### UNIT 7 \$ 8 QUIZ REVIEW

#### Don't worry, it'll be painless.

## Making A Reservoir



Bell-mouth spillway at <u>impoundment</u> Ladybower Reservoir.

A spillway is a structure used

- controlled release of flows from a dam or levee into a downstream area, typically being the river that wa dammed
  - release floods so that the water does not overtop and damage or even destroy the dam. Except during flood periods, water does not normally flow over a spillway

In contrast, an *intake* is a structure used to release water on a regular basis for water supply, hydroelectricity generation, etc.

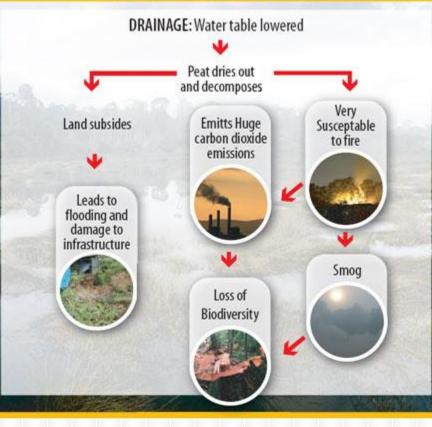
Other uses of the term "spillway" include bypasses of dams or outlets of a channels used during highwater, and outlet channels carved through natural dams such as moraines

### WETLAND REVIEW

#### **DEGRADATION OF PEATLAND**

Important ecological services:

- Store water
- Moderate the flow of water in floods and drought
- Protect and improve water quality
- Home to many fish and other animals.





Do you remember where most of the water supplied to homes and industry are used?

Wash.

Clean.

Flush.

# Switching gears to Ag

Basics of growing:

# Keeping pests away, the nutrients balanced, and enough water around for the plants to be harvested for food.

## In a perfect world...

#### Nothing would interact in the environment, no pesticides would leach into the ground, no artificial anything would need to be added....

And we could still feed everyone with the best organic food choices.



### But the world isn't perfect.

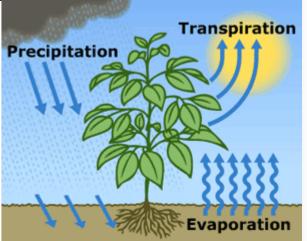
So, we make every effort for productive soil, stave off insect damage, and add fertilisers as necessary.



# But we still have change.

With the climates changing about, we have to deal with changes of all kinds from more rain in some areas, not enough rain in others.

And in other places, like the tropics <u>transevaporation</u> from the plants and earth, can mean a greater water loss



## And now, to energy!

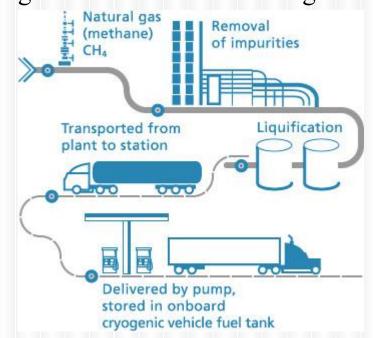


### DISCONNECT FROM REALITY

Lobbyist believe that if you keep the prices low, then people will waste indiscriminately. However, we are becoming more aware and making wise choices.

They also fuss over the transportation of natural gas, thinking it is super unsafe.

It's not.





#### You can learn how many watts of electricity you use as well.

Simply take a look at the amount of volts of electricity an appliance runs on, and multiply it by the current (amperes).

Volts x Amperes = Watts.

Show the lobbyists (and me) you know exactly what you're doing.

### Let's talk renewables.

Hydropower makes up 50% of the renewable energies currently consumed.

The fasting growing is wind energy.

Geothermal is pulling ahead from where it used to be since it can keep things constantly at 50 -  $60^{\circ}$ F

But ethanol and natural gas are the most promising for vehicles.

### Pull out your notes for it's time for the open-book quiz!



Good luck!