Exporting Graphics to Maya to Create an Animated Stylized River

by Alexandra Kyzer

I'll be showing you how to create a river in Maya and make it an animated texture in order to create a Stylized River that can be animated. On Symfaunic, the animated short, we plan to use this method to make our rivers in our environment come alive. In this paper, I will bring you through a step by step process of how to UV your object and prepare it for a texture in photoshop, how to bring the texture into Maya and place it on the object and, finally, how to bring it to life by animating the texture.

For example, I have placed an image below to show what it might look like before the animating.

(Example_01) below:
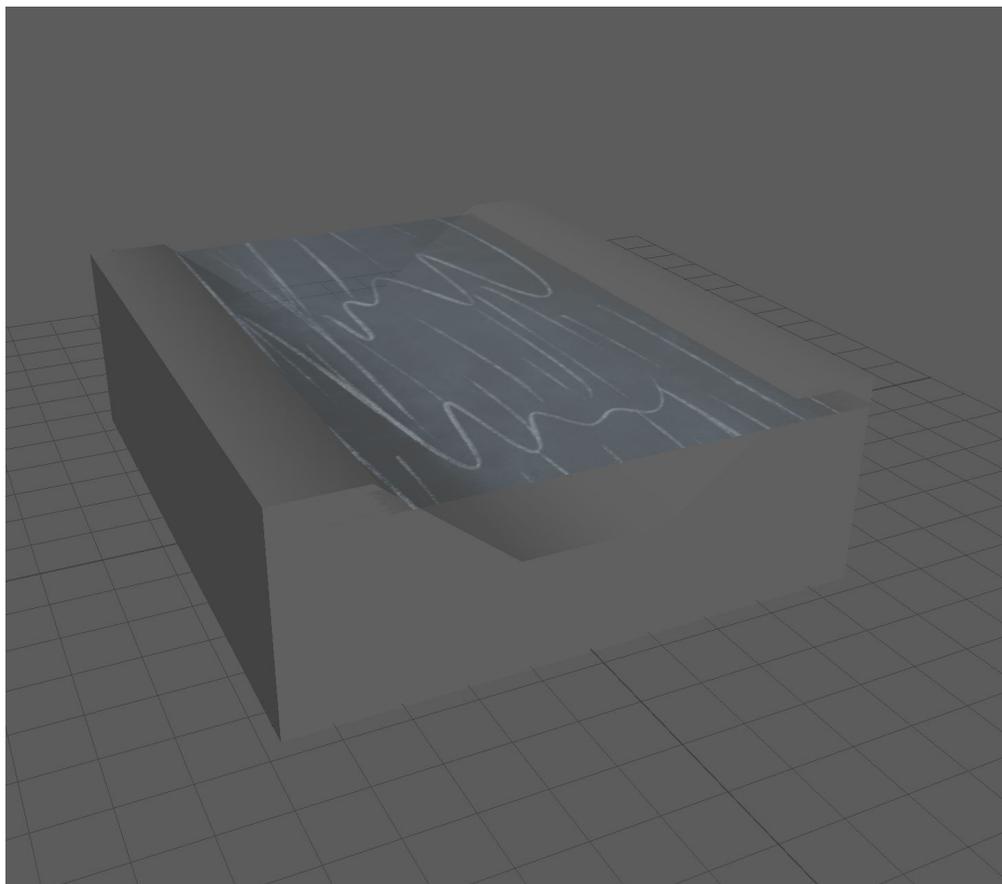
First open Maya and make sure you set your project. After that create a Polygon Cube by going to the

tool bar and find Create > Polygon Primitives > Cube > Option box. Make sure you select five sides for

the "Width divisions", one for the "Height divisions" and five for the "Depth divisions". See

