	1,890	1,890	1,890	1,890	2,004
1989	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890
AVERAGE of 1986, 1987	2,616	2,568	1,530	1,944	2,285	2,364	2,321	2,528	2,326	2,303	2,484	2,473	2,311

ESTIMATED

DRY SEASON  
 MIN 698 m<sup>3</sup>/d  
 MAX 2,794 m<sup>3</sup>/d  
 AVG 2,111 m<sup>3</sup>/d

RAINY SEASON  
 MIN 486 m<sup>3</sup>/d  
 MAX 2,754 m<sup>3</sup>/d  
 AVG 2,162 m<sup>3</sup>/d

AVERAGE OF LOWEST TWO MONTHS' PRODUCTION OF EACH YEAR IN DRY SEASONS 1,525 m<sup>3</sup>/d

Table 8.7 Richmond Waterworks Production Record (in monthly average production m3/d)

Listed Production : 2,467 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1976	1,377	1,354	1,364	1,441	1,459	1,450	1,532	1,500	1,468	1,423	1,432	1,477	1,440
1977	1,491	1,364	1,227	1,309	1,204	1,259	1,259	1,232	1,341	1,259	1,127	1,127	1,267
1978	1,127	1,127	1,127	1,127	1,214	1,164	1,286	1,100	1,204	1,236	1,282	1,177	1,181
1979	1,195	1,286	1,254	1,114	1,204	1,241	1,259	1,286	1,064	1,109	1,100	1,023	1,178
1980	1,132	1,268	1,318	1,432	1,273	1,218	1,218	1,082	1,164	1,186	1,204	1,309	1,234
1981	1,518	1,577	1,532	1,463	1,450	1,441	1,395	1,450	1,541	1,500	1,509	1,450	1,485
1982	1,328	1,316	1,337	1,380	1,370	1,232	1,346	1,439	1,305	1,188	1,313	1,868	1,369
1983	2,026	2,215	2,197	2,194	2,296	2,200	2,344	2,178	2,075	2,165	2,115	2,142	2,179
1984	2,515	2,493	2,581	2,168	2,252	2,451	2,317	2,286	2,346	2,001	1,624	1,916	2,246
1985	1,979	1,945	1,827	2,309	2,251	2,260	2,032	2,246	2,226	2,395	2,345	2,371	2,182
1986	2,556	2,432	2,525	1,945	2,237	2,076	2,202	2,115	1,945	1,537	1,705	1,675	2,079
1987	1,791	1,825	1,865		1,619	1,712	1,696	1,715	1,806	1,278	608	608	1,502
1988	1,332	1,851	1,673	2,013	2,151	1,770	1,672	1,776	1,475	1,617	1,764	1,892	1,749
1989	2,142	2,149	2,094	2,112	975	2,024	1,871	1,483	1,606	1,597			1,800
AVERAGE	1,679	1,729	1,709	1,693	1,640	1,678	1,674	1,631	1,612	1,535	1,471	1,541	1,635



Table 8.8 Green Hill Waterworks Production Record (in monthly average production m3/d)

Listed Production : 3,360 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1983													
1984					1,744								
1985			2,810	2,491	2,921	2,593	1,246	2,960	2,363	1,755	2,090	2,089	2,332
1986	2,989	2,829	2,707	2,625	2,033	1,728	2,106	1,303	2,198	2,019	2,146	2,425	2,259
1987	2,203	1,569	1,080		810	799	1,172	1,294	1,020	1,855	1,257	2,141	1,382
1988	2,357	1,973	1,973	1,134	1,035	1,097	1,238	995	420	556	581	909	1,189
1989	2,711	3,052	2,091	1,970	1,474	1,879	736	1,168	659	793			1,553
AVERAGE	2,565	2,356	2,132	2,055	1,670	1,619	1,300	1,544	1,332	1,396	1,519	1,891	1,781

Table 8.9 Courland Waterworks Production Record (in monthly average production m3/d)

Listed Production : 7.368 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1976	3,063	3,045	3,400	3,459	3,572	3,191	3,327	3,404	3,427	3,581	3,204	4,045	3,402
1977	4,045	4,140	4,390	3,904	4,081	3,895	3,959	4,077	4,054	3,722	4,481	4,418	4,097
1978	4,018	4,163	4,177	3,618	3,586	3,822	3,295	4,109	3,941	3,518	3,559	3,663	3,789
1979	4,068	4,345	4,209	4,236	3,927	3,509	3,309	3,295	2,732	3,409	3,154	3,045	3,603
1980	3,781	4,081	4,013	3,777	3,277	3,318	3,277	3,468	3,341	3,063	3,122	3,372	3,491
1981	4,490	4,736	4,490	4,545	3,431	3,186	3,327	3,259	3,218	3,686	3,531	3,195	3,758
1982	3,670	3,482	3,703	3,907	3,479	3,078	3,023	2,946	2,899	3,050	2,791	3,240	3,272
1983	3,575	3,628	3,520	3,391	3,055	3,124	2,689	2,730	2,555	2,418	2,246	3,343	3,031
1984	4,623	5,582	5,452	5,364	5,231	5,145	4,358	4,105	3,842	3,430	3,248	3,726	4,509
1985	4,449	5,076	5,040	5,701	5,695	5,550	4,330	4,784	4,723	4,512	4,184	4,489	4,878
1986	5,799	6,527	6,527	5,579	6,422	5,522	6,151	5,909	5,253	5,831	5,748	5,362	5,886
1987	6,495	6,738	6,473	5,446	5,446	6,168	6,455	6,358	5,630	5,845	5,660	6,691	6,178
1988	7,073	7,597	7,245	6,740	5,842	5,699	6,090	5,940	5,305	5,219	5,451	6,036	6,186
1989	6,150	6,736	6,751	6,931	6,913	6,647	6,015	6,035	5,642	6,237	5,620	6,036	6,406
AVERAGE	6,379	6,900	6,749	6,417	6,156	6,009	6,178	6,061	5,458	5,783	5,620	6,030	6,164

86-89

DRY SEASON  
MIN 5,446  
MAX 7,597  
AVG 6,525

RAINY SEASON  
MIN 5,219  
MAX 6,691  
AVG 5,881

Table 8.10 Craig Hall Waterworks Production Record (in monthly average production m<sup>3</sup>/d)

Listed Production : 2,461 m<sup>3</sup>/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1976	927	786	795	895	859	268	650	709	577	386	395	200	621
1977	800	786	986	959	973	1,014	986	941	764	904	854	954	910
1978	900	86	823	754	700	677	341	0	300	764	568	618	544
1979	764	745	686	727	650	709	695	695	645	668	673	864	710
1980	727	877	873	1,095	1,095	754	750	450	704	714	791	904	811
1981	1,027	1,082	1,109	1,059	995	1,018	777	818	795	986	1,027	918	968
1982	1,043	1,209	1,164	1,244	1,242	963	1,007	950	874	821	674	822	1,001
1983	936	1,026	1,017	1,031	1,016	821	666	819	839	871	794	761	883
1984	957	1,227	1,460	1,456	1,285	1,404	903	820	1,361	779	588	1,102	1,112
1985	1,427	1,896	1,520	1,420	1,454	1,392	1,045	1,007	881	974	921	1,248	1,265
1986	714	1,486	1,515	1,886	1,450	1,135	1,380	846	1,047	836	827	1,278	1,200
1987	1,215	1,061	1,080	1,010	1,010	992	1,002	1,404	1,172	1,387	241	1,235	1,073
1988	1,951	2,253	2,253	1,257	1,245	866	1,579	1,116	1,046	869	905	1,065	1,367
1989	1,470	1,382	1,747	1,157	1,735	1,879	1,296	1,614	759	1,240	1,044	1,186	1,428
AVE. 84-89	1,289	1,551	1,596	1,435	1,363	1,278	1,201	1,135	1,044	1,014	696	1,186	1,241

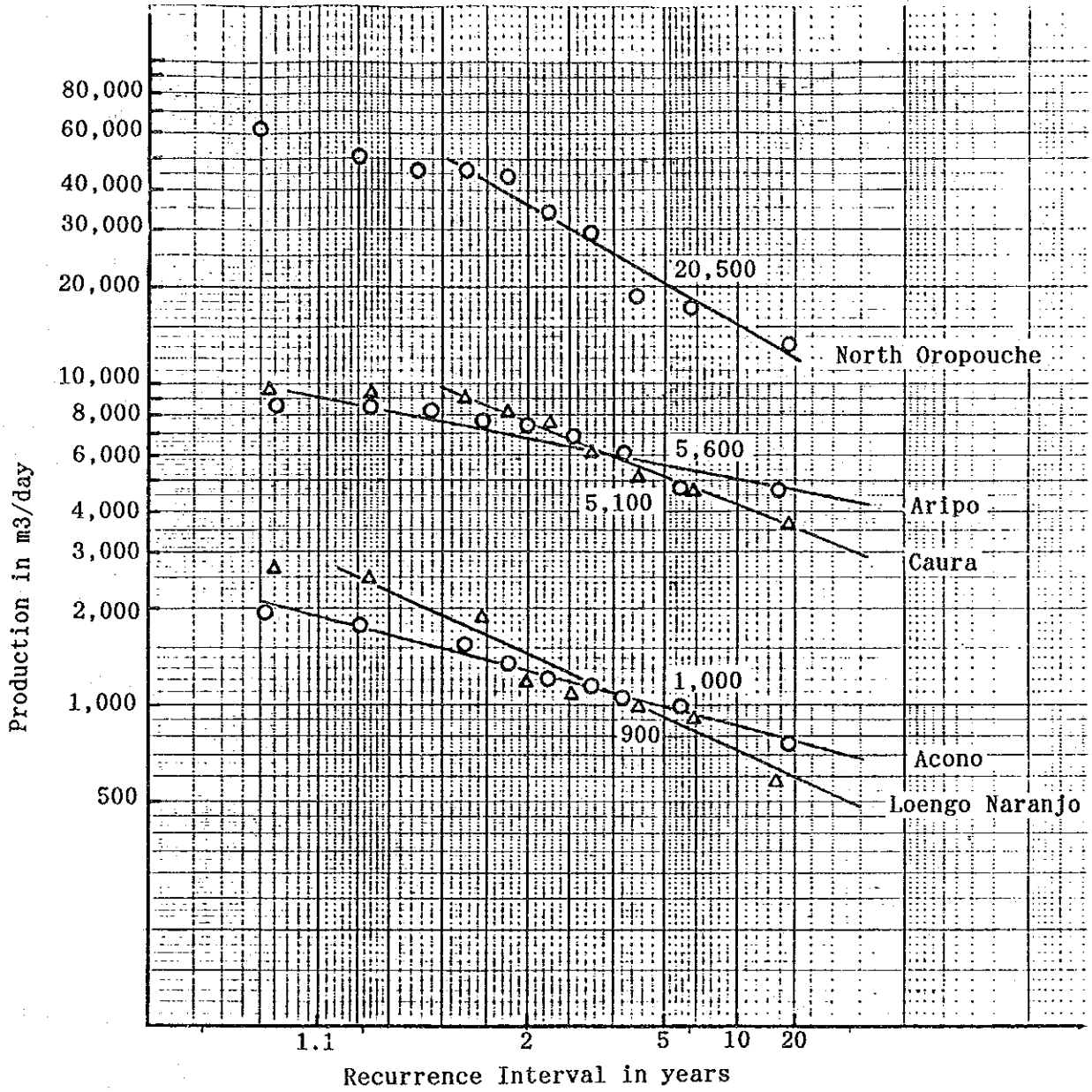
DRY SEASON

MIN	714 m <sup>3</sup> /d
MAX	2,253 m <sup>3</sup> /d
AVG	1,447 m <sup>3</sup> /d

RAINY SEASON

MIN	241 m <sup>3</sup> /d
MAX	1,879 m <sup>3</sup> /d
AVG	1,086 m <sup>3</sup> /d

AVERAGE OF TWO LOWEST PRODUCTION MONTHS OF EACH YEAR IN DRY SEASONS 1,192 m<sup>3</sup>/d



These curves were drawn under the assumption that the productions in dry seasons are correlated with the river discharges.

Fig. 8.1 Estimate Production during Drought (5 year recurrence interval)

## 9. GROUNDWATER SOURCES

Substantial number of wells are currently un-metered due to absence of flow meters. Several representative well fields are metered, and their production records are tabulated in Tables 9.1 to 9.4, indicating that the productions from groundwater sources are relatively constant through a year.

Water levels of the aquifers are being observed by WRA periodically. Figs. 9.1 to 9.10 reproduce the past water levels of major well fields prepared by WRA. From which, general upward trends are observed for most of the well fields for the time of 10 year period, suggesting that the current withdrawal rates are within the sustainable levels. Exceptions are Tacarigua and Las Lomas well fields which show relatively downward trends in recent years.

Table 9.1 Las Lomas Waterworks Production Record (in monthly average production m3/d)

Listed Production : 11,360 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1984							6,810	7,081	12,766	10,645	10,177	11,929	9,901
1985	12,097	10,099	11,082	11,223	9,545	10,928	9,341	11,465	11,663	11,530	12,284	10,909	11,014
1986	13,185	12,694	12,822	12,822	14,264	13,906	12,192	11,736	13,012	12,762	12,769	11,378	12,795
1987	12,296	13,078	11,591	12,131	11,185	10,239	6,504	13,719	12,370	10,691	11,852	11,850	11,459
1988	10,763	10,941	10,361	11,028	10,528	9,458	11,048	10,984	10,663	10,096	8,475	9,620	10,330
1989	8,575	10,195	10,364	11,460	9,504	9,649	9,215	9,215	6,826	10,591			9,559
AVERAGE	11,383	11,401	11,244	11,733	11,005	10,836	9,660	10,700	11,217	11,053	11,111	11,137	10,843

Table 9.2 El Socorro Waterworks Production Record (in monthly average production m3/d)

Listed Production : 27,270 m3/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1981													
1982	16,345	22,754	22,174	20,682	20,882	17,310	11,321	13,632	8,925	8,469	10,684	12,157	15,445
1983	13,089	13,237	7,672	11,443	14,446	16,371	14,329	14,493	13,570	16,547	18,377	20,085	14,467
1984	14,615	21,993	24,021	19,399	17,245	16,803	16,821	17,444	18,078	16,737	14,993	12,450	17,550
1985	23,125	13,806	19,348	14,258	20,664	19,212	14,295	15,273	14,418	15,396	16,439	15,396	16,803
1986	12,435	17,817	23,750	23,615	23,272	25,455	20,984	19,090	21,328	21,762	25,878	22,315	21,475
ESTIMATE	21,671	26,379	21,683	22,498	23,312	25,950	22,166	22,166	26,013	23,186	23,682	24,466	23,598
ESTIMATE	20,731	21,427	22,296	22,071	22,546	26,694	19,765	23,957	25,021	22,455	24,604	26,188	23,146
ESTIMATE	26,189	28,100	24,957	24,907	22,668	26,337	26,485	27,556	26,294	22,839			25,633
AVERAGE '87 - 89	22,864	25,302	22,979	23,159	22,842	26,327	22,805	24,560	25,776	22,827	24,143	25,327	24,126

Table 9.3 Freeport Waterworks Production Record (in monthly average production m<sup>3</sup>/d)

Listed Production : 11,360 m<sup>3</sup>/d

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1976	9,154	8,858	9,731	9,813	8,785	9,731	8,954	8,976	8,945	8,422	6,463	6,899	8,728
1977	5,286	4,936	6,354	8,017	6,740	6,413	6,958	6,449	6,413	6,463	4,922	6,795	6,312
1978	5,872	7,708	7,667	7,658	7,336	7,899	7,322	7,540	6,177	7,649	5,931	5,672	7,036
1979	7,458	5,727	7,876	8,081	8,072	7,604	8,363	9,349	9,849	9,095	9,272	7,704	8,204
1980	5,354	8,022	8,645	8,699	7,172	7,158	7,704	6,549	6,658	5,309	4,836	5,145	6,771
1981	4,013	4,727	5,490	7,531	3,604	3,845	3,822	3,554	5,049	6,213	5,522	5,890	4,939
1982	5,678	4,710	4,568	2,980	4,438	9,581	9,813	9,488	9,157	8,552	9,029	7,971	7,164
1983	9,703	6,438	8,441	2,769	8,650	6,992	9,174	7,617	8,339	7,081	7,577	8,826	7,634
1984	8,753	9,166	10,870	11,129	11,798	2,480	12,158	7,157	1,797	4,481	2,456	2,088	7,028
1985	6,250	2,107	1,973	2,341	2,245	2,167	3,985	4,242	3,934	3,432	8,745	8,507	4,161
1986	8,832	9,535	3,458	3,458	3,613	3,897	3,557	3,484	3,870	3,816	4,053	3,500	4,589
1987	3,624	3,942	3,389	3,574	3,758	4,245	3,858	3,768	3,801	3,655	3,650	4,963	3,852
1988	5,422	5,939	5,145	5,230	4,921	6,028	4,555	4,298	8,420	4,265	4,396	4,215	5,236
1989	4,030	4,005	3,489	4,000	3,725	3,885	3,590	3,460	9,127	5,010			4,432
AVERAGE	6,388	6,130	6,221	6,091	6,061	5,852	6,701	6,138	6,538	5,960	5,912	6,013	6,167



Table 9.4 Chatham Waterworks Production Record (in monthly average production m3/d)

Listed Production : 11,360 M3/D

YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	AVERAGE
1980													
1981													
1982													
1983													
1984					760	2,067	1,891	2,295	1,890	2,047	2,003	2,270	2,066
1985	2,932	3,858	3,579	4,062	4,324	4,723	4,470	4,875	5,093	4,465	4,798	5,046	4,352
1986	5,244	5,559	4,375	5,026	5,208	5,363	5,258	4,836	3,878	4,182	5,502	4,919	4,946
1987	5,229	5,463	3,762		4,391	4,289	3,816	4,281	5,654	4,960	5,559	5,235	4,785
1988	5,997	5,965	5,800	5,595	3,751	3,756	4,240	3,992	3,913	3,790	4,502	4,576	4,665
1989	4,761	4,987	3,927	4,383	4,282	4,252	3,200	4,464	4,809	4,809			4,387
AVERAGE	4,833	5,166	4,289	4,767	4,391	4,075	3,813	4,124	4,206	4,042	4,493	4,409	4,384

DRY SEASON  
 MIN 3,751  
 MAX 5,997  
 AVG 4,932

RAINY SEASON  
 MIN 3,200  
 MAX 5,654  
 AVG 4,544

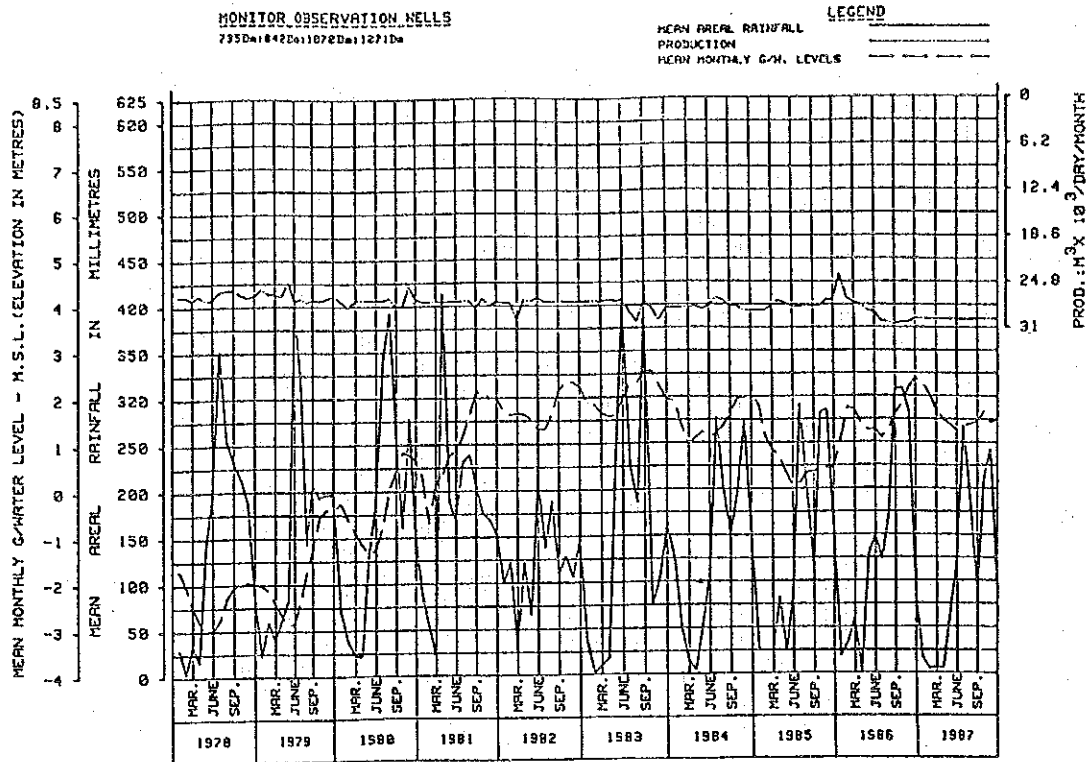


Fig. 9.1 Four Roads Well Field Groundwater Level Fluctuation 1978 - 1987  
(North West Peninsula Gravels)

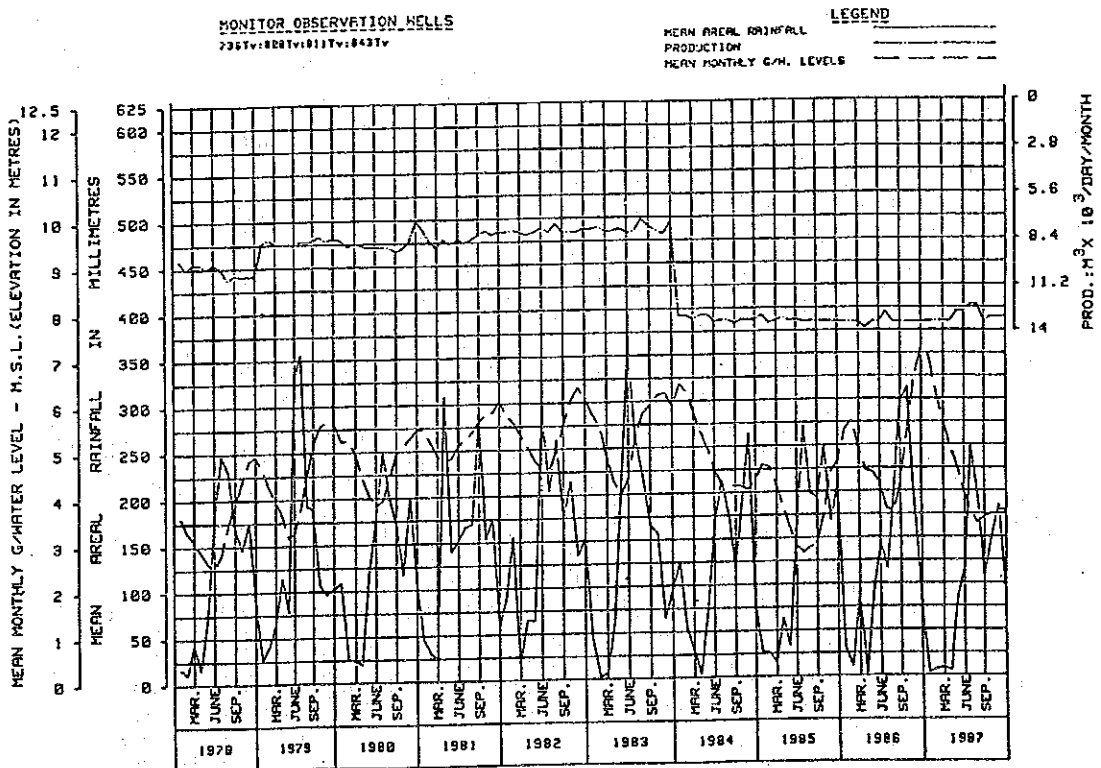


Fig. 9.2 Tucker Valley Well Field Groundwater Level Fluctuation 1978 - 1987  
(North West Peninsula Gravels)

