

What is Backscatter?

In underwater photography, backscatter is light that reflects off particles in the water resulting in specks of light in the photo. Usually this light comes from an on-camera flash, although any bright light from the direction of the camera can do it. Particularly unclear water can exacerbate the problem.

There are mainly two ways of addressing the problem:

1. **Don't use a flash / strobe from too far away**

"Too far away" is dependent on the visibility of the water, with higher visibility tolerating flash from slightly farther distances. However, anything above 3 ft / 1 m will probably have backscatter.

2. **Separate the camera and the strobe**

This can be problematic, since for most point-and-shoot cameras, an on-camera flash is your only option; only mid-range cameras and SLRs support separate strobes.



To correctly light photos without causing backscatter, a strobe pointing at the subject from the right or left of the camera is a huge help. This way, the camera only sees the light that reflects off the subject, and not that which is reflected by particles (since the light is reflected away from the camera lens).

In this photo you can see backscatter caused by a flash going off in somewhat murky water



(about 15 ft / 5 m visibility).