

# Treating Storm Water

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## I. INTRODUCTION

Treating stormwater is important for us to make clean use of our water. It uses the process of recycling water so that it can be used again, helping us in times of droughts. This uses advanced machinery that filters water completely, making rainwater drinkable by us. Excess of this is also added to the soil for plant growth as well.

## II. Treating Storm Water

Storm Water is crucial to be treated. In many places that suffer from droughts, water from every available source is important to be treated and conserved for our use. However, treating stormwater is not easy, and a combination of intense machinery with a lengthy process goes into making water usable for us. There are many different methods of treating stormwater, but some of the most popular designs include a bioretention basin, flow-through planter pervious pavement, and tree-box filtration. Not all stormwater is necessarily treated, such as in bigger areas, where some of it is directed into the soil for plant growth. This allows water to be a renewable resource, with stormwater being used for various needs such as drinking water, cleaning, cooking, and agriculture.

## III. Storm Water Machinery

When it comes to treating stormwater, managing the machinery being used is probably the most important part. A lot of machines and devices are used to treat stormwater to make it into usable water for us. Some of the machines used include filtration systems, vacuum trucks, and boring machines.

It is necessary to follow certain steps when treating stormwater. The following steps are;

- a) Screening
- b) Separation
- c) Filtration
- d) Infiltration
- e) Retention

Using these steps, we can understand the process and machinery that goes into treating stormwater.

Screening is the first operation used to treat water. The water passes through a fine screen to prevent any large objects such as plastic bags or any other trash that may have mixed with the water. Separation is the next step of water treatment, wherein smaller solids can be extracted from the water through processes such as sedimentation, flocculation, or filtration. These essentially gather the solids in one area, where they can be easily removed. Infiltration is when extra wastewater is able to seep into the soil through pipes and any other faulty connections, generally underground. Water is then chlorinated, after which it is supplied for its many different uses.

## IV. CONCLUSION

Overall, treating stormwater is crucial for us, especially in cities such as Los Angeles where we are currently facing a drought. Due to this, we need to save as much water as possible in order to make the most of the rain. Using such processes help us treat stormwater safely, making us able to use it for our everyday water usage.

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examples of the process are: Examples of stormwater treatment practices include source reduction, sand filters, infiltration basins and trenches, rain gardens (bioretention), dry ponds, wet ponds, constructed wetlands, filter strips, swales, wet vaults, and underground sedimentation practices.