Watershed Mapping

Today, you will be using virtual mapping technology to create a watershed map of a body of water in New Jersey that matters to you. Start by looking at [this watershed map of New Jersey](#) that was generated by the Rowan University School of Earth and Environment.

1) Uncheck the boxes on the left that say "Priority Lands for Water Quality Protection" and "DRWI Clusters and Focus Areas." This will allow you to see the water bodies more clearly.

2) Select a body of water on which you would like to focus your map. This can be a lake, pond, section of a river, or even stretch of shoreline.

3) Find the "Watersheds" checkbox and read the information that is provided there. Try unchecking then rechecking the box to help you see where the lines for the watersheds are. Set the opacity of this layer to its maximum by moving the slider to the right. Adjust the zoom and centering of your map so that the watershed containing your water body dominates your screen. Why do we need to know where these lines are when thinking about how local activity can affect a specific water body?

4) Check the "Impervious % (land use polys)" checkbox. Expand the header for this topic so you can see what the different colors will mean on your map when you check the box. Referring to the watershed lines, decide what the most common value for percent of impervious surfaces is within your water body's watershed and record it below. When you finish, uncheck the box for impervious surfaces.

5) Expand the "Component Layers" section. Expand the "Groundwater Recharge" section and read about recharge. Why might a waterbody that is surrounded by ground with a high recharge rate be healthier than one that is surrounded by ground with a low recharge rate?

6) Check the box for "Groundwater Recharge" and adjust the opacity of the layer so that you can still see the watershed lines. Below, describe the groundwater recharge rate for your water body's watershed, including any differences in the values between areas that are close to or far away from your water body.

7) Imagine that you are creating a map to help you talk to residents and businesses near your body of water about keeping their watershed healthy. Go through the list of available layers and check any boxes that you would want to be able to show on your map. Adjust the opacity of the layers as best you can to make the map easy to view and understand. When you are finished, click the "Share" button on the left hand side of the screen. (It is the 6th icon from the top.) Copy the link and paste it below along with an explanation of why you chose each layer.