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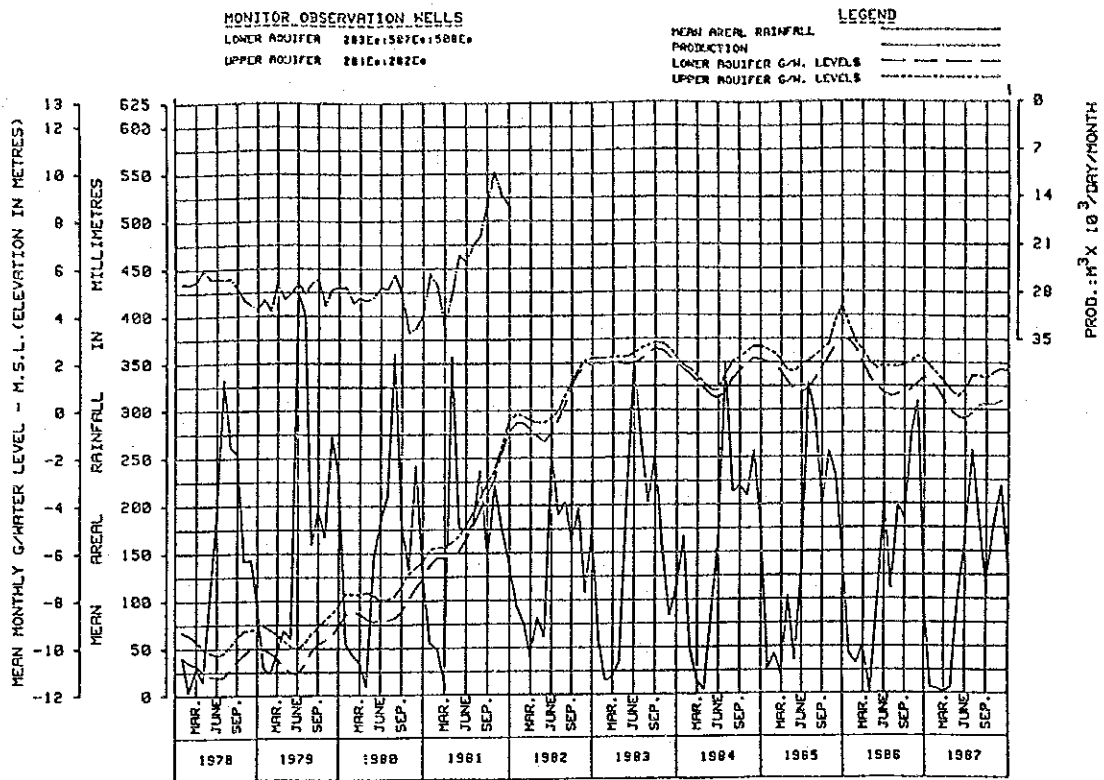


Fig. 9.3 El Socorro Well Field Groundwater Level Fluctuation 1978 - 1987 (Northern Gravels)

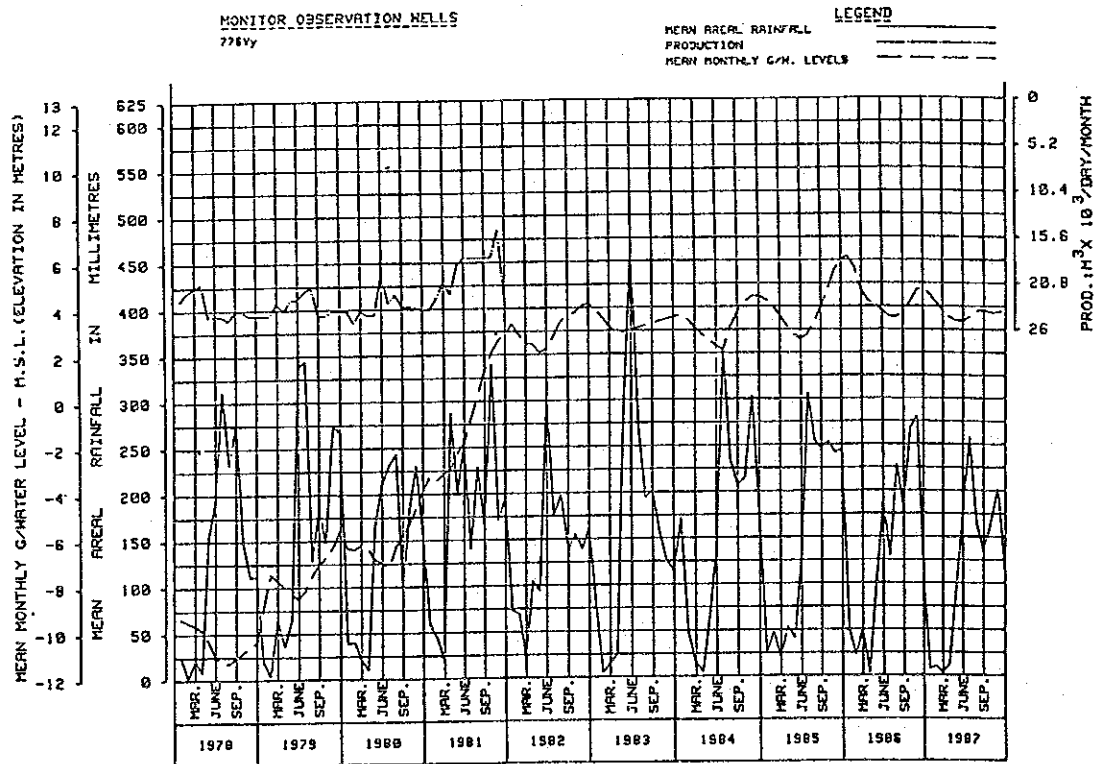


Fig. 9.4 Valsayn Well Field Groundwater Level Fluctuation 1978 - 1987 (Northern Gravels)

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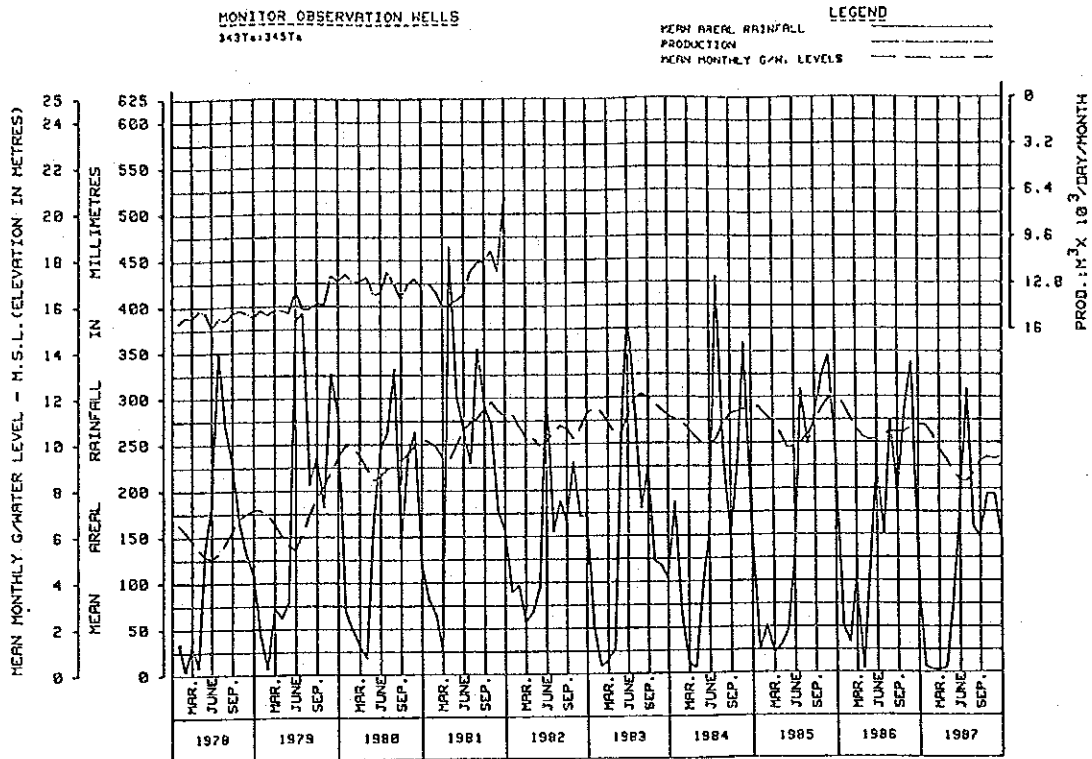


Fig. 9.5 Tacarigua Well Field Groundwater Level Fluctuation 1978 - 1987 (Northern Gravels)

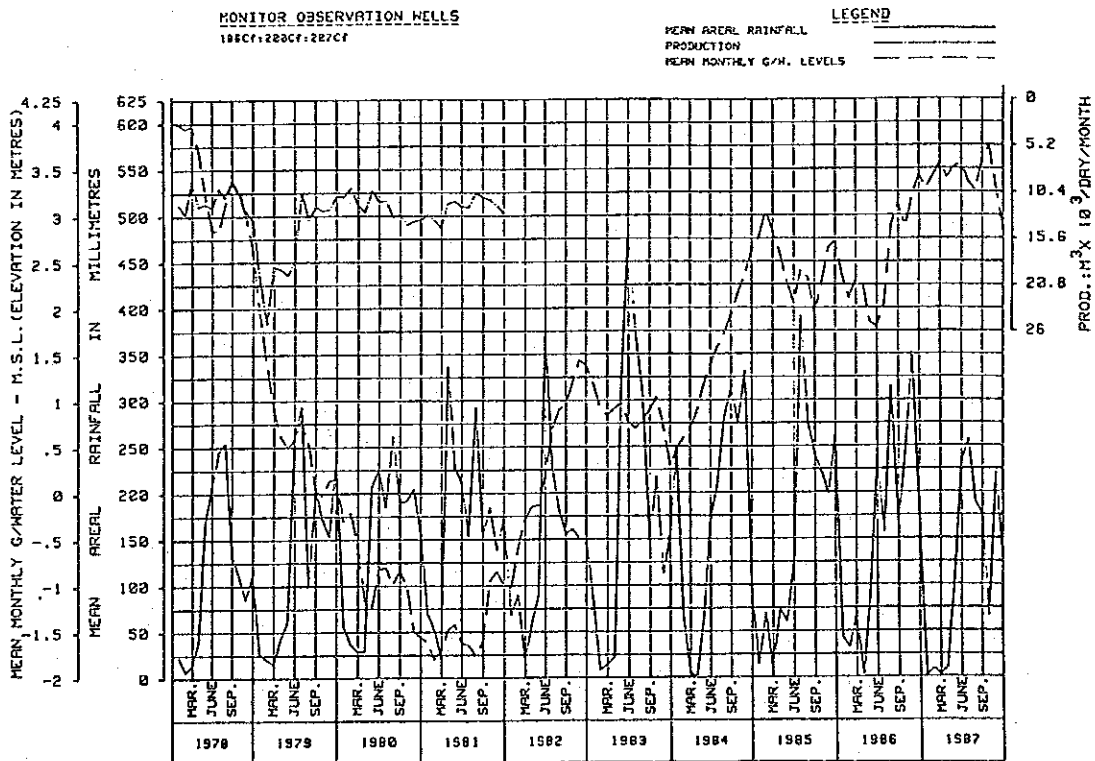
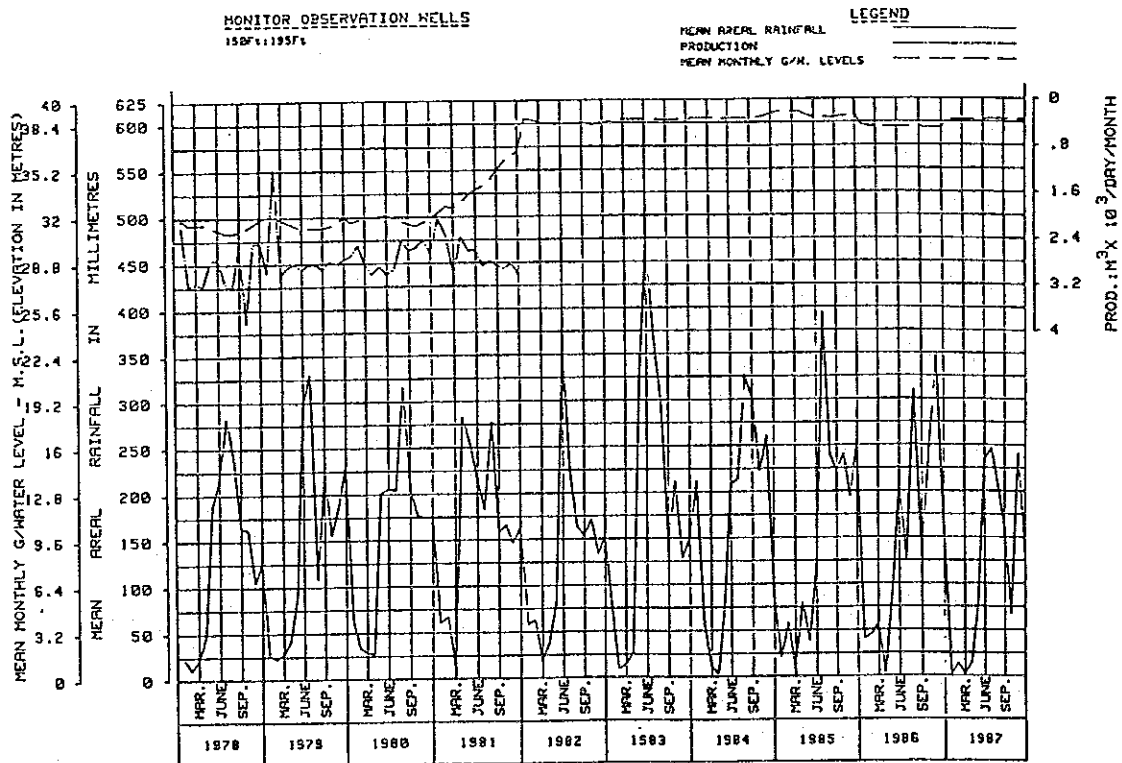
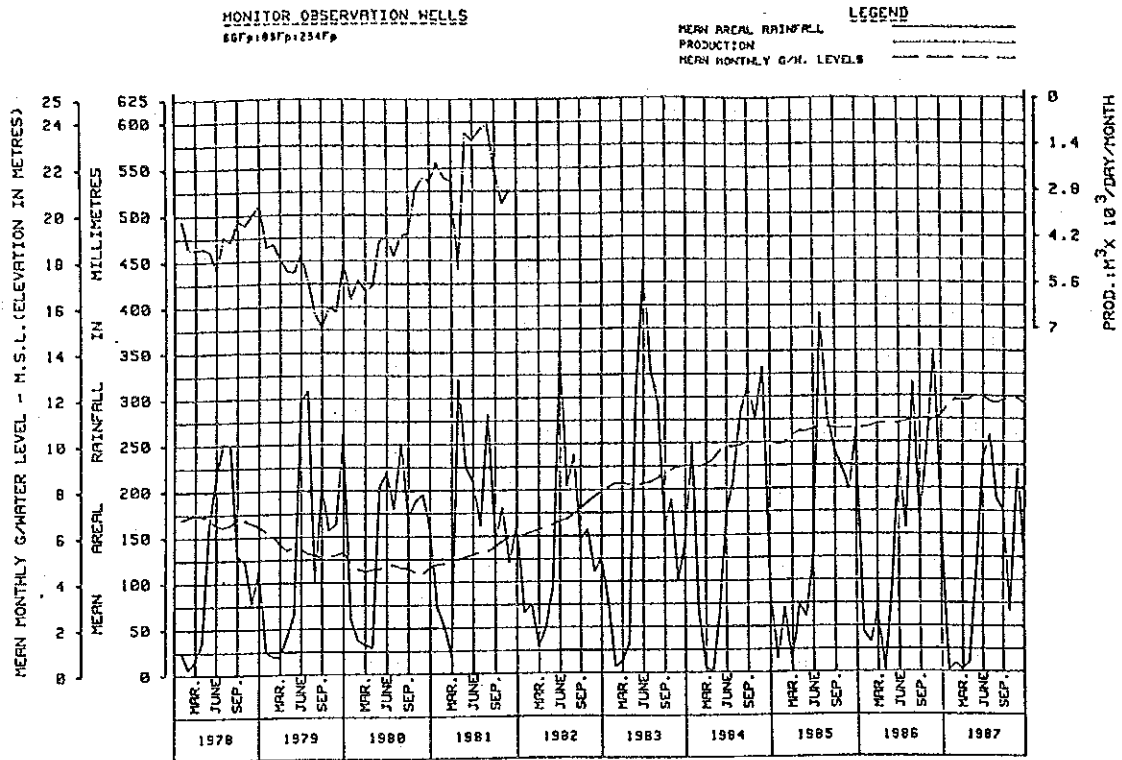


Fig. 9.6 Carlsen Field Well Field Groundwater Level Fluctuation 1978 - 1987 (Central Sands)

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Reproduced from GROUNDWATER REPORT, 1987 by WRA

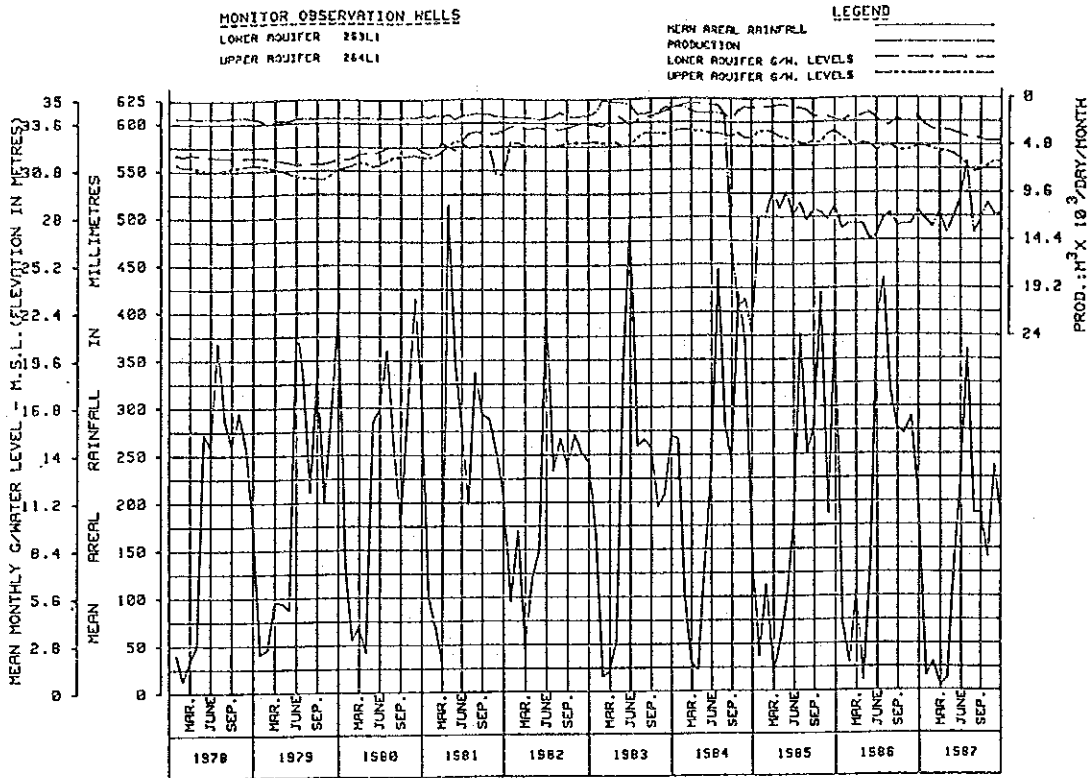


Fig. 9.9 Las Lomas Well Field Groundwater Level Fluctuation (1) 1978 - 1987 (Central Sands)

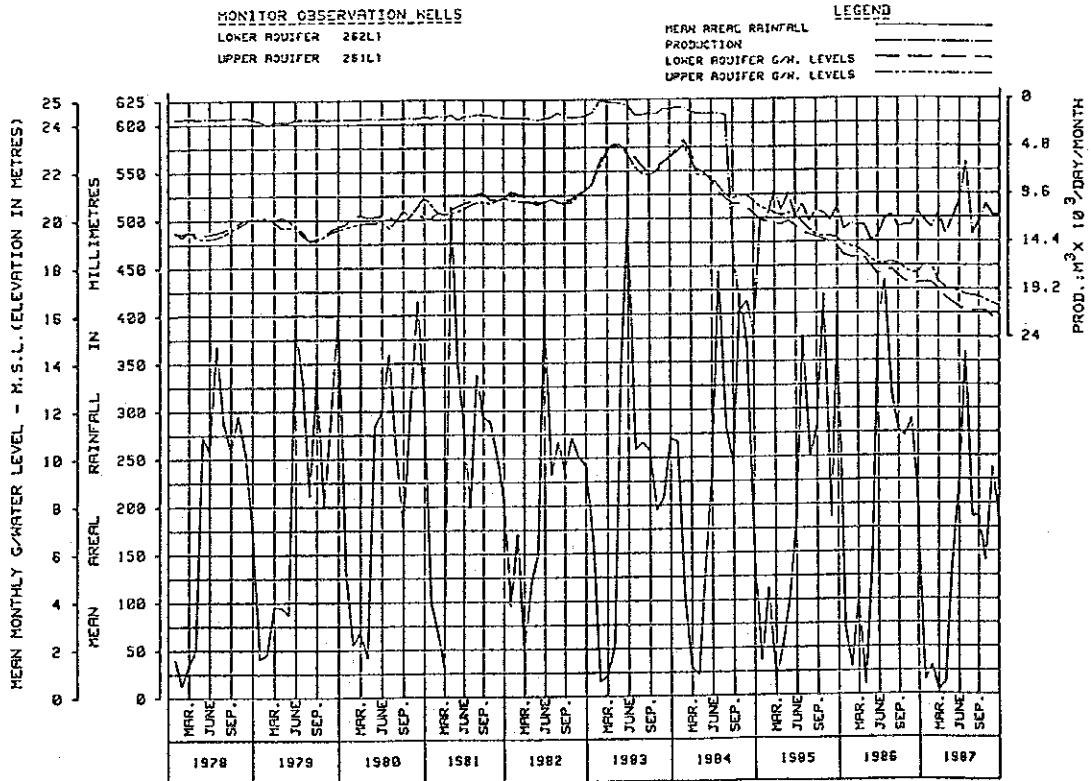


Fig. 9.10 Las Lomas Well Field Groundwater Level Fluctuation (2) 1978 - 1987 (Central Sands)

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Table B-10 ESTIMATED DEPENDABLE YIELDS (1)

NAME OF WATERWORKS, TREATMENT PLANTS, WELLS AND INTAKES	PRODUCTION CAPACITY (m3/d)	REPORTED PRODUCTION			DEPENDABLE YIELD	
		1987	1988	1989	RAINY	DRY
		(m3/d)	(m3/d)	(m3/d)	(m3/d)	(m3/d)
* Estimated						
<b>NORTH CENTRAL DISTRICT</b>						
1 AROUCA WELLS	1,860	584	577	797 *	653	653
2 CARONI/ARENA TREATMENT PLANT	272,760	259,424	259,781	264,850	272,760	272,760
3 CAURA WATERWORKS	11,360	10,584	9,932	9,590	11,360	9,094
4 LAS LOMAS WATERWORKS	11,360	11,515	10,330	9,559	11,360	11,360
5 LOANGO INTAKE	-	59	59	59 *	59	59
6 LOANGO/NARANJO WATERWORKS	3,180	3,116	2,488	3,171	3,180	2,214
7 LOPINOT INTAKE	145	35	35	35 *	35	35
8 Mt. D'OR INTAKE	-	88	88	88 *	88	88
9 ST. JOHN'S INTAKE	451	454	454	454 *	454	454
10 SURREY INTAKE	45	18	18	18 *	18	18
11 TACARIGUA WELLS	14,550	4,823	15,887	14,516 *	14,550	14,550
12 VALSAYN WATERWORKS	27,280	21,689	25,094	28,331 *	27,280	27,280
13 WATERFALL ROAD INTAKE	-	59	59	59 *	59	59
<b>NORTH EAST DISTRICT</b>						
14 ARIMA WELL #6	3,000	645	644	644 *	644	644
15 ARIPO INTAKE	-	35	34	35 *	4,535	4,535
16 ARIPO NEW WATERWORKS	15,900	9,312	8,365	8,997	10,530	8,059
17 BRASSO SECO-PARIA INTAKE	-	27	27	27 *	27	27
18 CUMACA INTAKE	45	9	24	68 *	45	45
19 FOUR ROAD/TAMANA INTAKE	70	68	74	91 *	70	70
20 GRAND RIVIERE INTAKE	45	35	35	35 *	35	35
21 GUAICO TAMANA/LOS ARMADILLOS INTAKE	105	91	77	35 *	105	105
22 GUANAPO WATERWORKS	11,360	5,791	5,776	8,625	11,360	11,360
23 HOLLIS WATERWORKS	31,826	23,040	25,722	23,452 *	31,826	25,000
24 MATELOT INTAKE	105	35	35	35 *	35	35
25 MATURA INTAKE	49	35	35	35 *	35	35
26 MONTEVIDEO INTAKE	45	35	35	35 *	35	35
27 MORNE LA CROIX	-	27	27	27 *	27	27
28 NORTH OROPOUCHE WATERWORKS	90,920	53,898	46,728	57,334	90,125	44,825
29 SALIBEA INTAKE	45	35	35	35 *	35	35
30 SANS SOUCI INTAKE	-	468	501	509 *	493	493
31 TOCO WATERWORKS	4,546	2,372	1,851	1,896 *	2,162	1,525
32 VALENCIA INTAKE (QUARE)	6,818	2,924	3,295	2,586 *	2,935	2,935
<b>NORTH WEST DISTRICT</b>						
33 ACONO WATERWORKS	2,100	1,994	1,699	2,065	2,100	1,543
34 BLANCHISSEUSE INTAKE	61	61	44	44 *	44	44
35 CHAGUARAMAS WELLS	-	5,669	5,669	5,645 *	5,669	5,669
36 DAMIER (BLANCHISSEUSE) WATERWORKS	143	-	355	360 *	358	358
37 DORRINGTON GARDEN	5,400	3,444	2,404	2,844 *	5,400	5,400
38 EL SOCORRO WATERWORKS	27,270	23,598	23,146	25,633 *	24,126	24,126
39 FOUR ROADS WELLS	28,900	29,864	29,890	28,786 *	28,900	28,900
40 LA CANOA INTAKE	200	59	106	88 *	200	200
41 LA PASTORA RES. ROAD	-	59	94	95 *	94	94
42 LA PASTORA WELLS	2,900	1,450	1,451	1,515 *	2,900	2,900
43 LA PASTORA/CAPRIATA INTAKE	-	106	63	95	88	88
44 LAS CUEVAS INTAKE	120	269	241	287 *	266	266
45 MON REPOS INTAKE	90	44	44	47 *	45	45
46 PIPOL INTAKE	90	88	88	81 *	90	90
47 RIVER ESTATE WELLS	6,820	6,064	7,173	6,054 *	6,820	6,820
48 TUCKER VALLEY WELLS	7,971	7,121	8,425	8,338 *	7,971	7,971
49 TYRICO INTAKE	900	268	284	363 *	305	305
<b>PORT OF SPAIN DISTRICT</b>						
50 ARIAPITA INTAKE	327	112	142	161 *	138	138

