

4/10/18 Drippy Update – Toni Taylor

- Artwork is done.
- Unfortunately, cards have not been separated into individual and evenly sized documents. Need to divide into individual cards (or arrange professionally on sheets for printing) and oriented properly.
- Need to find someone with graphic capabilities or it will have to wait until Toni Taylor can find time to figure it out.
- Recommend not making final payment yet as I may reach out to Kayla to solve this first. Contractually, it appears she's not obligated to.



The Idaho-Washington Aquifer Collaborative

presents...

The Adventures of... Drippy the Water Drop!

*A Water Cycle Lesson of the
Spokane Valley – Rathdrum Prairie Aquifer*

Funding by Idaho-Washington Aquifer Collaborative (IWAC) - www.iwac.us
Water purveyors working together to maintain water quality and quantity of
the Spokane Valley-Rathdrum Prairie Aquifer and Spokane River region.

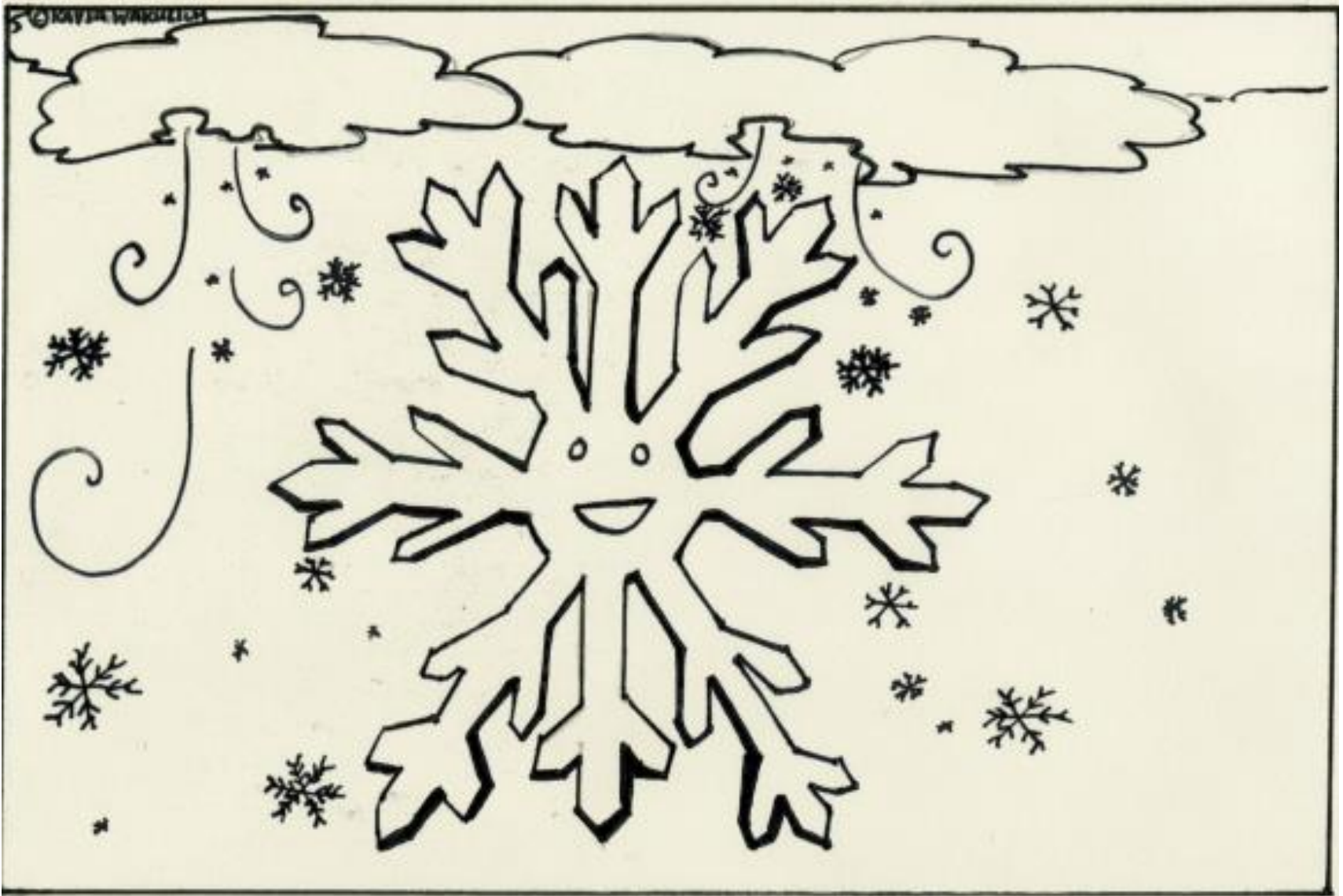




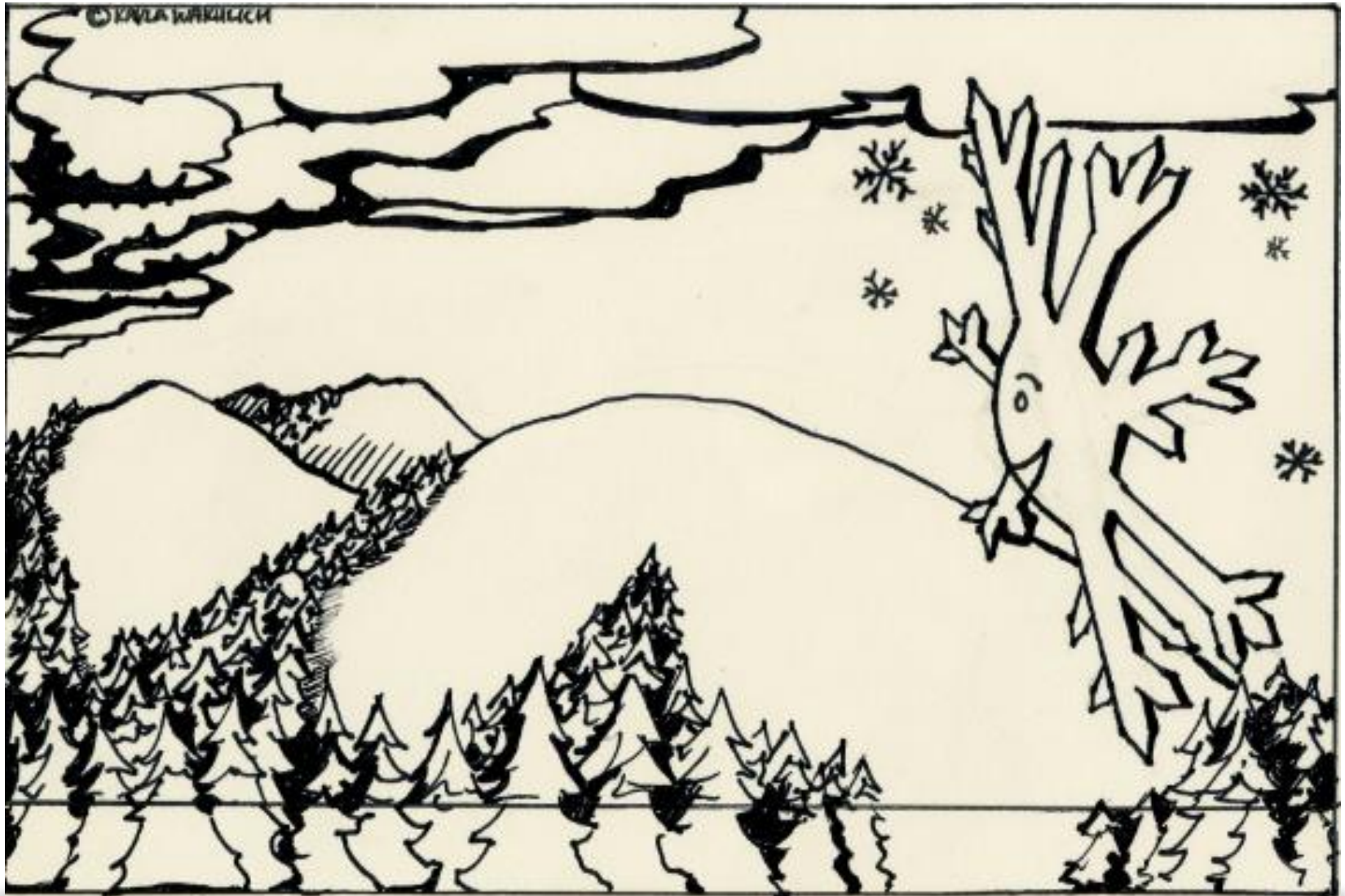
**We join Drippy the Water Drop as he rests CONDENSED in a cloud.
Drippy's adventure is about to begin!**



