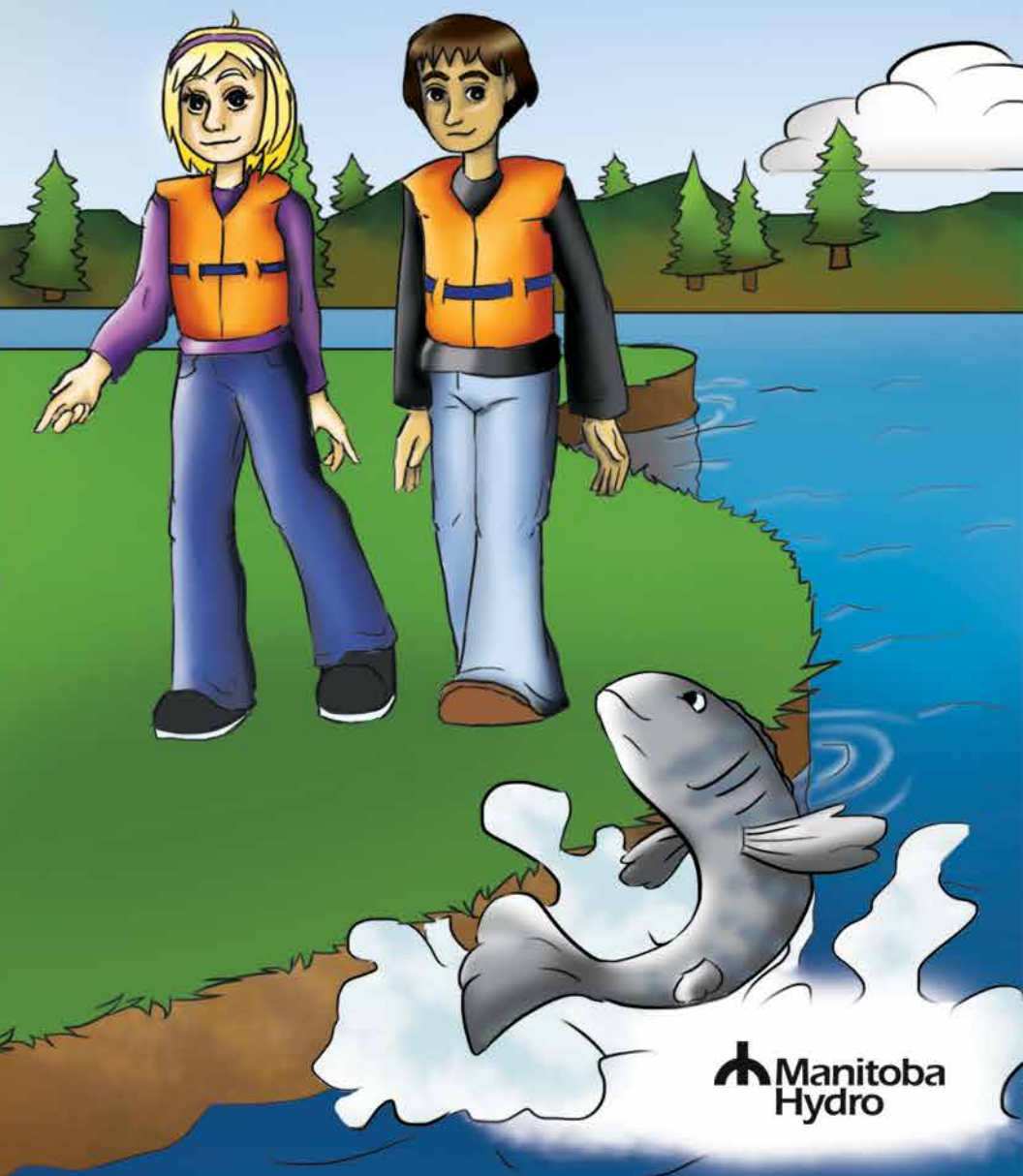


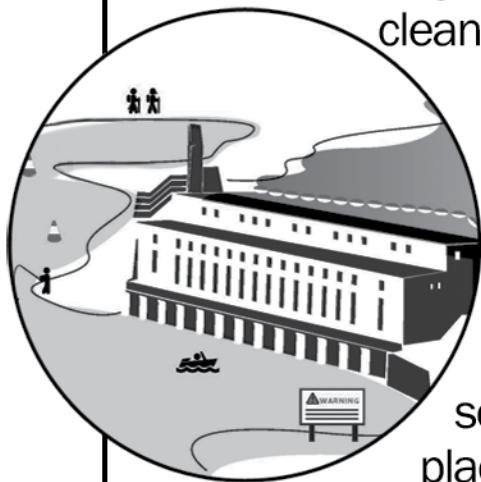
Safety Around Dams

Colouring and Activity Book

BE ALERT, DON'T GET HURT!