Table B-10 ESTIMATED DEPENDABLE YIELDS (2)

NAME OF WATERWORKS, TREATMENT PLANTS, WELLS AND INTAKES	PRODUCTION CAPACITY (m3/d)	REPORTED PRODUCTION			DEPENDABLE YIELD	
		1987	1988	1989	RAINY	DRY
		(m3/d)	(m3/d)	(m3/d)	(m3/d)	(m3/d)
51 CASCADE INTAKE	-	231	193	196 *	207	207
52 DIBE INTAKE	-	187	100	148 *	145	145
53 KING GEORGE V PARK WELLS	10,340	7,438	5,551	6,307 *	10,340	10,340
54 MARAVAL WATERWORKS	5,910	5,648	4,304	4,850 *	5,910	4,770
55 MOKA WELLS	1,590	2,090	2,090	1,441 *	1,590	1,590
56 PARAMIN WATERWORKS	1,178	458	366	346 *	390	390
57 SAVANNAH WELLS	12,270	10,206	9,501	8,406 *	12,270	12,270
58 ST ANN'S INTAKE	840	295	510	695 *	840	840
59 ST. CLAIR WELL	1,820	1,440	1,885	2,201 *	1,820	1,820
SAN FERNANDO/SOUTH CENTRAL DISTRICT						
60 CARLSEN FIELD WATERWORKS	18,180	8,439	10,604	11,293	11,175	11,175
61 FREEPORT WATERWORKS	11,360	3,852	5,236	4,432	6,165	6,165
SOUTH EAST DISTRICT						
62 AMOCO TOURNEBRIDGE WELLS	2,000	1,240	1,221	1,121	1,194	1,194
63 BICHE WATERWORKS	400	251	272	253	259	259
64 GUARACARA (SPRING)	1,136	1,067	725	343	1,136	1,136
65 GUAYAGUAYARE WELL #1	-	-	841	953	897	897
66 MALONEY WELLS	-	1,195	1,294	1,584	1,358	1,358
67 MAYARO WELLS	1,477	635	866	876	792	792
68 MAYO SPRINGS	630	595	613	652	630	630
69 MORICHAL	718	659	521	718	718	718
70 NAVET WATERWORKS	77,280	75,479	72,100	74,037	77,280	77,280
SOUTH WEST DISTRICT						
71 CAP DE VILLE WATERWORKS	1,006	1,218	938	1,157	1,006	1,006
72 CARAPAL WATERWORKS (PALO SECO/BRIN)	1,400	1,367	1,333	1,325	1,400	1,400
73 CHATHAM WATERWORKS	11,360	4,726	4,665	4,387	6,750	6,750
74 CLARKE ROAD WELLS	623	580	482	314	623	623
75 FYZABAD WATERWORKS	1,500	1,486	1,701	1,570	1,500	1,500
76 GRANVILLE WATERWORKS	2,800	3,201	2,800	2,780	2,800	2,800
77 PENAL WATERWORKS	3,500	3,764	3,009	3,156	3,500	3,500
78 POINT FORTIN WATERWORKS	980	712	393	390	980	980
79 SIPARIA (COORA) WATERWORKS	3,033	2,989	2,954	2,859	3,033	3,033
80 TEXACO TO GUAYAGUARE	180	100	94	92 *	180	180
81 TRINTOC TO PT. FORTIN	-	90	51	65	69	69
82 TRINTOC TO TECHIER	-	214	161	90 *	155	155
TOBAGO						
83 HILLSBOROUGH WATERWORKS	8,582	5,881	7,111	7,070	8,582	8,582
84 CHARLOTTEVILLE	600	396	418	350	388	388
85 RICHMOND WATERWORKS	2,467	1,522	1,749	1,800	2,467	2,467
86 COURLAND WATERWORKS	7,368	6,160	6,186	6,406	7,368	7,368
87 CASTARA	80	98	161	37	80	80
88 BLOODY BAY	24	5	10	10 *	24	24
89 L'ANSE FOURMI	34	23	27	18 *	34	34
90 PARLATUVIER	70	6	18	- *	70	70
91 SPEYSIDE	86	350	321	- *	86	86
92 CRAIG HALL INTAKE	2,461	1,067	1,367	1,428	2,461	2,461
93 KINGS BAY WATERWORKS	2,994	1,410	1,483	1,702	2,994	2,994
94 GREEN HILL INTAKE	3,360	1,322	1,189	1,653	3,360	3,360
95 GOV'T FARM WELL #3	335	215	-	-	335	335
96 HILLSBOROUGH WEST RIVER	3,500	-	-	-	3,500	3,500
T O T A L (m3/d) IN TRINIDAD	764,673	633,452	636,814	657,566	739,540	679,378
T O T A L (m3/d) IN TOBAGO	31,961	18,455	20,040	20,474	31,749	31,749
G R A N D T O T A L (m3/d)	796,634	651,907	656,854	678,040	771,289	711,127

NOTE: 1989's productions were calculated from the records until October 1989.



## Water Quality

### Water Quality of Groundwater

Most of groundwater in Trinidad and Tobago is suitable for drinking purpose, however groundwater from the Central Sands Aquifer and Southern Sands Aquifer tends to contain high concentration of iron as shown in the table below. Waterworks which extract water from these aquifers have treatment facilities such as aerators, (sedimentation basins), and filters to remove iron.

### Iron Contents of Major Well Fields in Central and Southern Area

Well Field	Total Iron (mg/l)	
	Raw	Treated
<u>Central Area</u>		
Carlson Field	3.1	0.8
Las Lomas	6.2	1.5
Freeport	12	-
<u>Southern Area</u>		
Point Fortine	5.9	0.6
Penal	2.1	0.8
Siparia	2.6	-
Clarke Road	2.0	-
Fyzabad	2.5	0.1
Cap-de-Ville	0.3	0.3
Chatham	3.2	0.2
Granville	1.0	-

Source: Central Laboratory, WASA (1988 average)

Majority of groundwater from northern area is of good quality and distributed after a sole treatment process, chlorination, to the consumers.

Chloride concentration of several wells near the coastal line is found indicating sea water intrusion depending on wells' location and geological condition.

### Water Quality of Surface Water

#### Caroni River and Arena Impounding Reservoir

Caroni River conveys raw water to the intake of the Caroni Treatment Plant, collecting water from ten major tributaries with vast catchment area which contains commercial and industrial estates as well as agricultural area. Mostly in the dry season, however, Arena impounding reservoir releases water to the Caroni River through the Tumpuna River in order to supplement necessary amount of flow of Caroni River at the intake. The portion from the Arena Reservoir ranges from 9 % to 87 % of the total discharge at the Caroni Plant Intake and approximately 60 % on the average during the dry season in 1988.

Water quality of the raw water is characterized by relatively high turbidity when compared with the other river intake sources. One of the causes of this high turbidity is considered due to industrial activities such as quarries of the upstream. During the survey by the JICA Study Team, Arima River, which is one of the major tributaries, showed outstandingly high turbidity over 450 NTU due to the effluent from quarries (Dec. 12 '89 sample). In addition to that, bacteriological quality of the raw water was significantly poor indicated by very high coliform counts over 100,000 N/100 ml at the intake of the Caroni Treatment Plant. The recent survey on water pollution of the Caroni River by Wessex Consultants in collaboration with WASA (1988) indicated that the existing low quality of the Caroni River is due to effluents from industry and farms.

#### Navet, Hollis and Hillsborough Impounding Reservoir

The water quality of Hollis Reservoir is stable with low turbidity and colour values through a year. Navet and Hillsborough Reservoirs show high colour units due to humic substances derived from the decomposition of plants in the catchment and surrounding areas. Colours in finished waters are 25 and 35 in Hazen units as the mean in the rainy season for Navet and hillsborough, respectively (WASA's Central Laboratory, 1988).

#### River Intake Sources

All the river sources in Trinidad are located in the Northern Range. The water quality of these rivers are generally good with low turbidity. However, turbidity in the rainy season tends to fluctuate sharply according to upstream rainfall which usually lasts very short period.

Following table shows turbidity values of river intake sources in 1988. The average turbidity of Caroni river is relatively higher than those of the other rivers.

Turbidity of River Intake Sources, 1988

River Sources	TURBIDITY (NTU)			
	JANUARY - MAY DRY SEASON		JUNE - DECEMBER RAINY SEASON	
	MEAN	RANGE	MEAN	RANGE
North Oropouche	0.6	0.3 - 2.0	1.6	0.4 - 7.0
Aripo	1.5	0.1 - 3.0	7	0.6 - 56
Caura	0.8	0.6 - 1.0	3	0.8 - 17
Loango/Naranjo	1.2	0.6 - 3.6	21	1.6 - 100
Acono	0.8	0.4 - 2.5	2.9	0.5 - 16
Caroni	31	16 - 70	113	20 - 250

\* Source: WASA's Central Laboratory

## Water Quality Control

WASA's Central Laboratory in the Head Quarter is in charge of supervising water quality of supplied water in Trinidad and Tobago. The Laboratory periodically collects and analyzes water samples for chemical and bacteriological analyses from different water sources, waterworks and distribution network throughout Trinidad and Tobago. About 3,000 samples for chemical and 10,000 samples for bacteriological analyses were collected and analyzed by the Laboratory in 1988. In addition to this Laboratory, Caroni Treatment Plant and Navet Treatment Plant have own laboratories which supervise water quality of raw and finished waters for monitoring the treatment processes.

In general, bacteriological quality of supplied water is satisfactorily maintained safe to the consumers by practicing chlorination at respective sources of supply. However, the following are considered to be major problems on controlling water quality.

- a) Raw water quality of Caroni Treatment Plant is low. Although the treatment plant has the modernized treatment processes including activated carbon filtration, the raw water is currently exposure to the possible contamination from industry and farms. It is of important to enhance monitoring the raw water quality. Valuable recommendations have been already made in the report titled "Water Pollution Control, 1988" including licensing system to control the effluent discharged into the Caroni tributaries with bylaws.
- b) The current chemical application practice for the river intake sources in northern range does not seem to respond quickly to the changes of raw water. It is of importance to enhance operators' duties in order to use chemicals effectively and economically.
- c) Due to limited manpower and laboratory facilities, supervising the water quality from separately located 95 sources by a sole laboratory, Central Laboratory, seems to be overwhelming. Especially for Tobago, a laboratory which covers Tobago's production sources is necessary.
- d) To achieve lower concentration of iron in the finished water from the groundwater sources, existing facilities such as aerators and filters as well as operation procedures should be modified or improved according to the levels of the function of the facilities.
- e) Colour removal is a major concern for Navet and Hillsborough Waterworks. Generally, it is necessary to adjust pH to a lower level than that for the ordinal coagulation in order to remove colour effectively. Monitoring of coagulation process should be strengthened for proper chemical dosages by the plant operators.



**C: QUESTIONNAIRES FOR DOMESTIC CUSTOMERS SURVEY**





**WATER AND SEWERAGE AUTHORITY  
CUSTOMERS SURVEY ON DOMESTIC WATER USE**

Identifying Number:      Questionnaire Number: \_\_\_\_\_  
County/Ward              : \_\_\_\_\_  
E.D. Number              : \_\_\_\_\_  
Household Number      : \_\_\_\_\_

Name of Respondent (Head of Household): \_\_\_\_\_  
Address of Household: \_\_\_\_\_  
Ward: \_\_\_\_\_ County: \_\_\_\_\_  
Date of first visit: \_\_\_\_\_  
Date of second visit: \_\_\_\_\_  
Date of third visit: \_\_\_\_\_

Result Code

- 1  Completed                      4  Vacant dwelling
- 2  Not at home                      5  Closed dwelling
- 3  Refusal                            6  Address not found
- 7  Other \_\_\_\_\_ (Specify)

\_\_\_\_\_  
Name of Supervisor

\_\_\_\_\_  
Name of Interviewer



## SECTION I

(To be answered by all heads of households)

1. What type of house do you occupy?

Separate	1	<input type="checkbox"/>
Double house/Duplex	2	<input type="checkbox"/>
Condominium/Townhouse	3	<input type="checkbox"/>
Flat/Apartment	4	<input type="checkbox"/>
Residential/Commercial	5	<input type="checkbox"/>
Other	6	<input type="checkbox"/>

2. Do you own, lease or rent this house?

Own	1	<input type="checkbox"/>	Rent	3	<input type="checkbox"/>
Lease	2	<input type="checkbox"/>	Squat	4	<input type="checkbox"/>
Other	_____			5	<input type="checkbox"/>
	(Specify)				

3. How many years have you been living in this house?

0 to 2 years	1	<input type="checkbox"/>	6 to 10 years	3	<input type="checkbox"/>
3 to 5 years	2	<input type="checkbox"/>	11 to 20 years	4	<input type="checkbox"/>
More than 20 years				5	<input type="checkbox"/>

4. How many rooms are there in this house?

One room	1	<input type="checkbox"/>	Three rooms	3	<input type="checkbox"/>
Two rooms	2	<input type="checkbox"/>	4 to 5 rooms	4	<input type="checkbox"/>
More than 5 rooms				5	<input type="checkbox"/>

5. (a) How many persons live in this house?

- |                     |                            |                            |                            |
|---------------------|----------------------------|----------------------------|----------------------------|
| One person          | 1 <input type="checkbox"/> | Four persons               | 4 <input type="checkbox"/> |
| Two persons         | 2 <input type="checkbox"/> | Five persons               | 5 <input type="checkbox"/> |
| Three persons       | 3 <input type="checkbox"/> | Six persons                | 6 <input type="checkbox"/> |
| More than 6 persons |                            | 7 <input type="checkbox"/> |                            |

(b) How many persons of this households are at home during daytime hours?

- |                     |                            |                            |                            |
|---------------------|----------------------------|----------------------------|----------------------------|
| None                | 1 <input type="checkbox"/> | Three persons              | 4 <input type="checkbox"/> |
| One person          | 2 <input type="checkbox"/> | Four persons               | 5 <input type="checkbox"/> |
| Two persons         | 3 <input type="checkbox"/> | Five persons               | 6 <input type="checkbox"/> |
| More than 5 persons |                            | 7 <input type="checkbox"/> |                            |

(c) How many persons are there of the age group stated below.

- 0 to 2 years \_\_\_\_\_ persons
- 3 to 64 years \_\_\_\_\_ persons
- 65 years and over \_\_\_\_\_ persons

6. How is your house actually supplied with water?

- |                                  |                            |
|----------------------------------|----------------------------|
| Connection by pipe into dwelling | 1 <input type="checkbox"/> |
| Connection by pipe in yard       | 2 <input type="checkbox"/> |
| Delivery trucks                  | 3 <input type="checkbox"/> |
| Public standpipe                 | 4 <input type="checkbox"/> |
| Rivers or wells                  | 5 <input type="checkbox"/> |
| Rain                             | 6 <input type="checkbox"/> |
| Other _____                      | 7 <input type="checkbox"/> |
- (Specify)

7. Do you have water storage facilities, i.e. tanks, cisterns?

Yes 1  No 2

If Yes, what is the capacity of the storage?

\_\_\_\_\_ gallons/cu.meters

8. Is your house connected to an existing supply system - i.e. WASA installations or Private?

Yes 1  No 2

If Yes, what is the system?

WASA system 1

Private system 2

Other \_\_\_\_\_ 3   
(Specify)

If Yes, Go to Section II

If No, Go to Section III

## SECTION II

(Questions to be answered by household  
connected to the Water System)

1. How many hours per day do you receive water?

24 hours	1 <input type="checkbox"/>	Less than 12 hours	4 <input type="checkbox"/>
17 to 23 hours	2 <input type="checkbox"/>	None at all	5 <input type="checkbox"/>
12 to 16 hours	3 <input type="checkbox"/>		

2. How many days per week do you receive water?

7 days	1 <input type="checkbox"/>	1 to 3 days	3 <input type="checkbox"/>
4 to 6 days	2 <input type="checkbox"/>	None at all	4 <input type="checkbox"/>

3. How is your water pressure?

Very good	1 <input type="checkbox"/>	Fair	3 <input type="checkbox"/>
Good	2 <input type="checkbox"/>	Poor	4 <input type="checkbox"/>

4. What is the quality of the water?

Clear	1 <input type="checkbox"/>	Distinct odor	3 <input type="checkbox"/>
Discoloured	2 <input type="checkbox"/>	Odorless	4 <input type="checkbox"/>

5. Do you have any of following in your house/property?

Shower	1 <input type="checkbox"/>	Water heater	6 <input type="checkbox"/>
Bathtub	2 <input type="checkbox"/>	Washing machine	7 <input type="checkbox"/>
Bidet	3 <input type="checkbox"/>	Dish washer	8 <input type="checkbox"/>
W/C	4 <input type="checkbox"/>	Swimming pool	9 <input type="checkbox"/>
Garden tap/Sprinkler	5 <input type="checkbox"/>	Pond/fountain	10 <input type="checkbox"/>
		Water-cooled air-conditioner	11 <input type="checkbox"/>
		Other _____	12 <input type="checkbox"/>
		(Specify)	

6. How many times a week do you use your washing machine if you have one? \_\_\_\_\_ times/household
7. How many times a week do you use your bathtub if you have one? \_\_\_\_\_ times/household
8. How many times a day do you use your shower(s) if you have one? \_\_\_\_\_ times/household
9. How many times a week do you wash your car(s) if you have one? \_\_\_\_\_ times/household
10. How many taps do you have in your house/property? \_\_\_\_\_ pc.
11. Do you have a meter to measure your water consumption directly?  
 Yes 1  No 2
12. Do you receive bills for water supplied by WASA?  
 Yes 1  No 2
13. What amount do you pay per quarter as water rate?  
 Quarterly TT \$ \_\_\_\_\_
14. Do you receive water by truck delivery?  
 Yes 1  No 2
15. Do you treat water for drinking purpose in this house?  
 Yes 1  No 2
- If Yes, how do you treat it?
- Boil 1
- Filter 2
- Use other method \_\_\_\_\_ 3   
 (Specify)
16. How do you consider the rate you pay for water to be in relation to those of electricity and telephone?  
 High 1  Low 3   
 Moderate 2

17. How do you dispose of your waste water?

Surface drain/canal 1  Other \_\_\_\_\_ 2   
 (Specify)

18. What type of toilet facilities do you have?

Pit latrine 1   
 Septic tank 2   
 W/C linked to Private System 3   
 W/C linked to Public System 4   
 None/other 5

19. Please give the occupation and income of all members of the household who work as follows: ( If member does not work, record none )

Members	Occupation & Type of Worker	\$ Income	Pay Period
1. Head			
2. Member			
3. Member			
4. Member			
5. Member			

N.B. In the column under "Type of Worker", use the symbols described as follows for each member.

A: Employee            B: Self-employed  
 C: Other

20. Would you like to have your water supply metered?

Yes 1  No 2

21. Are you satisfied with WASA water supply?

Yes 1  No 2

22. Have you ever noticed any advertisement regarding water saving?

Yes 1  No 2

SECTION III

(Questions to be answered by household  
not connected to the Water System)

1. How do you obtain water?

- |              |   |                          |       |   |                          |
|--------------|---|--------------------------|-------|---|--------------------------|
| Truck        | 1 | <input type="checkbox"/> | Rain  | 4 | <input type="checkbox"/> |
| Standpipe    | 2 | <input type="checkbox"/> | Wells | 5 | <input type="checkbox"/> |
| Spring/river | 3 | <input type="checkbox"/> | Other | 6 | <input type="checkbox"/> |

2. How much water does your household consume?

(Express type of container) \_\_\_\_\_

	Day	Week	Month
Number of containers			
Capacity of container			
Price paid per container, if any			

3. If standpipe or river, what type of container do you use to fetch water?

Type of Container	Capacity (litres/gallons)	How many carried in each trip
_____	_____	_____

4. How do you transport the water?

- |                          |   |                          |
|--------------------------|---|--------------------------|
| By hand                  | 1 | <input type="checkbox"/> |
| Push-cart                | 2 | <input type="checkbox"/> |
| Motor vehicle            | 3 | <input type="checkbox"/> |
| Other _____<br>(Specify) | 4 | <input type="checkbox"/> |

5. How far do you go to fetch water?

\_\_\_\_\_ kilometers

6. For each trip, how many persons go?

\_\_\_\_\_ persons

7. How much time does a trip take?

\_\_\_\_\_ hrs. \_\_\_\_\_ mins.

8. How do you dispose of your waste water?

Surface drain/canal 1

Other \_\_\_\_\_ 2   
(Specify)

9. Is there a water main in front of your house?

Yes 1  No 2

10. Do you need any of the following services?

Potable water Yes 1  No 2

Sewerage Yes 1  No 2

11. Have you asked the administration for connection to the network?

Potable water Yes 1  No 2

Sewerage Yes 1  No 2

12. If Yes, are you experiencing any problems in obtaining service? What type of problems did you experience?

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13. Do you treat water for drinking purpose in this house?

Yes 1  No 2

If Yes, how do you treat it?

Boil 1

Filter 2

Use other method \_\_\_\_\_ 3   
(Specify)



14. Please give the occupation and income of all members of the household who work as follows: ( If member does not work, record none )

Members	Occupation & Type of Worker	\$ Income	Pay Period
1. Head			
2. Member			
3. Member			
4. Member			
5. Member			

N.B. In the column under "Type of Worker", use the symbols described as follows for each member.

A: Employee

B: Self-employed

C: Other

15. Would you like to have your water supply metered?

Yes

1

No

2

16. Have you ever noticed any advertisement regarding water saving?

Yes

1

No

2



**D: QUESTIONNAIRES FOR PUBLIC, COMMERCIAL AND INDUSTRIAL SURVEY**





**WATER AND SEWERAGE AUTHORITY**  
**CUSTOMERS SURVEY ON PUBLIC, COMMERCIAL**  
**AND INDUSTRIAL WATER USE**

---

Identifying Number:	Questionnaire Number:	_____
	County/Ward	: _____
	E.D. Number	: _____
	Building Number	: _____

---

Name of Customer/Establishment: \_\_\_\_\_

Address of Customer/Establishment:  
\_\_\_\_\_

Ward: \_\_\_\_\_ County: \_\_\_\_\_

Date of first visit: \_\_\_\_\_

Date of second visit: \_\_\_\_\_

Date of third visit: \_\_\_\_\_

Result Code

1  Completed

2  Refusal

3  Address not found

4  Other \_\_\_\_\_  
(Specify)

---

Name of Supervisor

---

Name of Interviewer

1. What type of establishment is this?

\_\_\_\_\_

2. What is your major product, if any?

\_\_\_\_\_

(Specify)

3. What is the number of employees?

\_\_\_\_\_ persons

4. What is the operating hours?

7:00 a.m. to 4:00 p.m. 1

8:00 a.m. to 5:00 p.m. 2

9:00 a.m. to 4:00 p.m. 3

Other \_\_\_\_\_ 4

(Specify)

5. What is the total area of the floor space?

\_\_\_\_\_ sq.ft.

