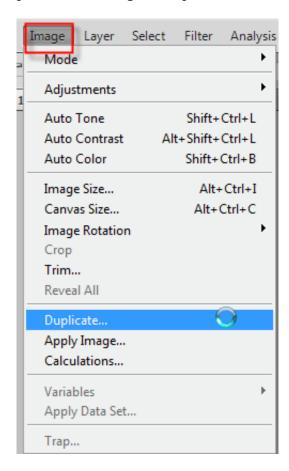
## Adding a Realistic Water Reflection to a Photo

Open the photo you want to add a water reflection to. I am using the photo below:

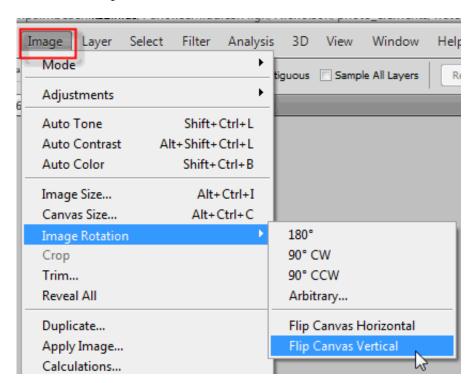


Duplicate the photo so that you have two photos of the same image open in Photoshop. To duplicate a photo select Image > Duplicate.



You can use the default name Tiger copy as the name of the new document. Click OK to create the duplicate copy of the photo of the tiger. You should now have a second tab in Photoshop with this name tiger copy @ 100% (RGB/8) \* 🗵

On the duplicate photo you want to flip the photo upside, or vertically. To do this select Image > Image Rotation > Flip Canvas Vertical.

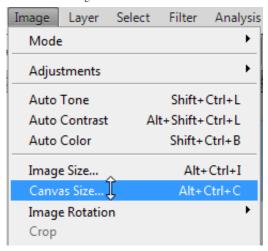


Your tiger copy should now appear upside down.

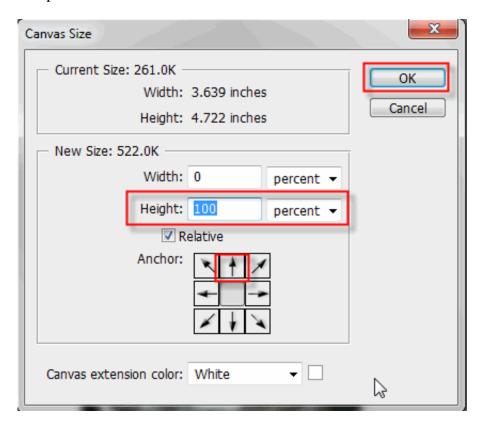


Return to your original photo of the tiger, the one that appears upright.

Now you are going to add the water reflection below the image, so let's add some canvas space to the bottom of our document to make room for our reflection. To do that, go up to the Image menu at the top of the screen and choose Resize > Canvas Size.

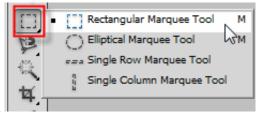


This will bring up Photoshop's "Canvas Size" dialog box. The easiest thing to do here is to add twice as much canvas space as what we currently have, but we only want it to appear at the bottom of the document, not above it or on either side, so you need to tell Photoshop exactly where we want this extra canvas space to go. First, enter 100 for the Height and set the measurement to percent, as circled in red below. Leave the Width option set to 0. Then make sure the Relative option is checked, which tells Elements to give us 100% more canvas space than what we already have. Below the "Relative" option is a 3x3 grid of squares. This is where we want to place our additional canvas space. Click inside the square in the middle of the top row (again as circled below). This tells Photoshop not to place any of the extra canvas space above the document and instead to place all of it at the bottom:



Click OK to exit out of the dialog box, and Photoshop will add the extra canvas space to the bottom of the image:

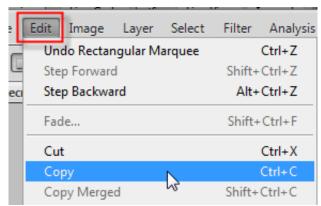




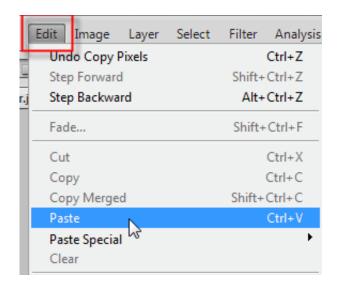
Return to tiger copy photo and with the Rectangular Marquee Tool and drag a rectangle around the entire image.



