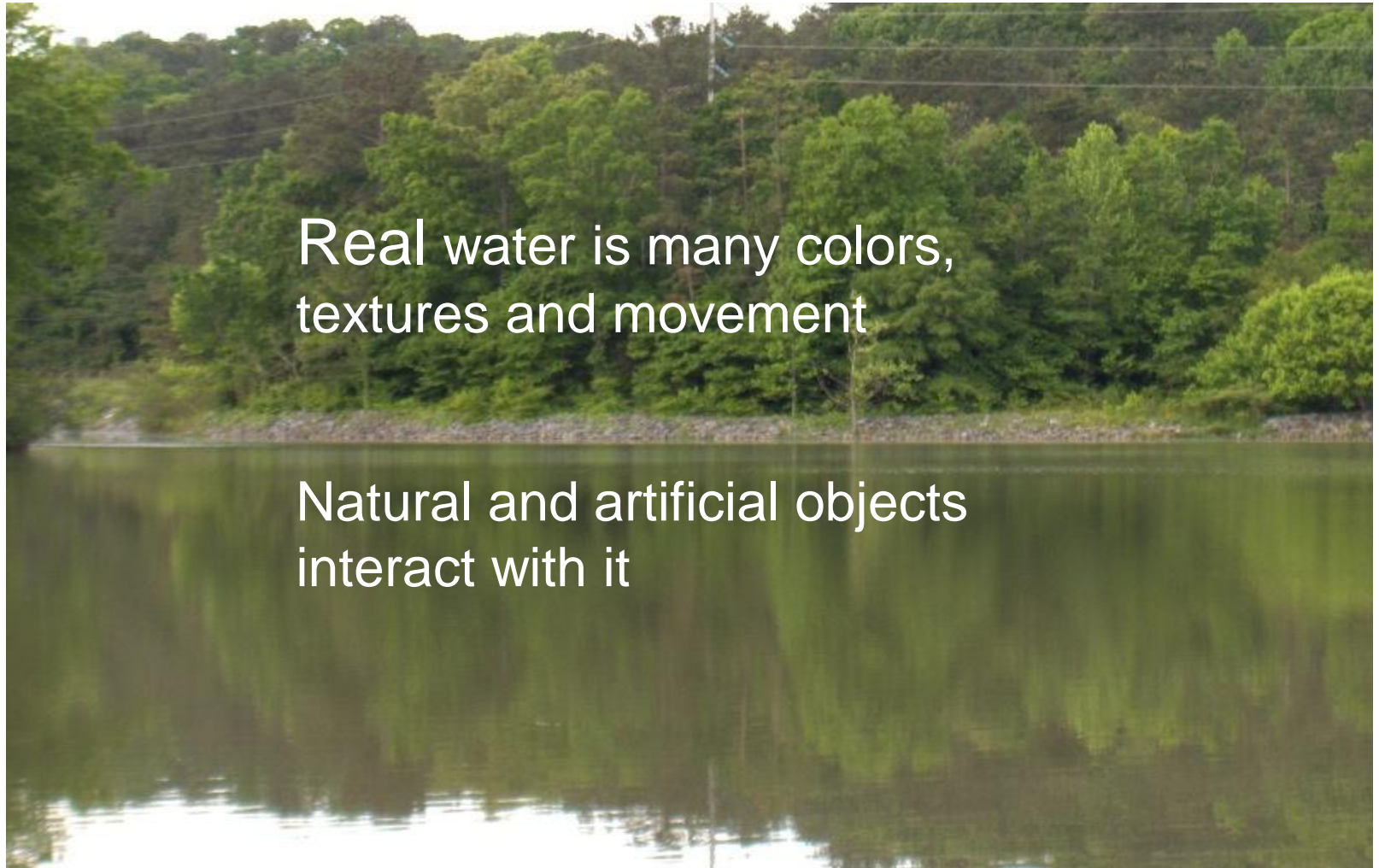


Modeling Water

Southeastern Region NMRA

Bob Beaty, MMR

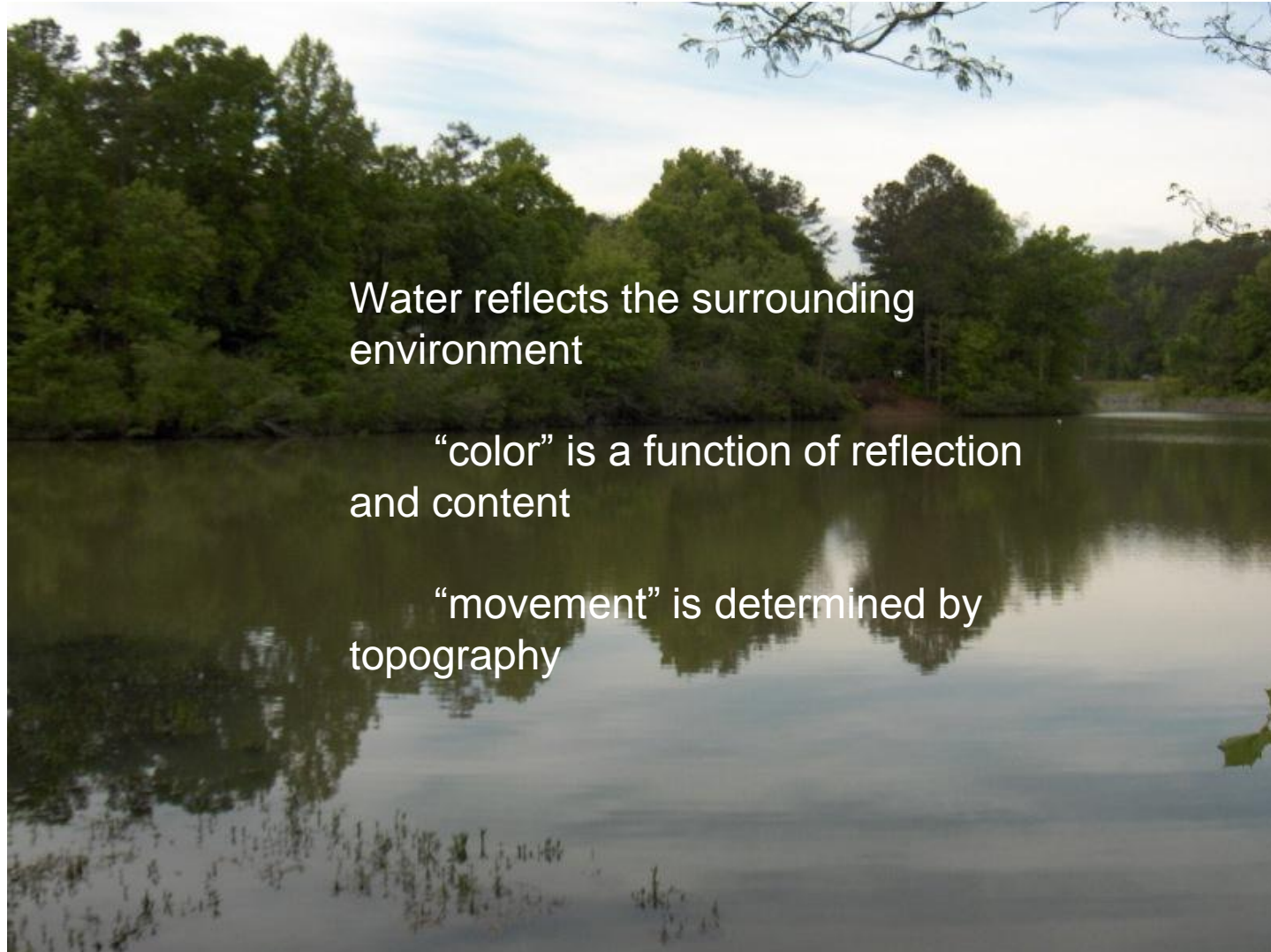
Reflections on a theme



Real water is many colors,
textures and movement

Natural and artificial objects
interact with it

Real Water



