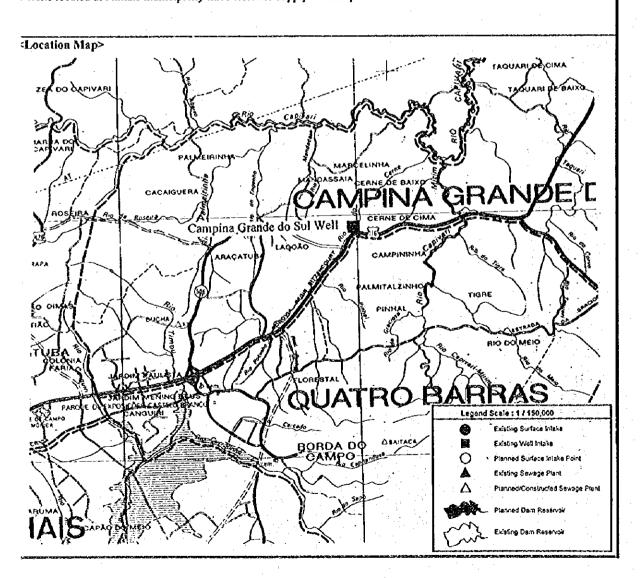
	· · · · · · · · · · · · · · · · · · ·	Description o	f Existing Intal	ke Facilities		
No./Name	Capivari In	take (Colom	bo)			
<location></location>						
	River	Municipality	Proprietor	Others	•	
Upper	Capivari					
Iguacu	(w = 25 m)	Colombo	SANEPAR			
<description< td=""><td>of System></td><td></td><td></td><td></td><td>·</td><td></td></description<>	of System>				·	
Intake Metho	d	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Yea
Surface Water				Integrated Sys.with		
Direct with W	ell	0.08	(mean, 24 hours)	1 well nearby intake	12,000	1984/85
(weir height =	2 m)		(m3/sec)	site	(connections)	·
<description< td=""><td></td><td></td><td>and the state of t</td><td></td><td></td><td></td></description<>			and the state of t			
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others	
i	250	•	100CV, 2 pumps	·	·	
25	300	250	150CV, 3pumps	Non		•
(km)	(mm)	(m)	(i is standby)			4.5
		formations, if a				
Left wing of e	xisting intake	weir is collapsed	l by flood last yea	ır.		
			*			
<location mi<="" td=""><td>an></td><td>·</td><td></td><td></td><td></td><td></td></location>	an>	·				
27 005 DIN	_	» I 4 3	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	سبر		~ 10° \
	Š .) L		}		ر د الأ
)),			J. 1		-
	Santi	EANT CLARA	ANTIN	Ho contains	V	K. ~
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	CLARA	Fit (CAMENA	1	Con Consum
NA ·	<i>{</i>			CAMPINA COS TAVAS	X	14
٠	<i>f</i> (See A	oio Massaroca) +		Corren
Sec.	/ Ase1	ruvý		` لم ،	CABECADA	ANIA
OB	RAN	CO DO	ころのド		h BOON	NUW
× _			RIBERACZINHO	Capivari W	30 30 40 12	- /]
1	CAMPIN	(Capivari Int	ake	Acros Costs	
	DOS PINT	ios	1	E 1	Septatore to su	
· - · \	W.		, (\ \ \ /
(a		on Parqueno	<i>\</i>	ARANHAS	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ERIVA -
	1	MORRO GRANDE	The said was	D = D	10	
, ·	6.0	Competite 5	BACAETAVA		1	i Estimate
	+ ~?/			18 5	1)
Δικ	migratic (مر المرات	SOLŌNIA POÇO NEGRI	MARZER OO OMPIVARI	J	Cour.
:Y	[**	SOLONIA POCO NEGR		I I	æRio
→ /		Δ12 / · · ·				TWO SE
2		GEFINA FE	RYDA RIBERÃO DA ONÇA	CAF VAR		٠ (
ADMINI	~) ~ ``	COLONY	storioto	1777	Legend Scale : 1 / 15	0,000
		2 4 2 5 E	mo /	11 Junton	Existing Surf	ece inlaka
7	PASS TO	Pig con	The state of the s	1-11	Existing Wes	
ITRO	Y	II QQU	OMB(ROSLINA	11 –	sce Intake Point
*	////	1 + divinganing	ZE & JAM ING	HAL	Existing Sew	Ţ.
-1/		X XXX		11	Pisnned/Con	structed Sewage Plant
COLONIA	1.04	The second		EMBRARA	Pierwood Oan	n Raservoir
	() d	30	#:		Existing Dam	Reservoir
TAY .	(C)	1	16 \	- · · · · ·	4 Y/**	

Description of Existing Intake Facilities 1988 1988 No./Name Capivari Well (Colombo) <Location> Municipality Others Proprietor Basin Source Karst Upper SANEPAR Aquifer Colombo Iguacu < Description of System> Intake Rate (Operation hour) Supply System Supply Connection Operation Year Intake Method Integrated with Groundwater 1995 🕒 137.30 (24 hours/day) Capivari Intake Direct from 1 well (inhabitants) (m3/hout) <Description of Pipeline> Intermediate Pump Others Depth of Well Intake Pump Length Diameter 400 120 (km) (inches) (n1) <Future Plan / or Other informations, if any> <Location Map> Capivari Well Capivari Intake Existing Sewage Plant

Description of Existing Intake Facilities No./Name Colombo Sede Wells (Colombo) <Location> Source Municipality Proprietor : Others Basin Karst Upper Colombo SANEPAR Aquifer Iguacu <Description of System> Supply Connection Operation Year Intake Rate (Operation hour) Supply System Intake Method supply area is only Groundwater Colombo Sede area 8,000 Direct from 3 wells (inhabitants) (m3/hour) <Description of Pipeline> Intermediate Pump Others Diameter Depth of Well Intake Pump Length 0.8 (km) (inches) (m) Future Plan / or Other informations, if any> <Location Map> Existing Well Intake

Vo./Name	Campina G	irande do Sul	Well (P-04)			
Location>		:				
Basin Upper	Source Karst	Municipality Campina	Proprietor	Others		
Iguacu	Aquifer	Grande do Sul	SANEPAR			· .
Description	of System>					
ntake Method		Intake Rate (Operation hour)		Supply System	Supply Connection	Operation Year
Groundwater		35.00	(15 hours/day)			
Direct from 1	well		(m3/hour)	Urban area	750 (inhabitants)	
Description	of Pipeline>	<u> </u>	(11311141)	<u> </u>		
ength	Diameter 3	Depth of Well 150	•	Intermediate Pump	Others	
(km)	(inches)	(m)			<u> </u>	
Future Plan	or Other in	formations, if a	ny>			<u> </u>

s wells located at Pinhais municipality have tested to supply to Campina Grande do Sul urban area in near future.

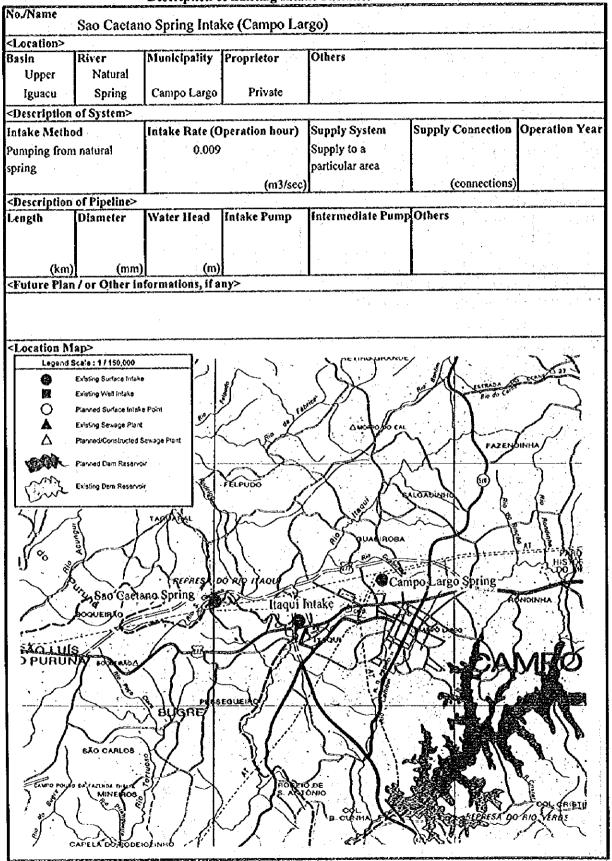


Quatro Barras

Description of Existing Intake Facilities No/Name Capitanduva Intake (Quatro Barras) <Location> Others Basin River Municipality Proprietor Capitanduva Quatro Upper (w = 8 m)Barras SANEPAR Iguacu <Description of System> Supply Connection | Operation Year Intake Rate (Operation hour) Supply System Intake Method Surface Water 1986/87 3,300 0.030 (19 hour/day) Direct with weir (m3/sec) (inhabitants) (weir height = 1 m) <Description of Pipeline> Intermediate Pump Others Intake Pump Water Head Length Diameter Natural 300 225 50 gravity 11 (km) (mm) <Future Plan / or Other informations, if any> <Location Map> Capitanduva Intake Legend Scale: 1/150,000

Description of Existing Intake Facilities No./Name Carvalho Intake (Piraquara) <Location> Municipality Proprietor Others River Basin Upper Caiguava **SANEPAR** Iguacu (w = 4 m)Piraquara <Description of System> Supply Connection Operation Year Intake Rate (Operation hour) Supply System Intake Method Integrated Sys with Surface Water 0.060 (24 hours/day) Piraquara reservoir 1972 Direct with dam reservoir (inhabitants) (m3/sec) intake (H = 4 m, V = 800 m3)<Description of Pipeline> Intermediate Pump Others Water Head Intake Pump Diameter Length Natual 10 84 Gravity (m)(km) (mm) <Future Plan / or Other informations, if any> Some lengths of existing pipeline exists under Piracuara reservoir bottom. <Location Map> 3