6. Do you have water storage facilities, i.e. tanks, cisterns?

Yes 1

No 2

If Yes, what is the capacity of the storage?

\_\_\_\_\_ gallons/cu. meter

7. Do you have any of the following on this premises?

Shower 1

W/C 2

Other \_\_\_\_\_ 3

(Specify)

8. How many taps are there on this premises? \_\_\_\_\_ pc.

9. Is it connected to an existing supply system - i.e. WASA installations or Private?

Yes 1  No 2

If Yes, what is the system?

WASA system 1   
 Private system 2   
 Other \_\_\_\_\_ 3   
 (Specify)

10. How many hours per day do you receive water?

24 hours 1  Less than 12 hours 4   
 17 to 23 hours 2  None at all 5   
 12 to 16 hours 3

11. How many days per week do you receive water?

7 days 1  1 to 3 days 3   
 4 to 6 days 2  None 4

12. How is your water pressure?

Very good 1  Fair 3   
 Good 2  Poor 4

13. What is the quality of the water?

Clear 1  Distinct odor 3   
 Discoloured 2  Odorless 4

14. Do you have a meter to measure your water consumption directly?

Yes 1  No 2

15. Do you receive bills for water supplied by WASA?

Yes 1  No 2



16. What amount do you pay per quarter as water rate?

Quarterly TT \$ \_\_\_\_\_

17. Would you like to have your water supply metered?

Yes 1  No 2

18. Are you satisfied with WASA water supply?

Yes 1  No 2

19. Have you ever noticed any advertisement regarding water saving?

Yes 1  No 2

20. How much water does your establishment consume?

WASA \_\_\_\_\_ gallons/  
cu m per \_\_\_\_\_

Private \_\_\_\_\_ gallons/  
cu m per \_\_\_\_\_



## **E: RESULTS OF QUESTIONNAIRE SURVEY**





RESULTS OF QUESTIONNAIRE SURVEY - DOMESTIC (1)-1/2

<b>Q. I-1 TYPE OF HOUSE</b> Separate 465 Duplex 95 Town House 5 Apartment 83 Res/Com. 25 Other 2 <b>TOTAL 675</b>	<b>Q. I-6 WATER SUPPLY</b> Pipe in House 560 Pipe in Yard 111 Truck 1 Rain 1 Other 2 <b>TOTAL 675</b>	<b>Q. II-5 AMENITIES (Shower)</b> Yes 585 No 90 (Bathtub) Yes 59 No 616 (Bidet) Yes 89 No 586 (W/C) Yes 518 No 157 (Sprinkler) Yes 200 No 475 (Water Heater) Yes 106 No 569 (Washing Machine) Yes 366 No 309 (Dish Washer) Yes 13 No 662 (Swimming Pool) Yes 1 No 674 (Pond) Yes 1 No 674 (Air Conditioner) Yes 6 No 669	<b>Q. II-9 WASHING CAR (Weekly)</b> None 456 One 170 Two 28 Three 7 Four 1 Five 3 Six 2 Seven 4 Eight 2 Nine 2 <b>TOTAL 675</b>	(TT \$, Quarterly) 112 1 120 6 125 19 126 1 130 3 131 1 132 1 134 1 135 2 136 13 138 1 140 7 142 2 144 1 146 1 147 1 150 47 155 2 156 1 160 2 165 1 167 1 168 1 173 1 175 4 180 6 184 2 185 1 188 1 189 1 190 1 191 1 195 1 200 29 204 1 208 1 212 1 217 1 219 3 220 2 225 14 229 1 237 1 240 2 247 1 249 1 250 25 259 1 269 1 270 1 271 1 272 1 274 1 275 3 278 1 279 1 280 1 281 1 287 1 294 3 295 1 300 5 319 1 320 1 325 1 336 1 350 4 370 1 375 3 400 7 425 1 465 1 500 3 637 1 700 1 702 1 Not Applicable 126 Not Stated 36 <b>TOTAL 675</b>
<b>Q. I-2 TENANCY</b> Own 513 Lease 16 Rent 125 Squat 3 Other 18 <b>TOTAL 675</b>	<b>Q. I-7 STORAGE FACILITY</b> Yes 413 No 262 <b>TOTAL 675</b>	<b>Q. I-7 STORAGE CAPACITY (gallons)</b> 0-50 63 51-100 19 101-200 15 201-300 19 301-500 197 501-700 4 701-900 61 > 900 28 Not Applicable 262 Not Stated 7 <b>TOTAL 675</b>	<b>Q. II-10 NUMBER OF TAPS</b> None 10 One 63 Two 91 Three 151 Four 157 Five 110 Six 37 Seven 23 Eight 17 Nine/Over 16 <b>TOTAL 675</b>	
<b>Q. I-3 YEARS LIVING</b> 0-2 Years 69 3-5 Years 99 6-10 Years 96 11-20 Years 142 > 20 Years 266 Not Applicable 1 Not Stated 2 <b>TOTAL 675</b>	<b>Q. I-8 CONNECTION</b> Yes 674 No 1 <b>TOTAL 675</b>	<b>Q. I-8 SYSTEM</b> WASA 658 Private 16 Not Applicable 1 <b>TOTAL 675</b>	<b>Q. II-11 METER</b> Yes 57 No 612 Not Applicable 3 Not Stated 3 <b>TOTAL 675</b>	
<b>Q. I-4 ROOMS</b> 1 Room 14 2 Rooms 75 3 Rooms 198 4-5 Rooms 305 > 5 Rooms 82 Not Stated 1 <b>TOTAL 675</b>	<b>Q. II-1 HOURS</b> 24 Hours 265 17-23 Hours 38 12-16 Hours 63 < 12 Hours 290 None 16 Not Stated 3 <b>TOTAL 675</b>	<b>Q. II-6 USE OF W/MACHINE (Weekly)</b> None 316 One 161 Two 114 Three 54 Four 8 Five 6 Six 1 Seven 10 Eight 4 Nine 1 <b>TOTAL 675</b>	<b>Q. II-12 BILLS</b> Yes 505 No 155 Not Applicable 8 Not Stated 7 <b>TOTAL 675</b>	
<b>Q. I-5(a) PERSONS</b> One 47 Two 101 Three 103 Four 133 Five 104 Six 71 > Six 116 <b>TOTAL 675</b>	<b>Q. II-2 DAYS</b> 7 Days 386 4-6 Days 114 1-3 Days 157 None 14 Not Stated 4 <b>TOTAL 675</b>	<b>Q. II-7 USE OF BATHTUB (Weekly)</b> None 643 One 13 Two 6 Three 1 Four 2 Five 1 Six 1 Seven 5 Eight 2 Nine 1 <b>TOTAL 675</b>	<b>Q. II-13 WATER RATE (TT \$, Quarterly)</b> 0 12 15 1 25 12 29 1 30 1 32 1 35 1 38 1 40 2 46 1 48 1 50 46 52 1 54 1 55 1 60 5 62 4 64 1 65 2 70 4 75 9 80 76 84 5 85 4 86 2 87 4 88 6 89 1 90 4 92 1 95 1 96 1 100 27 102 1 106 1 108 2 110 1	
<b>Q. I-5(b) AT HOME</b> None 105 One 231 Two 175 Three 73 Four 36 Five 20 > Five 35 <b>TOTAL 675</b>	<b>Q. II-3 WATER PRESSURE</b> Very Good 63 Good 280 Fair 170 Poor 145 Not Applicable 12 Not Stated 5 <b>TOTAL 675</b>	<b>Q. II-8 USE OF SHOWER (Daily)</b> None 129 One 14 Two 75 Three 37 Four 74 Five 29 Six 61 Seven 6 Eight/Over 239 Not Stated 11 <b>TOTAL 675</b>		
<b>Q. I-5(c) AGE (Aged 0-2)</b> None 541 One 111 Two 14 Three 6 Six 2 Eight 1 (Aged 3-64) None 36 One 64 Two 96 Three 104 Four 123 Five 100 Six 71 Seven 26 Eight 23 > Eight 32 (Aged 65/over) None 515 One 110 Two 48 Three 1 Nine 1 <b>TOTAL 675</b>	<b>Q. II-4 QUALITY (Color)</b> Clear 515 Discolored 145 Not Applicable 12 Not Stated 3 <b>TOTAL 675</b>			

RESULTS OF QUESTIONNAIRE SURVEY - DOMESTIC (1)-2/2

<b>Q. II-14 TRUCK DELIVERY</b> Yes 31 No 638 Not Applicable 3 Not Stated 3 TOTAL 675	Code Number 59 7 61 18 62 3 63 3 64 2 69 66 70 11 71 3 74 1 77 1 79 6 80 1 83 1 84 15 85 6 87 15 90 2 93 2 95 12 96 1 97 5 98 31 99 84 TOTAL 675	(Worker 3) Code Number 0 618 2 1 3 2 12 1 13 1 16 1 19 1 32 1 37 1 39 8 41 3 45 8 58 5 59 1 64 3 70 1 85 1 95 1 97 1 99 16 TOTAL 675	<b>Q. II-19 MONTHLY INCOME</b> (Worker 1) (TT \$) None 237 1-250 7 251-500 22 501-750 14 751-1000 55 1001-1500 69 1501-2000 68 2001-2500 31 2501-3000 35 3001-3500 9 3501-4000 9 4001-4500 6 4501-5000 3 > 5000 7 Not Stated 103 TOTAL 675
<b>Q. II-15 TREATMENT</b> Yes 250 No 423 Not Applicable 1 Not Stated 1 TOTAL 675	95 12 96 1 97 5 98 31 99 84 TOTAL 675	(Worker 4) Code Number 0 657 32 1 33 1 39 2 41 1 45 1 58 2 70 1 84 1 85 1 99 7 TOTAL 675	(Worker 2) (TT \$) None 425 1-250 2 251-500 15 501-750 19 751-1000 35 1001-1500 40 1501-2000 26 2001-2500 13 2501-3000 15 3001-3500 2 3501-4000 5 4001-4500 1 4501-5000 4 > 5000 3 Not Stated 70 TOTAL 675
<b>Q. II-16 RELATION</b> High 264 Moderate 224 Low 18 Not Applicable 120 Not Stated 49 TOTAL 675	0 416 2 2 3 3 7 7 8 1 9 3 11 3 12 1 13 20 19 1 20 1 30 2 32 6 33 13 35 1 39 21 40 4 41 8 42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 3) (TT \$) None 619 251-500 2 501-750 6 751-1000 7 1001-1500 8 1501-2000 4 2001-2500 3 2501-3000 2 Not Stated 24 TOTAL 675
<b>Q. II-17 DISPOSAL</b> Canal/Drain 524 Sewer 146 Not Stated 5 TOTAL 675	30 2 32 6 33 13 35 1 39 21 40 4 41 8 42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 4) (TT \$) None 658 501-750 1 751-1000 1 1001-1500 3 1501-2000 2 Not Stated 10 TOTAL 675
<b>Q. II-18 TOILET</b> Pit Latrine 145 Septic Tank 338 WC-Private S. 47 WC-Public S. 143 None/Other 1 Not Stated 1 TOTAL 675	41 8 42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 5) (TT \$) None 668 751-1000 1 1001-1500 1 Not Stated 5 TOTAL 675
<b>Q. II-19 OCCUPATION</b> (Worker 1) Code Number 0 169 2 2 3 6 4 1 5 2 6 1 7 4 10 1 12 2 13 24 14 1 16 1 19 4 21 1 32 11 33 7 34 2 35 3 36 1 37 3 38 3 39 16 40 6 41 27 42 3 43 3 44 4 45 21 51 1 53 7 54 4 55 6 56 1 58 31	42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 5) (TT \$) None 668 751-1000 1 1001-1500 1 Not Stated 5 TOTAL 675
<b>Q. II-19 TYPE OF WORKER</b> (Worker 1) Employee 331 Self-employed 101 Other 1 Not Applicable 236 Not Stated 6 (Worker 2) Employee 205 Self-employed 39 Not Applicable 423 Not Stated 8 (Worker 3) Employee 44 Self-employed 6 Not Applicable 620 Not Stated 5 (Worker 4) Employee 12 Self-employed 1 Not Applicable 657 Not Stated 5 (Worker 5) Frequency Employee 2 Self-employed 1 Not Applicable 667 Not Stated 5 TOTAL 675	42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 5) (TT \$) None 668 751-1000 1 1001-1500 1 Not Stated 5 TOTAL 675
<b>Q. II-20 METER</b> Yes 183 No 382 Not Applicable 71 Not Stated 39 TOTAL 675	42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 5) (TT \$) None 668 751-1000 1 1001-1500 1 Not Stated 5 TOTAL 675
<b>Q. II-21 SATISFACTION</b> Yes 358 No 312 Not Applicable 2 Not Stated 3 TOTAL 675	42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 5) (TT \$) None 668 751-1000 1 1001-1500 1 Not Stated 5 TOTAL 675
<b>Q. II-22 ADVERTISEMENT</b> Yes 597 No 75 Not Stated 3 TOTAL 675	42 1 43 1 44 2 45 7 51 1 53 2 54 6 55 5 58 12 59 9 61 4 62 1 63 2 64 4 69 6 70 2 77 1 79 3 81 1 84 4 85 1 86 1 87 4 88 1 89 1 90 2 92 4 95 9 97 2 98 14 99 49 TOTAL 675	(Worker 5) Code Number 0 667 7 1 34 1 41 1 99 5 TOTAL 675	(Worker 5) (TT \$) None 668 751-1000 1 1001-1500 1 Not Stated 5 TOTAL 675

RESULTS OF QUESTIONNAIRE SURVEY - DOMESTIC (2)

<b>Q. I-1 TYPE OF HOUSE</b>	
Separate	223
Duplex	11
Apartment	4
Res/Com.	4
TOTAL	242
<b>Q. I-2 TENANCY</b>	
Own	206
Lease	6
Rent	16
Squat	8
Other	6
TOTAL	242
<b>Q. I-3 YEARS LIVING</b>	
0-2	25
3-5	44
6-10	54
11-20	48
> 20	71
TOTAL	242
<b>Q. I-4 ROOMS</b>	
1 Room	27
2 Rooms	48
3 Rooms	92
4-5 Rooms	66
> 5 Rooms	9
TOTAL	242
<b>Q. I-5(a) PERSONS</b>	
One	31
Two	20
Three	30
Four	46
Five	32
Six	23
> Six	60
TOTAL	242
<b>Q. I-5(b) AT HOME</b>	
None	15
One	93
Two	50
Three	31
Four	27
Five	11
> Five	15
TOTAL	242
<b>Q. I-5(c) AGE</b>	
(Aged 0-2)	
None	173
One	55
Two	13
Three	1
(Aged 3-64)	
None	9
One	26
Two	28
Three	35
Four	50
Five	26
Six	27
Seven	12
Eight	13
> Eight	16
(Aged 65/over)	
None	210
One	28
Two	4
TOTAL	242
<b>Q. I-6 WATER SUPPLY</b>	
House	2
Yard	2
Truck	16
Standpipe	131
River/Well	9
Rain	60
Other	22
TOTAL	242

<b>Q. I-7 STORAGE</b>	
(Facility)	
Yes	196
No	46
TOTAL	242
(Capacity, gallons)	
0-50	45
51-100	18
101-200	15
201-300	6
301-500	72
501-700	8
701-900	15
> 900	16
NA	46
NS	1
TOTAL	242
<b>Q. I-8 CONNECTION</b>	
Yes	0
No	242
TOTAL	242
<b>Q. I-8 SYSTEM</b>	
WASA	0
Private	0
NA	242
TOTAL	242
<b>Q. III-1 WATER</b>	
Truck	26
Standpipe	149
Spring/River	14
Rain	30
Wells	2
Other	21
TOTAL	242
<b>Q. III-2 CONTAINER</b>	
(Type)	
Bucket	107
Barrel	99
Bottle	18
Tank	8
Drum	6
NS	4
TOTAL	242
(Number)	
1	92
2	61
3	19
4	10
5	20
6	9
7	6
8	6
9	4
10	6
> 10	8
NS	1
TOTAL	242
(Capacity, gallons)	
1	1
2	9
3	38
4	30
5	38
6	2
8	2
10-19	11
20-29	8
30-39	8
40-49	80
50-59	6
60-69	3
70-79	1
80-89	3
90-99	2
TOTAL	242

<b>(Price, TT\$)</b>	
0	225
1	2
2	1
3	2
5	5
10	2
20	3
25	1
30	1
TOTAL	242
<b>Q. III-3 STANDPIPE USER</b>	
(Container Type)	
Bucket	118
Barrel	14
Bottle	34
Tank	1
Drum	2
Other	2
NA	69
NS	2
TOTAL	242
(Capacity, gallons)	
1	3
2	14
3	45
4	39
5	56
6	3
NA	72
NS	10
TOTAL	242
(Number of Container)	
1	47
2	87
3	8
4	9
5	8
6	3
7	1
NA	71
NS	8
TOTAL	242
<b>Q. III-4 TRANSPORTATION</b>	
By Hand	135
Push-cart	16
M/Vehicle	19
Other	3
NA	67
NS	2
TOTAL	242
<b>Q. III-5 DISTANCE</b>	
(yards)	
0-30	22
31-60	20
61-100	19
101-200	24
201-500	55
501-1000	14
> 1000	14
NA	69
NS	5
TOTAL	242
<b>Q. III-6 PERSONS A TRIP</b>	
1	110
2	31
3	14
4	11
5	3
6	1
7	1
NA	70
NS	1
TOTAL	242

<b>Q. III-7 TIME FOR TRIP</b>	
0-10 Minutes	70
11-20 Minute	41
21-30 Minute	34
31-60 Minute	16
> 1 Hour	9
NA	69
NS	3
TOTAL	242
<b>Q. III-8 DISPOSAL</b>	
Canal/Drain	234
Sewer	6
NS	2
TOTAL	242
<b>Q. III-9 WATER MAIN</b>	
Yes	79
No	162
NS	1
TOTAL	242
<b>Q. III-10 SERVICES</b>	
(Water)	
Yes	168
No	70
NS	4
TOTAL	242
(Sewerage)	
Yes	101
No	111
NS	30
TOTAL	242
<b>Q. III-11 REQUEST</b>	
(Water)	
Yes	40
No	193
NS	9
TOTAL	242
(Sewerage)	
Yes	19
No	176
NS	47
TOTAL	242
<b>Q. III-12 PROBLEMS</b>	
Turned Down	2
No Main Pipe	4
No Money	5
New Request	2
Lease Land	2
No Response	10
Other	12
NA	203
NS	2
TOTAL	242
<b>Q. III-13 TREATMENT</b>	
Yes	89
No	152
NA	1
TOTAL	242
<b>Q. III-13 METHOD</b>	
Boil	91
NA	149
NS	2
TOTAL	242
<b>Q. III-14 OCCUPATION</b>	
(Worker 1)	
Code Number	0
	72
	13
	1
	14
	1
	17
	1
	21
	1
	31
	1
	32
	2
	36
	1
	39
	3

<b>Code Number</b>	
41	4
45	8
54	2
58	9
59	5
61	11
62	1
64	1
69	21
70	4
71	1
77	1
79	1
84	2
85	1
87	3
93	2
95	17
97	2
98	11
99	52
TOTAL	242
(Worker 2)	
Code Number	0
	186
	3
	30
	33
	39
	43
	45
	53
	55
	57
	61
	62
	69
	71
	77
	79
	81
	84
	85
	87
	93
	95
	98
	99
TOTAL	242
(Worker 3)	
Code Number	0
	232
	53
	54
	55
	77
	87
	95
	99
TOTAL	242
(Worker 4)	
Code Number	0
	238
	45
	64
	87
	99
TOTAL	242
(Worker 5)	
Code Number	0
	241
	99
TOTAL	242

<b>Q. III-14 WORKER TYPE</b>	
(Worker 1)	
Employee	104
Selfemployee	40
Other	1
NA	92
NS	5
TOTAL	242
(Worker 2)	
Employee	40
Selfemployee	10
NA	190
NS	2
TOTAL	242
(Worker 3)	
Employee	8
NA	232
NS	2
TOTAL	242
(Worker 4)	
Employee	2
Selfemployee	1
NA	238
NS	1
TOTAL	242
(Worker 5)	
NA	241
NS	1
TOTAL	242
<b>Q. III-14 INCOME</b>	
(Worker 1)	
(TT \$, monthly)	
None	92
1-250	6
251-500	16
501-750	11
751-1000	29
1001-1500	42
1501-2000	13
2001-2500	2
2501-3000	1
3001-3500	4
NS	26
TOTAL	242
(Worker 2)	
(TT \$, monthly)	
None	190
1-250	3
251-500	7
501-750	5
751-1000	10
1001-1500	9
1501-2000	7
NS	11
TOTAL	242
(Worker 3)	
(TT \$, monthly)	
None	232
501-750	2
1001-1500	3
NS	5
TOTAL	242
(Worker 4)	
(TT \$, monthly)	
None	238
NS	4
TOTAL	242
(Worker 5)	
(TT \$, monthly)	
None	241
NS	1
TOTAL	242
<b>Q. III-15 METER</b>	
Yes	99
No	83
NA	20
NS	40
TOTAL	242
<b>Q. III-16 ADVERTISEMENT</b>	
Yes	177
No	63
NS	2
TOTAL	242

N.B. NA: Not Applicable  
NS: Not Stated



**RESULTS OF QUESTIONNAIRE SURVEY -- INDUSTRIAL**

<b>Q. 1 ESTABLISHMENT</b> (Code Number)		<b>Q. 3 NO. OF EMPLOYEE</b>			<b>Q. 9 WATER SYSTEM</b>		
0	6	0	5	3500	1	1501-2000	2
301	2	1-10	108	3600	1	2001-3000	7
307	5	11-20	58	4000	2	3001-4000	8
311	2	21-30	39	4200	2	4001-5000	3
312	3	31-50	24	4800	1	5001-7000	6
313	1	51-100	22	6000	1	7001-10000	5
314	1	101-200	8	8000	1	10001-20000	5
321	1	201-600	4	10000	2	20001-40000	4
322	4	NS	3	13000	1	>40001	3
323	2	TOTAL	271	20000	3	NA	39
324	1			21000	1	NS	87
331	1	<b>Q. 4 OPERATING HOURS</b>		23000	1	TOTAL	271
332	2	7:00-16:00	40	24000	1		
341	3	8:00-17:00	130	25000	1	<b>Q. 10 HOURS</b>	
342	4	9:00-16:00	6	30000	1	24 Hours	142
351	1	6:00-18:00	41	35000	1	17-23 Hours	10
352	1	5:00-24:00	31	40000	1	12-16 Hours	17
353	3	> 16 hours	4	NA	92	< 12 Hours	81
357	1	24 hours	16	NS	12	None	10
361	1	Other	3	TOTAL	271	NA	4
363	1	TOTAL	271			NS	7
372	1			<b>Q. 7 AMENITIES</b> (Shower)		TOTAL	271
381	2	<b>Q. 5 FLOOR AREA</b> (sq. ft)		Yes	118		
382	2	< 250	9	No	150	<b>Q. 11 DAYS</b>	
383	2	250-500	16	NS	3	7 Days	173
384	2	501-1000	18	TOTAL	271	4-6 Days	46
385	1	1001-1500	21	(W/C)		1-3 Days	30
511	1	1501-2000	11	Yes	260	None	9
517	1	2001-3000	21	No	8	NA	5
610	2	3001-4000	19	NS	3	NS	8
612	1	4001-5000	16	TOTAL	271	TOTAL	271
614	1	5001-7500	22	(Other Amenities)			
616	1	7501-10000	17	Yes	36	<b>Q. 12 WATER PRESSURE</b>	
617	1	10001-15000	12	No	232	Very Good	20
619	7	15001-20000	10	NS	3	Good	134
621	12	20001-30000	9	TOTAL	271	Fair	51
622	7	30001-50000	5			Poor	46
623	1	50001-100000	5			NA	11
624	15	> 100000	7	<b>Q. 8 NUMBER OF TAPS</b>		NS	9
626	11	NS	53	0	4	TOTAL	271
627	5	TOTAL	271	1	23		
628	23			2	42	<b>Q. 13 WATER QUALITY</b> (Color)	
629	12	<b>Q. 6 STORAGE FACILITY</b>		3	36	Clear	193
631	10	Yes	178	4	39	Discolored	62
632	9	No	92	5	27	NA	10
639	1	NS	1	6	29	NS	6
711	4	TOTAL	271	7	10	TOTAL	271
712	1			8	7	(Odor)	
713	4	<b>Q. 6 STORAGE CAPACITY</b> (gallons)		9	2	Distinct	37
714	1	10	1	10	7	Odorless	199
719	3	45	1	11	3	NA	10
811	8	100	1	12	10	NS	25
812	1	200	2	13	10	TOTAL	271
821	12	250	3	14	2	<b>Q. 14 WATER METER</b>	
831	1	300	3	15	2	Yes	46
832	10	350	1	16	2	No	206
833	6	400	41	17	1	NA	2
834	3	450	5	18	2	NS	17
911	1	500	4	20	2	TOTAL	271
920	2	600	2	21	2		
931	5	700	2	22	2	<b>Q. 15 BILLS</b>	
932	1	800	28	24	2	Yes	209
934	2	900	1	29	1	No	50
937	2	1000	4	30	1	NA	7
939	1	1200	12	35	1	NS	5
941	2	1400	3	57	1	TOTAL	271
943	1	1500	2	65	2	<b>Q. 16 WATER RATE</b> (TT \$, Quarterly)	
949	3	1600	9	140	1	≤100	4
951	8	2000	7	150	1	101-200	15
952	1	2200	1	531	1	201-300	8
959	8	2400	4	TOTAL	271	301-400	6
960	2	2800	1			401-500	15
999	1	3000	6	<b>Q. 9 CONNECTION</b>		501-600	10
TOTAL	271	3400	1	Yes	266	601-700	23
				No	5	701-800	7
				TOTAL	271	801-1000	5
						1001-1200	6
						1201-1500	3