Manitoba Hydro produces nearly all of the electricity in the province from clean, renewable water power at 15 hydroelectric generating stations. These facilities are an important, renewable energy source. They are NOT places for recreation.



It's important to know the safety facts and
BE ALERT, DON'T GET HURT!

OBEY THE SIGNS

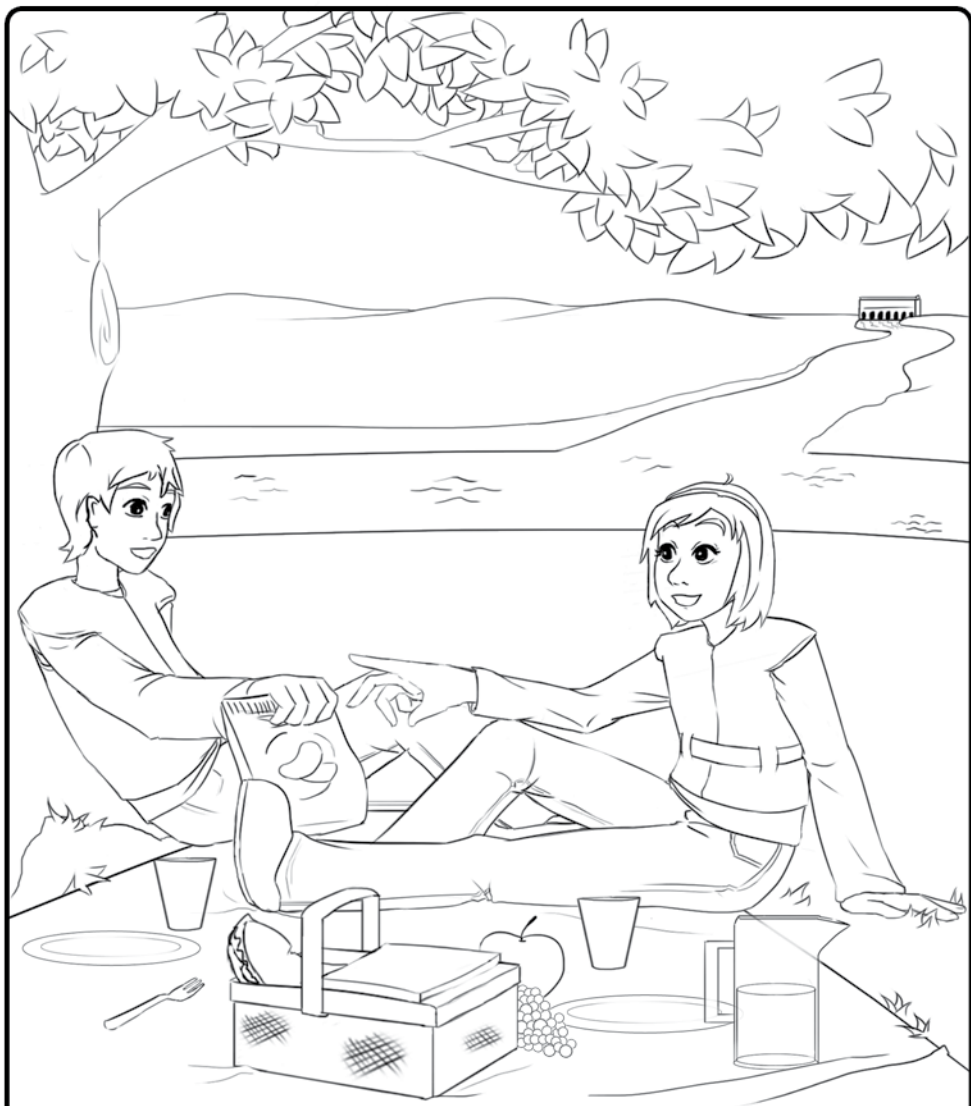


Dam Upstream
– Keep away!



