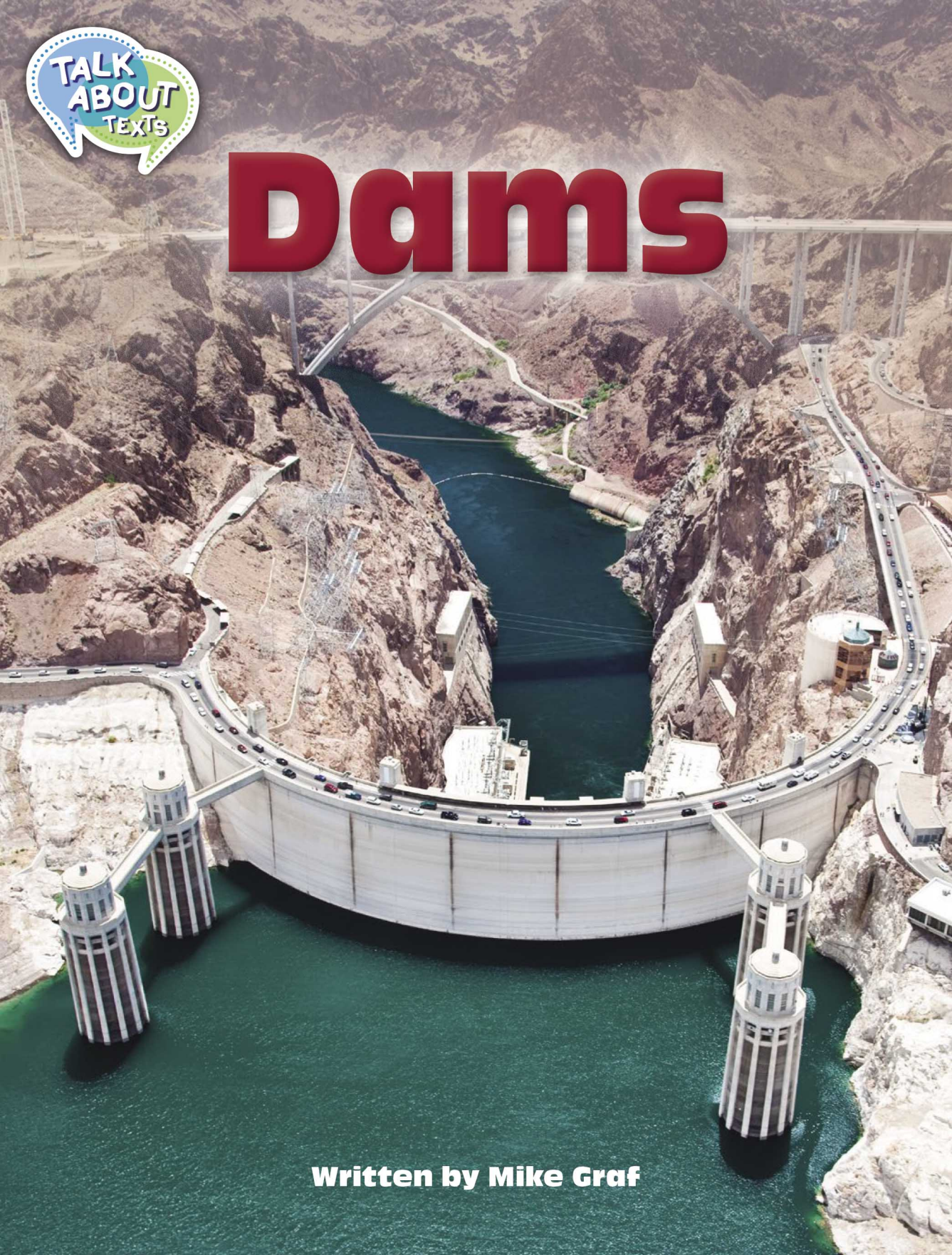

TALK ABOUT TEXTS
Dams
Written by Mike Graf

Dams



For Review Only

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macmillan education

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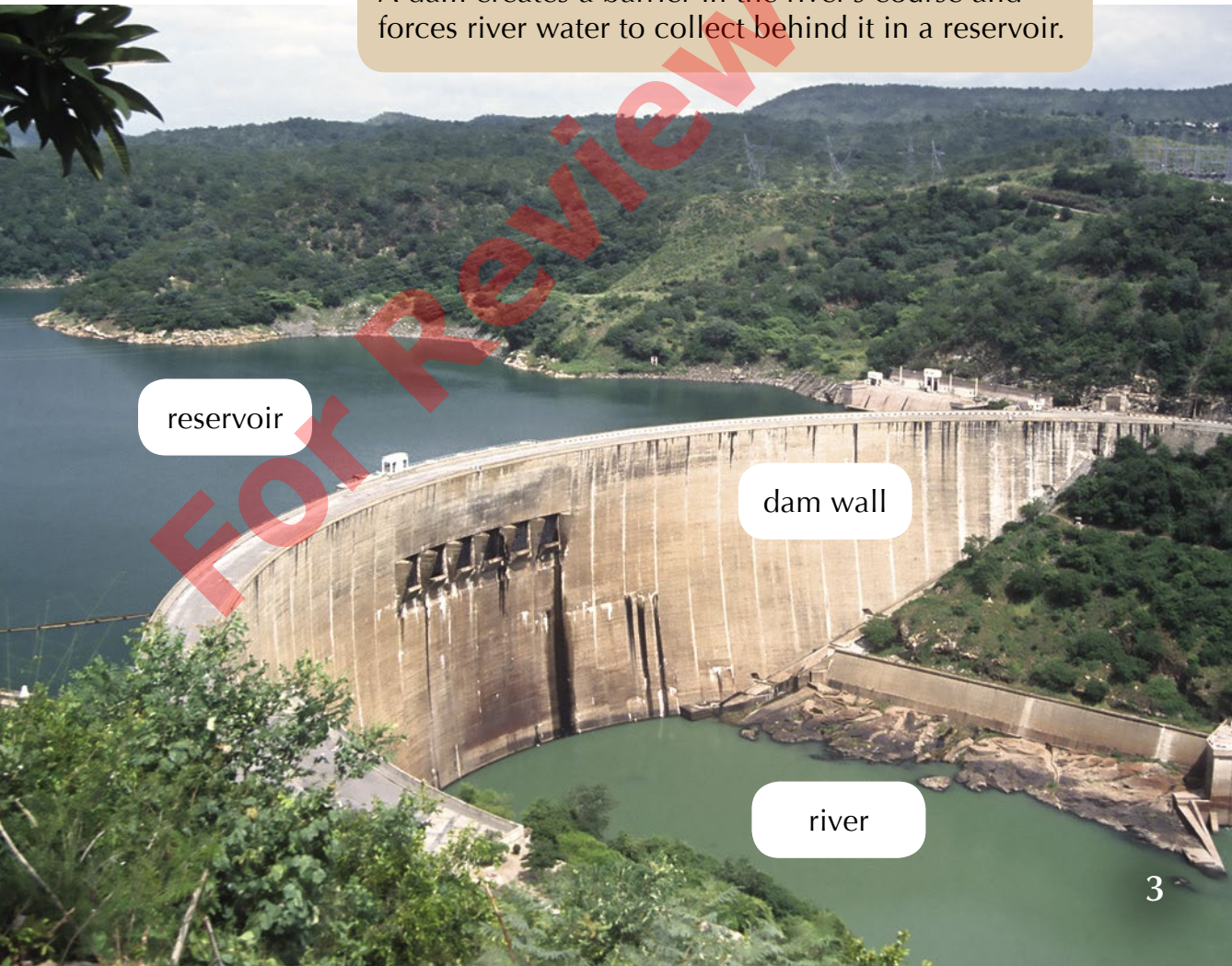


What is a Dam?

A dam is a large structure that looks like a wall. It blocks the flow of water in a river. This creates a storage lake, or **reservoir**, behind the dam. The water in the reservoir can be stored or channelled away.

There are thousands of dams around the world. The water you drink probably comes from a dam not far from where you live.

A dam creates a barrier in the river's course and forces river water to collect behind it in a reservoir.



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Why Are Dams Built?

Dams are built for different reasons. They are built in areas that need more water. Cities with large populations need extra water. Areas where there are many farms need water for crops. Dams are also built in places that have long dry seasons, or **droughts**, when there is very little rain. The stored water from the reservoir can be used during times of drought.

Some places around the world get a lot of rain during a short rainy season. Others have a lot of water going into rivers in the spring when snow melts. Dams can be used to store this extra water. This also helps prevent flooding in the area.

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This pole is used to measure the water level of a dam's reservoir at different times of the year.

This power station at the bottom of Srinakarin Dam, Thailand, creates electricity from the dam water.

Other dams are built to create electricity. These are called **hydroelectric** dams. A power station is usually built near the bottom of the dam. Water is channelled from the reservoir through a tube towards a **turbine** in the power station. The water spins the blades of the turbine. The turbine is connected to a generator that produces electricity.

Moving water turns these turbines inside the Manapouri Hydroelectric Power Station in New Zealand.



