Tone Mapping – Snow Cone

In our last workshop, we discussed Hidden Gotcha's in raw files - dust spots, noise, chromatic aberration, sharpening, etc.! We carefully scanned the image at 100% zoom, making note of these defects and planning our Tone Mapping.

This workshop takes the 'cleaned up' image and begins Tone Mapping in Lightroom. The original raw file lacks sharpness and contrast. Lightroom's Develop panel contains sophisticated sliders. We'll show how to choose slider control with visual appreciation and Histogram balance.

You may be surprised; Tone Mapping is almost like painting a picture!

Recap – Hidden Gotcha's

In our prior class, we talked about Hidden Gotcha's - basic problems each raw file has. Using a 'full body' scan (100% zoom), we looked for Noise, red or blue lines at the skyline, and the flat, relatively dull appearance of a raw file.

For example, we used Detail panel for Noise Reduction. Then we moved to Lens Correction panel for Chromatic Aberration.

We talked about Lightroom's changing the demosiac process. With advent of Lightroom 3, algorithms for noise reduction, sharpening, and chromatic aberration worse refined and strengthened.

Tip: the 'Full Body Scan' is really quite important. It has two primary functions:
1. Carefully and thoughtfully getting acquainted with your image.
2. Noting the problem areas Tone Mapping can repair.

Now, let's move on to the more regular steps in Tone Mapping.

Basic Default Slider Panel without Tone Mapping
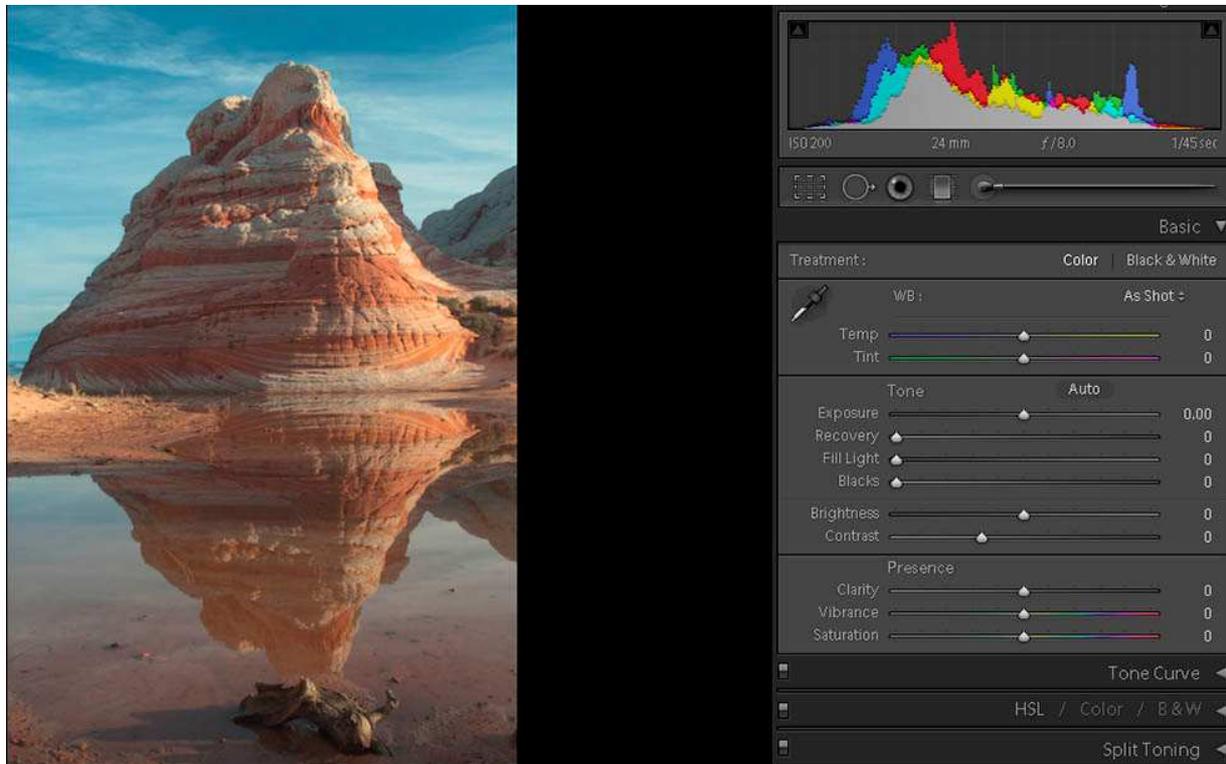
Here's our image before we begin Tone Mapping. In the Develop module, the right-hand panel shows default values for White Balance, Tone, and Presence.