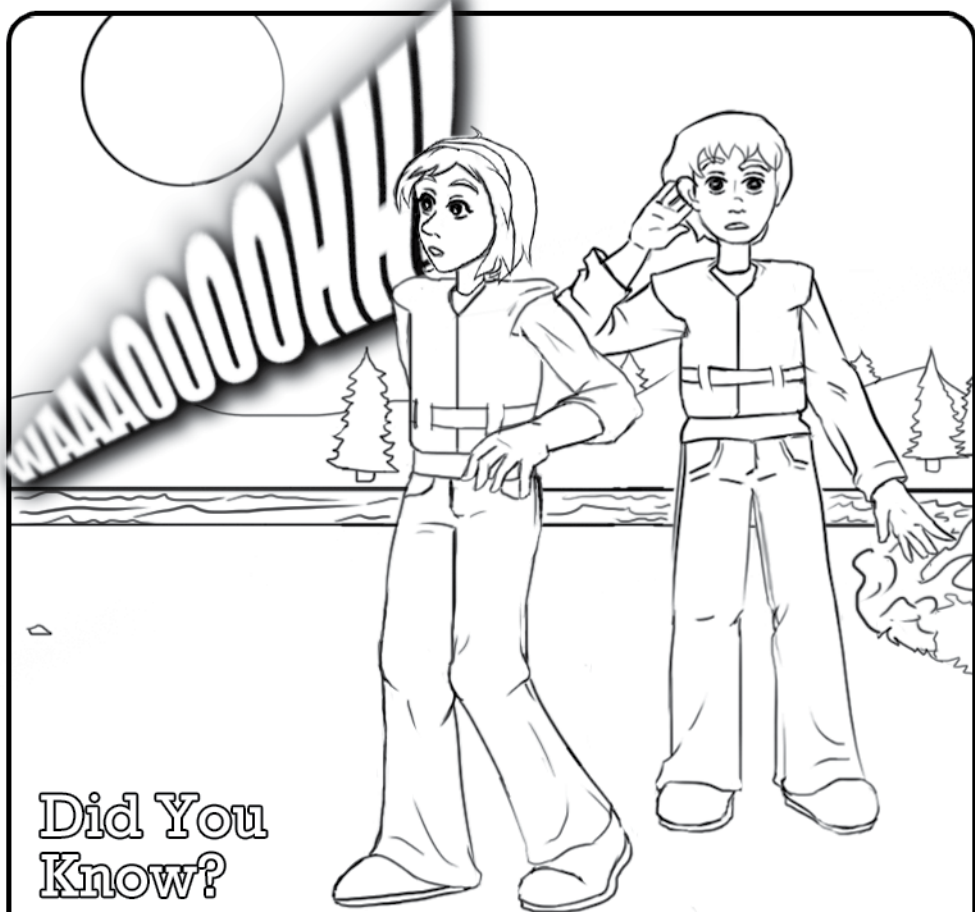
Strong Undercurrents
– Don't go on or in
the water!

Be careful around hydroelectric dams and generating stations. Always **BE ALERT** for danger and obey the **warning signs** and other safety barriers.



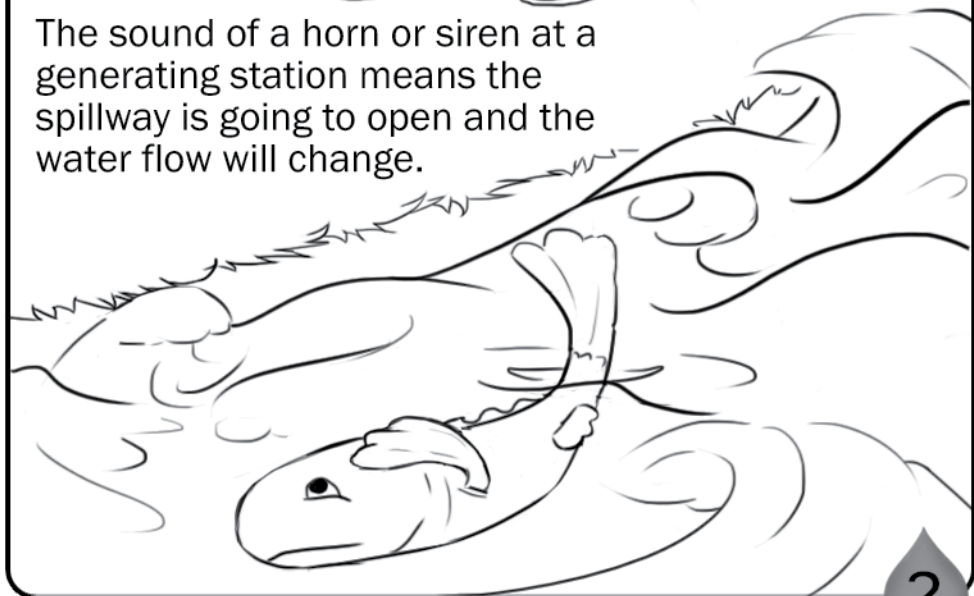
Stay Away From Generating Stations!

