



# Groundwater Assessment for Use in Planning Rural Development: A Model of Ivy

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Garrick E. Louis  
Systems & Information Engineering,  
Environmental Engineering  
University of Virginia  
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Project Overview



# Sustainable Infrastructure Systems

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- Assure sustained access to infrastructure services
  - Routine operations
  - Natural hazards
  - Sabotage
- Minimize adverse impacts of infrastructure
  - Economic, Environmental, Social
- Assure infrastructure is appropriate to regional preferences
  - Informed and participatory decision-making

# Sustainable Infrastructure Systems



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- Focus on:
  - Water supply
  - Wastewater & sewage treatment
  - Solid waste management
- Special interest areas
  - Developing communities
  - Rural communities

# Albemarle Groundwater Assessment Project



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- Goal 1
  - Create a model for groundwater resource assessment that can be used in planning for smart growth that affects rural areas.
- Goal 2
  - Promote use of the validated model by public planning agencies, community residents, and others involved in the development of rural areas.

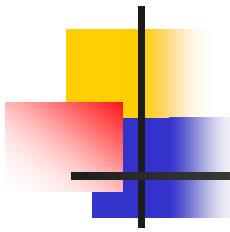
# AGWA Objectives



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1. Develop groundwater assessment model
2. Develop related data management and representation model
3. Develop a model for information use by decision makers and interested parties
4. Validate and disseminate results

# AGWA Administration

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- Funded by Foundation dedicated to natural resources conservation
  - Phase 1: June 2005 – May 2007, funded
  - Phase 2: June 2007 – May 2010, not funded
  - Phase 3: June 2010 – May 2015, not funded
  - Research team of UVA grad and undergrad environmental systems students, postdocs

# Activities to date



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- Assess current status
  - Existing GWA models and data
  - Understanding the planning process
- Assemble a project advisory board
- Start sampling from private wells
- Prepare Internet GIS Map of results
- Survey community's drinking water perception

# Results to date



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1. Well data quality and management needs improvement
2. Strong advisory board
3. Preliminary sampling results and maps
4. Preliminary community survey results
5. Ongoing GWA survey in MD, NC, VA, WV

# My information



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- Garrick E. Louis
- Phone: 434-982-2742; Fax 434-982-2972
- Email: [louis@virginia.edu](mailto:louis@virginia.edu)
- Web: <http://www.sys.virginia.edu/people/gel.asp>