In the tone subpanel, most effort is put into eliminating clipping exposure. Recovery does highlights. Fill Light does darks. With blacks, careful adjustment of these parameters centers the Histogram and creates a good starting point.

While Lightroom has <u>Histogram</u>, Tools, <u>Basic</u>, <u>Tone Curve</u>, <u>HSL</u>, Split Toning, <u>Detail</u>, Lens Correction, Effects, and Camera Calibration, we only use a few (underlined) for primary Tone Mapping. As you gain experience, you'll find that you choose to work in a different order.

The first thing I do for serious Tone Mapping is carefully evaluate the Histogram.   This Histogram is almost balanced.   Unfortunately, Blacks and Highlights could be stronger.
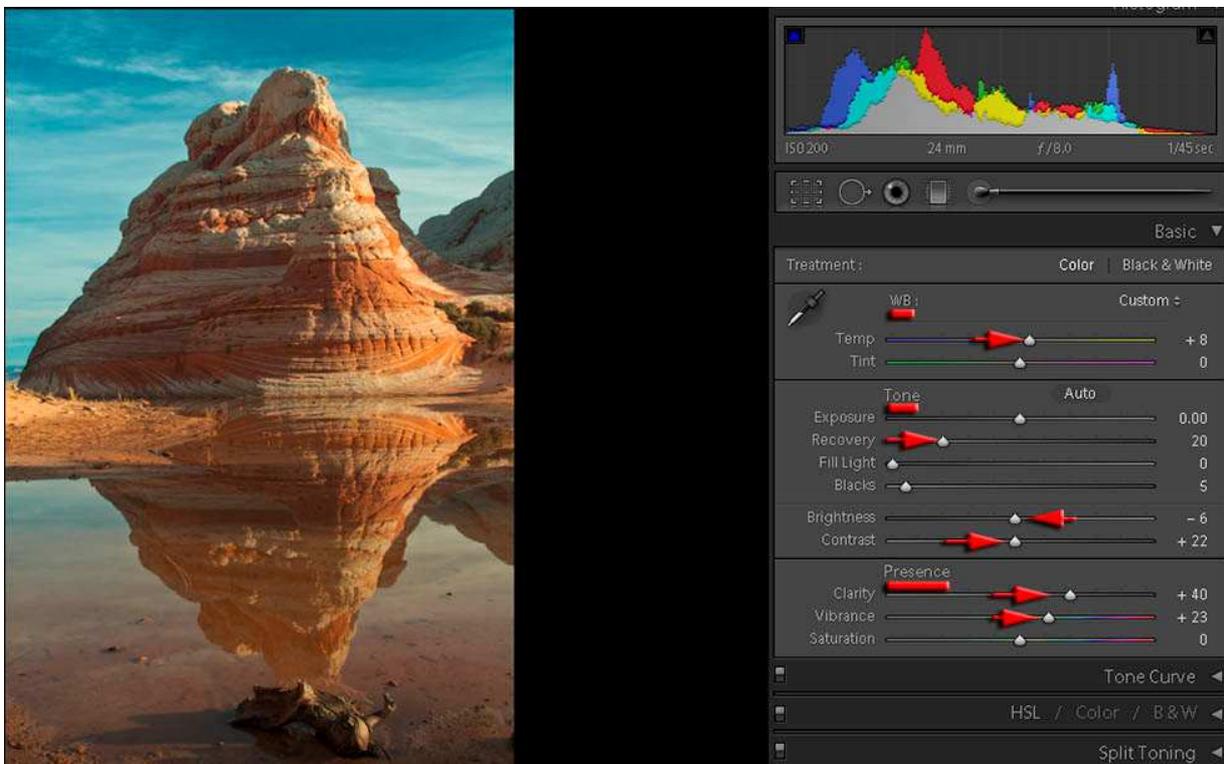
If the image looks cold (blue), I will occasionally move Temp slider under White Balance (WB) to a little warmth.