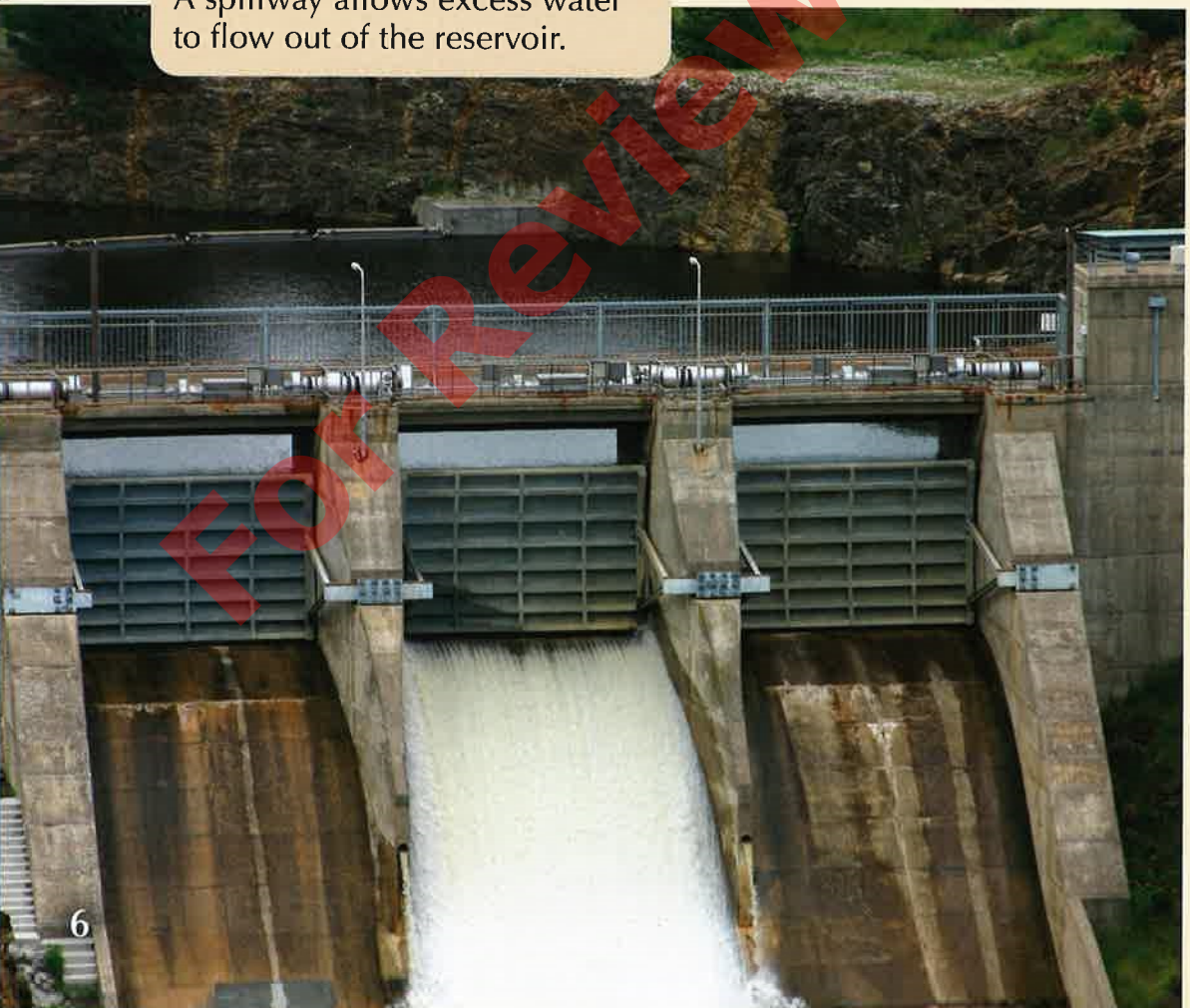
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How Does a Dam Control Water?

Building a dam across a river controls the amount of water that flows downstream. The dam's high wall stops the free flow of water. The water that collects in the reservoir is monitored so that it does not overflow.

If there is too much water in the reservoir, the excess water is re-routed back into the river through a spillway. This protects farms, towns and cities near the dam from being flooded.

A spillway allows excess water to flow out of the reservoir.



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How is a Dam Built?

To build a dam, part of the river is diverted from its usual **course**. One or more tunnels redirect the river's water. This creates a dry area. Then, the high wall of the dam is built and the reservoir area is sealed. Once the construction is complete, the tunnels are closed off. Then the river's water fills up the dam's reservoir.

The Drina, a river in Eastern Europe, was diverted to build this dam in the 1960s.



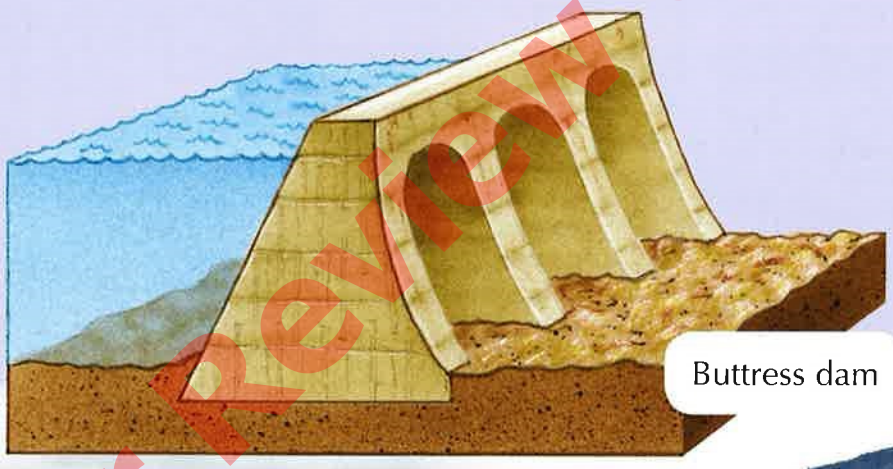
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Types of Dams

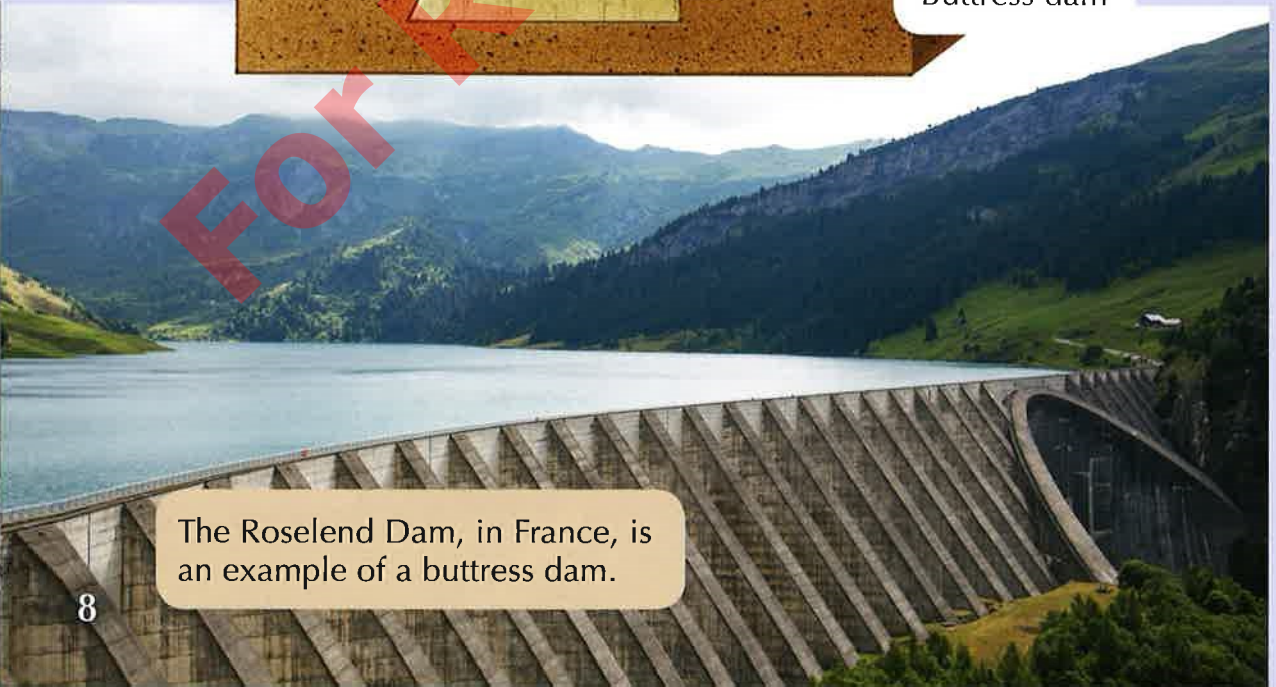
Dams can be built with different materials, including earth, dirt, rock, steel, wood, plastic and rubber. Most modern dams are made of concrete.

Buttress Dam

A **buttress** dam has a number of supports, or buttresses. The buttresses hold up the dam's wall against the force of the water in the reservoir.



Buttress dam



The Roselend Dam, in France, is an example of a buttress dam.

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