



# What's new in Adobe Photoshop 2020

*By Martin Evening*

# Camera Raw

Along with support for more cameras and lenses, the latest version of Camera Raw for Photoshop has a brand new, modern user interface (Figure 1) with new simplified controls and a Filmstrip you can toggle on or off and choose to run vertically or horizontally. This radical overhaul of the Camera Raw user interface will be thoroughly covered in the next edition of my book.



**Figure 1** The new Camera Raw interface, shown here opened via Photoshop.

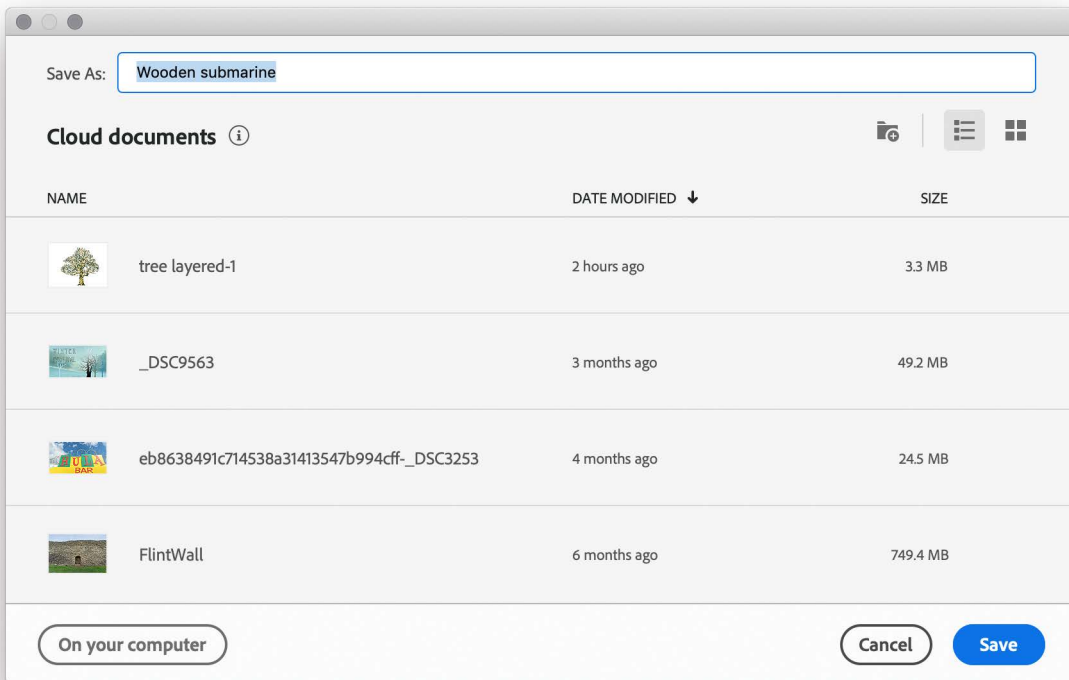
# Adobe Cloud Document saving

Adobe Cloud documents allows you to now share documents easily between computers/devices, or other account users. For example, documents saved to the Adobe Cloud can be accessed using Photoshop for iPad.

To add a new document to the cloud, create a new document or open an existing document in Photoshop and choose File ⇨ Save As. In the system Save dialog click on the Save to cloud documents button. This opens the Cloud Document Organizer shown in Figure 2. If you would rather save locally instead at this stage, Click the On your computer button, which will return you to the System navigation dialog. However, if you do proceed, and once a save has been completed to the cloud, you can continue working with the document while it is being pushed to the cloud in the background. Meanwhile, you will notice that the saved file has the .psdc extension, signifying this has been saved using the new PSD cloud format. You can open existing cloud documents by choosing File ⇨ Open as usual and click on Open cloud documents. This opens the Cloud Document Organizer again, listing uploaded and available cloud documents.

## Access to the cloud

Any subscription that gives you access to Photoshop will include access to Photoshop for iPad as well.