To swim, fish or boat is great recreation,
But never near a generating station!
It's a dangerous place – obey the signs,
Stay away and all will be fine.

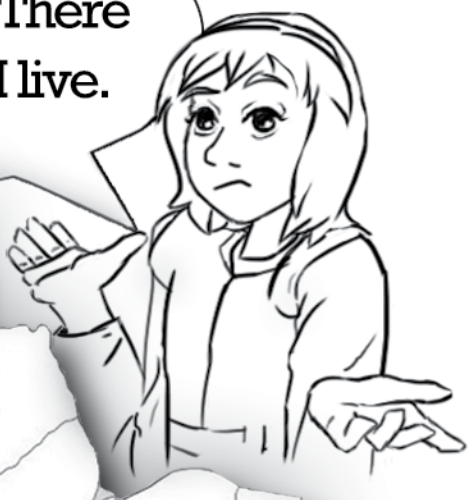


Did You Know?

The sound of a horn or siren at a generating station means the spillway is going to open and the water flow will change.



What's the big deal? There are no dams where I live.



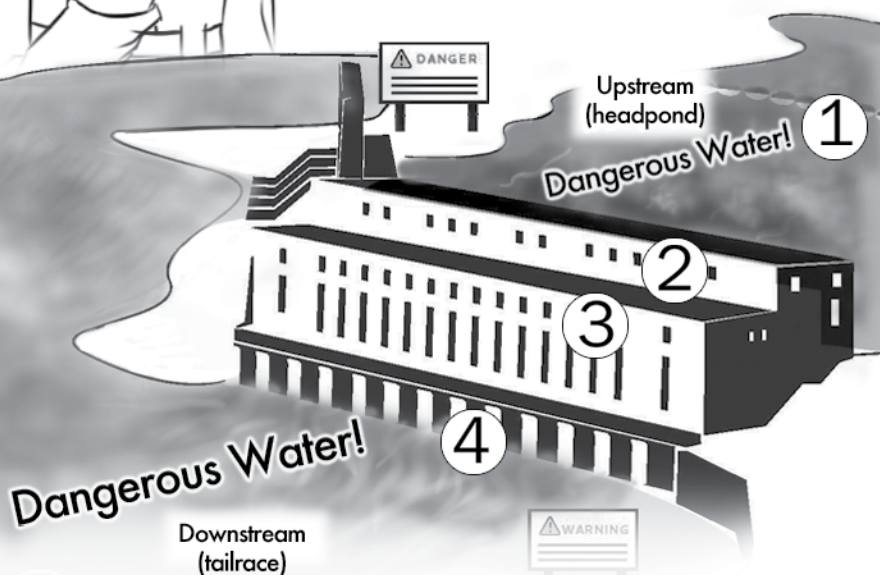
You may pass a hydro dam on the way to your cabin or a campsite. Use this map to help you spot the **15** hydroelectric dams in Manitoba.

So how does it work?



Electricity generated by waterpower is called hydroelectricity.

A hydroelectric generating station uses the force of a river as energy. Here's how:



- ① Water is stored in the headpond above the hydroelectric dam.
- ② When a generator starts, water is suddenly released through the turbine.
- ③ The water pushes against giant turbines, which spin generators to create power.
- ④ When the water flows through the station it creates waves and currents in the downstream area.

True or False?

☐ **T** ☐ **F** Never play near a dam or hydroelectric generating station.

☐ **T** ☐ **F** Stay away from the edge of the water. Rocks are slippery and you could fall into the current.

☐ **T** ☐ **F** Avoid snowmobiling, skating or ice fishing near dams and hydroelectric stations in the winter.

☐ **T** ☐ **F** Dams and hydroelectric stations operate all year round, 24 hours a day.

☐ **T** ☐ **F** Ice that forms on the surrounding waterways can be thinner due to the flowing water under it.

If you answered "true" to all of the above, you are right!

**Be Alert,
Don't Get Hurt
all year round!**



Unscramble the letters for a safety tip!

