

# Demo 1 Photoshop:

Raster vs. vector, the CC interface window, tools, tabs, working with panels, color mode, image size, resolution, canvas size, tools, layers & history panels, merge visible, when to flatten, clone stamp tool, methods of selecting, transforming, grabber tool, zooming in and out, saving, psd & jpeg, lossy and loss-less

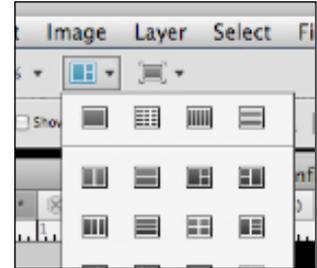
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Office rm 229

Open the file of a photograph or scanned image.

## First look at the Photoshop CS5 interface window.

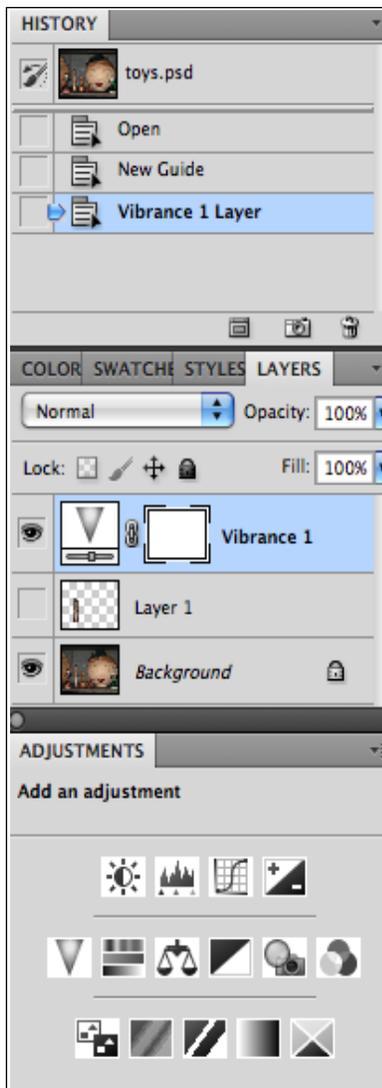
Tabs: Tabs enable you to have several photos open and work back and forth between them.

- You can drag tabs to change order: click on tab and drag to left or right.
- Detach by dragging away from tab-line.



Panels: Panels enable you to do most everything in Photoshop! There are various ways to arrange them, reduce them, collapse them, reunite them.

These are some of the Photoshop Panels you will use often:



- Open or close from "Windows" in the file menu.
- Click in the dark grey bar at the top of a panel to drag it around.
- Click on the tiny double arrows at the top dark grey bar to collapse to or expand a panel.
- To attach together, move a panel toward the underside of another panel, until you see the blue line. It will grab on and stick.
- Arrange icons for pop-out panels, the ones you use the most.

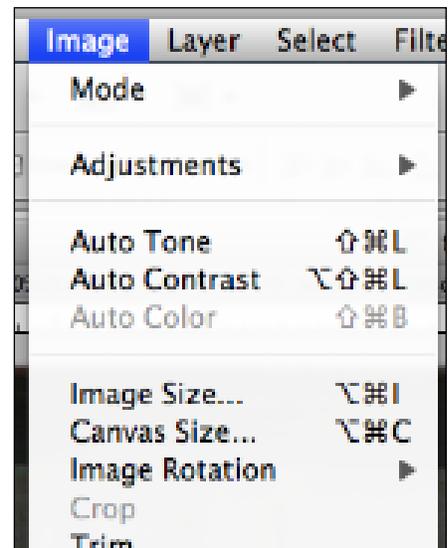
## Image: Look under Image on the Menu Bar

See "Mode". For our purposes, you should be in RGB. CMYK is for mass-produced printing.

Now see: "Image Size" (or press Option Key + Command Key + "I").

Resolution should be 300 ppi (pixels per inch) for print, 72 ppi or 96 ppi for screen images (web, mobile, etc.)

Uncheck the RESAMPLE box to constrain all proportions. When re-sizing, remember image should not be enlarged beyond 120%. (for appropriate sharpness/quality). Anything less than 120% is fine.



