
MEMORANDUM

TO: MARGARET LANG AND KRISTEN RADECKSKY
FROM: ADAM CLARK
SUBJECT: POTOWAT FIELD TRIP
DATE: 3/2/2012

Purpose:

The purpose of the trip to the Potowat Health Village was to view their implementations of various sustainable technologies. Since we are in an environmental engineering class, it is important to view current applications of modern renewable technologies. The Potowat Health Village houses a large solar energy production system as well as an on sight ecosystem.

Discussion:

One design aspect that the Potowat Health Village incorporated was the storm water treatment. Storm water collects all around the Potowat Health Village and all feeds into one main pond. They developed a natural filtration system by planting cat tails around the pond and allowing microorganisms to feed on pollutants. The metals and sediments settle as the purification takes place, and becomes naturally filtered and clean for the restoration area. The most difficult part of this project was getting the water to flow correctly and from all around the Health Village. To overcome this difficulty, they utilized aerial views to properly map out the channels and water flow paths. This implementation benefits the local environment by providing clean and fresh water to the ecosystem.

Back in Contra Costa County (where I'm from), they are planning on starting new storm water treatment projects to increase the amount of water collected, purified, and used. The water from these will be used more by people, and less by a wildlife system, but when I would love to get involved and get a chance to experience how to set up a storm water collection system. If I were to work on one, I would also like to adopt the Potowat eco-friendly purification idea.

Conclusion:

The most interesting thing I learned on the Potowat Field Trip, was that the solar panels that were installed provide about 70-75 percent of the electricity on the average day, and even some excess energy on the weekends. Solar energy is becoming an increasingly efficient source of energy, and it is not only eco-friendly, but also becomes cost efficient.