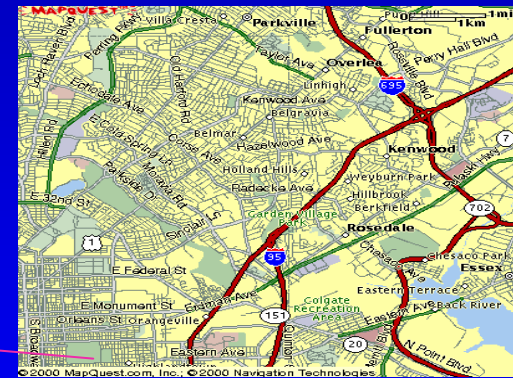
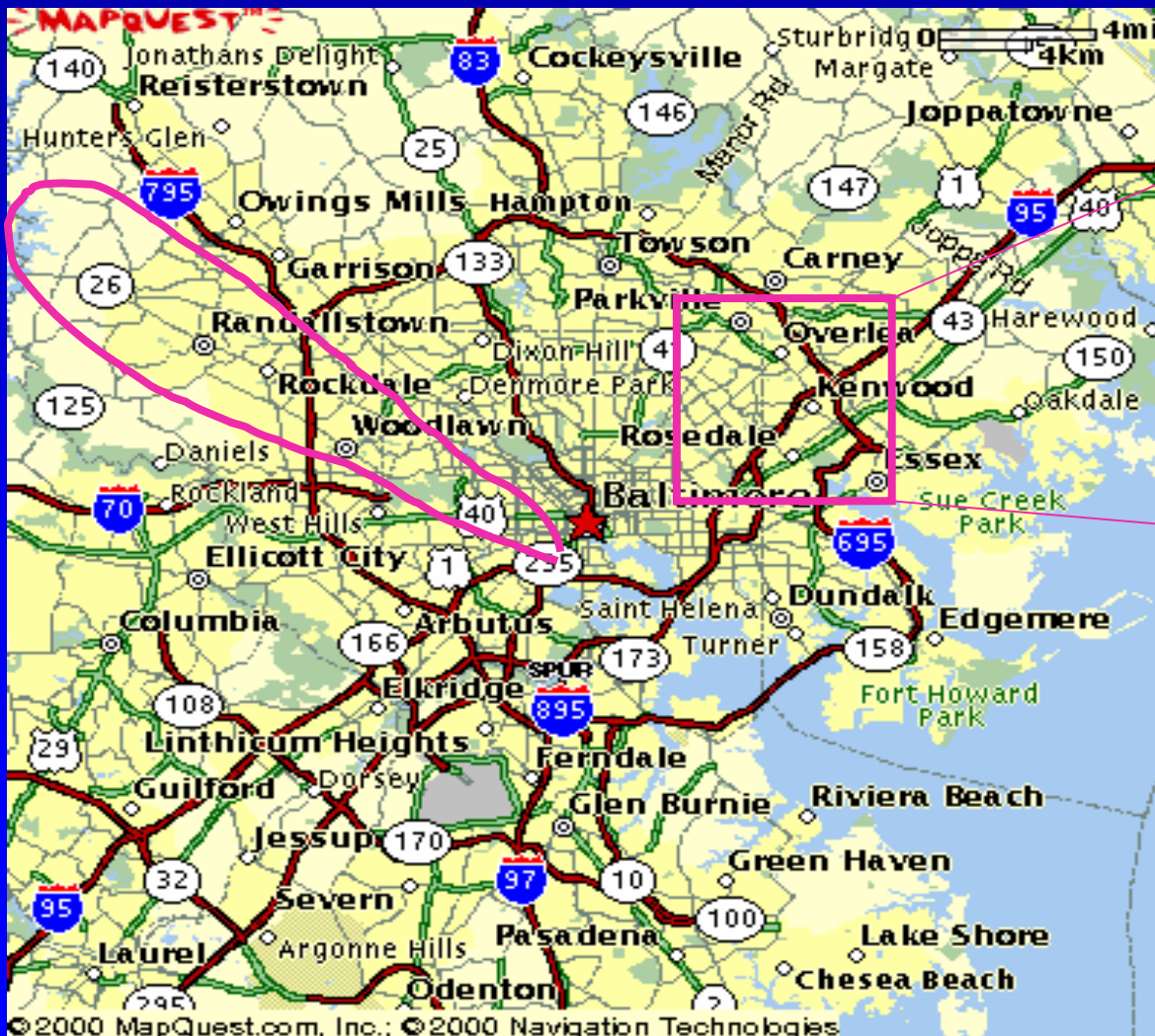