Piraquara Reservoir Intake (Piraquara) Clocation Sasin River Piraquara Municipality Proprietor Others Upper Piraquara Iguacu Reservoir Piraquara SANEPAR SANEPAR			Description of	f Existing Intal	ke Facilities		
Description of System Intake Rate (Operation hour) Intak	No./Name	Piraquara P	Reservoir Inta	ke (Piraquara)			
Upper Braquara Reservoir Description of System> atake Method nake from the existing (not existing) (not exist			-				
Iguacu Reservoir Piraquara SANEPAR Description of System> Intake Rate (Operation hour) Intake Rate (Op		t in	Municipality	Proprietor	Others		
Description of System ntake Rate (Operation hour) Intake from the existing Prinquars dam reservoir 0.030 (24 hours/day) 0.030 (24 hours/day) 0.05 Description of Pipeline> ength Diameter 0.5 200/450 (nn) (nn) Parture Plan / or Other informations, if any> idditional 0.03 m3/sec intake rate is planned at the same intake site in near future. Elecation Map> CAMPS ANALOSA ANALOSA ANALOSA Congression Prinquars dams ANALOSA ANALOSA ANALOSA Congression Essaga Sensa Intake Description of Pipeline> Camps ANALOSA ANALOSA Congression Camps Camps	Upper	Piraquara					:
Intake Nethod Intake from the existing O.030 (24 hours/day) O.030 (24 hours/day) O.030 (24 hours/day) O.030 (24 hours/day) O.030 (25 hours/day) O.030 (26 hours/day) O.030 (27 hours/day) O.030 (28 hours/day) O.030 (29 hours/day) O.030 (20 hours/day) O.030 (24 hours/day) O.030 (24 hours/day) O.030 (25 hours/day) O.030 (26 hours/day) O.030 (27 hours/day) O.030 (28 hours/day) O.030 (28 hours/day) O.030 (29 hours/day) O.030 (29 hours/day) O.030 (29 hours/day) O.030 (20 hours/day) O.030 (20 hours/day) O.030 (20 hours/day) O.030 (24 hours/day) O.030 (24 hours/day) O.030 (25 hours/day) O.030 (26 hours/day) O.030 (27 hours/day) O.030 (28 hours/day) O.030 (29 hours/day) O.030 (29 hours/day) O.030 (20 hours/day) O.030 (24 ho	Iguacu	Reservoir	Piraquara	SANEPAR			
Integrated Sys with Carvalho intake Description of Pipeline> Length	<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>					
Description of Pipeline> Length Diameter Water Head Intake Pump Intermediate Pump Others 2 pumps 2 pum	Intake Metho	đ	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Year
Description of Pipeline> Length Diameter Water Head Intake Pump Intermediate Pump Others 2 pumps 2 pum	Intake from th	e existing		9 	Integrated Sys with	,	·
Description of Pipeline Length Diameter Water Head Lintake Pump Linternediate Pump Others 2 pumps (m) Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake rate is planned at the same intake site in near future. Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake Planned Planned Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake Planned Planned Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake Planned Planned Septure Plan / or Other informations, if any- additional 0.03 m3/sec intake Planned Planned Septure Planned		-	0.030	(24 hours/day)	Carvalho intake		1994
Description of Pipeline> ength Diameter Water Head Intake Pump Intermediate Pump Others 2 pumps Intermediat				(m3/sec)		(inhabitants)	
Enture Plan / or Other Informations, if anys- Idditional 0.03 m3/sec intake rate is planned at the same intake site in near future. CAMPO REPUTATE Plan / or Other Informations, if anys- Idditional 0.03 m3/sec intake rate is planned at the same intake site in near future. CAMPO REPUTATION OF PROBLEM AND PROBLEM OF PROBLEM AND	<description< td=""><td>of Pipeline></td><td></td><td></td><td><u> </u></td><td></td><td>1</td></description<>	of Pipeline>			<u> </u>		1
Storation Map CAMPS REPRESE DO RIGHAL REPRESE DO	Length		Water Head	Intake Pump	Intermediate Pump	Others	
Future Plan / or Other informations, if any- idditional 0.03 m3/sec intake rate is planned at the same intake site in near future. **Location Map** **CAMP STADUE Particular Plan Particul			:		-		
Future Plan / or Other Informations, if any> Idditional 0.03 m3/sec intake rate is planned at the same intake site in near future. SLocation Map> CAMPS C	•	200/450		2 pumps			
Future Plan / or Other informations, if any> additional 0.03 m3/sec intake rate is planned at the same intake site in near future. **Location Map> **CAMP STADURI STADURI	(km)	(0101)	(m)				
ADDIANUS ARTICLES ON BOTH AS PAROLE INTERES ON BETTER ON BOTH AS PAROLE INTERES ON BOTH AS PAROLE INTERES.				ny>			
REPRESA DO RIGARI AARINEMAS PARQUEMAS PAR					ke site in near future.		
REPRESA DO RIGARI AARINEMAS PARQUEMAS PAR			•		1		
REPRESA DO RIGARI AARINEMAS PARQUEMAS PAR	el andlan Ne			· · · · · · · · · · · · · · · · · · ·			
AND STATE OF THE S	< Location Mi	ap>		نے سو ایاں کا ان			, ,
PARQUARA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RESSACA MANANCIAL OA SERRA OA SERRA REPRESACO RIO PIRACIANA REPRESACO RIO PIRACIANA Paraed Confucted Seraga Plan	1			C C	AMPS +		
PARQUARA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RESSACA MANANCIAL OA SERRA OA SERRA REPRESACO RIO PIRACIANA REPRESACO RIO PIRACIANA Paraed Confucted Seraga Plan						· · · · · · · · · · · · · · · · · · ·	∫
PARQUARA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RESSACA MANANCIAL OA SERRA OA SERRA REPRESACO RIO PIRACIANA REPRESACO RIO PIRACIANA Paraed Confucted Seraga Plan	1 18.			1	\		(No. 15 K
PARQUARA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RESSACA MANANCIAL OA SERRA OA SERRA REPRESACO RIO PIRACIANA REPRESACO RIO PIRACIANA Paraed Confucted Seraga Plan	ADOMA\			\mathcal{A}	a cree	- 1 D.C.L.	Manunda
PARQUARA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RESSACA MANANCIAL OA SERRA OA SERRA REPRESACO RIO PIRACIANA REPRESACO RIO PIRACIANA Paraed Confucted Seraga Plan		APAQ DO AVEIO	1. El			1 () ()	1
PARQUARA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RIOFIRACIANA RESSACA MANANCIAL OA SERRA OA SERRA REPRESACO RIO PIRACIANA REPRESACO RIO PIRACIANA Paraed Confucted Seraga Plan	wytry) }		REPRESE DO BIO	IRAI .		The same of the sa	
RESSACA Legand Scale: 1/159,000 Existing Visit Intake Planned Data Reservice REPARAS STADUAL MARDMBI ROCANOVA Pirace States STADUAL MARDMBI ROCANOVA Pirace States Pirace States REPARAS Carvalho Intake REPARAS Carvalho Intake REPARAS Carvalho Intake Planned Surface Intake Point Existing Visit Intake Planned Constructed Sewage Plant Planned Data Reservice STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS Carvalho Intake STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS REPARAS Carvalho Intake REPARAS STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS Carvalho Intake STADUAL MARDMBI REPARAS Carvalho Intake REPARAS	111111111111111111111111111111111111111	19	777		\ <u></u>		2,4
RESSACA Legand Scale: 1/159,000 Existing Visit Intake Planned Data Reservice REPARAS STADUAL MARDMBI ROCANOVA Pirace States STADUAL MARDMBI ROCANOVA Pirace States Pirace States REPARAS Carvalho Intake REPARAS Carvalho Intake REPARAS Carvalho Intake Planned Surface Intake Point Existing Visit Intake Planned Constructed Sewage Plant Planned Data Reservice STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS Carvalho Intake STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS REPARAS Carvalho Intake REPARAS STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS Carvalho Intake STADUAL MARDMBI REPARAS Carvalho Intake REPARAS	SP.	1500	in the second	7	Com 200 200 200	_22	
RESSACA Legand Scale: 1/159,000 Existing Visit Intake Planned Data Reservice REPARAS STADUAL MARDMBI ROCANOVA Pirace States STADUAL MARDMBI ROCANOVA Pirace States Pirace States REPARAS Carvalho Intake REPARAS Carvalho Intake REPARAS Carvalho Intake Planned Surface Intake Point Existing Visit Intake Planned Constructed Sewage Plant Planned Data Reservice STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS Carvalho Intake STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS REPARAS Carvalho Intake REPARAS STADUAL MARDMBI ROCANOVA REPARAS Carvalho Intake REPARAS Carvalho Intake STADUAL MARDMBI REPARAS Carvalho Intake REPARAS					Chebrer .	1 Books	
PAROUE BUANTUBA RIO PIRAQUARA II CAPONINCOS DINOS REPRESA DO RIO PIRAQUARA II CAPONINCOS DINOS REPRESA GO RIO PIRAQUARA REPRESA GO RIO PIRAQUARA Panned Surface Inlahe Existing Selvage Plant Pranned Dam Reservoir Panned Dam Reservoir	·	To and a		K WIE	AQUAH	A	
BOARTUBA RIO PIRAQUARA II CAPOFFIRMOS DINOS PIRACUARA II CAP	-F	1,7,		18 8	~ \		30 3 C
BOARTUBA RIO PIRAQUARA II CAPOFFIRMOS DINOS PIRACUARA II CAP	\ \tau_{\begin{subarray}{c} \cdot \\ \tau_{\begin{subarray}{c} \\ \tau_{\begin{subarray}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	- \}\	AR WERAS	1 : 1		PADALLA	
RESSACA Legend Scale: 11150,000 Evisting Surface Intake Evisting Surface Intake Pinned Data Reservoir Pinned Data Reservoir			rios .	- Action	& STAT	DUAL MARDMBI	
RESSACA MANANCIAL DA SERRA DA SERRA O Carvalho Intake REPRESACO RIO PIRAQUARA Planned Surface Intake Existing Well Intake Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir	BUARTU		REPRESA DO- RIO PIRAQUARA II	CAPODINADOS D	NOS ROCKNOVA	1 8 a 20 1	
RESSACA REPARSA QUELLE RIO PIRAQUARA RIO PIRAQUARA Planned Surface Intake Existing Sewage Plant Planned Constructed Sewage Plant Planned Dam Reservoir				A Such	Piraquara Intake	100000	
Legend Scale: 11/150,000 Existing Surface Intake Existing West Intake Existing Sewage Plant Planned/Constructed Sewage Plant Planted/Constructed Sewage Plant Planted/Cons	innoin those			MAN DA	ANCIAL SERRA		$\sum_{i=1}^{n} \sum_{j=1}^{n} (ij)^{n}$
Legend Scale: 1/150,000 Evisting Surface Intake Existing Welt Intake O Planned Surface Intake Point Existing Sewage Plant Department of the Point Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir	V~		Added	ressauch	500	Carvaino in	take
Legend Scale: 1/150,000 Evisting Surface Intake Existing Welt Intake O Planned Surface Intake Point Existing Sewage Plant Department of the Point Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir		× 1/3	人更要		J/V(4 - 1/-	· • /.	
Legend Scale: 1/150,000 Evisting Surface Intake Existing Welt Intake O Planned Surface Intake Point Existing Sewage Plant Department of the Point Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir			个人	Sepresa Chang	REPRESATO	s /	
Existing Surface Intake Existing Well Intake Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir	NO.	Find W			RIO PIRAGUARAJ		S
Existing Surface Intake Existing Well Intake Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir	Kell			1.200	$\sim 1/2$	$-\lambda$. i	
Existing Well Intake Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir	Legand Sc	ale: 1 / 159,000	\	X	· / [/] / ·		
Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Plant Planned/Dara Reservoir					5 / /m		<i>,</i> , ~
Existing Sawage Plant Description of Planned/Constructed Sawage Plant Planned/Dam Reservoir Planned Dam Reservoir				and the same		Charles 1	
Planned/Constructed Sewage Plant S PINIHAIS	1 ×		Const.	The state of the s	in some all		
Planned Dam Reservoir			wage Plant	PALA III			=
	4010		5	トニンエメ	115 / A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Existing Dam Reservoir	P P	lanned Dam Reservoir	.		100	C. O. Series	
	4. 2 E	xisting Dam Reservoir	صفيريد	2. P	C. Privered The	1.1/	
		خيد کسم به برسوی به سرم					