N. B. NA: Not Applicable  
NS: Not Stated

## OCCUPATION CODES

### MAJOR DIVISION 0/1: PROFESSIONAL, TECHNICAL AND RELATED WORKERS

0-1 Physical scientists and related technicians  
0-2/0-3 Architects, engineers and related technicians  
0-4 Aircraft and ships' officers  
0-5 Life scientists and related technicians  
0-6/0-7 Medical, dental, veterinary and related workers  
0-8 Statisticians, mathematicians, systems analysts and related technicians  
0-9 Economists

1-1 Accountants  
1-2 Jurists  
1-3 Teachers  
1-4 Workers in religion  
1-5 Authors, Journalists and related writers  
1-6 Sculptors, painters, photographers and relative creative artists  
1-7 Composers and performing artistes  
1-8 Athletes, sportsmen and related workers  
1-9 Professional, technical and related workers not elsewhere classified

### MAJOR DIVISION 2: ADMINISTRATIVE AND MANAGERIAL WORKERS

2-0 Legislative officials and government administrators  
2-1 Managers

### MAJOR DIVISION 3: CLERICAL AND RELATED WORKERS

3-0 Clerical supervisors  
3-1 Government executive officials  
3-2 Stenographers, typists and card and tape-punching machine operators  
3-3 Book-keepers, cashiers and related workers  
3-4 Computing machine operators  
3-5 Transport and communications supervisors  
3-6 Transport conductors  
3-7 Mail distribution clerks  
3-8 Telephone and telegraph operators  
3-9 Clerical and related workers not elsewhere classified

MAJOR DIVISION 4: SALES WORKERS

4-0 Managers (wholesale and retail trade)  
4-1 Working proprietors (wholesale and retail trade)  
4-2 Sales supervisors and buyers  
4-3 Technical salesmen, commercial travellers and manufacturers'  
agents  
4-4 Insurance, real estate, securities and business services salesmen  
and auctioneers  
4-5 Salesmen, shop assistants and related workers  
4-9 Sales workers not elsewhere classified

MAJOR DIVISION 5: SERVICE WORKERS

5-0 Managers (catering and lodging services)  
5-1 Working proprietors (catering and lodging services)  
5-2 Housekeeping and related service supervisors  
5-3 Cooks, waiters, bartenders and related workers  
5-4 Maids and related housekeeping service workers not elsewhere  
classified  
5-5 Building caretakers, charworkers, cleaners and related workers  
5-6 Launderers, dry-cleaners and pressers  
5-7 Hairdressers, barbers, beauticians and related workers  
5-8 Protective service workers  
5-9 Service workers not elsewhere classified

MAJOR DIVISION 6: AGRICULTURAL ANIMAL HUSBANDRY AND FORESTRY WORKERS,  
FISHERMEN AND HUNTERS (except group 6-9)

6-0 Farm managers and supervisors  
6-1 Farmers  
6-2 Agricultural and animal husbandry workers  
6-3 Forestry workers  
6-4 Fishermen, hunters and related workers  
6-9 Pensioner

MAJOR DIVISIONS 7, 8, 9: PRODUCTION AND RELATED WORKERS, TRANSPORT  
EQUIPMENT OPERATORS AND LABOURERS

7-0 Production supervisors and general foremen  
7-1 Miners, quarrymen, well drillers and related workers  
7-2 Metal processors  
7-3 Wood preparation workers and paper makers  
7-4 Chemical processors and related workers  
7-5 Spinners, weavers, knitters, dyers and related workers  
7-6 Tanners, felmongers and pelt dressers  
7-7 Food and beverage processors  
7-8 Tobacco preparers and tobacco product makers  
7-9 Tailors, dressmakers, sewers, upholsterers and related workers

7, 8, 9: Production and Related Workers, Transport Equipment Operators and Labourers - Continued

- 8-0 Shoemakers and leather goods makers
- 8-1 Cabinet makers and related wood workers
- 8-2 Stone cutters and cavers
- 8-3 Blacksmiths, toolmakers and machine tool operators
- 8-4 Machinery fitters, machine assemblers and precision instrument makers (except electrical)
- 8-5 Electrical fitters and related electrical and electronics workers
- 8-6 Broadcasting station and sound equipment operators and cinema projectionists
- 8-7 Plumbers, welders, sheet metal and structural metal preparers and erectors
- 8-8 Jewellery and precious metal workers
- 8-9 Glass formers, potters and related workers
  
- 9-0 Rubber and plastic products makers
- 9-1 Paper and paperboard products makers
- 9-2 Printers and related workers
- 9-3 Painters
- 9-4 Production and related workers not elsewhere classified
- 9-5 Bricklayers, carpenters and other construction workers
- 9-6 Stationary engine and related equipment operators
- 9-7 Material-handling and related equipment operators, dockers and freight handlers
- 9-8 Transport equipment operators
- 9-9 Labourers not elsewhere classified and workers not classifiable by occupation.

## INDUSTRY CODES

### MAJOR DIVISION 1: AGRICULTURE, HUNTING, FORESTRY AND FISHING

#### Division 10/11/12 Agricultural and Livestock Production

101-109	Field Crop Cultivation
111	Root Crop Cultivation
112-119	Growing of Fruits and Vegetables
121	Poultry Production
122	Pig Rearing
123	Cattle Rearing
124	Small Stocks
125	Agricultural, Animal Husbandry and Horticultural Services
126-128	Other Agricultural and Livestock Production

#### Division 13 - Forestry and Logging

131	Forestry and Logging
132	Forestry Related Activities

#### Division 14 - Fishing

140	Fishing
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#### Division 15 - Hunting, Trapping and Game Propagation

150	Hunting, Trapping and Game Propagation
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### MAJOR DIVISION 2: MINING AND QUARRYING

#### Division 21 - Coal Mining

210	Coal Mining
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#### Division 22 - Crude Petroleum and Natural Gas Production

221	Crude Petroleum Production
222	Natural Gas Production
223	Service Contractors

#### Division 23 - Metal Ore Mining

230	Metal Ore Mining
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MAJOR DIVISION 2: MINING AND QUARRYING - Continued

Division 24 - Quarrying

240 Quarrying

Division 29 - Other Mining and Quarrying

290 Other Mining and Quarrying

MAJOR DIVISION 3: MANUFACTURING

Division 30/31 - Manufacture of Food

301 Slaughtering, preparing and preserving meat.  
302 Manufacture of dairy products.  
303 Canning and Processing of fruits and vegetables.  
304 Canning, preserving and processing of fish, crustacean and similar foods.  
305 Manufacture of vegetable and animal oils and fats.  
306 Grain Mills.  
307 Manufacture of bakery products.  
308 Sugar Factories and Refineries.  
309 Cocoa, Chocolate and sugar confectionery.  
311 Manufacture of food products n.e.c.  
312 Manufacture of prepared animal feeds.  
313 Alcoholic Beverages.  
314 Non-alcoholic Beverages.  
315 Tobacco Manufactures.

Division 32 - Textiles, Wearing Apparel and Leather Industries

321 Manufacture of Textiles.  
322 Manufacture of wearing apparel except footwear.  
323 Manufacture of leather and products of leather (except footwear and wearing apparel).  
324 Manufacture of footwear, except vulcanized or moulded rubber or plastic footwear.

Division 33 - Manufacture of Wood and Wood Products, including Furniture

331 Manufacture of wood and wood and cork products except furniture.  
332 Manufacture of furniture and fixtures, except primarily of metal.

MAJOR DIVISION 3: MANUFACTURING - Continued

Division 34 - Manufacture of Paper and Paper Products, Printing and Publishing

- 341 Manufacture of paper and paper products.
- 342 Printing, Publishing and allied industries.

Division 35 - Manufacture of Chemicals and of Chemical, Petroleum, Coal, Rubber and Plastic products.

- 351 Manufacture of Industrial Chemicals.
- 352 Manufacture of Paints, Varnishes, lacquers and allied products.
- 353 Manufacture of other chemical products.
- 354 Petroleum Refineries.
- 355 Manufacture of miscellaneous products of petroleum and coal.
- 356 Manufacture of Rubber Products.
- 357 Manufacture of plastic products n.e.c.

Division 36 - Manufacture of Non-metallic Mineral Products Except Products of Petroleum and Coal.

- 361 Manufacture of pottery, china and earthenware.
- 362 Manufacture of glass and glass products.
- 363 Manufacture of cement, concrete and products of concrete and clay.
- 369 Manufacture of other non-metallic mineral products.

Division 37 - Basic Metal Industries

- 371 Iron and Steel basic industries.
- 372 Non-ferrous metal basic industries.
- 379 Basic Metal Industries n.e.c.

Division 38 - Manufacture of Fabricated Metal Products, Machinery and Equipment.

- 381 Manufacture of fabricated metal products except machinery and equipment.
- 382 Manufacture of machinery except electrical.
- 383 Manufacture of electrical machinery, apparatus, appliances or supplies.
- 384 Manufacture of transport equipment.
- 385 Manufacture of professional, scientific, measuring and controlling equipment n.e.c.
- 389 Manufacture of fabricated metal products, machinery and equipment n.e.c.

Division 39 - Other Other Manufacturing Industries.

- 390 Manufacturing Industries n.e.c.

MAJOR DIVISION 4: ELECTRICITY, GAS AND WATER

Division 41 - Electricity, gas, steam and other sources of energy.

410 Electricity, gas, steam and other sources of energy.

Division 42 - Waterworks and Supply

420 Waterworks and supply.

MAJOR DIVISION 5: THE CONSTRUCTION INDUSTRY

Division 51 - Construction

511 Construction, maintenance and alteration of buildings.  
512 Construction and maintenance of Industrial Plants.  
513 Construction and maintenance of electric power stations  
and installations.  
514 Construction and maintenance of crude petroleum and natural  
gas installations.  
515 Construction and maintenance of water reservoirs, irrigation  
systems and installations.  
516 Construction and maintenance of mining sites.  
517 Construction and maintenance of roads, bridges, ports, etc.  
518 Construction and maintenance of communication and other systems.  
519 Construction and maintenance of drainage and reclamation  
systems.

Division 52/53 - Activities allied to Construction.

521 Site preparation and excavation activities.  
522 Structural Steel fabrication and erection.  
523 Concrete mixing and preparation.  
524 Roof and ceiling.  
525 Weather proofing (e.g. mastic asphaltting).  
526 Plumbing.  
527 Electrical Installation.  
528 Air conditioning, insulation and ventilation.  
529 Flooring (carpeting, parquetry).  
531 Painting and decorating.  
532 Lifts and escalators, conveyors, cranes and other transport  
systems.  
533 Glazing.  
534 Installation of windows.  
535 Tiling.  
536 Joinery (kitchen cupboards etc.).  
537 General contractors.  
539 Other activities allied to construction n.e.c.



MAJOR DIVISION 6: WHOLESALE AND RETAIL TRADE RESTAURANTS AND HOTELS

Division 61 - Wholesale Trade

610-611 Food, beverages, tobacco and intoxicants.  
612 Mineral fuels and lubricants.  
613 Wood and wood products.  
614 Textile, wearing apparel, footwear and leather.  
615 Animal and vegetable oils and fats (edible and non-edible).  
616 Light and heavy machinery, vehicles and equipment.  
617 Chemicals, drugs, pharmaceuticals and cosmetics.  
618 Miscellaneous manufactured goods.  
619 Wholesale merchants and distributors.

Division 62 - Retail Trade

621 Food, beverages, tobacco and intoxicants.  
622 Mineral fuels and lubricants.  
623 Wood and wood products.  
624 Textile, wearing apparel, footwear and leather.  
625 Animal and vegetable oils and fats (edible and non-edible).  
626 Light and heavy machinery, vehicles and equipment.  
627 Chemicals, drugs, pharmaceuticals and cosmetics.  
628 Miscellaneous  
629 Miscellaneous

Division 63 - Restaurants, hotels and guest houses

631 Restaurants, cafeterias and other eating and drinking places.  
632 Hotels, rooming houses, camps and other lodging places.  
639 Restaurants and hotels n.e.c.

MAJOR DIVISION 7: TRANSPORT, STORAGE AND COMMUNICATION

Division 71 - Transport and Storage.

711 Land Transport.  
712 Water Transport.  
713 Air Transport.  
714 Storage and Warehousing  
719 Services allied to transport.

Division 72 - Communication.

720 Communication.

MAJOR DIVISION 8: FINANCING, INSURANCE, REAL ESTATE AND BUSINESS SERVICES SECTOR

Division 81 - Financial Institutions.

811 Financial Institutions.

Division 82 - Insurance

821 Insurance.

Division 83 - Real Estate and Business Services.

831 Real Estate.

832/833 Business Services except machinery and equipment rental and leasing.

834 Machinery and equipment rental and leasing.

MAJOR DIVISION 9: COMMUNITY, SOCIAL AND PERSONAL SERVICES SECTOR

Division 91 - Public Administration.

911/912 Public Administration and Defence

Division 92- Sanitary and Similar Services.

920 Sanitary and Similar services.

Division 93 - Social and Related Community Services.

931/932 Educational Services - Government and Private Educational Institutions of all types.

933 Research and Scientific Institutions.

934/935 Medical, dental and other health and veterinary services.

936 Welfare Institutions.

937 Business, Professional and labour associations.

939 Social and related Community Services n.e.c.

Division 94 - Recreational and Cultural Services

941 Motion Picture and other media entertainment services.

942 Music and Theatrical Productions and Services.

943 Independent Artistes.

944 Libraries, Museums, botanical and zoological gardens and other cultural services.

MAJOR DIVISION 9: COMMUNITY, SOCIAL AND PERSONAL SERVICES SECTOR - Continued

Division 94 - Recreational and Cultural Services - Continued.

949           Recreational and Cultural Services n.e.c.

Division 95 - Personal and Household Services.

951/952       Repair Services (Informal Sector).  
953           Laundries, laundry services, cleaning and dyeing services.  
954           Domestic Services.  
959           Miscellaneous, personal and household services.

Division 96 - International and other Extra-territorial Bodies.

960           International and other Extra-territorial Bodies.

MAJOR DIVISION 0: ACTIVITIES NOT ADEQUATELY DEFINED

Division 0 - Activities not adequately defined.

000           Activities not adequately defined



**F: DATA ON WATER CONSUMPTION**





DATA ON WATER CONSUMPTION (1)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person + Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
1	Matool	Aranquez Main Road	5			02/02	12.336		
			5	7	35	09/02	14.350	2.014	57.54
			5	7	35	16/02	16.578	2.228	63.66
			5	5	25	21/02	21.000	4.422	176.88
			5	10	50	03/03	27.578	6.578	131.56
			5	8	40	11/03	33.395	5.817	145.43
			5	12	60	23/03	44.065	10.670	177.83
			5	7	35	30/03	49.197	5.132	146.63
			5	7	35	06/04	54.857	5.660	161.71
			5	20	100	26/04	71.677	16.820	168.20
			5	22	110	18/05	86.927	15.250	138.64
			5	14	70	01/06	94.643	7.716	110.23
			5	19	95	20/06	106.160	11.517	121.23
			5	16	80	06/07	120.851	14.691	183.64
			5	21	105	27/07	133.926	13.075	124.52
			5	68	340	03/10	168.000	34.074	100.22
			243	1,215	-	-	155.664	128.12	
2	S. Garib	Aranquez Main Road	7			02/02	86.053		
			7	7	49	09/02	109.789	23.736	484.41
			7	7	49	16/02	132.125	22.336	455.84
			7	5	35	21/02	149.583	17.458	498.80
			7	10	70	03/03	168.004	18.421	263.16
			7	8	56	11/03	185.620	17.616	314.57
			7	12	84	23/03	208.627	23.007	273.89
			7	7	49	30/03	219.123	10.496	214.20
			7	7	49	06/04	231.475	12.352	252.08
			7	20	140	26/04	272.242	40.767	291.19
			7	22	154	18/05	315.225	42.983	279.11
			7	14	98	01/06	338.296	23.071	235.42
			7	19	133	20/06	387.834	49.538	372.47
			7	16	112	06/07	463.218	75.384	673.07
			7	21	147	27/07	588.821	125.603	854.44
			7	68	476	03/10	670.000	81.179	170.54
			243	1,701	-	-	583.947	343.30	
3	E. Carter	Aranquez Main Road	10			02/02	76.799		
			10	7	70	09/02	99.273	22.474	321.06
			10	7	70	16/02	121.103	21.830	311.86
			10	5	50	21/02	132.434	11.331	226.62
			10	10	100	03/03	148.875	16.441	164.41
			10	8	80	11/03	160.306	11.431	142.89
			10	12	120	23/03	185.588	25.282	210.68
			10	7	70	30/03	198.262	12.674	181.06
			10	7	70	06/04	215.173	16.911	241.59
			10	20	200	26/04	258.274	43.101	215.51
			10	22	220	18/05	296.524	38.250	173.86
			10	14	140	01/06	320.701	24.177	172.69
			10	19	190	20/06	351.643	30.942	182.85
			10	16	160	06/07	381.327	29.684	185.53
			10	21	210	27/07	419.287	37.960	180.76
			10	68	680	03/10	547.000	127.713	187.81
			243	2,430	-	-	470.201	193.50	
4	Adina Mc Donald	Arouca	4			31/01	20.471		
			4	17	68	17/02	31.218	10.747	158.04
			4	7	28	24/02	43.199	11.981	427.89
			4	15	60	11/03	48.000	4.801	80.02
			4	9	36	20/03	54.339	6.339	176.08
			4	17	68	06/04	63.235	8.896	130.82
			4	35	140	11/05	81.361	18.126	129.47
			4	46	184	26/06	105.526	24.165	131.33
			4	100	400	04/10	158.000	52.474	131.19
						246	984	-	-
5	Mannie Gays	Arouca	6			17/02	37.864		
			6	7	42	24/02	45.250	7.386	175.86
			6	9	54	05/03	53.634	8.384	155.26
			6	6	36	11/03	59.686	6.052	168.11
			6	11	66	22/03	71.719	12.033	182.32
			6	6	36	28/03	76.807	5.088	141.33
			6	9	54	06/04	86.756	9.949	184.24
			6	27	162	03/05	111.651	24.895	153.67
			6	22	132	25/05	134.370	22.719	172.11
			6	21	126	15/06	170.226	35.856	284.57
			6	34	204	19/07	224.867	54.641	267.85
			6	77	462	04/10	292.000	67.133	145.31
						229	1,374	-	-



DATA ON WATER CONSUMPTION (2)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
6	Christopher Drakes	Arouca	9			17/02	62.366		
			9	26	234	15/03	116.663	54.297	232.04
			9	26	234	10/04	179.037	62.374	266.56
			9	177	1,593	04/10	573.000	393.963	247.31
			9	229	2,061	-	-	510.634	247.76
7	R. Mathura & Ors.	Arouca	5			17/02	74.825		
			5	7	35	24/02	90.273	15.448	441.37
			5	9	45	05/03	112.835	22.562	501.38
			5	6	30	11/03	125.713	12.878	429.27
			5	11	55	22/03	153.738	28.025	509.55
			5	15	75	06/04	189.961	36.223	482.97
			5	27	135	03/05	258.020	68.059	504.14
			5	22	110	25/05	315.849	57.829	525.72
			5	21	105	15/06	372.629	56.780	540.76
			5	111	555	04/10	676.000	303.371	546.61
			5	229	1,145	-	-	601.175	525.04
8	Mervyn Ramdeen	Arima	6			20/02	333.765		
			6	3	18	23/02	353.425	19.660	1092.22
			6	10	60	05/03	372.695	19.270	321.17
			6	6	36	11/03	380.819	8.124	225.67
			6	9	54	20/03	392.373	11.554	213.96
			6	17	102	06/04	416.263	23.890	234.22
			6	27	162	03/05	473.231	56.968	351.65
			6	54	324	26/06	592.199	118.968	367.19
			6	23	138	19/07	631.385	39.186	283.96
			6	72	432	29/09	744.000	112.615	260.68
			6	221	1,326	-	-	410.235	309.38
			9	Margaret Charles	Arima	2			17/02
2	7	14				24/02	27.766	4.245	303.21
2	9	18				05/03	31.319	3.533	196.28
2	7	14				12/03	36.426	5.107	364.79
2	10	20				22/03	42.083	5.657	282.85
2	6	12				28/03	47.661	5.578	464.83
2	9	18				06/04	52.553	4.892	271.78
2	27	54				03/05	72.537	19.984	370.07
2	41	82				13/06	94.374	21.837	266.30
2	36	72				19/07	117.394	23.020	319.72
2	152	304	-	-	93.853	308.73			
10	Kenneth Blache	Arima Old Rd.	5			31/01	27.941		
			5	11	55	11/02	39.902	11.961	217.47
			5	6	30	17/02	47.434	7.532	251.07
			5	7	35	24/02	57.417	9.983	285.23
			5	9	45	05/03	69.855	12.438	276.40
			5	6	30	11/03	79.933	10.078	335.93
			5	9	45	20/03	90.131	10.198	226.62
			5	8	40	28/03	103.046	12.915	322.88
			5	9	45	06/04	117.714	14.668	325.96
			5	35	175	11/05	173.354	55.640	317.94
			5	14	70	25/05	195.681	22.327	318.96
			5	21	105	15/06	226.087	30.406	289.58
			5	34	170	19/07	280.636	54.549	320.88
			5	80	400	07/10	378.000	97.364	243.41
5	249	1,245	-	-	350.059	281.17			
11	Bobby Thomas	Arima	2			14/02	17.968		
			2	3	6	17/02	18.953	0.985	164.17
			2	7	14	24/02	23.548	4.595	328.21
			2	9	18	05/03	27.537	3.989	221.61
			2	7	14	12/03	31.858	4.321	308.64
			2	8	16	20/03	37.765	5.907	369.19
			2	17	34	06/04	50.422	12.657	372.26
			2	35	70	11/05	75.258	24.836	354.80
			2	46	92	26/06	103.149	27.891	303.16
			2	23	46	19/07	115.154	12.005	260.98
			2	84	168	11/10	145.000	29.846	177.65
			2	239	478	-	-	127.032	265.76
12	Roy R. De Landro	Nettoville, Arima	8			13/02	73.737		
			8	4	32	17/02	82.143	8.406	262.69
			8	7	56	24/02	95.595	13.452	240.21
			8	9	72	05/03	114.800	19.205	266.74
			8	7	56	12/03	130.468	15.668	279.79
			8	8	64	20/03	147.088	16.620	259.69
			8	8	64	28/03	165.769	18.681	291.89
			8	9	72	06/04	185.570	19.801	275.01
			8	27	216	03/05	243.743	58.173	269.32