When it is cold, Drippy becomes snow.



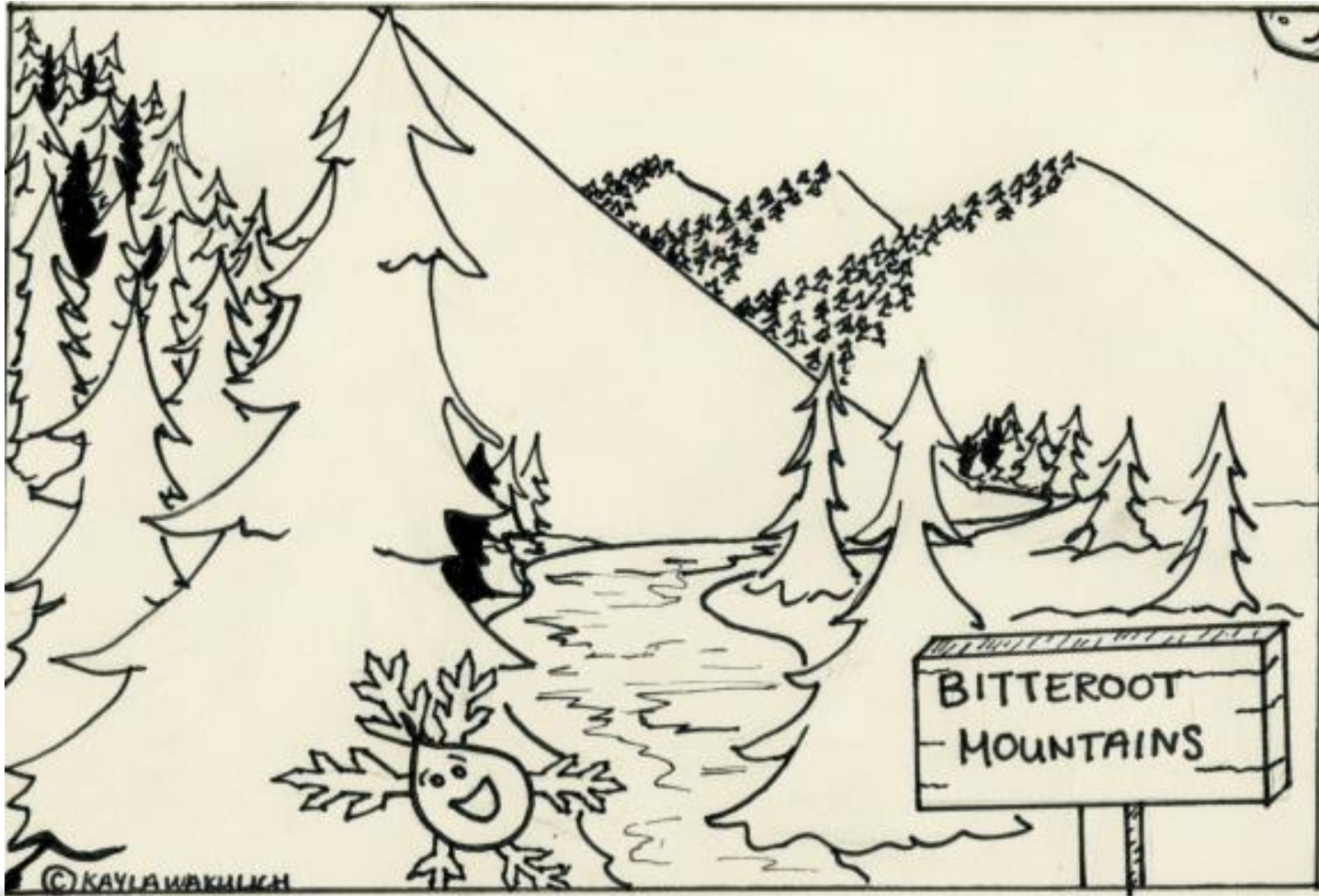
Drippy is now PRECIPITATION and falls from the sky.



