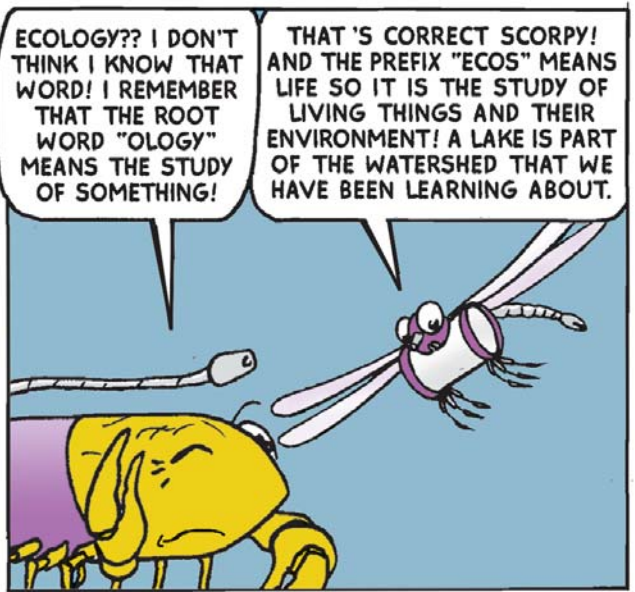




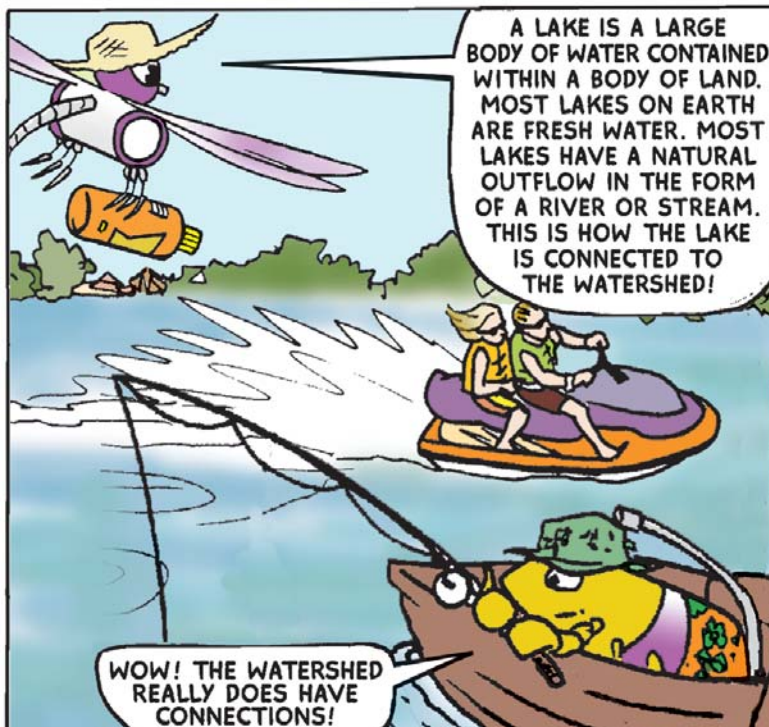
I LOVE THIS LAKE!
IT'S AN AWESOME
PLACE TO HAVE
SOME FUN!

I'M GLAD YOU
LIKE IT SCORPY.
LAKES PLAY A VERY
IMPORTANT PART
IN OUR ECOLOGY!