(Example_02) Below:
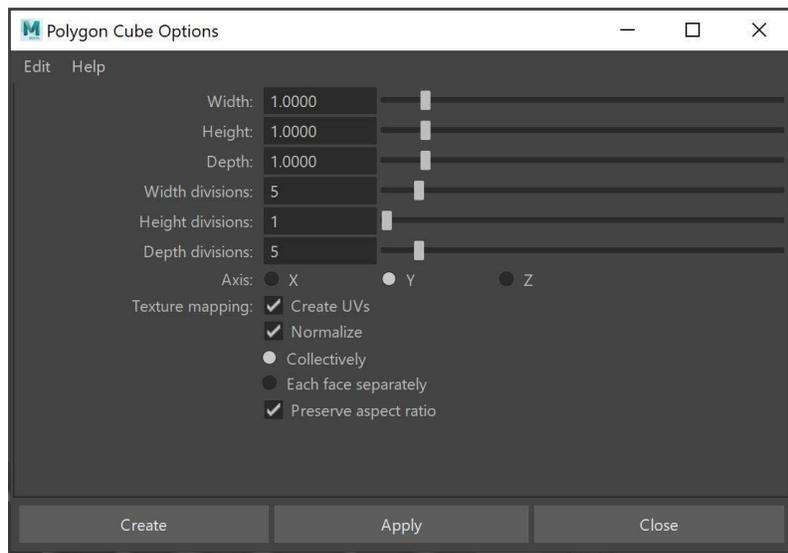

Once you have created your cube, shape it to look like the Example_03 Below:
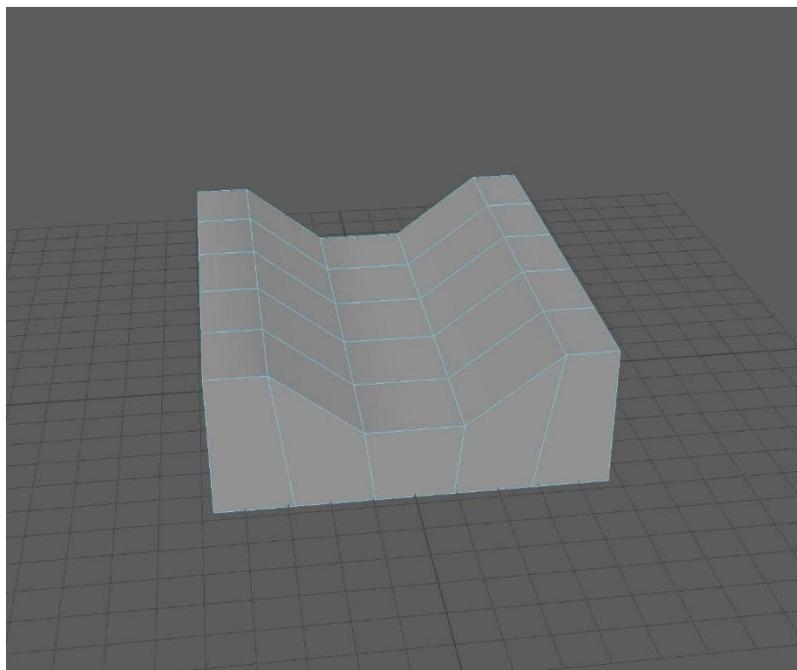
This is going to be our river bed so in the outliner on the left-side re-name it "riverBed". Next you will create a plane by going to Create > Polygon Prima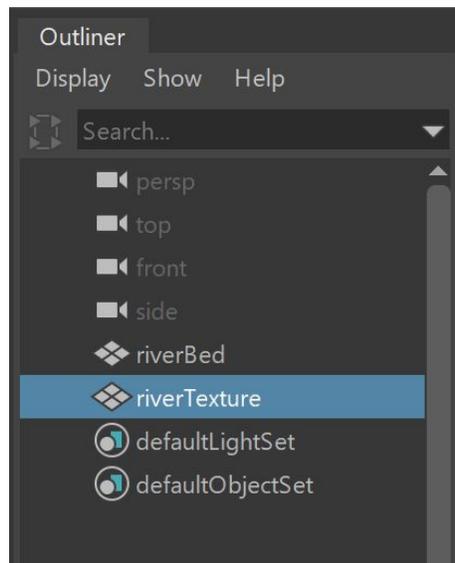tives > Plane. You will shape so it fits in the river bed. We are creating the texture that will later be animated to look as if water from a river is moving.

See (Example_04) Below:
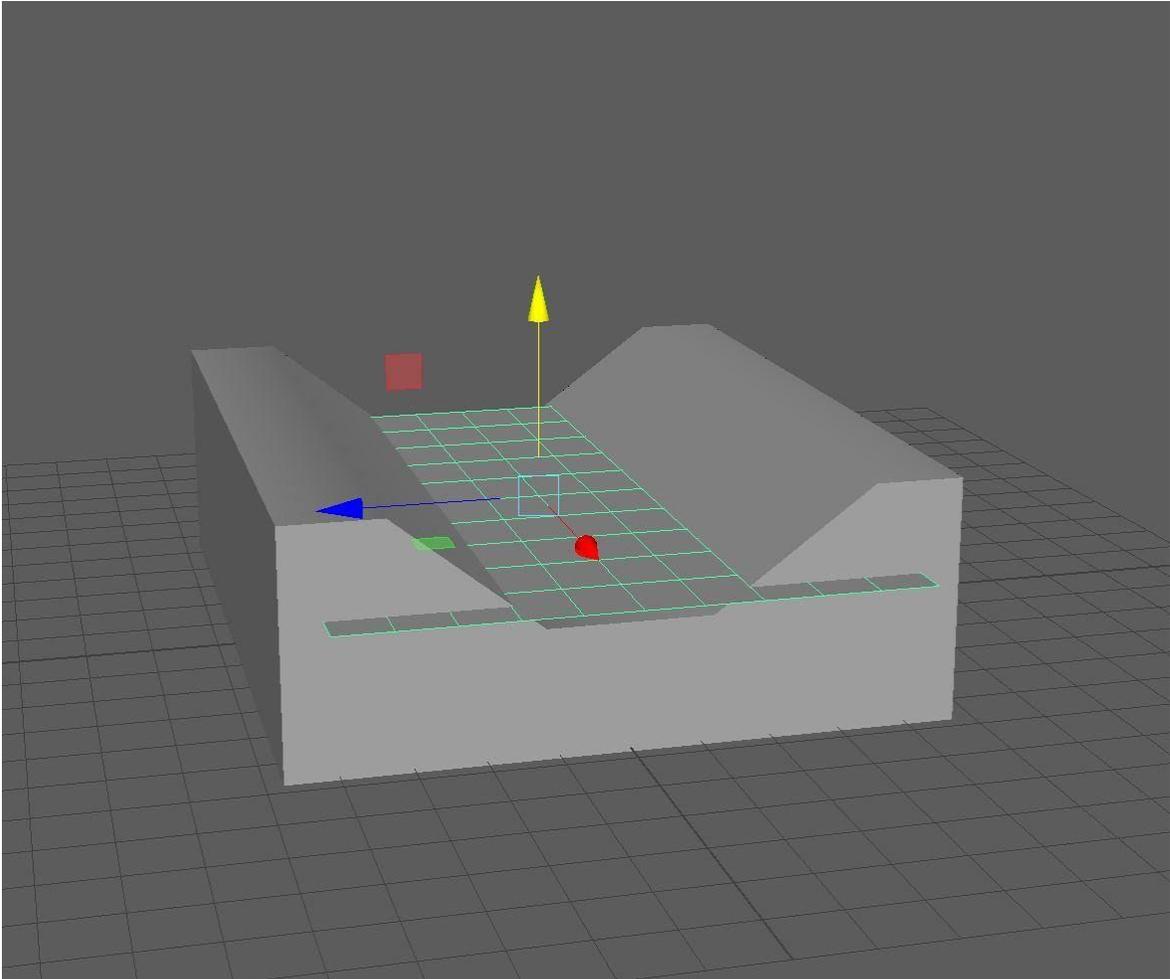
Once the layer is stacked you will need to rename is. Your outliner should look like this.

See (Example_05) Below:

The next step we are going to take is prepping our objects so we can apply a texture that we create in

photoshop. You will need to make sure that the UV is all set. To do this click your "riverTexture" plane to

