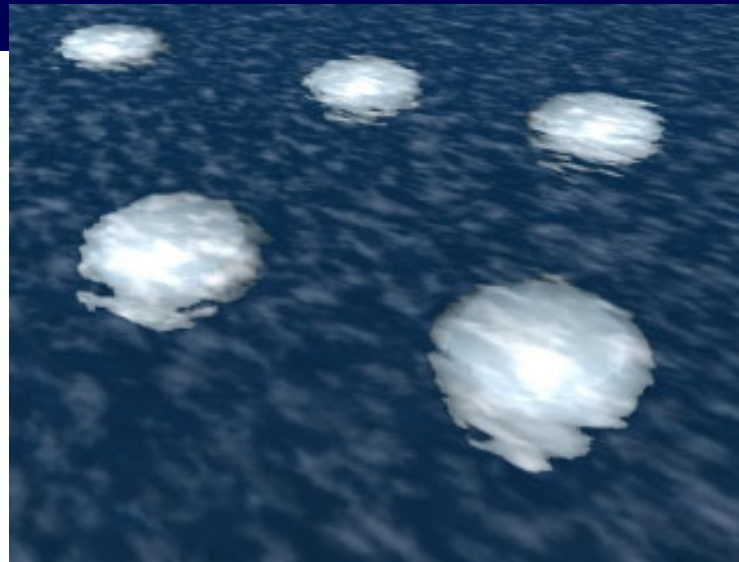


**DOSCH DESIGN TUTORIAL****Dosch Textures: Animated Water****A Step-by-Step Tutorial**

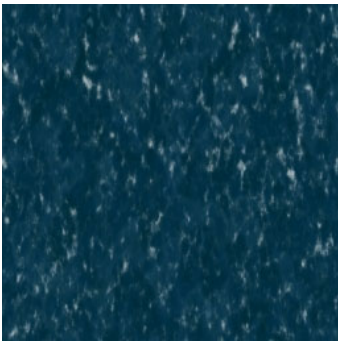
This tutorial provides some basic instructions for the use of DT: Animated Water, and explains how to use the animated water textures in Cinema4D and Lightwave.

## The filenames

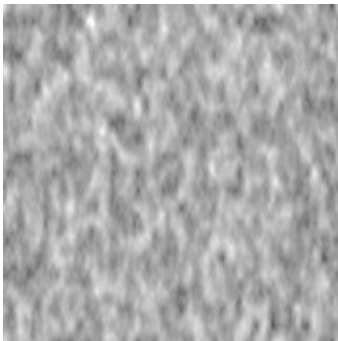
The attribute letter of each file describes for which material-layer the texture-file is used:

e.g. A01**C**\_000.jpg - A04**B**\_007.jpg - A12**S**\_075.jpg

C = Color - Defines coloration of texture



B = Bump-Map - Defines 3-dimensional texture of final appearance



S = Specularity / Reflection - Creates reflection highlights on the surface



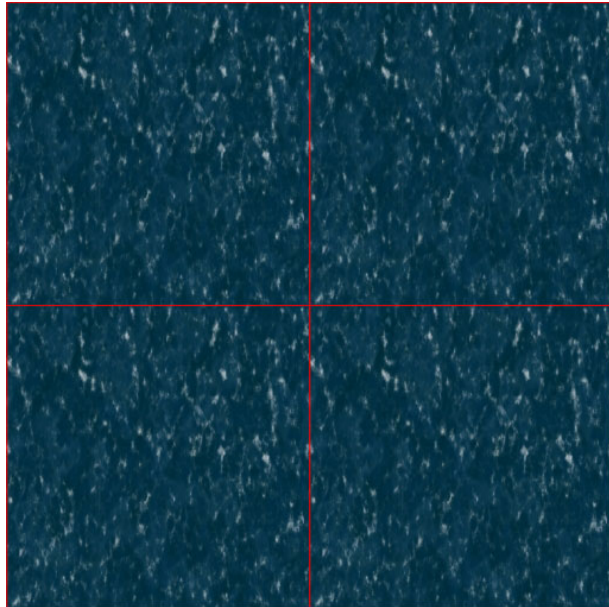
## The Textures

The textures are

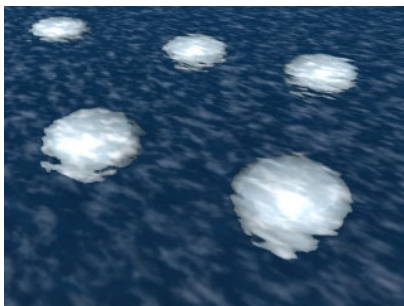
- seamlessly tileable and
- endlessly loopable.

