

# #NVJOB Simple Water Shaders

#NVJOB Simple Water Shaders are fast and easy water shaders running on mobile and desktop platforms. The asset includes two shaders, Specular and Surface. Water over time changes the direction vector, the direction of movement changes in a circle. You can also set the direction of water movement (for example, synchronize the direction of water with the direction of the Wind Zone). These shaders do not use tessellation, only normal mapping and parallax. Supported rendering path deferred and forward (DepthTextureMode). This shader is well suited for decorative purposes, in scenes where water is not a key element.

## Features:

- Two shaders, Specular and Surface.
- Advanced settings for visualization.
- Control the direction of water movement.
- Support for all functions in Forward Rendering and Deferred Rendering.
- Good performance.

## Information:

This shader does not work with SRP (HDRP, URP)!

This water shader uses parallax, so it is tied to UV mesh.

For shaders to work on mobile platforms with Forward Rendering, enable "Depth Texture Mode" function.

If you use mobile platforms, enable HDR for proper operation (Project Settings / Graphics). I recommend importing this asset into a new project. Study the operation of the asset and copy the components you need to your project.

For Unity version of at least 2019.1.8 (Built-in Render Pipeline)

#NVJOB Simple Water Shaders

<https://nvjob.github.io/unity/nvjob-simple-water-shaders>

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# Component Settings (Simple Water Shaders)

## #NVJOB Simple Water Shaders (v1.5)

### Albedo Movement:

Rotate Speed   
Rotate Distance

### Normal Map Movement:

Rotate Speed   
Rotate Distance

### Depth Texture Mode:

Depth Texture Mode ☒

### Wind Zone:

Water Sync With Wind ☐  
**Wind Zone Object**  

### **Albedo Movement**

- Rotate Speed - speed of rotation of the direction vector of the Albedo motion. Dependency: Albedo 1, Albedo 2, Microwave.
- Rotate Distance - duration of movement in the direction of the direction of movement of the Albedo. Dependency: Albedo 1, Albedo 2, Microwave.

### **Normal Map Movement**

- Rotate Speed - speed of rotation of the direction vector of the Normal Map motion. Dependency: Normal Map 1, Normal Map 2, Microwave, Parallax Map.
- Rotate Distance - duration of movement in the direction of the direction of movement of the Normal Map. Dependency: Normal Map 1, Normal Map 2, Microwave, Parallax Map.

### **Depth Texture Mode**

- Depth Texture Mode - For working shaders on mobile platforms with Forward Rendering.

### **Wind Zone**

- Water Sync With Wind - synchronize the direction of water movement with the direction of the wind. The default is off.
- Wind Zone Object - to synchronize the wind direction with the direction of water movement. If the "Water Sync With Wind" option is enabled, then the direction of the water is set by the direction of this object.

# Shaders Settings (Water Surface)

## #NVJOB Simple Water Shaders (v1.5)

### Albedo Settings:

Albedo Texture 1

Tiling X 50 Y 50  
Offset X 0 Y 0



Albedo Color

HDR

Albedo 2 Enable



Albedo Texture 2



Albedo 2 Tiling

0.9

Albedo 2 Flow

0.9

Albedo Intensity

4.2

Albedo Contrast

0.13

Glossiness

0.91

Metallic

0.95

Soft Factor

0.11

### Normal Map Settings:

Normal Map 1

Tiling X 50 Y 50  
Offset X 0 Y 0



Normal Map 1 Strength

0.8

Normal Map 2 Enable



Normal Map 2



Normal Map 2 Tiling

1.2

Normal Map 2 Strength

0.5

Normal Map 2 Flow

-0.2

Micro Waves Enable



Micro Waves Scale

1

Micro Waves Strength

0.91

### Parallax Map Settings:

Parallax Map Enable



Parallax Map



Parallax Map Tiling

0.51

Parallax Amount

0.1

Parallax Normal Map 2 Offset

2

Parallax Flow

2.3

Render Queue

From Shader

2800

Enable GPU Instancing



Double Sided Global Illumination



## **Albedo Settings**

- Albedo Texture 1 - basic texture for water. Used in parallax.
- Albedo Color - main color of the water, but depends on "Albedo Intensity", "Albedo Contrast" and the colors of Albedo Textures. HDR.
- Albedo 2 Enable - enable Albedo Texture 2, disabled by default. Texture 2 mixes with texture 1.
- Albedo Texture 2 - secondary texture for water. Used in parallax.
- Albedo 2 Tiling - texture 2 tiling relative to texture 1.
- Albedo 2 Flow - motion of texture 2 relative to motion of texture 1.
- Albedo Intensity - overall intensity Albedo.
- Albedo Contrast - overall albedo contrast
- Glossiness - this is the amount of gloss.
- Metallic - the metallic parameter of a material determines how "metal-like" the surface is. When a surface is more metallic, it reflects the environment more and its albedo colour becomes less visible.
- Soft Factor - amount of water depth. Lower the value, the more transparent.

