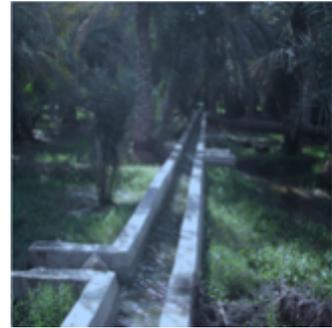


IAE Descriptive Outline Pre-reading

Irrigation in UAE

In 2011, UNESCO named Al Ain as a world heritage site because of its oases and its traditional *falaj* (*plural: aflaj*) irrigation system. The UN organization encourages countries to identify their cultural and natural heritage sites and protect them.

The 'falaj' **irrigation** system is seen as an engineering achievement. Some aflaj are around 3000 years old. They consist of stone **channels** aboveground, underground **tunnels**, and **shallow hand dug wells** that are a few meters deep. In the most common falaj, **gravity** pulls the water from the underground tunnels into the open, aboveground stone channels. Finally, it is moved towards the areas that needed to be irrigated like gardens and farms. In the past, this system was not only significant as a method of **transporting** water, but also allowed for **settlements** to develop that otherwise would not have **survived**. They provided **permanent** water sources used for **sustainable** agriculture and drinking water.



Today, only a few aflaj are still used. Electric **pumps** are now used to draw the water into the stone channels. Aflaj have limited uses today and are not used for **large scale** irrigation. They are not **efficient** enough and waste a lot of water. As a result, **modern** forms of irrigation have replaced aflaj. These modern irrigation systems water the various garden plants seen throughout the cities. Additionally, they bring water to the **crops** that the UAE uses itself or **trades** with other countries.

Aflaj are mostly being restored today to preserve the history and culture of Al Ain and the UAE. Unfortunately, water, which aflaj have transported for human **consumption** for so long, is also the reason that some of aflaj are falling apart. Aflaj are primarily made of stone and **clay**, and those materials are **vulnerable** to the flow of water. As a result, UAE is attempting to preserve these historic sites along with many others, so future **generations** can see the **ancestral innovation** that built the UAE.

References

Traditional Falaj Irrigation System in Al Ain. (2011, November 15). *Gulf News*. Retrieved from <http://gulfnews.com/>

Falaj Irrigation System, Hili Oasis on Heritage List. (2011, June 29). *Gulf News*. Retrieved from <http://gulfnews.com/>