So you are able to use them for any animation without having to worry about the size, length etc.

As reference for the size, we recommend a tile size of 5 square meters (54 square feet). But the size you use depends on your texture application – and your personal preference.



### Special note for the sample-renders:



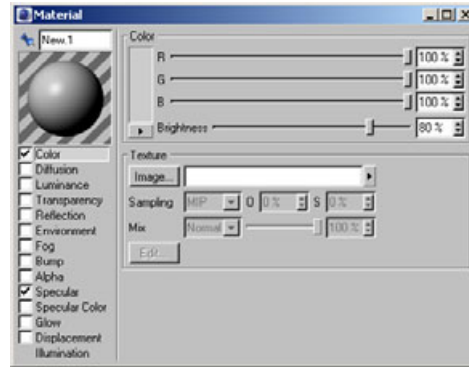
The white balls under the water surface are NOT included on the water textures.

We only used them to show the effect of the different water surfaces in a rendered scene, and how they affect objects –of whatever type- that are submerged in the water.

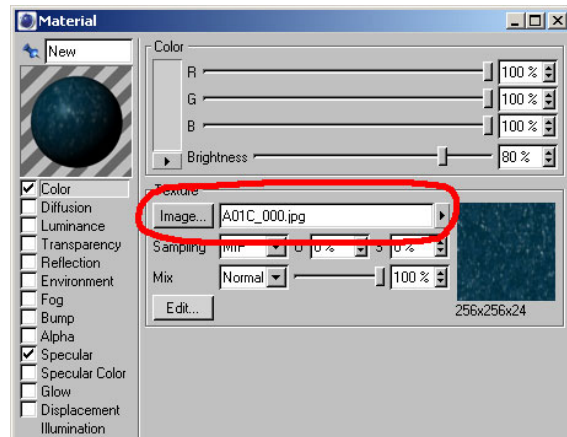
Using the textures in *Cinema4D*

In Cinema4D's Material-Manager you need to apply three Material-Layers to a specific material in order to create the complete water surface:

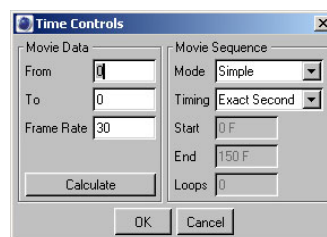
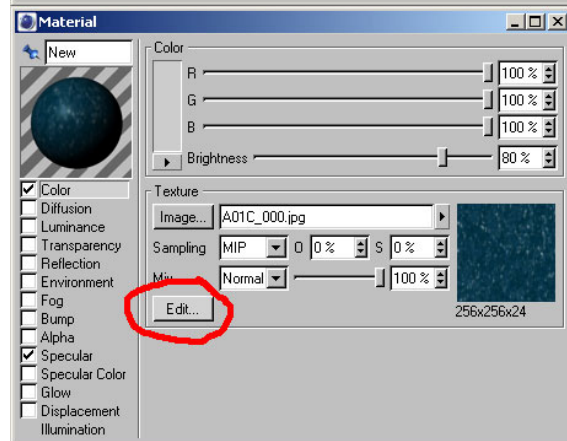
- Color
- Bump
- Specularity



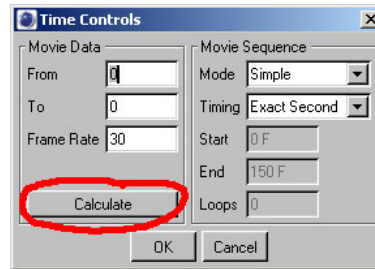
To do this please choose the "Color"-function and then click on „Image ...“-button where we pick the first image of the water animation as the color channel ... that would be image „A01C\_000.jpg“.



