

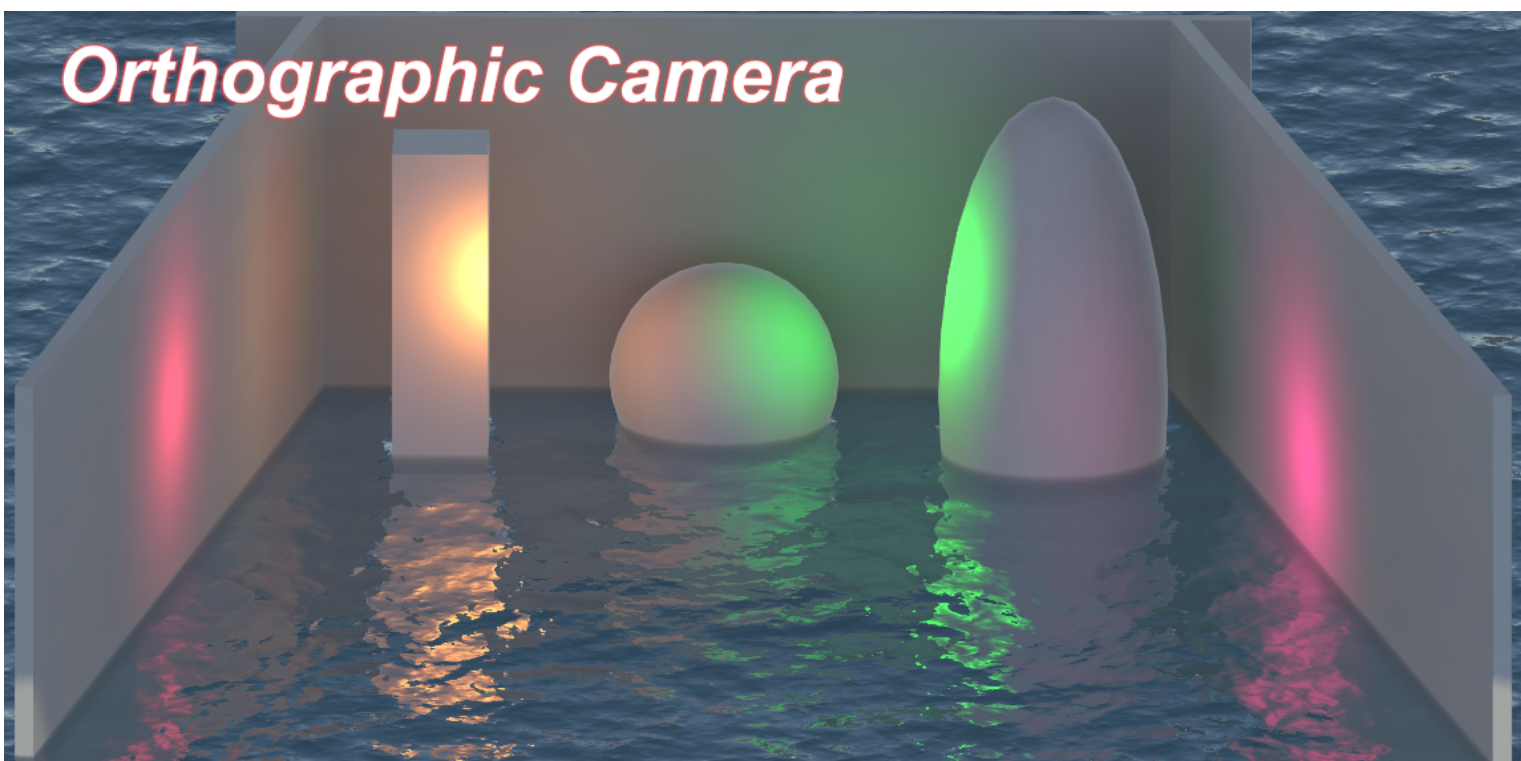
