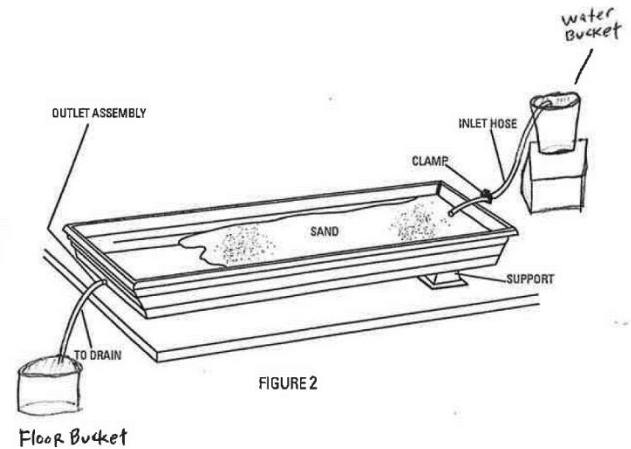


Stream Table Check Out Kit Set-up Instructions

Set-up

1) **Table:** Place the stream table on a desk or large flat surface so that the drain side of the stream table is on the edge. The supporting table should be high enough off the ground so the drain of the stream table can drop water into a bucket on the floor. Your supporting table must also be long enough so that there is room behind the top of the stream table for a bucket.



- 2) **Sand:** Pour the sand onto the table. Depending on what you are looking to explore you might make a flat plane that covers the table or you might create hills and mountains for a more natural look.
- 3) **Slope:** To adjust the slope of the stream table, place the rectangular support under the uphill side and move forward or back to get the angle you want.
- 4) **Buckets:** Fill one bucket with water and place it near the uphill side of the stream table atop a sturdy box or large book and insert the inlet hose with the clamp. The second bucket goes on the floor under the drain with the drain tube running into it. A small amount of water may leak under the gasket of the drain hole so keeping the bucket directly below the hole will catch any stray drops.
- 5) **Siphon:** Take the siphon tube and submerge the entire tube in the bucket of water. Make sure no air bubbles are left inside the tube. While it is submerged plug the end closest to the white clamp with your finger. Lift the side with your finger on it out of the water and onto the uphill end of the stream table while the other end of the siphon sits submerged at the bottom of the water bucket. Release your finger and the siphon should start moving water to the table. Check on this Youtube video if you are having trouble. https://www.youtube.com/watch?v=8U_HO6z6LaY To adjust the flow use the white clamp.
- 6) **Repeat:** Once the water bucket is fully drained you can reset the table by switching buckets, putting the original water bucket under the drain and the drain bucket at the top.
- 7) **Trough:** The long plastic trough can be placed at the uphill end of the table and used to carry water to examine stream velocity and determine the load of a stream.

Lesson ideas:

- Erosion – start with a straight stream and watch how it gains sinuosity. Label cut banks and point bars and deltas. Put rocks into the flow and see what happens. Can you limit erosion?

- Engineering – what does a beaver dam do? Can you construct one out of sticks? How about using cans and bottles to mimic different kinds of culverts. Which one's work?
- Plants – how do plants stop erosion? Use sponges as fake trees and line the banks to see if it slows erosion. Talk about how the shade from riparian trees keeps the water cool for salmon and provides food in the form of leaves that boost the food chain.