

# PGDP Future Vision Project

A presentation to the PGDP CAB

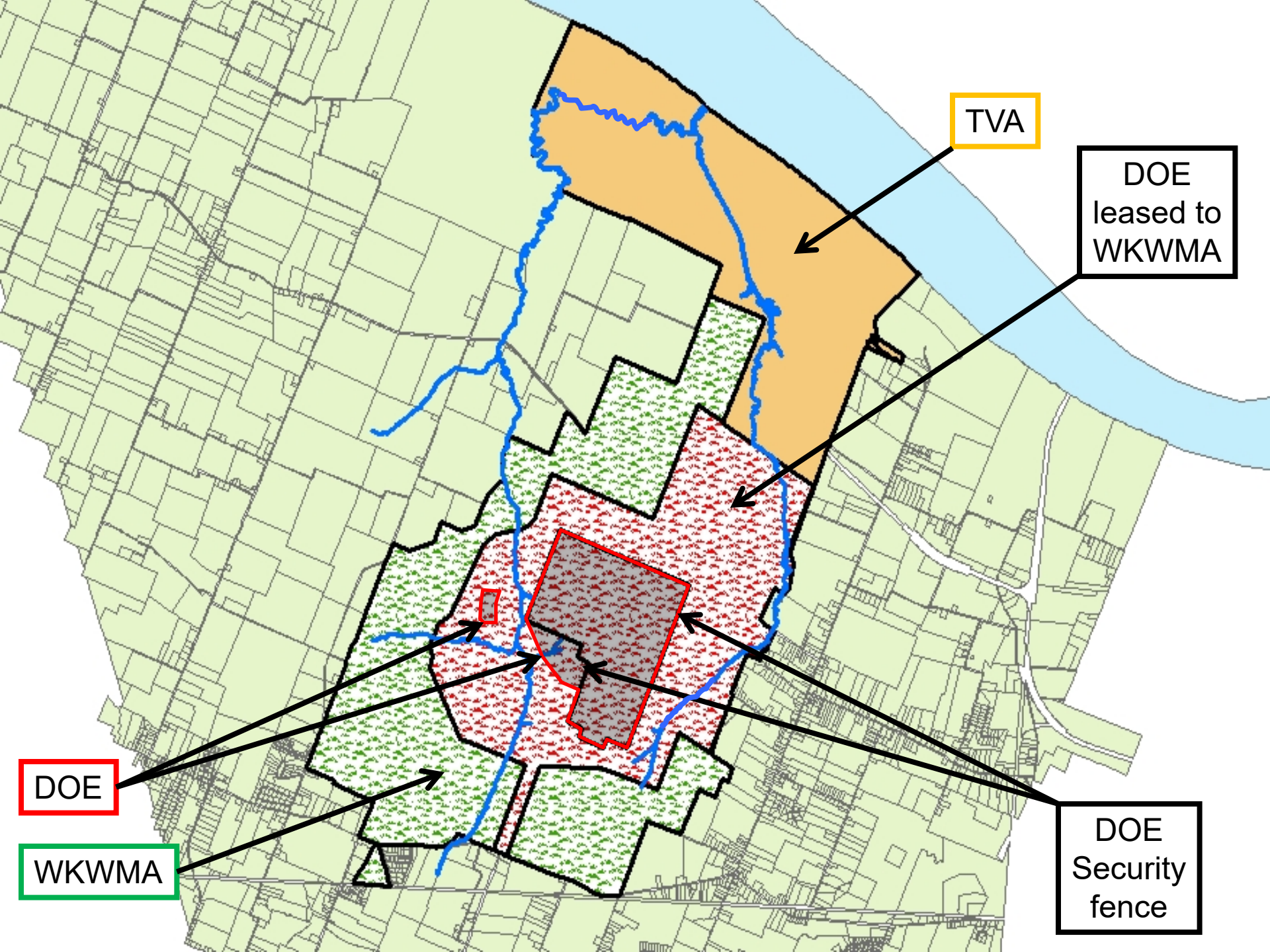
May 21, 2009

by

Ted Grossardt



[www.uky.edu/krcce/project23.html](http://www.uky.edu/krcce/project23.html)



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# PGDP Future Vision Contract

- Goal
  - Increase public participation in determining the ultimate use of the PGDP facility once it is decommissioned
- Objectives
  - Provide technical assistance
  - Facilitate stakeholder meetings to identify preferences
  - Produce PGDP Stakeholder End-State Vision Report
- DOE involvement
  - Funding through DOE from congressional earmark
  - DOE is only one of many stakeholders
    - Project/results are independent of DOE control
  - Final report provided to all stakeholders