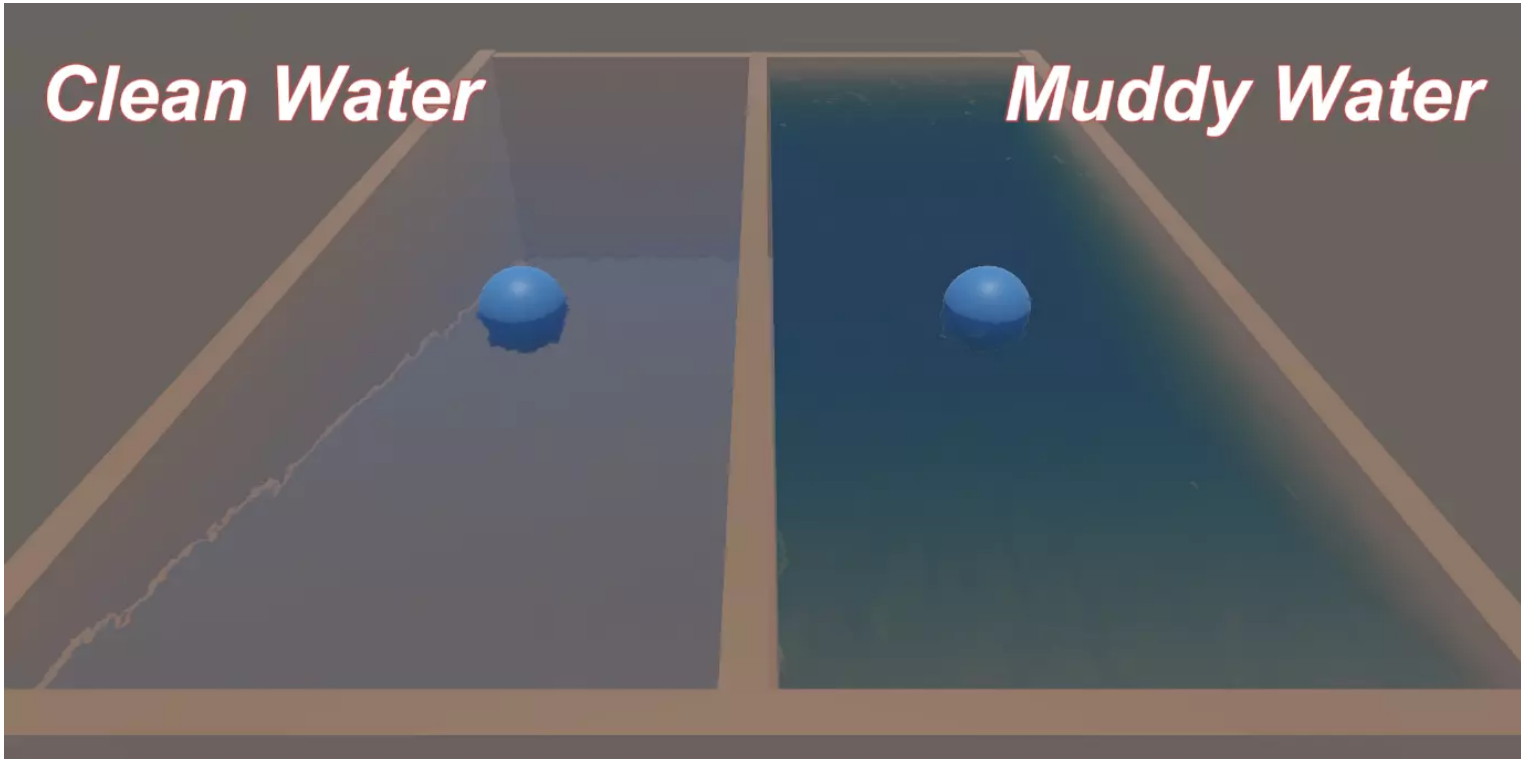
Last updated: Feb 27, 2020

