

# Raw Water Storage Reservoirs



The Island has six Raw Water Storage Reservoirs.

- Val de la Mare
- Dannemarche
- Queen's Valley
- Millbrook
- Handois
- Grands Vaux

## Technical Facts

| Name/ Location                   | Year Built | Type of construction                               | Catchment area (hectares) | Max capacity (mega litres) | Max capacity (million gallons) | Top Water Level (mAOD) | Length of dam (metres) | Max height if dam (metres) | Max depth of water (metres) |
|----------------------------------|------------|--|---------------------------|----------------------------|--------------------------------|------------------------|------------------------|----------------------------|-----------------------------|
| Dannemarche St Lawrence          | 1909       | Masonry faced, mass concrete infill                | 200                       | 93.0                       | 20.46                          | 45.26                  | 70.1                   | 7.9                        | 6.5                         |
| Grands Vaux St Saviour           | 1952       | Mass concrete                                      | 909                       | 229.6                      | 50.5                           | 36.58                  | 141                    | 15                         | 9.5                         |
| Handois St Lawrence              | 1931       | Masonry faced, mass concrete infill                | 271                       | 187.5                      | 41.25                          | 88.70                  | 110                    | 7.3                        | 4.0                         |
| Millbrook St Lawrence            | 1890       | Masonry faced, mass concrete infill with clay core | 127                       | 36.4                       | 8.0                            | 19.83                  | 57.3                   | 6.0                        | 3.5                         |
| Queen's Valley Grouville         | 1991       | Rockfill embankment with bituminous concrete core  | 516                       | 1193.0                     | 262                            | 36.00                  | 175                    | 24                         | 20                          |
| Val de la Mare St Peter/ St Ouen | 1962       | Mass concrete                                      | 350                       | 938.7                      | 206.5                          | 46.02                  | 192.9                  | 32.81                      | 24.31                       |



The reservoirs store untreated water collected from streams and pumped from the raw water abstraction points and the desalination plant.

Each reservoir has a catchment area, the size of which depends on the geography of the surrounding countryside. Rainfall in a catchment area runs off the land into streams which feed the reservoir. Unusually, in Jersey a number of the catchment areas generate more water than can be stored in the respective reservoir. To overcome this problem and fully utilise the reservoir and catchment area capacity, a system of raw water transfer mains has been developed which allows water to be moved between the reservoirs. When one reservoir is full, water can be moved to a second reservoir so that the first one can keep filling.

When full, the reservoirs hold enough useable water to provide approximately 110 days of supply to the Island. All reservoirs are equipped with monitoring equipment allowing water levels and certain quality parameters to be continuously monitored. In addition, samples are regularly taken from the reservoirs for analysis in the Company's laboratory.

When required for treatment, the stored water is pumped from the reservoirs to either Handois or Augrès Water Treatment Works. Water is specifically selected from the reservoirs so as to provide the best quality water at any time.

Both Queen's Valley and Val de la Mare Reservoirs are open to the public.