Water reflects the surrounding environment

“color” is a function of reflection and content

“movement” is determined by topography

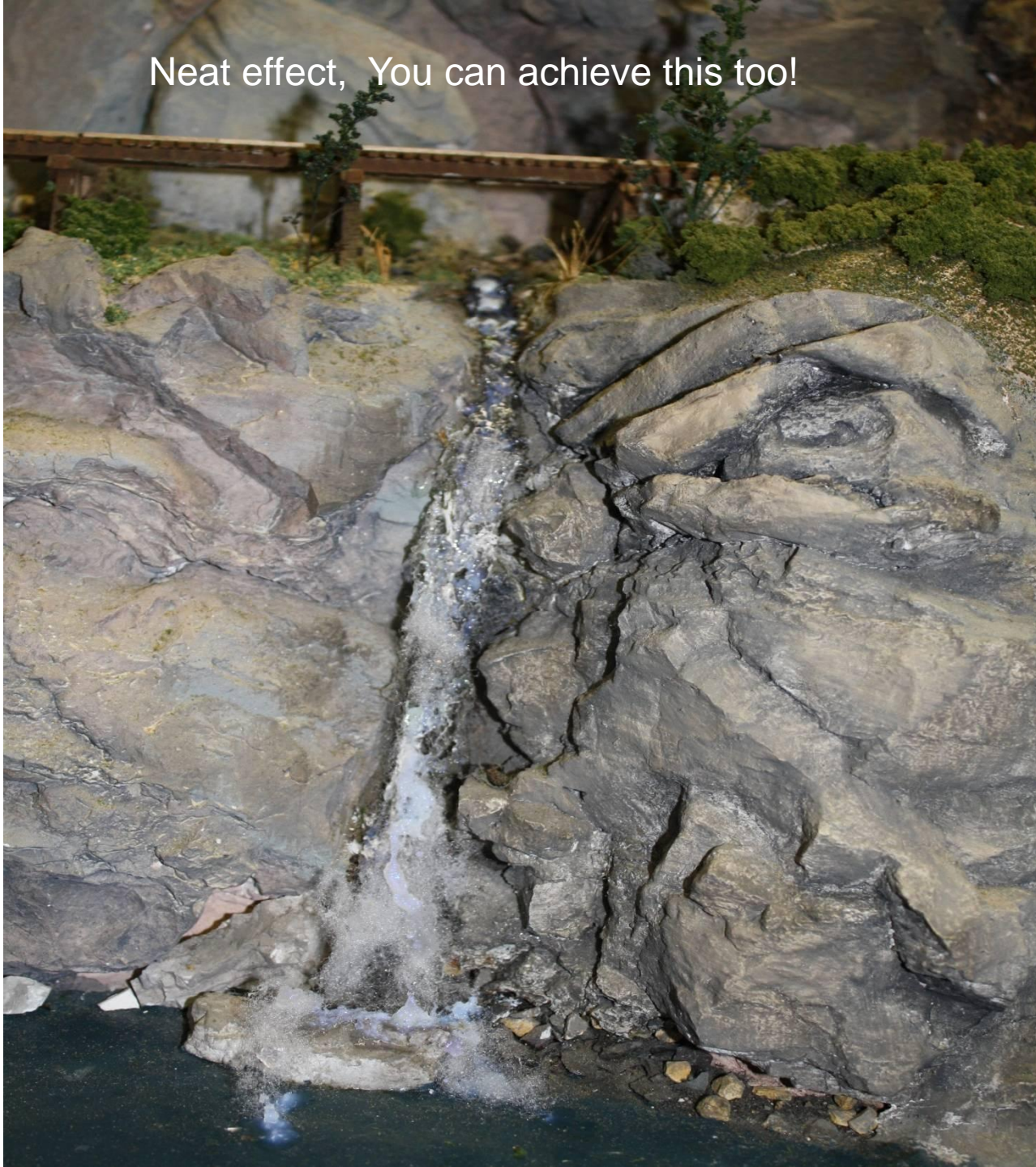
Preparing the modeled area

- Prepare the scene's environment first
 - Attention to detail, you will spend more time here
- Prepare the base
 - Foam, Plaster, Plywood. add topographical features
- Prevent leaks
 - products in use today will find the smallest hole
- Add scenic details
 - Ground texture, rocks tree limbs submerged objects



**A waterfall can be an interesting
effect**

Neat effect, You can achieve this too!