LWRP/URP SSR Water

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This is the **LWRP/URP** version of **Fatanstic SSR Water**.

[Asset Store Link](#) | [Youtube Link](#) |



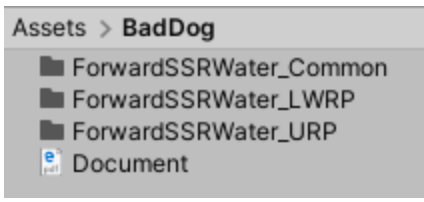
Features

- Three direction realistic waves.
- Support clean and muddy.
- PBR lighting with screen space reflection.
- Realistic refraction.
- Forward SSR, Mobile ready.

How to use

First of all, you should install **LWRP** or **URP** related packages, assign **LightweightRenderPipelineAsset** or **UniversalRenderPipelineAsset** in graphic settings.

Then import my package, folders are listed like this:



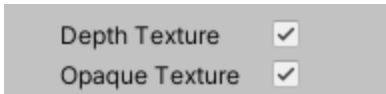
ForwardSSRWater_Common contains common resources such as wave textures and skybox.

ForwardSSRWater_LWRP is the version of **LWRP**, **ForwardSSRWater_URP** is the version of **URP**, choose the one you need and delete the other one.

Shader is named like this:

render-pipeline	shader name
LWRP	BadDog/LWRP/BGWater
URP	BadDog/URP/BGWater

To run the shader correctly, each **RenderPipelineAsset** should toggle **Depth Texture** and **Opaque Texture**:

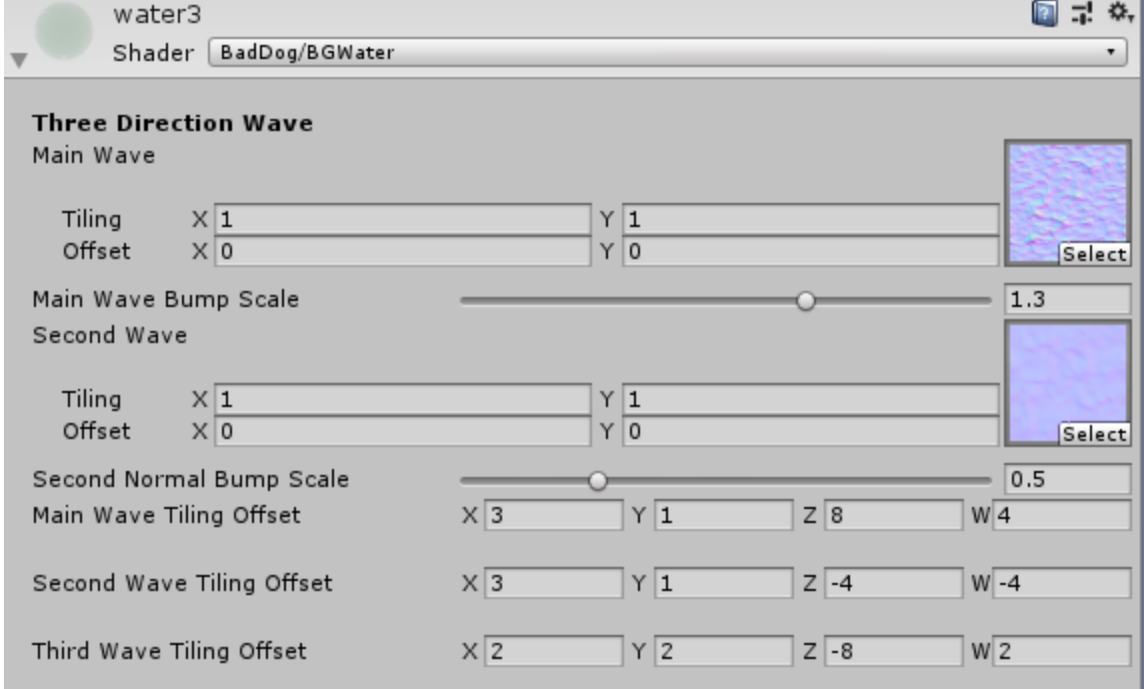


You can also use my **RenderPipelineAsset** in the **Settings** folders.

That's all, check the demo scenes and enjoy it, :)

Shader properties

Wave Section



Two wave maps generate three direction waves. You can adjust each wave's **tiling** and **offset**.

Water Base Color



It's computed as **diffuse color**.

Water Muddy and Depth

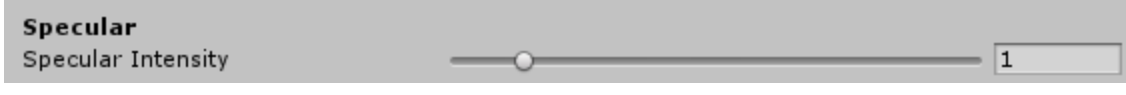


Water can be **clean** or **muddy**. Clean water is more transparent than muddy water.

Water's transparency is computed by **depth**.

Depth is computed by **muddy scale** and camera's **view direction**, you can also add a **depth offset** to adjust the final transparency.

