

Creating Visual Effects for Positive Social Impact

Pollution in the marine environment

Link to video: [VFX.Plastic Infested Waters.mp4](#)

Introduction

In this assignment, my colleague and I need to think about an important issue of today's society like mental health or pollution, and with that edit adding visual effects and music to impact visually and emotionally to the audience, so that the message is transmitted and understood.

First, we must be creative and inspired with a few ideas to be original. Then we need to draw our own storyboard with different scenes to have a better idea for visual editing.

The next thing would be searching videos and green screen images from Google or another site to edit in the scene with Adobe After Effects or another editing programme like Maya or Blender. Also, with the help of tutorials if needed.

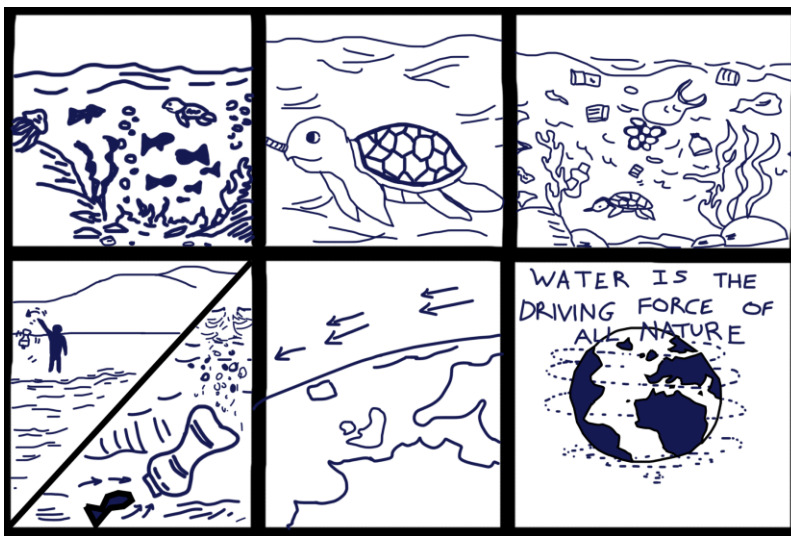
When it is already edited, we can add different tones and contrast to the scenes with After Effects or Da Vinci to help impact more emotionally, this makes the message even clearer.

We put the clips together and in order with the correct timeline that is asked for the assignment.

Finally, we add sound to impact giving a different mood thus conveying even more meaning.

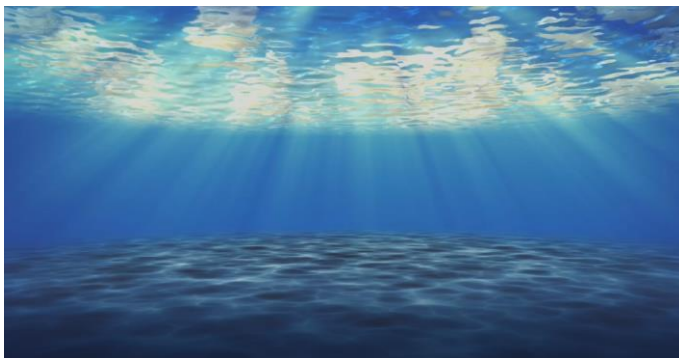


Storyboard



Images and videos created (water waves & ocean) and used for editing:





Conceptual choices:

BA Animation & VFX

First, we needed to think about a significant message that people could better understand visually. At the beginning I thought something about mental health (although I didn't have the main idea yet) but at the end I wanted to focus the topic on the pollution, like in forests or the ocean. My colleague had another very original idea, but in the end, we decided to address the issue of the consequences that ocean pollution can have on marine life, microplastics, and thus the environmental system.



Message Impact:

The message we're trying to convey to the audience is the current problem of the massive plastic waste and the fact that consuming fish can contain microplastics when the plastic decomposes over time in the ocean, thus affecting ecosystems. This also affects marine life above all else, leading to a decline in life and, also, affecting the growth of various marine species when they get stuck in plastic or causing injuries and intoxication also worsening the metabolism and reproduction of the species. In the video we show how plastic becomes more than an obstacle, seriously affecting the health of marine life. Not to mention that it also affects the fishing industry.