select it and go to UV > UV Editor. See (Example_06) Below:
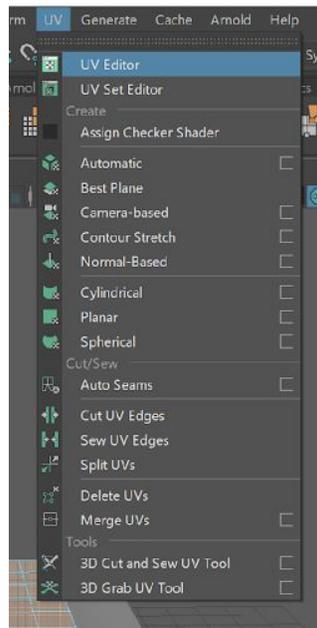
Your UV should look like this:
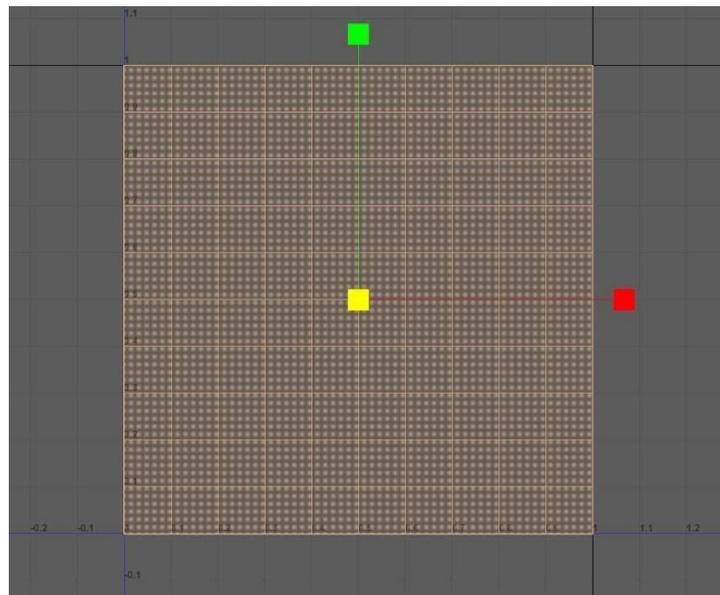
We need to fix it so when you apply the texture it isn't warped and looks how you drew it. To do this go back to your Maya scene and select all the objects. You will then need to click Edit > Delete by Type > History. After, making sure all objects are still selected, you will click Modify > Freeze Transformations. What this will do will make it so when we unfold the UV's they will stay the way we need them.

1) Now, select the "riverTexture" plane again and go back into your UV menu.

2) Right-click the UV so it is selected

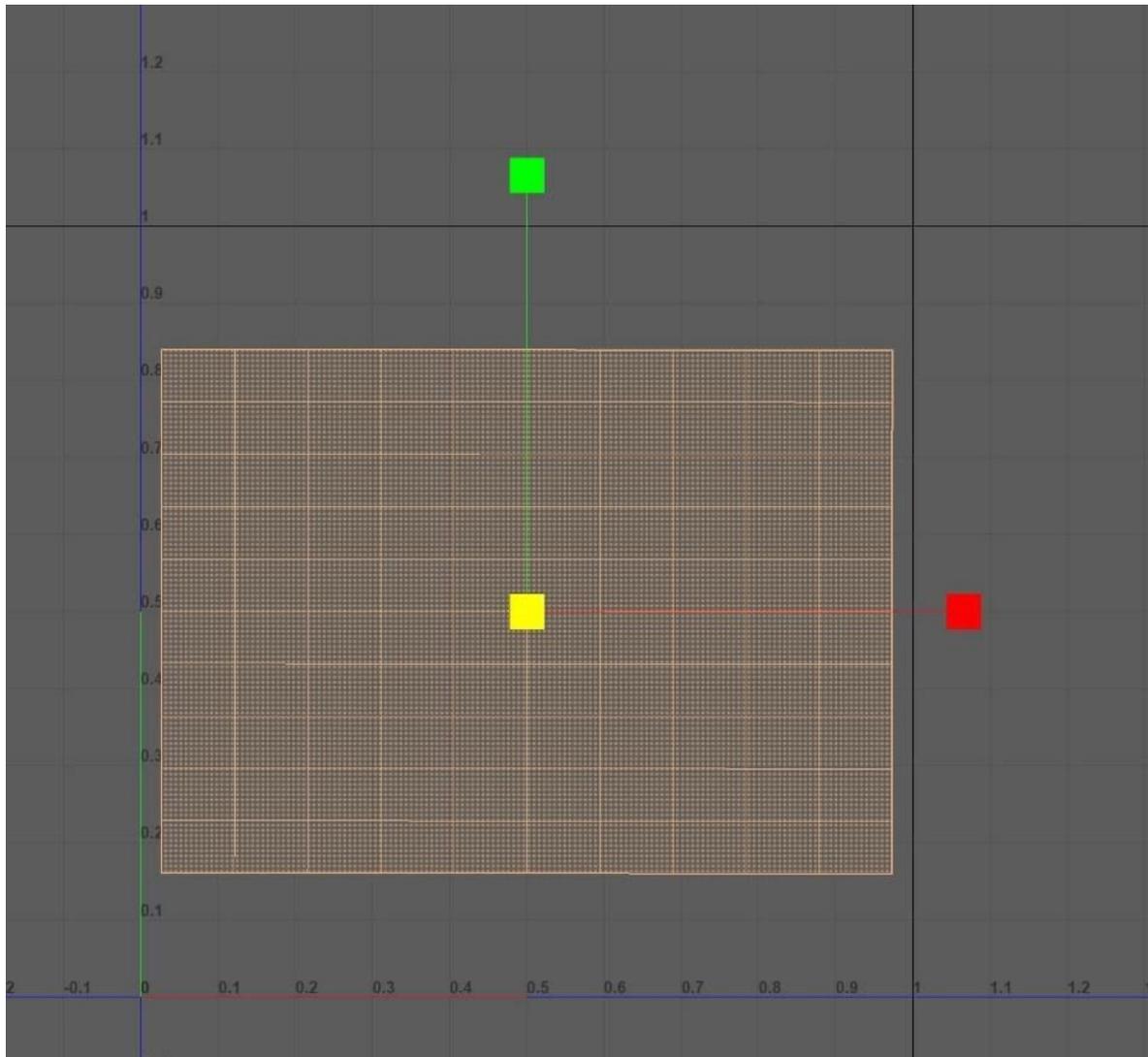3) In the "UV Toolkit" find the "Unfold" Drop down

4) Select "unfold"

See (Example_07) Below:
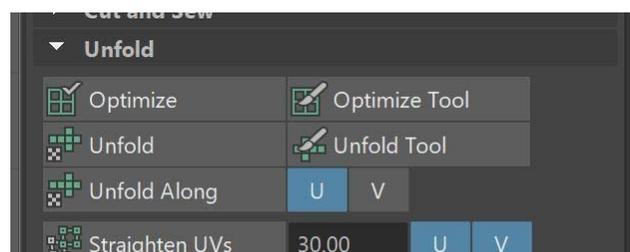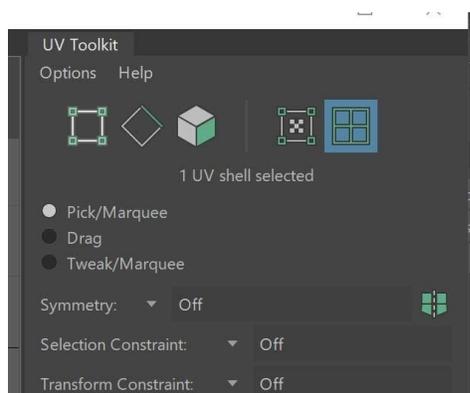
Once unfolded you will need to re-size it and rotate the UV to make sure it fits in the box.

