

Learning Guide

Landscaping and Water Features in Unreal Editor for Fortnite

Introduction

Landscape features such as mountains, variations in terrain, and bodies of water can make a 3D environment more visually interesting. This Guide will show you how to use basic tools in Unreal Editor for Fortnite (UEFN) to create a custom landscape on your Fortnite island.

Video Learning Guide for this Lesson

<https://www.youtube.com/watch?v=nDCbAVXLqJw>

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Prior Knowledge Check

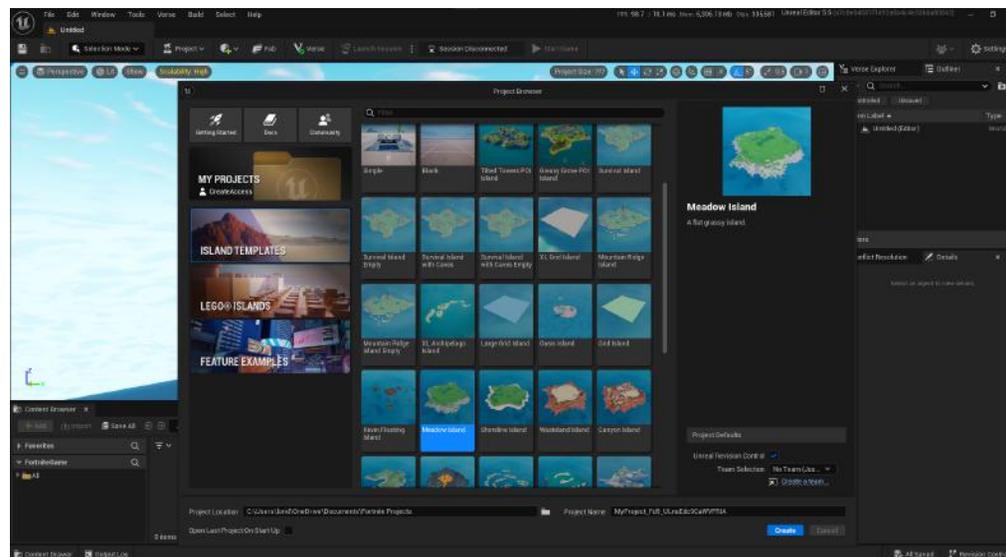
To successfully complete this lesson, you should be familiar with the basics of the UEFN User Interface and be comfortable navigating in UEFN. Take a look at the [Unreal Editor for Fortnite User Interface Basics](#) to familiarize yourself with the interface.

You can also use the [Epic Games Documentation](#) for more detailed information on the UEFN User Interface.

Getting Started

Access an existing project in UEFN, or set up a project by choosing an island template, naming your project, and clicking “Create.”

If you are interested in building a terrain for your island from scratch, start a project with the “Blank” or “Grid” template. If you’d like to adjust or add to an existing landscape, pick any of the other template options.



Step 1: Create terrain

Preview

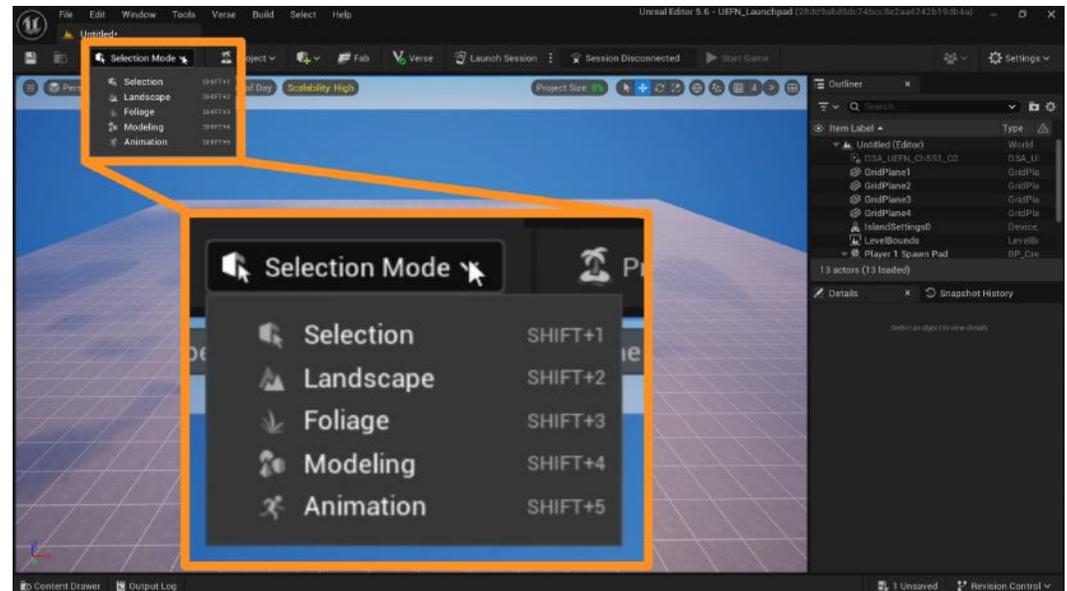
The first step to building your own landscape on a Fortnite island is to create terrain on which you can sculpt. This step is mandatory if you are starting a **blank project** in UEFN. If you chose a template that is already populated with terrain, *you can skip this step*.

Experiment

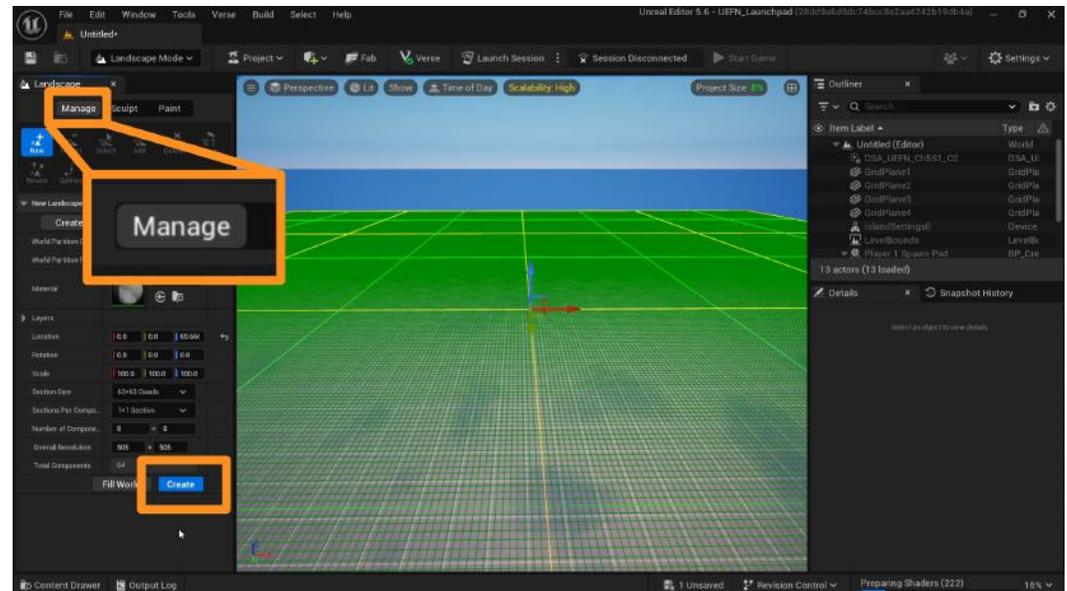
CREATE A BASE TERRAIN

To create terrain on your blank project, start by accessing **“Landscape Mode”** from the “Selection Mode” dropdown in the top menu.