There's a phrase that says: the ocean is the driving force of all nature.

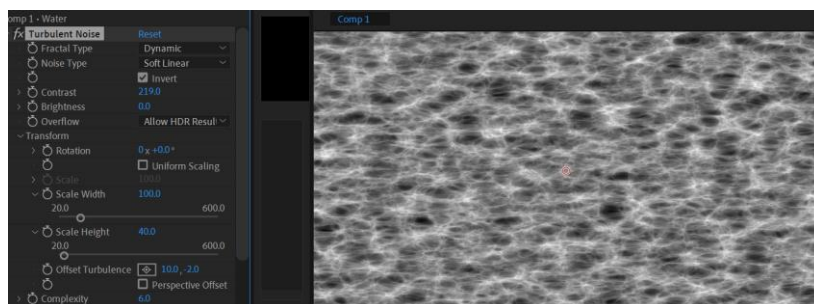
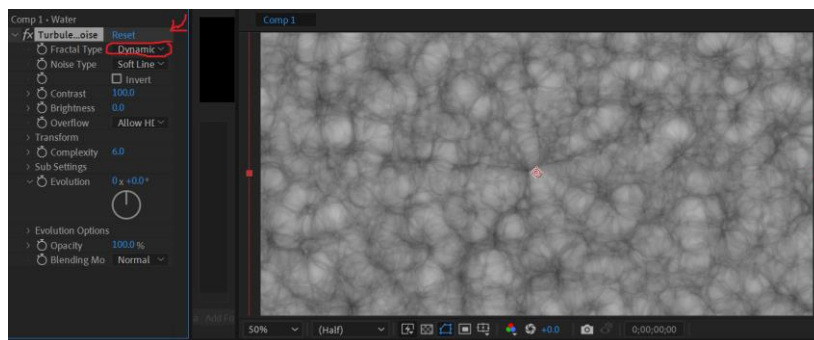
With the help of background music and the different tones in the scenes will make the message clearer.

Technical Execution:

First, my colleague and I planned the length of each clip by also downloading videos and trimming them for the video introduction (landscape from the coast) and for the end (planet Earth transition).

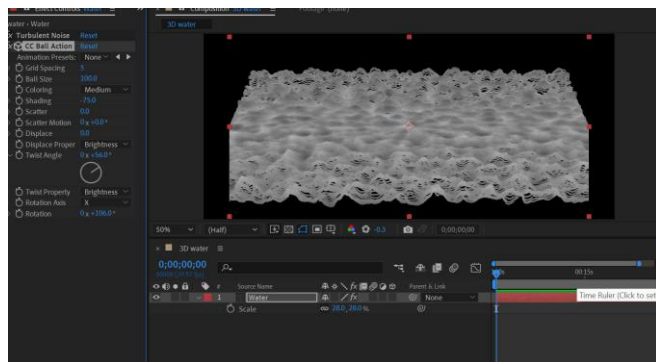
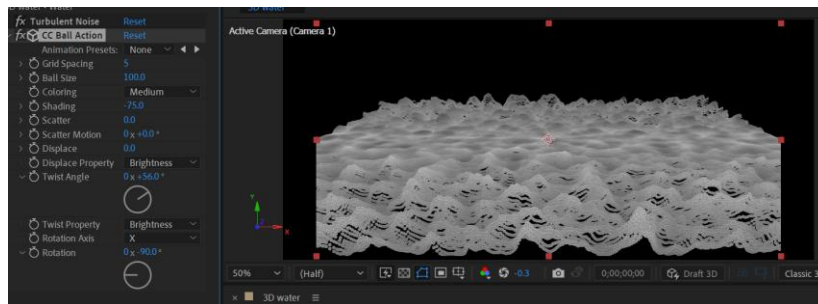
Then we decided which scenes each of us would do and helped each other by suggesting new ideas or how to improve it. We made our own storyboards to better understand the main idea of the scenes.

I created the water effects, under the ocean and the fishes swimming with the plastic around them with Adobe After Effects. First, I edited the water effects, so for that a **solid layer** is added to add the texture, in **Effect to Noise & Grain** and then to **Turbulent Noise** effect. To make the water texture I change some of the settings found in the **Turbulent Noise** section like the contrast, dynamic, width, height, complexity, in sub-setting I change to sub-influence, ...this is to create more waves and realism.