Preliminary Tone Mapping with Basic panel
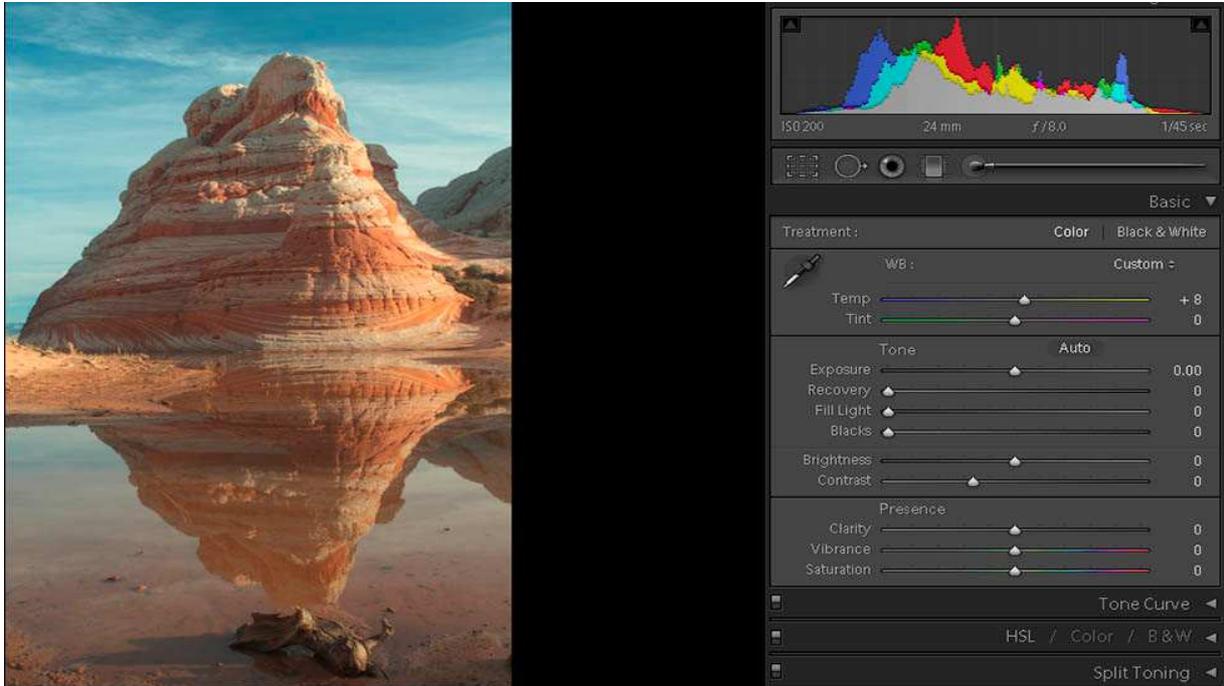
Here, I wanted to warm the image slightly. I increased Temp slider to +8...

Let's Get Serious with Basic panel

The second important step in Tone Mapping consists of:
1. Moving the slider to get the first effect you want to see.
2. Glance at the image to see that affect.
3. Glance at the Histogram to see how it changes.
4. Carefully repeat the first 3 steps for every slider adjustment

After a while, this becomes an automatic response system. You use these 3 tools to balance one another.

When Tones are right, it's time to consider Presence.
I will usually enhance Contrast in the range of 20%. I may or may not adjust Brightness; brightness handles mid tones.
Clarity is like a lens cleaning filter. It uses an adaptive mask-based image adjustment. It creates a mask of the image, then adds midtone contrast
Vibrance increases saturation of unsaturated colors more than it adjusts already saturated colors. I rarely use saturation in the Basic panel