See (Example_08) Below:

The next step we need to do is export this UV as a snapshot so we are able to line it up with a quick

animation that I did in photoshop and create the stylized texture we need.

1) In the UV Editor select Image > UV Snapshot

2) Image format should be Tiff

3) In the settings make sure you Browse and save the file to "sourceimages" folder

4) Name texture to "riverTexture" > Save

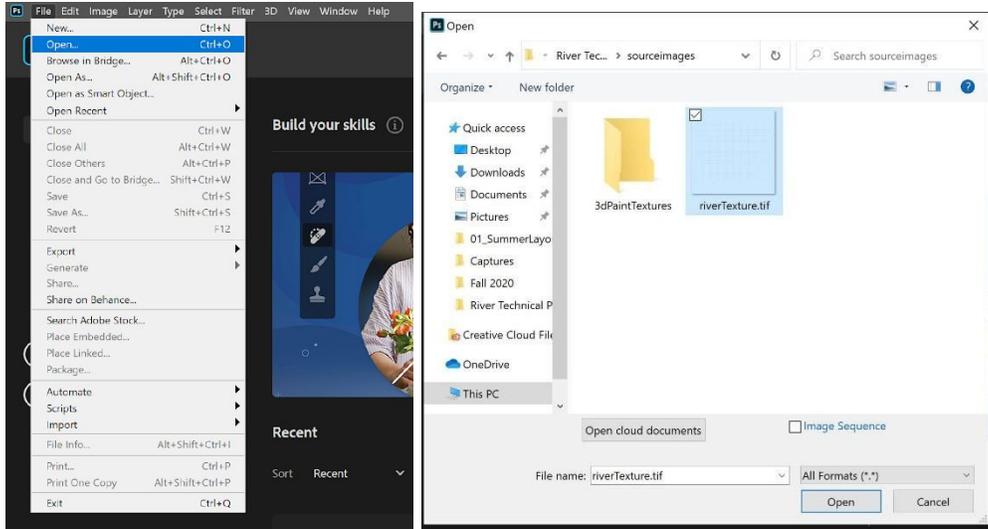5) Apply and Close

See (Example_09) Below:
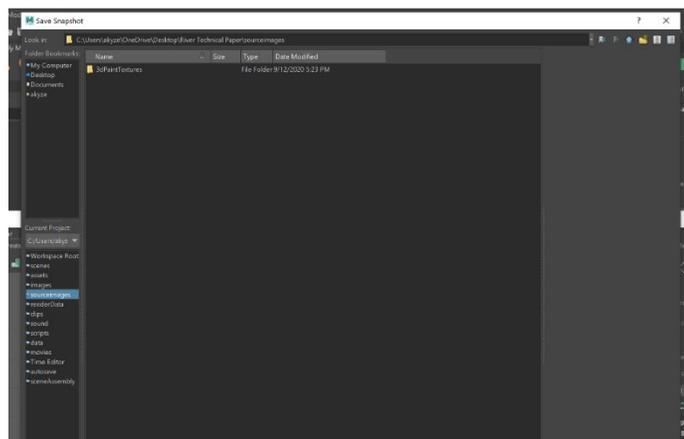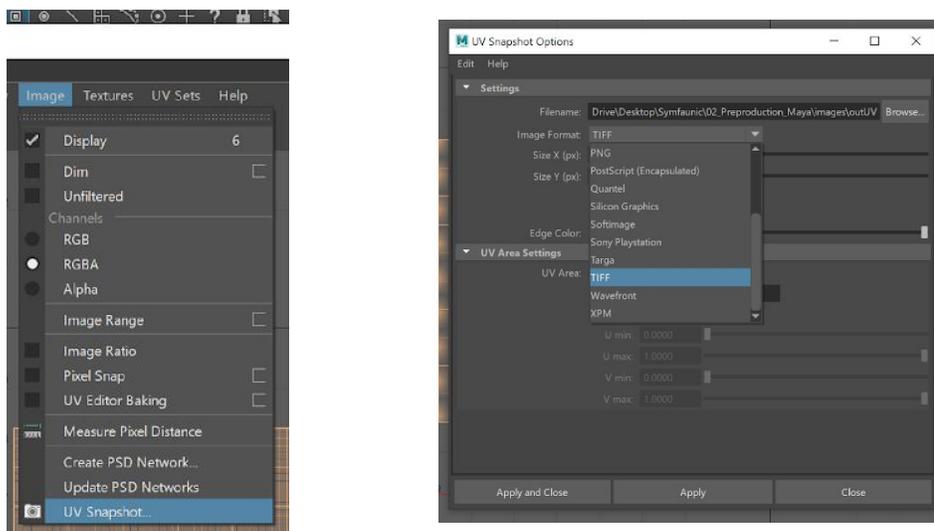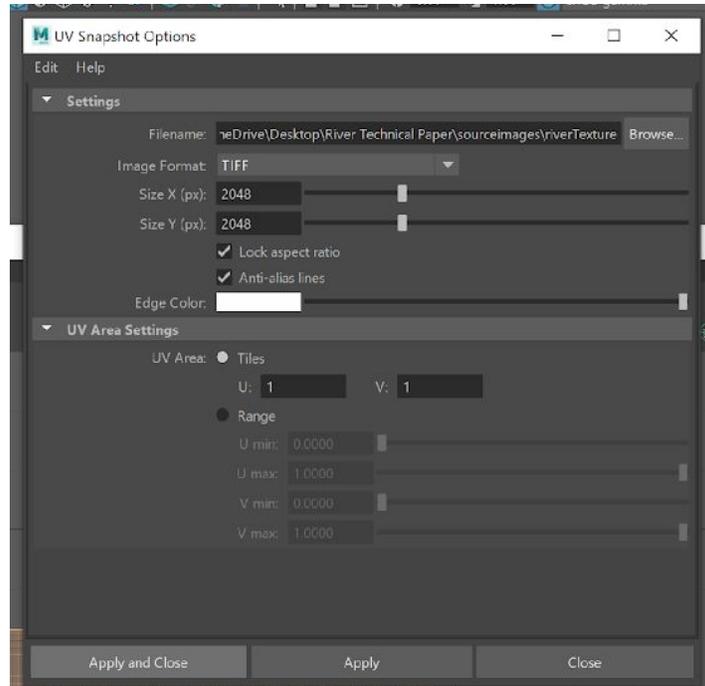
Now go ahead and open Photoshop. You might have to close Maya so your photoshop will open and process faster just make sure you have saved your work so far.