To add the **CC Ball** effect, I select **Effect** to **Simulation** and finally to **CC Ball Action**. In the **Twist Property** I set to **Brightness**, increase the **Twist angle** and rotate for the correct perspective. And because it is 3D, a camera is added in **Layer** to **New** and to **Camera**.

To add the Linear Wipe effect, I go to **Effect** to **Transition** to **Linear Wipe** and finally I increase the option of **Transition Completion**.

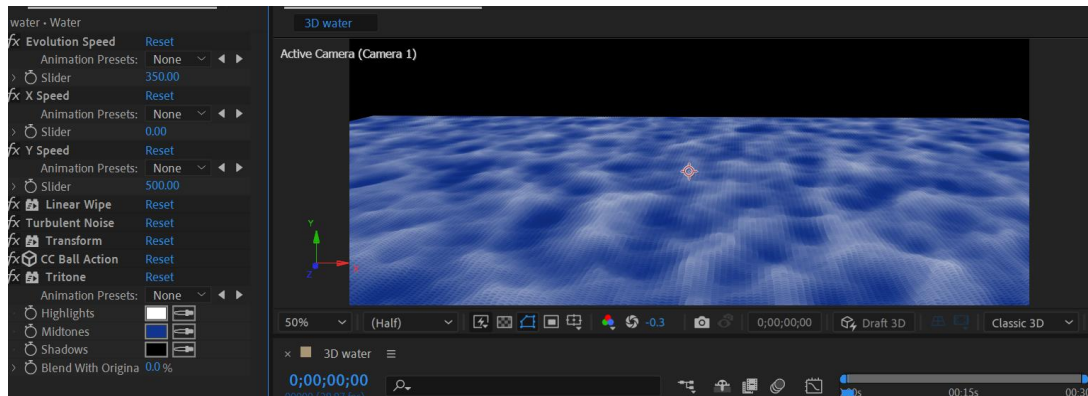


The waves start to move when I increase the numbers of **offset Turbulence** in the **Turbulent Noise** options for the texture.

I change some of the camera settings and in the water layer I add one more effect by going to **Effect** to **Distort** and to **Transform**, I extend the edges in **scale width** and increase the **height** until we cannot see the edge of the water.

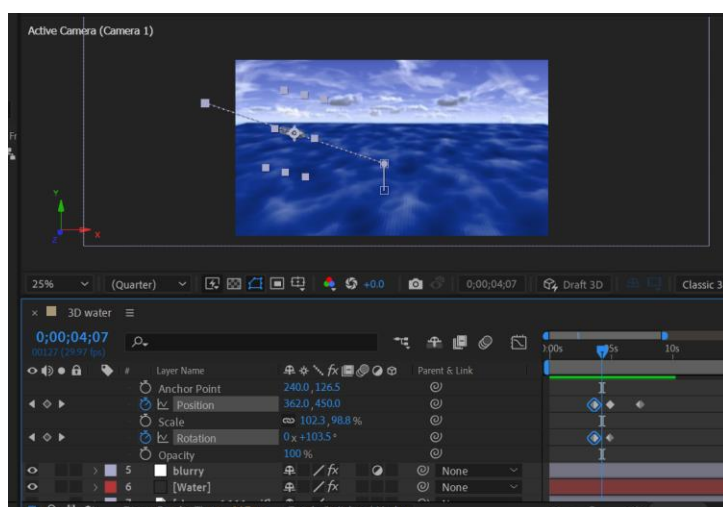
To animate the waves, I first select the **Turbulent Noise** effect and in the transform properties I animate the **offset turbulence** and the **evolution** to change the shape with the expression controls by connecting the properties to the correct control of the options above, starting with

Evolution to Slider. With **Color Correction** I change the tones color of the water to a dark blue tone.

