

1056-P1-1997 **Ben Fusaro*** (fusaro@math.fsu.edu), Department of mathematics, Florida State University,
Tallahassee, FL 32306-4510. *The Environment, Mathematics and Our Community Role.*

The struggle between civic or environment organizations and developers presents many opportunities to contribute to our communities and to show that mathematics is useful. How...? By being a volunteer consultant for organizations such as Audubon, the Sierra Club, or for local civic groups. A college mathematics teacher with an elementary knowledge of chemistry or physics is in a good position to help. Almost all local or regional environmental issues require little beyond a rudimentary knowledge of geometry, probability, growth functions, and skill in representing issues and results in visual form. It is easy to explain an issue to an individual or to a small group. Public hearings can come across as intimidating but it's not very different from giving a lecture to one's colleagues. The developers' experts are often biologists or engineers (used mainly to impress the commissioners & audience) but they have a healthy respect for mathematicians with a graduate degree. I will give suggestions on getting started as a volunteer consultant and will provide several examples from my own 12 years of experience. The examples will deal with such issues as resisting the paving-over of a stream, protecting cypress trees from being turned into mulch, and defeating a polluting power plant. (Received September 22, 2009)