

# going underwater

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Create an underwater scene using a Psunami preset, some parameter tweaks, and a light filter of your choice.



a tutorial for : [psunami water](#)

**PSUNAMI**



**photoreal 3D water simulation & effects.**

[ from Digital Anarchy ]

f/x tools for revolutionaries.



This tutorial takes you through creating an underwater scene with Psunami. It's easy to create above-the-water scenes in Psunami, but going 20,000 leagues beneath the sea is a bit more difficult. In fact, going one meter below the surface is tough to do realistically. But you can and we will! [ figure 1 ]

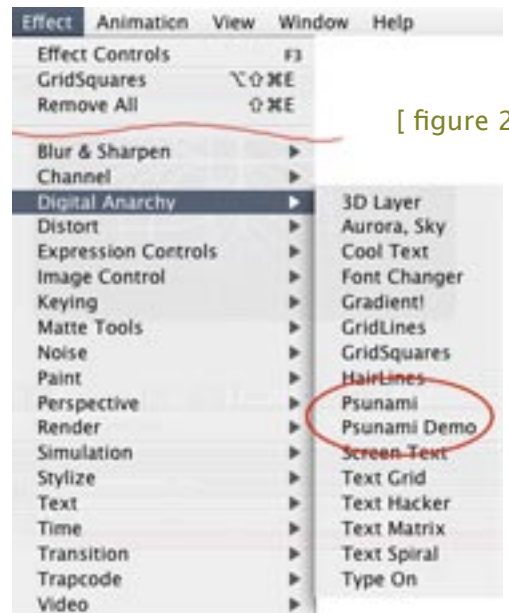


[ figure 1 ]

## 00- download & install

Before you start this tutorial, you will want to download the [psu\\_under-tute.zip](#) file from our website. This ZIP file contains an After Effects .aep file and QuickTime example movies.

You also need to install our Psunami Water plugin into your After Effects/Plugins folder. The plugin will appear in the 'Effect' dropdown menu, in a 'Digital Anarchy' submenu. [ figure 2 ]



[ figure 2 ]

If you are working with the demo version of Psunami, a red 'X' will watermark your footage.

## 01- project setup

From your download folder, open up the [psu\\_under.aep](#) project file in After Effects. The 'Final' comp shows your finished piece.

You can also play the QuickTime movie called [Psu\\_under-final.mov](#) to see the final composition that you will create.

The 'Start' comp is simply a 720x486 project with a new Solid layer. Alternately, you can just create a 720x486 comp and add a Solid layer. [ figure 3 ]



[ figure 3 ]



## 02- load the Carribbean preset

Apply Psunami (Effects> Digital Anarchy> Psunami) to your Solid. Go to the Preset Manager and load up the preset called Carribbean (Underwater> Carribbean). Click 'Go' to apply it. [ figure 3 ]

Once you've selected the Carribbean preset, you'll have a basic underwater scene. It doesn't look very realistic right off the bat, but it's a start. [ figure 4 ]

NOTE: On some systems, the preset names do not display correctly. If you select a preset and click 'Go' it will apply but the preset name won't show in the pop-up menu.

## 03- change the comp resolution

Change the comp resolution to 'Quarter' by changing the Resolution in the lower right of your Comp window.

The Carribbean preset puts us into in Psunami's 'Realistic' mode, which is somewhat render intensive. Check that out in 'Render Options' section.

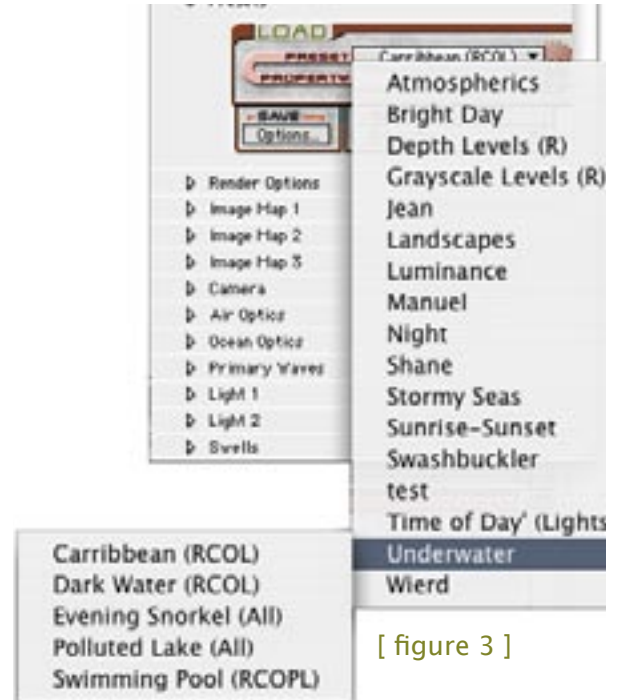
Turning down After Effect's built-in resolution will speed things up. We don't need to see high resolution results until the end of this project. Until then, Quarter res will let work reasonably fast and preview accurately.