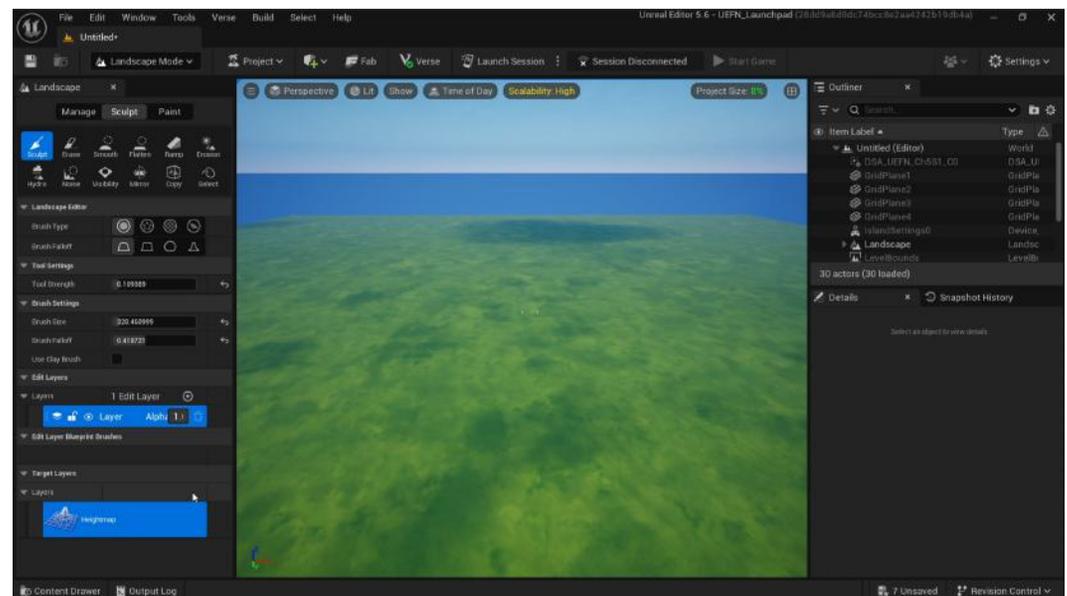
You will see new tools and features accessible through Landscape Mode.



On the menu panel on the left, make sure you're in the **Manage** tab. Click on **Create**, keeping the default settings.



This process might take a few seconds. When complete, you will see a new, flat terrain over your island with the default grass texture.



Step 2: Use landscape tools to customize terrain

Preview

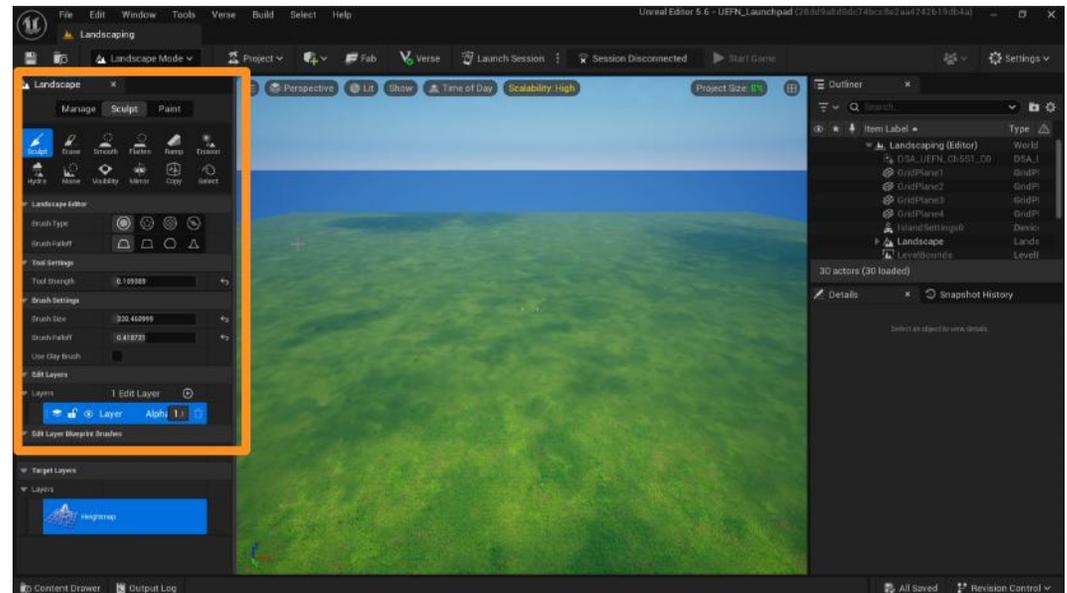
The tools discussed in this step will help you create nearly any type of landscape you want for your island: mountains, valleys, caves, canyons, etc. You can use these same tools and strategies to edit existing terrain on a template that already has some landscape features.

Experiment

BUILD YOUR LANDSCAPE

Within **Landscape Mode** are a variety of tools that allow you to create and change the features of the terrain on your island.