## Again, Under Image on the Menu Bar: Canvas Size

### See **Canvas Size**.

You can make the “canvas” size larger but keep your image the same size

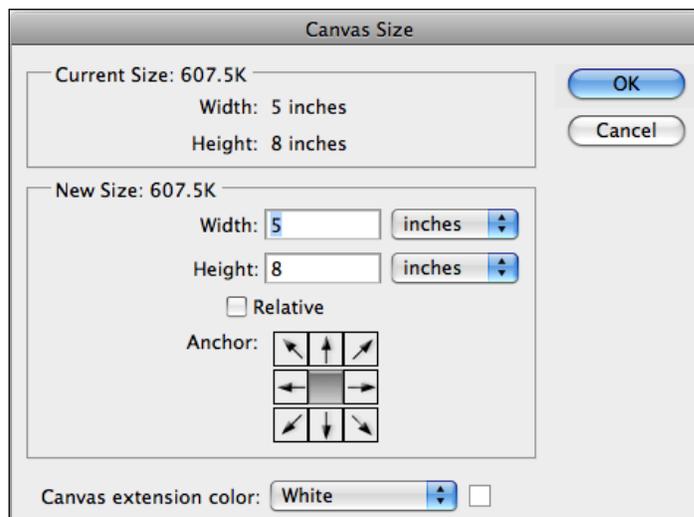
This is like making the paper larger, but the image stays the same size

One use for this is that you can add more background by using the Clone Stamp Tool.

Also use it to combine several photos into one larger composition.

### More Interface Basics:

- Make Rulers appear by pressing Command-R.
- Choose your units of measure by choosing: InDesign on the menu bar > Preferences > Units and Increments. Inches is best, for this assignment.

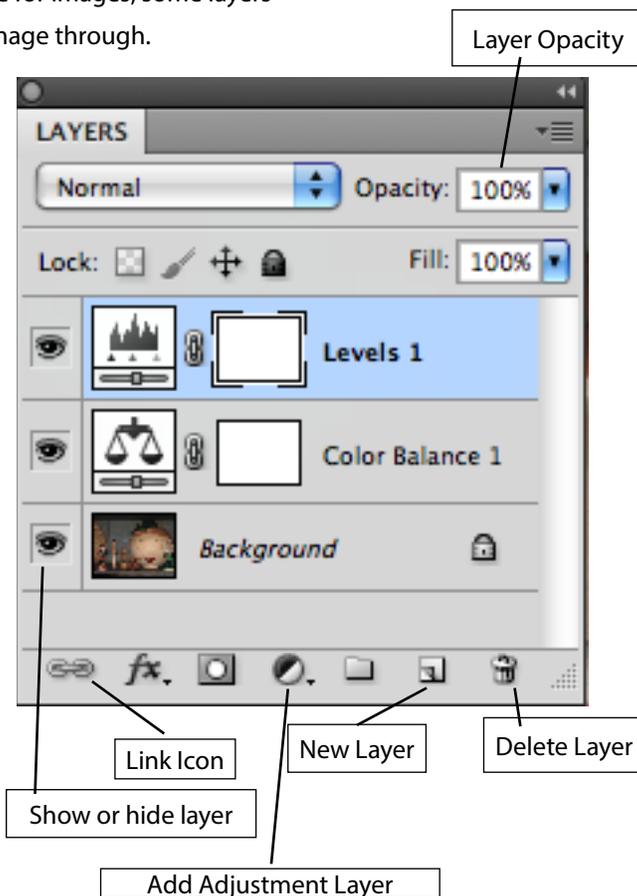


## Layers Panel

The layers panel is one you will refer to constantly. Some layers are for images, some layers are like a transparent film of adjustments/corrections to see the image through.

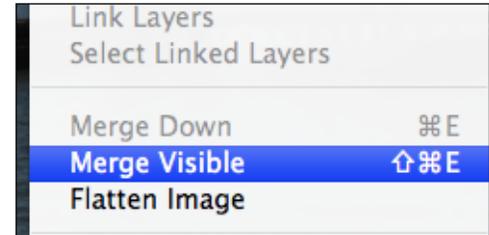
- Only an “active” layer can be edited or manipulated.
- You can activate a layer only by clicking on it in the layers palette. The active layer will be blue.
- Each photograph starts with a locked background layer.
- Using the layer panel you can duplicate layers, group, link, delete, and re-stack layers.
- You can also use the layers panel to change a layer’s opacity.
- Using the Type Tool will create a new type layer, which is editable. If you merge it with an image layer, or flatten the photo, the type will no longer be editable as type.

More about the Layers Panel...



## More About the Layers Panel

- Multiple layers take up lots of space (memory) for printing. You should save under one name, then Flatten and Save As with a different name in order to save a smaller file size to print from-- to print much faster.



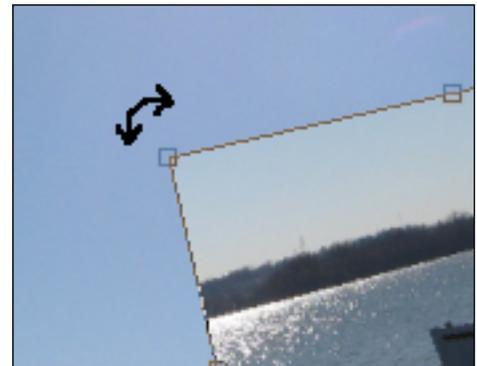
- You can Merge Visible layers through the pull-out menu on this panel or Flatten through this pull-out, which eliminates all layers, so be sure you really want to do this, or save a version with layers.

