

# Water conservation

[Environment](#), [Ecology](#)



Hovhannes Marukyan Extra Credit MGT 462/November 16, 2009 Water Conservation I have attended the presentation about water conservation techniques that each of us can use in our everyday life to ensure the sustainable development of resources and especially water. The presenter on the water conservation was a man who is in charge of the water preservation in Santa Monica. The presentation was very interesting and had great deal of information about proven water conservation tactics.

The topics covered included everything pertaining to consumer water usage and misuse. The topics included varied from water content in the soil to less water consuming showerheads to newer ways of watering the lawn. In order to understand the in-home usage one must first understand the nature of water usage in the global scale. He pointed out that most of the time societies use more water than needed. Some examples of places where people overuse water are in resorts, hydraulic dams, outdoor pools, basking in the showers, overflowing tubs, and so on.

What is interesting is that in order for water to get to us individually it needs to use energy to generate enough pressure, and if we use less water, hence we use less energy. Hydraulic dams use the most amount of water, and if we consume less energy we will use less water. Drying and cooling take the most amount of energy. His next topic in the presentation was about understood the Hydrologic cycle. The hydrologic cycle is when water on earth becomes dry enough and goes into the air as steam, than under right conditions when it's high enough in the atmosphere and it meets a with the cool air the steam becomes liquid and falls down as rain.

We dry up the air, from freeways, residential surfaces, and commercial surfaces, and if the air is not cold enough than the water will rarely liquefy. Now in order to battle this situation he presented with three possible solutions. First by cutting down on driving, with correlation of roof gardening we will to keep the air cool. Secondly we will save water by changing habits and fixtures, conserving water and energy. Third way is by reusing the water instead of throwing it away, this could be done by installing grey water systems.

It is when the dirty water is recycled instead of going to the ocean. Next step in the presentation was about how we as individuals can do to conserve water. He broke down water conservation into two parts, the indoor and the outdoor. What we can do indoors is to do the simple things, like not letting the water on when brushing our teeth, not taking extensive showers, not leaving the water on for hours and forgetting about it. Another easy way to use less water is putting a half full bottle of water in the back of the toilet to deter it from using a lot of water.

This is especially a good idea for old toilets models which in general use more water than needed. The best amount of water per flush is 1.5 GMP; the transition is slow, but persistent. He also mentioned other ways of water conserving that included buying a water conserving showerhead, using toilets with dual flush systems, for hard and soft waste. And in general looking at everything inside the house that uses water and trying to see if one can reduce its water consumption.

An example would be to buy a more water efficient dish washer, and a washing machine. However he talked more extensively about the outdoor techniques of water conservation. He said that about half of the water used in homes is consumed outdoors. He also stated that about 20% of energy in California is spent on the transportation of water. Another very interesting aspect about water consumption that he spoke of was the usage of plants in the landscaping of houses can greatly reduce the amount of energy that is required to cool them.

He also mentioned the fact that people sometimes make a mistake of watering their plants more when there is a problem. According to the speaker there could be many reasons that a plant is unhealthy such as bad soil, positioning, and bugs. Since watering plants and the lawn is such a huge consumer of water, he suggested inspecting plants regularly, finding out what kind of soil is required for a great plant, positioning the plants to face the sun, hence reduce the amount of sunshine on the house, and saving energy.

Also watering the lawn differently could help reduce water consumption. He spoke about drip irrigation, which is a very smart way of irrigating. It does not irrigate the whole lawn but the important parts of it where the plants are located. This helps use less water, waters only the plants exclusively, and is a great way to battle weeds which thrive on water and take a lot of money to kill. Other ways of making sure that we use less water is using spray heads that use less water. Because soil can only absorb so much water at a time it is important to making sure that the sprinkles don't disperse water faster

than the soil can absorb it. Adjusting the sprinkle time to daylight saving can meet this issue. The last way to save water that the presenter mentioned was using what is called permeable pavement. This pavement type uses space in between pavement and fills it with another material such as sand to allow in instead of allowing it to run off. Having some water in the soil is beneficial. With all the manmade building the soil underneath does not get enough water to stay in the same shape.