BE _____ AROUND HYDROELECTRIC
A C F L U E R

_____ AND _____ STATIONS.
S A D M T G I E E N G A N R

Signs, fences, booms, buoys and barriers warn of potential danger.

Unscramble the sentences for a safety tip!

1. alert be hurt don't get

2. signs warning obey the

3. dams waters hydro cause can turbulent

4. levels water rapidly change can

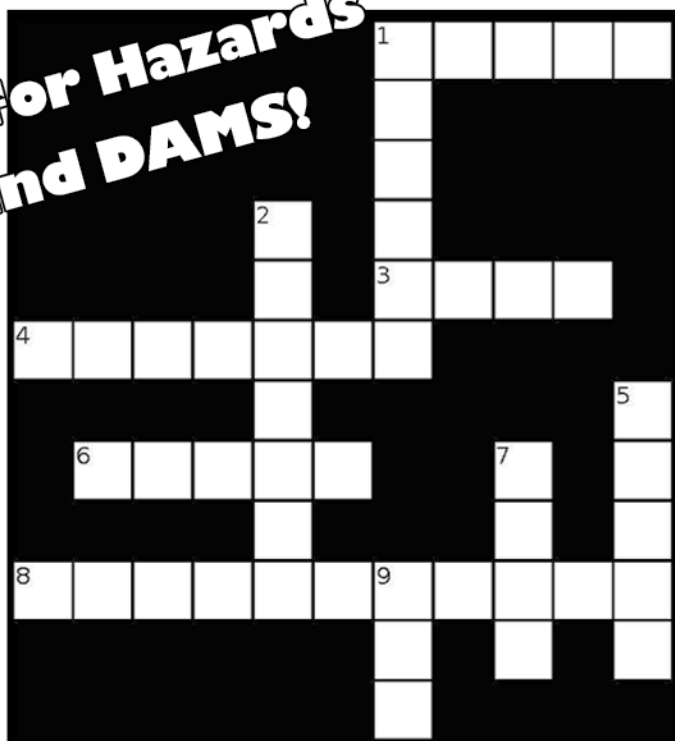
5. rocks wet when slippery are

6. water fatal can be falling into turbulent

TOP BOX: Be careful around hydroelectric dams and generating stations.
BOTTOM BOX: 1. Be alert, don't get hurt. 2. Obey the warning signs.
3. Hydro dams can cause turbulent waters. 4. Water levels can change rapidly.
5. Rocks are slippery when wet. 6. Falling into turbulent water can be fatal.

Watch for Hazards around DAMS!

Use your knowledge
to solve this
water safety
crossword puzzle.



Across

1. They can be slippery even if they appear dry.
3. They are sometimes operated by remote control.
4. These are marked with warning signs to keep you safe.
6. A clean, renewable resource.
8. Manitoba Hydro is a company that makes this.

Down

1. A calm river can turn into _____ when a hydroelectric dam is nearby.
2. Means the movement or flow of water. (When a dam has been opened it increases.)
5. This warns you of potential danger. It's one way to tell you to keep out!
7. You should not boat or _____ in unfamiliar water.
9. In wintertime this can be thin, so never walk, ski or snowmobile near dams.



Answers

Don't look
until you've
finished the
puzzle!