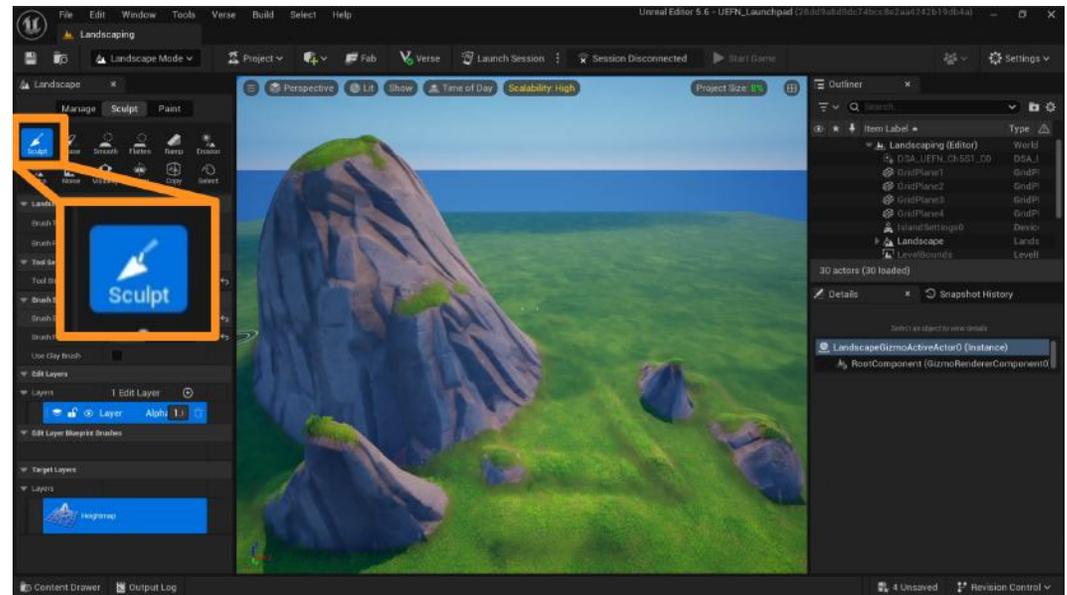
All these tools can be found under the **Sculpt** tab on the left Landscape menu. As the name implies, you will be using different tools to “sculpt” the landscape of your island.



The first option in the Sculpt tab is the **Sculpt** tool.

The **Sculpt** tool will build on top of the terrain of your island. To use it, hover your mouse over a part of your island, and click and drag your cursor over the terrain surface.

The landscape will change and grow based on the movement of your mouse.

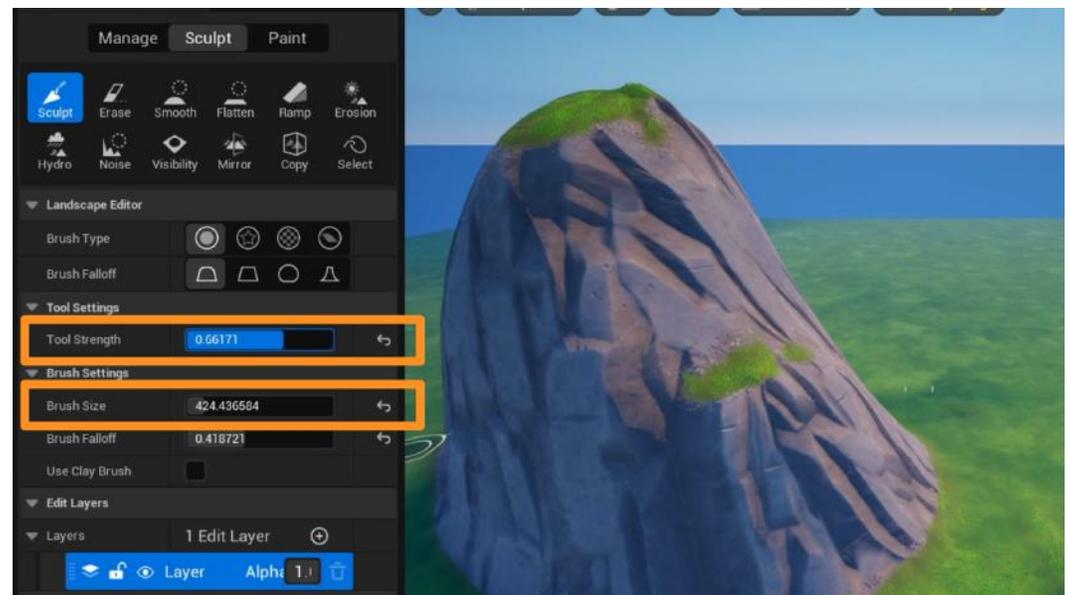


Most tools in the Sculpt tab work as brushes. In this menu, you will see a multitude of options to change the brush's settings, such as the shape, softness, size, and strength.

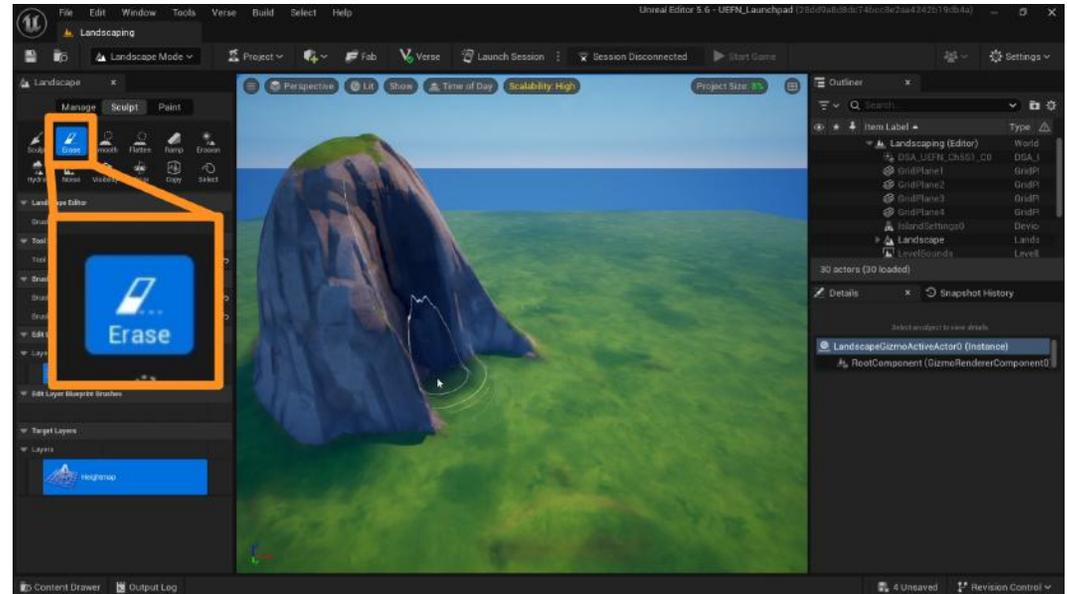
Brush Size will change how big of an area your cursor affects while using the landscape tools. A larger brush size will cause a larger area to be affected.

Tool Strength will change how little or how much the landscape changes when the tool is being used. A small number might not change the landscape much, while a larger number will cause your landscape to change rapidly.