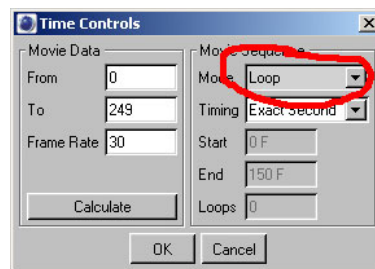
Now we click on „Edit“ which promptly opens the „Time Controls“-window.



In order to let Cinema4D know that the textures are animated textures (sequences) we must simply click on the „Calculate“-button ... and the program will know at once that the animation will run from frame 0 to frame 249.



Since all water animations are infinitely loopable please set the „Mode“ at „Movie Sequence“ to „Loop“.



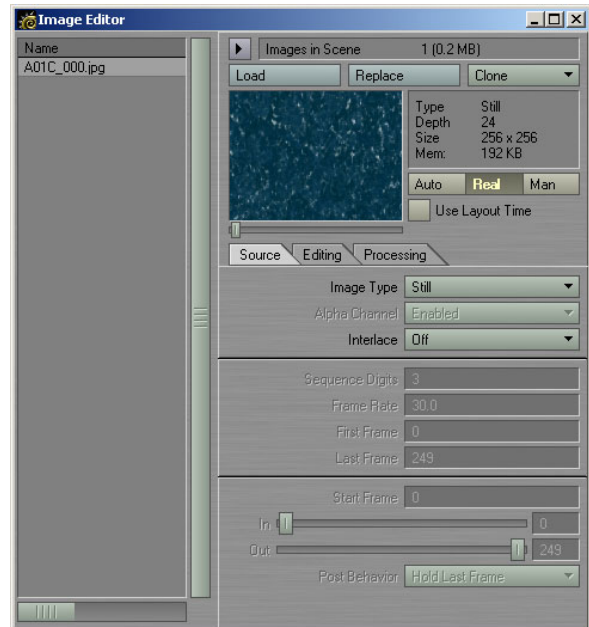
After making all the necessary adjustments for “Color” we now make the desired setting changes to “Reflection” and “Bump” – in a very similar way as we just did for “Color”. As soon as this is finished we have a fully animated water surface.

Transparency of the water is controlled directly with the help of the Transparency-channel in Cinema4D. Here the desired degree of transparency can be set.

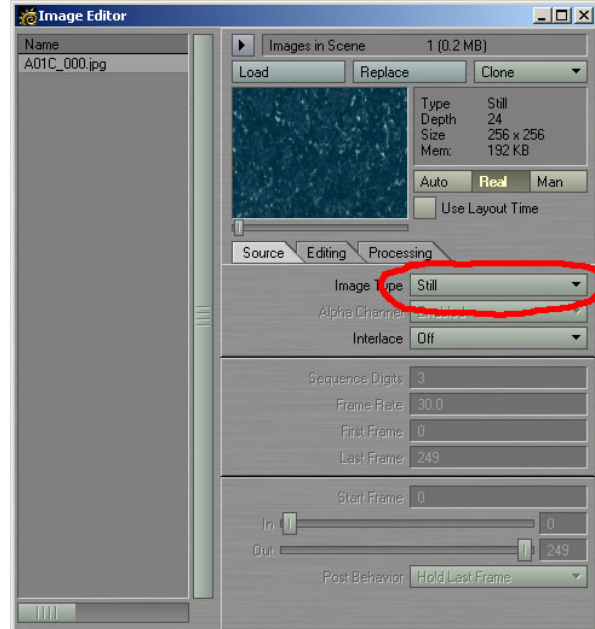
As soon as the material texture has been assigned to a surface (e.g. ocean, swimming pool etc.) and an animation calculated by using Cinema4D, the water will start “moving” automatically.

## Using the textures in *LightWave*

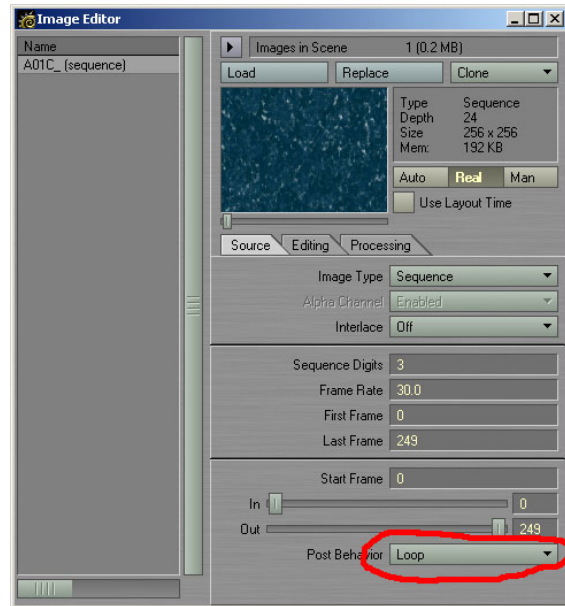
In order to use the textures as image sequences we simply load the desired file (e.g. A01C\_000.jpg) in the *LightWave Image Editor*.