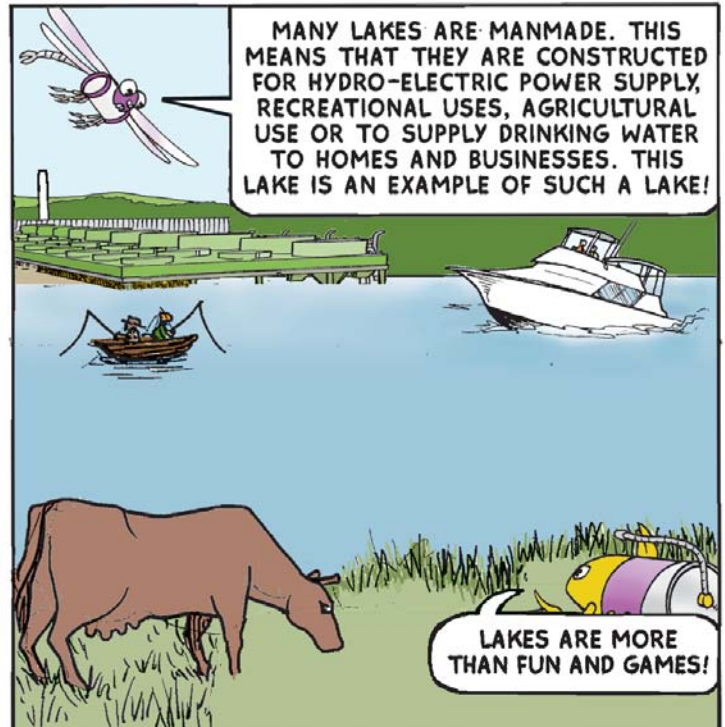
ECOLOGY?? I DON'T
THINK I KNOW THAT
WORD! I REMEMBER
THAT THE ROOT
WORD "OLOGY"
MEANS THE STUDY
OF SOMETHING!

THAT'S CORRECT SCORPY!
AND THE PREFIX "ECOS" MEANS
LIFE SO IT IS THE STUDY OF
LIVING THINGS AND THEIR
ENVIRONMENT! A LAKE IS PART
OF THE WATERSHED THAT WE
HAVE BEEN LEARNING ABOUT.



A LAKE IS A LARGE
BODY OF WATER CONTAINED
WITHIN A BODY OF LAND.
MOST LAKES ON EARTH
ARE FRESH WATER. MOST
LAKES HAVE A NATURAL
OUTFLOW IN THE FORM
OF A RIVER OR STREAM.
THIS IS HOW THE LAKE
IS CONNECTED TO
THE WATERSHED!

WOW! THE WATERSHED
REALLY DOES HAVE
CONNECTIONS!

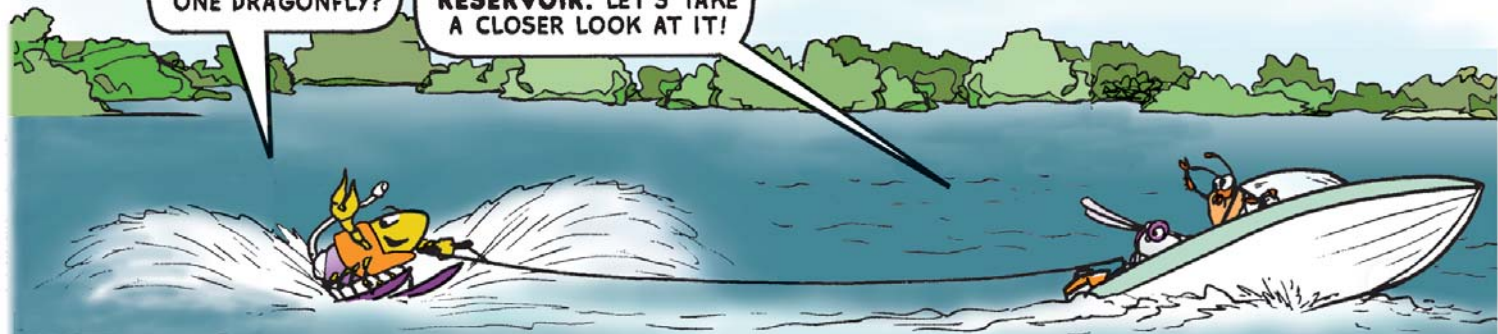


MANY LAKES ARE MANMADE. THIS
MEANS THAT THEY ARE CONSTRUCTED
FOR HYDRO-ELECTRIC POWER SUPPLY,
RECREATIONAL USES, AGRICULTURAL
USE OR TO SUPPLY DRINKING WATER
TO HOMES AND BUSINESSES. THIS
LAKE IS AN EXAMPLE OF SUCH A LAKE!

LAKES ARE MORE
THAN FUN AND GAMES!

THIS IS ANOTHER BIG LAKE! WHAT'S THE NAME OF THIS ONE DRAGONFLY?

THIS LOOKS LIKE A LAKE SCORPY BUT THIS IS ACTUALLY CALLED A RESERVOIR. LET'S TAKE A CLOSER LOOK AT IT!



