

Sequential Batch Reactor (SBR) process

Project Pure, Wānaka

- 1 Wastewater is piped to the treatment plant and screened to remove the bulk of non-biodegradable solids.
- 2 After screening, wastewater enters one of three 'SBR' reactor tanks (the full treatment process occurs within the one tank).
- 3 Within the reactor tank, the wastewater is subjected to periods of time with (aerobic) and without (anaerobic) oxygen, creating the necessary environment for the correct micro-organisms to flourish and perform the required treatment. These microbes digest organic matter in the wastewater, and clump together when healthy to enable separation from the liquid wastewater stream.
- 4 Wastewater within the tank is then allowed to settle, so micro-organisms can sink to the bottom of the tank and a clear layer of wastewater remains at the top of the tank.
- 5 The clear wastewater then receives filtration and ultraviolet (UV) disinfection before this treated water is discharged into a disposal field, where it soaks through gravels and safely returns to the environment.