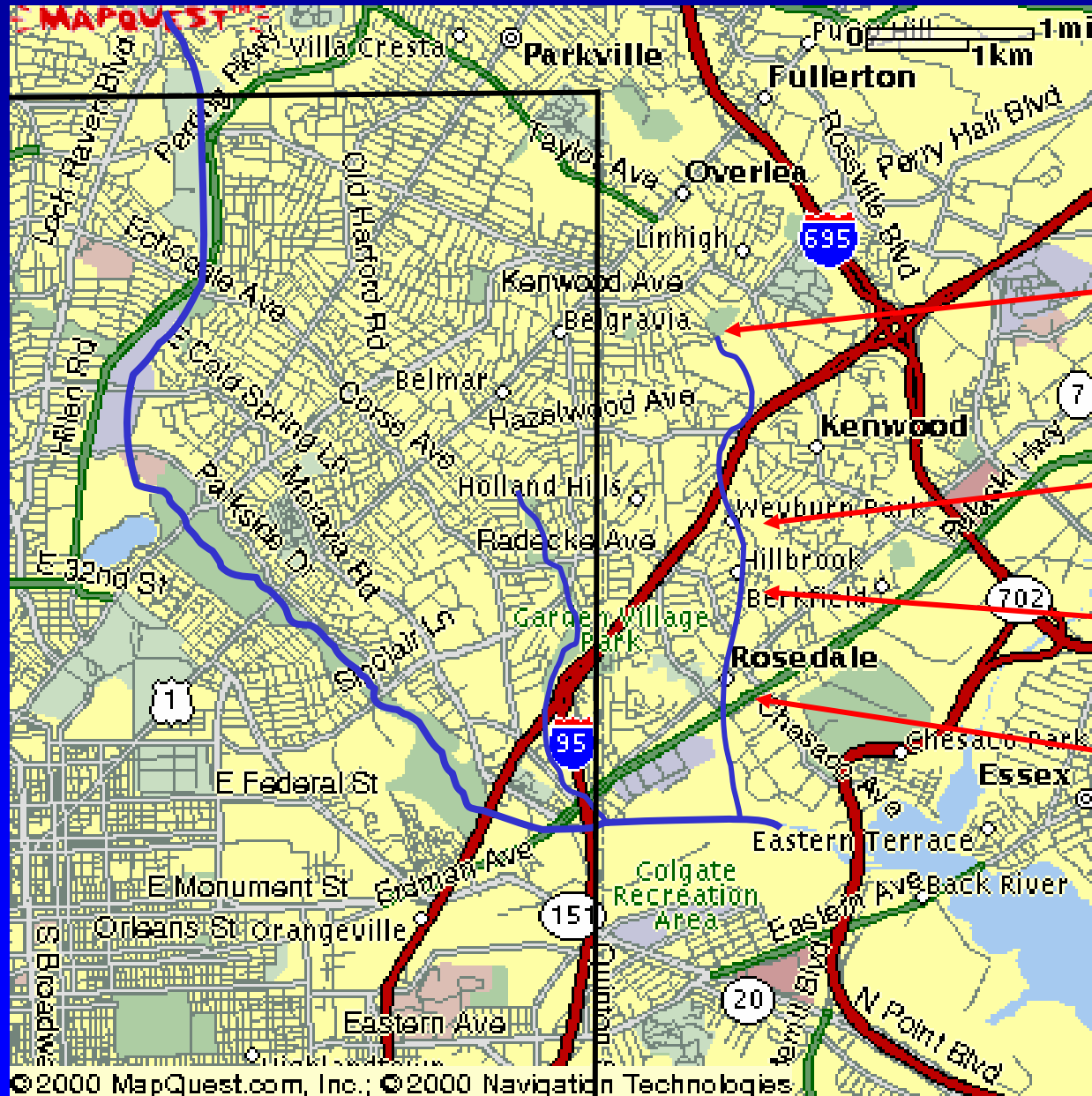