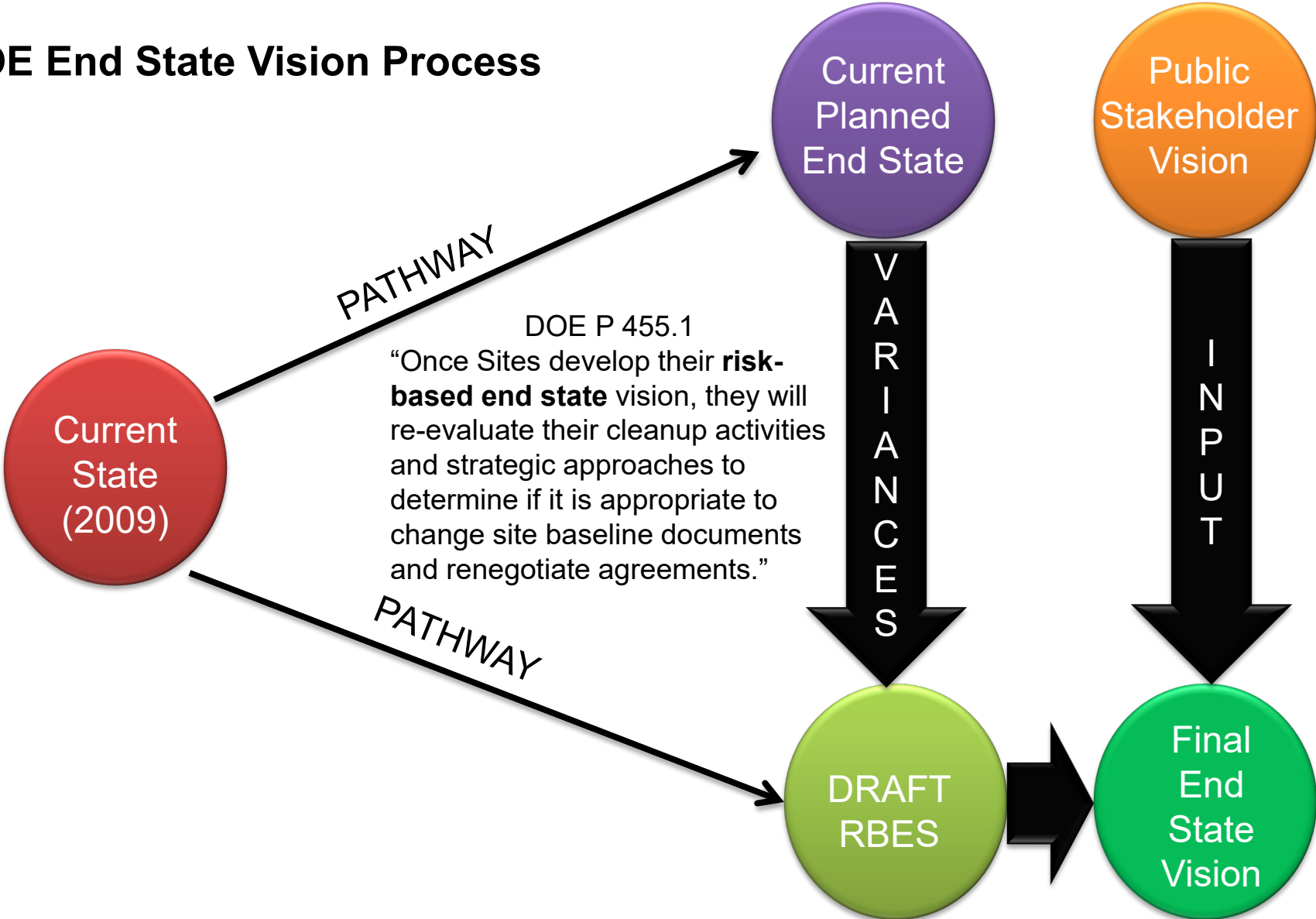
# Project Team

- **Administration**
  - Dr. Lindell Ormsbee, UK KRCEE
- **Communications Director**
  - Ms. Anna Hoover, UK KWRRRI
- **Community Based Participatory Research**
  - Dr. Chike Anyaegbunam, UK College of Communications
  - Mr. Jason Martin, UK College of Communications
- **Structured Public Involvement**
  - Dr. Ted Grossardt, Dept of Policy and Planning, UK KTC
  - Dr. Keiron Bailey, Dept of Geography Development, Univ. of Arizona
- **Technical Support**
  - Mr. Steve Hampson, UK CAER
  - Mr. Jim Kipp, UK KWRRRI