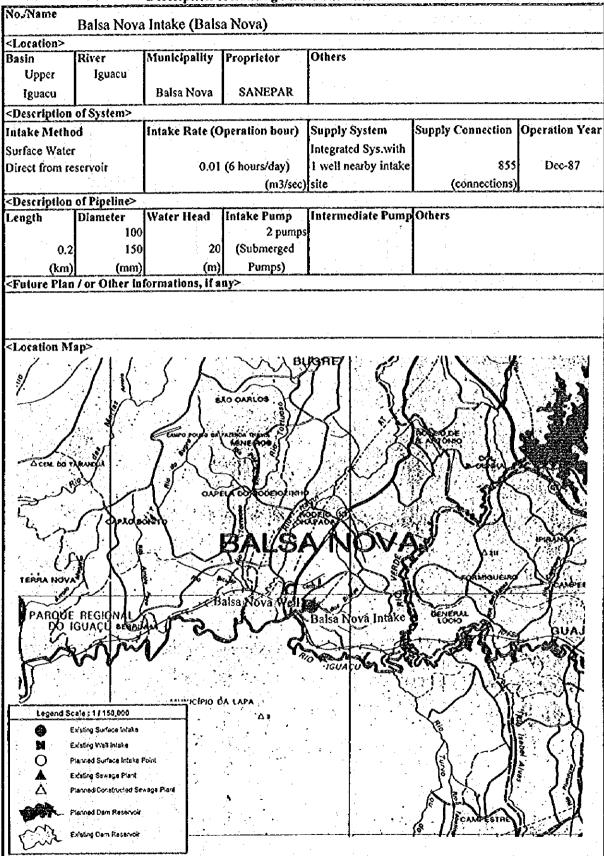


Campo Largo

Description of Existing Intake Facilities No./Name Campo Largo Spring Intake (Campo Largo) <Location> Basin River Municipality Proprietor Others Upper Natural SANEPAR Iguacu Spring Campo Largo <Description of System> Intake Rate (Operation hour) Supply System Supply Connection Operation Year Intake Method 0.033 Integrated with Pumping from natural Itaqui Intake spring (m3/sec) (connections) <Description of Pipeline> Intermediate Pump Others Diameter Water Head Intake Pump Length (mm) <Future Plan / or Other informations, if any> <Location Map> Legend Scale : 1 / 150,000 Existing Well Intake Planned/Constructed Sev

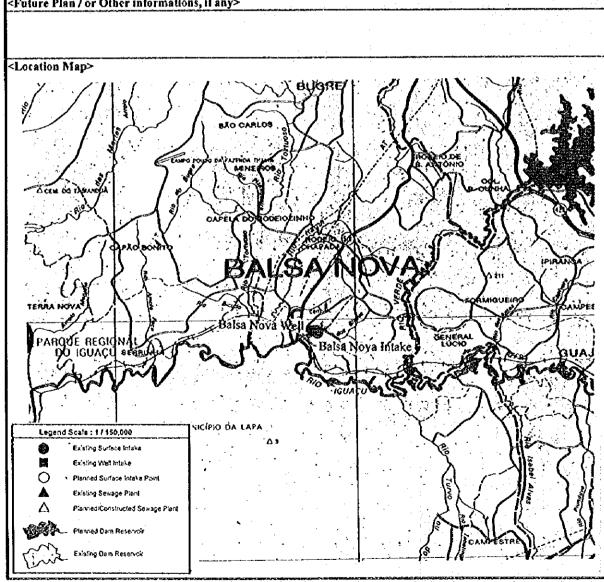
Description of Existing Intake Facilities No./Name Itaqui Intake (Campo Largo) <Location> Municipality Others River Proprietor Basin Upper Itaqui (w = 10 m)Campo Largo SANEPAR Iguacu <Description of System> Supply Connection Operation Year Intake Rate (Operation hour) Supply System Intaké Method 0.07 (24 hours/day) Integrated with Surface Water 1980 12,000 Campo Largo Direct with weir (connections (m3/sec)|Spring (weir height = 3 m) <Description of Pipeline> Intermediate Pump Others Water Head Intake Pump Diameter Length 2 pumps Double Pipes 133 200CV 200 (Pump Capa.) (mm) (1 is standby (km) <Future Plan / or Other Informations, if any> There is a plan to intake from a existing dam reservoir owned by PETROBRAS. There exist two springs in the municipality, such as "Campo Largo" owned by SANEPAR and "Sao Caetano" owned by private. Only the first one integrated with SANEPAR system. <Location Map> Legend Scale: 1/150,000 Existing Surface Intake Existing Well Intake Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Ptent Planned Dam Reservoir

Balsa Nova

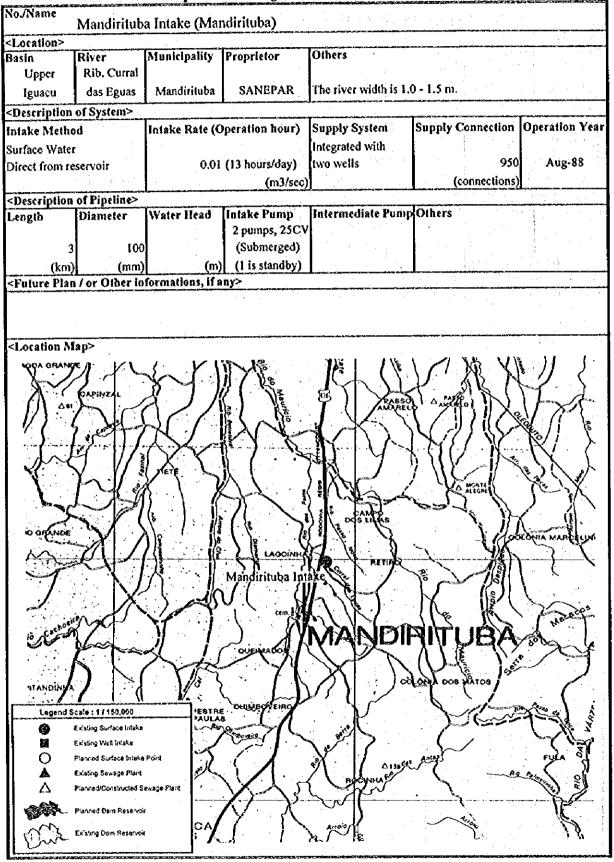


Balsa Nova

Description of Existing Intake Facilities No./Name Balsa Nova Well (Balsa Nova) <Location> Basin Others Source Municipality Proprietor Upper SANEPAR Balsa Nova Iguacu <Description of System> Supply Connection | Operation Year Intake Rate (Operation hour) Supply System Intake Method Integrated with Groundwater Balsa Nova Intake 1985 3.6 (20 hours/day) Direct from 1 well (connections) (m3/hour) <Description of Pipeline> Intermediate Pump Others Depth of Well Intake Pump Length Diameter 2 pump, 15 CV 0.2 100 (1 is standby) (km) (inches) (m) <Future Plan / or Other informations, if any> <Location Map>



-							
Year							
-							
:							
1U.							
y ,							
¥							
•							
-							
j							
ž.							
Ł							
7							
}							
/.							
<u> </u>							
Legend Scale: 1/150,000							
Existing Surface Intake							
Existing Well Intake							
Planned Surface Intaka Point Existing Sawage Plant Monite Attention							
7							
1# 							



Description of Existing Intake Facilities No/Name Mandirituba Wells (Mandirituba) <I.ocation> Others Municipality Proprietor Basin Source Upper SANEPAR Mandirituba Iguacu <Description of System> Supply Connection Operation Year Intake Rate (Operation hour) Supply System Intake Method Integrated with Groundwater 11.4 (total of 2 wells) Mandirituba Intake Direct from 2 wells (m3/hour) (connections) <Description of Pipeline> Others Depth of Well Intake Rate Intake Pump Diameter No. of Well Length 1 pump, 15 CV 107 No.1 5.7 1 pump, 15 CV 102 No.2 (m3/hour) (m) (inches) (km) <Future Plan / or Other informations, if any> The water from the wells are directly pumped to reserve tank of distribution. <Location Map> Mandirituba Existing Well intake

Contenda

Description of Existing Intake Facilities Contenda Wells (Contenda) No./Name <Location> Others Basin Municipality Proprietor Source Upper Contenda SANEPAR lguacu <Description of System> Supply Connection Operation Year Supply System Intake Rate (Operation hour) Intake Method Groundwater 42.700 Direct from 4 wells (connections) (m3/hour) <Description of Pipeline> Intake Rate Intake Pump Others Depth of Well No. of Well Length Diameter No.1 1 pump, 15 CV 112 No.2 I pump, IOCV No.3 80 13 5.7 1 pump, 5 CV No 4 150 (m3/hour) (inches) (m) (km) <Future Plan / or Other informations, if any> <Location Map> Legend Scale: 1/150,000 Existing Surface Intake Existing Well Intake Planned Surface Intake Point Existing Sewage Plant Planned/Constructed Sewage Plant Planned Dam Reservoir MUNICIPIO DE OUITANDIA Existing Dam Reservoir

		Describition of	of Existing Intal	ACTACIBITES		
	Tamandua	Intake (Foz d	o Iguacu)			
<location></location>		15.2	In	lau		
Basin	River Tamandua	Municipality	Proprietor	Others		
Iguacu	(w = 16 m)	Foz do Iguacu	SANEPAR	<u></u>		
<description< td=""><td></td><td>T</td><td></td><td>I</td><td>I .</td><td></td></description<>		T		I	I .	
Intake Metho	d		peration hour)	Supply System	Supply Connection	Operation Year
Surface Water			(7:00 - 24:00)	Integrated Sys.		
Direct with we	eir	0.30	(0:00 - 7:00)	with Vila "C"	33,000	Aug. 1978
(weir height =	2 m)		(m3/sec)		(connects)	
<description< td=""><td>of Pipeline></td><td></td><td></td><td></td><td></td><td></td></description<>	of Pipeline>					
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others	
]	
	500	20	3 Pumps		Gross Water Loss 50	%
(km)	(mm)	(m)				
		formations, if a	ny>			· · · · · · · · · · · · · · · · · · ·
~						
<location ma<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td></location>						
YA/CKININ KI	SANCTO LIBERTALISMEN	W11/241112111111111111111111111111111111		iral seisene	Legend (Scale: 1/	(50,000)
70201	10 /1gu	4 30U	HBKCAOSAO,E	9	Existing Surface In	take
	Ž	Na C			Existing Well Intak	e
			Cale 2	Ō	Planned Surface Int	ake Point
4720	\mathcal{L}_{n}		₩	À	Existing Sewage Pl	ant
411			∯ana a		Planned/eonstructed	
		3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>					The state of the s	
111:17:14			//\$ \			
		.	7 5 3			A
	The said	X 1,	1.27.7.7			
		Name		144K& [[= 1X		100
		\sim				
	1-14-5					
		N N		vr (21)		E STORY
-(111111			7		17/
	11 (人)	Çîx.	X			
	/II(}52		1 / > 2/ /	\ <i>\!</i> ?*\$\	\	
			644			
	X. Lize					
		10 10 10 10 10 10 10 10 10 10 10 10 10 1	Hotel			
3 3 3	i C				Tamandua Intake	
		`X	X	TO HOM	Dira X	
			Ambier zas			
	N. Bur					11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1
Activities 1	\$ 176	TO THE REAL PROPERTY.	1800	202		影目《人
Variation.	* # # #					
2000	E ICUACUS	***	A CONTRACT	(1)) /		
The state of the s			1 10			图》(初
			ARCENTIN.			Was Will
			1 TO		A PARTIE	1 Delivation
-	ŀ		1 1%	A MINING		ministra (1949)