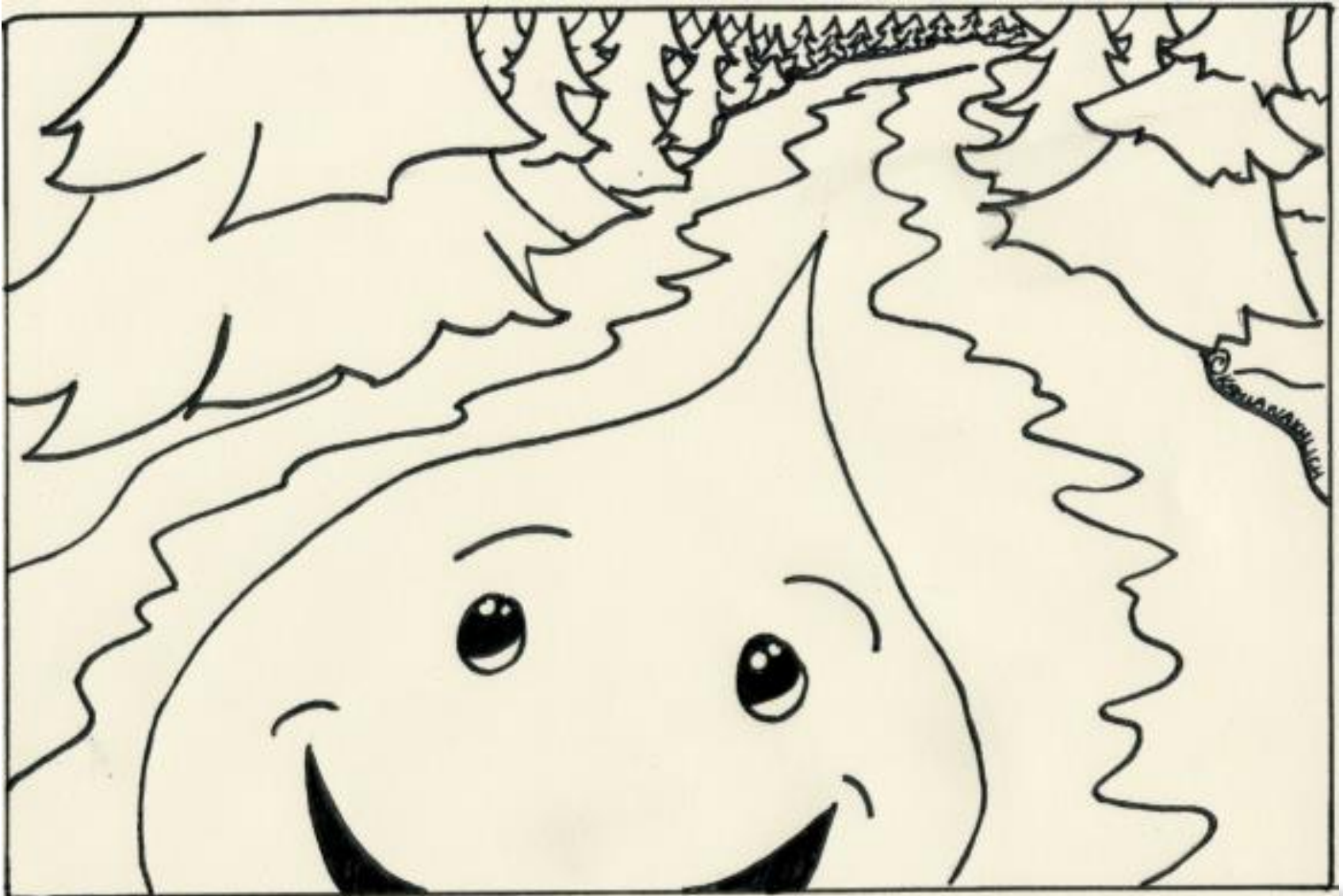
Drippy joins the other snow covering the mountains.



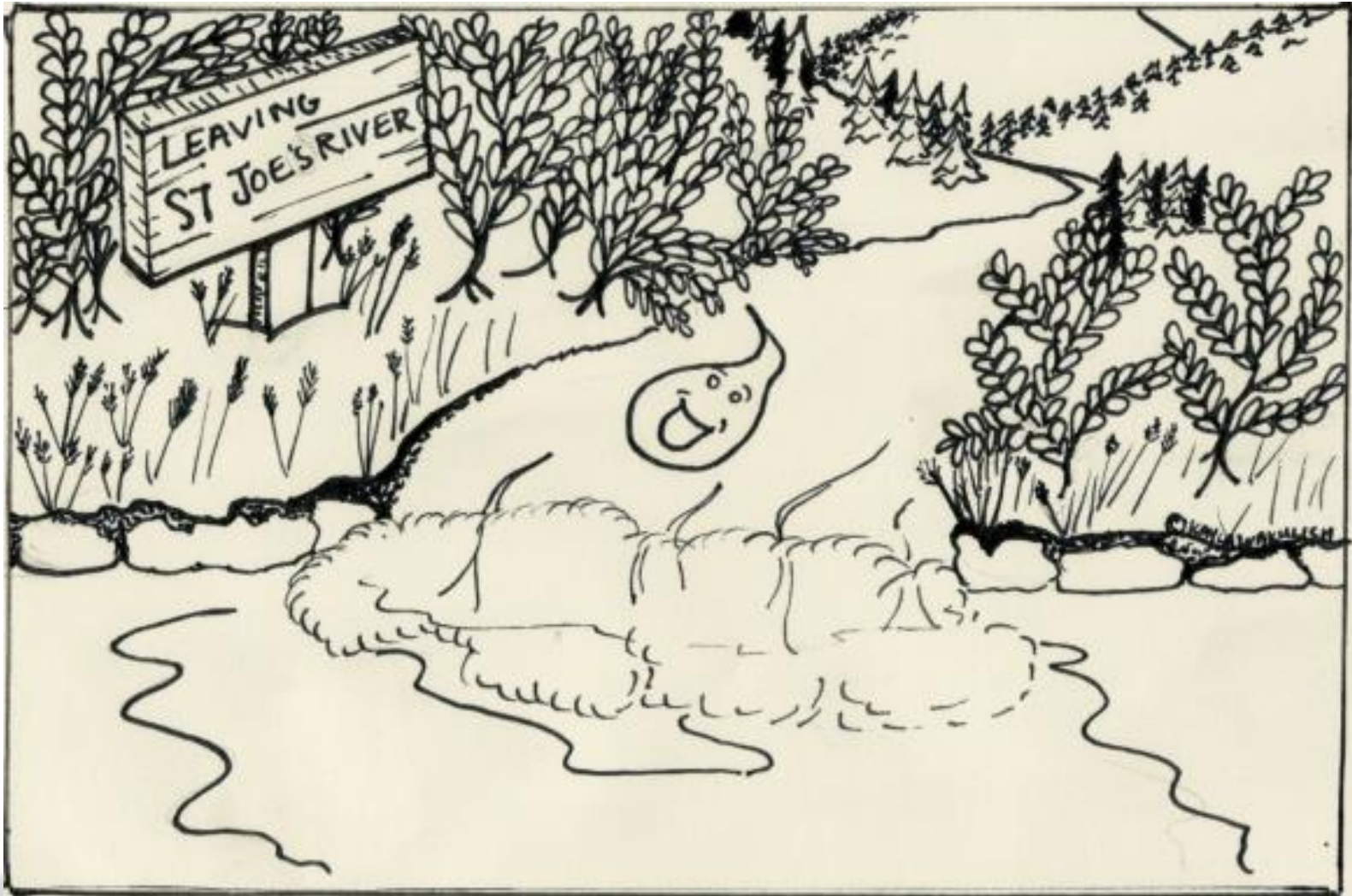
Drippy begins to MELT and changes from snow to water.



Drippy becomes water RUNOFF and joins a mountain stream.



Now Drippy is SURFACE WATER in the WATERSHED.



Wee! Drippy leaves the cold mountain stream and enters Coeur d'Alene Lake.



Drippy rests as the CURRENT takes him across the lake.



Drippy leaves Coeur d'Alene Lake and enters the Spokane River.



