



Setup

- Create a new material and assign the desired Calm Water Shader.
- Assign the material to your water geometry.
- For best results with displacement your mesh needs to be scaled to [1,1,1] or scaled by import settings.

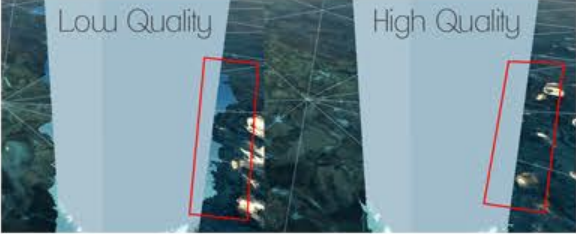
Properties



- Color**
- Shallow Color:** The color that is over the depth value
 - Depth Color:** The color that is below the depth value
 - Depth:** The depth of the transition between Shallow and Depth Color
 - Edge Fade:** The transparency range of the shore line.

- Specular**
- Specular Color:** The color of the specular highlights
 - Smoothness:** The shininess value of the specular highlights

- Bump**
- NormalMap:** The texture that creates the bump effect.
 - Bump Strength:** The intensity of the bump effect.
 - Scroll Speed [X,Y]:** The speed of the normalMap animation.
 - Distortion:** The intensity of the refraction effect.
 - Distortion Quality:** Low quality distortion will show objects in front of the water in the refraction while high quality will prevent this.



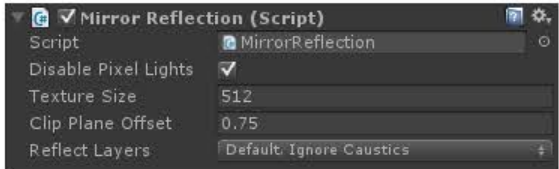
- Reflections**
- Reflection Type:**
 - CubeMap will use only a CubeMap
 - RealTime uses the mirror reflection script and creates real time reflections.
 - Mixed is a combination of the CubeMap and the real time reflections.
 - CubeColor:** Tints the cubemap color
 - CubeMap:** The cubemap texture used to create cubemap reflections
 - Reflection:** Intensity of realtime reflection
 - Fresnel:** Angle at which the reflection are visible.

- Foam**
- Foam Color:** Tints the foam
 - Foam Texture:** Texture used for the foam
 - Foam Size:** Size of the dynamic foam border around the edges of objects

- Displacement**
- Amplitude:** Height of the waves
 - Frequency:** The distance between waves
 - Steepness:** The steepness of the waves
 - Waves Speed:** Speed of the waves [XYZW]
 - Waves Directions 1 - 2:** [XZ] Waves Tiling [YW] Angle
 - Smoothing:** Normals recalculation according to the displacement. 1 Smoothing is equal to full recalculation and 0 equals to no recalculation. [Better on DX11 atm]

- Tessellation:** [DX11] Level of subdivision (edge lenght based)

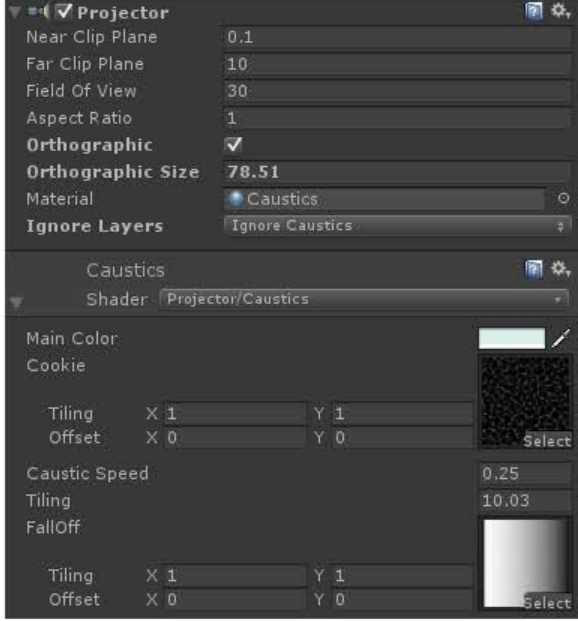
Mirror Reflection Script



- Based on this script:** <http://wiki.unity3d.com/index.php/MirrorReflection3>
In order to get real time reflections you will need to attach this script to your water geometry.

- Disable pixel lights:** Disable additional lights in the reflection in order to increase performances.
- Texture Size:** The resolution of the texture used to create the reflections.
- Clip Plane Offset:** Adjust this value to offset the position of the reflection and fit your need.
- Reflect Layers:** The layer that will be included in the reflection. The more objects you exclude from the reflection the best the performances will be.

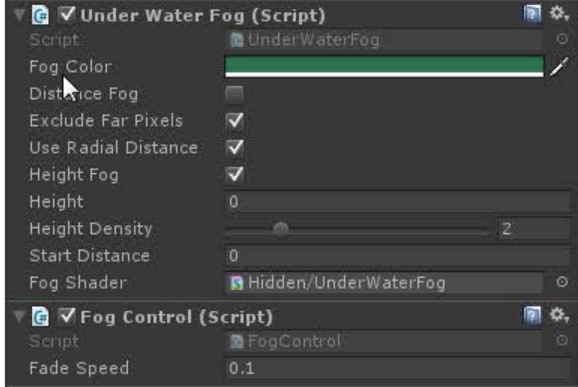
Caustics projection



- You can fake caustics using unity's projector and an included custom shader.
Please refer to this page to setup the projector options:
<http://docs.unity3d.com/Manual/class-Projector.html>

- Projector Shader**
- Main Color:** Tints the caustic texture
 - Cookie:** The caustic texture
 - Caustic Speed:** Animation speed
 - Tiling:** Amount caustic texture tiling
 - Falloff:** Ramp texture that determines the fading of the caustic texture.

Underwater Fog



- This post effect is basically unity's global fog with some tweaks. You can refer to their documentation here:
<http://docs.unity3d.com/Manual/script-GlobalFog.html>

- Fog Control script**
I also provide a control script that will turn the fog on when the camera is under the water and off when it is over the water.

- The Fade Speed property is used to determine how fast the transition will happen.