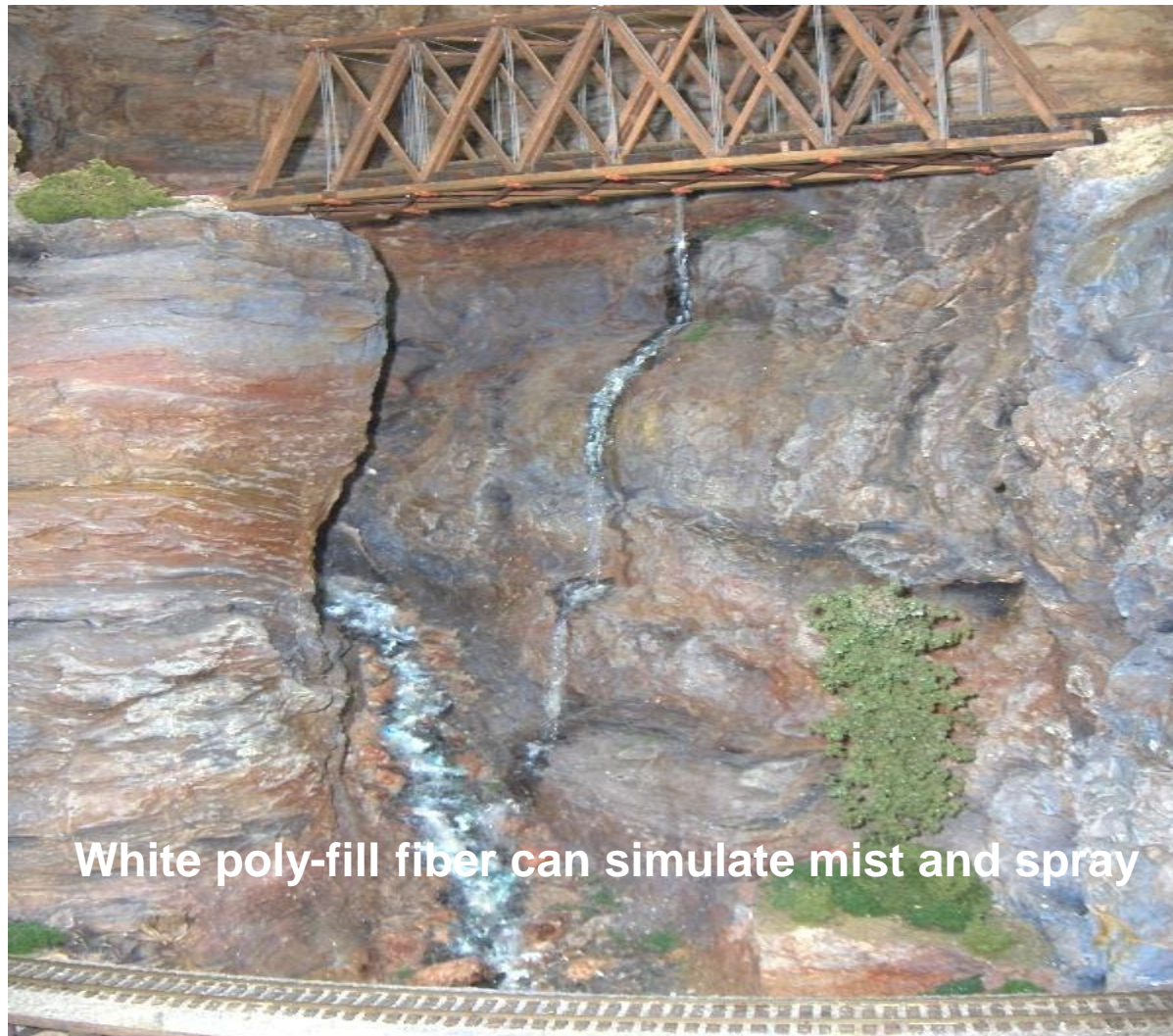


Prepare the scene, coloring the rocks and the pool.





