Make a realistic river for your layout

By David Popp

A rolling river adds interest to just about any model railroad. In this video article, I'll show you my methods for making a realistic river. First I'll mark where I want to locate the riverbanks. Then you can follow along as I show you step by step how to add this scenic detail to your layout.

This video article includes:
• Techniques for carving riverbanks
• Painting tips to add the illusion of depth
• How to pour resin to simulate water
• Methods for making ripples and waves

INSTRUCTIONS

The static content in this PDF document summarizes the video's key points. You can print it and take it with you to your layout. However, this interactive PDF document also contains within it the how-to steps on video. Just click the mouse on any image containing "Play Video" to see the video content that goes with that step.

The photos in this PDF have been sized for optimum hardcopy printout. When viewing the video steps on your computer, we recommend that you zoom in 150% or larger for optimum viewing of the video steps.

Model Railroader INFORMATION STATION VIDEO

PLAY To play a video segment, click any image containing "Play Video" in the upper corner.

STOP To stop or rewind a video, click on the image and then press the ESC button on your keyboard.

For a more realistic appearance, don't make your river too close to any tracks. Real railroads always kept some distance between tracks and riverbanks to help prevent the roadbed from washing away during a downpour.


Following my markings, I cut out the riverbanks first with a utility knife. I cut all the way through the foam scenery base to the plywood tabletop of the benchwork.

After the first cuts with the utility knife, I peel away the vinyl ground cover. I use a putty knife to make the final cut and then remove the scrap of foam. At this point the riverbanks are vertical.

Using an old curved wallpaper knife, I carve slopes into both riverbanks. Don't try to make a large cut and carve the slope all at once. Take your time and make small cuts so that you can adjust the slope as you work.
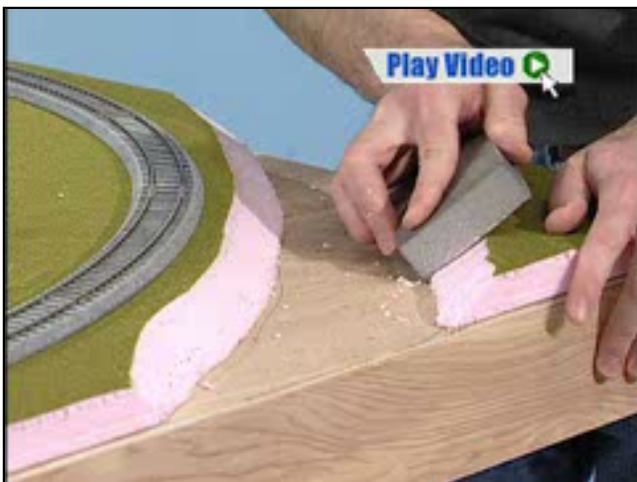
Once I'm happy with the angle of the slopes, I use a sanding block to clean up the surfaces of the riverbanks and remove any stray scraps of foam.

The exposed plywood forms the base of the river. Before painting the plywood, I use lightweight spackle to fill in and cover the wood grain. This will give me a more realistic river bed.

Lightweight spackle dries quickly, so you can apply multiple coats as needed. After each coat dries, I sand it smooth with a sanding block, making sure to remove any high spots.

To contour the riverbanks I use Sculptamold, a plaster modeling product that I find easier to work with than plaster of paris. I mix the Sculptamold with water until it reaches the consistency of oatmeal.

I apply some Sculptamold and spread it along the riverbank with a putty knife. Typical working time with Sculptamold is about 10 to 15 minutes before the material begins to set.

After the Sculptamold dries, I paint the riverbanks with tan latex paint. Then I apply white glue and mix it into the wet paint. Next I sprinkle limestone ballast over the riverbanks to add sandy texture.

I set the ballast in place by lightly spraying the riverbanks with a 50/50 mix of water and isopropyl alcohol. This will make sure that the glue penetrates the ballast so my riverbanks don't crumble later.

Now I'm ready to deal with the river itself. First, I paint the plywood with flat black latex paint. Dark colors help add the illusion of depth to the finished river.

Then I use an airbrush to feather a dark tan color along the bottom edge of each riverbank. This removes the sharp edge between the banks and the river and will also help make the finished water look deeper.

I slowly pour Realistic Water by Woodland Scenics, over the river bottom. Then I brush the resin along the edge of each bank. I've used masking tape to keep the resin from dripping down the layout's fascia.

Once the resin has dried, I add ripples and waves to the river's surface using Woodland Scenics Water Effects. With my brush I simply dab this product onto the river's surface. It will dry clear.

You can make taller waves by applying multiple coats of Water Effects. Once the final coat hardens, the finished result looks like a real rolling river.