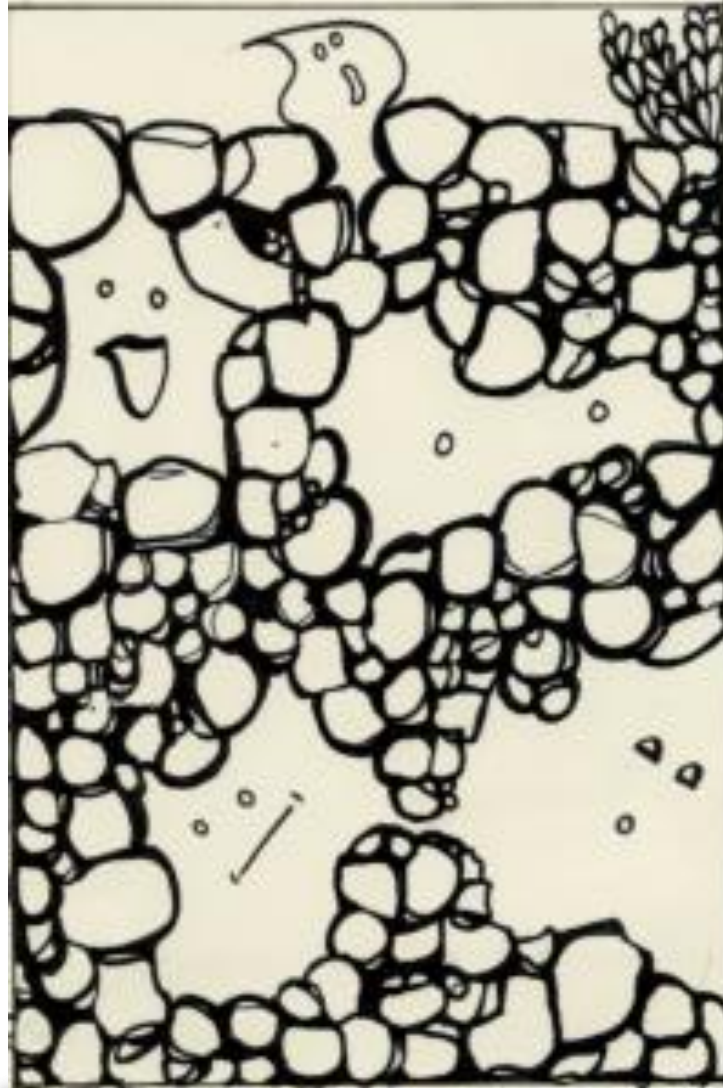
Now in the Spokane Valley, Drippy meets friends from the Spokane Valley-Rathdrum Prairie AQUIFER.



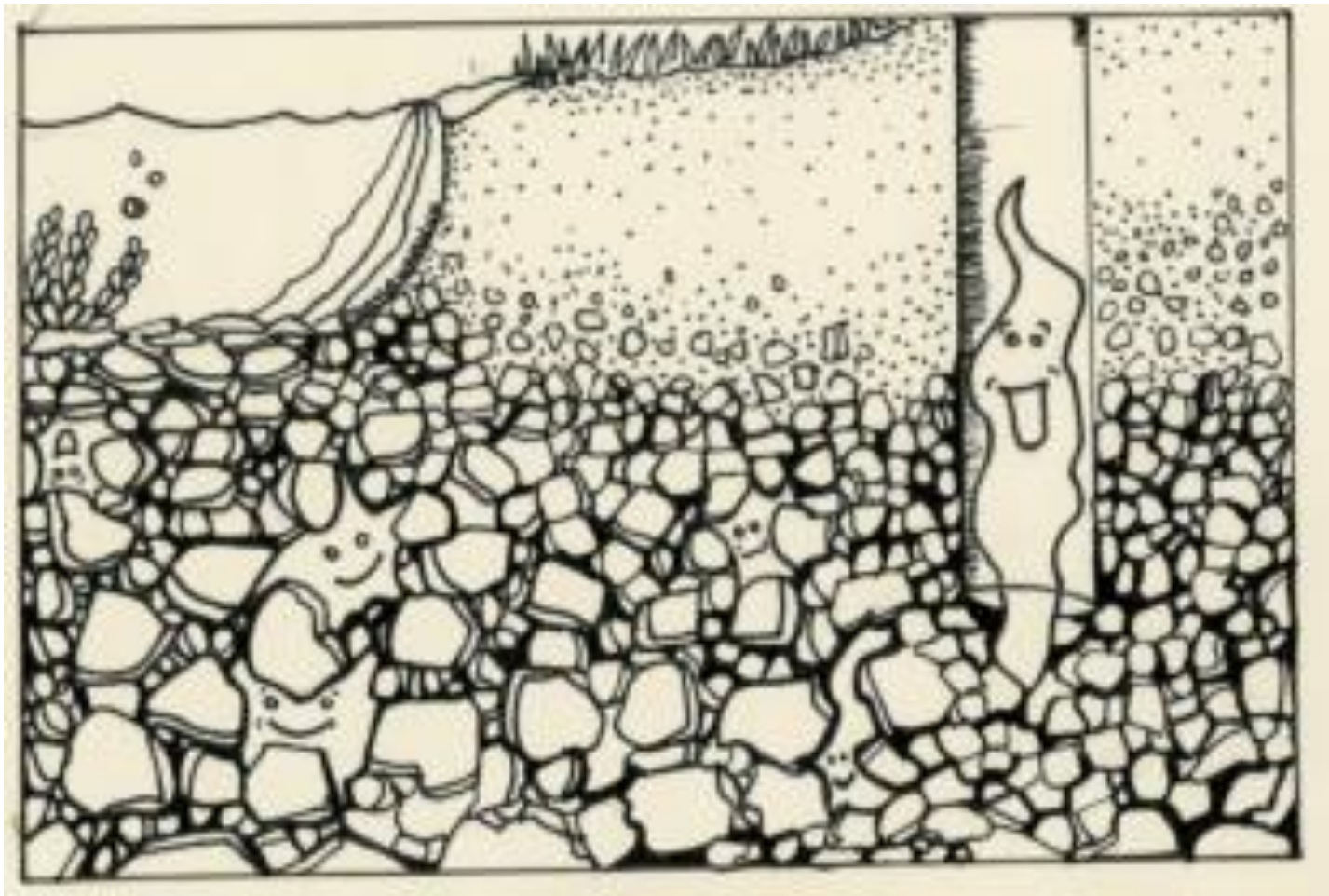
Drippy and his friends sink to the river bottom.