Tone Curve
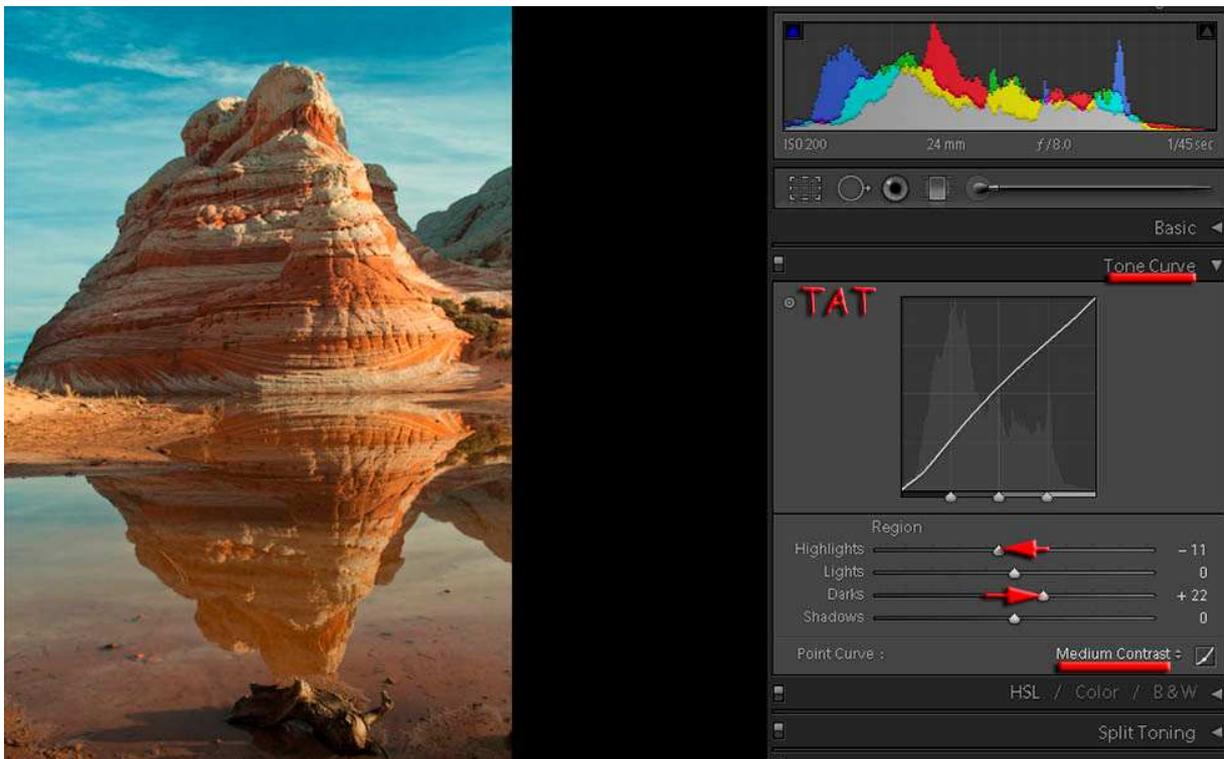
My first tone curves step is to set contrast at Medium. I'm careful about using Strong contrast because in some HDR images, it can cause blown highlights.

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The Targeted Adjustment Tool gives users the ability to adjust parameters by simply clicking on the image and mousing up or down to adjust each parameter. In the Tone Curve panel, the Histogram is broken into four parametric parts with equal weight of 25%; Shadows, Darks, Lights, and Highlights.