At "Image Type" we then switch from „Still“ to „Sequence“, since we want *LightWave* to use the 250 frames provided by the DT: Animated Water files.



Lightwave immediately recognizes the 250 frames and all that's left to do is changing "Post Behavior" setting to "Loop" – this will trigger the animation to be played endlessly.



As described above for color-file A01C\_000.jpg we now load the corresponding Bump (B) and Specularity (S) files. After doing that successfully there will be 3 image sequences visible in the Image-Editor.

We now switch to the Surface-Editor, assign to the material the image sequences for Color, Specularity and Bump by using the textures-channel, then set "Reflectivity" and "Transparency" to the desired values.

These are the essential settings on order to animate the water surface without a time limit. All that's left to do is fine-tuning and getting the effect "just right" ...

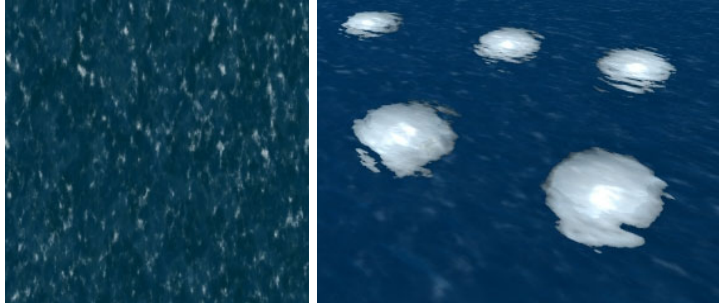




