

# Glossary

## Dams & Reservoirs

### Key Terms

- A **dam** is a structure built across a stream or river to confine and control the flow of water. Dams vary in size and construction from small earth embankments to high massive concrete structures.
- A **reservoir** is the water stored behind a dam for uses including water supply, irrigation, flood storage and hydropower. Sometimes, the term reservoir is used to describe both the water, dam and associated structures.
- **Spillways** are structures that are used, when a reservoir is full, to pass flood water safely and in a controlled way over, around or through a dam.
- At the top of the spillway is a **weir** which controls the level at which the water starts to flow down the spillway.
- There are different types of spillways – at Toddbrook we are planning a **side channel spillway**. These are located just upstream and to the side of the dam. The water flows over the **side channel weir** into a **tumble bay** which removes some of the energy from the water. Then it flows down a **chute** and towards the river downstream of the dam.
- Most spillways have a **stilling basin** at the downstream end. This structure removes the energy from the water before it is discharged into the river downstream.
- Some dams have more than one spillway, as Toddbrook does at the moment. The **primary spillway** is set at a lower level than the other spillway and water will overflow over this first. The **auxiliary spillway** is set at a higher level and so will not operate as frequently.
- Other **outlets** may be built under, through or around the dam, to release water from the reservoir for different uses.
- A **bywash channel** allows some of the flows that could enter the reservoir to be diverted around the reservoir and discharged into the river downstream, maintaining flow in the river.