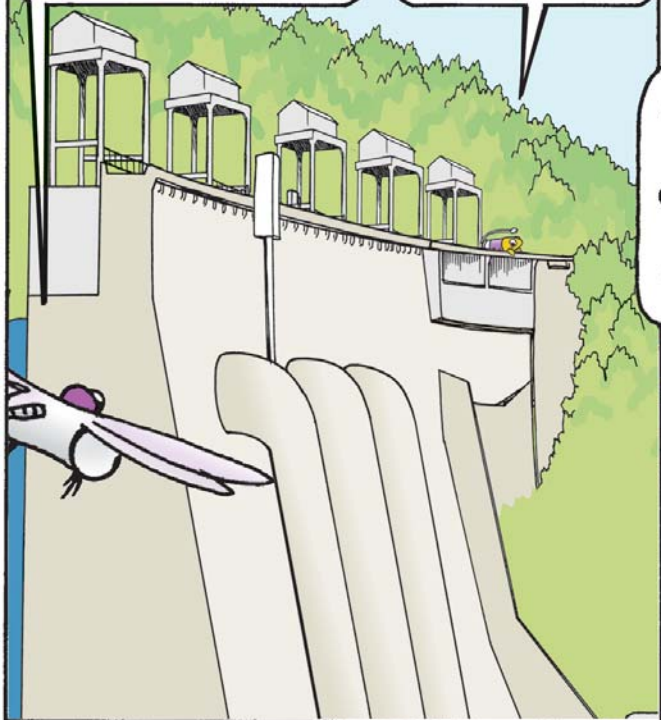
A RESERVOIR REFERS TO AN ARTIFICIAL LAKE. THE WATER IS STORED FOR VARIOUS USES. MANY TIMES IT IS USED TO PROVIDE DRINKING WATER TO NEARBY COMMUNITIES.

I GET IT ... THE WATER IS "RESERVED" FOR A SPECIAL USE! I BET THAT'S WHERE THE WORD RESERVOIR COMES FROM!



RESERVOIRS ARE CREATED BY BUILDING A VERY STURDY DAM. THIS DAM IS USUALLY MADE OUT OF CEMENT, EARTH, ROCK OR A MIXTURE OF ALL. ONCE THE DAM IS COMPLETED, A STREAM IS ALLOWED TO FLOW BEHIND IT AND EVENTUALLY FILL IT TO CAPACITY. RESERVOIRS CAN COME IN A WIDE VARIETY OF SHAPES AND SIZES AND CAN EITHER BE NATURAL OR MANMADE.

IT SURE TAKES A LOT OF WORK FOR A GLASS OF WATER!



SEE HOW WELL LAKES PROVIDE FOR US SCORPY? LET'S LEARN MORE ABOUT THE WATERSHED IN VIRGINIA!

I SURE HAVE ENJOYED LAKES AND RESERVOIRS! I CAN'T WAIT FOR MORE!

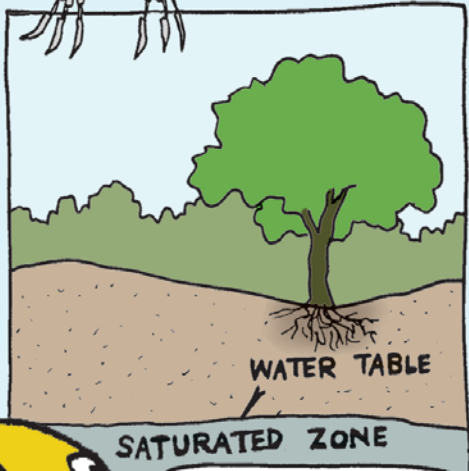
I HAVE REALLY LIKED LEARNING ABOUT WATERSHEDS BUT IT'S NICE TO GET AWAY FROM THE WATER FOR A WHILE AND GET BACK ON DRY LAND!

SO YOU THINK YOU'RE ON DRY LAND HUH? LET'S TRY A LITTLE EXPERIMENT SCORPY.

HEY! I'M STANDING IN WATER HERE! WHO TURNED ON THE HOSE???