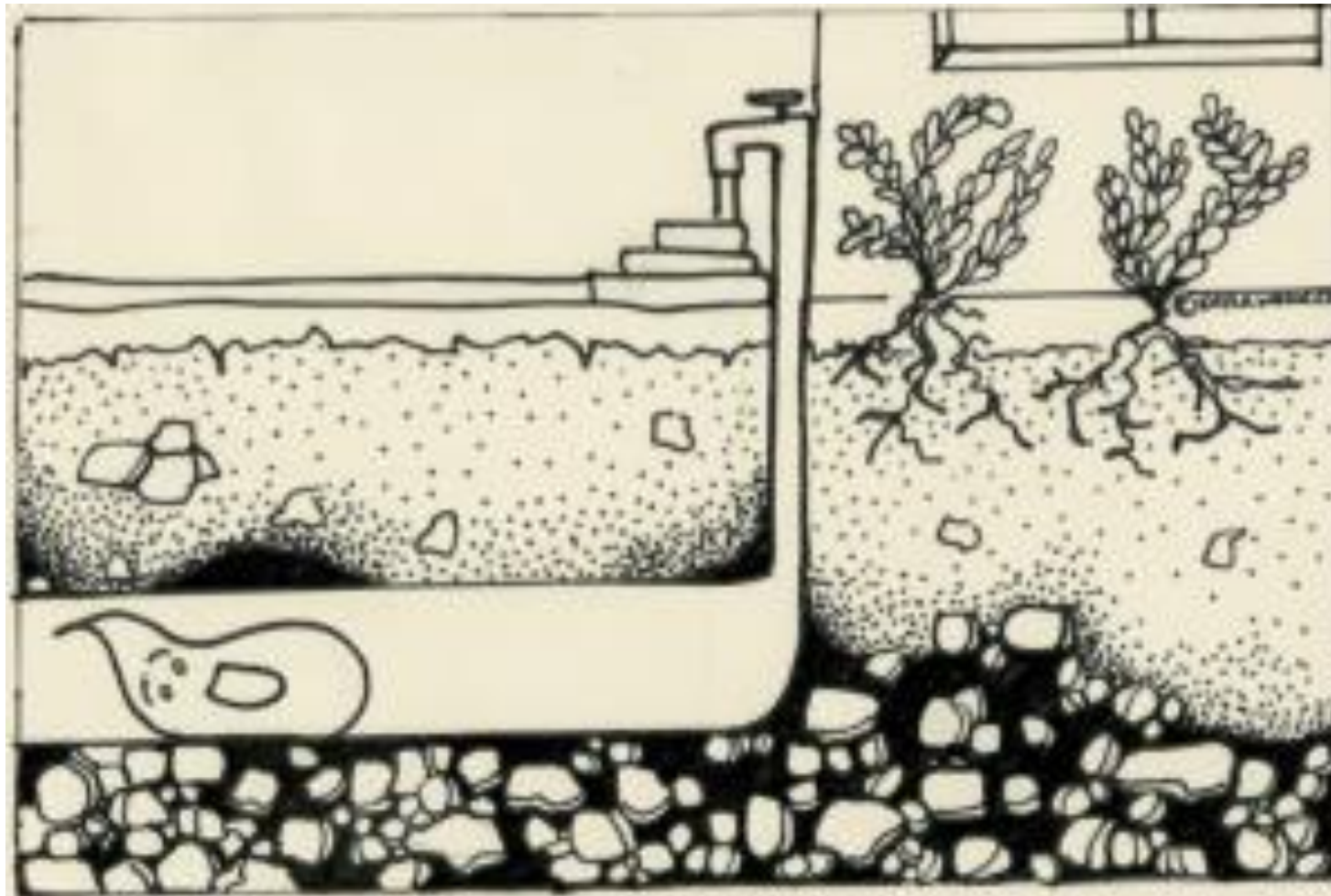
**Drippy changes shape to fit
between the rocks.**



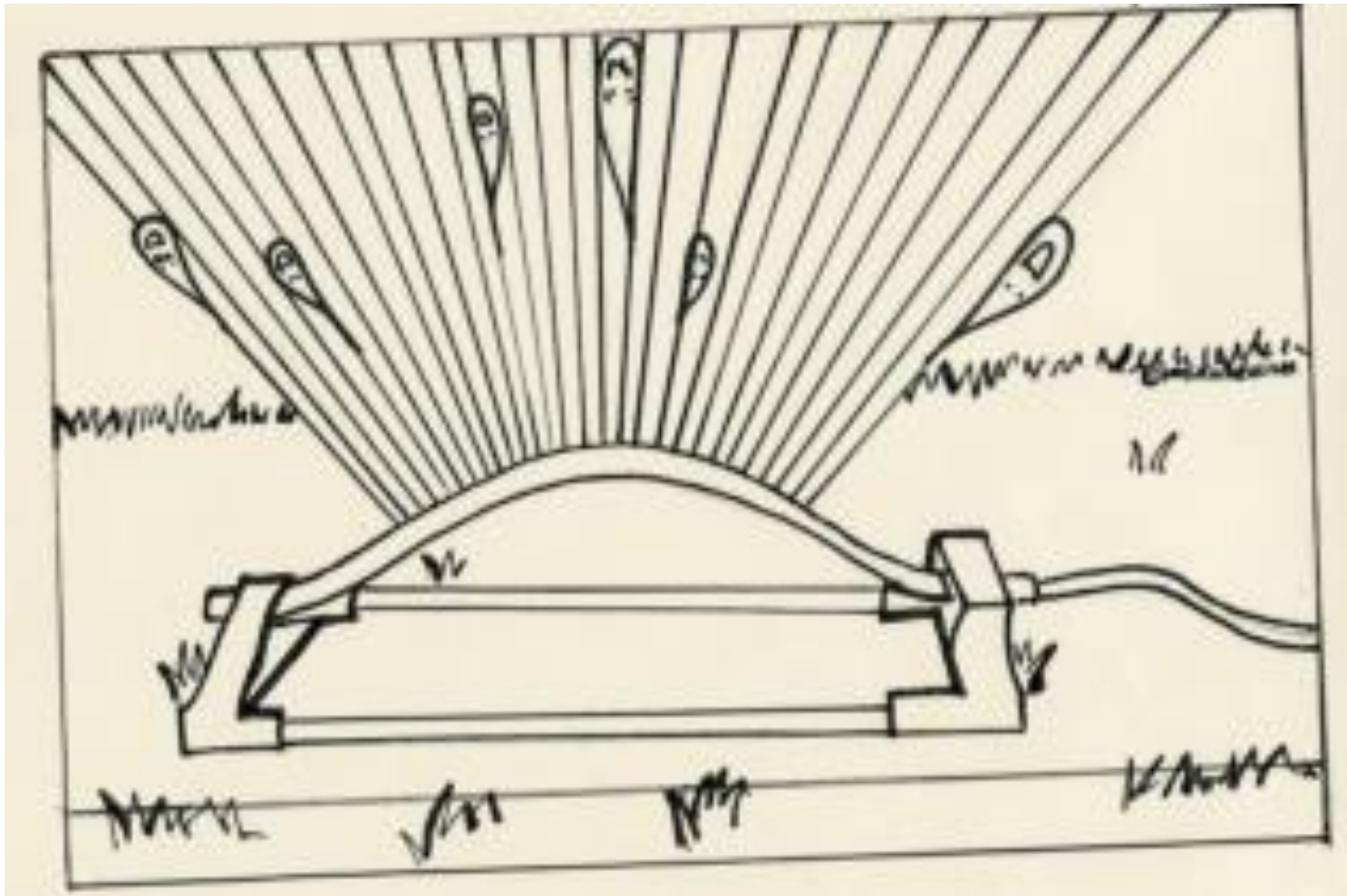
Through INFILTRATION, Drippy and his friends become GROUNDWATER.



