

Milky vs Frozen

Photographing waterfalls, cascades, bubbling brooks
and other waterbodies

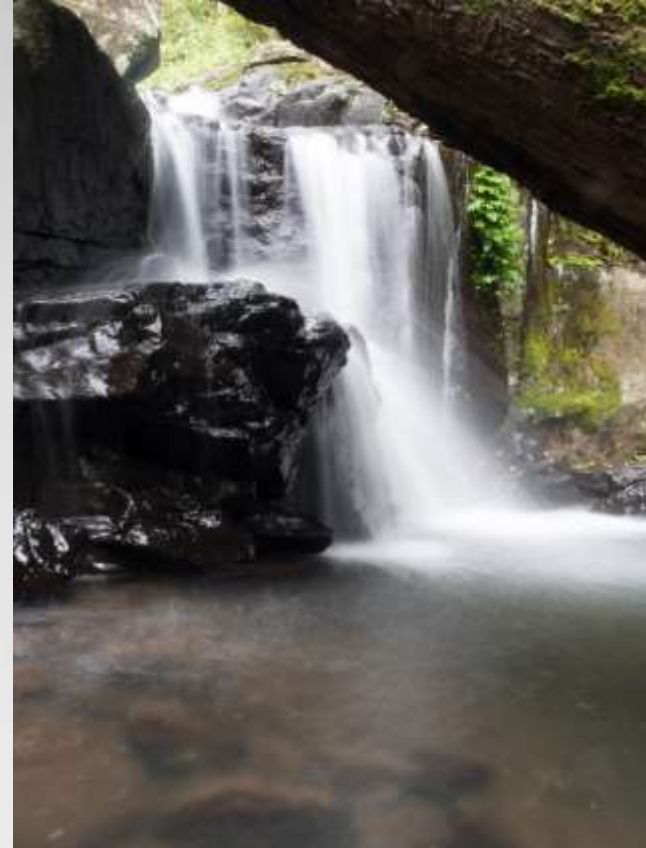
Rod Burgess
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- Milky or frozen?

- Depends on shutter speed – frozen needs 1/500 or faster
- Milky can be 1/3 sec or slower.



**1/1250
sec**



**1.3
sec**

- **Camera Gear**

- **Camera with manual exposure mode**
- **Wide- short telephoto lens – say between 18mm and 80 mm**
- **Polarising filter**

Nice to have:

- **Live view and flexible screen**
- **Touch screen**

If you want milky water:

- **Tripod**
- **Remote release**
- **Neutral density filters – 3x, 6x, 10x**

- **Other gear**

Raincoat

Wet shoes, sandals etc that are ok to get wet and have good grip



• **Challenges**

- Getting close enough to pick out highlights
- Staying dry (if not able to get into water)
- Slippery rocks, unstable tripod
- People - in popular places
- Wide dynamic range if too sunny creates exposure problems
- Getting an interesting composition

- **Weather**

- Best in low light
- Dull, showery weather sometimes the best
- Filtered sun or low angle sun is OK.



- Avoid too much contrast



- Look for unwanted objects – these often look fine in the wild



- Polarisers:

Without



With

- **Settings**

- **Milky water**

- I use aperture exposure mode (Av/A) or manual exposure mode (M)
- F16 for depth of field
- ISO 100 or 200
- Aim for $\frac{1}{4}$ second or preferably slower – eg 10 - 30 seconds
- May need polariser and ND filter to slow exposure

- **Settings**

- **Frozen water**

- I use shutter exposure mode (Tv/S) or manual exposure mode (M)
- F16 for depth of field unless you want to isolate some aspect of the scene
- ISO as high as required to get 1/1000 second or faster to freeze water
- May need fairly high ISO if using polariser

- F16, 30 seconds, ISO 100



- F13, 1/8 second, ISO50



Gibraltar Creek (hand held, low ISO to reduce exposure time)