Description of Existing Intake Facilities No./Name Vila "C" Intake (Foz do Iguacu) <1.ocation> Others Municipality Proprietor Basin River Itaipu SANEPAR Reservoir Foz do Iguaçu Parana <Description of System> Supply Connection Operation Year Intake Rate (Operation hour) Supply System Intake Method 0.30 (21 hour/day) Integrated Sys. Surface Water with Tamandua 33,000 Sep. 1992 Direct (m3/sec) (connects) <Description of Pipeline> Intermediate Pump Others Intake Pump Water Head Length Diameter 2 Pumps Gross Water Loss 50 % (175 CV/Pump) 500 29 (mm) (m)(km) <Future Plan / or Other informations, if any> 3 more pumps will be installed in the future as same intake rate of exsiting pump. <Location Map> 745.000 745.000 Vila "C" Intake ZEP **Existing Treatment Plant** Legend (Scale: 1/20,000) Existing Surface Intake **Existing Well Intake** Planned Surface Intake Point **Existing Sewage Plant** Planned/constructed Sewage Plant

	Company of the Company of the Street of the Company	Description o	f Existing Intal	ce Facilities	ti kalika tangan dan disebuah dan kemendan digundak di mendapang dagan dalam dala n	
	Cascavel In	take (Collect	ing System fro	m Peroba intake a	and Saltinho intake	e) (Cascavel)
<1.ocation>		_		ra.;		
Basin	River	Municipality	Proprietor	Others		
	Cascavel				m upstream from conf	luence of
Iguacu	(w = 5 m)	Cascavel	SANEPAR	Quanti river (outlet o	of Sewage treatment).	
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>					
Intake Metho	d	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Yea
Surface Water		0.48	(max.)	Integrated Sys.		
Direct		0.11	(mean, 24 hours)		188,327 inhabitants	Jan.1973
			(m3/sec)			
<description< td=""><td>of Pipeline></td><td>L</td><td></td><td></td><td></td><td></td></description<>	of Pipeline>	L				
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others	
	·					
7.2	700	173.3				
(km)	(nım)	(m)				
<future plan<="" td=""><td>for Other in</td><td>formations, if a</td><td>ny></td><td></td><td></td><td></td></future>	for Other in	formations, if a	ny>			
) when water shortage	occures.
Total intake ca	pacity of 3 int	ake systems rea	ches 824.94 lit/sec	5.		
						·
<location ma<="" td=""><td>ap></td><td></td><td></td><td>The state of the s</td><td>er v over 16 har Al St</td><td>- N. N</td></location>	ap>			The state of the s	er v over 16 har Al St	- N. N
					JANA BUR	o oa
1 Semin	100 · \:(1 1/100	7082030			
				W		X
	X Intern			第一次原则 件	M. Q.K. E. S.	
Nex.			Co-College II			
	TO WEST					
		7.7178.4.2				
		44114.54.6				
	or of the N	1/1/19/1		$A \in \mathbb{R}^{2}$		
		分的 數字				
Contract of the second		N. K. L. K.		X X		
		3.7117.67 22		A. Committee		と対し
					Lell	
		3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
						11/1/16
13.Z		22 1 XX				16/11/11
						~//
XIII			LINE SALL			
		TEL ZIA	111 <i>216117</i>		Legend (Scale : 1	/50 000)
XXXXX					Existing Surface In	
		$X \setminus X \setminus X \setminus X$				
1881		Cascavel	Intake 🙀	SUCCEST AND PRODUCT	Planned Surface In	
		in Kara	Lagran		Existing Sewage P	
	***//\\\\		A MARKET			
	daetaxiiiiiii	anariiiii Kiiki		ing the control of th	Liamen conzulcte	O DE MOSC FIMIL

Cascavel

Description of Existing Intake Facilities No./Name Peroba Intake (Emergency Intake) (Cascavel) <1.ocation> Others Basin River Municipality Proprietor This river is one of tributory of Cascavel river. Rio de Pez SANEPAR (w = 7 m)Iguacu Cascavel <Description of System> Supply System Supply Connection Operation Year Intake Rate (Operation hour) Intake Method 0.13 (12 hour/day) Supply to Surface Water (188,327 inhabitants) 1982 Cascavel intake Direct with weir (m3/sec) (weir hight = 2 m) <Description of Pipeline> Intermediate Pump Others Diameter Water Head Intake Pump Length 500 2 pumps 1.8 400 26.6 (1 is standby) (75 CV/pump) (km) (mm) (m)<Future Plan / or Other informations, if any> This intake water supply to Cascavel intake site when water shortage occurs. <Location Map> Peroba Intake Legend (Scale: 1/50,000) Existing Surface Intake Existing Well Intake Planned Surface Intake Point **Existing Sewage Plant** Planned/constructed Sewage Plant Saltinho Intake

		Description o	f Existing Inta	Ke pacinies	angerick filter and the second		
No./Name	Saltinho In	take (Emerge	ncy Intake) (C	ascavel)	·		
<i.ocation></i.ocation>	River	[] [] [] [] [] [] [] [] [] []	In	Others			
Basin	Kiver	Municipality	Proprietor	9	ributory of Cascavel ri	ver	
Iguacu	Saltinho	Cascavel	SANEPAR	This river is one of tributory of Cascavel river.			
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>						
Intake Metho	d	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Year	
Surface Water		0.06		Supply to			
Direct with we				Peroba intake	(188,327 inhabitants)	1982	
			(m3/sec)				
<description< td=""><td>of Pipeline></td><td></td><td></td><td></td><td></td><td></td></description<>	of Pipeline>						
Length	Diameter	Water Head	Intake Pump	Intermediate Pum	Others		
			2 pumps	•			
3.99	400	106	(1 is standby)	į			
(km)	(mm)						
		formations, if a			· · · · · · · · · · · · · · · · · · ·		
This intake wa	ater supply to (Cascavel intake:	site when water sl	iorlage occurs.			
			•				
					,		
<location ma<="" td=""><td>ap></td><td></td><td></td><td>10447451 H 7847844</td><td>Washington and Same and Same</td><td>S Parises</td></location>	ap>			10447451 H 7847844	Washington and Same and Same	S Parises	
沙 / 二		\$#####\$\\$\\$\}\	累石/測 11	1 <i>?/(J//</i> /###	A PASTLANE N. CT.X. C	1/m & m	
1/1/2					解しく人類調		
	44887.			Casc	avel Intake)		
		3 \ \ \ \ \ \	$M \times X \times M$				
(\	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5 1 9/1 22/5				
						W XXXXX	
						区加级出	
			Peroba	mayerile intinting		353	
1.62	7		S . S . C	// a >- x4(
(Concession)	Vales, val	.			Legend (Scale : 1	/50,000)	
7,700				0	Existing Surface In		
					_		
200	V1 (0 1 K						
1000					Existing Sewage P		
	AND SE	67 .				•	
the S	//#			J. J. My	VALLAX Y LEUGES	d Zalveti	
		(@:\\~#/\				作品(1)	
	1/1/1/2			arte. 2008	& A		
) X X ()				V BRUDÎK AL V			
We to					Was a same of the		
		T T			T Mary Mark		
			11/20/2011			11000	
	MANIA			在整义 的图	W W STILL		
7 72 3	双翼羽	W. N.	Saltinho Inta	ke [] [] [] [] [] [] [] [] [] [] [] [] []			
1 7 7 / 29	NA RE		推荐为了人		<i>J.</i>	WALKET	
STAN STANKE	vezpraku:X	លោមបានបានដ	millioner de Pales	windstanguage.		MICHARASKANINI	

Guaraniacu

		Description o	f Existing Intal	ce Facilities		
No./Name	Firela Intak	e (Guaraniae	eu)		د المراجع المرا -	A Secretary of the second seco
<location></location>		No 1-1 114	D	Others		
Basin	River Firela	Municipality	Proprietor	Omers		
Piquiri	(w = 15 m)	Guaraniacu	SANEPAR			
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td>·</td></description<>	of System>					·
Intake Metho		Intske Rate (O	peration hour)	Supply System	Supply Connection	Operation Year
Surface Water			45.		7061	0 1000
Direct with we		0.025	(12 hour/day)		7,961	Sep.1980
(weir height =			(m3/sec)]	(inhabitants)	
<description< td=""><td></td><td></td><td></td><td>T</td><td></td><td></td></description<>				T		
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others	
		250 5	4 pumps			
5.1	150	i .				
(km)		(m)	(100, 75 CV)	<u> </u>		
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	/ or Uther in	formations, if a	hecalice unstream	of existing intake is	affected by outlet of h	no vard
There is a full	ire pian at San	Francisco nvei,	occause apstream	TOT CAISING IMAKE IS	anceced by observer in	og yaru.
<location m<="" td=""><td>ap></td><td></td><td></td><td></td><td>Legend (Scale: 1/</td><td>50.000)</td></location>	ap>				Legend (Scale: 1/	50.000)
				9.5 ₁₀ . W	Existing Surface Int	
					Existing Well Intak	
12502			M Ct	3/1/10	Planned Surface Int	
	A STATE			2/// 1	Existing Sewage Pi	
				Z 17/12	Planned/constructed	
	4X (1 X)		Market 1) / / / / / / / / / / / / / / / / / / /	WARN - NO	NAME IN COMMENT
X () ()	X-4XX		1756	Firela Intake		
			~ 3) [M	Millist.		
13 Y				1631/50 175/K		
ZZ AN						31 人無視
			XXXXX			
3 N		1 3 4				
	巡视	1	派主教服务		調がという	W III
		计三型		到1. 逐點開	不 一个解析为	到八人人
17	2	1.	少沙山	和此為語歌	16/發熱/20	《《《《《》》
i A	El .	IZ		》	11/2011/2011	AR 4 TA
1250			200		en Cara	7177
	通過	1894年		845		主题 [2]
		1	TO COM		7 V/7	公法是有
1 30 M						
	J. Market	1	%	3/1/202	938	
	S 8/1/1		聚為制力			144
		NIZZIN.	398	ARES SOLV	2 (18 m)	/ X ************************************
33886					NEW SOFT	
	1881				X)[[[V]///	
	1100 E	統配徵				
X		HYZAKA				
N/X 40			**************************************			
間的次		SERVEN			MAX	