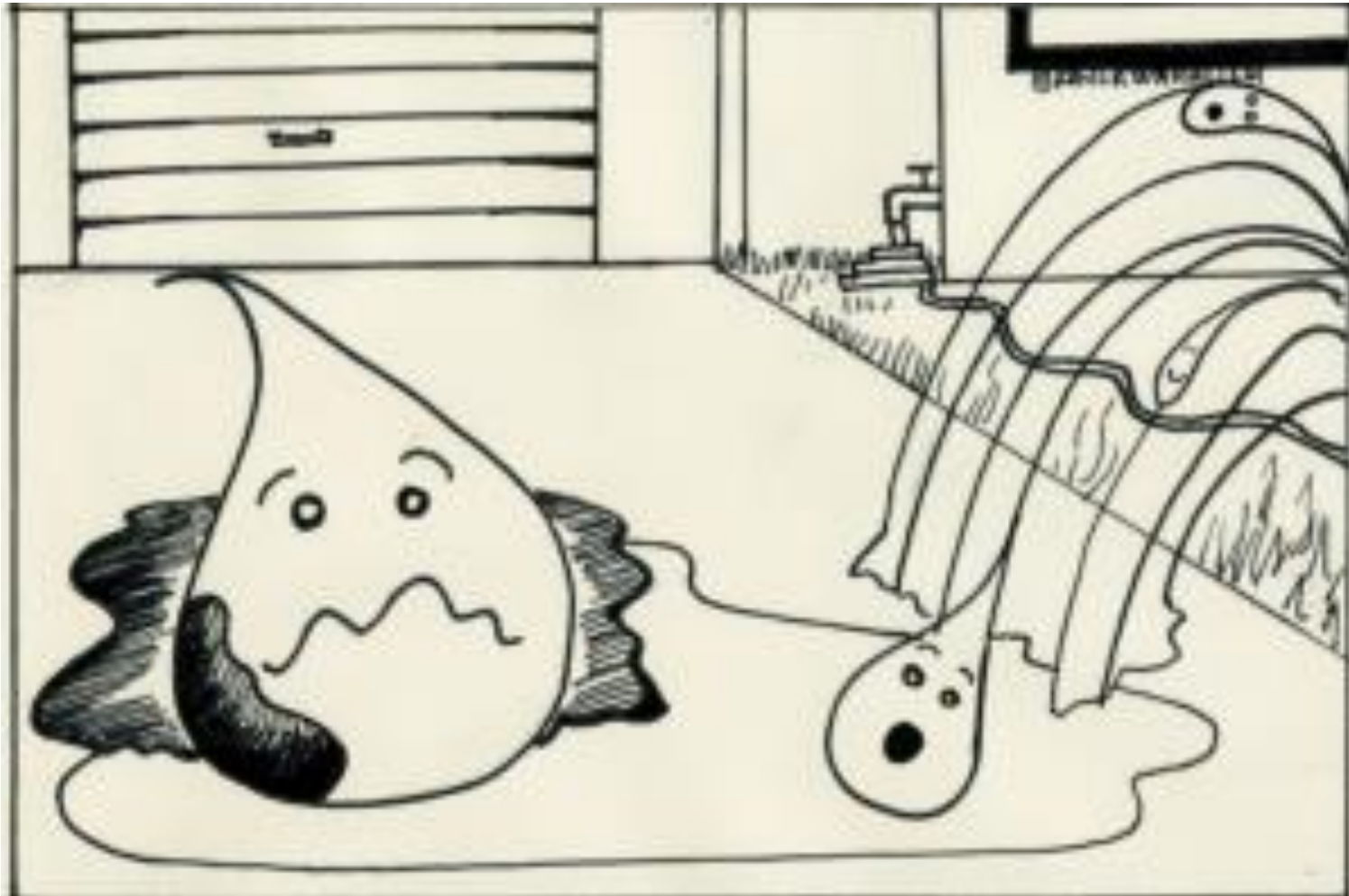
Drippy is underground until he is PUMPED out through a WATER WELL.



Drippy then travels through PIPES to homes and businesses.



Drippy and friends come out through a lawn sprinkler!

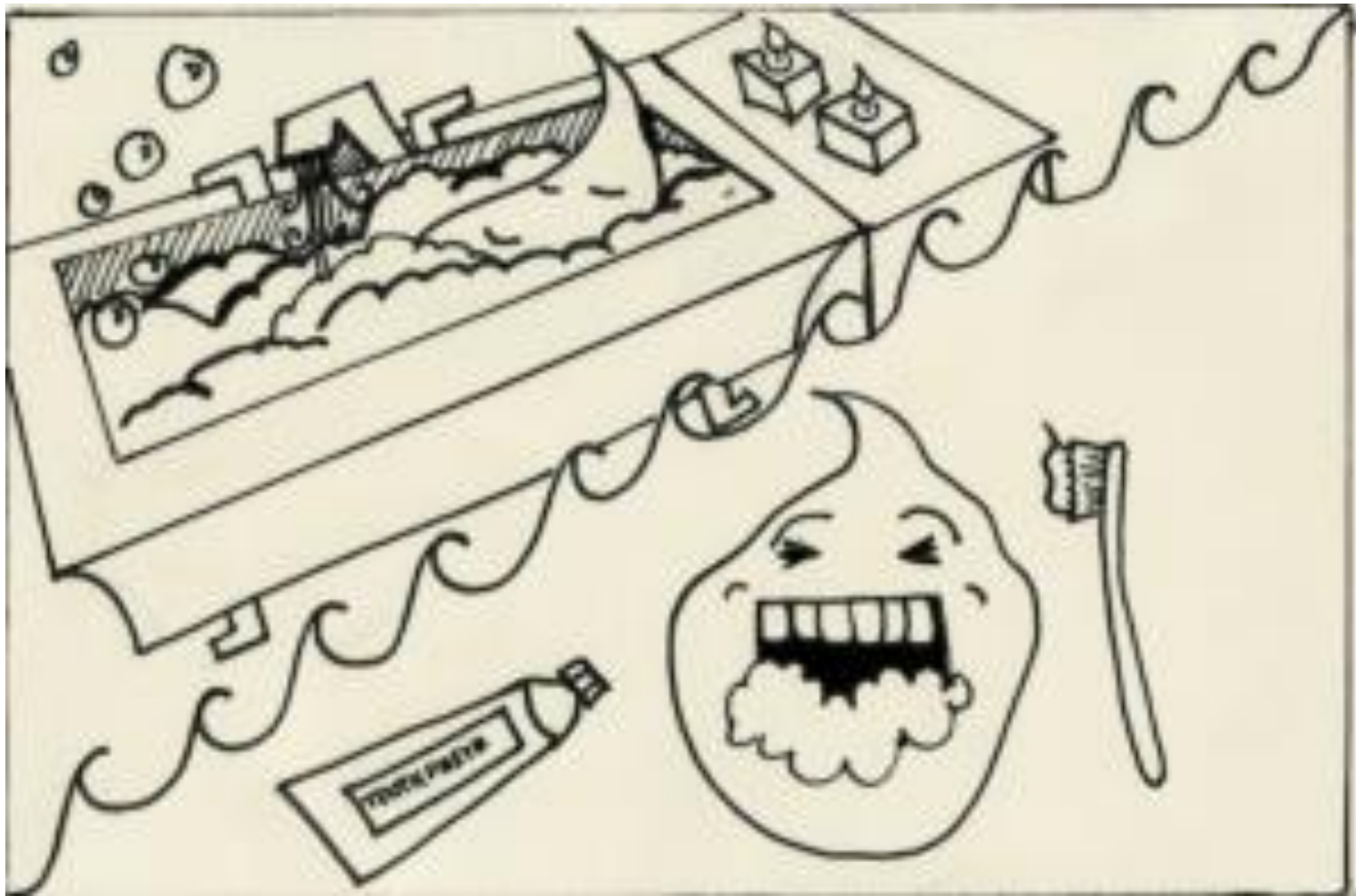


Drippy's friend lands in oil. Oh no...that's STORMWATER pollution!