DATA ON WATER CONSUMPTION (3)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
			8	41	328	13/06	333.277	89.534	272.97
			8	36	288	19/07	429.212	95.935	333.11
			8	84	672	07/10	632.000	202.788	301.77
			8	240	1,920	-	-	558.263	290.76
13	Mustapha Ackbarali	Barataria	5	5	25	21/02	0.984		
			5	10	50	03/03	18.332	17.348	346.96
			5	7	35	10/03	29.820	11.488	328.23
			5	14	70	24/03	52.202	22.382	319.74
			5	7	35	31/03	62.386	10.184	290.97
			5	6	30	06/04	74.497	12.111	403.70
			5	28	140	04/05	130.237	55.740	398.14
			5	12	60	16/05	152.900	22.663	377.72
			5	16	80	01/06	182.784	29.884	373.55
			5	19	95	20/06	214.453	31.669	333.36
			5	107	535	05/10	396.000	181.547	339.34
			5	226	1,130	-	-	395.016	349.57
14	C. & L. Celestine	Barataria	3	3	9	02/02	29.339		
			3	7	21	09/02	37.561	8.222	391.52
			3	7	21	16/02	45.634	8.073	384.43
			3	5	15	21/02	53.682	8.048	536.53
			3	10	30	03/03	61.666	7.984	266.13
			3	7	21	10/03	70.771	9.105	433.57
			3	6	18	16/03	79.910	9.139	507.72
			3	8	24	24/03	89.508	9.598	399.92
			3	7	21	31/03	95.784	6.276	298.86
			3	6	18	06/04	103.091	7.307	405.94
			3	28	84	04/05	143.176	40.085	477.20
			3	14	42	18/05	164.181	21.005	500.12
			3	14	42	01/06	183.259	19.078	454.24
			3	19	57	20/06	211.534	28.275	496.05
			3	16	48	06/07	235.708	24.174	503.63
			3	91	273	05/10	381.000	145.292	532.21
			3	245	735	-	-	351.661	478.45
15	Martin David	Cantaro, Santa Cruz	6	6	36	02/02	36.172		
			6	7	42	09/02	50.407	14.235	338.93
			6	7	42	16/02	60.285	9.878	235.19
			6	5	30	21/02	69.873	9.588	319.60
			6	16	96	09/03	94.546	24.673	257.01
			6	14	84	23/03	117.272	22.726	270.55
			6	11	66	03/04	137.344	20.072	304.12
			6	3	18	06/04	143.125	5.781	321.17
			6	20	120	26/04	181.946	38.821	323.51
			6	22	132	18/05	228.295	46.349	351.13
			6	14	84	01/06	248.402	20.107	239.37
			6	38	228	09/07	312.115	63.713	279.44
			6	18	108	27/07	342.915	30.800	285.19
			6	74	444	09/10	472.000	129.085	290.73
			6	249	1,494	-	-	435.828	291.72
16	R. D. Baker	Cantaro, Santa Cruz	6	6	36	02/02	68.871		
			6	8	48	10/02	88.313	19.442	405.04
			6	6	36	16/02	102.209	13.896	386.00
			6	5	30	21/02	124.607	22.398	746.60
			6	14	84	07/03	152.438	27.831	331.32
			6	2	12	09/03	157.713	5.275	439.58
			6	14	84	23/03	188.493	30.780	366.43
			6	11	66	03/04	209.031	20.538	311.18
			6	3	18	06/04	214.161	5.130	285.00
			6	42	252	18/05	298.794	84.633	335.85
			6	14	84	01/06	322.191	23.397	278.54
			6	20	120	21/06	357.989	35.798	298.32
			6	18	108	09/07	399.592	41.603	385.21
			6	18	108	27/07	441.013	41.421	383.53
			6	74	444	09/10	583.000	141.987	319.79
			6	249	1,494	-	-	514.129	344.13
17	Victor Bowen	Diamond Vale	5	5	25	17/02	37.496		
			5	7	35	24/02	44.817	7.321	209.17
			5	9	45	05/03	54.166	9.349	207.76
			5	6	30	11/03	61.788	7.622	254.07
			5	8	40	19/03	69.362	7.574	189.35
			5	17	85	05/04	88.390	19.028	223.86
			5	22	110	27/04	125.200	36.810	334.64
			5	19	95	16/05	148.475	23.275	245.00
			5	51	255	06/07	206.456	57.981	227.38
			5	139	695	-	-	168.960	243.11

DATA ON WATER CONSUMPTION (4)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
18	Clyde & R. Reid	Diamond Vale	7			17/02	58.785		
			7	7	49	24/02	75.832	17.047	347.90
			7	9	63	05/03	102.888	27.056	429.46
			7	6	42	11/03	116.422	13.534	322.24
			7	8	56	19/03	137.718	21.296	380.29
			7	17	119	05/04	174.103	36.385	305.76
			7	22	154	27/04	244.100	69.997	454.53
			7	21	147	18/05	281.423	37.323	253.90
			7	33	231	20/06	378.559	97.136	420.50
			7	16	112	06/07	423.505	44.946	401.30
			7	139	973	-	364.720	374.84	
19	Howard Graves	Diamond Vale	2			17/02	17.871		
			2	7	14	24/02	20.865	2.994	213.86
			2	9	18	05/03	26.223	5.358	297.67
			2	6	12	11/03	30.252	4.029	335.75
			2	8	16	19/03	35.329	5.077	317.31
			2	17	34	05/04	45.244	9.915	291.62
			2	29	58	04/05	59.412	14.168	244.28
			2	12	24	16/05	66.051	6.639	276.63
			2	16	32	01/06	74.677	8.626	269.56
			2	19	38	20/06	85.733	11.056	290.95
			2	16	32	06/07	95.543	9.810	306.56
			2	139	278	-	-	77.672	279.40
			20	E. I. Goodridge	Diamond Vale	4			17/02
4	7	28				24/02	85.751	12.496	446.29
4	9	36				05/03	99.969	14.218	394.94
4	6	24				11/03	105.795	5.826	242.75
4	8	32				19/03	116.137	10.342	323.19
4	17	68				05/04	135.456	19.319	284.10
4	47	188				-	-	62.201	330.86
21	P. Chandan-Dass	El Socorro	13			09/02	117.733		
			13	7	91	16/02	156.882	39.149	430.21
			13	5	65	21/02	187.167	30.285	465.92
			13	9	117	02/03	229.207	42.040	359.32
			13	8	104	10/03	274.963	45.756	439.96
			13	24	312	03/04	392.409	117.446	376.43
			13	3	39	06/04	406.474	14.065	360.64
			13	28	364	04/05	542.737	136.263	374.35
			13	12	156	16/05	610.823	68.086	436.45
			13	35	455	20/06	816.901	206.078	452.92
			13	16	208	06/07	921.554	104.653	503.14
			13	88	1,144	02/10	1,438.000	516.446	451.44
			13	235	3,055	-	-	1,320.267	432.17
22	Peter Fifi	Glencoe	7			02/02	115.985		
			7	7	49	09/02	129.212	13.227	269.94
			7	7	49	16/02	135.178	5.956	121.76
			7	5	35	21/02	143.051	7.873	224.94
			7	16	112	09/03	161.987	18.936	169.07
			7	21	147	30/03	184.117	22.130	150.54
			7	7	49	06/04	195.585	11.468	234.04
			7	20	140	26/04	234.770	39.185	279.89
			7	20	140	16/05	280.674	45.904	327.89
			7	16	112	01/06	308.777	28.103	250.92
			7	19	133	20/06	360.955	52.178	392.32
			7	16	112	06/07	393.590	32.635	291.38
			7	92	644	06/10	642.000	248.410	385.73
			7	246	1,722	-	-	526.015	305.47
23	Margaret R. Rapier	Goodwood Park	4			02/02	35.420		
			4	7	28	09/02	43.697	8.277	295.61
			4	7	28	16/02	55.039	11.342	405.07
			4	42	168	30/03	122.326	67.287	400.52
			4	7	28	06/04	135.064	12.738	454.93
			4	56	224	01/06	263.658	128.594	574.08
			4	19	76	20/06	328.163	64.505	848.75
			4	16	64	06/07	368.264	40.101	626.58
			4	154	616	-	-	332.844	540.33
24	Peter & Donna Stone	Goodwood Park	5			02/02	38.976		
			5	7	35	09/02	49.172	10.196	291.31
			5	7	35	16/02	58.218	9.046	258.46
			5	5	25	21/02	66.929	8.711	348.44
			5	16	80	09/03	90.395	23.466	293.32
			5	21	105	30/03	124.882	34.487	328.45
			5	7	35	06/04	139.191	14.309	408.83
			5	56	280	01/06	223.186	83.995	299.98

DATA ON WATER CONSUMPTION (5)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
			5	119	595	-	-	184.210	309.60
25	Valantine Modeste	La Florisante	2	17	34	31/01	5.939		
			2	16	32	17/02	11.587	5.648	166.12
			2	15	30	05/03	17.030	5.443	170.09
			2	17	34	20/03	27.219	10.189	339.63
			2	17	34	06/04	37.697	10.478	308.18
			2	35	70	11/05	60.726	23.029	328.99
			2	46	92	26/06	104.756	44.030	478.59
			2	23	46	19/07	114.842	10.086	219.26
			2	169	338	-	-	108.903	322.20
26	Dooban Ramdehal	La Resource Road South	6	6	36	11/02	67.025		
			6	7	42	17/02	83.714	16.689	463.58
			6	26	156	24/02	103.292	19.578	466.14
			6	15	90	22/03	176.076	72.784	466.56
			6	49	294	06/04	223.783	47.707	530.08
			6	19	114	25/05	395.201	171.418	583.05
			6	36	216	13/06	458.426	63.225	554.61
			6	158	948	19/07	551.080	92.654	428.95
			6	158	948	-	-	484.055	510.61
27	Phillip Deterville	La Resource Road South	2	11	22	31/01	6.675		
			2	6	12	11/02	13.484	6.809	309.50
			2	7	14	17/02	17.677	4.193	349.42
			2	16	32	24/02	21.844	4.167	237.64
			2	8	16	12/03	31.756	9.912	309.75
			2	17	34	20/03	37.826	6.070	379.38
			2	68	136	06/04	54.023	16.197	476.38
			2	36	72	13/06	99.090	45.067	331.38
			2	169	338	19/07	140.420	41.330	574.03
			2	169	338	-	-	133.745	395.70
28	Rookmin Moosai	Macoya Main Road	7	3	21	17/02	110.778		
			7	3	21	20/02	117.317	6.539	311.38
			7	10	70	23/02	123.248	5.931	282.43
			7	17	119	05/03	144.939	21.691	309.87
			7	6	42	22/03	179.506	34.567	290.48
			7	7	49	28/03	195.761	16.255	387.02
			7	29	203	04/04	208.613	12.852	262.29
			7	22	154	03/05	269.861	61.248	301.71
			7	14	98	25/05	286.625	16.764	108.86
			7	7	49	08/06	318.209	31.584	322.29
			7	34	238	15/06	335.268	17.059	348.14
			7	152	1,064	19/07	423.143	87.875	369.22
			7	152	1,064	-	-	312.365	293.58
29	Arthur Teleford	Macoya	7	3	21	17/02	69.419		
			7	3	21	20/02	78.111	8.692	413.90
			7	10	70	23/02	84.789	6.678	318.00
			7	6	42	05/03	106.208	21.419	305.99
			7	11	77	11/03	124.732	18.524	441.05
			7	6	42	22/03	151.510	26.778	347.77
			7	9	63	28/03	165.028	13.518	321.86
			7	27	189	06/04	186.007	20.979	333.00
			7	22	154	03/05	253.162	67.155	355.32
			7	14	98	25/05	301.331	48.169	312.79
			7	7	49	08/06	331.171	29.840	304.49
			7	34	238	15/06	347.002	15.831	323.08
			7	152	1,064	19/07	429.536	82.534	346.78
			7	152	1,064	-	-	360.117	338.46
30	Partap Boodoo	Tacarigua	4	7	28	17/02	33.687		
			4	9	36	24/02	42.924	9.237	329.89
			4	6	24	05/03	55.620	12.696	352.67
			4	11	44	11/03	62.253	6.633	276.38
			4	15	60	22/03	75.595	13.342	303.23
			4	35	140	06/04	95.985	20.390	339.83
			4	35	140	11/05	149.692	53.707	383.62
			4	11	44	15/06	202.117	52.425	374.46
			4	23	92	26/06	231.619	29.502	670.50
			4	152	608	19/07	257.151	25.532	277.52
			4	152	608	-	-	223.464	367.54
31	L. Andrews	Tacarigua	2	9	18	20/02	16.197		
			2	10	20	01/03	20.332	4.135	229.72
			2	11	22	11/03	25.018	4.686	234.30
			2	15	30	22/03	29.436	4.418	200.82
			2	35	70	06/04	37.968	8.532	284.40
			2	46	92	11/05	50.564	12.596	179.94
			2	46	92	26/06	72.692	22.128	240.52

DATA ON WATER CONSUMPTION (6)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
			2	23	46	19/07	86.101	13.409	291.50
			2	149	298	-	-	69.904	234.58
32	Ellis Baptiste	Trincity	5	5	25	17/02	14.591	4.308	107.70
			5	8	40	25/02	18.899	5.041	126.03
			5	8	40	05/03	23.940	3.943	112.66
			5	7	35	12/03	27.883	5.208	104.16
			5	10	50	22/03	33.091	3.929	130.97
			5	6	30	28/03	37.020	3.182	79.55
			5	8	40	05/04	40.202	23.794	132.19
			5	36	180	11/05	63.996	29.865	129.85
			5	46	230	26/06	93.861	13.264	115.34
			5	23	115	19/07	107.125	92.534	121.76
			5	152	760	-	-	-	-
33	John Haynes	Trincity	4	4	17	17/02	56.974	8.081	288.61
			4	7	28	24/02	65.055	6.933	346.65
			4	5	20	01/03	71.988	6.681	417.56
			4	4	16	05/03	78.669	9.538	397.42
			4	6	24	11/03	88.207	12.967	294.70
			4	11	44	22/03	101.174	9.717	404.88
			4	6	24	28/03	110.891	9.474	296.06
			4	8	32	05/04	120.365	49.779	345.69
			4	36	144	11/05	170.144	70.441	382.83
			4	46	184	26/06	240.585	32.209	350.10
			4	23	92	19/07	272.794	215.820	354.97
			4	152	608	-	-	-	-
34	M. & Mungal Singh	Tunapuna	7	7	49	17/02	74.480	8.520	202.86
			7	6	42	23/02	83.000	17.523	250.33
			7	10	70	05/03	100.523	11.167	265.88
			7	6	42	11/03	111.690	20.659	268.30
			7	11	77	22/03	132.349	9.881	235.26
			7	6	42	28/03	142.230	10.907	222.59
			7	7	49	04/04	153.137	257.724	292.96
			7	51	357	25/05	257.724	27.820	283.88
			7	14	98	08/06	285.544	40.716	323.14
			7	18	126	26/06	326.260	70.620	373.65
			7	27	189	23/07	396.880	160.120	326.78
			7	70	490	01/10	557.000	482.520	305.01
			7	226	1,582	-	-	-	-
35	S. & M. Sookoo	Tunapuna	6	6	36	17/02	61.142	15.751	437.53
			6	6	36	23/02	76.893	24.807	258.41
			6	16	96	11/03	101.700	16.200	245.45
			6	11	66	22/03	117.900	6.167	171.31
			6	6	36	28/03	124.067	8.293	197.45
			6	7	42	04/04	132.360	42.564	244.62
			6	29	174	03/05	174.924	26.671	202.05
			6	22	132	25/05	201.595	28.610	340.60
			6	14	84	08/06	230.205	9.782	232.90
			6	7	42	15/06	239.987	24.364	369.15
			6	11	66	26/06	264.351	38.174	235.64
			6	27	162	23/07	302.525	90.475	215.42
			6	70	420	01/10	393.000	331.858	244.73
			6	226	1,356	-	-	-	-
36	Rupert Alfred Walker	Tunapuna	2	2	12	17/02	27.484	2.663	443.83
			2	3	6	20/02	30.147	1.853	308.83
			2	3	6	23/03	32.000	7.812	390.60
			2	10	20	05/03	39.812	12.768	375.53
			2	17	34	22/03	52.580	4.287	357.25
			2	6	12	28/03	56.867	7.099	507.07
			2	7	14	04/04	63.966	28.753	388.55
			2	37	74	11/05	92.719	28.205	402.93
			2	35	70	15/06	120.924	24.404	358.88
			2	34	68	19/07	145.328	117.844	387.64
			2	152	304	-	-	-	-
37	Albert Lee	Valsayn Park	6	6	36	02/02	26.714	10.717	223.27
			6	8	48	10/02	37.431	10.267	285.19
			6	6	36	16/02	47.698	8.829	245.25
			6	6	36	22/02	56.527	8.010	166.88
			6	8	48	02/03	64.537	8.915	185.73
			6	8	48	10/03	73.452	16.166	449.06
			6	6	36	16/03	89.618	21.050	250.60
			6	14	84	30/03	110.668	9.545	265.14
			6	6	36	05/04	120.213	87.243	290.81
			6	50	300	25/05	207.456	38.297	265.95
			6	24	144	18/06	245.753	-	-

DATA ON WATER CONSUMPTION (7)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
			6	21	126	09/07	348.478	102.725	815.28
			6	39	234	17/08	420.955	72.477	309.73
			6	53	318	09/10	518.000	97.045	305.17
			6	249	1,494	-	-	491.286	328.84
38	Anthony Vierra	Victoria Gdns.	2			02/02	14.789		
			2	9	18	11/02	21.612	6.823	379.06
			2	5	10	16/02	25.890	4.278	427.80
			2	5	10	21/02	29.667	3.777	377.70
			2	16	32	09/03	45.022	15.355	479.84
			2	21	42	30/03	70.281	25.259	601.40
			2	7	14	06/04	77.963	7.682	548.71
			2	40	80	16/05	132.472	54.509	681.36
			2	16	32	01/06	155.678	23.206	725.19
			2	19	38	20/06	182.229	26.551	698.71
			2	16	32	06/07	208.861	26.632	832.25
			2	92	184	06/10	354.000	145.139	788.80
			2	246	492	-	-	339.211	689.45
40	Roopchan Ramsingh	Barataria	4			02/02	80.374		
			4	8	32	10/02	109.909	29.535	922.97
			4	9	36	19/02	160.055	50.146	1392.94
			4	12	48	03/03	205.072	45.017	937.85
			4	21	84	24/03	282.031	76.959	916.18
			4	7	28	31/03	301.998	19.967	713.11
			4	6	24	06/04	324.558	22.560	940.00
			4	20	80	25/04	387.527	62.969	787.11
			4	22	88	18/05	400.778	13.251	150.58
			4	14	56	01/06	411.825	11.047	197.27
			4	20	80	21/06	437.819	25.994	324.93
			4	15	60	06/07	464.339	26.520	442.00
			4	21	84	27/07	546.148	81.809	973.92
			4	70	280	05/10	655.000	108.852	388.76
			4	245	980	-	-	574.626	586.35
41	Earl Bhagan	Goodwood Park	6			16/02	101.433		
			6	5	30	21/02	119.366	17.933	597.77
			6	44	264	06/04	235.220	115.854	438.84
			6	20	120	26/04	280.639	45.419	378.49
			6	20	120	16/05	332.601	51.962	433.02
			6	16	96	01/06	374.313	41.712	434.50
			6	19	114	20/06	436.909	62.596	549.09
			6	16	96	06/07	474.582	37.673	392.43
			6	140	840	-	-	373.149	444.23
42	Joseph Henry *	Diamond Vale	3			17/02	240.405		
			3	7	21	24/02	278.971	38.566	1836.48
			3	9	27	05/03	321.586	42.615	1578.33
			3	6	18	11/03	347.241	25.655	1425.28
			3	8	24	19/03	372.426	25.185	1049.38
			3	18	54	06/04	424.534	52.108	964.96
			3	75	225	20/06	636.735	212.201	943.12
			3	37	111	27/07	719.449	82.714	745.17
			3	160	480	-	-	479.044	998.01
43	Lewis Bhagwansingh	St. Augustine	10			17/02	119.761		
			10	6	60	23/02	143.661	23.900	398.33
			10	10	100	05/03	185.758	42.097	420.97
			10	6	60	11/03	208.324	22.566	376.10
			10	11	110	22/03	257.194	48.870	444.27
			10	6	60	28/03	273.002	15.808	263.47
			10	9	90	06/04	307.939	34.937	388.19
			10	27	270	03/05	419.406	111.467	412.84
			10	22	220	25/05	512.313	92.907	422.30
			10	14	140	08/06	572.105	59.792	427.09
			10	18	180	26/06	654.408	82.303	457.24
			10	23	230	19/07	781.248	126.840	551.48
			10	152	1,520	-	-	661.487	435.19
44	Gayasingh	Tacarigua	5			17/02	45.641		
			5	7	35	24/02	56.994	11.353	324.37
			5	9	45	05/03	74.163	17.169	381.53
			5	6	30	11/03	85.766	11.603	386.77
			5	11	55	22/03	103.507	17.741	322.56
			5	15	75	06/04	135.394	31.887	425.16
			5	35	175	11/05	191.326	55.932	319.61
			5	69	345	19/07	292.265	100.939	292.58
			5	79	395	06/10	423.000	130.735	330.97
			5	231	1,155	-	-	377.359	326.72
45	Peter Joseph	Trincity	4			17/02	92.847		

DATA ON WATER CONSUMPTION (8)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
			4	7	28	24/02	112.825	19.978	713.50
			4	5	20	01/03	126.692	13.867	693.35
			4	4	16	05/03	136.776	10.084	630.25
			4	6	24	11/03	156.114	19.338	805.75
			4	11	44	22/03	187.965	31.851	723.89
			4	6	24	28/03	208.563	20.598	858.25
			4	8	32	05/04	227.218	18.655	582.97
			4	36	144	11/05	320.515	93.297	647.90
			4	46	184	26/06	440.766	120.251	653.54
			4	23	92	19/07	513.673	72.907	792.47
			4	152	608	-	-	420.826	692.15
47	Joan L. M. Forrest	Valsayn South	5	5	25	02/02	22.500		
			5	8	40	10/02	33.313	10.813	270.33
			5	6	30	16/02	46.673	13.360	445.33
			5	6	30	22/02	53.537	6.864	228.80
			5	8	40	02/03	61.478	7.941	198.53
			5	8	40	10/03	79.980	18.502	462.55
			5	6	30	16/03	83.266	3.286	109.53
			5	14	70	30/03	110.668	27.402	391.46
			5	6	30	05/04	127.939	17.271	575.70
			5	47	235	22/05	224.653	96.714	411.55
			5	17	85	08/06	244.143	19.490	229.29
			5	18	90	26/06	268.090	23.947	266.08
			5	13	65	09/07	288.873	20.783	319.74
			5	34	170	12/08	361.028	72.155	424.44
			5	58	290	09/10	456.000	94.972	327.49
			5	249	1,245	-	-	433.500	348.19
48	Agatha Nora Lake	Glencoe	5	5	25	16/02	136.934		
			5	16	80	21/02	150.212	13.278	531.12
			5	28	140	09/03	194.347	44.135	551.69
			5	20	100	06/04	223.958	29.611	211.51
			5	36	180	26/04	238.612	14.654	146.54
			5	19	95	01/06	277.225	38.613	214.52
			5	16	80	20/06	305.280	28.055	295.32
			5	16	80	06/07	319.615	14.335	179.19
			5	140	700	-	-	182.681	260.97
49	Francis Joseph	Cantaro, Santa Cruz	3	3	9	02/02	15.348		
			3	7	21	09/02	21.797	6.449	307.10
			3	7	21	16/02	29.828	8.031	382.43
			3	5	15	21/02	40.189	10.361	690.73
			3	16	48	09/03	67.946	27.757	578.27
			3	14	42	23/03	84.374	16.428	391.14
			3	12	36	04/04	97.053	12.679	352.19
			3	2	6	06/04	99.264	2.211	368.50
			3	20	60	26/04	112.951	13.687	228.12
			3	22	66	18/05	127.192	14.241	215.77
			3	14	42	01/06	136.232	9.040	215.24
			3	20	60	21/06	148.751	12.519	208.65
			3	15	45	06/07	161.754	13.003	288.96
			3	21	63	27/07	186.271	24.517	389.16
			3	74	222	09/10	339.000	152.729	687.97
			3	249	747	-	-	323.652	433.27
50	Dwarika	Aranquez	1	1	1	02/02	1.331		
			1	7	7	09/02	2.426	1.095	156.43
			1	7	7	16/02	2.431	0.005	0.71
			1	5	5	21/02	2.442	0.011	2.20
			1	10	10	03/03	2.479	0.037	3.70
			1	8	8	11/03	2.535	0.056	7.00
			1	12	12	23/03	2.572	0.037	3.08
			1	7	7	30/03	2.647	0.075	10.71
			1	7	7	06/04	3.361	0.714	102.00
			1	20	20	26/04	3.428	0.067	3.35
			1	22	22	18/05	3.772	0.344	15.64
			1	14	14	01/06	4.037	0.265	18.93
			1	19	19	20/06	4.279	0.242	12.74
			1	16	16	06/07	4.324	0.045	2.81
			1	21	21	27/07	5.199	0.875	41.67
			1	68	68	03/10	7.200	2.001	29.43
			1	243	243	-	-	5.869	24.15
51	B. Balroop	Curepe	6	6	36	17/02	106.819		
			6	6	36	23/02	126.913	20.094	558.17
			6	10	60	05/03	161.549	34.636	577.27
			6	6	36	11/03	178.128	16.579	460.53
			6	11	66	22/03	198.721	20.593	312.02