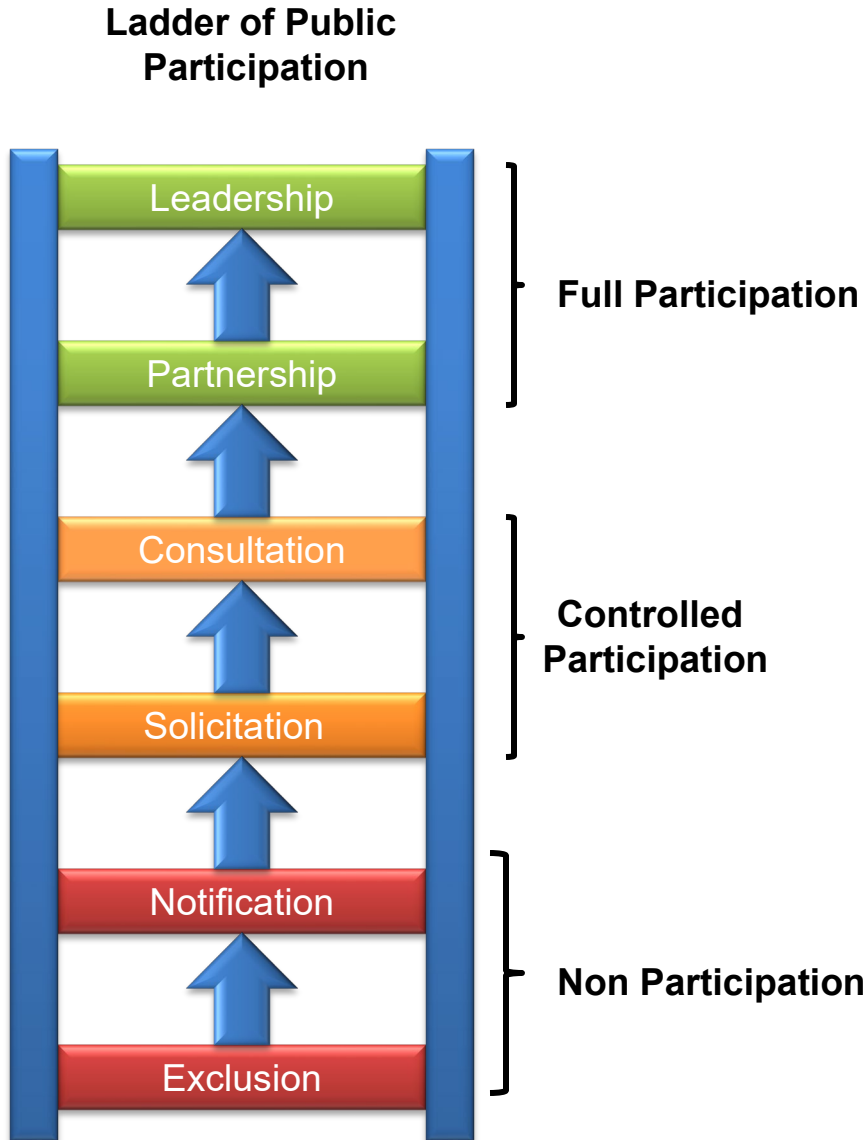
# Recent DOE Administrative History

- DOE Top-to-Bottom Review (2002)
  - Recognition that clean up was taking more time and resources than initially envisioned
  - Accelerated cleanup
- Risk Based End State Process (2003)
  - Directs sites to define risk-based end states that are sustainably protective of human health and the environment.
  - RBES are derived from appropriate land uses and their associated exposure scenarios.
  - Addresses all contaminants of concern.
  - With RBES, cleanup efforts can be focused so they are both cost effective and protective.
  - DOE must still comply with all applicable laws, regulations and agreements.
  - End state vision must be formulated in cooperation with all stakeholders.
  - RBES Vision documents are not decision documents.
- Politics of Clean-Up (2007)
  - Based on a review of previous clean-up experiences
    - Oak Ridge
    - Mound
    - Rocky Flats

# DOE End State Vision Process



# Guiding Principles

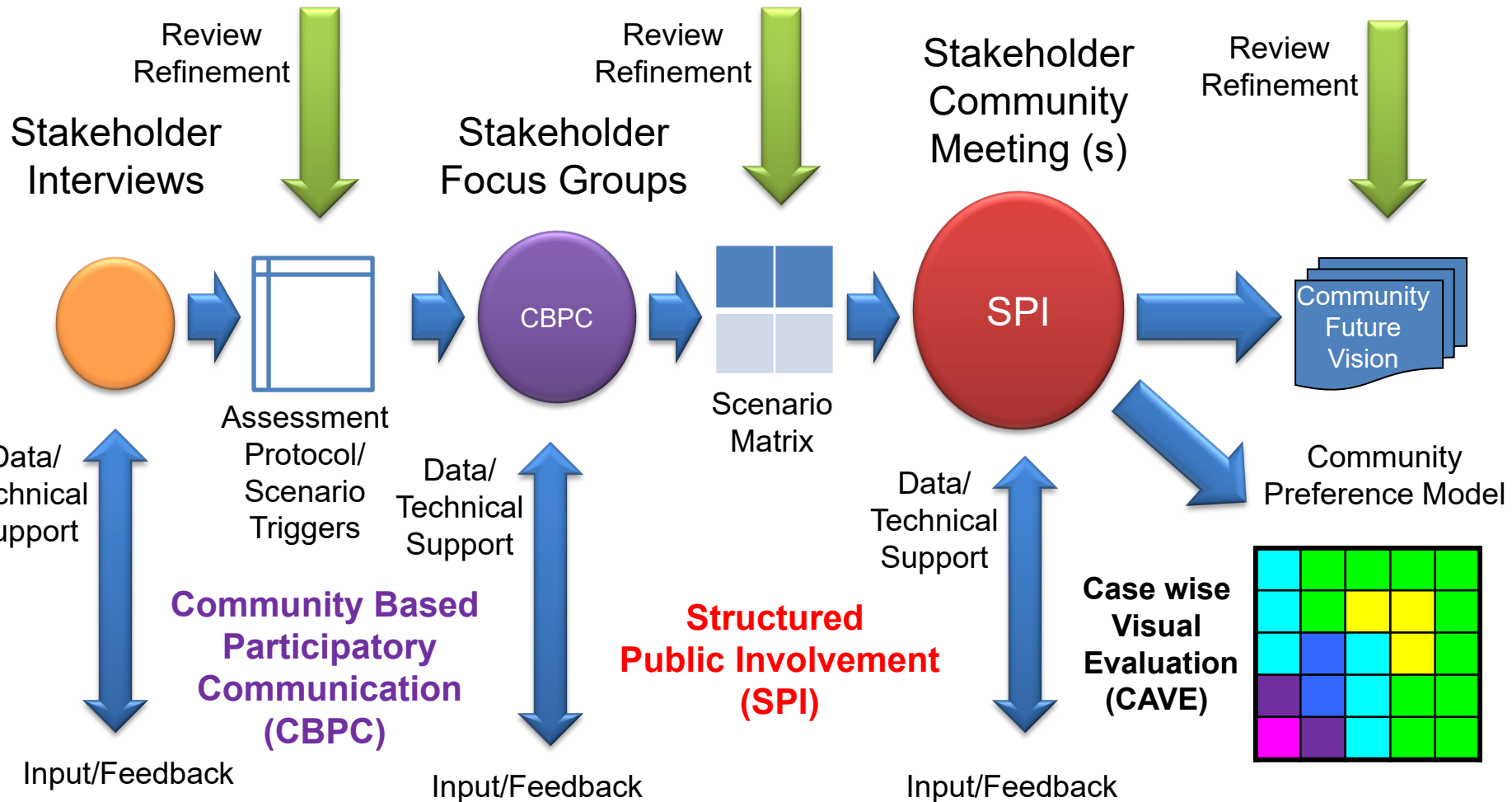


- Foster Full Participation
- Follow principles in “Politics of Cleanup”
- Use Community Based Participatory Communication Process
- Use Structured Public Involvement Process



# PGDP Future Vision Process

Future Vision Advisory Panel (Representatives Drawn from Stakeholders)





