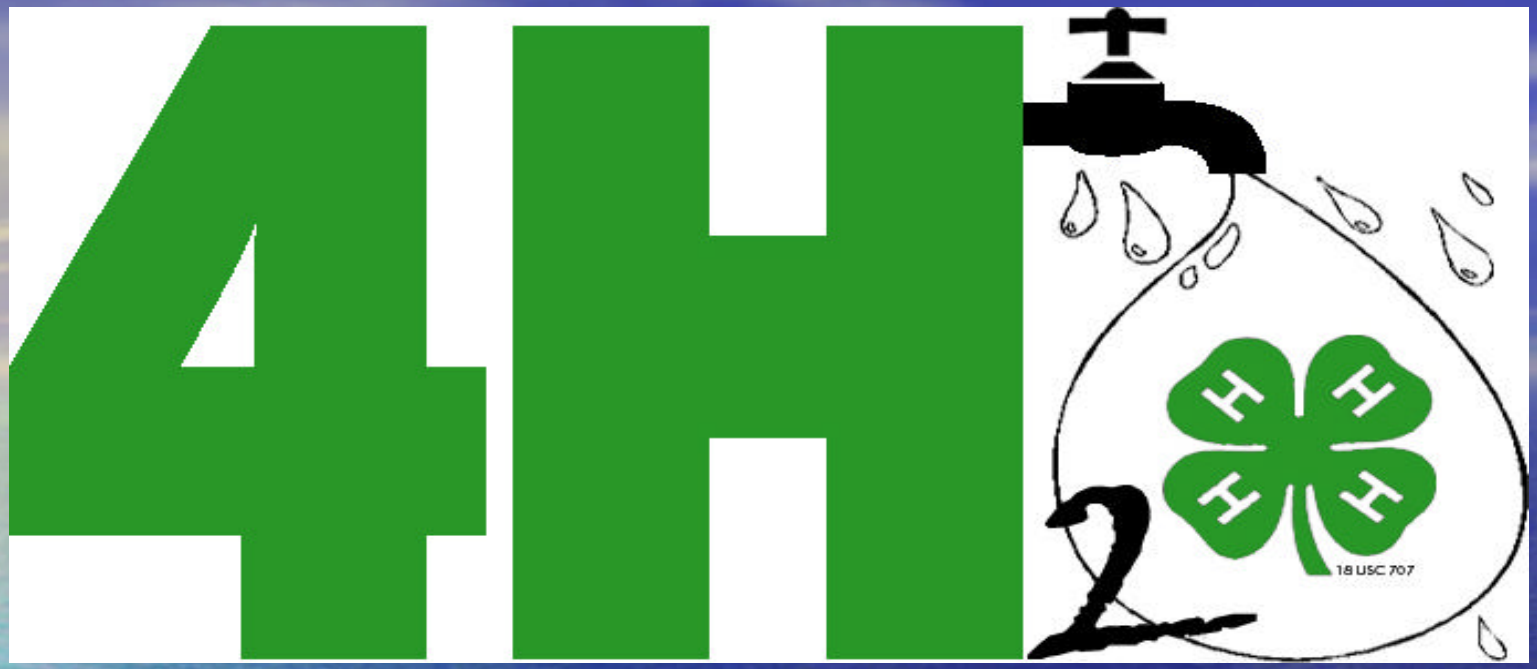
Environmental Stewardship

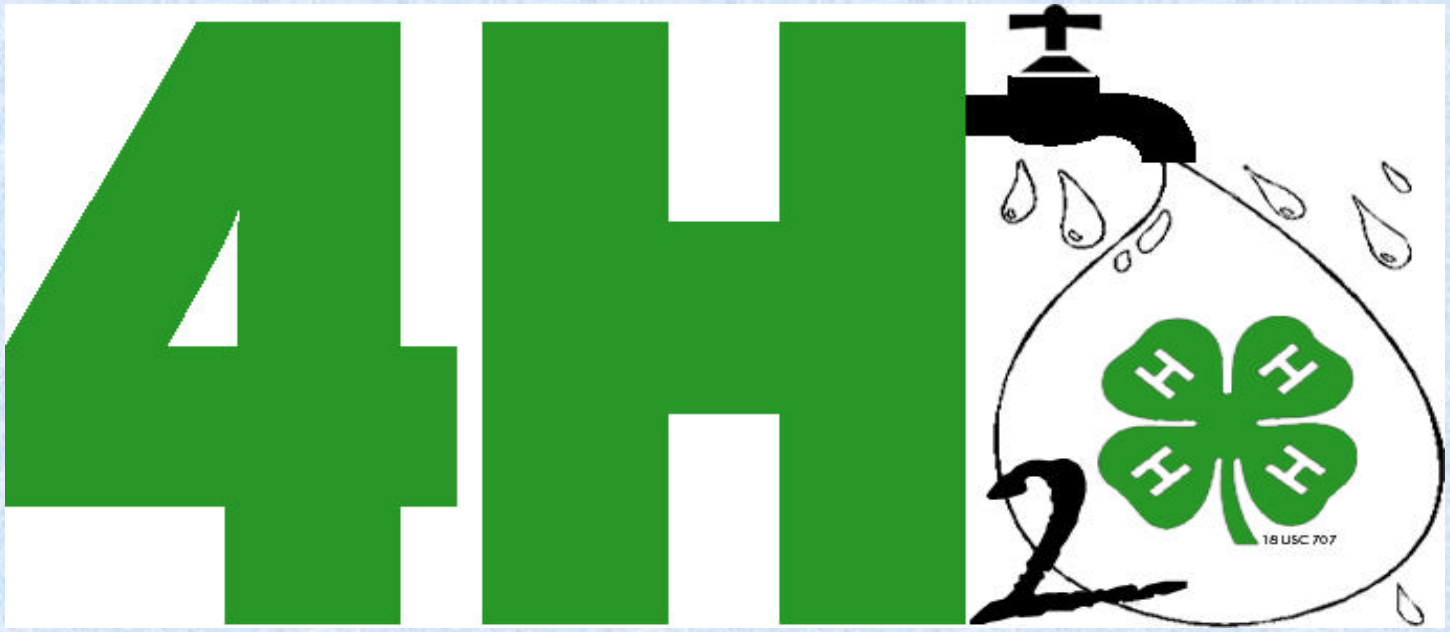
Alan VanDeventer
Oklahoma State University Cooperative Extension

Environmental Stewardship Impact Area

- Develop youth, adult, and community partnerships across Oklahoma to conduct educational experiences in the area of environment
- Focus Area - WATER



- Identify potential partners
- Conduct meeting with partners to develop long term goals - environment
- Develop short term goals – water quality
- Wrote curricula
- Find financial assistance for material
- Train Trainers



- Oklahoma Farm*A*Syst
- Oklahoma Home*A*Syst
- Oklahoma Aqua Times
- Fact Sheets
- Department of Environmental Quality (DEQ)

4H

- Basic water facts
- Definitions
- Site assessment document –evaluation of area around well
- Mapping guidelines –measuring and mapping surrounding area including natural formations, buildings, septic systems, etc.
- Hazardous materials –animal waste, insecticides, pesticides

- TRAIN THE TRAINER
- Well Depth
- Bacteria Test

Global Positioning System (GPS)
Geographical Information System (GIS)

UNDERGROUND WATER MODEL

- Soil Types
- Water Wells
- Aquifers
- Depression Cone
- Water table
- Abandon wells
- Leaky landfills

- Water Conservation
- Water Quality
- Erosion
- Riparian
- Flood Zones
- Vegetation
- Sediment
- Delta Formation
- Water Flow

Nitrite
Ph
Alkalinity
Hardness
Nitrate

Total Dissolved Solids

