

Guide to Building Your Own Stream Table

There are a number of variations on the theme of stream table design. The following components are needed:

- Large basin divided into two parts. There are several options for this. One option is to use a length (about 3 feet) of gutter with a divider toward the lower end to keep the sand out of the reservoir. Another is to build a wooden table (approximately 3 feet x 5 feet) using 2x4s and a sheet of plywood. Other options are to combine large plastic bins available from most department stores to create a basin approximately 2 feet x 4 feet. Refer to the figure below for the set up of the stream table. Exact dimensions are left to the designers.
- Sand to fill up part of the basin (clean sand usually works best). Sand is available in 50 pound bags found in most home improvement stores. This type of sand is clean and well sorted and will likely last several years in a stream table. It is also useful to use sand from a local beach or river to replicate natural streams. Depending on size of the stream table designed, it may take up to 20 pounds (approximately 2.5 gallons) of sand to fill the upper portion of the stream table. Again, the amount of sand used is left to the discretion of the designer.
- Water to fill part of the basin. Depending on size of the stream table, it may take up to 20 gallons of water. The reservoir should be filled to a level to cover the intake of the pump.
- A small pump and hose for recycling the water. Aquarium pumps and tubing are available from a number of suppliers such as pet stores or scientific supply companies. It is recommended that the pump be able to run at least 100 gallons per hour.
- A method for providing an incline for the stream table. Because the water needs to be able to flow in a downhill direction to recreate an actual stream, designing the stream table with a 20 to 30% incline is recommended. This can be accomplished by raising the sand filled end of the stream table several inches above the reservoir.

See diagram below for a diagram of a stream table:

Diagram of Stream Table containing sand and water