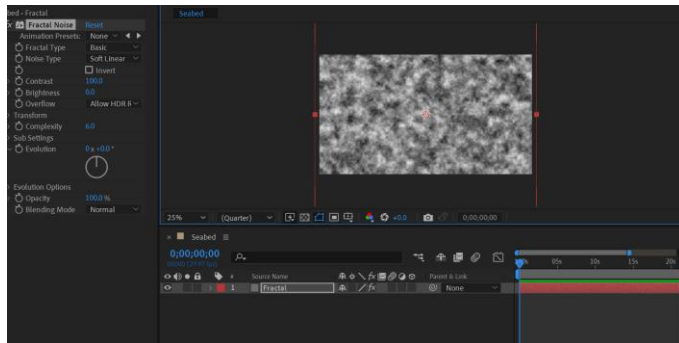


To finish I added an image of the sky for the background, and I need to improve the quality of the water by changing some CC Ball effect values but overall looks good.

To add the bottle falling into the ocean, I downloaded a green screen image, and using the **Keylight**, made it so that only the bottle was visible with the rest of the background I did the same with the green screen water splash video. I position and scale them first. With the splash, I fade it out with the fade feature, reducing the contrast as the bottle falls into the water. With the bottle I add keyframes to the timeline, changing the position until I achieve the desired movement.

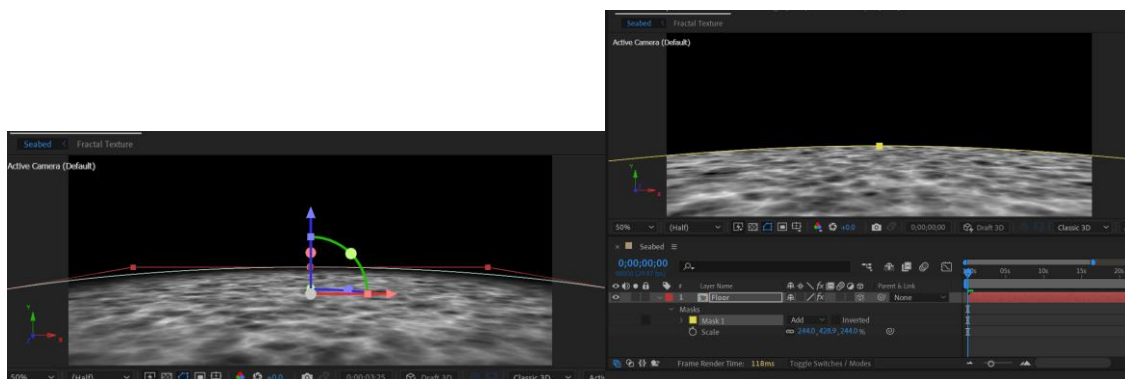


To create **under the ocean** with After Effects, first I open a **New Composition** and a **New Solid** and then I **pre-compose** this layer and add the **Fractal Noise** effect. To make it look a bit like clouds I select **dynamic progressive** and then I change some of the **sub settings** options and **Invert**.



To create the animation, we don't have to add keyframes we can scale the **Evolution**, and, in the keyboard, we press on **Alt+ (write the correct values)**. To move downwards I change the **Offset Turbulence** values and add keyframes for the timeline. So now I have the texture for the floor, but we also need to rotate and scale.

I then create a **Mask** and feather it. I take the **CC Vector Blur** effect to change some settings, to make it look even better.

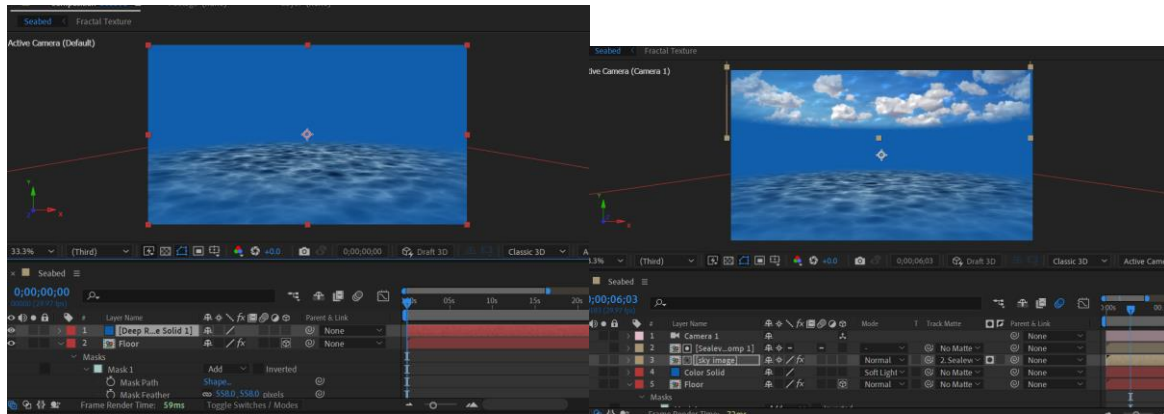


To create the color I add a **New Solid** and choose a bluish color, changing **blending mode** to **soft light** and to create the sea level I **duplicate** the floor and take it further up above the **color solid**, and **pre-compose** this layer **moving all attributes**.