Nova faranjeiras

		Description o	f Existing Intal	ke Facilitie	:s		
No./Name	Cobras Inta	ike (Nova La	ranjeiras)				
<location></location>					4-74-1		
Basin	River Cobras	Municipality Nova	Proprietor	Others			
lguacu	(w = 7 m)	Laranjeiras	SANEPAR	ļ 			والمراجعة والمراجعة والمراجعة والمستوان والمراجعة والمستوان والمراجعة والمستوان والمراجعة والمستوان
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>						
Intake Metho	od	Intake Rate (O	peration hour)	Supply Sys	stem	Supply Connection	Operation Year
Surface Water	Ī						
Direct with we	eir	0.006	(5 hour/day)			711	1983
			(m3/sec)	<u></u>		(inhabitants)	
<description< td=""><td></td><td></td><td></td><td></td><td></td><td>Ia.:</td><td></td></description<>						Ia.:	
Length	Diameter	Water Head	Intake Pump	Intermedia	ite Pump	Others	
0.2	75	10 - 12	2 pumps (1 is standby)				
0.2 (km)		i :	(1 is standoy)				
		formations, if a	nv>	<u> </u>			
<location m:<="" td=""><td>11114</td><td>CENTRAL</td><td>√v. ∀r vix</td><td>Schreibe</td><td></td><td>Legend (Scale: 1</td><td>(50,000)</td></location>	11114	CENTRAL	√v. ∀r vix	Schreibe		Legend (Scale: 1	(50,000)
					0	Existing Surface In	
						Existing Well Intak	
			211/1	216	ļ	Planned Surface In	
60)			Existing Sewage Pl Planned/constructed	
No Fred	itorio fadil pa				11682	Table Constitution	1 Share
	300 000 100 100			Mark			
			3 kg) s//(200			
7						1177777	
			11/2000	///			300
				Wa.			
	Y					G OY	N GANGE
	Cobras In	lake		501	100		
1/2 25	NAN((()				Maya	aran estas	
(200	(Herill		300	A DILL			
	7/2/3	7001			XIST	MVIIIZE 235	
		TO COPP			1 1		
学会と							鄉心
系统。			851 MK(?		Wife		110以数
			THERE IN	加運	(Mer.).	图图	平化磁线学
16251		辽州影響	深到外位		170		有為
11/11/11	All 12	力的影響	8 陸級極級				7/15
	计修建约	划以过		\$(((t ^t)			
11022 1	233	20) NAV	艾瓜似 化桂蕊	STATE OF	7期(6		
	7 (2)	邓明紫紫黑	3/////////////////////////////////////	MARK	STO	A CONTRACT	V/C
1. ~ July		ALEXANDER SAND	HENCHE WALL	存留之一	3W .		江/湖底器

Description of Existing Intake Facilities No./Name Leao Intake (Laranjeiras do Sul) <Location> Others Municipality Basin River Proprietor Laranjeiras do Sul SANEPAR Iguacu Leao <Description of System> Supply Connection | Operation Year Supply System Intake Rate (Operation hour) Intake Method Surface Water 19,780 1978 0.050 (18.5 hour/day) Direct with weir (inhabitants) (m3/sec) (weir height = 1 m) <Description of Pipeline> Intermediate Pump Others Water Head Intake Pump Length Diameter 4 pumps 5.1 150 x 2 0.6 200 160 (2 is standby) (100, 125 CV) (km) (mm) <Future Plan / or Other informations, if any> There is a future plan at 4 km downstream of the existing intake, facility desigh has finished on 1983. <Location Map> da Divisa SUL DO Sanga Leao Intake Legend (Scale : 1/100,000) Existing Surface Intake Existing Well Intake Planned Surface Intake Point O

Existing Sewage Plant

Planned/constructed Sewage Plant

Guarapuava

PROPERTY NAME OF THE	KACIONINO INCIDENTIALISME	Distribution	of Existing Intal		_		
No./Name	Pedras Inta	ke (Guarapua	ıva)				
<location></location>	- 40(10) 3111(1	(Saurapua	,				
Basin	River	Municipality	Proprietor	Others			
	Rio das	' '					
Iguaçu	Pedras	Guarapuava	SANEPAR	İ			
<description< td=""><td>of System></td><td></td><td><u> </u></td><td><u>t_,_,</u></td><td></td><td>The state of the s</td><td></td></description<>	of System>		<u> </u>	<u>t_,_,</u>		The state of the s	
Intake Metho		Intake Rate (O	peration hour)	Supply Sys	tem	Supply Connection	Operation Year
Surface Water			· • • • • • • • • • • • • • • • • • • •			o-pp-y commensu	1966
Direct with we		0.300	(17 hour/day)			26,334	
		•	(m3/sec)			(connections)	tros(opaating)
<description< td=""><td>of Pipeline></td><td><u> </u></td><td>(ms/ord)</td><td>l</td><td></td><td>(comiterioris)</td><td></td></description<>	of Pipeline>	<u> </u>	(ms/ord)	l		(comiterioris)	
Length	Diameter	Water Head	Intake Pump	Intermedia	te Pump	Others	
	400	l	3 pumps				
1.12	350					Gross water loss 34 %	Ó
(km)	(mm)	(m)	600 x 2, 450 CV)				
		formations, if a					
There is a futu	ire plan at bana	anas river. (2004	1)				
<location ma<="" td=""><td></td><td></td><td>······································</td><td></td><td></td><td></td><td></td></location>			······································				
*Location vis	ap~ 1	11 69/11 - 2018 i	nangez i ereve i e	ه ۲ سساما		Legend (Scale: 1.	/50,000)
1 54			Section of	1.1	•	Existing Surface In	take
17. 60	N. U.B.	15 3(23)				Existing Well Intak	
					Ó	Planned Surface In	
		K A S	Vita P	mayers	A	Existing Sewage Pl	
مرافع المراث					\sim	Planned/constructed	Sewage Plant
Allo S	1., 7		100		$\mathcal{L}_{\mathcal{L}_{\mathcal{L}_{\mathcal{L}_{\mathcal{L}}}}}$	S. 2-206	
7 51028 7				5	7	Torn	\$ (161)
BOCK TO	111.3			Both Ville Bo	nave fato il	MAZSO (CCAN	777
1	S. Ville	1000					((O)ZAN)
1/038	1			Manuf.	H		
Sa Milli			Area			MICHAELINI (35°)/8/1°
うくか	Notoborto (NA A	TYNUM	TOBIAS (III
13	1040	ALICOSTONAL			XVII.	Vila Santada)	1
Ter Jure	Vila Col	1000			"ZX-1	1000/8	
A10.3 C (c)	Vila Col	Tes &			\$ 500	MONTH MUNICIPAL	
	15				12 71 V	13 182 1182	Wall
[5×4]	17 5			~\ / \&\(f	Z-K Pe	dras Intake	
1 1 1	人人			Broso	》 个	- Y)\C-3	STANTIA 1
11 1	To sate	777.7.2	SULLAND.	1915 - 143			
N7 18		DATE	77 11 7/10		Kell &		777 F
15/2/2	1019 (860	DEURACO	1 32 110	派。起	\mathbb{R}^{n}	12/06/70	7 60 900
377				(ISD	J/3-6	2 (01/08)	(\$ (()
(1) (6.5 Km)	SQURAL			从温料			9-11-1
N	11656			Our Gara	VALUE .		
100x	100		· · · · · · · · · · · · · ·		The state of	TO AREST	
200			10801	15,7	10839	No source	
		Je Nich	11/2/1/4/1/2	W/W		Red sittle	
	14. 14. 14. 14. 14. 14. 14. 14. 14. 14.	Art Frankly		XT 100X	HT/C	JAN 125 T. Y.	100
					AND RESIDENCE PROPERTY.		THE RESERVE AND ADDRESS OF THE RESERVE AND ADDRE

No./Name	Invernada I	ntake (Pinhac))		
<location></location>	mitter interest	maro (1 mm			
	River	Municipality	Proprietor	Others	
Basin	RIVEL	oruntipaint	r 1 obi ietor		ibutory of Pinhao river.
Iguacu	Invernada	Pinhao	SANEPAR	imare fiver is a u	loatory of t unido tivet.
<description< td=""><td>of System></td><td></td><td>L</td><td></td><td></td></description<>	of System>		L		
		Intalia Bata (O	peration hour)	Supply System	Supply Connection Operation Year
Intake Metho		intake Nate (O	peration notify	on hay obstem	Supply Connection Operation Tea
Surface Water	ī				
Direct		0.019	(16 hour/day)	370 ha supply are	
ì	1.0		(m3/sec)		(connections)
<description< td=""><td>of Pipeline></td><td></td><td></td><td></td><td></td></description<>	of Pipeline>				
Length	Diameter	Water Head	Intake Pump	Intermediate Pu	mp Others
-		:	2 pumps	to the same	
1.5	150	40	(1 is standby)		
(km)	(mm)	(m)	(20 CV/pump)		
		formations, if a		<u> </u>	
		Laj Bonito rive			
incle is a fact	ato pian at rim	.baj.bemio mv	••		
<location m<="" td=""><td>ap></td><td></td><td></td><td></td><td>3</td></location>	ap>				3
2122-57		(1)////(1)	$yy \in YXX$	ルルはを	
13000			NLY MAN	\$8,684VAUAGS	
	XIII (2)	11152565	11 864 (11)	50 1 21	1000 1000 1000 1000 1000 1000 1000 100
	J-18/11/11	5 M. P.	17 7/3/b	1/2/	
1 5 82	1711) G	1 1/227	12 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	550	
1 5/	(1)	1 1 5 6 2 5 (人们的东		NOWA CONTRACTOR
12 50	17 (717775		// Ø5\	MENTING FINANCE
1 1 7	V I V	\(\{\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	A TOM		120 12 C(24 (AS)
	' I Y	川原			STAN IN MINE
311	/035*	ノ 八張! - !	125925	12	AND THE STATE OF T
1042	10/	[13][[] [1/6/15	2/2	My Colon
400 1037	11:	K/SY	1 3/15	See () 5	CHATI) A 1054
>-	6642		760.	300	STATES (CHANGE)
					3/1/1/ 10/ 10-54
`	-//		Pinhão,	1051	W. Misself Commission
	78	*1033	W W		W.W. K. G. F. F. S. J.
 ノ	"Faz. Afibal Tolo	05 -103) \ . \ /	DK X	(18/2) 18/18
λ		火 ,	vernada Intake	(E \ A)	1/2 1/20 No. 1/2
vdp.	1	/	1 50	1 1	DE LOS TIMOS ICI
	1517	′ \ \ *x038	1 5	13/	
Diatros Mendes	() RET	\sim 1	JUN 1		William I The Man
1/6	1 > 1 W	1 3 37		G665 ()	1 5 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	1			13	
		1 62	(A)	(23)	
Cem	77	J. J. Jan			
	IL CURE	19.0		3 / 40	Legend (Scale: 1/100,000)
129 4		Bulla	LAGORS	<i>≶</i> ∕\ _/}}	
		4-	The state of the s	— / 二条	AT
\	Campo de Po	30	1 どびレ	$\int \int $	Existing Well Intake
7	1015	1089	1 sold		Pianned Surface Intake Point
	/ "" ·	1-12-1	11.	(The	Existing Sewage Plant
\		×1 //		` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	△ Planned/constructed Sewage Plant