Some more Waterfalls



White poly-fill fiber can simulate mist and spray



**Pre-stain the watercourse first then
add the medium**

Some Special effects

- The Bottom: add fish, logs, trash, junk, etc
 - Prepare the scene “dry” first then add the medium
- Ripples and Waves
 - Apply gloss Gel Medium after the surface has set
- Rapids and waterfalls
 - Use combination of Gels, white fiberfill and paint
 - Support the water fall with clear acrylic
- Boat wakes
 - Heavy Gloss Gel or clear caulk, accented with paints



These rapids were a “happy accident.” They were supposed to be clear tile caulk

Pouring on the River

- Surface contours (depth) – stacked foam board shapes
- Banks – scultimold and sand with ground foam
- River bed – poured plaster, smoothed and “leaks” sealed
- Painted river – center dark blue black, edges light earth/mud
- Multiple coats of Acrylic Varnish, Gloss Gel ripples

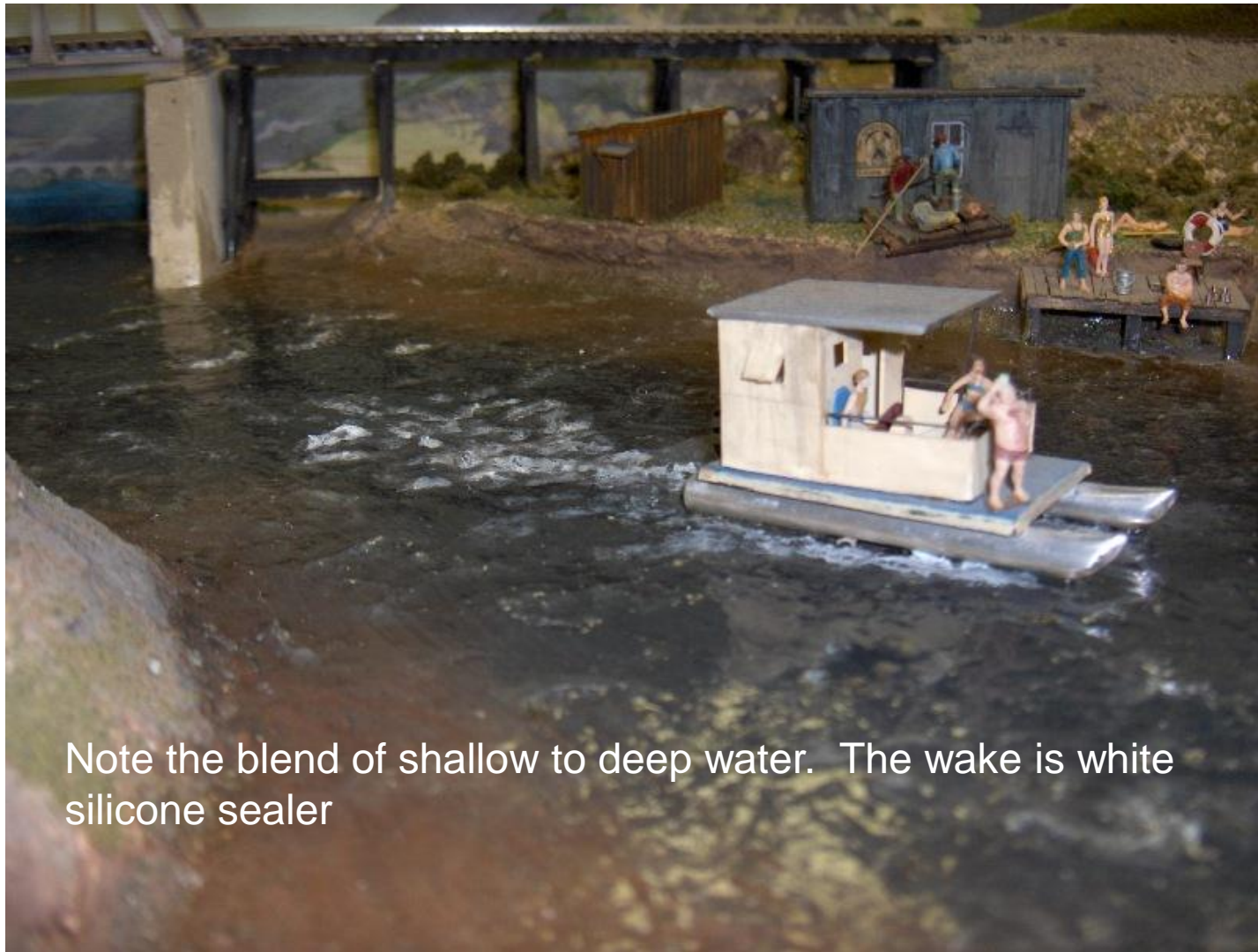


This mini-scene captures a dunking and is only 1/16" deep

Special effects



Wakes



Note the blend of shallow to deep water. The wake is white silicone sealer

Waves



Blend the 3D water into the backdrop, or hide it around a bend

Boats



This wake is Acrylic Gloss Gel dry brushed with white craft paint

Tips and Techniques

- Smooth plaster surface-
 - Paint to represent depth then use gloss varnish
- Contoured bottom with a raised surface
 - Model the bottom detail first then add a clear surface about 1 inch above
- Contoured surface with a poured depth
 - Complete the bottom then pour several layers of medium