DATA ON WATER CONSUMPTION (9)

No.	Consumers Name	Address	Number of Persons in Occupancy	Duration (Days)	Person * Days	Date Read 1990	Meter Reading (m3)	Water Consumption (m3)	Per Capita Consumption (lpcd)
			6	6	36	28/03	209.785	11.064	307.33
			6	9	54	06/04	224.773	14.988	277.56
			6	35	210	11/05	298.376	73.603	350.49
			6	28	168	08/06	352.674	54.298	323.20
			6	7	42	15/06	364.927	12.253	291.74
			6	34	204	19/07	447.791	82.864	406.20
			6	72	432	29/09	645.000	197.209	456.50
			6	224	1,344	-	-	538.181	400.43
52	Clyde Boothman	Diamond Vale	6			17/02	10.546		
			6	7	42	24/02	15.100	4.554	108.43
			6	9	54	05/03	19.591	4.491	83.17
			6	6	36	11/03	21.686	2.095	58.19
			6	8	48	19/03	24.692	3.006	62.63
			6	17	102	05/04	27.222	2.530	24.80
			6	92	552	06/07	68.328	41.106	74.47
			6	139	834	-	-	57.782	69.28
53	Vernon George	Cantaro, Santa Cruz	4			02/02	5.818		
			4	8	32	10/02	8.321	2.503	78.22
			4	6	24	16/02	10.112	1.791	74.63
			4	5	20	21/02	12.603	2.491	124.55
			4	14	56	07/03	17.544	4.941	88.23
			4	2	8	09/03	18.113	0.569	71.12
			4	14	56	23/03	23.836	5.723	102.20
			4	12	48	04/04	28.063	4.227	88.06
			4	2	8	06/04	28.954	0.891	111.38
			4	20	80	26/04	36.424	7.470	93.38
			4	22	88	18/05	45.986	9.562	108.66
			4	52	208	09/07	61.454	15.468	74.37
			4	18	72	27/07	97.644	36.190	502.64
			4	74	296	09/10	99.000	1.356	4.58
			4	249	996	-	-	93.182	93.56
54	Fred Jackson	St. Augustine	3			17/02	5.964		
			3	6	18	23/02	6.786	0.822	45.67
			3	10	30	05/03	8.139	1.353	45.10
			3	6	18	11/03	9.966	1.827	101.50
			3	17	51	28/03	12.291	2.325	45.59
			3	8	24	05/04	14.206	1.915	79.79
			3	36	108	11/05	26.288	12.082	111.87
			3	28	84	08/06	31.235	4.947	58.89
			3	7	21	15/06	32.872	1.637	77.95
			3	34	102	19/07	38.877	6.005	58.87
			3	152	456	-	-	32.913	72.18
55	James & J. Samuel	Tacarigua	1			20/02	10.259		
			1	9	9	01/03	12.364	2.105	233.89
			1	10	10	11/03	17.616	5.252	525.20
			1	11	11	22/03	20.396	2.780	252.73
			1	6	6	28/03	22.826	2.430	405.00
			1	9	9	06/04	24.834	2.008	223.11
			1	35	35	11/05	34.760	9.926	283.60
			1	44	44	24/06	45.672	10.912	248.00
			1	104	104	08/10	79.000	33.328	320.46
			1	228	228	-	-	68.741	301.50
			4.98	196	52,788			17,372.869	329.11

N.B. \*: formerly L. & R. Samuel

Data on water consumption for nos. 39 and 46 are removed because of non-domestic use.



**G: POPULATION DISTRIBUTION BY WATER AREA**





POPULATION DISTRIBUTION BY WATER AREA  
(CENSUS 1980)

1. WATER AREA: DIEGO MARTIN

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: DIEGO MARTIN	Carenage	001-007	7,354	Tucker Valley Wells
	L'Anse Mitan	008	1,036	
	Amow Ville, Pt. Cumuna	009	1,087	
	Sonora Park, Pt. Cumuna	010	735	
	La Horquette	049	812	
	Bayshore/Regents Park	050	633	Four Roads Wells
	Goodwood Park	051	725	
	Goodwood Gardens	013	1,852	Four Roads Wells
	Westmoorings/Victoria Gardens	052	2,200	Four Roads Wells Caroni-Arena
	La Puerta	011-012 054-055	4,966	Four Roads Wells
	Rich Plain	019-020	2,062	Four Roads Wells
	Diamond Vale	021	7,513	Diamond Wells #14,15
	Diego Martin	017-018 022-025 027 060-061	9,094	Four Roads Wells (Diego Martin Road) Dorrington Gardens (Eastern Diego Martin)
	Patna/River Estate	028	3,210	River Estate Wells
	Bagatelle	026	2,000	River Estate Wells
	Blue Range	029-030	2,481	River Estate Wells
	Cameron	032-033	1,618	Dorrington Gardens
	Majuba	031,059	2,508	Dorrington Gardens
	Morne Coco	034-035	1,385	Dorrington Gardens
	Petit Valley	056-058	2,381	Dorrington Gardens Four Roads Wells
	Simeon Road	016	2,385	Four Roads Wells

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: DIEGO MARTIN (Continued)	Averbough	053	899	Four Roads Wells
	Union	014	1,339	Four Roads Wells
	Four Roads	015	867	Four Roads Wells
	Islands	085,086	84	Tacker Valley Wells
	SUB TOTAL		61,226	

2. WATER AREA: PORT OF SPAIN

MUNICIPALITY	City Proper	001-024 133	6,933	Caroni-Arena/Picton #2 El Socorro Waterworks Savannah Wells #4,#5 (Via Knaggs Hill)
	Woodbrook	025-039	6,154	King George Wells #2-3, Farrell, Caroni-Arena
	St. Clair	040-041	698	Via Knaggs Hill
	New Town	042-045	1,729	Savannah Wells #3-#5
	St. James	046-066 069	8,990	King George Wells #2-4, Caroni-Arena
	Cocorite	067-068	2,031	Caroni-Arena
	Clifton Hill	085-086	1,349	Caroni-Arena, El Socorro Wells
	East Dry River	070-082 084 087-096 101-102 130,132	11,161	via Picton #1 & #2
	Gonzales	097-100 131 083,108	3,269	Caroni-Arena, El Socorro Waterworks (Picton #1, Gonzales Tank and Booster)
	General Hospital	104	-	Savannah Well #6, Caroni-Arena
	Belmont	103 105-107 109-129 134-135	13,486	Caroni-Arena, El Socorro Waterworks (Via Picton #1) Savannah Wells #1-3 (#6 Hilton),Knaggs Hill

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: DIEGO MARTIN	Maraval	042 044-045	3,058	Moka Wells, Maraval Waterworks
	La Seiva	046-048 080	3,205	Maraval Waterorks
	Haleland Park	043	878	Moka Wells, Maraval W/W
	Sant Deau	040-041	1,553	Moka Wells
	Boissiere No.1	083	498	St.Clair Wells, Savannah Nos.2-3, Knaggs Hill
	Boissiere No.2	081-082	1,397	
	Belle Vue	070-071	1,409	Maraval Plant (Via Brieves Road Booster)
	Long Circular	072-073	334	Maraval Plant
	St. James Barracks	075		King George V Park Well #4
	Federation Park	074	477	St. Clair Well and Savannah #2 and #3
	Ellerslie Park	076	553	Maraval Waterworks
	Dibe	077-078	1,751	Dibe Intake Maraval Plant
	Champs Elysees	079	616	Maraval Plant
	Paramin	038-039	842	Paramin Wells
	Morne Roche	036	1,225	Dorrington Gdns. Wells
	Waterhole	063	2,686	Caroni-Arena
	Harding Place	062	1,522	Caroni-Arena
	Ross Lands	064-065	1,393	Maraval Plant (Via St. Clair, Brieves Rd., Ross Lands Booster
	West Vale	084	238	
	Khandahar	066-067	1,616	Maraval
La Finette	037	494		
Dundonald Hill	068-069	1,781	Maraval via Dundonald Tank and Brieves Road Booster	

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: ST. ANNS	St. Anns	001-003 105-106	3,194	Caroni-Arena via Tunapuna Booster, El Socorro (Via Picton #1), St. Anns
	Mental Hospital	104		St. Anns/Caroni-Arena via Picton #1
	Cascade	004-007 170	3,295	Cascade, Caroni-Arena, El Socorro Waterworks, (Via Foncette Booster
	Casablanca	107	487	in Dry Season and Picton #1) and Hollis
	SUB TOTAL		90,302	

### 3 E.M.R. COMMUNITIES

#### 3.1 WATER AREA: ST. BARBS

WARD: ST. ANNS	Upper Belmont	008-011 108-109	4,561	Caroni-Arena via Tunapuna Booster, El Socorro (Via Picton #1) Savannah Wells #1-3
	St. Barbs	012-013 110	1,614	Caroni-Arena via Tunapuna Boodter, El Socorro via Picton #1
	SUB TOTAL		6,175	

#### 3.2 WATER AREA: LAVENTILLE

WARD: ST. ANNS	Laventille	014-015 067-068 111	6,325	El Socorro Waterworks (Booster to Picton #3)
	SUB TOTAL		6,325	

#### 3.3 WATER AREA: MORVANT

WARD: ST. ANNS	Morvant	091-097	5,684	Caroni-Arena (Via El Socorro Waterworks)
	Chinapoo	112-113	2,742	

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: ST. ANNS (Continued)	Redhill	083-084	2,217	Caroni-Arena (Via El Socorro Waterworks)
	Romain Lands	114-115	2,099	
	Mon Repos/Never Dirty	116-118	6,398	Caroni-Arena, El Socorro W/W, Mon Repos Intake
	SUB TOTAL		19,140	

### 3.4 WATER AREA: PICTON

WARD: ST. ANNS	Picton	016-019 069-070	8,228	Caroni-Arena via T/Booster (Via Kerr Road Off-Take)
	Eastern Quarry	071-072	2,824	Caroni-Arena via T/Booster (Via Prizgar Lands Off-Take)
	Troumacaque	079-082 085	4,684	Caroni-Arena via T/Booster (Pashley Street Off-Take)
	Success Village	073-078 086-089	9,364	Caroni-Arena via T/Booster (Pashley St. Off-Take, St. Joseph and Wharton St. Off-Take)
	Beetham Estate	168-169	664	El Socorro Waterworks Caroni-Arena
	Caledonia No.1	090	580	
	SUB TOTAL		26,344	

### 3.5 WATER AREA: BARATARIA

WARD: ST. ANNS	Barataria	020-032	10,002	El Socorro 30" at Tenth Avenue Third Avenue Off-Take Eight Avenue Off-Take
	El Socorro	041-048 125-126	11,098	El Socorro Waterworks
	Aranguez	049-059	11,282	El Socorro Waterworks Caroni-Arena



	SUB TOTAL		32,382
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3.6 WATER AREA: ST. JOSEPH

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: ST. ANNS	Mt. Lambert	098-100	1,887	Valsayn Waterworks
	Champs Fleurs	101,103 162-163	2,771	Valsayn Waterworks
	Bamboo Settlement #1	164	1,970	Caroni-Arena via Uriah Butler Highway East Off-Take/St. Joseph Res.
WARD: TACARIGUA	Bamboo Settlement #2	051	1,121	El Socorro Waterworks
	Valsayn	052	1,640	Caroni-Arena Tacarigua
	La Baja	053	1,486	
	Juaranta Village	054	1,738	Lluengo/Naranjo Waterworks
	Lluengo	056	659	
	Maracas	055	797	Acono Waterworks
	Acono Village	057	871	
	St. Joseph	001-005	4,108	Caroni-Arena, Valsayn
	Real Spring	065	1,614	Tacarigua/Caroni-Arena
	Spring Village	066	1,218	
	Morang Village	067	811	
	Pasea	068 077-079	4,807	Tacarigua
	Monte Grande	075-076	1,867	
	SUB TOTAL		29,365	

3.7 WATER AREA: AROUCA

WARD: TACARIGUA	Bonair(Dunder Hill)	091	499	North Oropouche, Hollis
	Red Hill	100	1,937	North Oropouche, Hollis

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: TACARIGUA (Continued)	Surrey	093	443	Surrey Intake
	La Pastora	095-096	242	Surrey Intake
	Lopinot	094	575	Lopinot Intake
	Garden Village	098-099	1,706	Arouca Highlift North Oropouche, Hollis
	Golden Grove	097	20	North Oropouche, Hollis
	Arouca	044-050 092	6,466	North Oropouche, Hollis
WARD: ARIMA	Bregon Park	005	958	Arouca Borehole, Hollis (Arouca Offtake)
	La Resource	007	761	
	Crescent Gardens	008	2,364	North Oropouche
	SUB TOTAL		15,971	

3.8 WATER AREA: TACARIGUA

WARD: TACARIGUA	Paradise	040-042	3,434	Tacarigua Boreholes, Hollis, North Oropouche Caura Waterworks
	Cane Farm	043,084	1,014	
	Trincity	082	2,884	Tacarigua Boreholes, Hollis, North Oropouche Caura Waterworks
	Dinsley	083	3,211	Hollis, Caura Waterworks , Tacarigua
	Kandahar	085-086	1,895	North Oropouche
	Five Rivers	087-090	4,130	North Oropouche
	SUB TOTAL		16,568	

3.9 WATER AREA: SADDLE ROAD

WARD: ST. ANNS	Caledonia No.2	119-122	5,402	El Socorro
		124		Caroni-Arena

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY	
WARD: ST. ANNS (Continued)	San Juan	033-035 039-040	2,854	Valsayn Waterworks (Via Mendez Drive Off-Take)	
	Malick	127-128 123	4,838	Caroni-Arena (Third Avenue Off-Take Malick Tank)	
	Concord	036-038	2,799	Caroni-Arena (Mt. Hope Tank via Valsayn Water Works)	
	Febeau	129-135	7,383	Caroni-Arena (Via Valsayn Waterworks)	
	Sam Boucaud	144	723	La Pastora Wells	
	Soconusco	145	818	Caroni-Arena via Balsayn Booster	
	Cutucupano	146	716	and La Canoa Booster	
	Maracas	165-167	434		
	Pipiol	140	1,060	Pipiol Intake	
	Cantaro	141-143	2,840	La Pastora Wells Caroni-Arena	
	La Pastora	147-148	1,048	La Pastora Wells	
	La Canoa	136-139 149-150	6,204	Caroni-Arena/ La Canoa Intake	
	Gran Curacaye	151-152	1,532	Caroni-Arena	
	Old Santa Cruz	153-156	3,587	Valsayn Waterworks	
	Pitit Bourg	060-066 157-159	7,351	Valsayn Waterworks	
	Mt. Dor	160-161	2,459	Valsayn Waterworks	
	Mt. Hope	102	1,711	Valsayn Waterworks	
		SUB TOTAL		53,759	

3.10 WATER AREA: ST. AUGUSTINE

WARD: TACARIGUA	Curepe	006-007 010-017	10,784	Tacarigua Boreholes Valsayn Waterworks
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COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: TACARIGUA (Continued)	St. Augustine	008-009 018	3,016	Tacarigua Boreholes Valsayn Waterworks
	Caurita Village	058	711	Lluengo/Naranjo W/Works Acono Waterworks
	La Mango	059	804	Lluengo/Naranjo W/Works Acono Waterworks
	Riverside	060	952	Lluengo/Naranjo W/Works Acono Waterworks
	Santa Margarita	061	802	Valsayn Waterworks
	St. Benedict	063	23	
	St. John Village	062,064	2,032	St. John's Intake
	SUB TOTAL			19,124

#### 3.11 WATER AREA: TUNAPUNA

WARD: TACARIGUA	Tunapuna	019-026 028-031 033-034	10,147	Tacarigua Boreholes (Highlift) Caura Waterworks Valsayn	
	Maingot Village	027	1,539		
	Macoya	032	2,087	Tacarigua	
	El Dorado	035-039	5,222	Caura W/Works, Tacarigua , Valsayn	
	Hillview	080	2,140		
	Caura	081	629	Tacarigua Boreholes Caura Waterworks	
	SUB TOTAL			21,764	

#### 4. WATER AREA: ARIMA

WARD: ARIMA	Arima Heights	002	1,585	Guanapo, Aripo
	La Laja	006	108	No Supply
	Calvary	003	956	Aripo, Guanapo
	Maturita	001	1,753	Guanapo Waterworks

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: ARIMA (Continued)	Mausica	004	2,999	Hollis, North Oropouche (Mausica Off-Take)
	Olton Road	011	1,259	Hollis
	Malabar	014-017	6,684	North Oropouche
	Santa Rosa Heights	020-021	5,180	North Oropouche
	Tumpuna	018	1,448	North Oropouche
	Pinto Road	019	447	Guanapo
	Wallerfield	022	834	Aripo (Via Fort Read Reservoir #2), Guanapo
	Samaroo Village	012	1,126	Hollis
	O'Meara	013	1,576	Hollis/ N. Oropouche
	WARD: ARIMA BOROUGH	Arima	001-002 004-006 009-011	5,756
Calvary		003	1,077	Calvary Tank and Booster Pump Station, Guanapo Waterworks, Aripo Waterworks
Nettoville		007	1,359	Hollis
Santa Rosa Gardens		008	701	North Oropouche
Lawrence Park		012	1,215	Hollis
Cocorite		013	1,239	Hollis, N. Oropouche
SUB TOTAL				37,302

5. WATER AREA: SANGRE GRANDE

WARD: ST. ANDREW	Valencia	001-002	1,273	Valencia Intake (Via Valencia Booster)
WARD: VALENCIA	Cumaca	003	120	Cumaca Intake
	Melago	004	211	Cumaca Intake
WARD: MANZANILLA	Valencia	001-002	1,507	Valencia Intake via Valencia Booster

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: MANZANILLA (Continued)	Turure	003	1,182	Valencia Intake via Valencia Booster
	Guaico	004-005	2,143	
	Sangre Grande	006 031-035	4,223	Hollis (Via Guaico Booster Pump Station & Tank) and Sangre Grande
	Sookram Village	029-030	1,565	Reservoir
	La Seiva	007-009	3,793	
	El Reposo	014	385	Hollis/ N. Oropouche
	Oropouche	010	471	Hollis/ N. Oropouche
	Vega De Oropouche	011-012	739	Hollis/ N. Oropouche
	Fishing Pond	013 015-017	2,058	Hollis/ N. Oropouche
	North Manzanilla	022-025	864	Hollis (Via Guaico Booster Pump Station & Tank) and Sangre Grande Reservoir
	Caigual	020-021	366	Hollis, N. Oropouche via Guaico Booster via S/Grande Reservoir via Caigual Booster
	Manzanilla	026-028	570	Hollis, N. Oropouche
	Brooklyn Settlement	018	469	Hollis, N. Oropouche
	Sangre Chiquito	019	1,060	Hollis, N. Oropouche
	WARD: TAMANA	Guaico	001	548
Cunaripo		002-004	1,592	Hollis, N. Oropouche
Cumuto		005-007 009-010	2,055	Aripo Waterworks
Gudtapajaro		008	405	No Supply
Tamana		011-012 014,019	1,398	Four Roads Tamana Intake
La Tosca		013	355	

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY	
WARD: TAMANA (Continued)	Coryal	016-018	1,081	No Supply	
	Carmichael	015	195	No Supply	
WARD: TURURE	Sangre Grande	024-025 010-012 014	4,688	Hollis, North Oropouche	
	Guaico	015-016	1,373	Hollis, Valencia Intake	
	Tamana	022	192	Four Roads Tamana Intake	
	Four Roads, Tamana	021,023	598		
	Coal Mine	018-019	1,075	Hollis, N. Oropouche	
	Maraj Hill	017	733	Hollis, N. Oropouche	
	Mount Harris	020	326		
	Manzanilla	026-027	383	Hollis, N. Oropouche	
	Compano	009	439		
	Plum Road	003-004	506	Plum Road Intake	
	Brigand Hill	005-006	437		
	Plum Mitan	007-008	981	Plum Mitan Intake	
	Biche	013	167	Biche Waterworks	
	Canque	001-002	964		
	WARD: SAN RAPHAEL	Four Roads, Tamana	004	143	Four Roads Tamana Intake
		SUB TOTAL		43,633	

6. WATER AREA: WALLERFIELD

WARD: TACARIGUA	Piarco	073-074	1,642	Carapo Offtake from North Oropouche
	Mausica	101-102	943	Arouca Boreholes, North Oropouche (Mausica Offtake)

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: ARIMA	Carapo	009-010	2,082	North Oropouche (Carapo Offtake)
	San Rafael	023	939	North Oropouche (Tumpuna Offtake)
WARD: SAN RAFAEL	Mundo Nuevo	001-002	552	North Oropouche
	Brazil	008-011	2,596	North Oropouche
	Talparo	003 005-007	1,180	North Oropouche (Tumpuna Offtake)
WARD: CUNUPIA	Chin Chin	012-013	2,071	Las Lomas Water Treat- ment Plant (Old)
	Las Lomas No.1	005,009 010	2,912	North Oropouche (Tumpuna Offtake) Caroni-Arena
	Las Lomas No.2	006-008	2,105	
	Madras	011	881	
	Mon Plasir	014	985	
	SUB TOTAL		18,888	

7. WATER AREA: TOCO

WARD: MATURA	Matura	001-003	1,032	Matura Intake
	Salybia	004	162	Salybia Intake
	Balandra	005	96	
	Rampanalgas	006	223	Tompire Waterworks
WARD: TOCO	Cumana	001-003	491	Cumaca Intake
	Anglais	004-008	733	Toco
	Alandale	009	419	
	Salybia	010	165	Salybia Intake
	Toco	011-013 025-026	1,311	Toco Waterworks
	Pt. Galera	024	241	Toco Waterworks



COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: TOCO (Continued)	L'anse Noir	014	145	
	Matelot	021-023	402	Matelot Intake
	St. Helena	020	149	
	Grand Riviere	018-019	371	Grand Riviere Intake
	San Souci	015-016	573	San Souci Intake, (Toco Tank, Cumana Res.)
	Monte Video	017	168	Monte Video Intake
		SUB TOTAL		6,681

8 CARONI

8.1 WATER AREA: CARONI

WARD: TACARIGUA	La Paille Village	069	783	Tacarigua/ Caroni-Arena
	Kelly 1	072	981	Caroni-Arena/North Oropouche
	Jumbie Piece	070-071	1,190	
WARD: CUNUPIA	Caroni 2 Settlement	001	694	Caroni-Arena(Frederick Settlement Offtake)
	Caroni Village	002	820	Caroni-Arena (Offtake at Old Booster)
	Kelly 2	003	1,101	Caroni-Arena
	St. Helena	004	1,121	Caroni-Arena, Las Lomas (New Plant, Offtake at Southern Main Road)
	SUB TOTAL		6,690	

8.2 WATER AREA: CUNUPIA

WARD: CUNUPIA	Warren	015-016 018	3,247	Caroni-Arena (Railway Road Offtake)
	Bejucal	019	868	Caroni-Arena
	Monroe Road	017	788	Caroni-Arena

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: CHAGUANAS	Mamoral No.1	040	343	Carlsen Field #5
	Mamoral No.2	041	286	
	Caparo	037,042	991	Carlsen Field #5
	Todds Road	035-036 038-039 043	2,424	Carlsen Field #5
	Palmiste	044	1,114	Carlsen Field #5
	Ravine Sable	033-034	786	No WASA Supply
	Longdenville	029-030 032,045	4,548	Caroni-Arena (9" Offtake)
	Montorose	028 046-048	3,601	Caroni-Arena (9" Offtake)
	Enterprise	008,031 025-027	9,338	Caroni-Arena (12" Offtake)
	Endeavour	022-023	2,125	Caroni-Arena (12" Offtake)
	Lendore Village	024	1,846	Caroni-Arena
	Lange Park	049	2,492	Caroni-Arena
	Monroe Road	003-005	2,661	Caroni-Arena
	Jerningham	009-010	1,880	Caroni-Arena
	Welcome Village	006	352	Caroni-Arena
	Ragoonanan Road	007	996	Caroni-Arena
WARD: MONTERRAT	Flanagin Town	021-023	925	Freeport (Via Chimbo- razo System)
	Caparo	010,011	983	No WASA Supply
	Mamoral No.1	012	314	Carlsen Field #5
	Mamoral No.2	013	234	Carlsen Field #5
	SUB TOTAL		43,142	

