



## CITY OF PORT ALBERNI - ENGINEERING DEPARTMENT INFRASTRUCTURE INVENTORY SUMMARY

\* updated to end of 2010

### WATERWORKS

Watershed - China Creek basin	6202 Ha	
- Bainbridge Lake Catchment	1310 Ha	
Intakes (Surface Supply)	3	
- China Creek - gravity	24,451	m3/day permit
- Bainbridge Lake - pumped	9,763	m3/day permit
- Somass River - pumped	13,564	m3/day permit
Total Permitted Volume	47,778	m3/day permit
Dams	3	
- China Creek - intake - concrete El. 184m (603.7')	5000	m3 storage
- Lizard Lake -concrete/earthfill (440 acre ft) El. 732m (2401.6')	578,000	m3 storage
- Bainbridge Lake - earthfill (1000 acre ft) El.150m (492')	1,230,000	m3 storage
	1813000	
Pumpstations	5	
- Bainbridge - 2x50 HP @ 2508 gpm	100	Hp
- Somass - 2x60 HP @ 750 gpm ea. - 1x125 HP @ 1390 gpm	245	Hp
- Cowichan - 2x60 HP @ 2400 gpm - 1x5 HP @ 65 gpm	125	Hp
- Johnston - 4x60 HP @ 800 gpm ea. - 1x7.5 HP @ 120 gpm - 2x145 HP diesel @ 2100 gpm	538	Hp
- Arrowsmith - 2x5 HP @ 65 ea.	10	Hp
Total Pumpstation Horsepower	1018	Hp
Chlorination Stations	3	
- Bainbridge Pumpstation (gas injection)		
- Somass Pump/Intake (gas injection)		
- Johnston Pumpstation (gas injection)		
Chlorine Residual Test Points - Daily	10	
Bacterial Test Locations - Monthly	20	
Reservoirs	5	
- Upper Cowichan - floating cover El.158m	11,250	m3 1962/1963
- Lower Cowichan - floating cover El.146m	6,750	m3 1937
- Burde - floating cover El.86.8m	6,750	m3 1947
- Johnston - 2 cells, concrete El.66.8m	9,000	m3
- Arrowsmith - 1 cells, steel tank El.173.6m	250	m3
Total Reservoir Storage Volume	34,000	m3
Supply mains HDPE- 500mm	3.60	km
Supply mains Steel - 1200mm	0.11	km
Supply mains PVC- 500mm	1.51	km

Total Supply Mains	10.03
Distribution mains < 150mm	87.5 km
Distribution mains 200-300mm	47.6 km
Distribution mains > 300mm	25.5 km
Total Distribution Mains	160.6 km
Pressure Reducing Stations	20
Pressure Zones	12
Line Valves	1537
Air Valves	60
Hydrants (City )	724
Hydrants (Private )	57
Connections - Residential	6395
- Commercial	312
- Industrial	13
- City	64
	6784
Meters (Active)	6784
Average Annual Volume Served	6,048,020 m3
Peak Day Usage	21,166 m3
Minimum Day Usage	2,468 m3
Average Day Usage	10,315 m3