- Tidal Flats, shallow streams
 - Shallow depressions fully sceniced, add a thin pour of medium
- Mud puddles, drips
 - Color the depression darker than the surrounding area, tint medium with a color

Trash and Junk

The surface junk and debris was completed first then Enviro-tex added. The duck was inserted when the medium was still wet.







Even a small amount of “water” can give a really nice effect to a model



Big Deep Lakes

- Prepare the area edges
- Use plaster to create a smooth surface
- Paint a dark blue/black for depth
- Pour acrylic resin (Enviro-tex)



Harbors and Lakes

- Use Foam core board to create a smooth surface
- Use Latex texture paint and a sea sponge for waves
- Paint to achieve the color of depth
- Paint waves blue and light blue/green top with white
- Brush on several coats of Acrylic Varnish





Problems to be aware of

- Leaks. Many products will seep through the smallest hole
- Shoreline creep. Some products will “ride” up the bank, requiring repainting/scenicizing
- Air bubbles. Envirotex must be “de-bubbled” with CO₂ (use a straw) or heat (torch)
- Trash, bugs and finger prints. Stuff happens! Try to prevent it.

Products to try

- | | |
|---------------------------|----------------|
| • Gloss paint | Cheap |
| • Acrylic light diffuser | not expensive |
| • Actual Water | messy |
| • Acrylic Artist products | easy, min cost |
| • Casting resins | smelly, toxic |
| • Enviro-tex | Easy, med cost |
| • WS products | Easy, med cost |
| • Glass/Plexiglas | A challenge |