# Stakeholders

- Office of Governor Steve Beshear
  - Katie Allison, John Esham, Will Coffman
- Kentucky Energy and Environment Cabinet
  - Secretary: Len Peters, Dept Secretary: Hank List
  - Commissioner: Bruce Scott, DWM Director: Tony Hatton
- Cabinet for Health and Family Services
  - Secretary: Janie Miller
  - Public Health Commissioner : William Hacker
- Cabinet on Economic Development
  - Corky Peters, Madisonville office
- Kentucky Department of Fish and Wildlife
  - Anthony Black, Murray office
- West Kentucky Wildlife Management Area
  - Tim Kreher

# Stakeholders

- City of Paducah
  - Mayor William Paxton
  - City Manager Jim Zumwalt
- McCracken County
  - Judge Executive Van E. Newberry,
  - Deputy Judge Executive Doug Harnice
- Ballard County
  - Judge Executive Vickie Viniard
- City of Metropolis, IL
  - Mayor Billy McDaniel
- City of Kevil, KY
- West McCracken Water District
- McCracken Joint Sewer Agency
- Purchase District Health Department
- Paducah Housing Authority
  - Ray Henderson
- McCracken County Sheriff
  - John Hayden
- Senator Mitch McConnell
  - Martie Wiles
- Senator Jim Bunning
  - Rachel Nave McCubbin
- Representative Ed Whitfield
  - Janece Everett
- Representative Brent Housman
- Representative Steven Rudy
- Representative Mike Cherry
- Representative Will Course
- Representative Fred Nesler
- Senator Robert Leeper

# Stakeholders

- US Department of Energy
  - Reinhard Knerr & Robert 'Buz' Smith (Paducah)
  - William Murphie (regional office in Lexington)
- United States Enrichment Corporation
  - Steve Penrod, Georgeann Lookofsky
- Paducah Remediation Services
  - Joe Tarantino
- Citizens Advisory Board
  - Bobby Lee
- US Environmental Protection Agency
  - Turpin Ballard, Remedial Project Manager
  - EPA Region IV Office (Atlanta)
- Agency for Toxic Substances and Disease Registry
- United States Fish and Wildlife Service
  - Anthony Velasco
- Tennessee Valley Authority

# Stakeholders

- Purchase Area Development District
  - Jennifer Beck Walker
- Paducah Uranium Plant Asset Utilization Task Force
  - John Anderson
- Greater Paducah Economic Development Council
  - Rex Smith
  - Wayne Sterling
  - George Harvens
- Paducah Area Chamber of Commerce
  - Elaine Spalding, Susan Guess, Glen Denton
- Paducah Tourist and Convention Commission
  - Mary Hammond
- Entre Paducah
  - Terry Reeves
- Ballard County Chamber of Commerce
  - Barbara Jones
- HCSI
  - John Williams

# Stakeholders

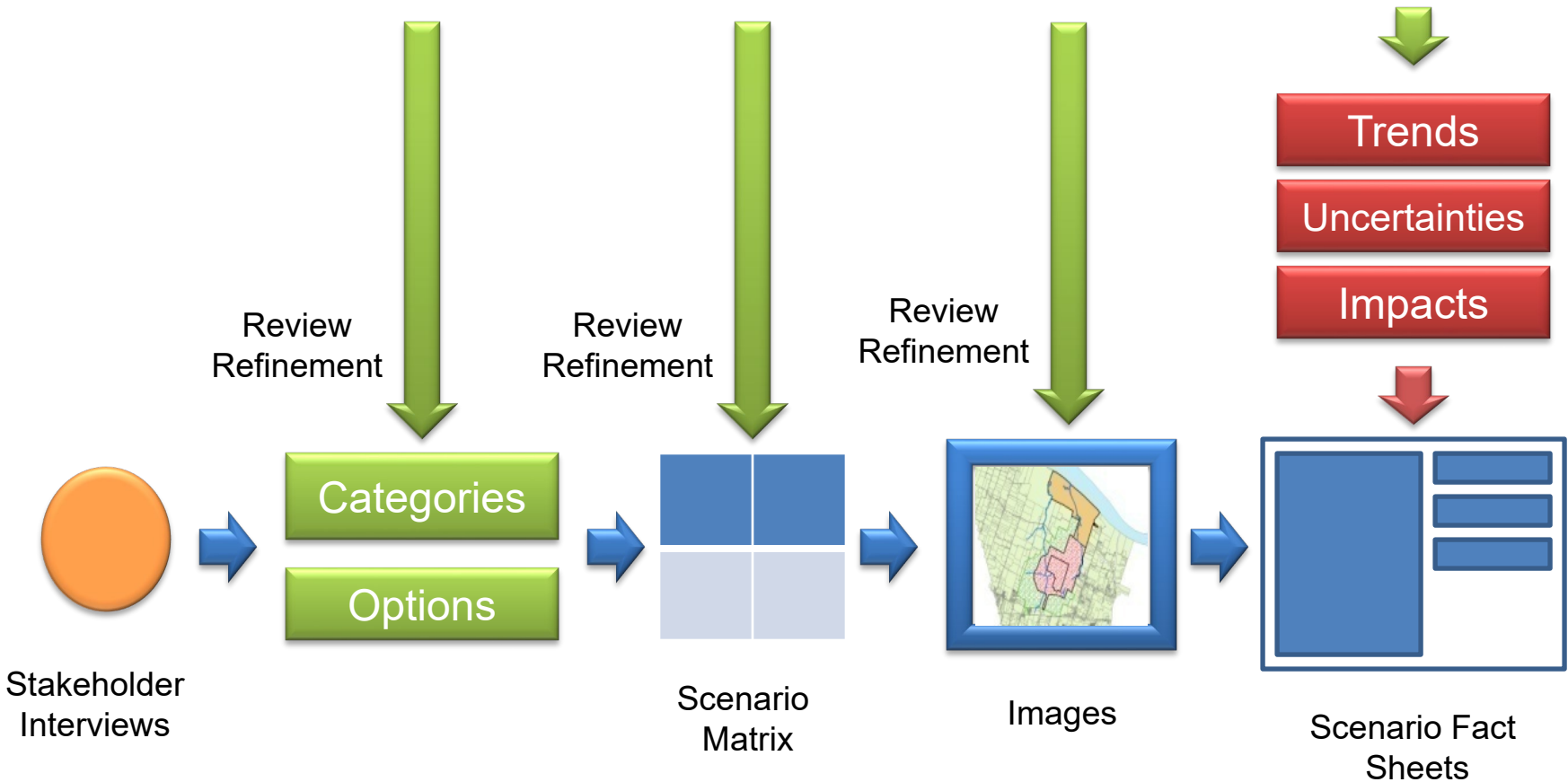
- Kentucky Resources Council
  - Tom Fitzgerald
- Active Citizens for Truth
  - Ruby English
- Coalition for Health Concerns
  - Corinne Whitehead
- Regional Association of Concerned Environmentalists
- Indigenous Peoples Environmental Network
- Western Kentucky Construction Association
  - Mike Donohoo
- United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied-Industrial and Service Workers International Union, Local 550
  - Rob Irvin
- Security Police and Fire Professionals of America, Local 101