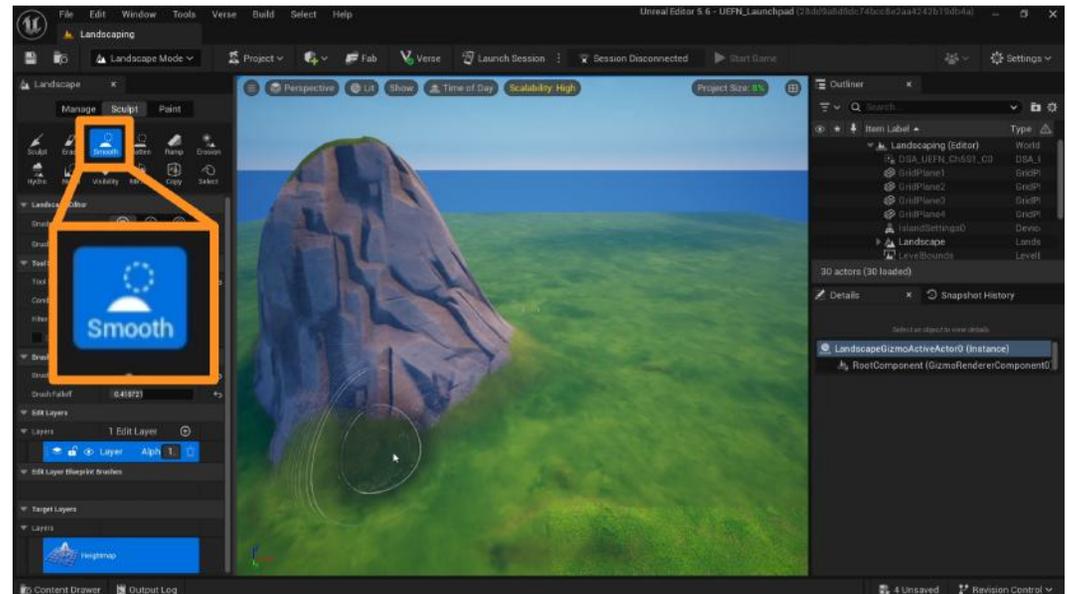
Explore additional brush settings in the Sculpt tab to build your desired landscape.



The **Erase** tool works like the opposite of the Sculpt tool and will remove terrain where you click and drag your cursor.

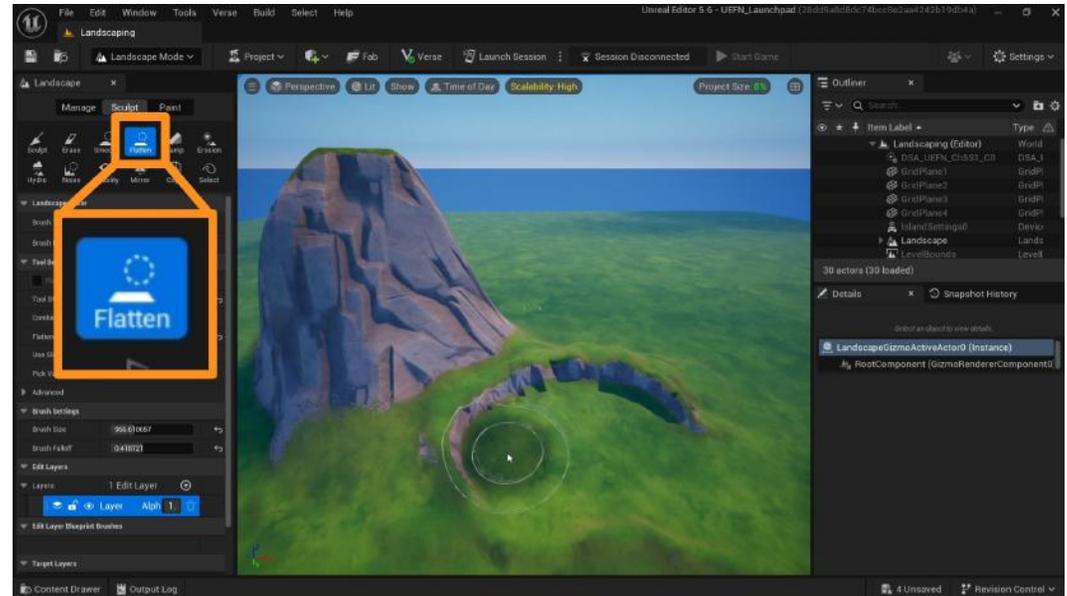


The **Smooth** tool will smooth out the height of your terrain based on the surroundings. This tool can be useful if you have jagged edges on your terrain and want to make them softer.



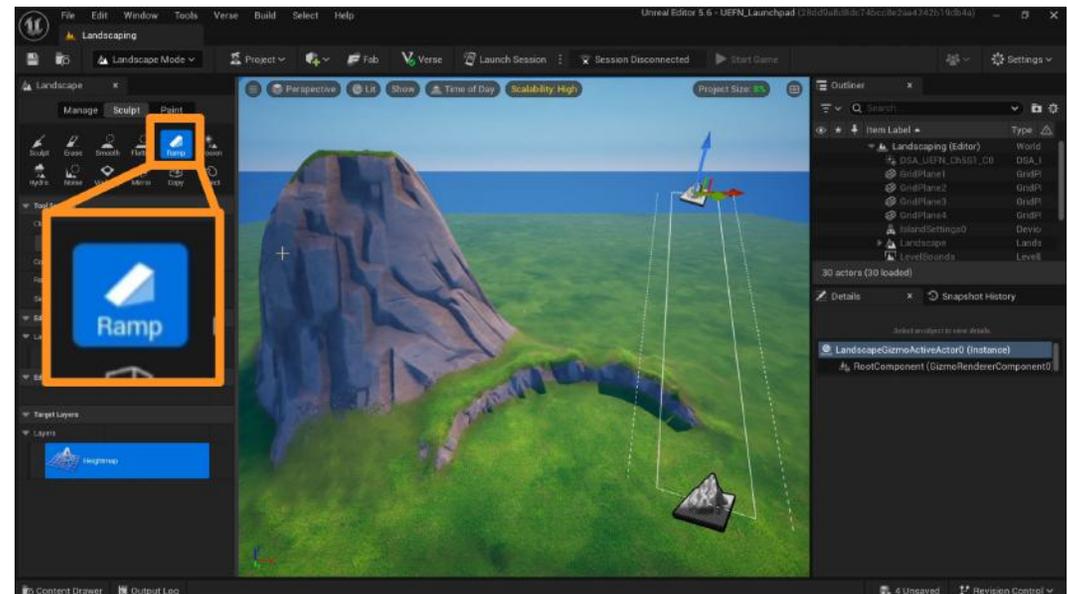
The **Flatten** tool will create a flat surface on your terrain where your cursor is placed.

The size of the brush is important when using the Flatten tool. If you'd like to flatten a large part of your terrain with a lot of height difference relative to the surrounding area, make sure to use a larger brush size.

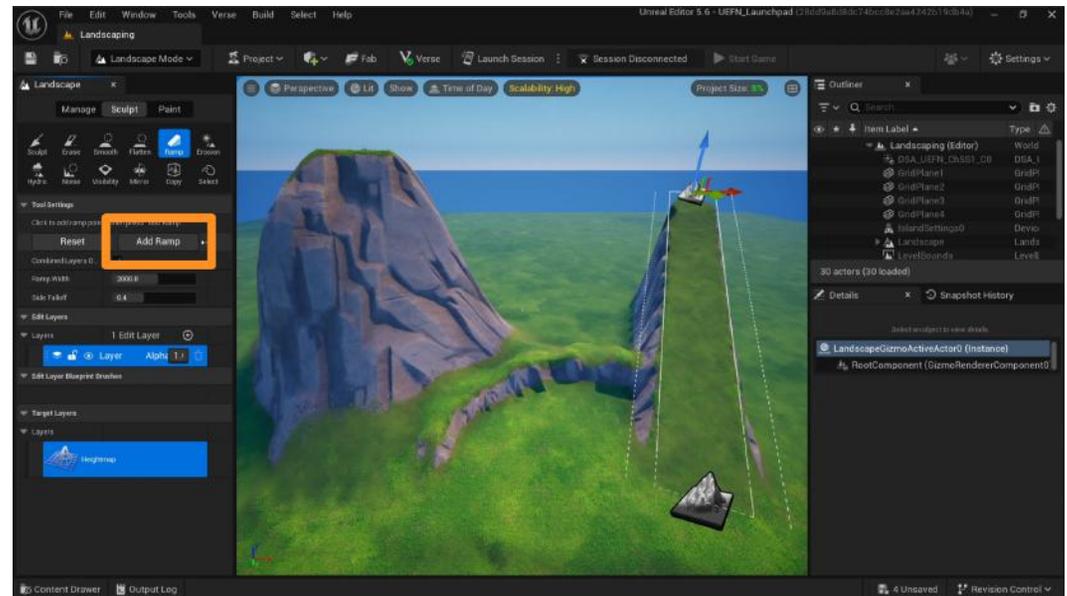


The **Ramp** tool is one of the few tools that does not work like a brush. To use this tool, click somewhere on your island where you want the ramp to start, and then click on the place where you want the ramp to end.

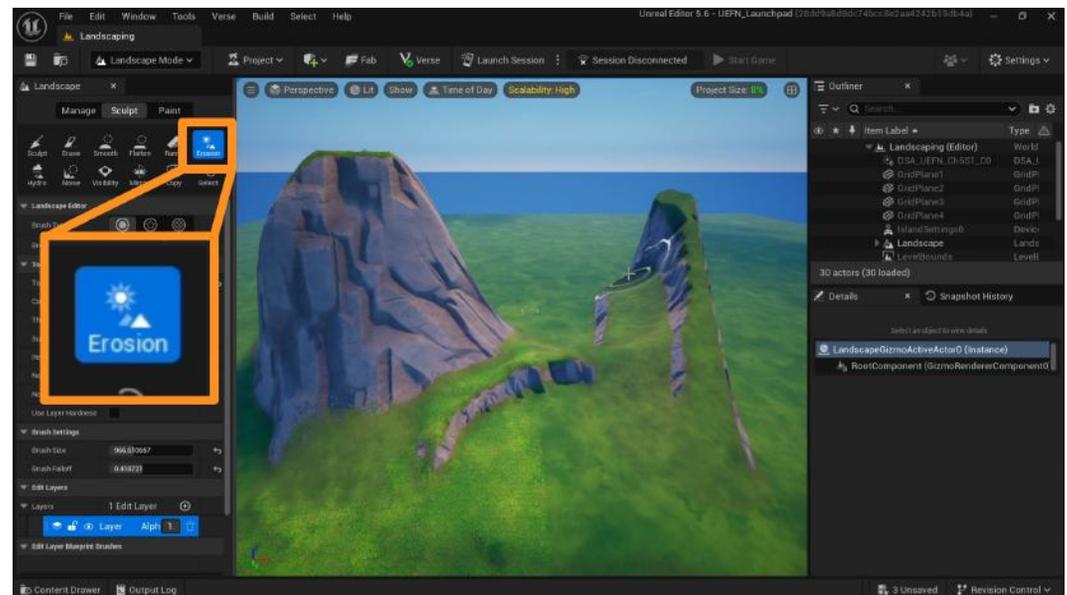
Before creating the ramp, you can move these points by clicking on the icons on the viewport and using the move gizmo.



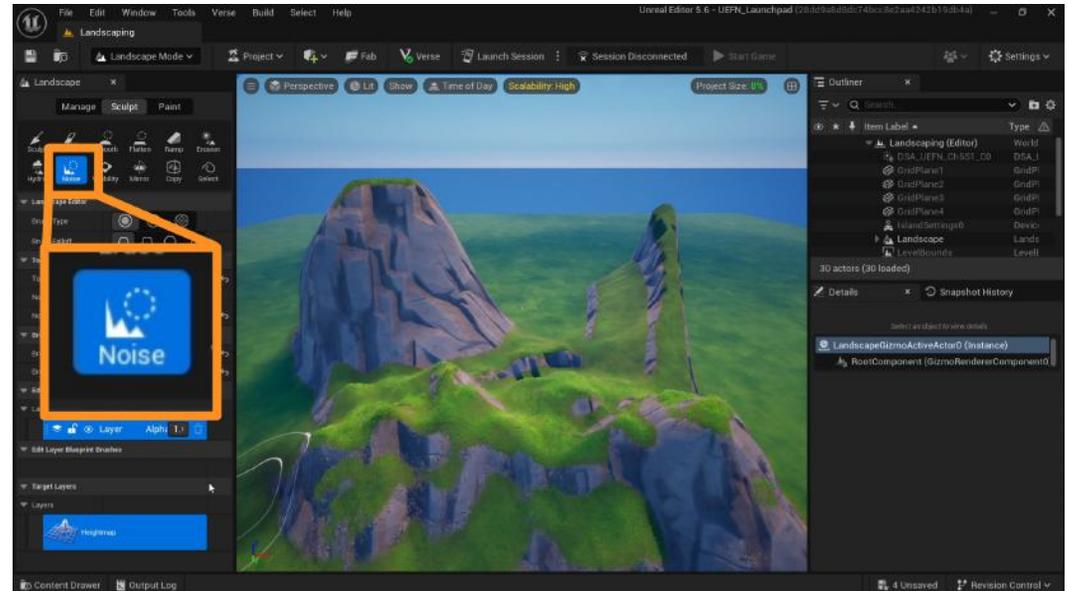
When you're happy with the start and end points of your ramp, click on the **Add Ramp** button on the Landscape menu on the left.