Once you have photoshop open go ahead and on the task bar find the File > Open… and find where we saved that texture.
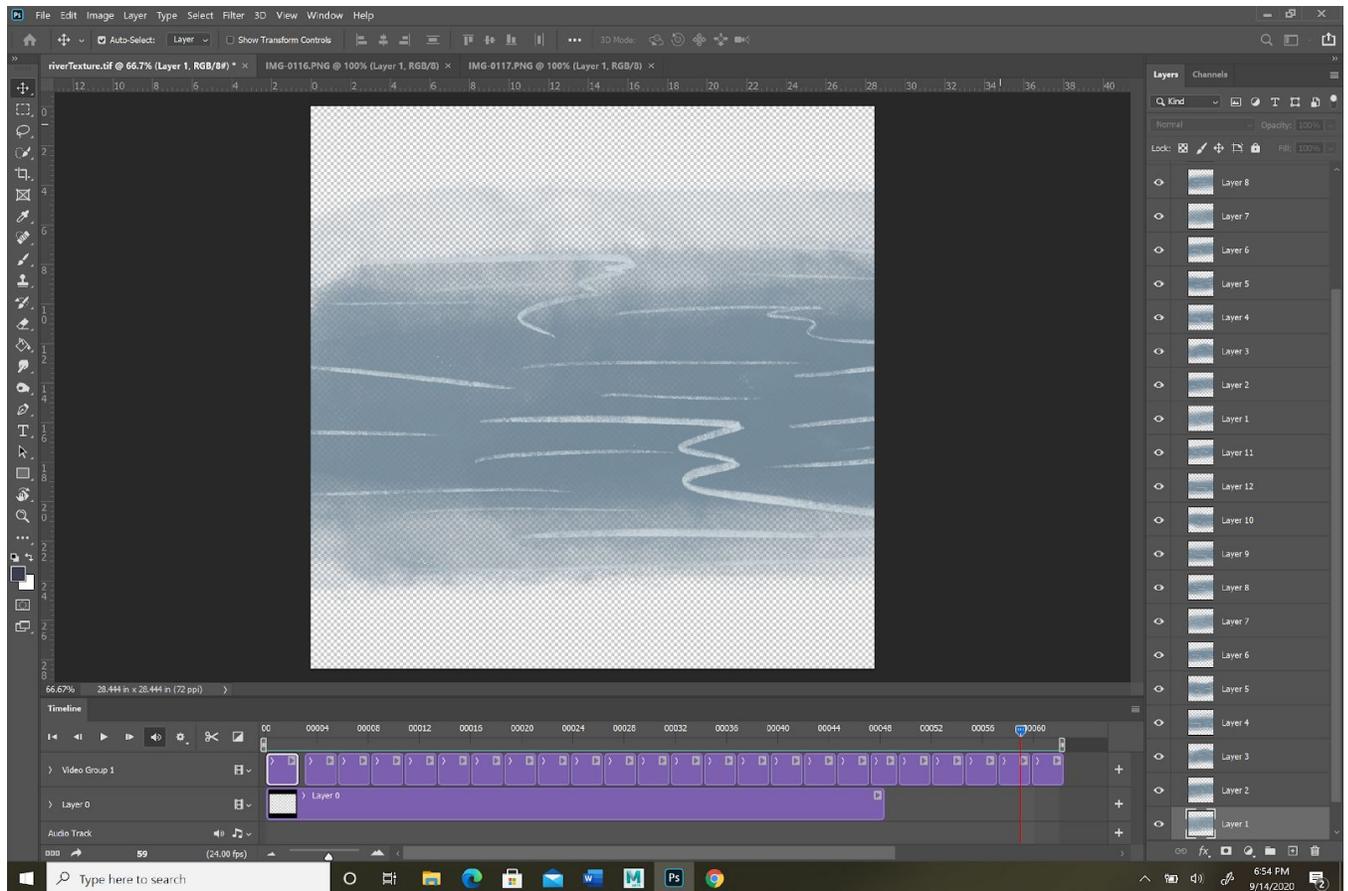
See (Example_10) Below:

You will need to create a new folder for the animation to put it's images in. Place it in your folder under > sourceimages > create new file and name it riverTexture.
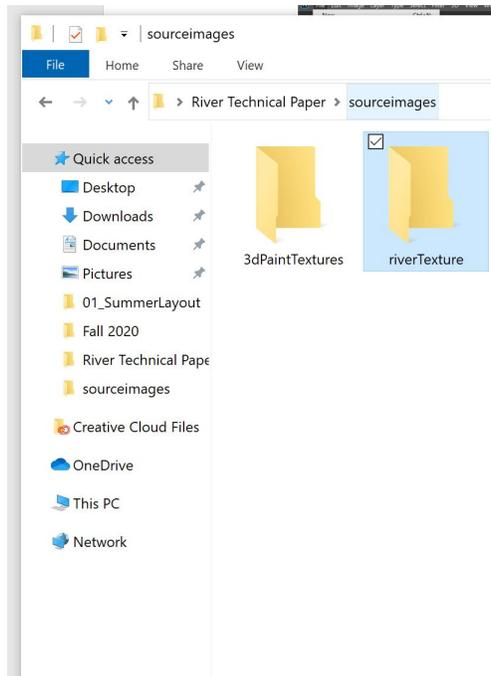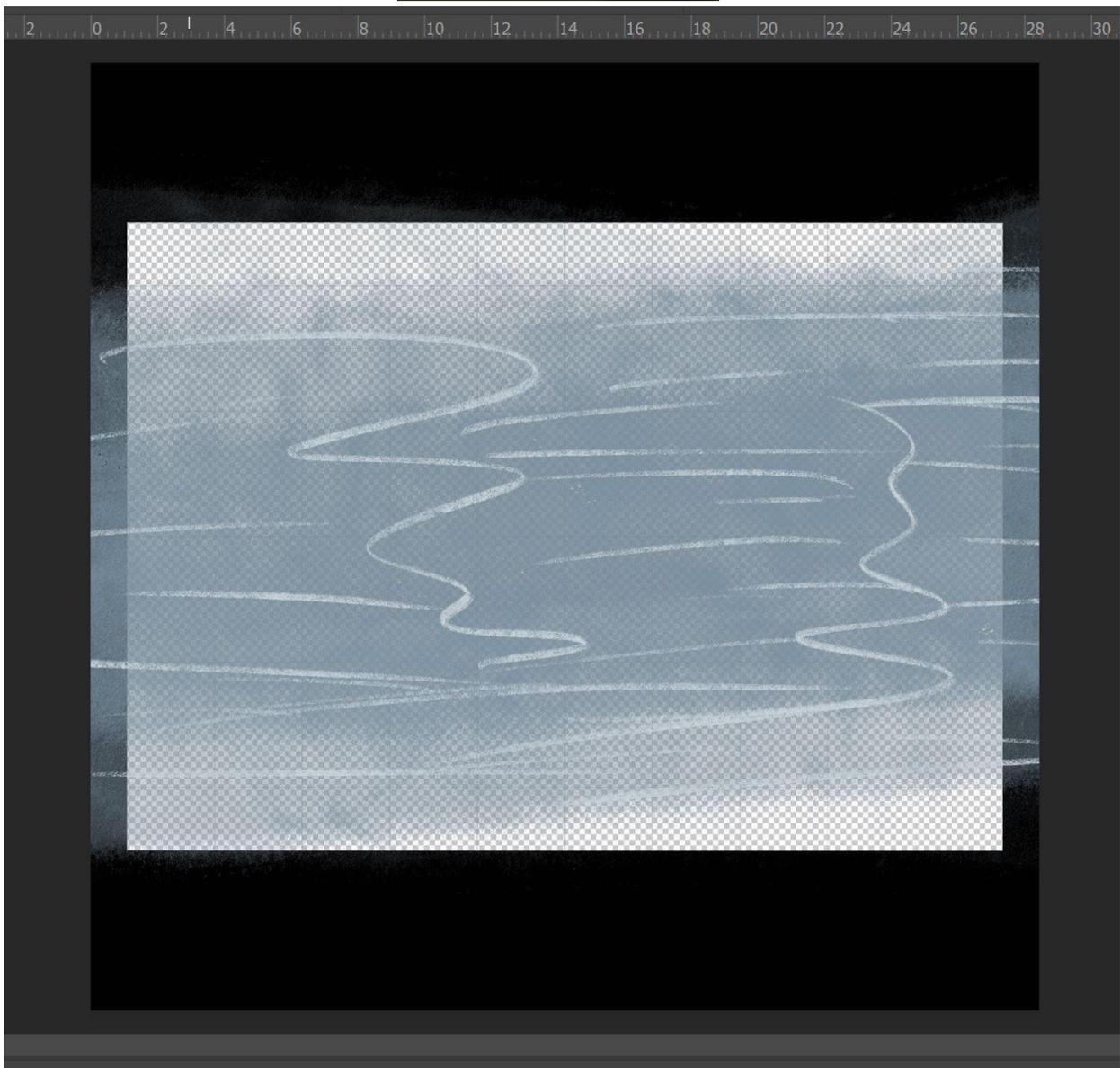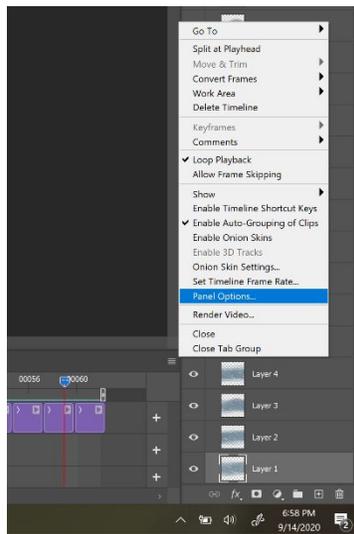
I opened an animated river that I quickly created in photoshop which is about three seconds of

movement. See (Example_0) Below:

I have taken the layers I created and lined them up with the UV snapshot we created so they will fit on

my plane. I colored the background of mine black in hopes of it being easier for you to read.

See (Example_) Below:

Go To ▶
Split at Playhead
Move & Trim ▶
Convert Frames ▶
Work Area ▶
Delete Timeline

Keyframes ▶
Comments ▶

✔ Loop Playback
Allow Frame Skipping

Show ▶
Enable Timeline Shortcut Keys
✔ Enable Auto-Grouping of Clips
Enable Onion Skins
Enable 3D Tracks
Onion Skin Settings...
Set Timeline Frame Rate...
Panel Options...

Render Video...

Close
Close Tab Group

Layer 4
Layer 3
Layer 2
Layer 1

6:58 PM
9/14/2020

Once you have your animation you will need to export it. Click the three dashes on the "Timeline"

toolbar > Render Video..

This little window will pop up and you will need to make sure that the correct presets are picked. You

will need to make sure that you select "Photoshop Image Sequence" as well as PNG. You can also use a

Targa or Tiff. After we will need to select where the images will be saved.
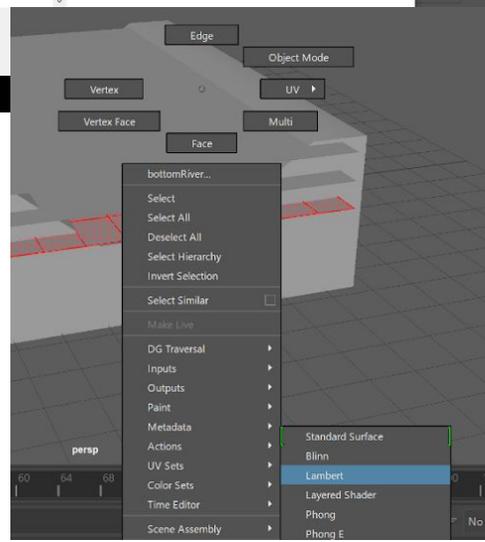
See (Example_) Below:
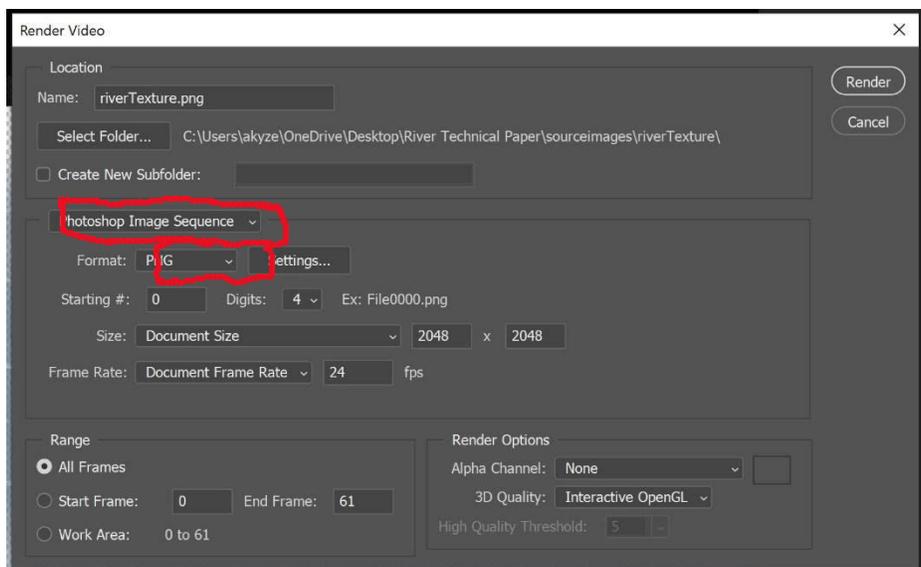
In the same window Select Folder and create a new folder by clicking