Copy the selection (Edit > Copy)"



Return to the original photo with the extended canvas and paste the selection in the document (Edit > Paste):



The pasted selection now appears on a new layer in this document. Now drag this photo to the bottom of the document using the move tool. Make sure the top photo is lined up with the bottom photo as shown below:

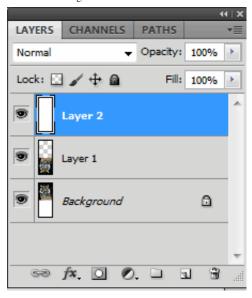


Add a new blank layer by clicking the new layer icon on the layer's palette

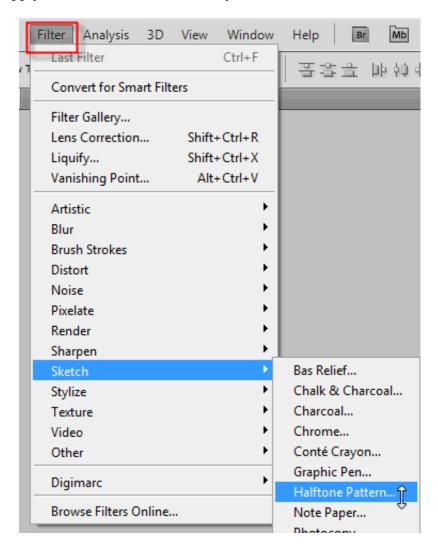


Fill this new layer with white by making sure that the foreground color on your color palette is set to white

, then selecting Edit > Fill. Since your foreground color was white, the fill dialog box should have white as its default setting. If not make sure the fill is set to white. Your layer's palette should look like the picture below:

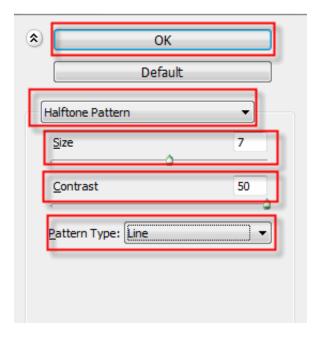


Now we are going to apply the half tone filter to this layer. Select Filter > Sketch > Halftone Pattern.



We're going to use this filter to add a series of black and white horizontal lines to the image. These lines are going to become our water ripples. The more lines we have, the more ripples we'll have. First, we want to make sure we're creating lines and not dots or circles, so set the Pattern Type option to Lines. We control the number of lines by adjusting the Size option. Lower values give us more lines, since we're lowering the size of each line, and higher values give us fewer but thicker lines. I'm going to set my Size value to 7,

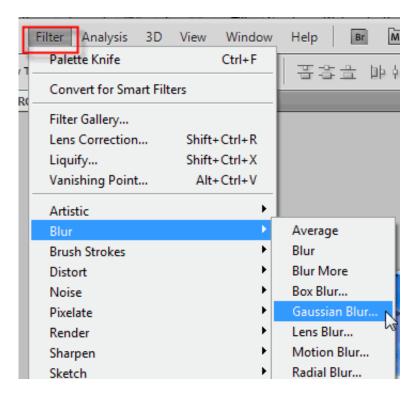
which I think works best for my image. You may want to experiment with this value on your own. The Contrast option below it determines how sharp the edges of the lines are. Lower values give you softer lines, white higher values give you hard edge lines. Set this value all the way to 50 to give your lines sharp edges. We're going to soften them later with the Gaussian Blur filter.



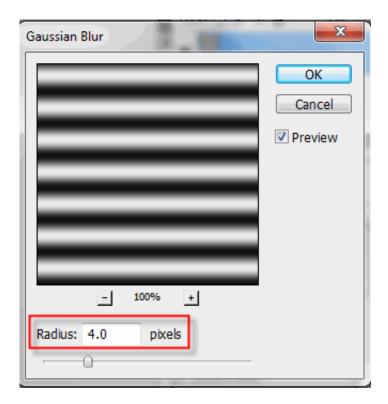
Click OK when you're done to exit out of the dialog box, and Photoshop Elements will fill the image from top to bottom with your black and white lines:



Before we can use our black and white lines as water ripples, we need to smooth them out and create nice, smooth transitions between them. To do that, go up to the Filter menu once again, choose Blur, and then choose Gaussian Blur, which brings up the "Gaussian Blur" dialog box.

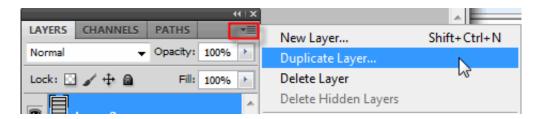


Keep an eye on your image and drag the slider at the bottom of the dialog box to increase the Radius value until the lines have a very soft edge to them. I'm using a small image for this tutorial, so for me, a Radius value of about 4 pixels works well. If you're using a larger, high resolution image, you'll need to set yours to a higher value:

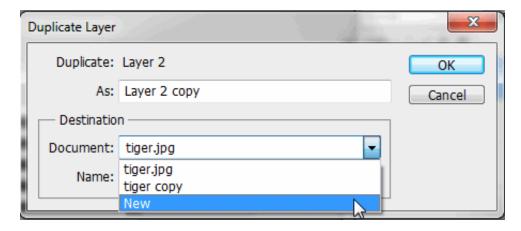


Click OK to exit out of the dialog box and apply the blur to the lines.

Next we will duplicate The Lines Layer As A New Document. We're going to create a brand new document out of our lines layer, which we'll then use as our displacement map for our water ripples. With the lines layer selected, go up to the Layer menu at the top of the screen and click on More and select Duplicate Layer, which brings up the "Duplicate Layer" dialog box.