Urban Stream Monitoring Around Baltimore MD



Red House Run Stream Monitoring



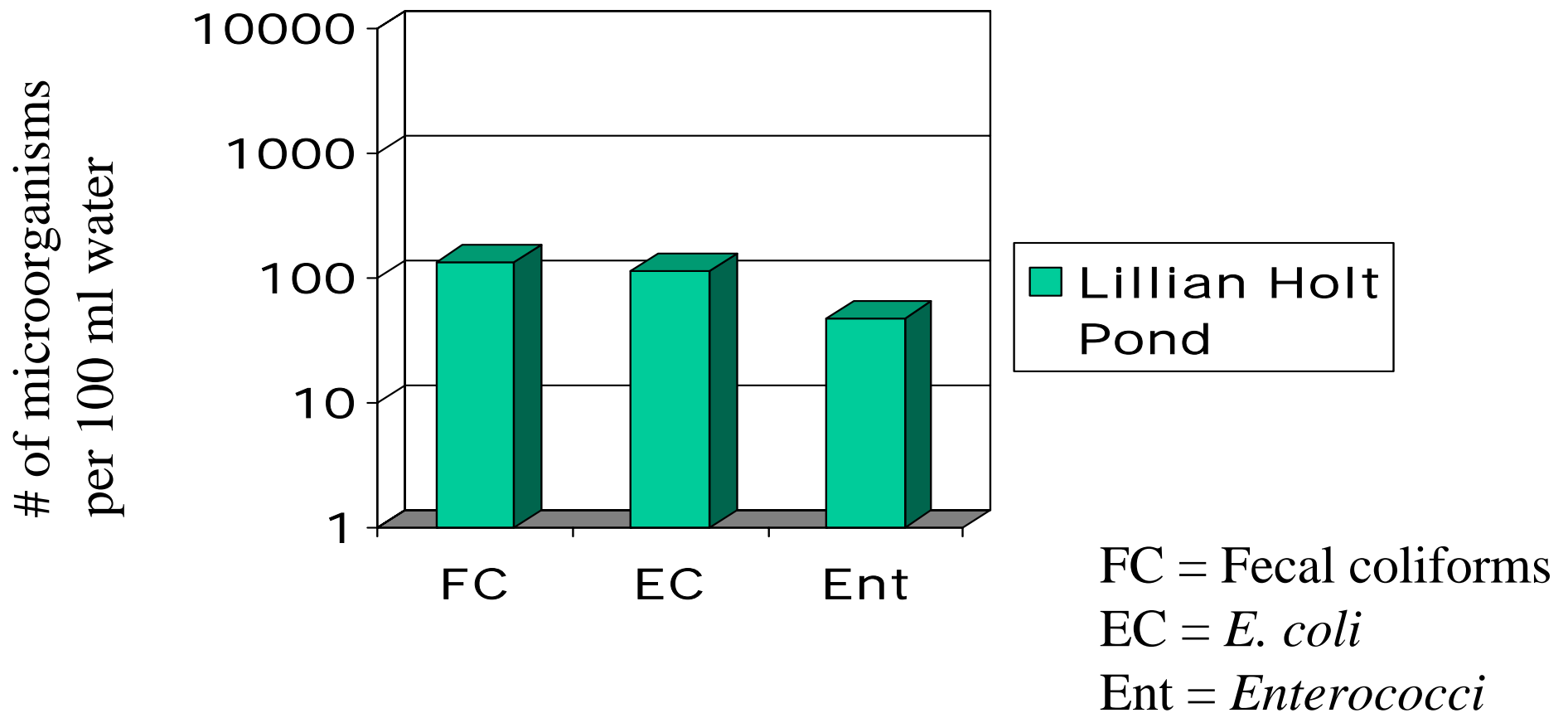
Lillian Holt Pond

Weyburn Rd

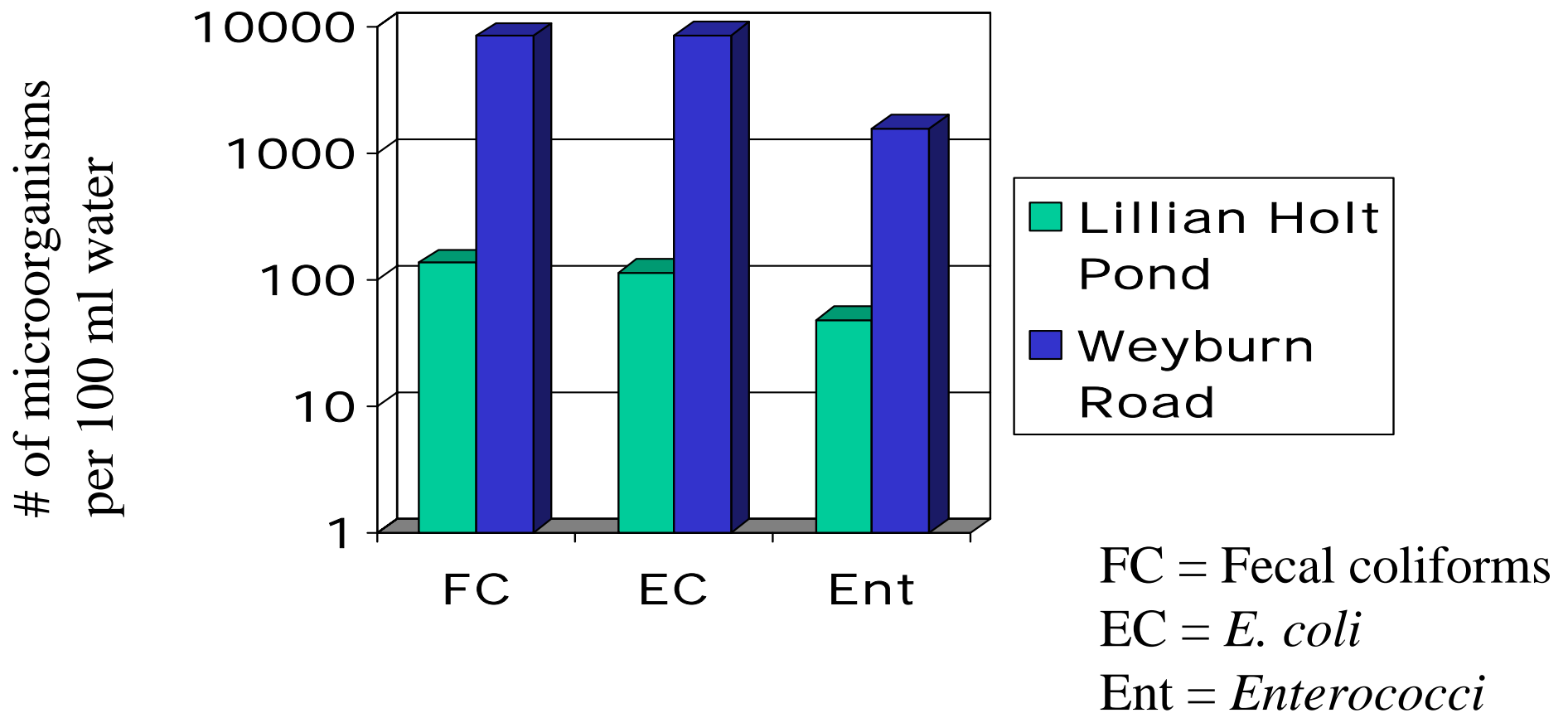
Seiling Ave

