A Study in some Vue water Parameters

We begin with a scene where someone is picking up a stone out of the water:

Skipping Stone 3: Default Water- Global Radiosity – Direct volumetric light

The water level is not easy to distinguish. The sandy bottom is okay but we can't tell where the water level is by looking at the stones. How much of a stone is above or below the water line, or if the stone being picked up is in the water or not. Not too realistic.

First thought is to darken the water. Currently, under the **Transparency** Tab for the **Default Water** material, the **Absorption & Scattering Depth** is set to 5m.

The **Refraction index** is set to 1.00
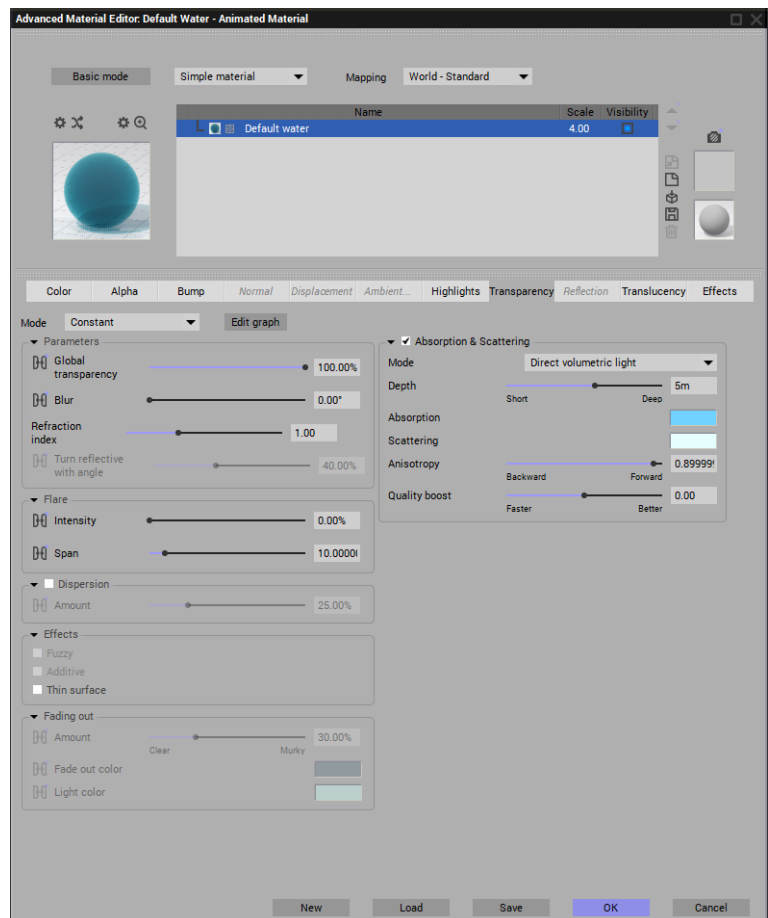
Skipping Stone 4

In Skipping Stone 4, the **Absorption & Scattering Depth** value is decreased to 2.478 and the **Refraction index** remains at 1.00.

The water is darker to the point where the deeper water out by the larger rocks is thick enough to hide any stones on the lake floor.

While the water is generally darker, it is still not very apparent where the water level is in relation to the stones.

Maybe some adjustment of the Refraction index will give me what I want.
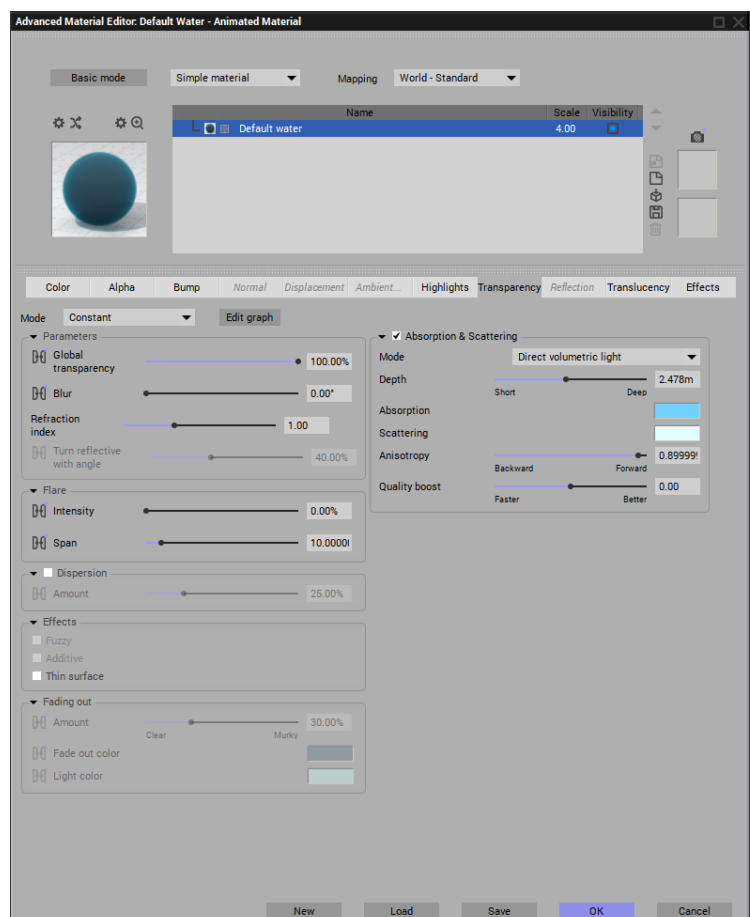
Skipping Stone 6

