Wetmaps in Houdini

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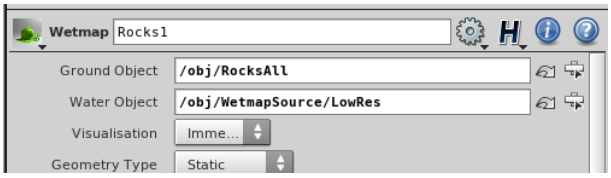
This is an overview of the process how I made wetmaps for my project. It is very useful, and incredibly easy. I only go over the basics of how to use it, but feel free to further explore the method.

1. Watch Peter Quint's wetmap tutorial (https://vimeo.com/52290971). It will give you a good understanding of how they work inside of Houdini. You also must create your own shader like how he does in the video.

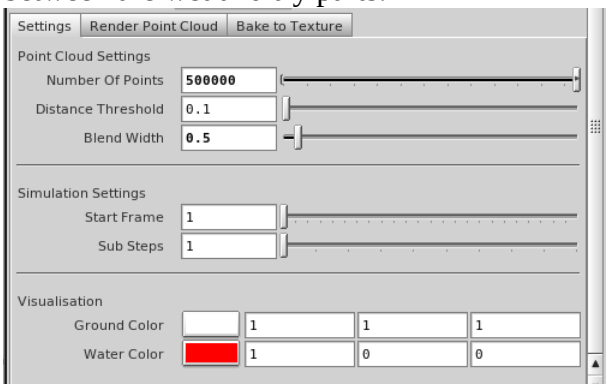
2. Download Julian Davidson's Houdini Wetmap asset (http://www.orbolt.com/asset/Julian_Davidson::jnd_wetmap::1.0). Disregard the comment, from what I have tested it works perfectly in H13.

3. Install the digital asset into your Houdini scene.

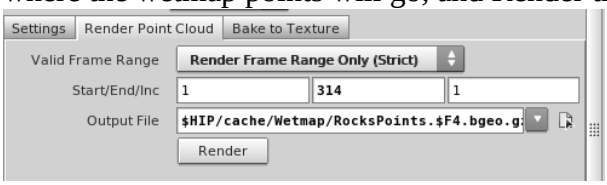
4. Assuming you have your geometry already created and your water simulated and cached out, select the appropriate nodes for your Ground Object and Water Object. I merged groups of my geometry (such as all of my rocks) together into a node on the object level, and used a low detail version of my water so that it will run quicker. Keep in mind that unless the Visualization is changed from Immediate, you will only see the wetmap created at the specific frame, and not over time.



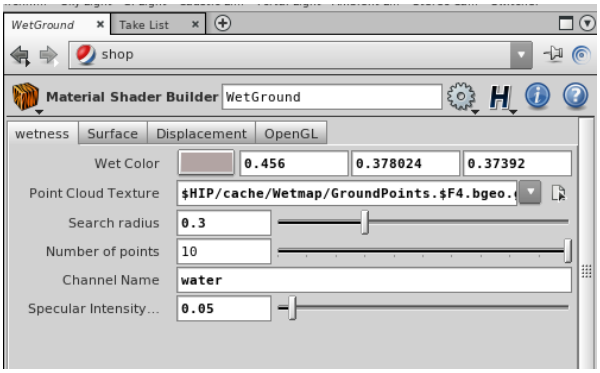
5. This should create points around your geometry. To increase the detail of these points, increase the Number of Points. This will increase the accuracy of where your wetmap is created, at the expense of longer simulation times and larger files. Increase the Distance Threshold to increase the distance of your wetmap, and the Blend Width to create a smoother transition between the wet and try parts.



6. If play through your timeline, you should see your water changing points from white to red. You now need to cache this out to use in your wetmap shader. Select the range and output file of where the wetmap points will go, and Render them out.



7. Assuming you followed Quint's tutorial, plug your newly created wetmap points into your Point Cloud Texture in your wetmap shader. You may have to increase Search Radius so that the shader will pick up on the wetmap points. Also it is ESSENTIAL to use "water" as your channel name. Unlike how Quint used an attribute named "wetness" to spread the wetmap's influence, this asset uses "water". You can see it in the details view for the wetmap points.



8. Lastly, change your Wet Color and Specular Intensity to how you want your wet shader to look like. You can also do other attribute, but from what I tested with you can get a good looking wet texture from these. Changing the Wet Color will affect your textures.

If this process does not work for you, please hit me up. I was unable to spend enough time to explore the Bake To Texture tab in the asset, and you will need to do a lot more steps to get that working.
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