(TDS)

- Identifying Pump House
- Pressure Tank
- Submergible Pump
- Jet Pump
- Backflow Device
- Well Cap
- Floor condition

- Site Assessment
- Land formation
- Soil types
- Hazardous material
- Animal waste
- DIPLOMACY

So the water is tested and the site has been assessed.

- The youth go over results with land/well owner
- Recommendations for improvements are made
- Data sent to state office to be compiled
- Offered mailer kit for Total Coliform to be sent to State DEQ

- Anticipation to test 400 wells in a four years
- Map and data on well sites and water testing results to be used by DEQ and State Legislators
- Advance to other environmental concerns

Impact Team Reports

- Groundwater flow model demonstrated at camp, schools, county fairs, and District Youth Action Conference
- GPS workshops conducted at camps, club meetings, and afterschool programs
- Teens trained to teach elementary youth about forestry.
- Exploring Streams and Lake poster workshop

- Community beautification project in city parks
- Establish and maintain butterfly garden at the Okla. City McDonald House
- Locate and map illegal dumpsites
- Establish recycling projects

Partnerships

- Youth and Adult
- Natural Resources Conservation Service (NRCS)
- Department of Environmental Quality (DEQ)
- Department of Wildlife and Fisheries
- Oklahoma Department of Transportation
- Department of Forestry
- City, County, and State Government
- Langston University