Pulaski Ave

Bacterial Indicators in Red House Run



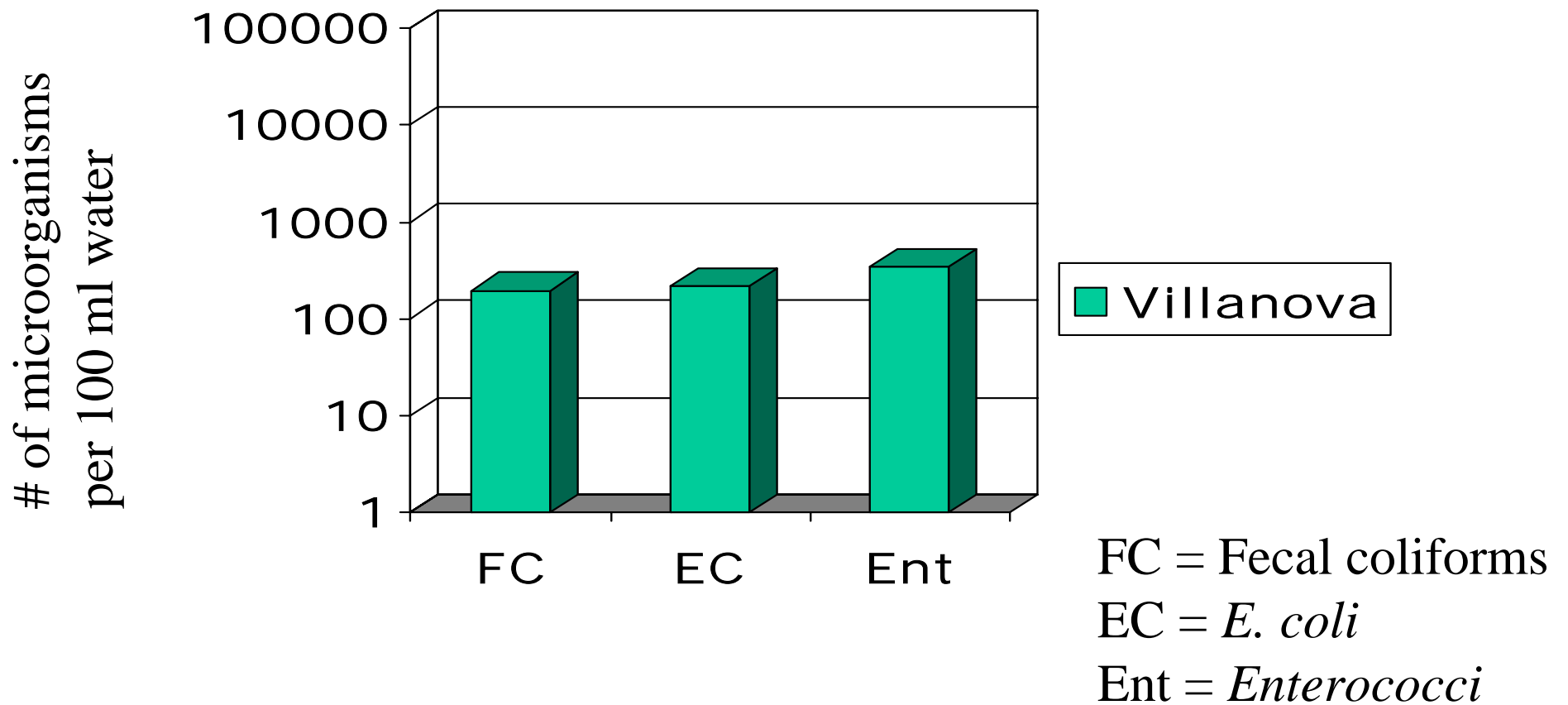
Bacterial Indicators in Red House Run



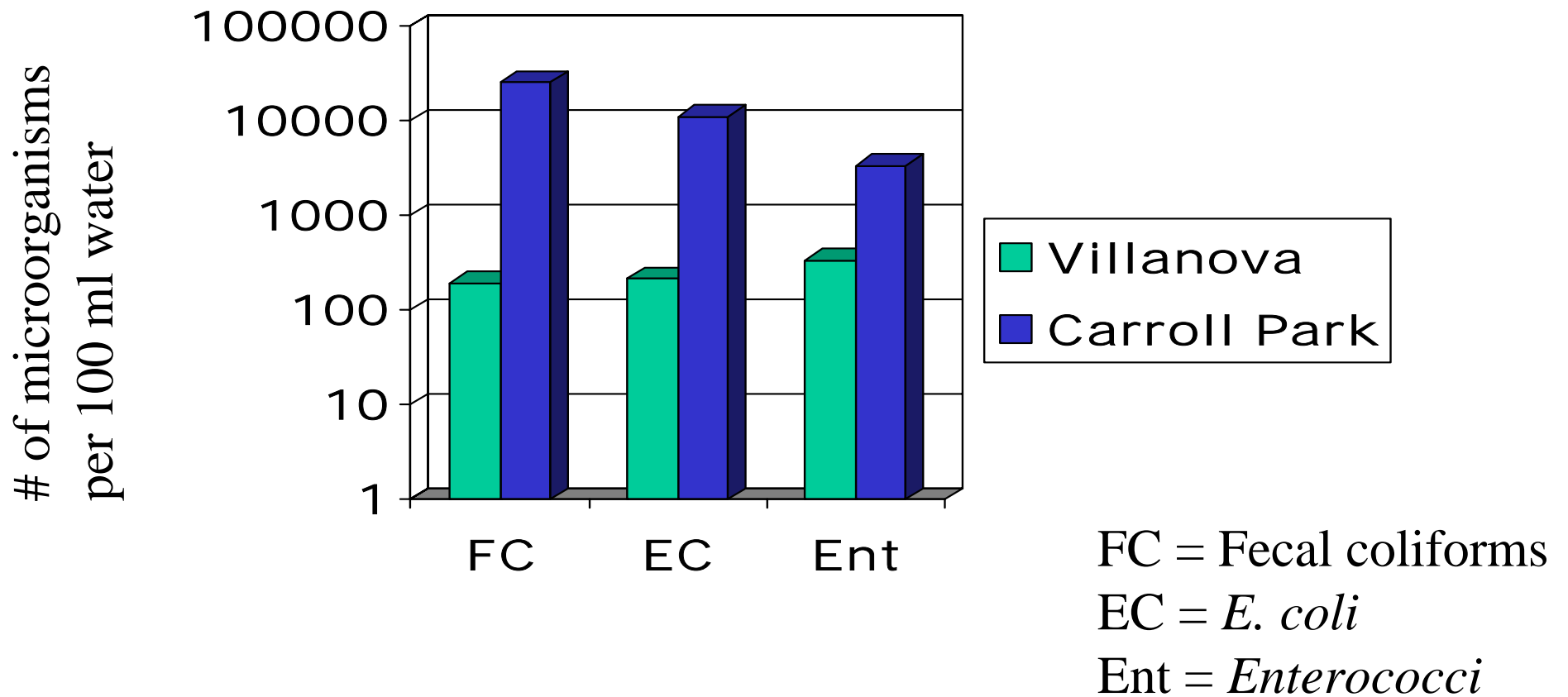
Gwynns Falls Watershed Baltimore Ecosystem Study LTER



Bacterial Indicators in Gwynnns Falls



Bacterial Indicators in Gwynnns Falls



Detection of Human Pathogens at Carroll Park

- We routinely detected human pathogens at the downstream sample site
 - Norovirus
 - *Cryptosporidium*
- Positive samples contained ~23 NoV / L (5 / 200 ml)
 - Swimmers consume ~200 ml of water
 - Shellfish can filter 100-200 L per day and efficiently sequester viruses during feeding