# Stakeholders

- Landowners
- Neighborhood Associations
- Residents near the facility
- Community Spokespersons
- Public Schools
- Community College (West KU Tech)
- UK-Paducah Campus
- Extension Office
- Farm Bureau
- Conservation District
- Paducah Arts
- Churches/Religious Organizations
- Service Organizations
- Social Clubs
- General Public
- Paducah Sun
  - Ron Clark
- WKYX-AM/WDDJ-FM
  - Donna Groves
  - Greg Dunker
- WGCF-FM Community Radio
  - Glen Dunkerson
- WPSD (TV)
- WBCL (radio)
- Bristol Broadcasting
  - Jamie Futral
  - Gary Morse



# Trigger Scenario Development

Future Vision Advisory Panel/ Citizens Advisory Board

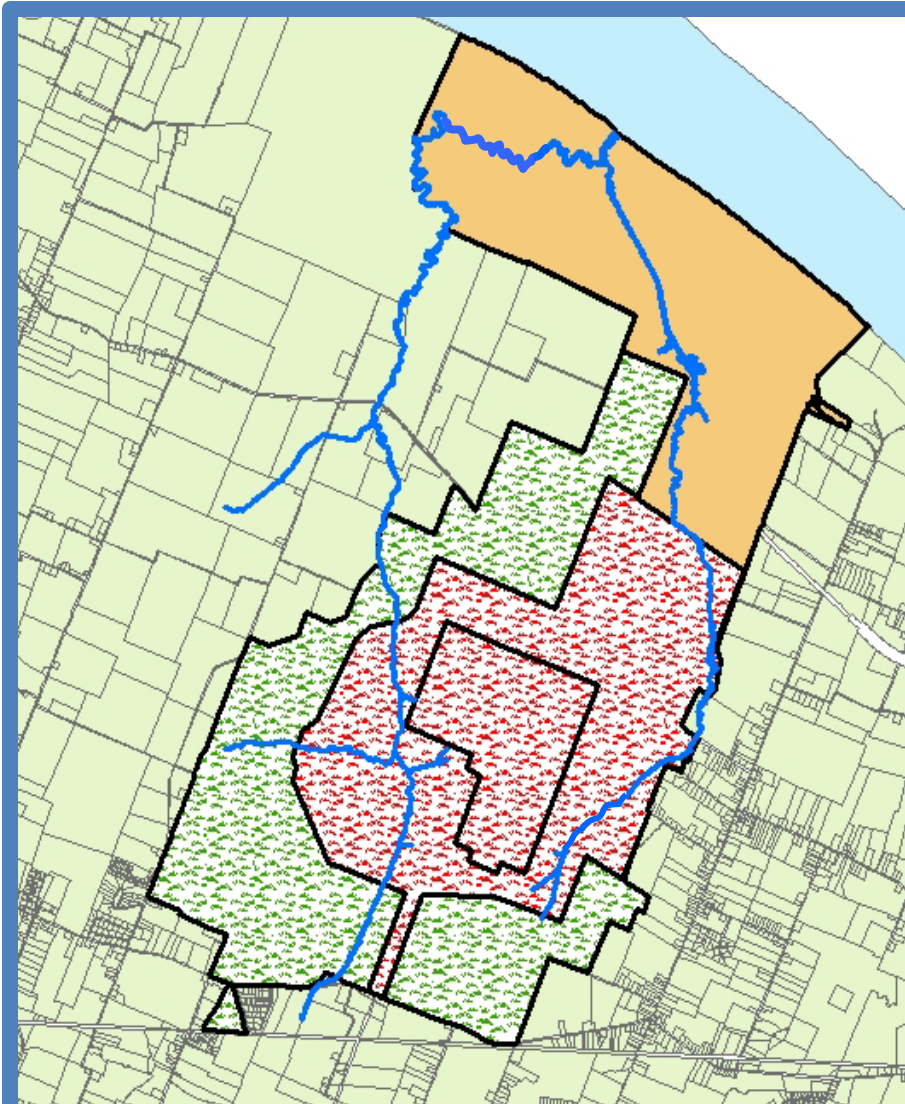




# Example Scenario Matrix

Future Vision Categories	Scenario 1	Scenario 2	Scenario 3	Scenario 4	
<b>Land Use</b>					
a. Nuclear Industry					
:					
z. Residential Apartments					
<b>Waste Disposal</b>					
a. On-site					
b. Partial					
c. Off-site					
<b>Groundwater</b>					
a. Water Policy & Active Treatment					
:					
z. Monitoring & Enhanced Inst. Controls					
<b>Surface Water</b>					
a. Monitoring					
:					
z. Sedimentation Basins/Removal					
					