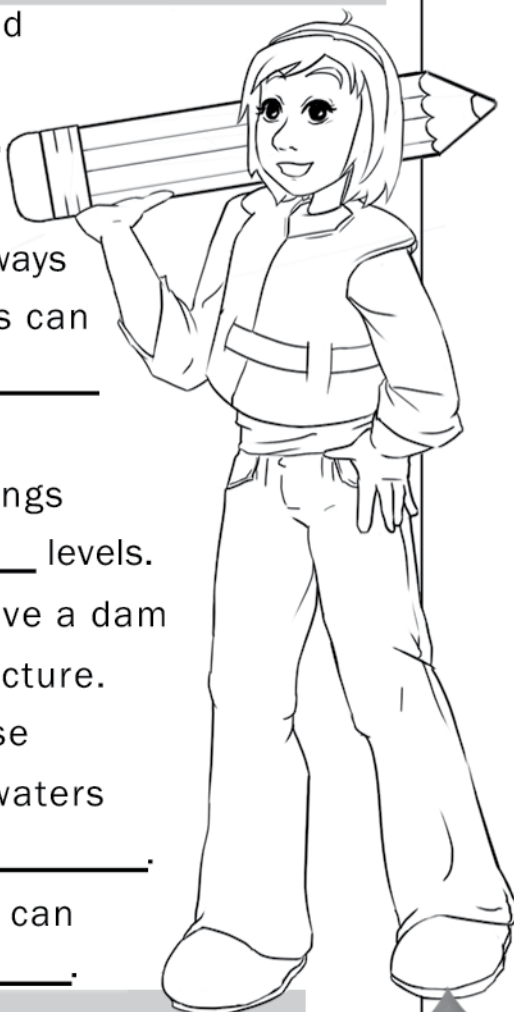
LEARN THE RULES

Fill in the blanks from the word bank to complete these rules to stay safe around dams and generating stations.

WORD BANK

rapidly warning currents alert swim
dangerous boating water fishing

1. The waterways around dams can be scenic but also _____.
2. Obey all danger and _____ signs. Waterways near hydroelectric dams can be unsafe for _____ or _____.
3. Be _____ for warnings and changes in _____ levels.
4. Never _____ above a dam or dive from a dam structure.
5. Hydro dams can cause dangerously turbulent waters with strong _____.
6. Water flows or levels can change _____.



1. dangerous 2. warning/boating/fishing 3. alert/water 4. swim 5. currents 6. rapidly

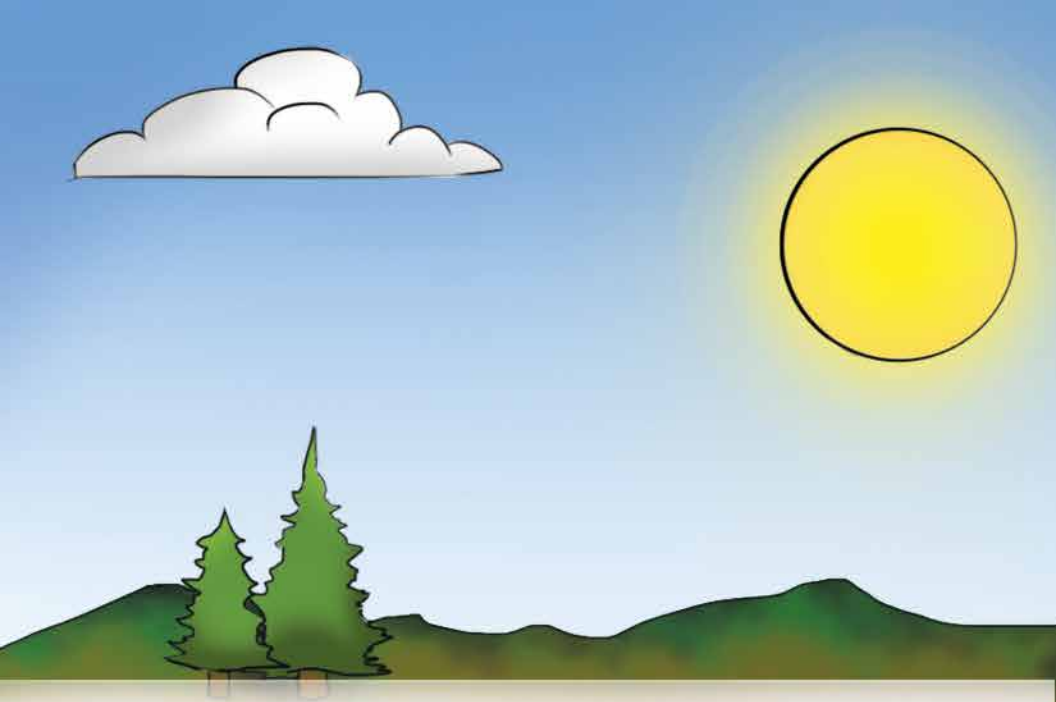
So what has a dam done for **me** lately?

Dams and hydroelectric stations make electricity. You need electricity to power things like the microwave, refrigerator, lights and television. Can you imagine life without your computer, video games or DVD player?



In this code, a symbol stands for a letter. Use this legend to solve the message!

A	🔹	H	⬇️	O	🔌	V	👉
B	〰️	I	⋯	P	🏠	W	🔄
C	⚡	J	✓	Q	🏭	X	〰️
D	!	K	💡	R	🔥	Y	🐉
E	▲	L	🏠	S	⚙️	Z	🐜
F	🔌	M	🔪	T	🌀		
G	+	N	🐟	U	❄️		



www.hydro.mb.ca

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