The **Erosion** tool will shift and remove parts of your terrain as if it has naturally eroded over time.



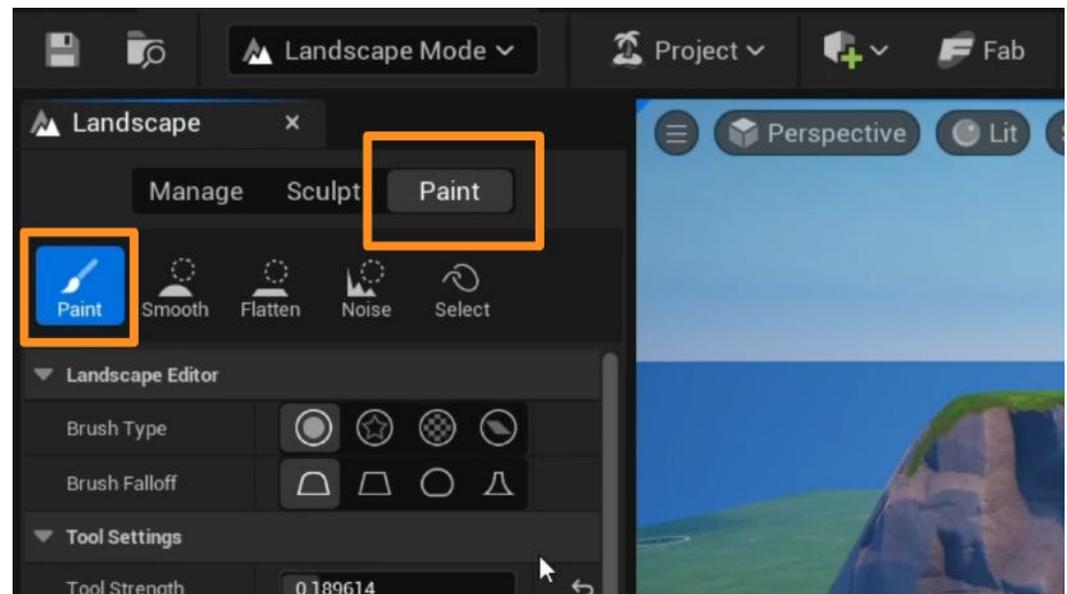
The **Noise** tool will change the height of your terrain randomly as you move your cursor over the terrain. This tool can be helpful, for example, if you'd want to give a more natural look to your overall terrain.



CHANGE THE TERRAIN TYPE

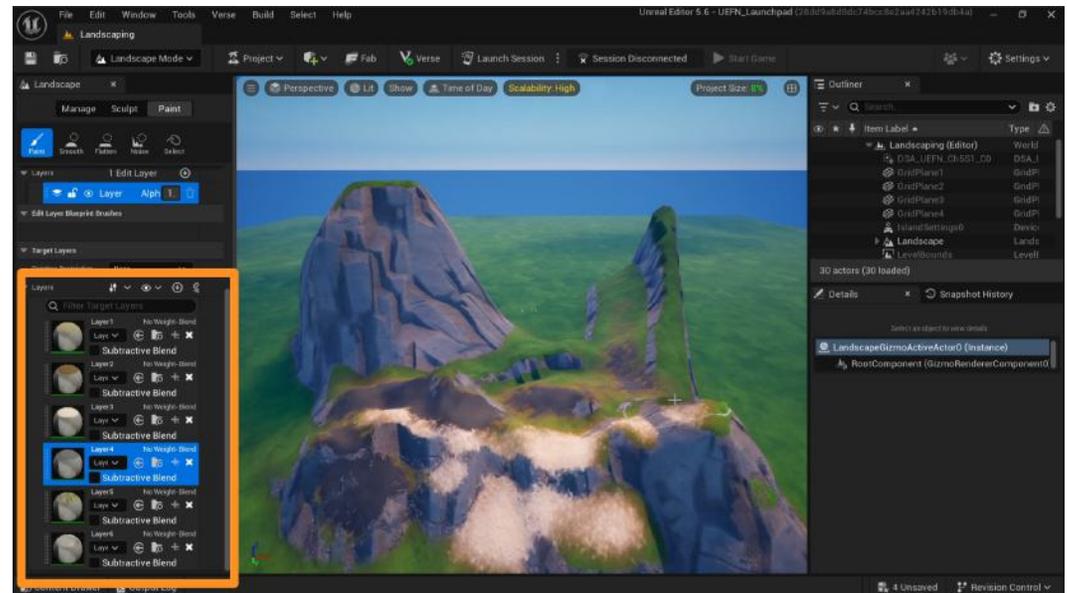
In addition to changing the shape of the terrain, you can also change the type of the terrain and how it looks.

Open the **Paint** tab in the landscape menu, and make sure you're in the **Paint** option.

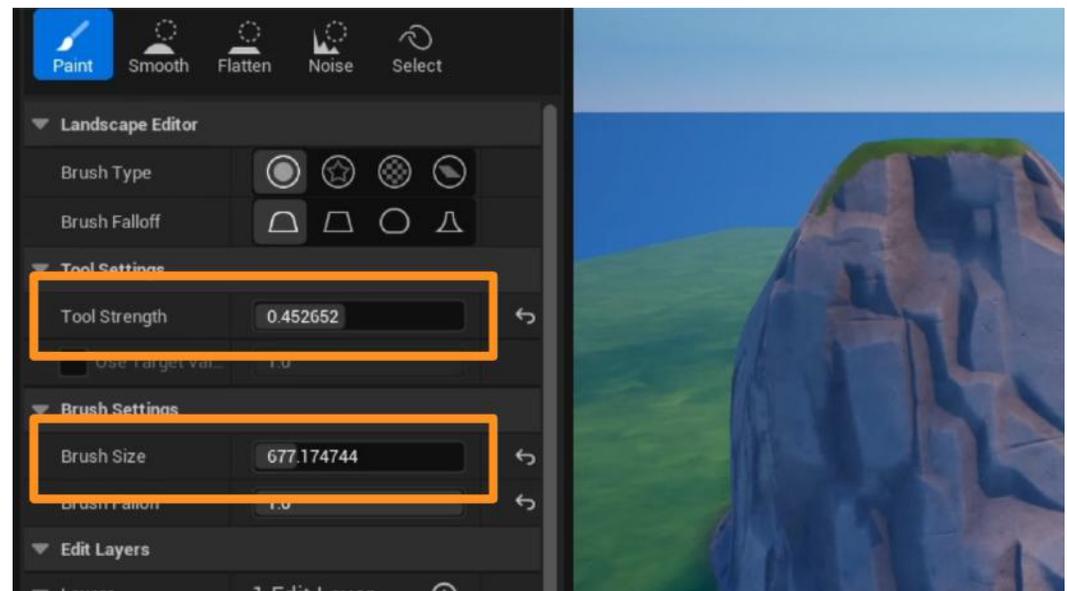


Scroll down to find different layer options, ranging from dirt to sand, from grass to stone. Click on the layer you want to use on your terrain.