In Skipping Stone 6 we have adjusted the **Scattering & Absorption Depth** back to 5.949 which means the water is not as dark near the lake bottom as before. We can clearly see the stones on the lake bottom by the larger rocks.

We have also increased the **Refraction index** to 1.47. This has allowed for a bit more reflection on the water surface (at the default 40% angle) and noticeable distorting of the stones below the water surface because it is refracted.

This shows the transition from the open air to the water level much better on the stones and at the reaching person's fingers.

We have caustics rays on the lake bottom which we don't want.
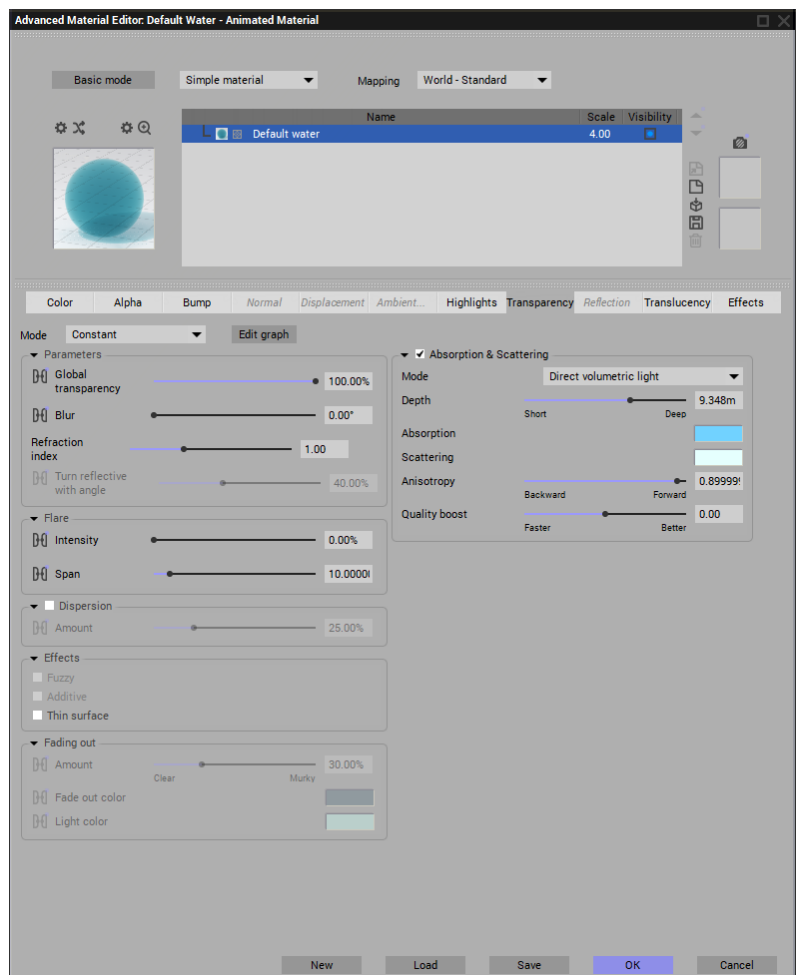
Skipping Stone 7

In Skipping Stone 7 we have removed some of the large rocks and the caustic rays on the lake bottom.

We left the **Refraction index** at 1.47 which seemed just enough to see the water line on the stones and give a bit of reflection on the water surface.

We also reduced the **Absorption & Scattering** a bit to 4m so we could just see the stones on the lake bottom near the far shore but not obscure them.

Conclusion

There are so many more parameters for the water material that can be adjusted but these two: **Refraction index** and **Absorption & Scattering** play a large role in getting the water surface to show the person's fingers going into the water to pick up a Skipping Stone.

This adds much more realism to the scene.