When you click on the little round circle in the upper left portion of Tone Curve, putting the cursor over a color lets you increase or decrease that color. I often find this useful in darks and shadows when there could be a little inherent texture.
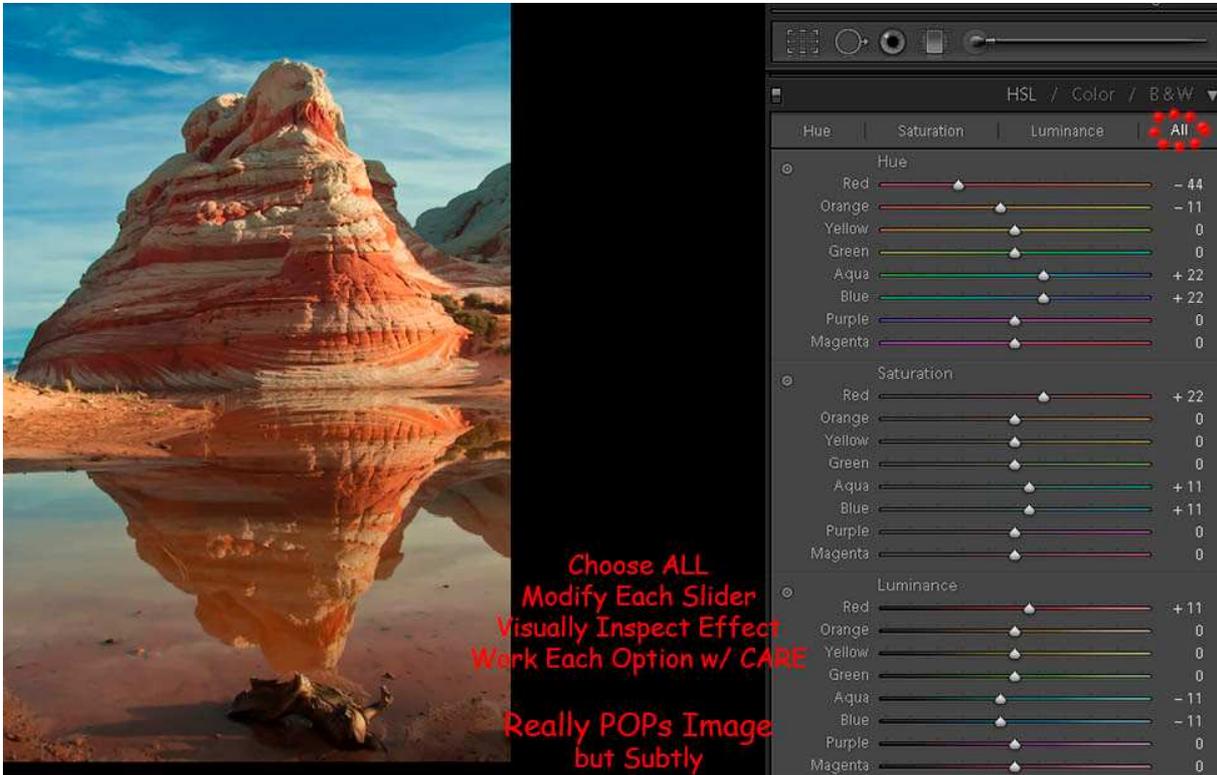
Sharpening
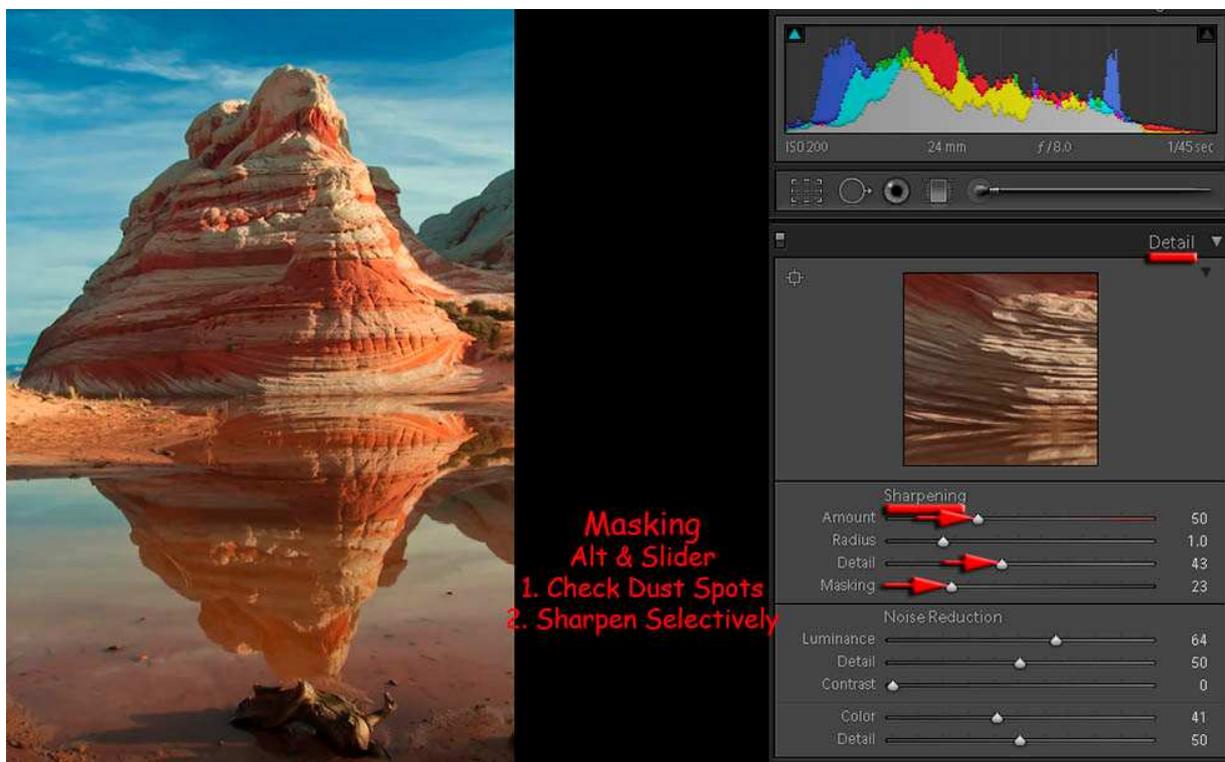
While Lightroom uses sharpening presets, I've learned to just move Amount to 40, then play with Masking slider using Alt key. As you will recall, at first the image turns completely white. As Alt key slider value increases, Black begins to appear.