Use your cursor to click and drag over your terrain to paint it with the selected layer.

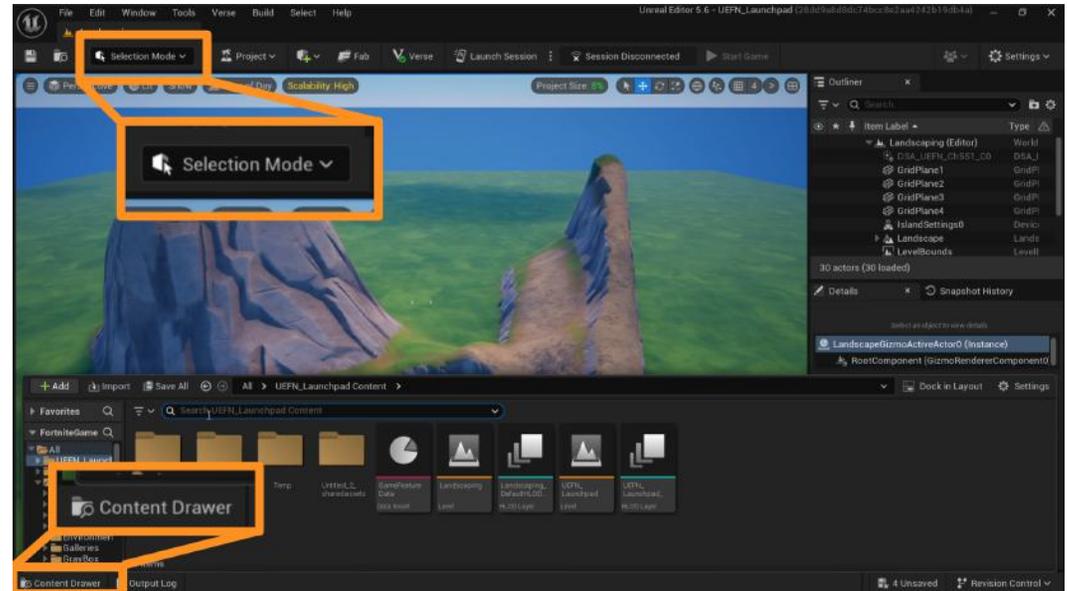


As with the sculpting tools, you can use the brush size and strength settings to customize your brush and paint options.



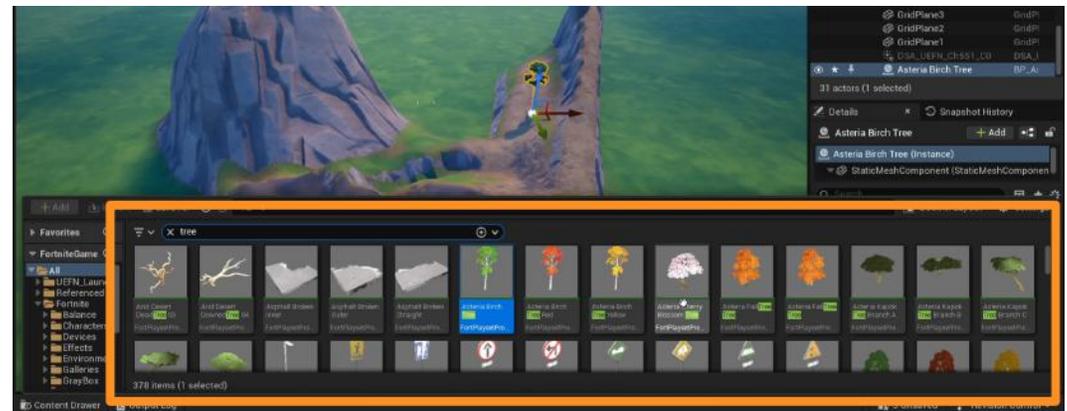
ADD TREES AND FOLIAGE

To add trees and other foliage to your island, go back to **“Selection Mode”** in the dropdown menu at the top of your screen and open the **Content Drawer**.



In the search bar, search for trees, flowers, etc. and drag the assets you want onto your island.

Keep in mind that creating a dense foliage may slowly cause UEFN to lag, so use these assets sparingly as you need.



Self Check

What kind of terrain did you create on your island with the landscape tools? Could you make adjustments to the landscape as you wanted to?

Step 3: Add water features

Preview

Building a landscape you like may include adding water to your island. Adding water features to your island in UEFN has a slightly different process than “sculpting” or “painting” terrain in Landscape mode. Through “water blueprints,” UEFN provides creators with easy and quick ways to add water to their islands.

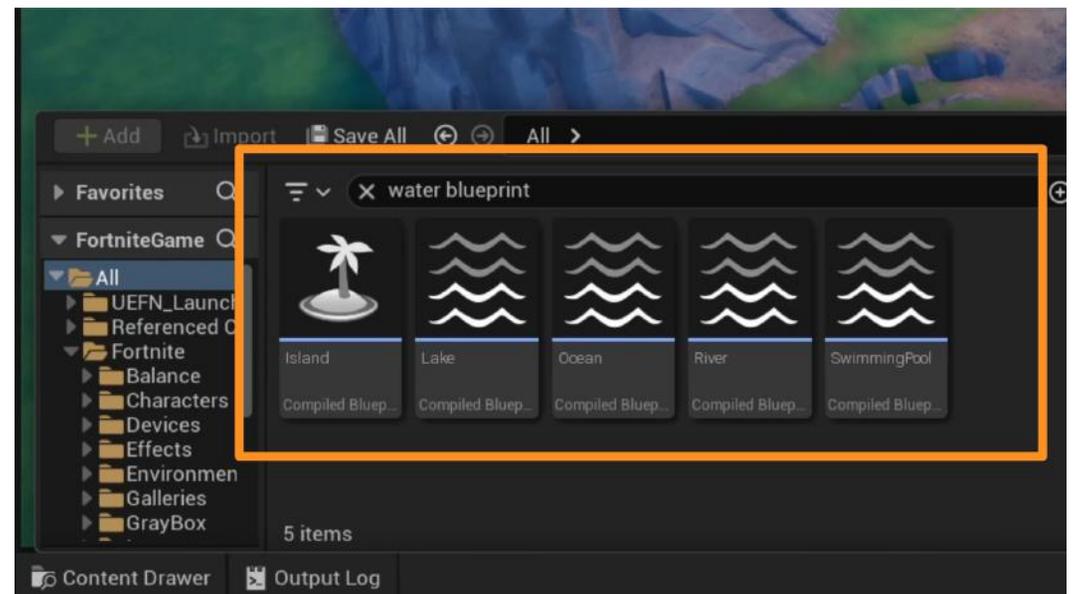
Experiment

ADD WATER FEATURES

Make sure you're in “**Selection Mode**”.