Then add a sky image, pre-compose too and take the Alpha option from the layer above, to make it look like the reflection I add the **CC Glass** effect on

the sky image composition and a setting of **surface** options. We take down the **softness** and **displacement** for a really good effect.

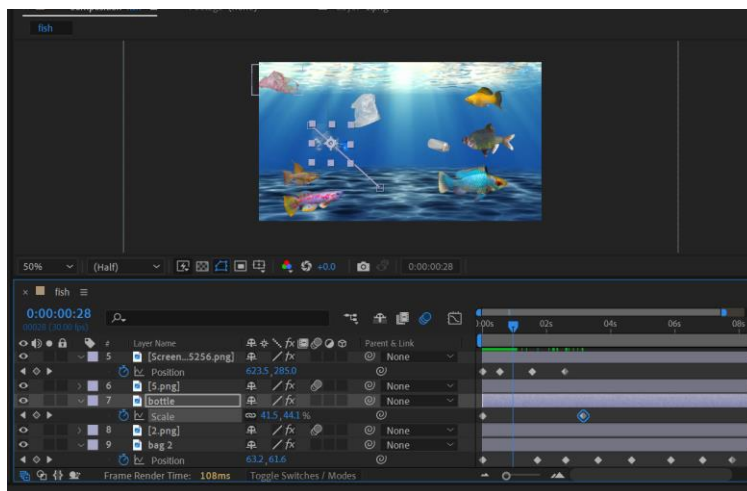
I place the **CC Radial Blur** effect to the **sea level** layer and change settings. With the **Levels** effect we can add more contrast, also with the help of the **Curves** effect and **Tint** effect to make it look more realistic.



In summary I will explain how the fishes were added and moved with the under the ocean video as the background, also adding the plastic around them.

First, all green screen photos of fish and plastic are added with the help of **Keylight**. The **Puppet Tool** it will be used for the fishes so that they move in a more realistic way since the **pins** that are added like around the bone structure of the fish will help to move and deform starting from the tail fin of the fish, by holding down the **Alt key** in the **Timer**, moving a little from one side to the other and with the rest also trying to synchronize the movement for the rest of the parts.

Just like the fish and the plastic, **keyframes** are added to each one for **position**, making them move from one side to the other also creating curves, and **scaling** or **rotating**. This will represent how the plastic can become an obstacle, thus affecting marine life.



Different **contrast** and **tones** are added to what we are trying to convey and with **background music** so that the audience attaches importance and empathizes.

Bibliography:

- Creation Effects, **3D Water – After Effects Tutorial (No Plugins!)**, 2023, YouTube.
- VODONA, **Seabed Under-water After Effects Tutorial**, 2017, YouTube.
- Visual Effects – Tutorials, **AF Puppet Tool tutorial**, 2021, YouTube (from Moodle).
- **Adobe Photoshop**, 2023.
- **Adobe After Effects**, 2024.

Image List

- **Img. 1:**

https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.film-maker.tools%2Fspecial-fx-vs-vfx&psig=AOvVaw03Dzlu9kYB6AioS5YoWJkB&ust=1745062640955000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCMiYyYi_4YwDFQAAAAAdAAAAABAR

Special Effects vs Visual Effects: What's the Difference? | Filmmaker

- **Img. 4:**

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.shutterstock.com%2Fvideo%2Fclip-1056068075-8-intro-animations-empty-water-bottle-green&psig=AOvVaw1GWhnohD8lOcJcWmFMHk0e&ust=1745003132559000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCLiRkLDh34wDFQAAAAAdAAAAABAE>