# Example Scenario Fact Sheet



## Trends:

Energy Needs



Economic



Environmental



## Uncertainties:

Funding



Regulations



Demographics



## Impacts:

Health



Economic



Environmental



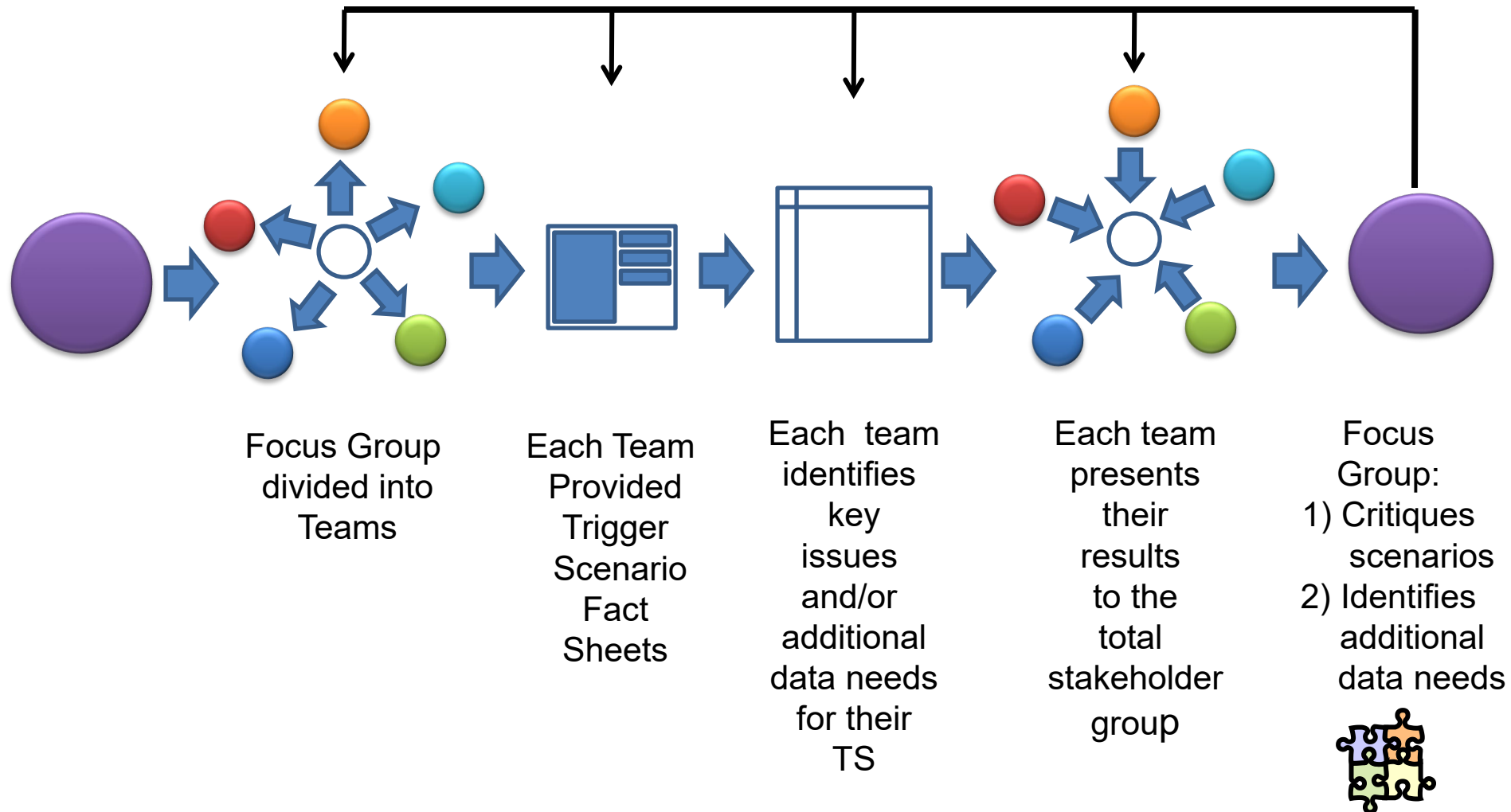
# Community Based Participatory Communication

- A process of raising awareness and understanding about social reality, problems and solutions, rather than persuasion for short-term behavioral changes that are only sustainable with continuous campaigns.
- Two-way relationships in which stakeholders enter into conversations and form partnerships with internal and external communities to yield mutually beneficial outcomes.
  - Favors decentralization, democracy, people involvement, dialogue, bottom-up and horizontal communication.
  - Uses both traditional and modern forms of communication and organization.
  - Protects tradition and cultural values, while facilitating the integration of new elements.
  - Creates an environment that empowers individuals and groups and gives them the freedom to voice their perceptions of reality and to act on these realities.