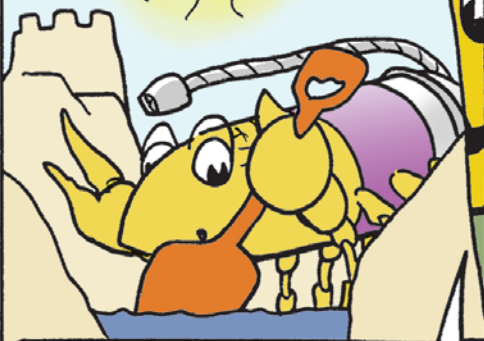
NO ONE TURNED ON THE HOSE SCORPY. YOU ARE SEEING FIRSTHAND ANOTHER PART OF THE WATERSHED. YOU'RE STANDING IN **GROUNDWATER**. GROUNDWATER IS WATER THAT IS FOUND INSIDE THE GROUND. IT COMES FROM RAIN, SNOW, SLEET, AND HAIL THAT SOAKS INTO THE GROUND.

AFTER THE PRECIPITATION SOAKS INTO THE GROUND IT REACHES THE **SATURATED ZONE**. AND THE TOP OF THIS ZONE IS THE **WATER TABLE**. THE WATER TABLE CAN BE NEAR THE GROUND'S SURFACE OR HUNDREDS OF FEET BELOW!



THAT MAKES SENSE! THE TOP OF THE SATURATED ZONE IS THE TABLE... AND TABLES HAVE TOPS!

REMEMBER THIS SUMMER WHEN YOU DUG A HOLE IN THE SAND AT THE BEACH? AS YOU WERE DIGGING, WATER FILLED UP THE HOLE! THAT WAS GROUNDWATER. THE WATER IN LAKES, RIVERS, AND OCEANS IS CALLED "SURFACE WATER" BECAUSE IT'S ON THE SURFACE. IF IT'S BELOW THE SURFACE, IT'S CALLED "GROUNDWATER."



WOW! I THOUGHT I WAS JUST PLAYING IN THE SAND! I HAD NO IDEA THAT I WAS DISCOVERING GROUNDWATER!

BOY IS IT NICE TO RELAX A BIT BY THE RIVER! LEARNING ABOUT WATERSHEDS HAS BEEN A LOT OF WORK!

YES IT HAS BEEN SCORPY! BUT WE'RE NOT QUITE DONE YET! RIVERS ARE ANOTHER VERY IMPORTANT PART OF WATERSHEDS HERE IN VIRGINIA.

A RIVER IS FRESH WATER THAT FLOWS ACROSS THE SURFACE OF THE LAND. IT FLOWS IN A "CHANNEL." THE BOTTOM OF THE CHANNEL IS CALLED THE "BED" AND THE SIDES OF THE CHANNEL ARE CALLED "BANKS." A RIVER FLOWS TOWARD ANOTHER RIVER, AN OCEAN, A LAKE, OR ANOTHER LARGE BODY OF WATER SUCH AS AS OCEAN.



OR EVEN THE CHESAPEAKE BAY!!!



A RIVER'S SOURCE OF WATER MAY BE RAINFALL, MELTING SNOW, A SPRING, OR THE OVERFLOW OF A LAKE. STREAMS THAT FLOW AT A RIVER SOURCE ARE THE HEADWATERS AND ARE THE RIVER'S HIGHEST ELEVATION. MOST RIVER HEADWATERS BEGIN IN HILLS OR MOUNTAINS, BUT AS THE RIVER FLOWS DOWNSTREAM, IT GAINS MORE WATER FROM OTHER STREAMS, RIVERS, SPRINGS, ADDED RAINFALL AND OTHER WATER SOURCES.

SO THAT'S WHY RIVERS ARE LARGER ... WATER IS ADDED TO THEM AS THEY FLOW DOWNSTREAM!!!



RIVERS HAVE ALWAYS BEEN IMPORTANT FOR TRAVEL, TRANSPORTATION, AND TRADE ROUTES. MOST EARLY SETTLEMENTS WERE BUILT ALONG MAJOR RIVERS. FARMERS USE RIVERS TO IRRIGATE CROPS AND PROVIDE WATER FOR THEIR LIVESTOCK. INDUSTRIES USE WATER TO POWER THEIR MACHINES.



RIVERS ARE REALLY IMPORTANT FOR SURE! I AM GLAD TO LEARN ABOUT WATERSHEDS! I GUESS YOU "SHED" SOME LIGHT ON THEM FOR ME!