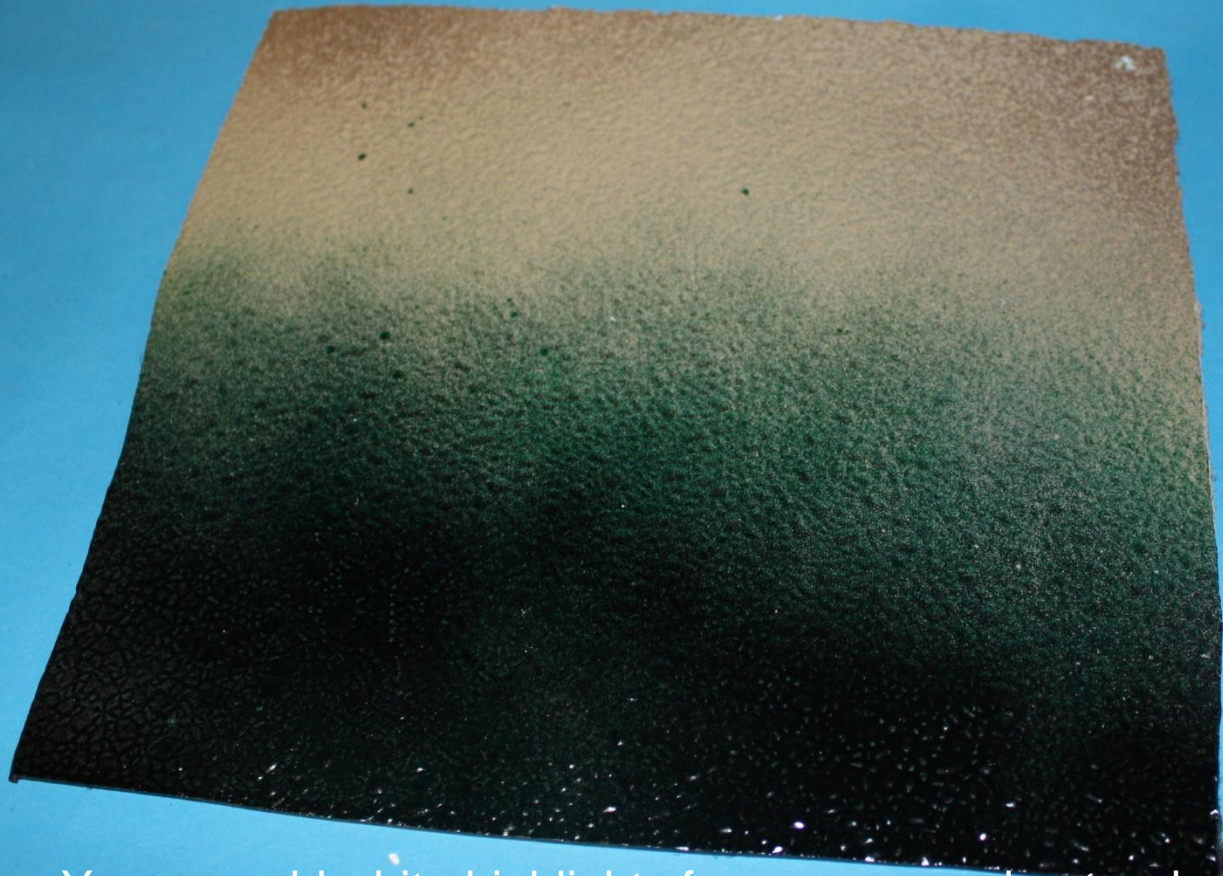
**Now for something
completely different!**