8.3 WATER AREA: CHAGUANAS

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: CHAGUANAS	Felicity	013 017-019	3,241	Caroni-Arena (12" Main)
	Cancandee	014-016	2,406	Caroni-Arena
	Charlie Village	001-002 011-012 020-021	5,456	Caroni-Arena (12" Main)
	Chaguanas	050-051 070-075	6,177	Caroni-Arena (12" Offtake)
	Carapichaima	065-066	1,404	Caroni-Arena
	Waterloo	067-069	2,074	Caroni-Arena
	Chandernagore	053-054	1,867	Caroni-Arena
	Edinburgh	052	1,071	Caroni-Arena
	Orange Field	056,059	3,168	Carlsen Field (Via Arena System)
	Carlsen Field	055	1,766	Carlsen Field
	Chase Village	057-058	2,167	Carlsen Field (Via Arena System)
	Freeport	060-063	2,236	Freeport Waterworks (Via San Fernando System)
	Bank Village	064	1,054	Carlsen Field (Via Arena System)
	WARD: COUVA	Carapichaima	001	1,042
Waterloo		002	647	Caroni-Arena (Small Offtake)
Orange Valley		003-004	1,595	
Calcutta No.1		011-013	3,177	Freeport (Via San Fernando System)
Calcutta No.2		009	764	
Freeport		008	1,177	Freeport (Via San Fernando System)
McBean		010	1,017	Caroni-Arena

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: MONTSEERRAT	Freeport	001-002 006-009	5,025	Freeport Waterworks (Via San F'do System)
	Chickland	004-005	909	Freeport Waterworks (Via San F'do System)
	Calcutta No.1	003	956	Caroni-Arena
	SUB TOTAL		50,396	

8.4 WATER AREA: COUVA

WARD: COUVA	Perseverance	005-007	2,377	Caroni-Arena
	Exchange	016	334	Caroni-Arena (18" Offtake)
	Couva	039-043	3,572	Caroni-Arena
	Balmain	014-015	1,258	Caroni-Arena (Basta Hall)
	Rivulet	017,025 037	1,428	Caroni-Arena (Basta Hall)
	California	018-021	2,407	Caroni-Arena
	Forres Park	027-030	2,863	Caroni-Arena (Basta Hall Tank)
	Phoenix Park	034-035	1,024	Caroni-Arena (Basta Hall Tank)
	Windsor Park	036	602	Caroni-Arena (Basta Hall Tank)
	Claxton Bay	031-032	2,197	Caroni-Arena
	Dow Village	022-023 033	4,209	Caroni-Arena
	Oplay	024,038	1,130	Caroni-Arena (Basta Hall Tank)
	Indian Trail	026	661	Freeport (Via Chimbo- razo System)
WARD: MONTSEERRAT	Preysal	033-035	2,776	Freeport (Via Chimbo- razo System)

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: MONTSEERRAT (Continued)	Balmain	031-032	1,266	Caroni-Arena (Via Basta Hall Tank)
	Indian Trail	030	275	
	Tortuga	027-028	934	
	Pepper Village	025-026	750	Freeport (Via Chimbo-razo System)
	Gordon Village	029	494	
	Brasso Venado	020	277	No WASA Supply
	La Vega	024	304	Freeport (Via Chimbo-razo System)
	Tabaquite	015-018	2,322	Navet Waterworks (Via 4"Offtake at Tabaquite)
	Brasso	014	321	Freeport (Via Chimbo-razo System)
	Emmanuel Junction	019	376	No WASA Supply
WARD: POINTE-A-PIERRE	Claxton Bay	001	1,056	Caroni-Arena
	St.Margaret's Village	007-008	1,761	Caroni-Arena
	Union Village	005-006	2,222	Caroni-Arena
	Macaulay	004,011	1,865	Caroni-Arena
	Cedar Hill	002-003	1,935	Caroni-Arena
	Tortuga	012	493	Freeport (Via Chimbo-razo System)
	Hermitage	023	514	Caroni-Arena
	Parforce	020	1,196	Navet Waterworks (Via Gasparillo Booster)
	San Fabien	021	410	
	Forest Park	022	558	
	Texaco Res. Area	041-043	863	Private Supply
	Plaisance Village	009-010 044	3,426	Caroni-Arena/Navet
	SUB TOTAL			50,456

9. WATER AREA: MAYARO

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
	Mayaro	013-018	2,684	Mayaro Waterworks
	Guayaguayare	009-012	1,477	Guayaguayare
	Ortoire	001	490	Mayaro Waterworks
WARD: GUAYAGUAYARE	St. Joseph Village	002-003	325	Mayaro Waterworks
	Radix	004-005	973	Amoco
	Grand Lagoon	006-007	873	Amoco
	La Savanne	008	598	Amoco
WARD: TRINITY	Abyssina	001-002	344	No Supply
	Main Field	003-004	125	No Supply
WARD: COCAL	Mafeking	014-015	1,099	Mayaro Waterworks
	Ortoire	016-017	366	Mayaro Waterworks
	SUB TOTAL		9,354	

10. RIO CLARO

10.1 WATER AREA: ARCH TRACE

	Charuma Village	001-002	598	Swamp - No Supply
	Cushe Village	003	521	Forest - No Supply
	Biche	004-005	966	Biche Waterworks Navet Waterworks
	Poole Valley	006	318	Navet Waterworks (Via TCO Booster)
WARD: COCAL	Ecclesville	007-009	1,706	Navet Waterworks (Via TCO Booster)
	Clear Water	010	521	Navet Waterworks (Via TCO Booster)
	Deep Ravine	011	612	Navet Waterworks (Via TCO Booster)
	Union	012-013	1,329	No Water Mains

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: COCAL (Continued)	Rio Claro	018-019	1,348	Navet Waterworks (Via TCO Booster)
	Navet Village	020-021	960	Forest - No Supply
WARD: CHARUMA	Charuma Village	003 018-019	962	Navet Waterworks (Tabaquite Offtake 12")
	Dades Trace	012-013	1,902	Navet Waterworks (Via TCO Booster)
	San Pedro	004	761	Navet Waterworks (Via TCO Booster)
	Brothers Road	001-002 022	1,708	Navet Waterworks (Tabaquite Offtake 12") TCO Booster
	Cushe Village	016-017	666	Navet Waterworks (Via TCO Booster)
	Navet Village	014-015	1,133	Navet Waterworks (Via TCO Booster)
	Poole	005-007	1,829	Navet Waterworks (Via TCO Booster)
	Poole Village	009	400	
	Libertville	008 010-011	2,215	Navet Waterworks (Via TCO Booster)
	Rio Claro	020-021	1,074	Navet Waterworks (Via TCO Booster)
WARD: POINTE-A- PIERRE	Mayo	013-015	1,717	Morichal Spring
	Eckles Village	027	492	Navet Waterworks
	Corosal	028	534	
	Esmeralda	030	664	Guaracara Spring
	Guaracara	031	580	
	Piparo	032-033	1,524	Navet Waterworks
WARD: ORTOIRE	Tableland	001-003 006-007	2,713	Navet Waterworks
	Robert Village	004	717	
	George Village	005	735	

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: ORTOIRE (Continued)	Torrib Trace	008,011	1,776	Navet Waterworks
	Watts Road	009-010	557	Navet Waterworks
WARD: SAVANNA GRANDE	New Grant	026-028	2,198	Navet Waterworks
	Sister's Road	029-030	1,076	Navet Waterworks
	Piparo	031	554	Navet Waterworks
	Brothers Settlement	032-035	2,257	Navet Waterworks
	Ben Lomond	038	1,433	Navet Waterworks
	Kumar Village	040	913	
	Garth Road	041-043	2,914	Navet Waterworks
	Ecckles Village	037,057	1,035	Navet Waterworks
	SUB TOTAL		45,918	

10.2 WATER AREA: PRINCES TOWN

WARD: NAPARIMA	Borde Narve	034-035	1,290	Navet Waterworks
	Manahambre	022	934	Navet Waterworks
	Mt. Stuart	019-020	1,285	Navet Waterworks
	Iere Village	021	860	Navet Waterworks
WARD: MORUGA	St. Mary's	003-004	604	Navet Waterworks
	Rock River	005-007	1,287	Navet Waterworks
	La Lune	014-017	1,026	Navet Waterworks
	Basseterre	008-012	2,192	Navet Waterworks
	Moruga Village	019-020	669	Navet Waterworks
	Mondoe	013	10	Navet Waterworks
WARD: ORTOIRE	Hindustan	012	847	Navet Waterworks
	Indian Walk	013,015 016,018	2,620	Navet Waterworks
	Fifth Company Village	014,019	1,121	Navet Waterworks



COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY	
WARD: ORTOIRE (Continued)	New Grant	017	876	Navet Waterworks	
	St. Mary's	020-022	1,853	Navet Waterworks	
WARD: SAVANNA GRANDE	Princes Town	047-056	8,444	Navet Waterworks	
	Indian Walk	018-019	1,233	Navet Waterworks	
	Lengua	003 015-017	3,049	Navet Waterworks	
	Craignish	022-023	1,510	Navet Waterworks	
	St. Julien	024	735	Navet Waterworks	
	Petit Cafe	020-021 025	1,749	Navet Waterworks	
	Iere Village	044	684	Navet Waterworks	
	Lothian	001-002	1,513	Navet Waterworks	
	Buen Intento	036	744	Navet Waterworks	
	Cumuto Village	005,008	1,598	Navet Waterworks	
	St. Croix	004,006	1,603	Navet Waterworks	
	St. Mary's	011-013	2,088	Navet Waterworks	
	Fifth Company	014	949	Navet Waterworks	
		SUB TOTAL		43,373	

10.3 WATER AREA: BARRACKPORE

WARD: NAPARIMA	Digity	080-081	1,644	Navet Waterworks
	Cottage	040-041	1,199	Navet Waterworks
	Wellington	043-044	1,005	Navet Waterworks
	Barrackpore	036,037 039,042	3,283	Navet Waterworks
	Congo Hill	038	759	Navet Waterworks
WARD: MORUGA	Barrackpore	001-002	2,039	Navet Waterworks
	Marac	018	316	Navet Waterworks

COUNTY/WARD	TOWN/VILLAGE	C. S. O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: SAVANNA G'DE	Barrackpore	009-010 007	2,606	Navet Waterworks
	Penal	001-003	15,781	Penal Waterworks
009-015		Navet Waterworks		
022-025				
029				
	093-097			
	Rock Road	020-021	1,573	
	Tulsa Village	028	910	Penal Waterworks
WARD: SIPARIA	Batchyia Village	026-027	1,870	Penal Waterworks
	Barrackpore	004-007	3,163	Navet Waterworks
	Plantinite Village	008	897	Navet Waterworks
	Morne Diablo	016-018	2,029	Navet Waterworks
	Scott Road	019	676	Navet Waterworks
	Massahood	054	599	Caroni-Arena
	San Francique	055-060	3,765	Caroni-Arena
		SUB TOTAL		44,114

10.4 WATER AREA: FYZABAD

WARD: NAPARIMA	Duncan Village	057-061	4,880	Caroni-Arena
	La Romain	063,067	6,907	Caroni-Arena
		069,075		
		071-073		
	Concord	068	1,112	Caroni-Arena
	La Fortune	070	826	Caroni-Arena
	Pone Trace	074	553	Caroni-Arena
	Bamboo Village	062	2,942	Caroni-Arena
	Woodland	064-066	1,703	Caroni-Arena
	Hermitage	046-048	2,383	Caroni-Arena
Monkey Town	045,054	1,261	Navet Waterworks	

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: NAPARIMA (Continued)	Monkey Town	052	747	Navet Waterworks
	Debe	076,078	5,651	Navet Waterworks
		079,088		Caroni-Arena
		089-091		
	Rami Trace	077	763	Navet Waterworks
	Philippine Village	049	761	Caroni-Arena
Diamond	050-051 053	2,721	Navet Waterworks	
WARD: SIPARIA	Dow Village	083	1,313	Caroni-Arena
	Avocat	061-063	2,069	Caroni-Arena
	South Oropouche	066	954	Caroni-Arena
	St. John's Village	065	661	Caroni-Arena
	St. Mary's Village	067	958	Caroni-Arena
	Harris Village	064	2,090	Caroni-Arena
		068-069		
	Delhi Settlement	074-079	3,641	Fyzabad Waterworks
	Mondesir	080-082	1,646	Caroni-Arena
	Pepper Village	070-073	2,629	Caroni-Arena
	Forest	092	262	Fyzabad Waterworks
	Fyzabad	098-100	1,573	Fyzabad Waterworks
	Hickling Village	053	578	Fyzabad Waterworks
SUB TOTAL			51,584	

10.5 WATER AREA: PALMYRA

WARD: POINTE-A- PIERRE	Poonah	016	826	Morichal Springs
	Bonne Aventure	017-019	2,920	Navet Waterworks
		026		
	Cocoa Piece	024	808	Navet Waterworks
Mahogany	025	670	Navet Waterworks	

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: POINTE-A- PIERRE (Continued)	Gasparillo	034,035 037-039	4,987	Navet Waterworks
	Lumsden	036	1,531	Navet Waterworks
	Ragoobar Lands	040	1,333	Navet Waterworks
WARD: NAPARIMA	Harmony Hall	001	250	Navet Waterworks
	St. Madeline	013,014 026	2,117	Navet Waterworks
	Cocoyea	008,010 011	3,936	Navet Waterworks
	Pleasantville	009	1,659	Caroni-Arena
	Corinth	012 015-017	3,579	Navet Waterworks
	Palmyra	018	1,298	Navet Waterworks
	Golconda	055	1,370	Navet Waterworks
	Victoria Village	056	890	Navet Waterworks
	St. John's	029 032-033	1,650	Navet Waterworks
	Cedar Hill	023	934	Navet Waterworks
	Jordan Hill	024-025	1,899	Navet Waterworks
	St. Charles	028	974	Navet Waterworks
	Petit Morne	027	832	Navet Waterworks
	Friendship	030-031	1,939	Navet Waterworks
	WARD: SAVANNA GRANDE	Mt. Stuart	045	800
Reform		039	952	Navet Waterworks
Harmony Hall		046	792	Navet Waterworks
	SUB TOTAL		38,946	

10.6 WATER AREA: MARABELLA

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD: NAPARIMA	Marabella	006,082 083,085 092,093	8,662	Caroni-Arena Navet Waterworks
	Union Village	002,003	1,883	
	Battoo New Dev.	007	1,411	
	Battoo Ave.	084	1,221	
	Ramdass St.	086	1,603	
	Gopaul Lands	087	1,514	
	Tarouba	004,005	1,647	Caroni-Arena
	SUB TOTAL		17,941	

11. WATER AREA: SAN FERNANDO

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
BOROUGH OF SAN FERNANDO	Vistabella	003-008 012-016	8,007	Navet Waterworks
	Paradise	034-039	3,754	Navet Waterworks
	San Fernando Proper	009-011 032-033	1,601	Navet Waterworks
	St. Joseph Village	017-019	1,705	Navet Waterworks
	Mon Repos	020-021 026-028	3,359	Navet Waterworks
	Pleasantville	022-023 046	5,889	Caroni-Arena
	Les Efforts West	024-025	1,115	Navet Waterworks
	Upper Lower Hillside/ Coffee	029-031	2,225	Navet Waterworks
	Les Efforts East	041-045	4,650	Navet Waterworks
	Broadway	040,047	1,090	Navet Waterworks
	SUB TOTAL		33,395	

12. WATER AREA: SIPARIA/ERIN

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY	
WARD: SIPARIA	Charlo Village	030-033	3,135	Penal Waterworks	
	Syne Village	040-042 084	2,283	Penal Waterworks Siparia (Coora) W/Works	
	Siparia	037-038 043 085-090	5,918	Penal Waterworks Siparia (Coora) W/Works	
	Mendez Village	034-035	940	Siparia (Coora) W/Works	
	Quinam	036	7	Penal Waterworks	
	Guapo	052	689	Fyzabad Waterworks	
	Saltmine	050	939	Siparia (Coora) W/Works	
	Thick Village	051	940	Siparia (Coora) W/Works Fyzabad Waterworks	
	Apex	091	209	Fyzabad Waterworks	
	Sudama Village	047	688	No Water Mains	
	Sudama Village	048	536	No Water Mains	
	Quarry Village	044-046 049	2,317	Siparia (Coora) W/Works	
	De Gannes Village	039	551	Penal Waterworks	
	WARD: ERIN	Los Charos	007,008	609	Carapal Waterworks
		Los Charos	012	573	Carapal Waterworks
Sobo Village		009-011	1,628	Carapal Waterworks	
Los Bajos		013-015	2,057	Carapal Waterworks	
Dally Village		016	793	Siparia (Coora) W/Works	
Santa Flora		017,019	878	Siparia (Coora) W/Works	
Waddle Village		018	791	Siparia (Coora) W/Works	
La Union		001	604	Carapal Waterworks	
Los Iros		002	643	Carapal Waterworks	
Arena		003	537	Carapal Waterworks	
Carapal	004-006	1,291	Carapal Waterworks		

	SUB TOTAL		29,556
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13. WATER AREA: POINT FORTIN

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
WARD:ERIN	Buenos Ayres	020,021	384	Cap-de-Ville W/Works
	Perseverance	016,017	675	Granville Waterworks
	Constance	018-019	947	Granville Waterworks
	Icacos	020	296	Granville Waterworks
	Coromondel	009,013	677	Granville Waterworks
	Bamboo Village	014	527	Granville Waterworks
WARD: CEDROS	Iros Forest	005	571	Chatham Waterworks
	Chatham	006-008	916	Chatham Waterworks
	Point Coco	010	341	Chatham Waterworks
	Granville	011,012	894	Granville
	Cap-de-Ville	002-004	1,564	Cap-de-Ville W/Works Chatham Waterworks
	Porto Grande	001	152	No Water Mains
	Bonas, St. Marie	021	617	Granville Waterworks
	St. Marie	022	709	Granville Waterworks
	Bois Bourg	015	434	Granville Waterworks
	Fanny Village	007-013	4,589	Cap-de-Ville W/Works Chatham Waterworks
	New Village	003-006	2,079	
	Point Ligoure	014,015	1,494	
WARD: LA BREA	Point Fortin	055-064	6,738	Chatham
	Gonzales	019 021-023	2,028	Point Fortin Waterworks
	Egypt Village	016	1,459	Cap-de-Ville W/Works Chatham Waterworks
	Parry Lands	017,018	1,006	Point Fortin Waterworks

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY	
WARD: LA BREA (Continued)	Cochrane	024-026	814	Point Fortin Waterworks	
	Cap-de-Ville	002	218	Chatham via Cap-de-Ville Tank	
	Lot Ten	020	386		
	Mondesir	039,040	1,218	Caroni-Arena	
	La Brea	043-047	1,490	Caroni-Arena	
	New Lands	048,049	1,029	Caroni-Arena	
	Corbeau Town	050	496	Caroni-Arena	
	Coffee Village	051	379	Caroni-Arena	
	Majuba	052	436	Caroni-Arena	
	Sobo Village	033-035	1,540	Caroni-Arena (Via Boodoosingh Booster)	
	Chinese Village	037	504	Caroni-Arena	
	Vance River	027-029	1,037	Point Fortin Waterworks	
	Vessigny	030-032	1,258	Caroni-Arena (Via Boodoosingh Booster)	
	Rousillac	036,038 041,042	4,179	Caroni-Arena	
	Forest Reserve	053,054	345	Private Water Supply	
	Geerahoo	065	293	No Water Supply/Trintoc	
		SUB TOTAL		44,719	

14. WATER AREA: NORTH COAST

WARD: BLANCHI- SSEUSE	La Fillette	004-005	375	No Water Supply
	Las Cuevas	009	402	Las Cuevas Intake
	Brasso Seco	001-002	324	Brasso Seco Paria Intake
	Blanchisseuse	003 006-008	605	Blanchisseuse W/Works Blanchisseuse Intake
		SUB TOTAL		1,706



15. TOBAGO

15.1 WATER AREA: LEEWARD SECTION

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
ST. GEORGE	John Dial	001	271	Green Hill/Hillsborough
	Hope	002	537	Green Hill/Hillsborough
	Mt. St. George	003,004	754	Green Hill/Hillsborough
	Windsor	005	291	Green Hill/Hillsborough
	Hillsborough	006	368	Hillsborough
	Mason Hall	007-009	1,292	Craig Hall
	Concordia	010	1,067	Hillsborough
	Scarborough	021-025	1,384	Green Hill/Hillsborough
	Darel Spring	011-012	1,826	Hillsborough/Green Hill
	Rockly Vale	013	717	Green Hill/Hillsborough
ST. ANDREW	Calder Hall	014	419	Hillsborough
	Cinamon Hill	017	560	Hillsborough
	Friendship	018	900	Courland Water Works
	Bacolet	019	169	Green Hill/Hillsborough
	Mt. Marie/Mt. Pellier	020	114	Green Hill/Hillsborough
	Mt. Gomery	003	656	Courland Water Works
	Auchenskeoch	004	341	Courland Water Works
	Amity Hope	005	498	Hillsborough
	Signal Hill	006,007	924	Courland Water Works
	Sherwood Park	008	302	Courland Water Works
	Milford	009	456	Green Hill/Hillsborough
	Lambeau	010	631	Green Hill/Hillsborough
	Harmony Hall	015	512	Hillsborough
	Providence	016	526	Hillsborough

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
ST. PATRICK	Crown Point	001	591	Courland Water Works
	Canaan/Bon Accord	003	1,042	Courland Water Works
	Tyson Hall	002	941	Courland Water Works
	Golden Grove	004	703	Courland Water Works
	Hamden/Low Lands	005	433	Courland Water Works
	Mt. Pleasant	006	947	Courland Water Works
	Buccoo	007	656	Courland Water Works
	Mt. Irvine	008	378	Courland Water Works
	Black Rock	009	688	Courland Water Works
	Orange Hill	010	191	Hillsborough
	Montgomery	011	428	Courland Water Works
	Bethel	012	642	Courland Water Works
	Bethlehem	013	219	Courland Water Works
ST. DAVID	Mason Hall	020	336	Craig Hall Intake
	Whim	001	238	Hillsborough
	Plymouth	002,003 018,019	1,560	Courland Water Works
	Arnos Vale	004-006	972	Courland Water Works
	Culloden	007	264	Craig Hall Intake
	Golden Lane	008	442	Craig Hall Intake
	Woodlands	009,013	618	Craig Hall Intake
	Moriah	010-012	881	Craig Hall Intake
	Runnymede	014	314	Craig Hall Intake
	Castara	015,016	463	Castara Intake
Les Coteaux	017	318	Craig Hall Intake	
	SUB TOTAL		29,780	

15.2 WATER AREA: WINDWARD SECTION

COUNTY/WARD	TOWN/VILLAGE	C.S.O. ED	POP'LN CENSUS 1980	SOURCES OF SUPPLY
ST. MARY	Goodwood	001	208	Richmond T./Plant
	Pembroke	002-005	1,545	Richmond T./Plant
	Glacmorgan	006	307	Richmond T./Plant
	Belle Garden	007	231	Richmond T./Plant
ST. PAUL	Belle Garden	001,014	865	Richmond T./Plant
	Zion Hill Village	015	410	Richmond T./Plant
	Roxborough	012,013	1,057	King's Bay/Richmond TP
	Kendal	003	22	Richmond T. Plant
	Bamboo Village	004	197	Richmond T. Plant
	Argyle	002	399	Richmond T. Plant
	Betsy Hope	005	309	King's Bay T. Plant
	Louis D'or	006	400	King's Bay T. Plant
Delaford	007-011	978	King's Bay T. Plant	
ST. JOHN	Parlatuvier	001,002	283	Parlatovier Intake
	Bloody Bay	003	100	Bloody Bay Intake
	L'anse Fourmi	004	222	L'anse Fourmi Intake
	Hermitage	005	277	Charlotteville Intake
	Charlotteville	010-012	911	Charlotteville Intake
	Aconza	007	329	
	Speyside	006,008	414	King's Bay T./Plant
	Lucy Vale	009	280	King's Bay T./Plant
	SUB TOTAL		9,744	