## **Normal Map Settings**

- Normal Map 1 - basic normal map texture 1 for water. Used in parallax.
- Normal Map 1 Strength - intensity of normal map texture 1.
- Normal Map 2 Enable - enable normal map texture 2, disabled by default. Normal map 2 mixes with normal map 1.
- Normal Map 2 - secondary normal map for water. Used in parallax.
- Normal Map 2 Tiling - normal map 2 tiling relative to normal map 1.
- Normal Map 2 Strength - intensity of normal map texture 2.
- Normal Map 2 Flow - motion of normal map 2 relative to motion of normal map 1.
- Micro Waves Enable - turn on micro waves. Micro waves depend on normal map 2.
- Micro Waves Scale - size of micro waves.
- Micro Waves Strength - intensity of micro waves.

## **Parallax Map Settings**

- Parallax Map Enable - enable parallax map, disabled by default.
- Parallax Map - parallax map texture 1 for water.
- Parallax Map Tiling - parallax map tiling relative to normal map 1.
- Parallax Amount - amount of parallax.
- Parallax Normal Map 2 Offset - degree of parallax offset for normal map 2.
- Parallax Flow - parallax flow rate.

# Shaders Settings (Water Specular)

#NVJOB Simple Water Shaders (v1.5)

Albedo Settings:

Albedo Texture 1

Tiling

X

30

Y

30


Offset

X

0

Y

0



Select


Albedo Color

HDR

Albedo 2 Enable

☒

Albedo Texture 2



Select

Albedo 2 Tiling

2.3

Albedo 2 Flow

0.3

Albedo Intensity

2.55

Albedo Contrast

1.4

Shininess

0.57

Specular Color

HDR

Soft Factor

0.06

Normal Map Settings:

Normal Map 1

Tiling

X

80

Y

80


Offset

X

0

Y

0



Select


Normal Map 1 Strength

0.8

Normal Map 2 Enable

☒

Normal Map 2



Select

Normal Map 2 Tiling

1.1

Normal Map 2 Strength

0.7

Normal Map 2 Flow

-0.4

Micro Waves Enable

☒

Micro Waves Scale

1

Micro Waves Strength


0.1

Parallax Map Settings:

Parallax Map Enable

☒

Parallax Map



Select

Parallax Map Tiling

1

Parallax Amount

-0.1

Parallax Normal Map 2 Offset

1

Parallax Flow

3

Reflection Settings:

Reflection Cubemap Enable

☒

Reflection Cubemap

Tiling

X

1

Y

1


Offset

X

0

Y

0



Select

Reflection Color

Reflection Strength

1.7

Reflection Saturation

0.5

Reflection Contrast

1.1

Render Queue

From Shader

2800

Enable GPU Instancing

☐

Double Sided Global Illumination

☐

## **Albedo Settings**

- Albedo Texture 1 - basic texture for water. Used in parallax.
- Albedo Color - main color of the water, but depends on "Albedo Intensity", "Albedo Contrast" and the colors of Albedo Textures. HDR.
- Albedo 2 Enable - enable Albedo Texture 2, disabled by default. Texture 2 mixes with texture 1.
- Albedo Texture 2 - secondary texture for water. Used in parallax.
- Albedo 2 Tiling - texture 2 tiling relative to texture 1.
- Albedo 2 Flow - motion of texture 2 relative to motion of texture 1.
- Albedo Intensity - overall intensity Albedo.
- Albedo Contrast - overall albedo contrast
- Shininess - specular shininess.
- Specular Color - specular Color, HDR.
- Soft Factor - amount of water depth. Lower the value, the more transparent.

## **Normal Map Settings**

- Normal Map 1 - basic normal map texture 1 for water. Used in parallax.
- Normal Map 1 Strength - intensity of normal map texture 1.
- Normal Map 2 Enable - enable normal map texture 2, disabled by default. Normal map 2 mixes with normal map 1.
- Normal Map 2 - secondary normal map for water. Used in parallax.
- Normal Map 2 Tiling - normal map 2 tiling relative to normal map 1.
- Normal Map 2 Strength - intensity of normal map texture 2.
- Normal Map 2 Flow - motion of normal map 2 relative to motion of normal map 1.
- Micro Waves Enable - turn on micro waves. Micro waves depend on normal map 2.
- Micro Waves Scale - size of micro waves.
- Micro Waves Strength - intensity of micro waves.

## **Parallax Map Settings**

- Parallax Map Enable - enable parallax map, disabled by default.
- Parallax Map - parallax map texture 1 for water.
- Parallax Map Tiling - parallax map tiling relative to normal map 1.
- Parallax Amount - amount of parallax.
- Parallax Normal Map 2 Offset - degree of parallax offset for normal map 2.
- Parallax Flow - parallax flow rate.

## **Reflection Settings**

- Reflection Cubemap Enable - enable reflection cubemap, disabled by default.
- Reflection Cubemap - reflection Cubemap.
- Reflection Color - reflection color, but depends on "Reflection Cubemap", "Reflection Strength", "Reflection Saturation" and "Reflection Contrast".
- Reflection Strength - intensity of reflections.
- Reflection Saturation - saturation of reflection.
- Reflection Contrast - contrast of reflection.