Middle East Environmental Issues Guided Notes:

Pollution

Many countries in Southwest Asia are experiencing the increasing problem of water pollution.

- Farmers have begun using <u>chemical fertilizers</u> that run off from the fields and contaminate water supplies.
- •Chemicals also lead to salt build-up in the soil, which eventually makes farming in those areas impossible.
- Rapid growth of <u>industry</u> in cities and towns has caused garbage and sewage to build up in rivers and streams.

Enough Water?

- •Less than <u>1%</u> of the world's fresh water is available to the area's inhabitants (5% of the world's population).
- •There is simply not enough water available to meet the population's needs.
- Middle Eastern countries are constantly in *conflict* over these water problems.

Turkey

Turkey has a <u>"water advantage"</u> over other Middle Eastern countries because the Tigris and Euphrates rivers form in the country's highlands.

- Turkey has developed the <u>Southeastern Anatolia Project</u>, which consists of 22 dams and 19 hydroelectric plants along the Euphrates River.
- •This project has greatly improved the <u>standard of living</u> for Turkey's citizens.
- •Unfortunately, the country has had to deal with the increasing problem of water pollution.
- •In addition to <u>chemical fertilizers and industrial wastes</u>, the rivers have also been affected by <u>oil spills</u> in the Black Sea.

Syria

The dams that Turkey built along the Euphrates have greatly <u>reduced</u> the amount of water reaching Syria (40% less).

- •Syria already suffers from <u>food shortages</u>, and <u>irrigating</u> new land is extremely difficult with the diminished water supply from the Euphrates.
- •In order to keep some water in the country, Syria has also built <u>dams</u> along the river.
- •This has reduced the river's flow into Iraq, thus causing more conflict.

Iraq

The dams that Turkey & Syria built along the Euphrates have also greatly reduced the amount of water reaching Iraq (80% less).

- •This has negatively impacted the country's food supply.
- <u>Wheat</u> and <u>rice</u> production has decreased dramatically, and many farmers are now without jobs.
- •Iraq also faces <u>water pollution</u> problems as a result of industry and petroleum drilling equipment.
- •Also, three decades of warfare have caused damage to Iraq's water treatment plants.

Israel

Since its creation in 1948, Israel has developed new technology and advanced farming techniques that have turned the once-barren (having very few plants) desert land into farmland.

- •Because <u>rainfall</u> is down, Israel has to rely on drawing water from its aquifers (underground layer of rock and sand that contains water).
- •Unfortunately, the aquifers are in jeopardy because more water is taken out than is replenished by rain.
- •Israel has been involved in many conflicts over water rights to the <u>Jordan River</u> with Syria, Jordan and Palestinian territories.

Jordan

Jordan is one of the <u>ten most water scarce</u> countries in the world. (Scarce means having a very small amount or not enough of something.)

- •The country's major surface water sources are shared with Israel and Syria, who leave only a small amount for Jordan.
- •Israel has built *pipelines* that redirect the river's water away from Jordan and into its own lands.
- •Jordan & Israel have been involved in *military battles* over water rights.
- •Jordan cannot meet the basic needs of its people and has to ration the water supply.
- •Citizens can only get water two days a week.

Saudi Arabia

Saudi Arabia has a <u>desert climate</u> and has struggled to meet the water needs of its growing population.

- •Water is scarce in the country, and what little water that is available is of <u>poor</u> quality because of salt water intrusion.
- •The country has built a number of <u>desalination plants</u> that provide most of the country's drinking water.
- <u>Desalination</u> is the process of taking salt out of seawater and using it for drinking water. (VOC WORD!)