Select Folder…> sourceimages > New Folder > "riverTexture" > Select Folder
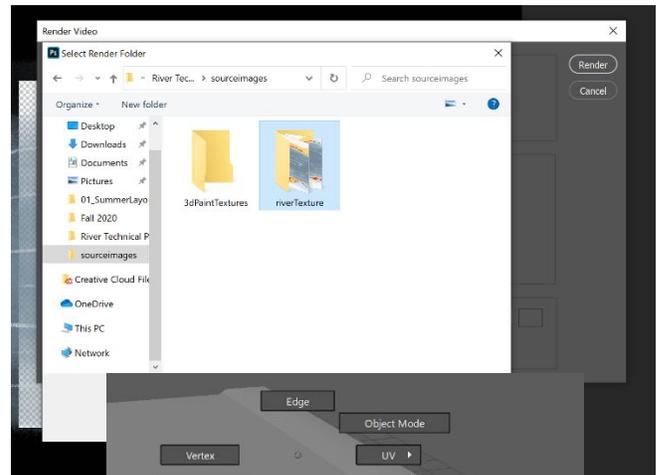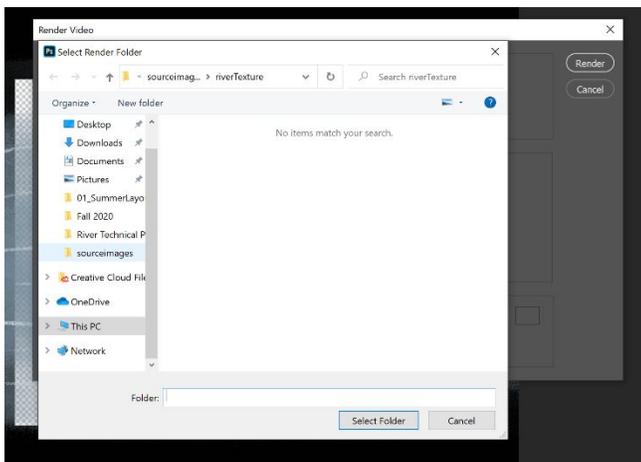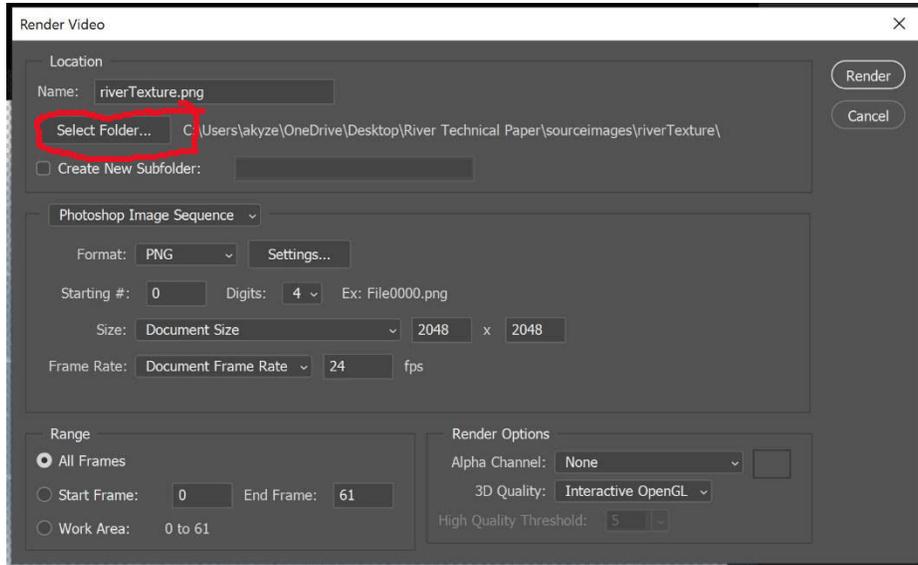
After you have saved all of your textures and name

them correctly you can go ahead and close photoshop and

re-enter your Maya project.

1) Once back in your file, in object mode, right-click hold the "riverTexture" plane

2) Hover to"Assign Favorite Material" > "Lambert"

Now that we have assigned a material to it we are able to apply the texture we created in Photoshop and add it to the objects.

