Drivers and Constraints Tool

- Where does the water start?
- Where can the water go? What is the process?
- What drives or moves the water? How?
- What are the constraining factors, and how do they work?
Scale Tool

**Atomic-Molecular**
- Not visible Nanometer or smaller (<10⁻⁹ m)
- Molecule

**Microscopic**
- Visible with microscope (10⁻⁸ m to 10⁻⁴ m)
- Cells
- Water Drop
- Football Field

**Macroscopic**
- Visible with naked eye
- Millimeter (10⁻³ m) to Meter (10⁰ m) to Hectometer (10² m)
- Watershed

**Landscape**
- Larger than what you can see at once
- Kilometer or more (>10⁻³ m)
- Watersheds
Tracing Mixtures with Water Tool

Substances mix and unmix with water and water moves through systems. How does this work?

**Tracing Back**
- Where did the substance come from?

**The Mixture**
- What’s mixed in the water? (Teacher provides)

**Tracing Forward**
- If the water moves (new place) ________________, will the substance stay mixed with the water? Yes or No

- If no, how and why will it separate?

- Where will the substance end up next?

**Tracing Back**
- Where did the water come from?

**The Mixture**
- Where is the mixture now? (Teacher provides)

**Tracing Forward**
- Where will the substance end up next?

**The Mixture**
- What kind of mixture is it? Suspension or Solution
  - How do you know?