



## Dams:

- A big wall constructed across a valley.
- Dams control the flow or raise the level of water held within a catchment area.
- SunWater owns and manages nineteen dams in Queensland.
- Each dam has been strategically built in existing river, stream or creek locations to serve the needs of the region.
- Dams (and weirs and water channels) supply water for various purposes including town water supply, irrigation, electricity production, industry (i.e. power stations, mines, stock and groundwater supply).
- Dams are also a great place to visit to enjoy recreational activities, however there are risks associated with dams, which are important to understand.
- SunWater dams are designed to store water to their intended capacity and then safely pass any excess water inflows through purpose built spillways, release gates or outlet works.





## **Weirs:**

- A weir is a steel or concrete barrier constructed across a river or creek that regulates water flow and allows water to be slowly released to users downstream.
- Due to the unpredictable nature of water release, weirs can be very dangerous with strong undercurrents and hidden debris that cannot be seen.
- A common difference between a dam and a weir is that water flows over the top (crest) of a weir or through gates but in a dam the water overflows through a special area called a spillway. Dams are also considerably larger than weirs.
- Over the last 80 years, SunWater has designed and managed the construction of 66 weirs and barrages.





## **Water channels:**

- A water channel is like a passage dug into the ground to send water from one location.
- Farmers use water channels to water their crops.
- Water levels in channels can change very quickly.
- Heavy gates let water in and out of the channels causing the water levels to rise and fall.
- The sides of water channels are often very steep and algae present in the water can make the sides of the water channels slippery.
- Just like dams and weirs, there are also pipes under water in channels that cannot be seen from the surface.