Click the "riverTexture" plane again and on the right-hand side in the "Attribute Editor" you will see a tab that say "lambert2". It might be a different number but as long as it doesn't say "lambert1" you have successfully applied a texture. Find the checkered box to the right of the "Color" attribute is what you are going to select.
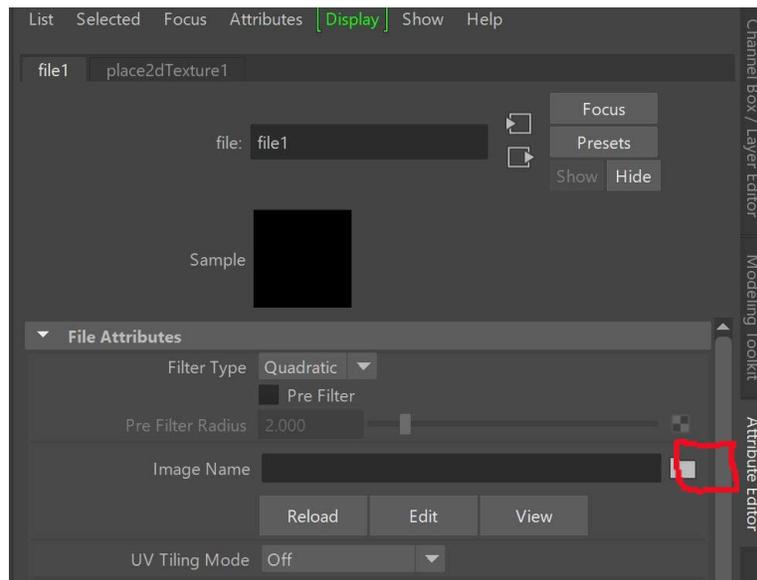
See (Example_16) Below:
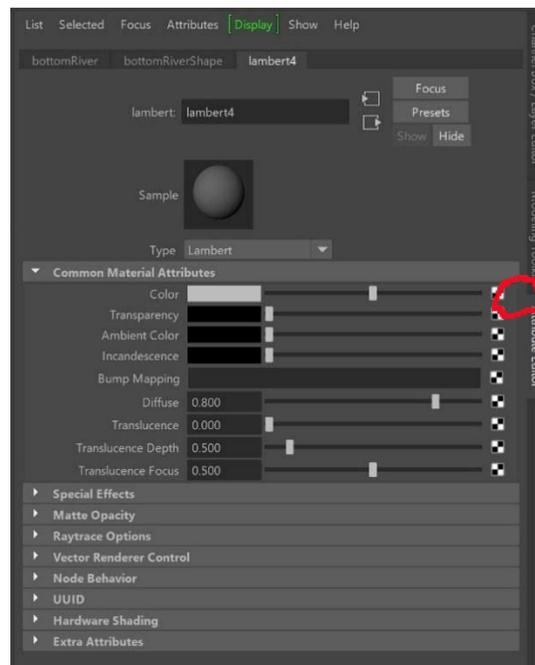
It'll will bring you to this   pop up which you are going to select "File".
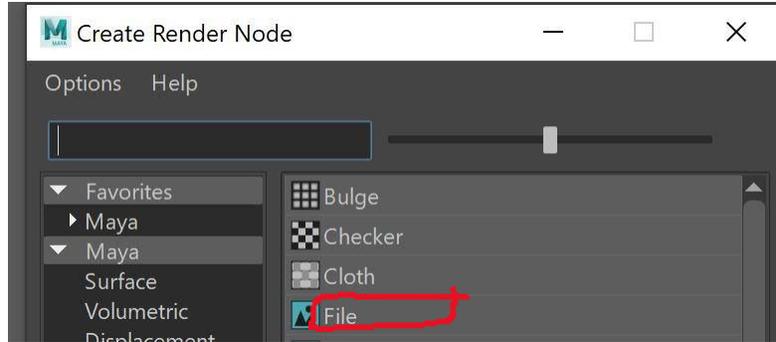
In the Attribute Editor box you will need to select the file looking button.

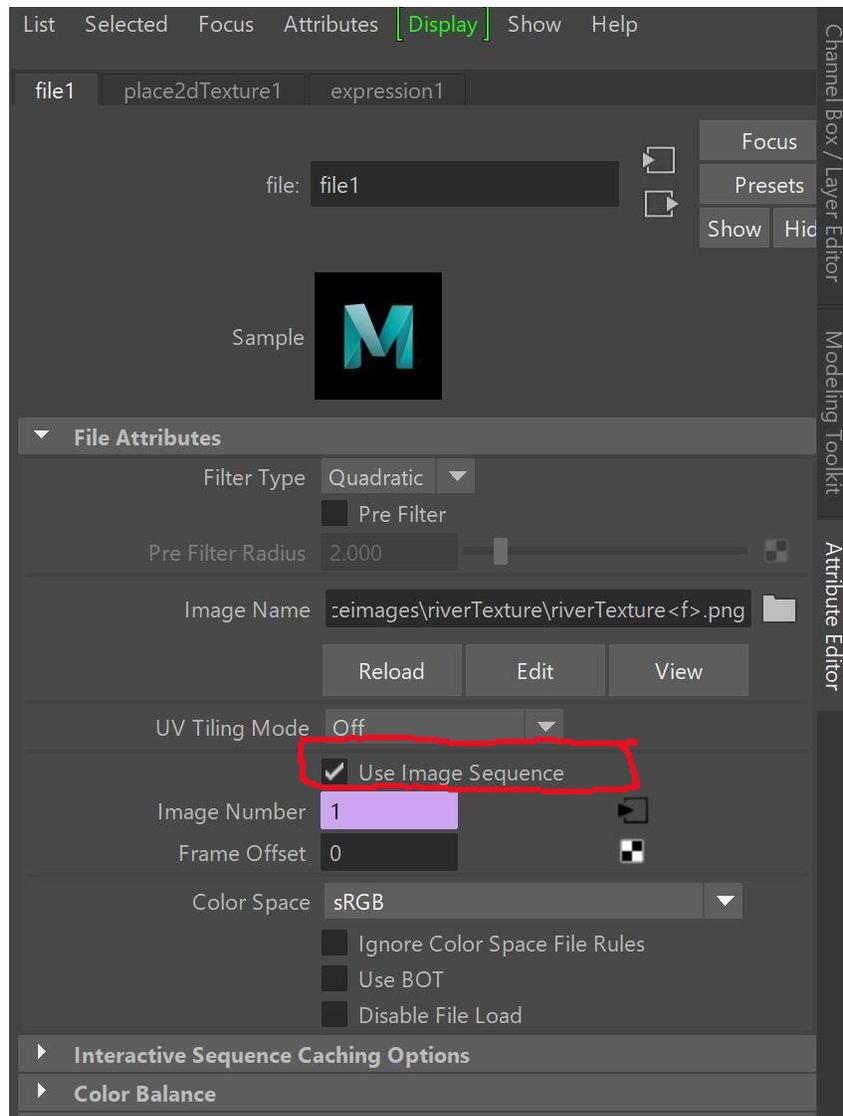Find the folder that we created in soureimages named "riverTexture" and select the first photo and

Open

See (Example_17) Below:

Once you see your image on your plane go to your Attribute Editor and Click "Use Image Sequence".

I added two more layers of the texture and edited the speed to be different in each one in Adobe Premier. By doing this I got different variations of the water movement.

Then click your Animation tab and hit play! There you should have a stylized river using an animated texture! Happy animating!