**The different water surfaces:**

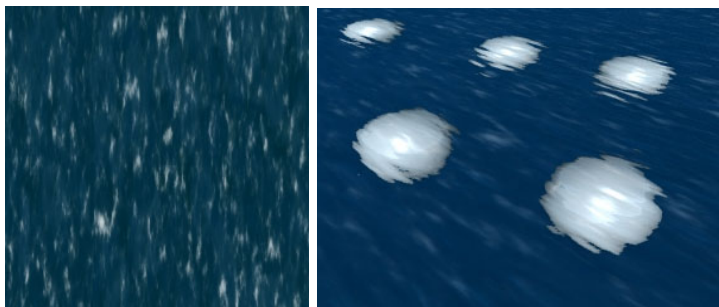
**WA01**

- Deep
- Minor flow
- Clear



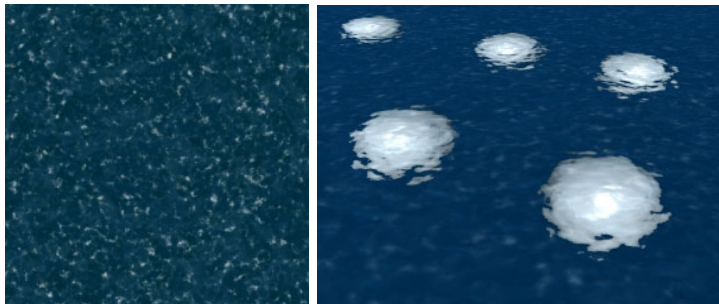
**WA02**

- Deep
- Considerable flow
- Clear



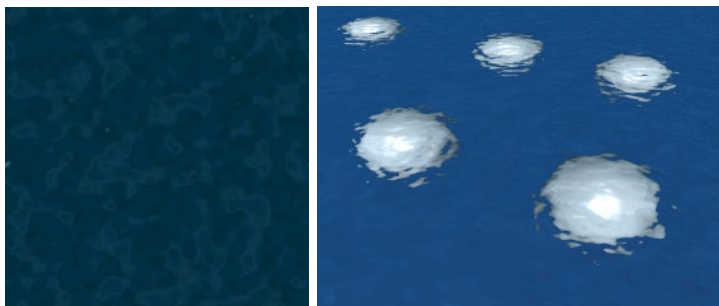
**WA03**

- Deep
- No flow
- Some wind
- Very clear



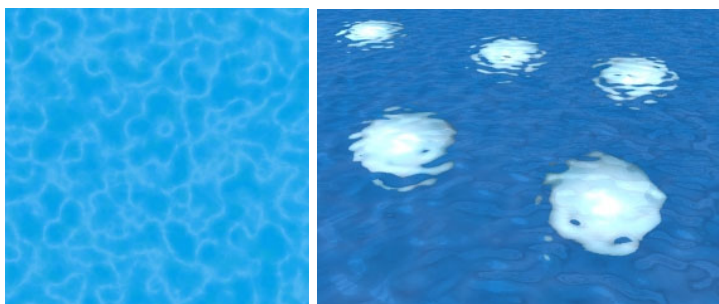
**WA04**

- Semi-deep (tropic blue)
- Minor flow
- Minor wind
- Very clear



**WA05**

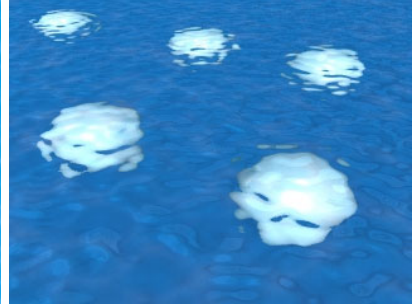
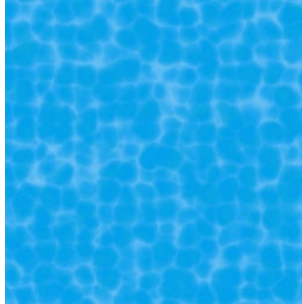
- Shallow
- Pool
- Light reflections from pool floor





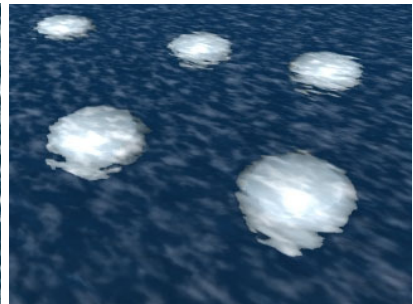
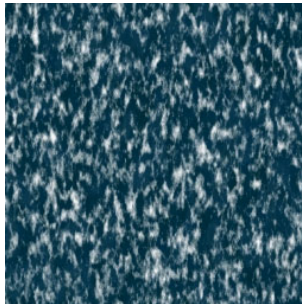
**WA06**

- Shallow
- Pool
- Light reflections from pool floor



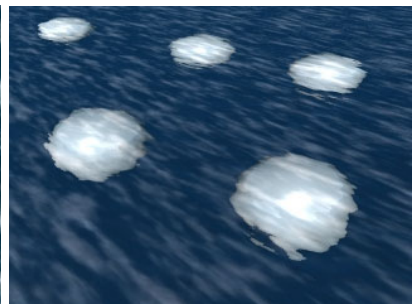
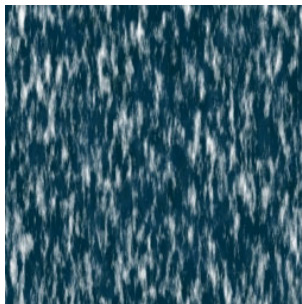
**WA07**

- Deep
- Minor flow
- Some spray



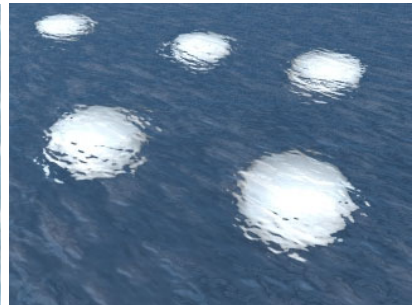
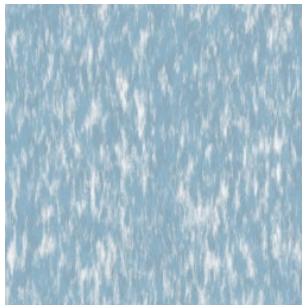
**WA08**

- Deep
- Considerable flow
- Some spray



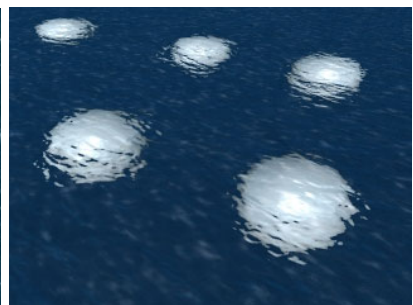
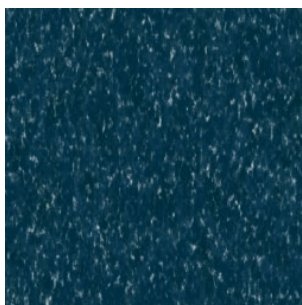
**WA09**

- Semi-deep (gray-blue)
- Considerable flow
- Ideal for waterfalls



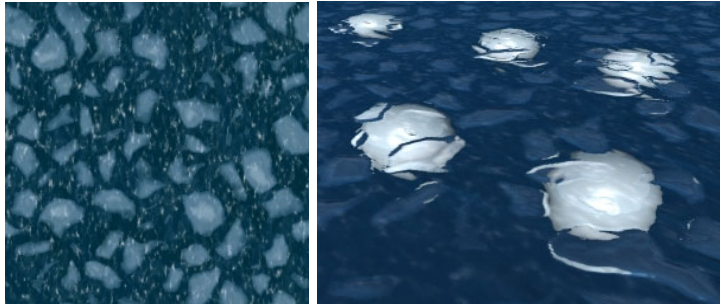
**WA10**

- Very deep
- Minor flow
- Minor spray



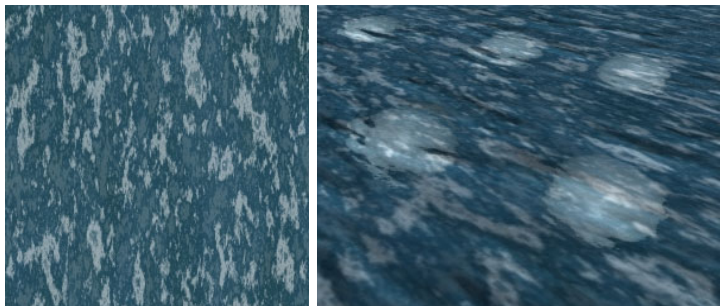
**WA11**

- Floes (ice)



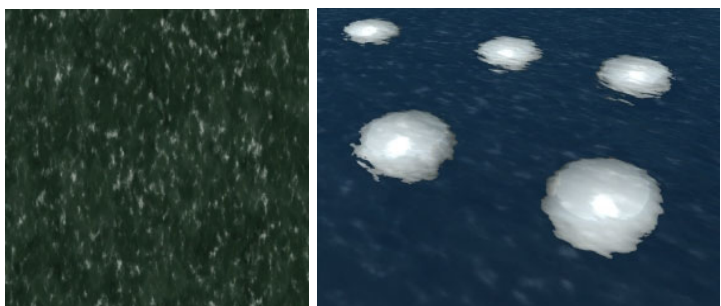
**WA12**

- Diagonal flow
- Some waves



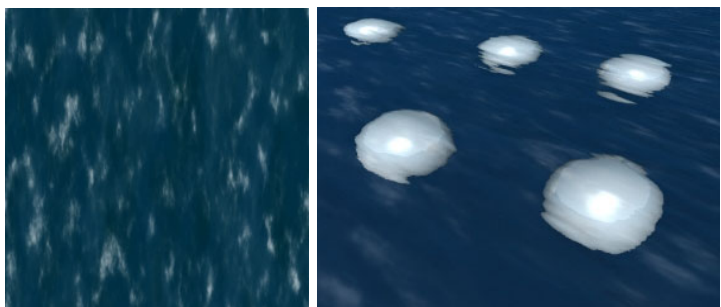
**WA13**

- Very deep (dark blue)
- Some flow



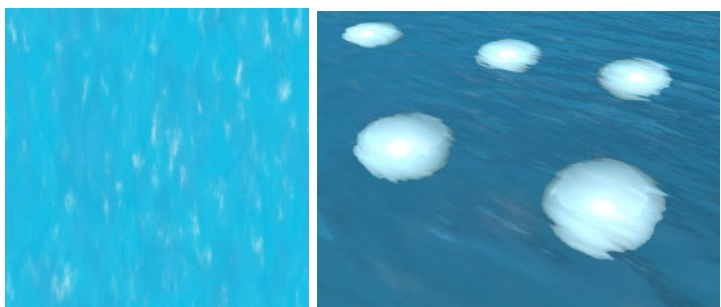
**WA14**

- Deep
- Some flow



**WA15**

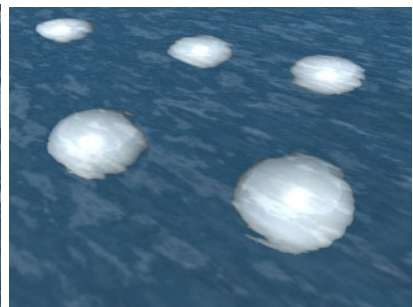
- Shallow
- Minor flow





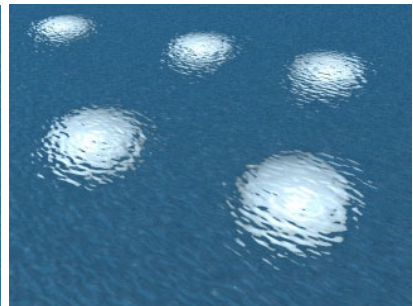
**WA16**

- Deep
- Some waves



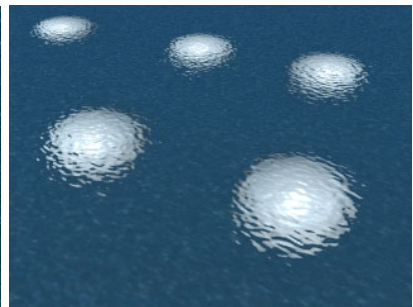
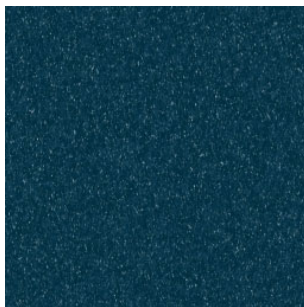
**WA17**

- Deep
- Large area
- Waves



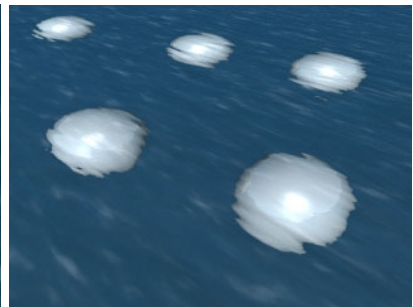
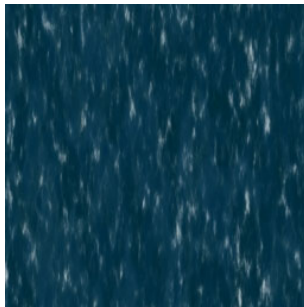
**WA18**

- Very deep
- Large area
- Waves



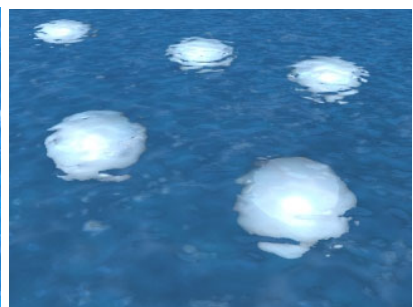
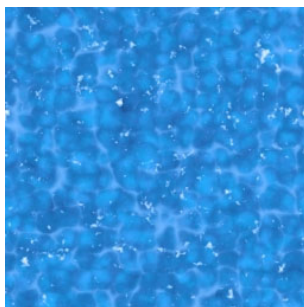
**WA19**