## 04- change the camera

Let's get a better camera angle. Twirl down the 'Camera' section. Change 'Tilt' to 88 degrees and 'Pan' to 68 degrees. [ figure 5 ] This will put the highlight caused by the sun into the upper right corner and have us looking a little more off into the distance.

The camera angle is more of an aesthetic touch, so change to taste. The exception is 'Elevation', which is bring your camera under the water surface.

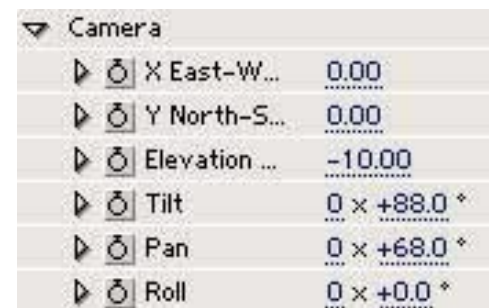
If you change Elevation from a negative to positive number, you will move the camera above water. Make sure to change it back to -10!



[ figure 3 ]



[ figure 4 ]



[ figure 5 ]



## 05- change the water color

Open the 'Ocean Optics' section and change 'Water Color Scale' to 1.50. [ figure 6 ]

This will cause the color selected in this section to have more of an effect. You'll notice that the water becomes a bit more blue.

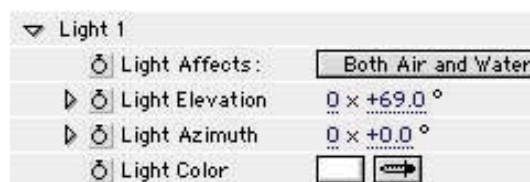


[ figure 6 ]

## 06- change your lighting

Now for a quick change of lighting. Let's move the sun slightly to affect the position of the highlight.

Go down to 'Light 1' and set the 'Light Elevation' to 69 degrees. [ figure 7 ] This will raise the sun up in the sky and increase the contrast a little.



[ figure 7 ]

## 07- increase wave resolution

Open the 'Primary Waves' sections and set 'Coarse Grid Size' to 2.00 and 'Fine Grid Size' to 0.20. [ figure 8 ] This increases the resolution of the 3D mesh that Psunami uses to create waves. [ figure 9 ]

Why does decreasing these values increase the resolution? Well, mostly because we want to confuse you. That way you appreciate these tutorials all that much more. ;-)

Actually, the 3D mesh that Psunami uses is made up of polygons (like most 3D objects). By decreasing these values, you're making the polygons smaller. That means more polygons can fit in the same amount of space, thereby increasing the resolution of the mesh.

Yeah, we know, wonderfully intuitive, but that's the way it works. Now let's create some volumetric light rays, and improve the overall color intensity of our Psunami water.



[ figure 8 ]



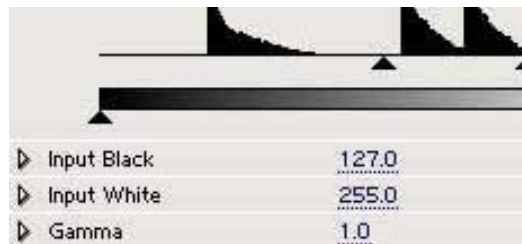
[ figure 9 ]



## 08- duplicate the layer

Next up in the bag of tricks is to duplicate the layer. So... go ahead and duplicate the layer.

We'll use this layer to create the light rays, then use a transfer mode to put the light rays into the scene.