Open the Content Drawer, and search for “**water blueprint**” in the search bar.

Choose the type of body of water you'd like to add (lake, ocean, river, swimming pool). Click and drag the water type onto your island.

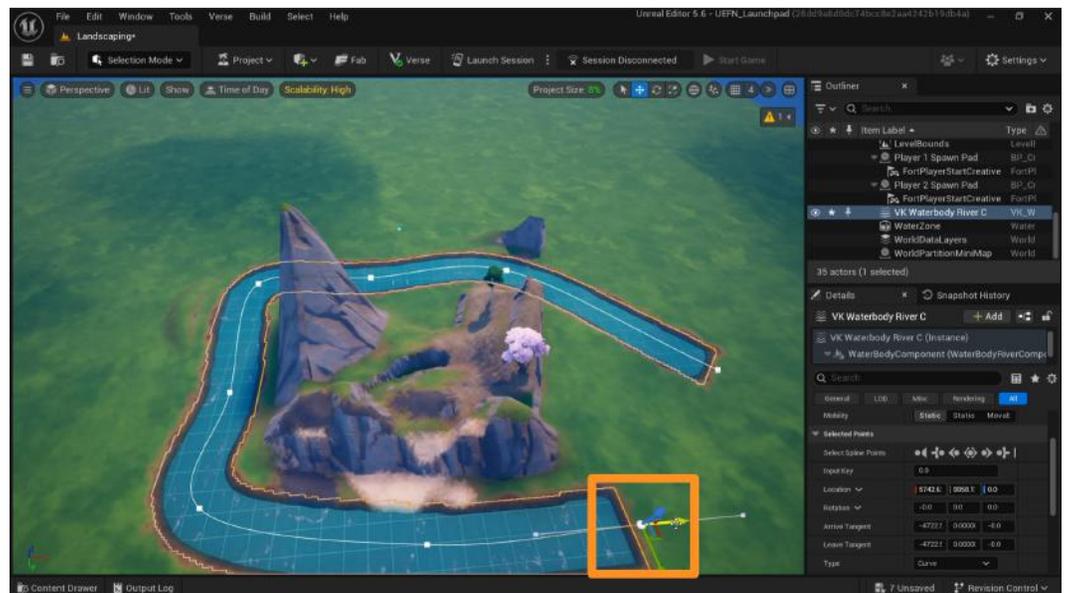


Water features in UEFN are made using **splines**, a collection of points and lines. They all function the same way and are indicated by small white squares connected by a white line.



To change the direction or shape of your body of water, click on any of the **spline points** to select it and use the **Move** gizmo to place it anywhere on your island.

If you'd like to add more points to your spline in order to extend its length or change the size, you can do so by clicking on one of the **spline points** and holding **ALT** while moving the point. A new spline point will be created, allowing you to change the shape of the water more easily.

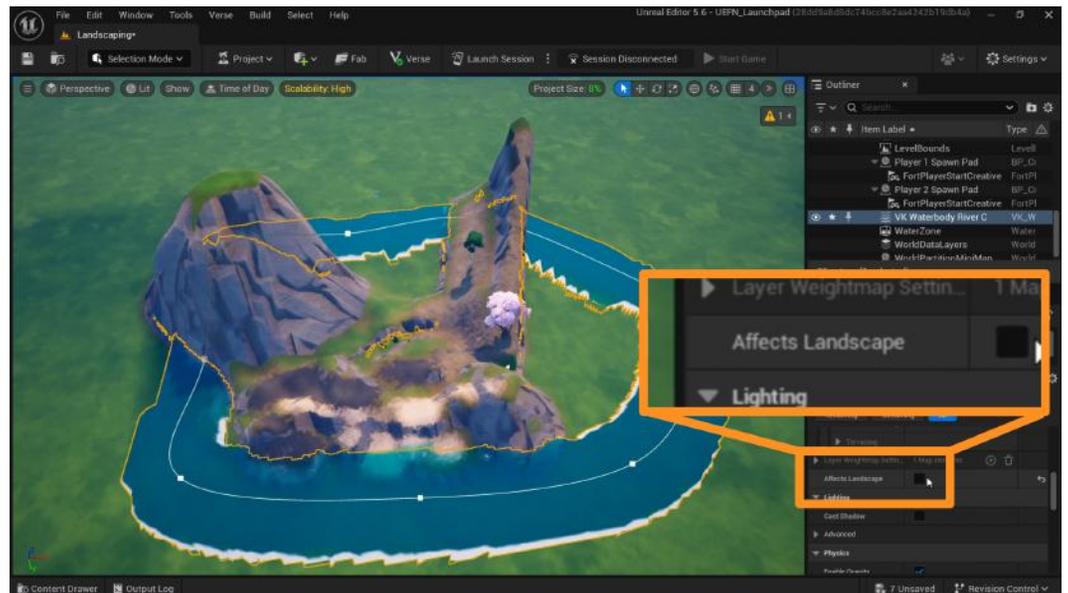


By default, water features will automatically change the shape of the terrain under it. For example, a river running through a mountain will flatten the parts of the mountain that the river touches.



If you do not want water to affect your landscape, you can change this setting in the **Details Panel**.

Make sure your water feature is selected and look for the **Affects Landscape** setting in the Details Panel. Unchecking this box will revert your terrain back to its original shape before the water was added.



Self Check

Could you add different types of bodies of water and make their shape and size what you wanted?

Lesson Closure

Demonstration of Learning

In this Guide, you've learned about the UEFN's Landscape Mode and its many tools, as well as using water blueprints to create and edit bodies of water on your island. As with any other tool, Landscape Mode comes with a multitude of customization options. You've practiced how to use different types of brushes to change the terrain and texture of your landscape. Keep practicing to discover more tools and how to use them on your island.

Exploration Opportunities

Once you've created a base landscape on your island, you can add even more environmental features and different devices throughout your island to make it more engaging. Check out the following Learning Guides to learn more skills for enhancing your island environment:

[Environmental Features and Visual Effects in Unreal Editor for Fortnite Learning Guide](#)

[Devices and Trigger Events in Unreal Editor for Fortnite Learning Guide](#)