No/Name	Tibagi Inta	ke - EEB13((Londrina)				
<location></location>							
Basin	River	Municipality	Proprietor	Others Integrated sys. with Cafezal Intake			
	Tibagi						
Tibagi	(w = 150 m)	Londrina	SANEPAR				
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>						
Intake Metho	od	Intake Rate (Operation hour)		Supply System	Supply Connection	Operation Year	
Surface Water		1.20 (16 hours/day)		supply to Londrina		4. 2	
Direct	1			and Cambe urban	140,000	Dec. 1991	
		<u> </u>	(m3/sec)	area	(economy)	:	
<description< td=""><td>of Pipeline></td><td></td><td></td><td></td><td></td><td></td></description<>	of Pipeline>						
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others		
	900		4 pumps	Two intermediate			
12.036	800	230	(2 is standby)	pump stations	Gross water loss with	Cafezal intake	
(km)	(nım)	(m)	(150 CV/pump)	(3 pumps, 1500 CV)	is 40 % (Dec.1994)		
- Putura Plan	Law Other in	formations if a	m 10.			+ 4	

<Future Plan / or Other informations, if any>

There is a plan of hydroelectric dam by COPEL at Jataizinho (Sep. 2002),

backwater of future reservoir will cover this intake facility. (about 10 m heigher) Additional 2 intake pumps, pipeline and treatment plant are planned to install in the future (1998). The future intake rate will be 2.4 m3/sec.

Legend (Scale : 1/100,000) Existing Sewage Plant Planned/constructed Sewage Plant Planned/constructed Sewage Plant

Londrina

Description of Existing Intake Facilities No./Name Cafezal Intake - EEB1 (Londrina) <Location> River Municipality Others Basin Proprietor Cafezal SANEPAR (w = 10 m)Londrina Tibagi <Description of System> Supply Connection | Operation Year Intake Rate (Operation hour) Intake Method Supply System supply to paticular 0.55 (16 hours/day) Surface Water 1959 (140,000)0.90 (Max.capacity) area in Londrina Direct with weir (downtown, west) (economy) (m3/sec) (weir height = 2 m) <Description of Pipeline> Interniediate Pump Others Water Head Intake Pump Diameter Length 1 internediate pump 600, 500(1st) 3 pumps station with Gross water loss with Tibagi intake (500 CV/pump) 5.7 400, 550(2nd) 2 pumps (600 CV) is 40 % (Dec. 1994) (mm) (km) (m)<Future Plan / or Other informations, if any> <Location Map> Legend (Scale: 1/100,000) **Existing Surface Intake** Existing Well Intake O Planned Surface Intake Point **Existing Sewage Plant** Planned/constructed Sewage Plant

Apuçarana

· · · · · · · · · · · · · · · · · · ·		Description of	of Existing Intal	e racilities	
No./Name	Caviuna In	take (Apucar	ana)		
<location></location>	~ 01 7 0 07 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	C. Shanin		التركية والمستوية والمستوية المستوية والمستوية والمستوية والمستوية والمستوية والمستوية والمستوية والمستوية وال	diginalin Tipi Padi pilanin ini mada mada di manana da manana. Naja di inaka Pang yaya <u>da a badan ini sana sana b</u> ad
Basin	River	Municipality	Proprietor	Others	
	Caviuna				•
Ivai	(w = 5 m)	Apucarana	SANEPAR	e general	
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td></description<>	of System>				
Intake Metho	đ	Intake Rate (O	peration hour)	Supply System	Supply Connection Operation Year
Surface Water		0.25	(22 hours/day)	Apucarana Urban	
Direct	÷		(Max. capacity)	(18 km2)	26,678 1976
4			(m3/sec)		(connections)
<description< td=""><td></td><td></td><td></td><td></td><td></td></description<>					
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others
6043	100	262	3 pumps	4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	C
6.043	400	1	(No standby)		Gross water loss is 36 %. (Feb/1995)
(km)	(mm)	(m) formations, if a			
			lan at Rio Cerne (Tibagi basin).	
				<i>C</i> ••••••	
<location ma<="" td=""><td>ap></td><td></td><td></td><td></td><td>Legend (Scale : 1/50,000)</td></location>	ap>				Legend (Scale : 1/50,000)
in Suit	1 - 1850	X = X = X = X = X = X = X = X = X = X =		- 38 3E	
5.2.1		Caviuna Inta	%/ '~\\	した、	
	إذكائك		1 /200	On Pil	
	33	Control of the second		STATE A	
4 11 1	1. 1/2	3/			Planned/eonstructed Sewage Plant
- , \				7/1	
	λ . (/ 1			11 July 1	
1. 10	174KC		$\langle \cdot \rangle \langle \cdot \rangle$		
ومرسر للغر	-1.17		- XY		1677 WICC
7 717	M Ita				ハトロガアンスプブ
1/10/1				$\bigvee f(X) \nearrow f(X)$	
THOU	100	97/		144	
		7/1/			
3	//\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	11/1	LEE	11.86.11	
1.75			>>-)	73/1/2	
1	77/14				
	7 H/)	(Second)			
La Series	1/11/	A STATE OF THE STA		1111	
176		MA(X)		たけいし (1	
35.21		$(I \cup I)$	11/1/1	7/1/1/XXX	the ans
400	[[[لمسجي	$ \mathcal{J} _{\mathcal{F}}$	インクロ		A WAS
325?		/ N LL-V	W 111	What I	
Zerish	NICO	11571	A K		以《BBBBBL 化氯酚
1 ×300		111 (11)	MM	CANNO CONTRACTOR	(6660) 83333343334////
	\//>\\	11/1	UN V		
K CA	$\langle \mathcal{J}_{\perp} \rangle$	166	110	3 WAGETON	
* うナナポ		けたてファ	3) 1. 100	TAUNINAZA	なになく入りからない。
1.1					

Description of Existing Intake Facilities No./Name Formigas Intake (Ortigueira) <Location> Municipality Proprietor Others River Basin Formigas SANEPAR Ortigueira (w = 8 m)Tibagi <Description of System> Supply Connection | Operation Year Intake Rate (Operation hour) Supply System Intake Method Integrated sys. 0.013 (15-18 h/day) Surface Water 1982 with well intake 1,530 0.12 (Max. capacity) Direct with weir (connections) (m3/sec) (weir hight = 1.5m) <Description of Pipeline> Intake Pump Intermediate Pump Others Water Head Diameter Length Water treatment plant exists 2 pumps 100 (PVC) at same location of intake. 35 150 (m) (mm) (km) <Future Plan / or Other informations, if any> <Location Map> Legend (Scale: 1/100,000) Existing Surface Intake Existing Well Intake O Planned Surface Intake Point Existing Sewage Plant Planned/constructed Sewage Plant

Telemaco Borba

		Description o	f Existing Intal	ke Facilities		
No./Name	Tibagi Intal	ke (Telemace	o Borba)			
<location></location>						
Basin	River	Municipality	Proprietor	Others		
	Tibagi	Telemaco		Industy Activity is pa	aper factory 50 %,	
Tibagi	(w = 80 m)	Borba	SANEPAR	Agriculture 25 % and	i commercial 25 %.	
<description< td=""><td>of System></td><td></td><td><u></u></td><td>L</td><td></td><td></td></description<>	of System>		<u></u>	L		
Intake Metho		Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Yes
Surface Water			(18 hours/day)			
Direct			(Max. capacity)		13,800	1963/64
Diffect		0.17	(max. capacity) (m3/sec)			1703/04
<description< td=""><td>of Pineline></td><td></td><td>(1113/500)</td><td></td><td>(connections)</td><td></td></description<>	of Pineline>		(1113/500)		(connections)	
		Water Head	Intake Pump	Intermediate Pump	Others	
Augen	200	Tracer Inches	3 Pumps	. •		
6	350	183.3	_	•	Distribution water los	s 38 %
(km)	(mm)	(m)			~.50100000 mutt 103	
		(m) formations, if a				······································
here is the hi	opest namer for	ctory (" Klahin I	Paper Factory*) in	South-America at do	wnstream of SANEPA	R intake site
				lectric power station.		- Lanconty Gitte.
	piji nyudil	Transfer Pr		The power success	•	
Location Ma	ap>			<u> </u>	Legend (Scale : 1	100 000)
1111 X~V	141-402	× 1/4 %	SWATELY AND		Existing Surface In	ال جن جن و مدخون المساحث
Z//) \\ \od		0 CXX			Existing Well Intak	
17.7		16 19			Planned Surface Int	
9181	CS/	18/0	July 1		Existing Sewage Pl	* *
SHE		MBA	DZINHO	Moo A	Planned/constructed	
777	S (1)	TEXT	3/1/2		J/: \V/	« (< <
RIO 1			N M	Sold A		1771
	WEAT!		の企業を	Well to		(Euo V
W.	5X-440		SANO			Work
	₹ ₩	STILLY SE	Parfore	Troops of Lines	$ \langle S L_2 \rangle ^2$	
		113810 C	DEST	of air the	YVANY A	
19/165	(Section		Cole No.		1621 15	
1 01/6	11031335	KZAN		The state of the s	100	
Me &	1916	W/2 / 1/2				
MAK				TO THE STATE OF TH	SOLVE DE LA COMPANION DE LA CO	ME
			1000	SIPPER IN	COLLEGE SON	
	xnantes 3	chool I Tel	meto Bolda		Jan 16	R WP1
(4) (a)					N/W	2
)}{(\mathred{\matrid{\matrod{\mathred{\matrod{\mathred{\matrod{\matrod{\matrid{\matrod{\matrod{\matred{\matrod{\matrod{\matrod{\matrod{\matrod{\matrod{\matrod{\matro			7/3/2013	10 CA CA CA	
	150				(1) so. 3 d (1)	M
				FEMILES V	1777	2011
		Valid Col	em or	Tibagi	Intake /	
	MGM		1 2000 W	MAN SEC		
1(2)	Ed Kar			M.W. (172.3)	Jas Cégado	
PSMX	JITYA		X S.M.	LAN TELLAN	W = 376	M AV
(////)	(代学》)	Collect S		16-XXX-552XXX	CONTACT NO	150 (XX)
MAN	18/20	Charles of the second	CONTRACTOR OF THE PARTY OF THE	3) 186571111	Contract of the second	
	15/2/6	MIM	The Contraction	とうなった。	入るがであって	1576
以外人			TOTAL SOLE	SILLIM		(\subset,\supset)
(Cen	redo//> 9		小对外	ノハグラ	MICH D	12 12 12 12 12 12 12 12 12 12 12 12 12 1
u ~ 11		LOH-	· · · · · · · · · · · · · · · · · · ·		· ·	

