Making Realistic Water

Through making these tutorials I have gained even more knowledge into designing a golf course then I have previously in the last two years helping out Custom Play Games. I hope to share my knowledge along the way through tutorials and maybe some of you will in turn help out the game by designing wonderful new courses for us to enjoy for a long time to come. I have made ponds, lakes and streams before but I happen to think this creation is my finest and I'll pass it along for you all to read right now.



First off we need to draw our shape by holding down the space bar and then use the mouse to draw the shape, now let go of the space bar and select "Closed Shape". Right click on the shape and select "Edit/Edit Template" and select a suitable water bank texture, you most likely you will have to "Create New Template" unless you have one already pre-made. In this case I had one already pre-made. (Below screen) While you're at it select the second border and give that the same water bank texture using the same steps above.



In the first screenshot you probably have noticed I already had borders but were going to tell you have to add them. We now need to add a couple borders to help us with lowering of the water banks, right click on the newly created water bank texture and select "Edit/Add Border", leave it at the default of (2.00) and then right click on that border and select "Edit/Add Border" once again. This time we are going to widen it by right clicking on it and selecting "Edit/Change Border Width" and move the slider till you hit (3.00). With this done we will now move into the height layer by click on the bottom layer and select "Layers/Height"



What we need to do now is right click on the screen and select "Edit/Get Shape" and move your mouse over the main water bank texture (Above screen) and left click it. You'll notice that the shape has a red line around it, we need to turn it to yellow line since we need to use the get shape tool again and red always comes up first and unless we do this were just going to lose the red line over the water bank texture. Right click anywhere's on the plot and select "Edit/Swap Red & Yellow".



Now right click on the screen and select "Edit/Get Shape" and move your mouse over the second border we made and left click, once this is done we can now right click anywhere's on the screen and select "Edit/Swap Red & Yellow" now our red texture is on the inside and the yellow is on the outside and that's what we want since red is the primary color for elevations and the yellow is just a fall off shape.



Lets lower this outside border shape now, right click on the elevation slider to the right twice till we come to the (1) meter setting. Now place your mouse over the round icon in the middle of the elevation slider (left click) and lower it till you come to (0.65), now delete the yellow line around the outer second border.



Right click on the screen and select "Edit/Swap Red & Yellow" so that the water bank has the yellow line around it again, now right click on the screen and select "Edit/Get Shape" and highlight the first border shape around the main water bank texture and left click. Now right click on the screen and select "Edit/Swap Red & Yellow" so that the main water bank has the red line around it again and the second border the yellow. ARG, swapping red and yellow so much is very cumbersome and I wish we didn't have to go through this so much but I am not sure there is anything we can do at this point.



Now we can start lowering the main water bank texture, right click on the elevation slider twice more till we come across the (10) meter setting. Left click on the round icon and lower till we come across (2.20), we can now delete both the red and yellow lines.



Now we can get ready for the smoothing on the water bank walls, hold down the space bar and draw a shape around the area we need to smooth. Once you have accomplished that then we need to <u>ONCE AGAIN</u> right click on the screen and select "Edit/Swap Red & Yellow" so that the red line turns into yellow line. Now right click on the screen and select "Edit/Get Shape" and highlight the second outer border shape as shown in the (Above screenshot) and left click. I bet you though we were going to have to swap red & yellow again, I'll give you a break this time because it wasn't needed. ©

Lets start the smoothing process, right click inside the red line and select "Edit/Smooth (Inside Red)" now select (0.25) as the Filter Size and hit ok. Now keep the Iteration slider at the default (1) and click ok, do this a couple more times but use a Filter Size of (0.05) now and the same Iteration of (1). When you finish the outcome should look close to what I have in the (Below screenshot). I do want to mention that I have usually smoothed the walls a lot and this time I decided to not smooth as much so I can try to keep the terrain natural looking and real ponds don't have perfectly smooth borders. There's always some kind of randomness in the terrain and that's what I was trying to go for, it makes it look more natural I think. You can also see why I added the water bank texture to the first border as well as it keeps the texture on the top of the bank when lowering the (2) shapes.



Hey that looks kind of natural that way, nice job! (Ego Trip)



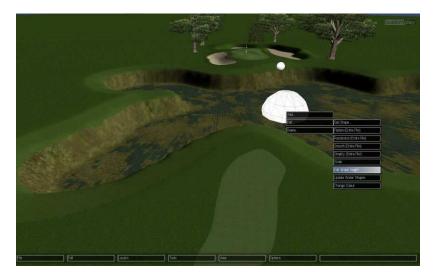
Let's add our water now, right click on the screen and select "Add/Add Water from Shape".



Now highlight the outer border shape (left click)



We want to add some color to this pond so right click on that white sphere and select "Edit/Change Colour" (yes they spelt it wrong or at least here in the states because my spell checker is having fits...lol), you can color it anyway you would like using the sliders provided.

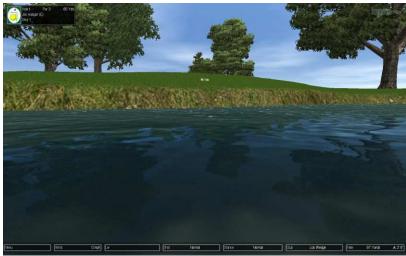


Now right click on the white sphere again and select "Edit/Edit Water Height"



Move the slider either way to find out which way you need to move it to get the water to start coming up, in my case I need to go down. Here I selected (-1.23) and it just fell short of the top of the water bank which is how I wanted it. I always like to keep it close to the top unless your course is going through a drought. Now you can go back to the surface layer (Layers/Surface) and delete the outer border shape as it is not needed anymore. I also selected the first border shape and put a blend on it "Edit/Add Blend" and then widened the blend "Edit/Change Blend Width" just enough so it would go past the top of the pond.





Here is the completed job, it's my best work yet and there's always room for improvement!