- Deep
- Considerable flow
- Clear



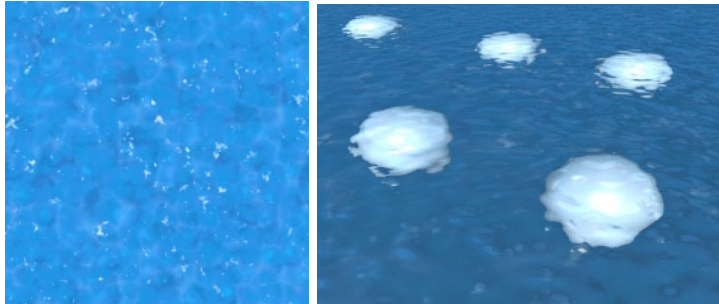
**WA20**

- Deep
- Pool
- Strong water movement



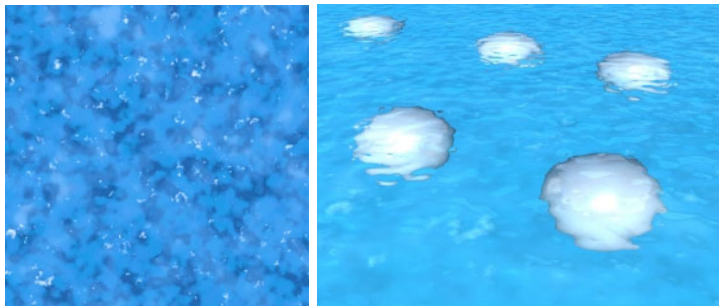
**WA21**

- Deep
- Pool
- Considerable water movement



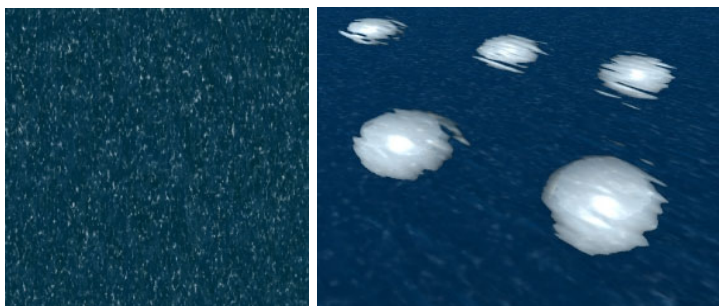
**WA22**

- Shallow (light blue)
- Pool



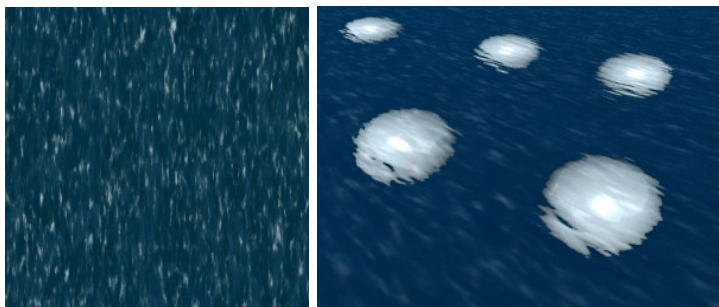
**WA23**

- Very deep
- Calm
- Minor flow



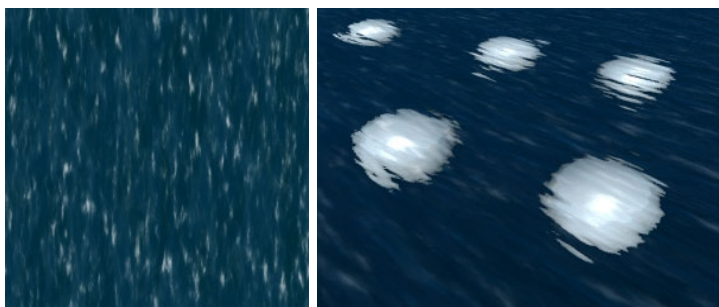
**WA24**

- Very deep
- Some flow



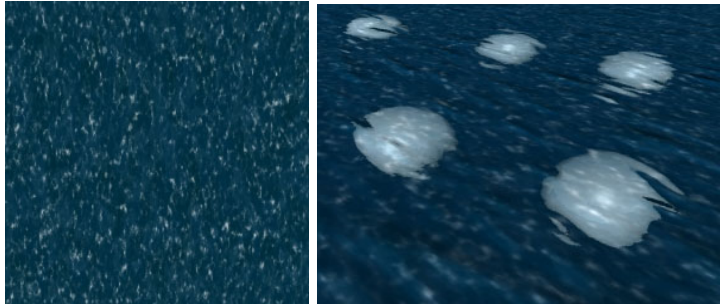
**WA25**

- Very deep
- Considerable flow



**WA26**

- Very deep
- Some flow
- Some spray



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