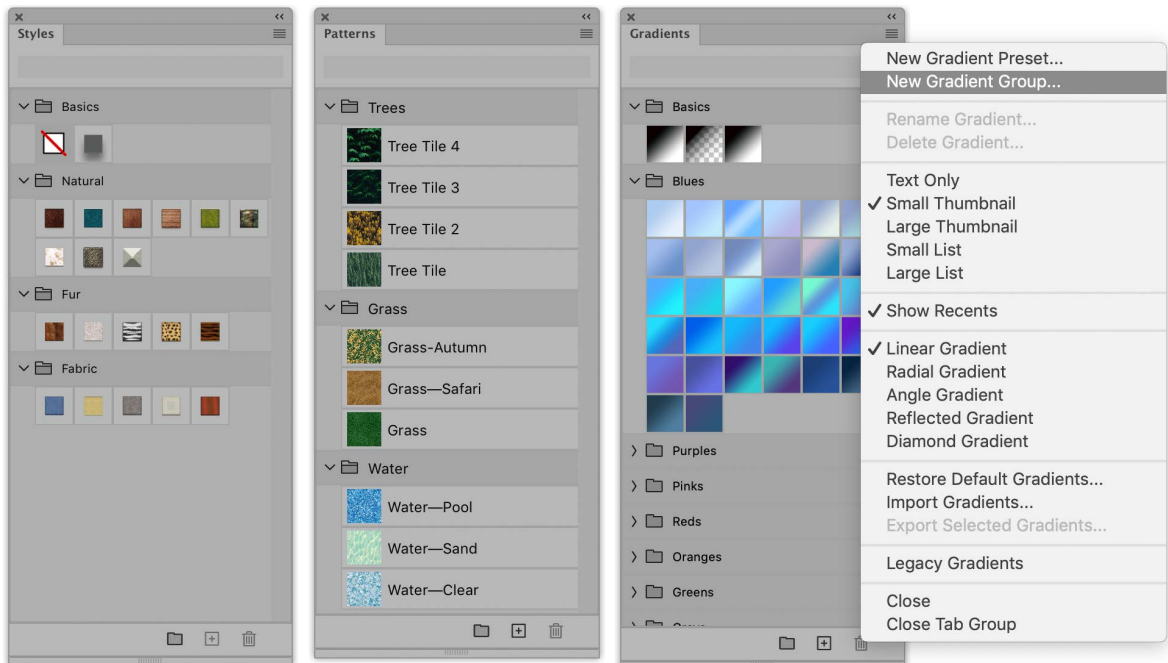
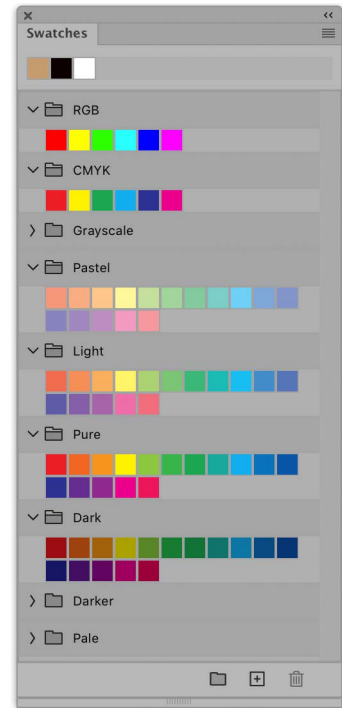
**Figure 2** The Creative Cloud document organizer.

## New Presets panels

The Swatches, Gradient, Patterns, Shapes, Styles and brushes have all been removed from the Presets Manager and you now manage them via their independent panels, which have now been updated. The Swatches, Styles, Patterns and Gradients presets panels are all shown in Figure 3.