Tibagi Inta				
	ke (Tibagi)			
		r 	Ta	
River Tibagi	Municipality	Proprietor	Others	error (1965) er en
	Tibagi	SANEPAR		
	r			
od .	1	-	Supply System	Supply Connection Operation Year
• .	0.03	(10 hours/day)		
		(m2/caa)		1,874 1978 (connections)
of Binalina	L	(113/300)	<u> </u>	(connections)
	Water Head	Intaka Pumn	Intermediate Pump	Others
	Water Head			
	60	1		Gross water loss = 24.9 % (Dec/94)
			1	(1055 Water 1055 - 24.5 76 (150054)
CC MOIK 15 UNG	or-construction.	(no vo brokress)		
		* 1	· · · · · · · · · · · · · · · · · · ·	
an>		· · · · · · · · · · · · · · · · · · ·		
			Tibagi Intake	Strip Ciriaco Control
	of Pipeline> of Pipeline> Diameter 100 and 150 Parallel pipe (mm) / or Other in et work is und	of System> Intake Rate (O 0.03 of Pipeline> Diameter 100 and 150 Parallel pipe (mm) / or Other informations, if a et work is under-construction. Application continues applications of the continue construction.	Tibagi SANEPAR of System> of Marke Rate (Operation hour) 0.03 (10 hours/day) (m3/sec) of Pipeline> Diameter 100 and 150 Parallel pipe 60 (1 is standby) (mm) (m) (75 CV/pump) / or Other informations, if any> et work is under-construction. (50 % progress)	of System> d Intake Rate (Operation hour) 0.03 (10 hours/day) of Pipeline> Diameter 100 and 150 Parallel pipe (mm) (m) (r) (r) (r) (r) (r) (r) (r) (r) (r) (r

No./Name		Description (of Existing Inta	Ke racuules		and the state of t
MONING	lapo Intake	(Castro)				+
<location></location>					Total Control of the	***************************************
Basin	River	Municipality	Proprietor	Others	:	
	Iapo		_			
Tibagi	(w = 25 m)	Castro	SANEPAR			
<description< td=""><td>of System></td><td></td><td>·</td><td>J</td><td></td><td></td></description<>	of System>		·	J		
Intake Metho	od ·	Intake Rate (C	operation hour)	Supply System	Supply Connection	Operation Ye
Surface Water	· · · · · · · · · · · · · · · · · · ·	0.058	(20 hours/day)	Integrated Sys.		-
Direct from na	ature swamp			with Sao Cristovao	8,846	1963
			(m3/sec)	dam reservoir	(connections)	
<description< td=""><td>of Pipeline></td><td>-</td><td></td><td></td><td></td><td></td></description<>	of Pipeline>	-				
Length	Diameter	Water Head	Intake Pump	Intermediate Pump	Others	
			2 Pumps		·	
0.273	250	61.7	, ,			
(km)	(mm)					
		formations, if a				
SANEPAR co	nsiders future	intake at same lo	ocation.			
<location m:<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td></location>						
- Location in			*			
*	拉 之外	10/19/11/05	Chapeut	「大きまっ」	IN MORE	≥ 7/≤
	1500	137 815	[E/2/1, 127] }	リジカだき	J115257X	
40	1.5	13/ 1/3 C	100 P		1 2 5 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	3 5
0		172/3 4	CO) TONO	3 Chis		\sim
873	10-10)	400/2V	\		A Was Care	S
D	1/2/6/1	ተጎዢ" ለ		18-5-1800		2-6
2	12 X 5 34	FVV.	5		COLONIA	218
~2	A C	NEW Y	(m)	Erry 1		医阳
446	Pilan	TO K	2 2 1 I	3 4/		1
\approx	1/2) 18 c-	93.	FUNDÃO	~~ \ \ · · · · · · · · · · · · · · · · ·		Mil
	$\Psi / \lambda > 0$	170%/5.7		としか か	14.85 P. H. 18.47	
1	1-7) \$7	13/17		Marila Line		Japo Intal
<i>}/</i>	CACO	X/CZ (C)		9 HT 5		SI
W.	1/2/200	17/2/2011	Dest.	SIS TO	TO WAS TO THE TO	67
رخ	12/(Vs)		ristovao Dam Res	aniair Intoka Cola	1000000 N	
<i></i>	12254			icivon iliake 2.5	WASTROX 12	器针
2	\(\cdot\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	**************************************	7/09/0	36 33		23 <u>7</u>
. S	2561 21	Y_{<< </td <td>P. 556</td> <td></td> <td>COLUMN TO THE STATE OF THE STAT</td> <td>tire</td>	P. 556		COLUMN TO THE STATE OF THE STAT	tire
7	$\mathcal{W}(\mathcal{U})$	1000	K-WKF	43 CD K	(H-725- MA)	7
u He	17:17:X	1000 Sept.	がわれた	(CALCE!		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
11/6	1.080 X	10000	COLONIALCONCE	Was Company	M CON	n'a
QS P		1	I WOUNT.		S Tay All	(V)]
	和5.			442285 27A	1/3/1/8/2	
	will bear	V37 /2 / / //		C Show	NAV MARCINE	
	V Mill	CAMINA DE	\$ 1000E	1621 -	Legend (Scale: 1/1	The later with the la
ر ب - ب	10 M22-	1.18	(W) 25 G		Existing Surface Into	
10	1/2/1/2V	L (EU)	MY (K) YZ		Existing Well Intake Planned Surface Inte	
નિ	18/2/11/2	【 】	N KY CE	ર્હિં ૄિ ઍ	Existing Sewage Pla	
	10/13/2011 30	· · · · · · · · · · · · · · · · · · ·	4. 15 A.	Δ	Planned/constructed	
				L	Market market	

		Description of	f Existing Intal	C Pathiles		
	Sao Cristov	ao Dam Rese	rvoir Intake ((Castro)	and the second s	
<location></location>		1.2	1	Others		
Basin	River Sao	Municipality	Proprietor			
Tibagi	Cristovao	Castro	SANEPAR	Catchment area at da	m is 100 ha.	
<description< td=""><td>of System></td><td></td><td></td><td>I</td><td></td><td>A</td></description<>	of System>			I		A
intake Metho	đ	Intake Rate (O	-	Supply System	Supply Connection	Operation Year
Surface Water			(24 hours/day)	Integrated Sys.		
Dam reservoir	V = 100 m	0.055	(Max. capacity)	with lapo intake	(8,846)	1
(Dam H = 4 n	n, W = 12 m)		(m3/sec)		(connections)	<u> </u>
<description< td=""><td>of Pipeline></td><td></td><td></td><td></td><td></td><td></td></description<>	of Pipeline>					
Length	Diameter	Water Head	Intake Pump	Intermediate Pump		4. 4
			2 Pumps		Pipeline is natural gra	wity flow.
0.5125	200	27	(1 is standby)			
(km)	(mm)	(m)	(75 CV/pump)	<u> </u>		
<future plan<="" td=""><td>/or Other in</td><td>formations, if a</td><td>ny></td><td></td><td></td><td></td></future>	/or Other in	formations, if a	ny>			
Hightning the	existing dam	may be acceptab	le, but material of	existing pipeline hav	e to improve.	
<location m<="" td=""><td>ap></td><td></td><td></td><td>•</td><td></td><td></td></location>	ap>			•		
, W.	W	101 DIKES	KATY W	8 Y 4 ~ 80%	1003 × NW 89 P 2	9 # &
		CYMSISO G	Chapeu	Winter	11/2/25(11)	S
√.6		15 1/5 21	45372 3.	- U// ///	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1
ار با	1-32 MCC	1. N. U.	Supplied A	- 5 M	1565 Com	S.
811.5		\(\langle\) \[\{ \]	(A) 大洋(A)	Co Cha	1445577	1. T.
1,20		17,160m		35 20	(Tanhaman)	2-34
り	\$ 15 T	$LV \setminus M$		V/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CONONIA	7 6
l 📆	CT/	Deft.	\sim \sim	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	MO CONSTITUTION	K W
550	Birth	たとうな	الم والمحادثة	ら か り	4000	191
200		> 3.1.7.	FUNDÃO		Sama	TK:
│	1/ 183 Y	1500 × 1	ion ion	15/4 5	S. E. OZ (DA 1/2)//-{}\
	11135	18/7-72		may filed		4 <i>4</i>
1 57	1723x			1 / Let 3 . 2 %	* WHE	Japo Intake
l <i>W</i>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	KN(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	14 C			
1	[{\$\ac{2}{2}}	<i>እ የ</i> ረረ ዎ ሩኒ	15557 11/		72 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	<u>{</u> }}-
2	RV1700	Sax Sax	Cristóvao Dam	Reservoir Intake	RK LOVE	
1 8	///\\\\^\	V,0%/ 5		37~2~45	CASTRONO!	en) [
35	NCXXXX	1/2/2/2/1				(B)
1 %	1267773	1)。}\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1, 25.75			eero -
I %	1/6(4/5)	K Zwin		$\mathscr{D} \subset \{i\} \supset \mathcal{T}$	M. Colinary	1 2
1 36€		170		ハングルくら		$\mathcal{J}_{\mathcal{I}}$
1/18	1. S. X.	100000000000000000000000000000000000000	Crosonia colof	M. L.C. 1825		11.7
1 3	NIST S	12000	My VI	2 ACTOR	5 47 PU LST	(V)
×	1.50		30 KV	2 COM 25 R	SVETMEN	
	LO SOLO SUR	CAMPINA DE		3 7	Legend (Scale:	1/100,000)
7		1 (U)	\$1616).			
	1011/25.J	P. 1. 21/1	WENT		-	
1/2	12 N.S.	12700	KC W. / C	6 X X	- '	
[d	2. //UMI	下一个人	グニジブ	13 6 1 A		Plant
	,			Δ		
				t		

Ponta Grossa

		Description o	f Existing Intal	ke Facilities		
No./Name	Pitangui In	take (Ponta C	Grossa)			
<la>cation></la>						
Basin	River Pitangui	Municipality	Proprietor	Others		
Tibagi	(w = 15 m)	Ponta Grossa	SANEPAR			
<description< td=""><td>of System></td><td></td><td></td><td>r</td><td></td><td></td></description<>	of System>			r		
Intake Metho	d	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Year
Surface Water	•	0.30	(21 hours/day)	Integrated Sys.		•
Direct with ga	bion weir	•		with Alagados	302,180	1985
(weir height =	4 m)		(m3/sec)	Intake	(inhabitants)	
<description< td=""><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td></description<>			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Length	Diameter	Water Head	Intake Pump	Intermediate Pun	np Others	
Ŭ			3 pumps		Net-work loss 36 %	
6	700	150	(2 are standby)		Production loss 7 %	
(km)	(mm)	(m)			Gross water loss 43 9	Y6
		formations, if a				
			t the existing station	on,	····	
		not enough from		·		
	,	•			4	
<location m<="" td=""><td>ap></td><td></td><td></td><td></td><td></td><td></td></location>	ap>					
			Brain (Sub)	Pltangui Intaki		
rque Sen Sen Sen Sen Sen Sen Sen Sen Sen Se		Months of the state of the stat			Planned Surface Intain	ke ke Point
源州 郊	Z BOWA	ANGYIYA	然为是中国的			
************************************	ne someone they salts	······································		1 4-7	1 tentes di Action de CAO	// OD- = 10216

Ponta Grossa

No./Name			of Existing Intal			
	Alagados I	ntake (Ponta	Grossa)			
<location></location>	T.	15.4		lou		
Basin	River Alagodos	Municipality	Proprietor	Others Alagados reservoir is	one of COPEL's hydr	oelectric
Tibagi	Reservoir	Ponta Grossa	SANEPAR	reservoir in Pitangui	river. (Dam H=14 m)	and the state of t
<pre><description< pre=""></description<></pre>	of System>					
Intake Metho	od	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Year
Surface Water	•	0.40	(21 hours/day)	Integrated Sys.		
Direct with Co	OPEL'sdam			with Pitangui intake	(302,180)	1971
		<u> </u>	(m3/sec)	<u></u>	(inhabitants)	
<description< td=""><td></td><td></td><td></td><td></td><td></td><td></td></description<>						
Length	Diameter	Water Head	Intake Pump	Intermediate Pump		
		İ	5 pumps		Net-work loss 36 %	
14.8			(1 is standby)		Production loss 7 %	_
(km)		 			Gross water loss 43 9	0
		formations, if a		when water level face	er than normal stage.	
SANEPAR na	is a response to	o pay the water t	ise fee to Cored,	When water level low	er man normai stage.	
İ				•		
<location m<="" td=""><td>an></td><td></td><td></td><td></td><td><u> </u></td><td></td></location>	an>				<u> </u>	
HAMMEN					CALL TO	1
A COLLEGE			11 12 11 11	######################################		
	100					
11.0						
		1,11		William (VI)		
	$\sim T \sim$			A MARIE	Morro Grand	
A Process	11	1 1 1	Alagados			
	1. Ch	4 29	Alagados (1015 °)			
111111	(1) L	1	(Romans	on Alagados		
		There !				
	XIII	-587-		上 ()	八個議員	
	ESI -					
	(lio	1/100		Milli	7) " "(CE)	37 X II
			1009	All Cook - May		
1	7 2			対のしていたとうと	The Carrie	
			2/)		(-1377:	
tic 📝)	
77		iV	Rail Essera Barbara	1031		1. E. C.
					Sir Sin In	
	y Ciktin Hitto				Sec. 10	
	10-1-11-11-11-11-11-11-11-11-11-11-11-11				Tagand (Saata - 1	/so ooo
	chicara Rea Ville		I		Legend (Scate: 1	
	V			9		
Chácara			. (Bicara ∵ Kilitis	i i koatiu		
	Chemaison's	ill Ziniy	8 w 114	A	Existing Sewage P	
<i>i</i>	mmmmmm	merce constraint			Planned/constructe	o sewage Plant

		Description of	f Existing Intal	ke Facilitie	s		
No./Name	Santa Cruz	Area (Well)	(Cascavel)				
<location></location>							
Basin	Source Serra Geral	Municipality	Proprietor	Others			
Parana 3	Aquifer	Cascavel	SANEPAR		· · · · · · · · · · · · · · · · · · ·		
<description< td=""><td>of System></td><td></td><td></td><td>r</td><td></td><td>Y</td><td></td></description<>	of System>			r		Y	
Intake Metho	od [*]	Intake Rate (O	peration hour)	Supply Sys	tem	Supply Connection	Operation Year
Groundwater		92.70	(16 hours/day)				
Direct from 1	well			Santa Cruz	Area	9,000	Aug.1993
			(m3/hour)			(inhabitants)	(date of drilling)
<description< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></description<>							
Length	Diameter	Depth of Well		Intermedia	ite Pump	Others	
			1 pump				
		103	(60 CV/pump)			Gross Water loss 40 %	6
(km)		(m)					
		formations, if a		>4 1	. 1 7. 4	006	
			be operated between		_	995.	•
intake rate wi	ii is expected ?	250 m3/nour and	supply to 8,000 (connections.			
<location ma<="" td=""><td>aD></td><td></td><td></td><td></td><td></td><td></td><td>50.000</td></location>	aD>						50.000
	warender	Alsys XIIIIku		gringinist.		Legend (Scale: 1/	
					9	Existing Surface Int	
1 west		} } }				Existing Well Intak	
			Į į į į į į į į į į į į į į į į į į į į		Ò	Planned Surface Int	
					A	Existing Sewage Pla	ľ
VEA	**([])[Δ	Planned/constructed	Sewage Plant
	*			200	i de la		
/	A L	委特省 松斯					
220			须		de la compa		919(fin)
32000							
		3000		2440		in and the second	
N.							
TECOPODE .							
	******* # #						IIIIIAB
T X X X X							
Seso cerascos:	62.1	11000000					APPENDED.
WX XI							
			20/-1:1-1/E			了情報報道	
							HAA.
			:T:7 / 1/1	The same	40.0		
		ZĎ** N	1) /		V SV G		
				Y izaza		A STATE OF THE STA	
	\$ (7)		is is a				
	h'X' i i i i					计数据	器可用
							國家一代期
	THE STATE OF						計劃分析的
		Reservable.					
						* 1001 × 5	
		A Same		/	(\$0.311)		23.2
wantikanana).	o venikilikini	en en en en en en en en en en en en en e	arasti i i i i i i i i i i i i i i i i i i	solmicking	415. 50111	enderfaxiðsinhilið	their comments

Cascavel

		Description of	f Existing Intal	(e l'acuilles		
	Periolo Are	ea (Well) (Ca	scavel)			
<location></location>		11.6	D	Others	<u>, </u>	
Basin	Source	Municipality	Proprietor	Others		
i	Serra Geral					
Piquiri	Aquifer	Cascavel	SANEPAR			
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>					
Intake Metho	d	Intake Rate (O	peration hour)	Supply System	Supply Connection	Operation Year
Groundwater		48.00	(14 hours/day)			
Direct from 2	well	1	(- " -)	Periolo Area	35,000	Sep.1993
Once nom 2	*1**		(m3/hour)	i	· · · · · · · · · · · · · · · · · · ·	(date of drilling)
<description< td=""><td>of Pineline></td><td><u> </u></td><td>(Marilout)</td><td><u>L</u></td><td>. (</td><td><u> </u></td></description<>	of Pineline>	<u> </u>	(Marilout)	<u>L</u>	. (<u> </u>
Length	Diameter	Depth of Well	Intake Pump	Intermediate Pump	Others	
Lingin	12.25, 8			_		
	12.25, 9, 10	3		l	Gross Water loss 40 9	6
a			1 ' '	[
(km)	(inches)	formations, if a		1	I	
ruture rian	/ OF Winer In	iormanons, il a	")"			
					<u></u>	
<location m<="" td=""><td>ap></td><td></td><td></td><td>ngagang go di dalaman dan</td><td>andomingoniphologopologopolog</td><td></td></location>	ap>			ngagang go di dalaman dan	andomingoniphologopologopolog	
			. JM / / / /	対し 八田田 はんしょう こうしょう しょうしょう はんしょう しょうしょう しょうしょう しょうしょう はんしょう しょうしょう しょう	4-4-77	
1 1 1						. V
N 17				X 121 11		
34.503					28/1/2	
	NOV X		1		TOWN 1 144 P	CABÁU /
				Nan980 • V		
No. A		上版的人,随		Per	iolo Well	
XXX	6	10000			## xx 15 // /	
X1.2 X36						
		\$ 6 (A A)		Pin Cont		94
20 Z						K N X X
	第二十二岁				Mulan	ibi Well ()
					: //: // /@@@	
	1000			X 10000000		/ lating lating
				200		
	a salah salah					
			VV bills			1 142 3 3 3 3
Sit of	3 (1,0)(1	The soul and		アンフィン・メント		
		AREA MILITAE				
		Sando .	以用鐵川		一个大學問題	
					A MARKANIAN A	THE PROPERTY OF THE PARTY OF TH
					Legend (Scale : 1	
			SA FAM	C PO C		
			YEN V			
		De la company	STATE OF THE PARTY.		Planned/constructe	d Sewage Plant

		ras (Wall) (Cascavel)			
	Mulumbi A	tiea (wen) (Cusculon			
<location></location>						
Basin	Source	Municipality	Proprietor	Others		
	Serra Geral					
Piquiri	Aquifer	Cascavel	SANEPAR			
<description< td=""><td>of System></td><td></td><td></td><td></td><td></td><td></td></description<>	of System>					
Intake Metho	d	Intake Rate (C	peration hour)	Supply System	Supply Connection	Operation Yea
Groundwater						
Direct from 2	well	55.00		Mulumbi Area	10,000	
	_		(m3/hour)		(inhabitants)	
<description< td=""><td>of Pipeline></td><td></td><td></td><td></td><td></td><td></td></description<>	of Pipeline>					
Length	Diameter	Depth of Well	Intake Pump	Intermediate Pump	Others	
					Gross Water loss 40 9	%
(km)	(inches)					
<future plan<="" td=""><td>/or Other in</td><td>formations, if a</td><td>ny></td><td></td><td></td><td></td></future>	/or Other in	formations, if a	ny>			
There is anoth	er well to be o	perated in the fi	iture, its intake rat	e will be 35 m3/hour.		
<location ma<="" td=""><td>ap></td><td></td><td></td><td>4 x 4.</td><td>e e completar de l'acceptant de l'ac</td><td></td></location>	ap>			4 x 4.	e e completar de l'acceptant de l'ac	
	X Y		mpr J. J. J.			.
		**************************************		X::(人) (::::1:2:2)		
1 1 1 1 1 1 1		X X III (S	X / / //			
			<i>ŽVV</i> 2		<i>####</i> \$\$\	(iii) Y
						` }}
1						
					/	
					erjoto Well	
					erjoto Well	A CONTRACTOR OF THE PROPERTY O
					erjoto Well	
					erjoto Well	
					erjoto Well	
					erjoto Well	
					erjoto Well	
					erjoto Well	
					erjoto Well	
					erjoto Well	
					erjoto Well	
		AREA MILITAR			erjoto Well	
		AREA MILITAR			erjoto Well	
		AREA MITUAL PROPERTY OF THE PR			erjolo Well Mul	
		AREA MILITAR Page 1			erjolo Well Mul Mul Legend (Scale: I	January 1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (
		AREA MITUTAL Parks			Legend (Scale: I	/S 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
					Legend (Scale: I Existing Surface In Existing Well Intal	/50,000) stake
					Legend (Scale: I Existing Surface In Existing Well Intal Planned Surface In	umbi Welk /50,000) ntake ke
		AREA MILITARY OF THE PROPERTY			Legend (Scale: I Existing Surface In Existing Well Intal	undi Well // S0,000) Itake ke Itake Point Itant