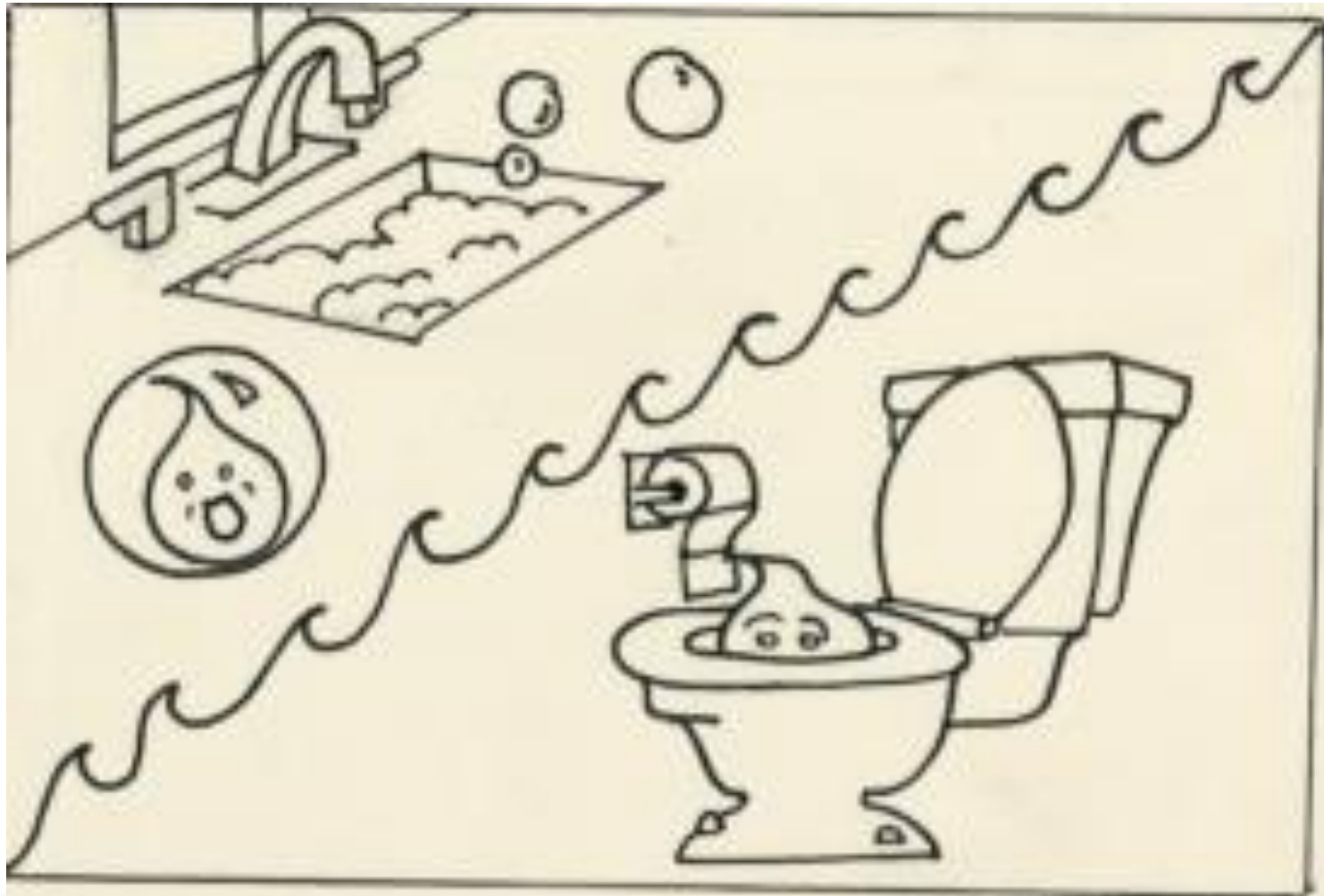


Another friend lands on the sidewalk and EVAPORATES without helping the grass.