## Transform: Resize Your Selection

- Using the Transform command, you can also scale the image, larger or smaller. Constrain it to scale proportionately by holding down on the shift key while dragging.

## Transform: Rotate Your Selection

- You can drag from the handles. Hover your mouse over the corners until it becomes a curved, two-headed arrow. This allows you to rotate the selection by dragging.



## Confirm Your Transformation

- To confirm the Transformation, press the Return Key.

The Mover Tool must be selected in the Tool Palette to access the Transform command through the keyboard. It can also be accessed through the menu bar, under Edit. Look at this sub-menu to learn the other things the Transform command can do.

# Exercise 1:

## 1. Straighten out the horizon of the Potomac River Here's how:

- First, drag a guide out from the ruler to show a straight horizon line. (if your rulers are not showing, press Command+"R" key.)
- Unlock the background image by dragging the background layer over the New Layer icon at the bottom of the panel.
- Make the locked background invisible by clicking in the layers panel on its "Eye" icon.
- Again, click on the background copy layer to make it active.
- Transform, by pressing Command key plus the "T" key.



- Zoom out a little, to see the edges.
- Hover with your mouse near a corner till it turns into a curving, two-headed arrow. Now click and drag to rotate the image, to straighten it. Then hit the "Return/Enter" key to finalize your transformation.
- Use the Crop Tool to eliminate the crooked edges.

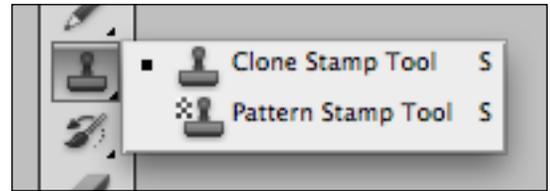
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## 2. Make the canvas larger and give it a colored border. Here's how:

- Extend the edges of this image by choosing Menu Bar > Image > Canvas Size . Add two inches to both the height and the width.
- Choose a blue or other color with the eye-dropper tool from the photo. Notice how it now fills the "foreground" square at the bottom of the tool panel.
- Now in the layers panel, click the "New Layer" icon. Notice that a new, (active) layer appears.
- Now, Menu bar > Edit > Fill.
- Choose "Foreground color", click Okay, and watch it fill with the color you chose.
- Then drag the stacking-order of the layers to put fill color behind (layer beneath) the image.
- Choose Menu Bar >View > Clear Guides.
- Layers Panel > fly-out menu from upper right corner > Flatten Image.

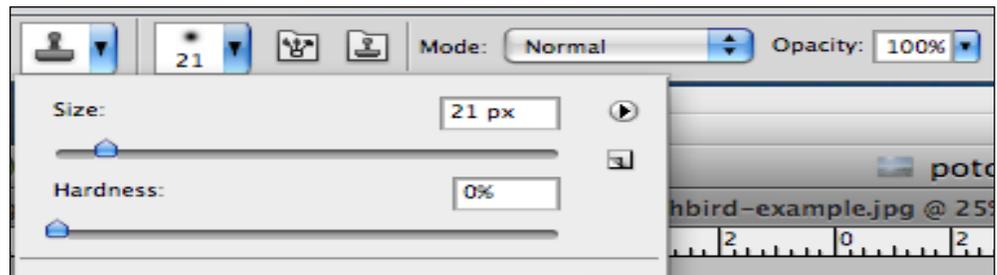
# The Clone Stamp Tool

*This is a wonderful tool I'm sure you will enjoy using. Sometimes it can be used for a quick fix, and sometimes carefully and thoroughly, to work miracles in your photographs.*



1. Choose the Clone Stamp Tool in the Tool Panel.
  2. Then, while **pressing down on the option key**, click once in the area which you would like to clone. This is called a "target" click.
  3. Now click and drag in the area you want to change, and watch the target cross-hairs move with you, as it copies a section of the photograph onto a new spot.
  4. See the **Settings** in the **Options Bar** (at the top of the window) for the **Clone Stamp Tool**.
- ◆ You can choose a **width in pixels** for the size circle it will cover
  - ◆ You can choose the **softness or hardness** of the edge of the trail you leave.

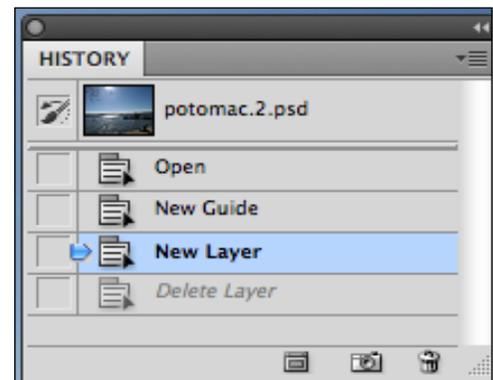
- ◆ You can choose the **Opacity** of the clone tool. (**transparency** can be very helpful in evening out contrasting areas.)