Specular

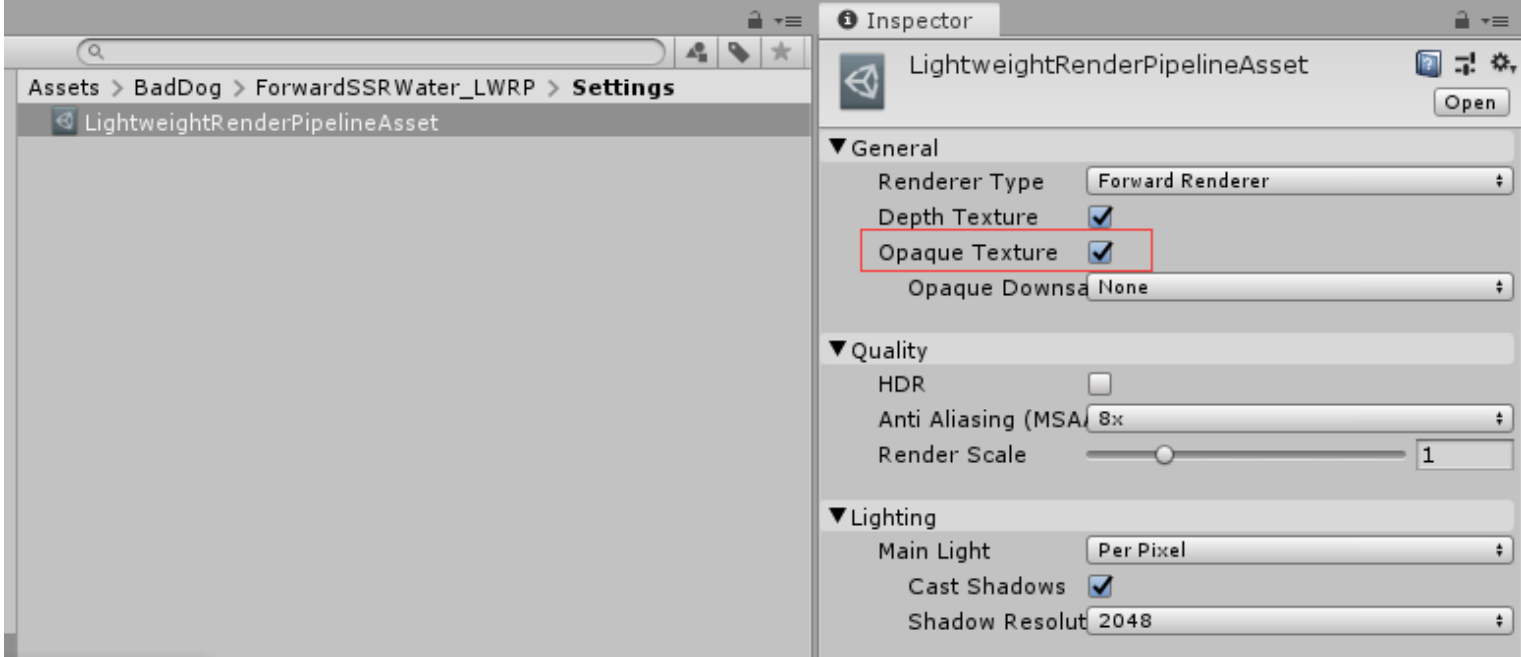


Specular color is always **(0.04, 0.04, 0.04)**, and you can adjust its intensity as you need.

Refraction

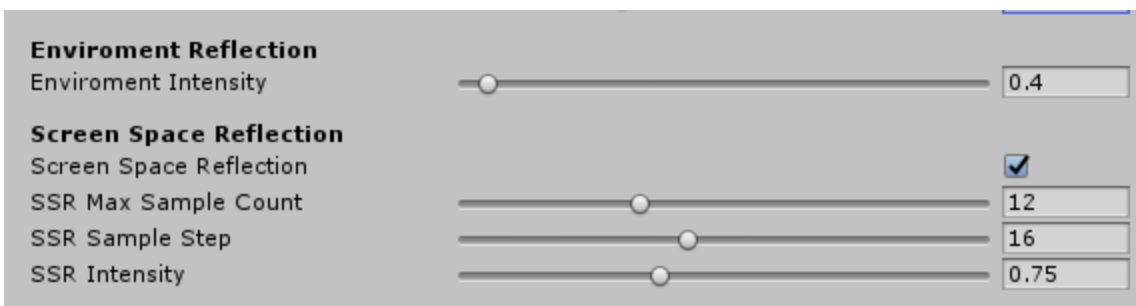


Refaction needs **Opaque Texture** enabled.



OpaqueTexture's uv is distorted by wave normal, and you can adjust the final **distort scale**.

IBL and SSR



Unity's reflection probe is used for **IBL**, but it's not enough.

If you need a **realistic realtime reflection**, you can enable **screen space reflection**.

IBL and SSR are **mixed** for the final environment lighting.

SSR **Sample Count** is performance sensitive. For mobile device, max sample count use 8 and sample step use 20 is good enough.

Final

The final water color is mixed by reflection and refraction.

Orthographic Camera



You should toggle **Orthographic Camera** if you are using an orthographic camera.

About the examples

There are five example scenes:

- testSSR
- testLighting
- testDepthAndMuddy
- testRoom
- testRoomOrtho

Choose **linear space** and check them for details.

LWRP demos are tested using unity **2019.1** and unity **2019.2**.

URP demos are tested using unity **2019.3**.

Customer Support:

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