These panels all contain new preset settings, which immediately expand the range of options available. The presets are conveniently arranged into groups, which make them easier to manage. To create say, a new Gradients group in the Gradients panel, make a selection of gradients you wish to add to a new group. Then go to the Gradients panel fly-out menu and choose New Gradient group (see Figure 3). This will add a new folder containing the selected gradient presets. To this you can also add another Gradient group as a subfolder if you like.

There is a legacy option in each of the fly-out menus should you wish to append the legacy presets in each panel.



**Figure 3** The new-style Swatches, Styles, Patterns and Gradients presets panels.

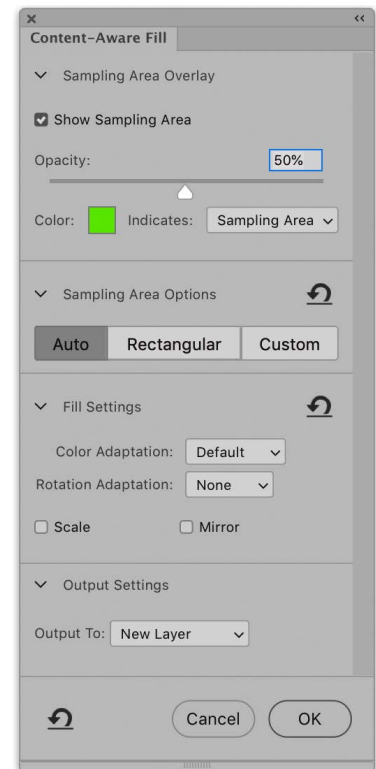
## Content-Aware Fill

The Content-Aware Fill dialog gives you full control over the content-aware fill process, and provides you with a complete workspace with which to work. To use, go to the Edit menu and choose Content-Aware Fill. This opens the Content-Aware Fill panel shown in Figure 4, along with an Options bar, a Tools panel plus a live preview window showing the content-aware fill outcome.

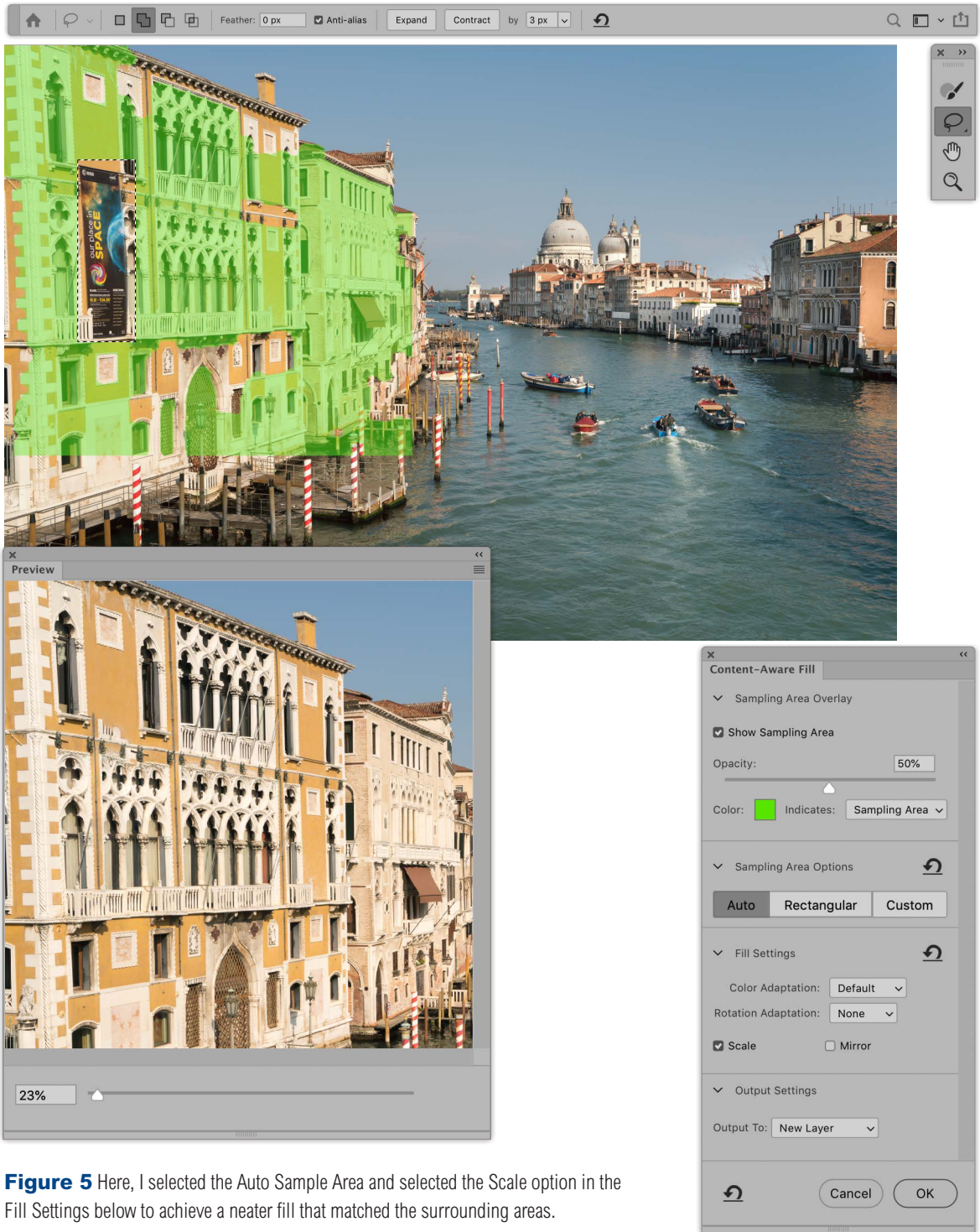
In the Content-Aware Fill panel Sampling Area Overlay section you can turn the sampling area overlay on or off, adjust the shaded mask opacity of the shaded area, or change the color if necessary. By default, the shaded area indicates the Sampling area. Basically, the shaded area in the preview represents the area the content-aware fill will analyze and sample from, but you can use the Indications menu to indicate the Excluded areas instead.

In the Sample Area Options section the default Auto option intelligently seeks the best areas to sample from based on content that is similar to that which immediately surrounds the fill area. The Rectangular option simply includes a rectangular area that surrounds the selected region. Or, choose the Custom mode to create your own user-defined sampling area. The reset button clears everything and resets the active sampling area mode to its initial state.

The Fill Settings can be used to select the sampling adaptation method. The Color Adaptation settings allow the color and contrast to adapt, where you can choose to select None, Default, High or Very High. The Rotation Adaptation determines how much the content-aware fill can flexibly rotate the sampled pixels to create a better match. With higher Rotation Adaptation settings, the content-aware fill will be more randomly rotated. The Scale checkbox allows the sample content to resize. Therefore, if there is a shift in perspective between the areas and the areas from where you are sampling, the Scale option can help you achieve a better fill (see the example shown in Figure 5). The Mirror option applies a horizontal flip to the sampled data, which can help you achieve a better match for symmetrical subjects.



**Figure 4** The Content-Aware Fill panel.



**Figure 5** Here, I selected the Auto Sample Area and selected the Scale option in the Fill Settings below to achieve a neater fill that matched the surrounding areas.

## Object selection

Powered by advanced machine learning technology, Select Subject has been trained to identify various types of objects in an image and automatically create a selection. In practice I find it does a pretty good job of creating instant selections that correctly identify the main subject in a photo. However, it will nearly always be necessary to refine the selection to some extent, but Select Subject is still a great time-saver. To quickly select an object, go to the Select menu and choose Subject. This command cleverly works out what the main subject in a photo is and creates a selection around it. It won't work for every image, but often does surprisingly well. In Figure 6 below, it selected nearly all of the car in a single step.



**Figure 6** The result of a Select ⇒ Subject selection.

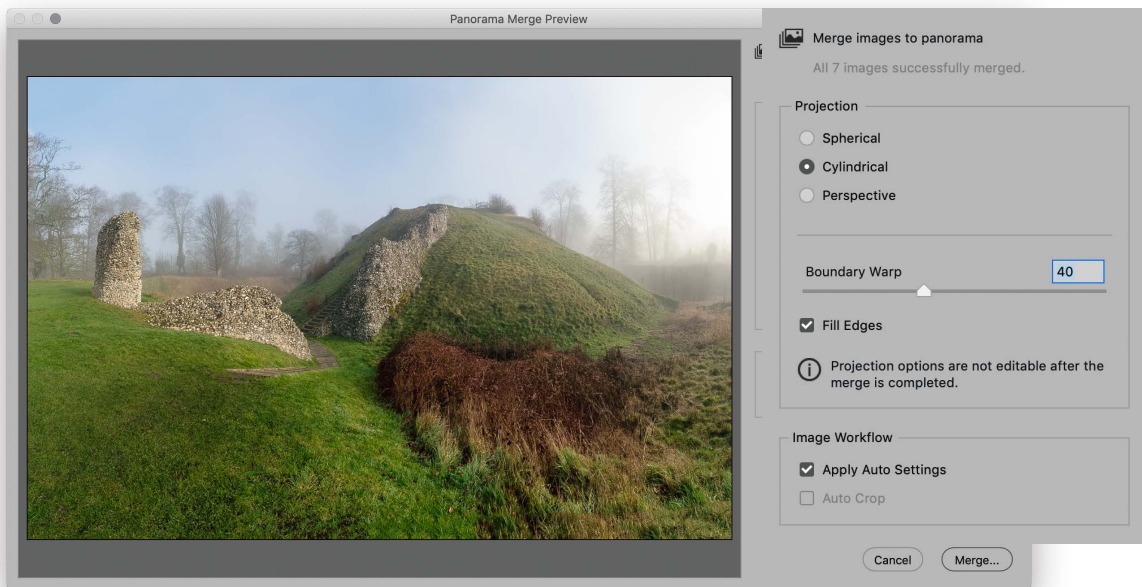
## Object selection tool

The new Object selection tool is essentially more of a guided Select Subject command and should be thought of as offering a way to get a reasonable quick selection. It's not really meant for refining selections since Photoshop already has other tools for such purposes.

The Object selection tool has a Lasso and a Rectangle marquee mode. The marquee mode for example, simplifies the process of selecting a single subject, or part of a subject, by allowing you to simply click and drag a rectangle around the object.

## Panorama Photo Merge: Fill Edges

In most instances you will find that the outcome of a panorama Photo Merge preview will be an irregular shape. It can help to try using different projection methods, but ultimately you have to choose to either crop the image, warp the image using Boundary Warp, or now use a content-aware fill to fill the outer edges. The effectiveness of the boundary warp approach is very much dependent on the type of subject. It works best on landscape subjects, such as the example shown below in Figure 7. It won't work well with photographs taken of buildings, or where the horizon line is visible and is likely to become bent. It is also dependent on the amount of distortion that's induced as a result of a Boundary Warp adjustment. This is why the Boundary Warp feature is offered as a slider, so you have complete control over the amount of warp adjustment you apply. The Fill Edges option is new to Panorama Photo Merge and uses Content-aware fill technology to fill the border areas and can be used in conjunction with the Boundary Warp slider.



**Figure 7** In this step I applied a 40% Boundary Warp and also checked the Fill Edges option, which filled the remaining transparent areas using a Content-aware fill method.



## Advanced warp controls

The flexibility of the traditional Transform Warp has now been expanded with new options for controlling the warp mesh. These allow you to manually add extra grid lines and control points.

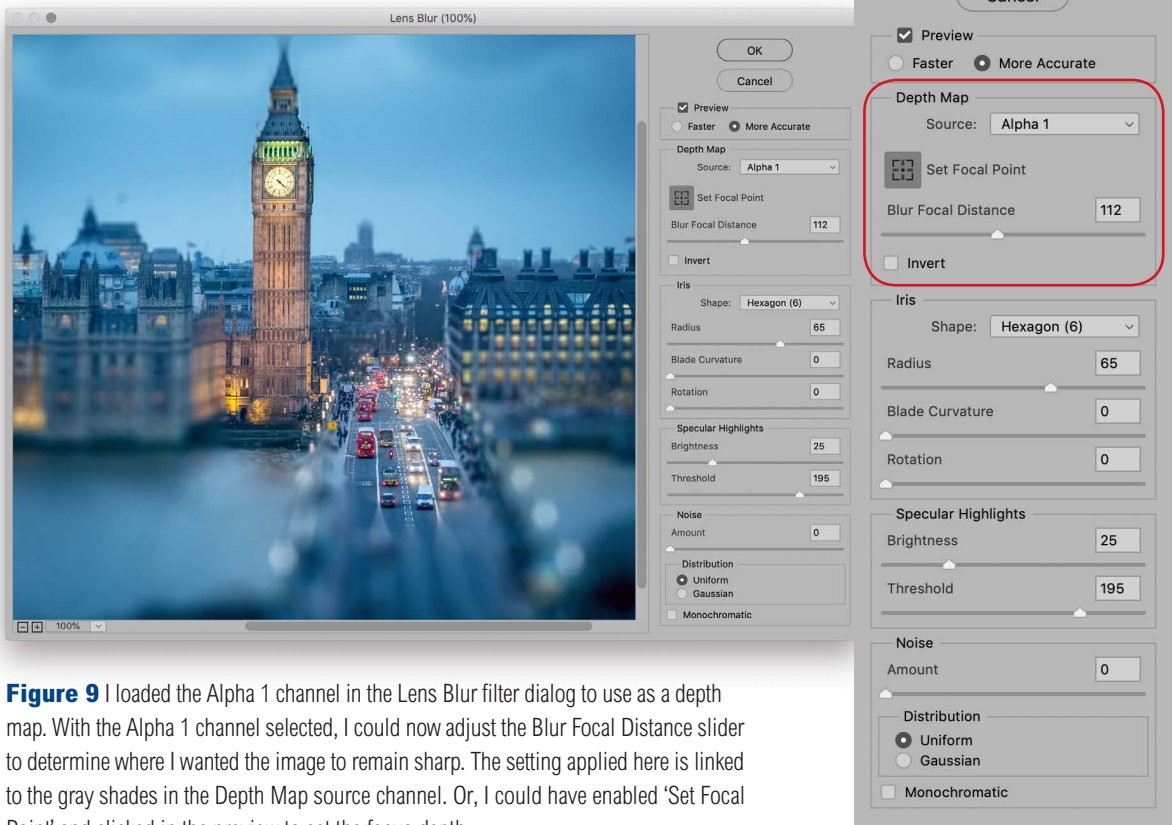
To take advantage of the advanced Warp Transform you need to make sure you have GPU enabled in the Photoshop Performance preferences. As before, select the layer you wish to warp and choose Edit ⇒ Transform Warp, or Alternatively, choose Edit ⇒ Free Transform (**⌘ T** [Mac], **ctrl T** [PC]) and click on the Transform/Warp mode selection button in the Options bar. The Options bar pop-up menu (Figure 8) allows you to select Grid options other than the 3x3 default, such as 4x4, or 5x5. There are also three new Split buttons on the Warp Transform options bar. These let you add either a vertical grid line, horizontal grid line, or both in the form of crosswise grid lines. To do this, just click and drag on the Transform grid. As you release the mouse, new control points will be added to the warp mesh. You can split the warp mesh again by clicking on one of the Split buttons and place new grid lines.



**Figure 8** In this step I selected a 3x3 grid from the Warp Options bar Grid menu. I then clicked on the split warp crosswise button and clicked on the warp mesh to add vertical and horizontal split guidelines to the 3x3 grid and placed the intersection in the middle right section. I was then able to manipulate the control points to create a more nuanced warp compared to what could be achieved using the legacy, default grid layout.

## Lens Blur filter: depth of field effects

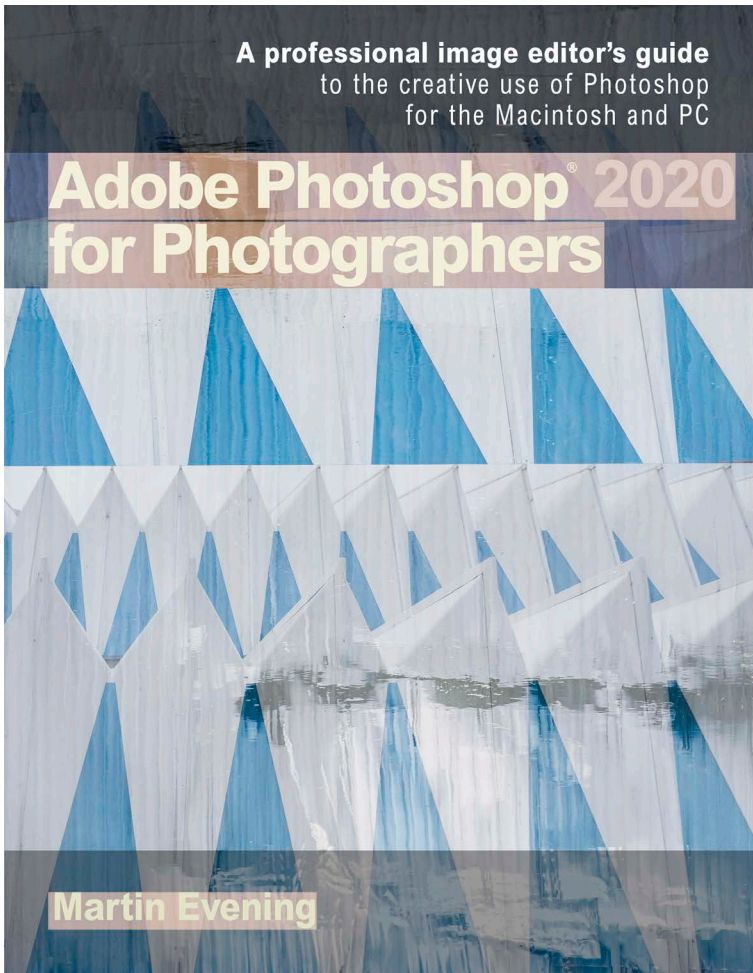
With the Lens Blur filter you can use a mask channel to define the areas where you wish to selectively apply the Lens Blur. This allows you to create shallow depth of field effects, such as in the example shown on the right. Basically, you can use a simple gradient, or a more complex mask to define the areas that you wish to remain sharp and those that you want to have appear out of focus. You can then load the channel mask as a Depth Map in the Lens Blur dialog and use the 'Blur Focal Distance' slider to determine which areas remain sharpest. The Depth Map section (circled) now includes a Set Focal Point toggle button. When depth information is present in a loaded source channel and the Set Focal Point button is active you can click in the preview to define the area you want to be in focus.



**Figure 9** I loaded the Alpha 1 channel in the Lens Blur filter dialog to use as a depth map. With the Alpha 1 channel selected, I could now adjust the Blur Focal Distance slider to determine where I wanted the image to remain sharp. The setting applied here is linked to the gray shades in the Depth Map source channel. Or, I could have enabled 'Set Focal Point' and clicked in the preview to set the focus depth.

# Adobe Photoshop 2020 for Photographers book

By *Martin Evening*



Adobe Photoshop 2020 for Photographers is published by Focal Press, an imprint of Taylor & Francis.

782 pages + Online website

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