# The History Panel

Using the **History Palette** you can choose to go back to your image at any particular point before changes you have made.

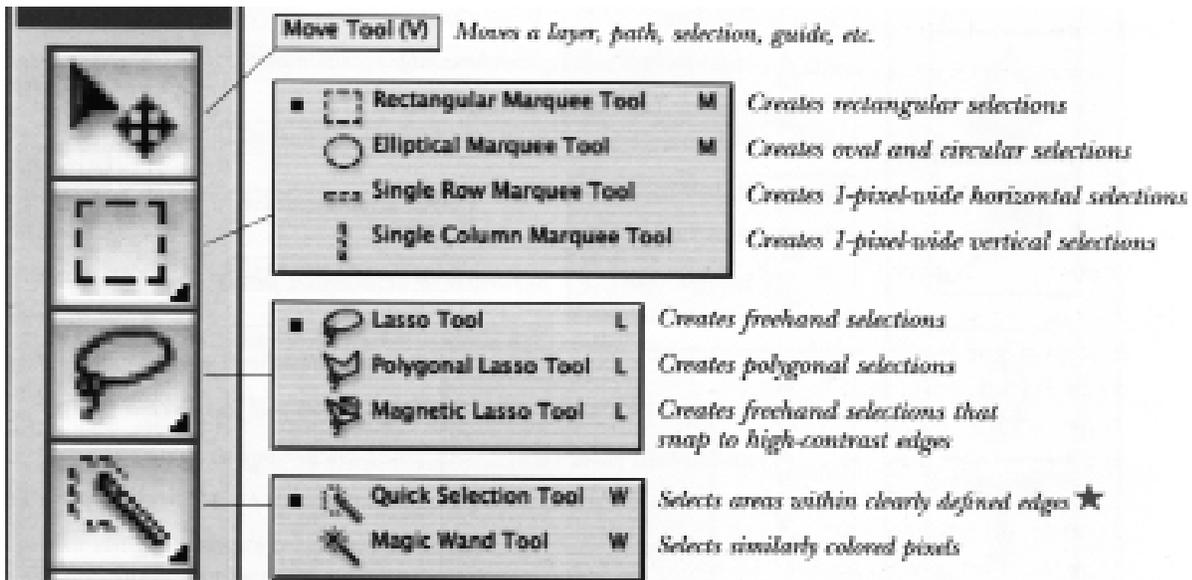
You can also use the **History Brush**, from the **Tool Palette**, to "paint" an area to be like it was, prior to your changes.



# Exercise 2:

Clone some sky to improve the blue-sky-highway photo.

# Methods of Selecting



- ◆ **Rectangular Marquee**
- ◆ **Elliptical marquee**
- ◆ **Row marquee** (single pixel wide row).
- ◆ **Column marquee** (single pixel wide column).
- ◆ **Lasso Tool** (drag-draw a selection, freehand)
- ◆ **Polygonal Lasso** (click at points to make a straight-sided selection).
- ◆ **Magnetic Lasso** (selects areas with high-contrast edges)
- ◆ **Quick Selection Tool.** (selects areas with clearly defined edges)
- ◆ **Magic Wand** (selects areas with similarly colored areas, in the options bar.)  
*The Magic Wand has the option of choosing "Contiguous" or not (in the Options Bar, across the top), as well as numerical values to increase or decrease the range of similar colors.*

## More Selection Tips:

To Deselect, press Apple Key + "D".

To add to a selection, hold down on the Shift Key while selecting more.

To Invert any selection, press Shift Key + Apple Key + "I".

To Undo any last action, press Apple Key + "Z".

# Saving Your Photoshop Document

Always **print from a flattened version**. You can “save as” with a different file name, to save a version with layers, in case you want to return to it later with changes.

“**Save as**” allows you to re-name the document, and/or save it in a new location on your computer, and/or to change the format. The format you choose might be **jpeg** or **psd**.

- **.JPEG** (also known as **.jpg**) means: *Joint Photographic Experts Group*. This is a “**Lossy**” format, meaning the compression eliminates some pixel information every time it is saved in this format. A jpeg image must be flat (only one layer)
- **.PSD** means *Photoshop Document*. Layers are preserved. This is known as a “**Loss-less**” format, meaning no info is lost.
- **.TIFF** is a format often used in the publishing industry (mass printings) which is another loss-less format.

More Exercises:

1. Open the file “Sky-Highway. Using the clone Tool, extend the clouds to the top of the frame along the top and cover the antenna.
2. Use all seven methods of selection on the Ascidiae file.