

wastes into the rivers and streams. Oil and gas drilling also contaminate water. The Nile, the Tigris, and the Euphrates, which are the main rivers in the region, are becoming badly polluted.

### Some Solutions:

**Desalination** – This is a process for removing the salt from seawater so the water can be used for drinking, watering crops, etc. The water is heated and the steam is collected and cooled. The result is that the salt and water are separated. There is certainly seawater around the Middle East, but the process of desalination is expensive and uses a great deal of energy to heat and cool the water. So far, only countries with ample fuel (like oil) have been able to afford to build facilities that can produce enough water to be worth the expense.

**Treated Wastewater** – Use of treated, recycled sewage water is common in many Mid-East countries, but the amount of treatment varies. Some countries treat the sewage water once, some twice, and some three times. This water is generally used for crops. The problem with this practice is that some countries, fearing contamination, don't want to buy farm produce watered with in this way.

**Imports** - Some countries may be able to import water from other countries. Already some countries have built large pipelines to distribute water within their own borders, and this process could be expanded. The problem with importing water is that the countries in the region would need to cooperate in maintaining pipelines, and there are terrorist groups that might try to destroy the lines.

**Alternative Water Sources** – There are some small, but useful ways to increase water supplies. These include: storing rainwater from roofs, capturing winter thaws from the mountains, importing water by tankers, cloud seeding.

**Conservation** – Some people in the Middle East manage to be conservative in their use of water. Bedouins, who were traditionally desert dwellers, can get along on as little as 4-5 liters of water per day. This is one of the lowest levels of consumption in the world. In contrast the Gulf States are among the highest water users in the world.

**Other Ideas** - The solutions listed are some of the ideas that have already been considered or tried in the Middle East. There are certainly other possibilities.