Here, I wanted to push Amount beyond 40 to 50. Yet, I found masking was quite adequate at 23. Note - when I did that, I began to blow Cyan channel in Shadows. A little Fill Light would recover texture in those partly blown channels.

Choose ALL
Modify Each Slider
Visually Inspect Effect
Work Each Option w/ CARE

Really POPs Image
but Subtly

Although I've chosen to show all here, I wanted to show the summary affect in working up these images

Actually, I performed each Tone Mapping sequence separately. As you note, Hue, Saturation, and Luminance each contain a TAT tool. Using TAT sliders, it's amazing how far this simple tool can extend the sense of color and impact as you develop images.

Beginning with **Hue**, I'd deemphasize red and emphasize blue. If anything, aqua is too high because it leaves a cyan edge to the clouds. For this reason, I've learned to first carefully use TAT tool. Then, I separate sliders to create more subtle Tone Mapping.

Working with **Saturation**, I did a single enhancement of red. Then, I did a couple of enhancement of aqua and blue. Probably should leave some of that aqua out...

Finally, working with **Luminance**, I wanted a little red is well...

Tone Mapping and Color Balance are sensitive issues lying in the creative artist realm. What's sauce for the goose is *not* necessarily sauce for the gander!

So how should an instructor treat this subject?

I think it's important to recognize - each individual sees, remembers, and works differently. Tone Mapping is that process where each artist selectively composes their own tone poem.

Remember - as your skills improve software does the same. You'll find yourself coming back to images and trying them with new tools, improving on your old skills!

My advice; work through HSL at your own pace. Ask others how they feel about your work as it progresses. With effort in experience, you'll find your meter!

Over the years I've noted: male judges tend to dislike high saturation - female judges like saturation.

What do you like?

Before and After

Here's a Before and After... the sky is stronger, it's reflections show better in the pool, and snow cones are piquantly lit up Sun. Lightning the white bands in strong shadows on the west gives strength to the snow cones. The final tone mapping image has some pop.

I feel the After image is a strong representation of that magical morning when I got an iconic HDR image reflected in a transient desert pond...

Conclusions

It's your picture!

You're using artificial tools such as a linear camera sensor, software tone mapping, and you're trying to match the memory your eye saw. Neither sensor nor software produces exactly what your eye saw.

Care should be taken at each step!

Let your creative soul reach to its fullest limit. Embrace color balance seriously. It will differ for each image set. Work diligently at getting *your* creative answer. Then, put it down; go away... do something else to refresh your mind.

Come back another day with a fresh eye!

Examine each Tone Mapping step again. See if there's something you dislike in that step. Using virtual copies, you'll be able to work your way through the whole process again. Just start from any branch point (virtual copy) you choose.

Come back in six months and see if you do it the same way!

The last choice provides you a visually clean option to realize you're continually growing. For example, these images were done a year ago. I wouldn't do them the same now...

Remember ~ Tone Mapping is an artistic endeavor. You're trying to reestablish what you saw. You modify and enhance images to 'rise to' those memories. Then, present results in an attractive and impactful way!