# Application of Community Based Participatory Communication to Future Vision Process

## 3) Focus group critiques process

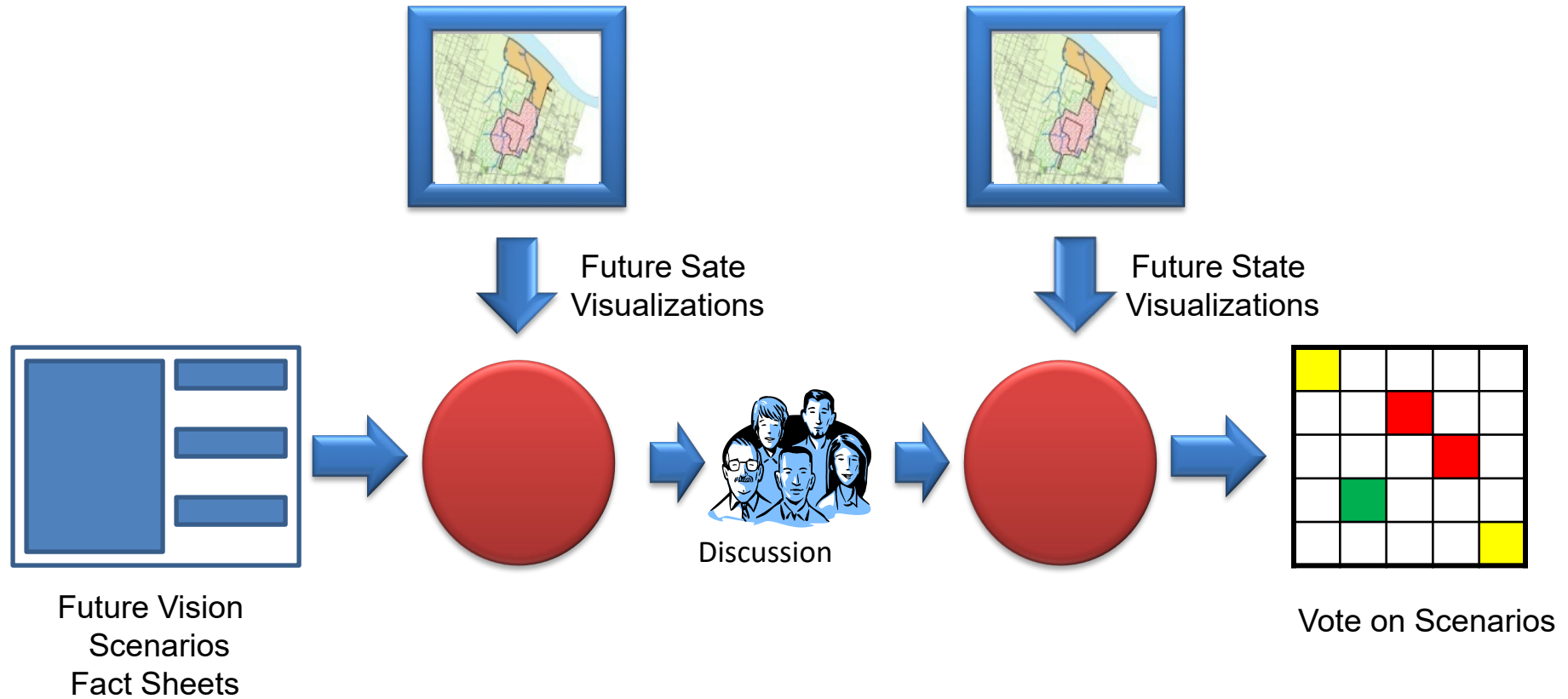


# Structured Public Involvement

- Inclusiveness
  - Hundreds of people can participate
- Fairness
  - Everyone gets equal voice
- Quality
  - People can understand the issues
- Respect
  - Everyone's time is valued
- Verification
  - Everyone sees the results in real time
- Accountability
  - Results are recorded, modeled, and analyzed
- Relevance
  - Results are incorporated into the planning process

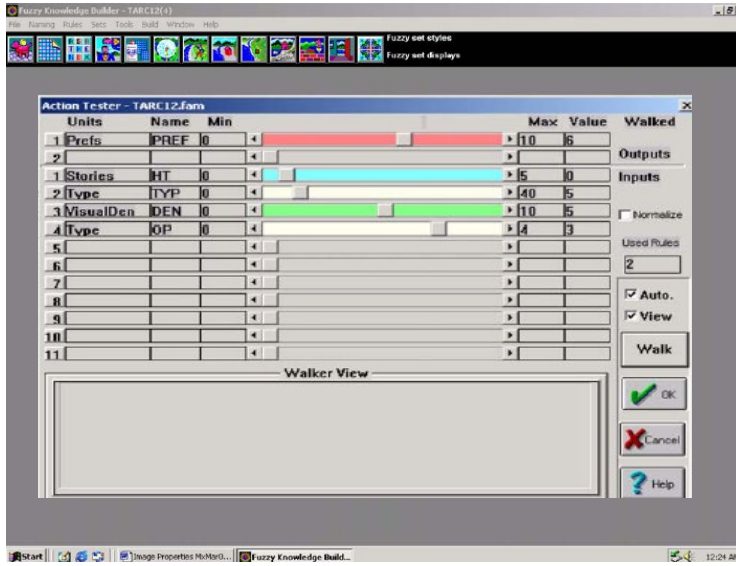


# Structured Public Involvement

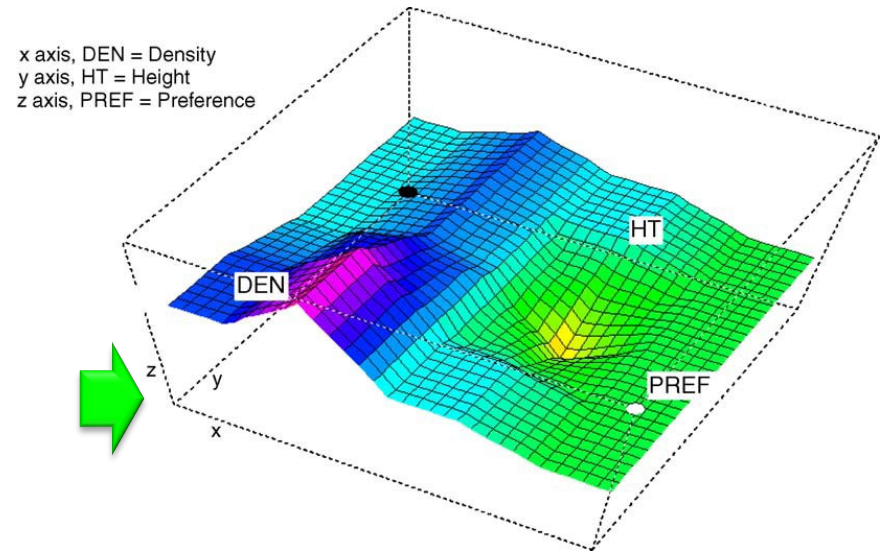




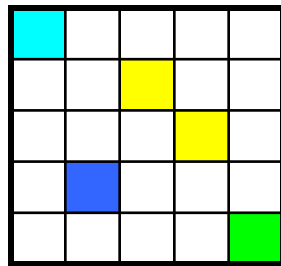
# CAsewise Visual Evaluation (CAVE)