In the "Destination" options, click on the down-pointing arrow to the right of the Document option and set it to New, which will create a new Photoshop Elements document out of our layer:



Click OK to exit out of the dialog box, and your layer will open up in a new document on the screen.



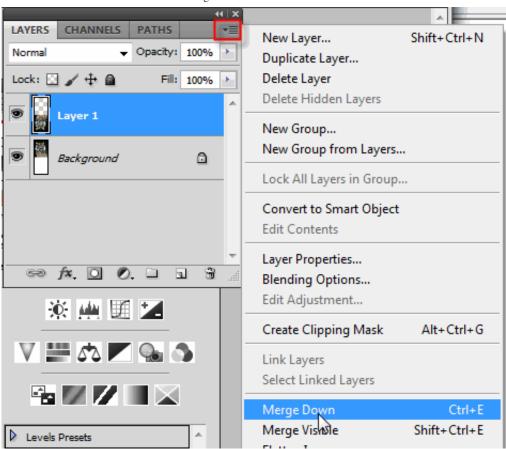
This new document that we've created is going to become our displacement map, but before you can use it, you need to save it. Also you are going to close it after it is saved because you won't need it open anymore. Save The New Document (File > Save As) and keep the default Photoshop extension. Assign it a name you will remember (water\_ripple).



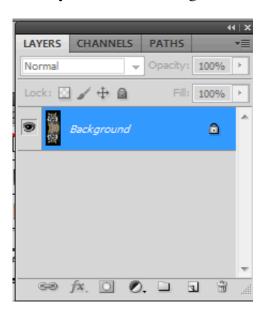
Close this new document.

Delete The Lines Layer in your tiger document. To do that, simply click on it and drag it down onto the Trash Bin icon at the top of the Layers palette.

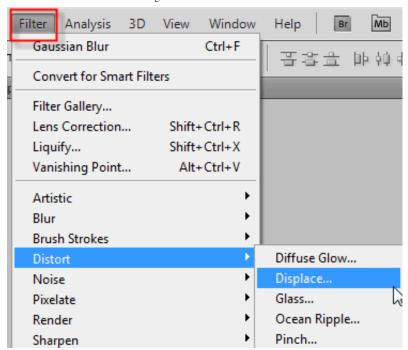
Before we can add use our displacement map, we need to merge our two image layers onto a new layer above them. To do that, with "Layer 1" selected, click the arrow at the top right of the layer palette and select merge down.



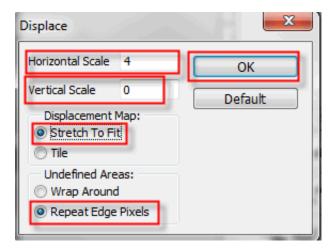
Nothing will appear to have happened in the document, but if we look in the Layers palette, we can see that both layers have been merged onto a new layer at the top.



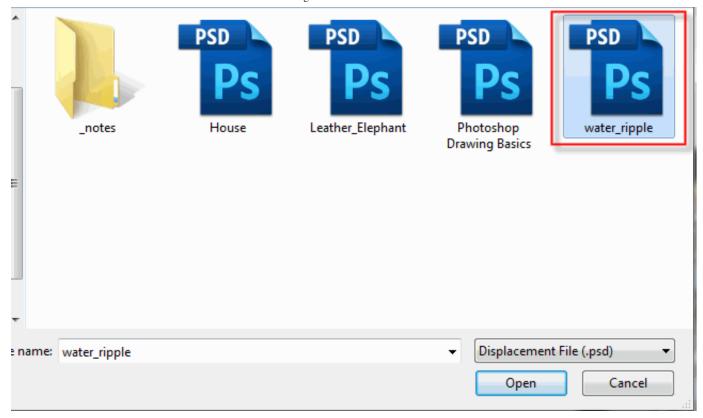
Now we are going to create water ripples using the displacement map we just created. With the new merged layer selected in the Layers palette, go back up to the Filter menu at the top of the screen, choose Distort and then choose Displace .



This brings up Photoshop "Displace" filter dialog box. This is where you determine the strength of our ripple effect, and you will do that with the Horizontal Scale option at the top. I'm going to set mine to a value of 4, which will give me a realistic ripple effect. You may want to experiment with this value with your own image. Setting it too high though will create too much of a horizontal distortion and you'll lose the realism. You don't need any vertical distortion to create our effect, so set the Vertical Scale option to 0. Also, make sure that Stretch To Fit and Repeat Edge Pixels are selected:



Click OK in the top right corner of the dialog box, and Photoshop will ask you which file you want to use as your displacement map. Choose the file that you just saved a moment ago, and then click Open.



Photoshop will then apply the displacement map to the entire image, creating your water ripples

Notice, you have a slight problem at the moment. You've added the water ripple effect to the entire image, and you only wanted it in the bottom half. You can fix that easily by returning or opening the original photo

and using the Rectangular Marquee Tool
and as you have done previously you will copy this selection and paste it into the water ripple document.
You will then use the move tool to drag the image to the top of the document.

Elliptical Marquee Tool

Here is how my photo came out:



