

# Waterworks Webquest

Created by Max Driggs and Mike Eliot, De Anza High School, Richmond, CA.

## Introduction

For thousands of years, civilizations have used water to carry wastes away from homes and workplaces. In the past, the guiding principle was that the "solution to pollution is dilution". No matter how dirty something is, if you throw enough water at it, it will disappear. Modern science has shown us that simple forms of waste treatment like dilution only solve a small part of the problem.

## Task

You will investigate the differences between modern wastewater treatment methods, the effects of those methods on the environment, and predict the future evolution of wastewater treatment as our government debates the seriousness of current water pollution. You will produce an inventory of water polluting practices and substances that could be distributed to homes in your neighborhood.

## Resources

[History of Plumbing Index](#)

[Thomas Crapper](#)

[Wastewater Links](#)

## The Process

1. Within your **group of 2**, identify the four major processes in wastewater treatment.
2. Using the links in the resource section above, find the following information for each of the 4 processes:
  - A. What activity takes place from flushing to when the water reaches the treatment plant?
  - B. What is removed during the treatment?
  - C. What happens to what's removed?
  - D. Identify at least 2 approaches to each process.
3. Describe additional wastewater treatments that may be used in the future to better remove pollutants
4. Describe elements in the waste stream that would disrupt any of these processes
5. Describe practices and pollutants that can be stopped from entering the waste stream.