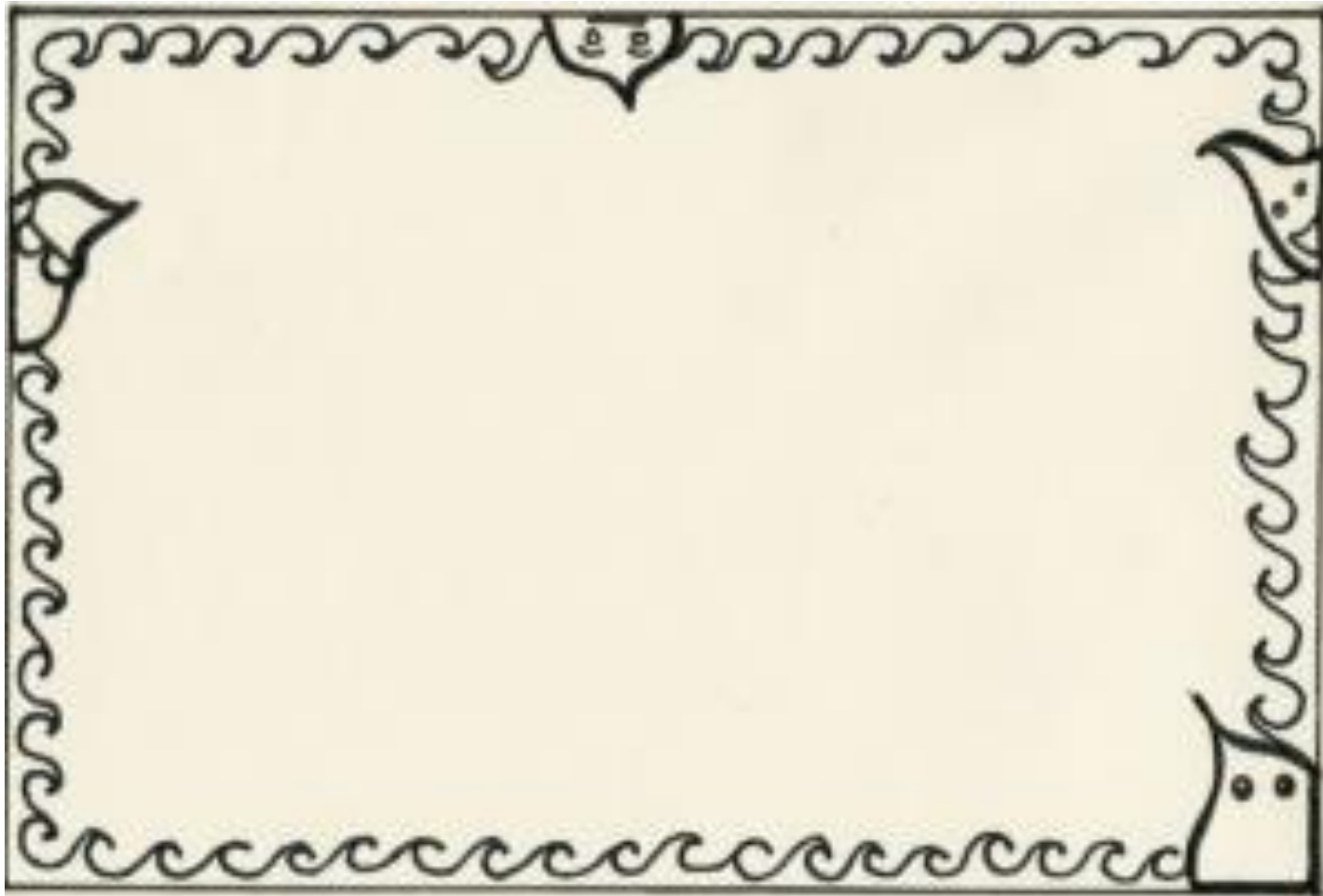




**Some water drops flow into our homes
and are used for many things.**



**Water drops that go down our drains and toilet are called
WASTEWATER.**



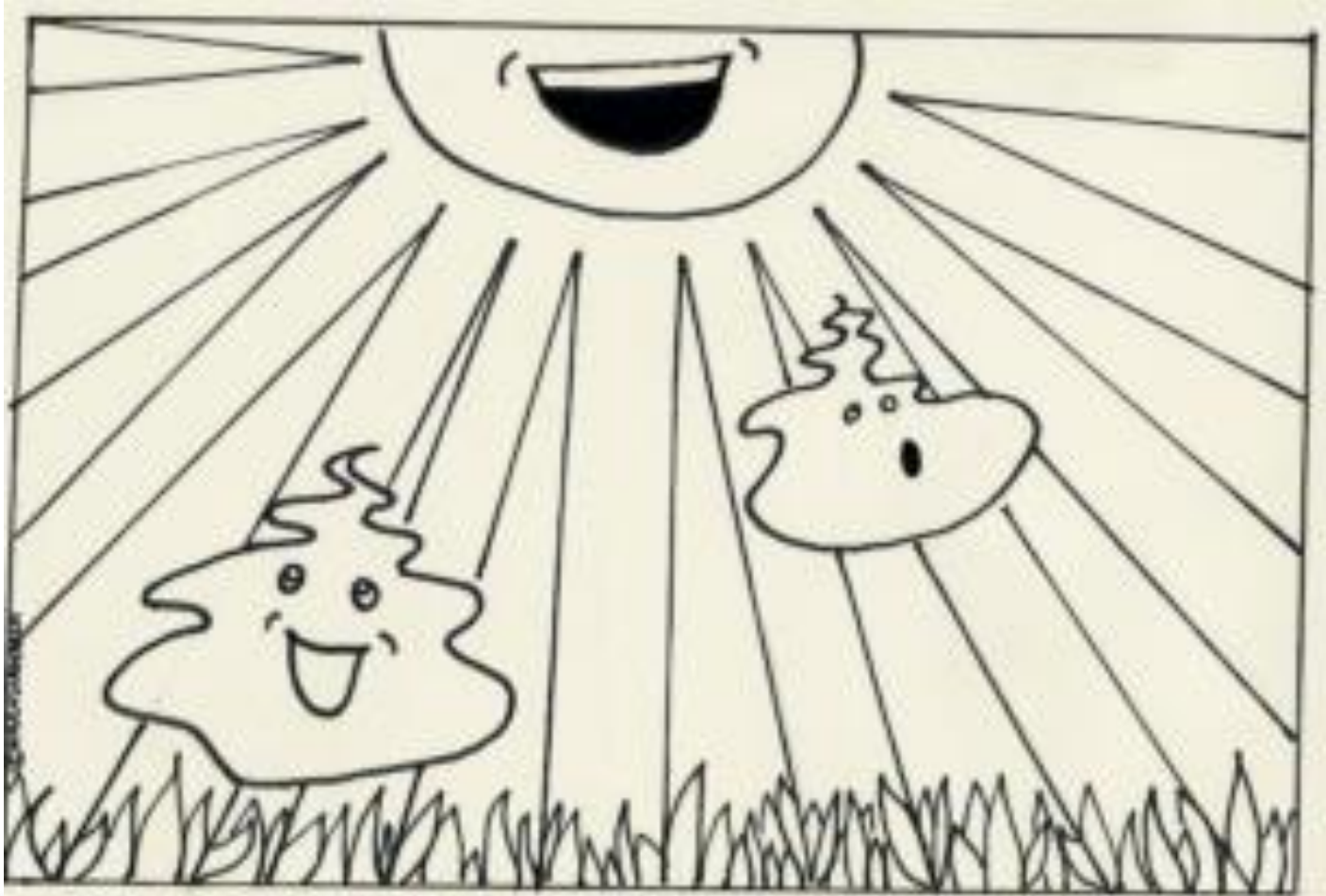
**How can you conserve water
inside and outside of your home?**



**Drippy lands on a blade of grass
and feels dizzy and warm
from the heat.**



The sun warms Drippy and he begins to float in the air.



Drippy EVAPORATES into the sky.



**Drippy CONDENSES
back into a cloud.**



**Drippy has completed one WATER CYCLE!
He rests in the clouds until the cycle begins again!**

VOCABULARY

Condensation (n): the conversion of a substance (such as water) from the vapor state to a denser liquid or solid state usually initiated by a reduction in temperature of the vapor

Precipitation (n): a deposit on the earth of hail, mist, rain, sleet or snow

Melt (v): to become altered from a solid to a liquid state usually by heat

Runoff (n): the portion of precipitation on land that ultimately reaches streams often with dissolved or suspended material

Surface Water (n): natural water that has not penetrated much below the surface of the ground

Watershed (n): an area of land bounded peripherally by a divide and draining ultimately to a particular body of water

Current (n): the movement of water in a stream or river

Aquifer (n): water within the earth, especially that which supplies wells and springs

Infiltration (v): to enter, permeate, or pass through a substance or area by filtering or by insinuating gradually

Groundwater (n): a water-bearing stratum of permeable rock, sand or gravel

Pump (v): to draw or move fluid especially by suction or pressure or both

Water Well (n): a pit or hole sunk into the earth to reach a supply of water

Pipe (n): a tubular or cylindrical object for moving a liquid, gas or finely divided solid

Stormwater (n): surface water resulting from heavy falls of rain, snow and snow/ice melt

Evaporation (n): to convert into vapor or a gaseous state from a liquid or solid state

Water Cycle (n): sequence of conditions through which water passes from vapor in the atmosphere through precipitation upon land or water surfaces and ultimately back in the atmosphere as a result of evaporation and transpiration – a.k.a. the hydrologic cycle

TEACHER INSTRUCTIONS:

By following the journey of Drippy the Water Drop, these cards teach the natural water cycle PLUS the concept of the aquifer and how we use pipes and pumps to get our water. It includes five cards about human use which can be removed depending on the desired lesson content. It is available in a full-color teacher's version and in a black and white student version for coloring. **Suggested Lesson:** Review the water cycle. Have each student color a card. Bring the class together around a large surface and have the students lay the cards side-by-side in the correct order.

HUMAN USE CARDS:

Card Numbers: 19, 20, 21, 22, 23

Remove the Human Use cards if you wish to focus only on Drippy the Water Drop's (mostly) natural water cycle journey of condensation, precipitation and evaporation. Leave the Human Use cards if you wish to include concepts of stormwater, wastewater and water conservation.

Human Use Card 19: Stormwater pollution; driveway oil

Human Use Card 20: Outdoor water use; avoid watering the sidewalk

Human Use Card 21: Indoor water use; types of use

Human Use Card 22: Indoor water use; types of use

Human Use Card 23: Conservation; reflection after seeing prior cards

Contact a local informal educator for a classroom visit or field trip to a local area hydropower facility, historic water well, wastewater treatment facility, wetland or creek.