8 Intro Animations Empty Water Bottlegreen Stock Footage Video

- **Img. 5:**

https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.shutterstock.com%2Fvideo%2Fsearch%2Fcoca-cola-green&psig=AOvVaw33YQ_1x00eF7_XwgkZZFjM&ust=1745003547815000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCKCR1vbi34wDFQAAAAAdAAAAABAE

155 Coca Cola Green Videos

- **Img. 6:**

<https://www.google.com/url?sa=i&url=https%3A%2F%2Felements.envato.com%2Fplastic-bag-rotating-on-green-screen-background-XSAWGFP&psig=AOvVaw2BN0MEwcqAXa5EZJoNoCKG&ust=1745003839112000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCOC1i4Hk34wDFQAAAAAdAAAAABAE>

Plastic Bag Rotating On Green Screen Background

- **Img. 7:**

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fvideohive.net%2Fitem%2Fplastic-crushed-water-bottle-on-green-screen-background%2F35003198&psig=AOvVaw2JhJZGpsMXL5K2eH07mjLm&ust=174>

[5004018460000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCID7rNDl34wDFQAAAAAdAAAAABAE](https://www.google.com/url?sa=i&url=https%3A%2F%2Felements.envato.com%2Fplastic-bag-rotating-on-green-screen-background-XSAWGFP&psig=AOvVaw1C7xSzx3FioaNWBXVb0-Ne&ust=1745004271774000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCID7rNDl34wDFQAAAAAdAAAAABAE)

Plastic Crushed Water Bottle On Green Screen Background

- **Img. 8:**

[https://www.google.com/url?sa=i&url=https%3A%2F%2Felements.envato.com%2Fplastic-bag-rotating-on-green-screen-background-XSAWGFP&psig=AOvVaw1C7xSzx3FioaNWBXVb0-Ne&ust=1745004271774000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCID7rNDl34wDFQAAAAAdAAAAABAE](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.shutterstock.com%2Fvideo%2Fsearch%2Fgreen-screen-bottle&psig=AOvVaw0j0YQcTmcruWstBpJbwAON&ust=1745004506909000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCOCstsHm34wDFQAAAAAdAAAAABB0)

Plastic Bag Rotating On Green Screen Background

- **Img. 9:**

[https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.shutterstock.com%2Fvideo%2Fsearch%2Fgreen-screen-bottle&psig=AOvVaw0j0YQcTmcruWstBpJbwAON&ust=1745004506909000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCOCstsHm34wDFQAAAAAdAAAAABB0](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.pond5.com%2Fstock-footage%2Fitem%2F136364012-8-animation-3d-full-water-plastic-gallon-bottle-green-screen&psig=AOvVaw1Z3FUszU6u7Eti6qj4dTMW&ust=1745006254778000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCMDVooHt34wDFQAAAAAdAAAAABAJ)

2,621 Green Screen Bottle Stock Video Footage – 4K and HD Videos

- **Img. 10:**

[https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.pond5.com%2Fstock-footage%2Fitem%2F136364012-8-animation-3d-full-water-plastic-gallon-bottle-green-screen&psig=AOvVaw1Z3FUszU6u7Eti6qj4dTMW&ust=1745006254778000&source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCMDVooHt34wDFQAAAAAdAAAAABAJ](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.revistaquercus.es%2Fnoticia%2F7489%2Farticulos%2Fcontaminacion-del-mar-por-los-plasticos%3A-el-enemigo-en-casa.html&psig=AOvVaw3GsVpAR7XDMa87u4BdgFmj&ust=1743447053131000)

8 animation 3d full water plastic gallon bottle green screen drinking chroma key video

- **Img. 11-15:** Images downloaded from the files in Moodle.

- **Img. 17:**

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.revistaquercus.es%2Fnoticia%2F7489%2Farticulos%2Fcontaminacion-del-mar-por-los-plasticos%3A-el-enemigo-en-casa.html&psig=AOvVaw3GsVpAR7XDMa87u4BdgFmj&ust=1743447053131000>

<https://www.google.com/search?source=images&cd=vfe&opi=89978449&ved=0CBcQjhxqFwoTCJi7kMS8sowDFQAAAAAdAAAAABAp>

Contaminacion del mar por los plasticos: el enemigo en casa,
Google