**DRY WATER using FRP board
FRP board is a textured product
used for back splashes**

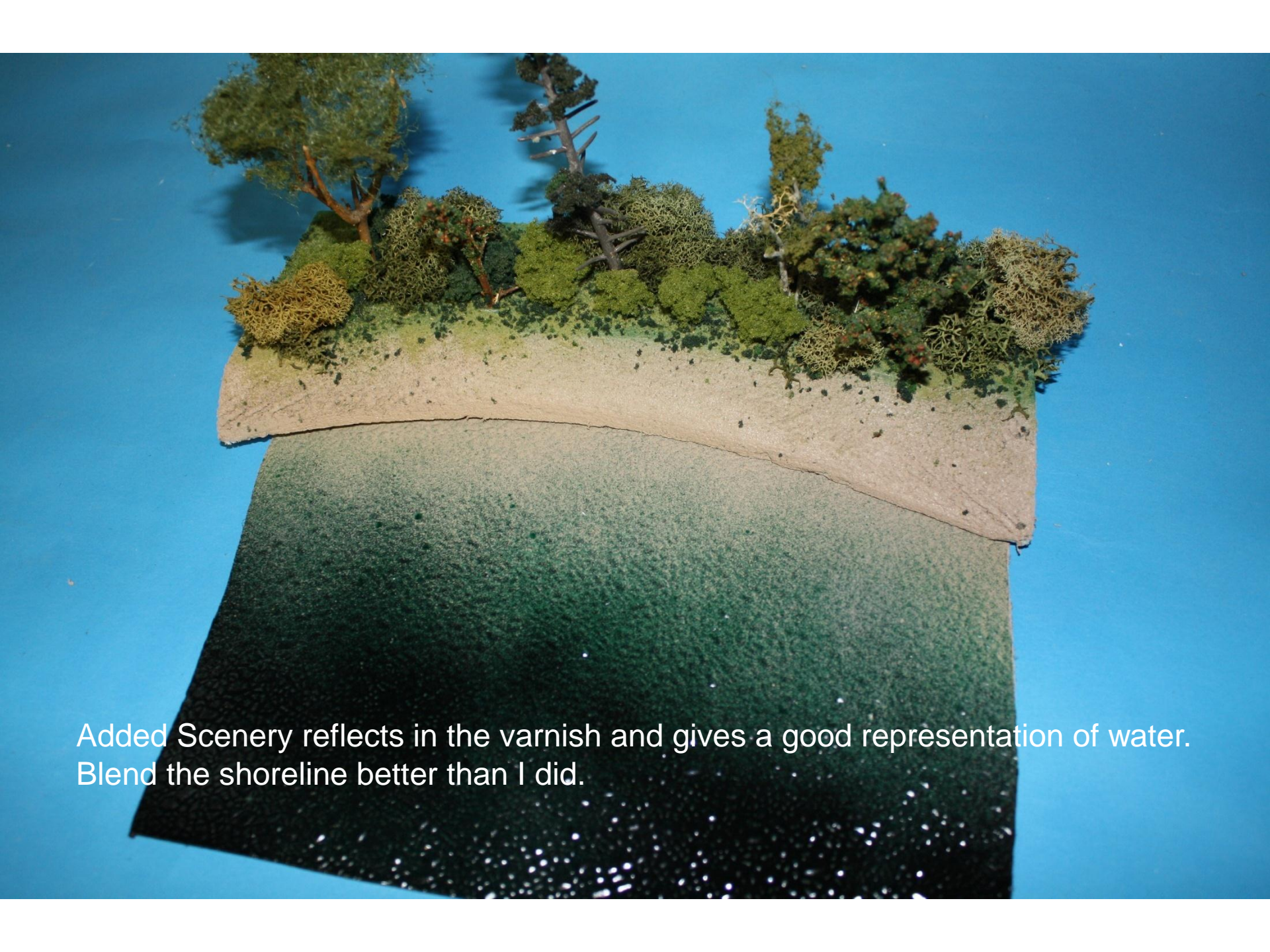


FRP board is water resistant, has a “bumpy” texture and is about 1/16” thick

The surface is sprayed with Light Earth, Sand, Deep Green and Dark Sea Blue. After the paint dries, over spray with gloss sealer or paint with gloss acrylic varnish.



You can add white highlights for wave caps, boat wakes etc.

A miniature landscape model is shown against a solid blue background. The model consists of a rectangular base. The top portion of the base is covered with a layer of light brown, textured material, possibly sand or fine gravel. Above this layer, there is a dense collection of miniature trees and shrubs. The trees vary in size and shape, with some having green foliage and others appearing more skeletal or brown. The bottom portion of the base is covered with a dark green, textured material, likely representing water. The water area has a gradient, being lighter green near the shoreline and darker towards the bottom. The shoreline is a thin, irregular line separating the land from the water. The overall composition is a cross-section of a miniature landscape.

Added Scenery reflects in the varnish and gives a good representation of water.
Blend the shoreline better than I did.

Well there you have it. See
there is nothing to it.

THAT'S ALL FOLKS

BOB BEATY, MMR