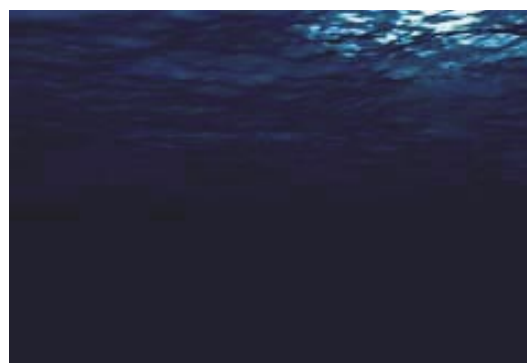


[ figure 10 ]

## 09- increase the contrast

Apply the Levels filter (Effects> Adjust> Levels) to your duplicated layer. We'll use levels to increase the contrast of the image providing us with good source material for the light ray filter.

Set the Black Input parameter to 127. [ figure 10 ] This will increase the contrast nicely and give us a pretty nice looking underwater scene. [ figure 11 ]



[ figure 11 ]

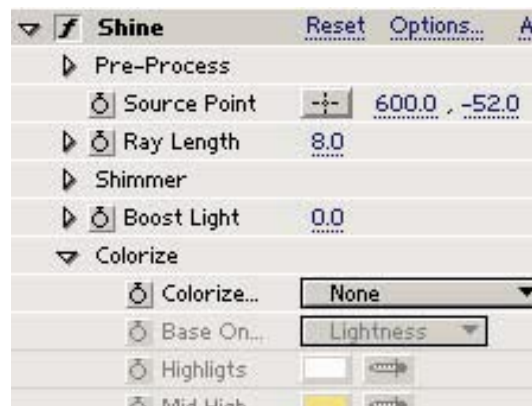
## 10- create light rays

Now the composition gets even better. Let's create our light rays.

We're going to use the Shine plugin (from Trapcode), but you can use any light blast filter of your choice. In a pinch, you can even use the Zoom blur filter.

The trick is to position the light ray 'light source' above the highlights created by the sun and set a relatively long ray length.

For Shine, set the 'Source Point' to 600, -52. This will position the virtual light source slightly outside of our comp, above the highlights. Set 'Ray Length' to 8.0. Open the 'Colorize' section and set the pop-up to 'None'. [ figure 12 ]



[ figure 12 ]



And there ya go! Nice volumetric light rays shining through the water. [ figure 13 ]  
Composite in your favorite shark, mermaid, or gaggle of octopi, and you're good to go.

### 11- add color effects

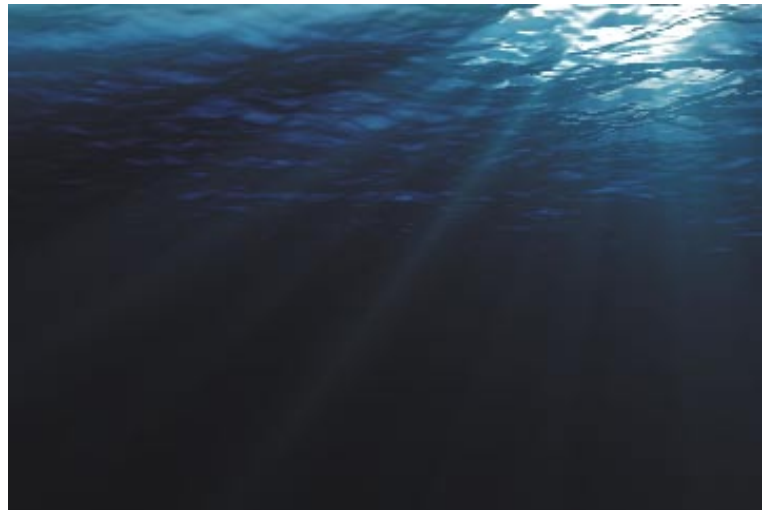
If you don't quite like the colors in the scene, then create a blue Solid, lay it over the scene, and choose the 'Overlay' transfer mode in your Timeline. That should make the colors pop subtly. [ figure 14 ]

Alternately, if you open the 'Final' comp, you'll notice a blue solid that's had its visibility turned off. Click the eyeball to turn the layer on and see its effect.

You can also watch our QuickTime movies [psu\\_under-final.mov](#) and [psu\\_under-tweak.mov](#) to compare results.



[ figure 13 ]



[ figure 14 ]