- F10, 1/400 second, ISO400



Gibraltar Falls

- F5.6, 1/800 second, ISO2000



Ocean – note high ISO for faster shutter speed

- **Composition**

- Look for diagonals, leading lines and other compositional elements
- Repetition (rocks?)
- Framing
- Foreground interest
- Get low, get close

- Diagonals, rule of thirds



- Repetition



Orroral Creek

- Framing
- Foreground

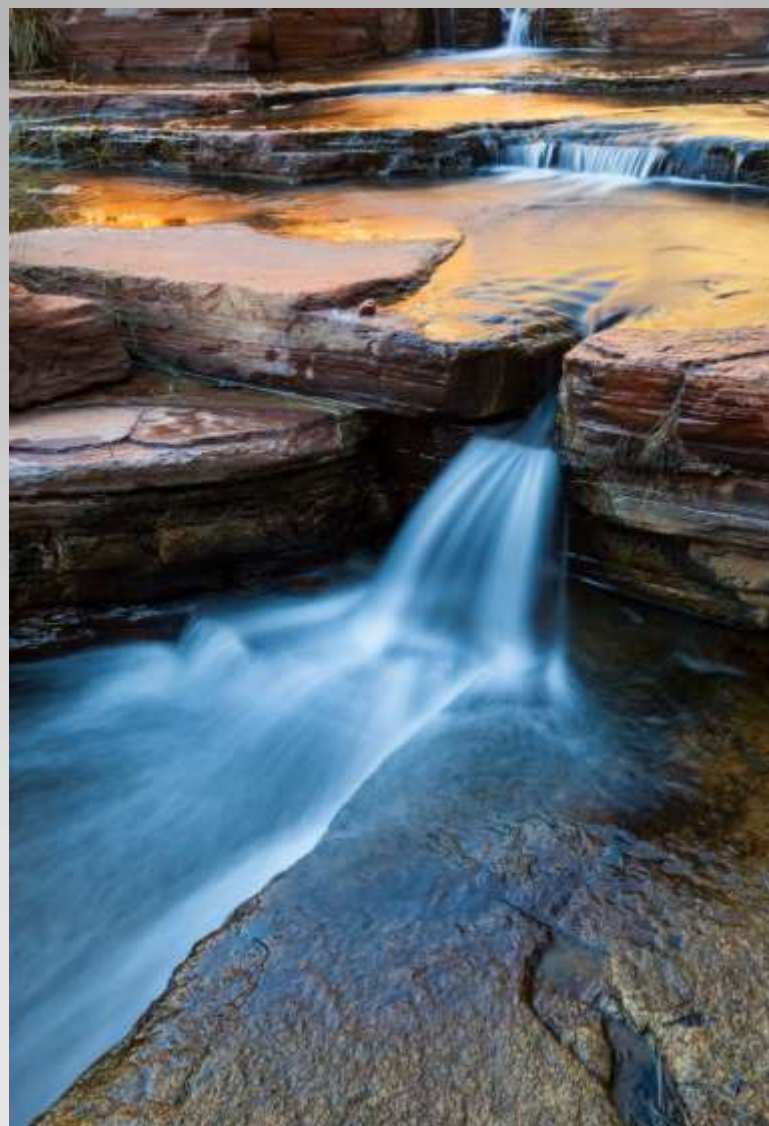


- Leading lines



- Reflected light looks good





- Swirly water can look great – slow shutter speed needed



Gudgenby River (8 second exposure on tripod)

- Too much distraction - a “clean” shot may look better



- Cleaner



- Even better



- Some local places to practice
- Gibraltar Falls, Gibraltar Creek at Woods Reserve
- Cotter Reserve
- Orroral Creek (near day use area)
- National Botanic Gardens (below)



My favourite camera for creeks:

- Olympus EM5 with 18-16mm or 24-80mm lenses

Why?

- Small, light
- Tilt screen with touch focussing
- Up to 60 seconds exposure on Av
- "Live composite" shows photo as it builds
- Real time histogram to manage exposure
- Excellent long exposure noise reduction

Questions?