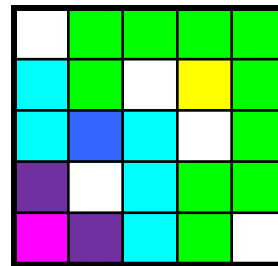
Fuzzy Knowledge Builder



Optimal Solution



Sampled Scenarios



Modeled Scenarios



5	3	3	3	3
5	3	1	1	3
5	7	5	1	3
8	7	5	3	3
9	8	5	3	3

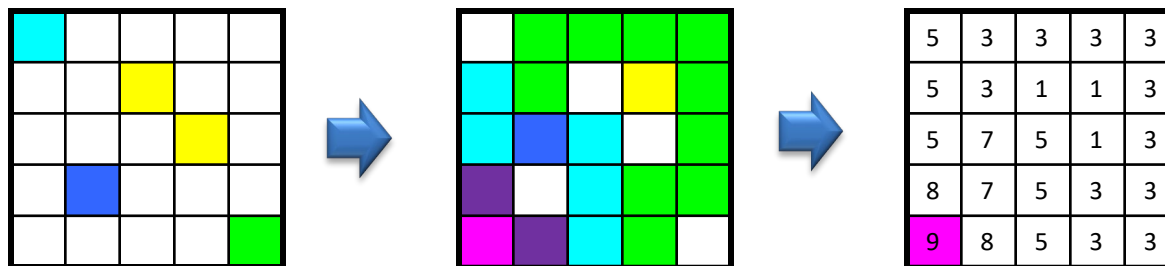
Selected Scenario(s)



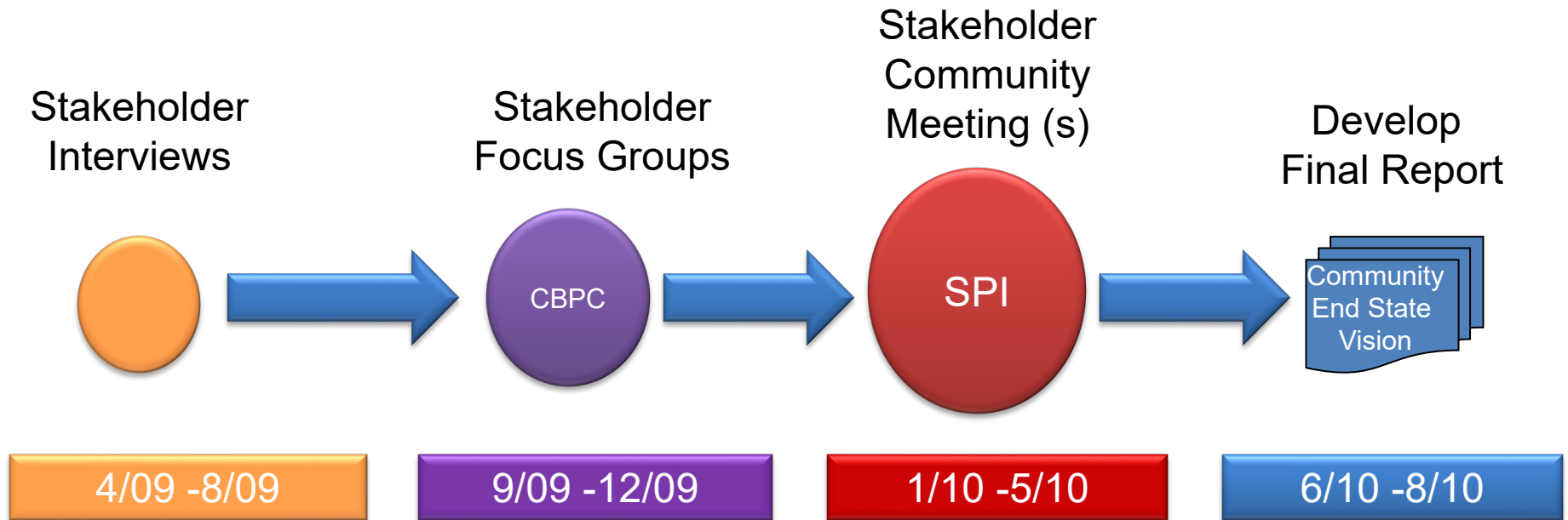


# Technology/Methodology Integration

- Community Based Participatory Communication (CBPC)
  - Dr. Chike Anyaegbunam
  - Approach has been applied around the world
  - Most recently used to address farm tractor safety
- Structured Public Involvement (SPI)
  - Dr. Ted Grossardt
  - Key pad technology
  - GIS/visualization technology
  - Approach has been applied on several projects in KY
- Preference Modeling using Casewise Visualization Evaluation (CAVE)
  - Dr. Keiron Bailey
  - Uses artificial intelligence modeling techniques
  - Approach has been applied on several projects in KY



# Future Vision TIMELINE



# Feedback

- Overall process
  - Suggestions for improvement?
- Stakeholders
  - Are we missing someone?
- Issues/Concerns
  - Are there some critical issues we need to be aware of?
    - Waste disposition
      - e.g. onsite vs offsite
- Opportunities/Challenges
  - Are there opportunities we need to know about?
    - Nuclear industry
      - e.g. GE
- Critical information
  - Is there some key information we need to obtain?
    - e.g. economic impact of PGDP to region