

Noise Reduction

Types of Noise

- Luminance Noise
 - Salt and pepper where it should be smooth
 - Grainy
- Chrominance Noise (Color)
 - Odd color pixels
 - Speckles, usually blue and sometimes red
- In RGB, blue channel often has most noise

When to Try to Reduce Noise

- When you can see it, especially in darker areas or bright skies.
 - More likely when the highest ISO was used.
 - Older cameras had more of it.
- *But* reducing luminance noise may reduce sharpness.
- *But* reducing chrominance noise may alter the image colors.
- RAW editor has a noise tab. Best to try it there.

Tools

- Filter > Noise > Reduce Noise
- Pretty good at preserving details, reducing color noise and removing JPG artifacts.
 - Try the basic mode
 - Then switch to channels and see which has more.

Tools

- Filter > Noise > Median
- Filter looks for average colors and moves odds of color toward that median color.

Strategies

- 1. Try reducing noise in only the blue channel
 - Sometimes green channel. Not usually red.
- 2. Change to Lab mode and select the L channel.
 - Luminosity channel is separate from color.
 - Then try Filter > Reduce Noise
- 3. Use a mask to bring back details that need to keep their sharpness.