

PGDP Future Vision Project



www.uky.edu/krcce/project23.html

Outline

- Introduction of Project Team/Background
- Project Background
- Overview of Process
 - Guiding Principles
 - Three Step Stakeholder Process
 - Community Based Participatory Communication
 - Key Values Exercise
 - Structured Public Involvement
 - Key Pad Exercise
 - CAsewise Visual Evaluation
 - Scenario Visualization

Project Team

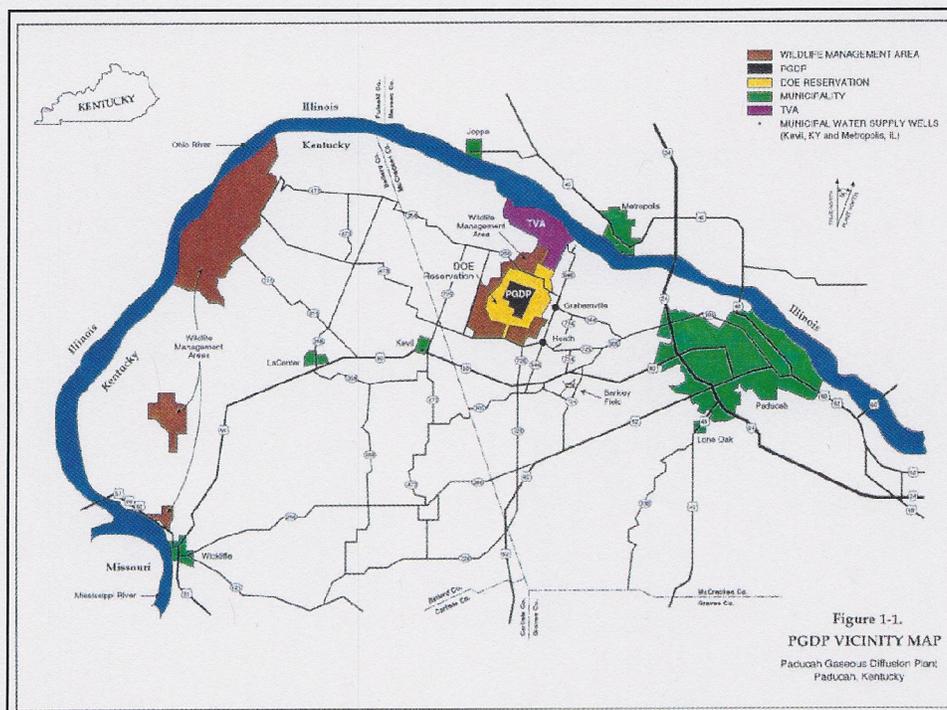
- DOE Technical Liaison
 - Rich Bonczek (DOE)
- UK Technical Liaison
 - Steve Hampson (University of Kentucky)
- Project Manager
 - Dr. Lindell Ormsbee (University of Kentucky)
- Community Based Participatory Communication
 - Dr. Chike Anyaegbunam (University of Kentucky)
- Structured Public Involvement
 - Dr. Ted Grossardt (University of Kentucky)
- CAsewise Visual Evaluation
 - Dr. Keiron Bailey (University of Arizona)
- Scenario Visualization
 - John Ripy, Ben Blandford (University of Kentucky)
- Technical Support/Facilitators
 - Anna Hoover, Mitchael Schwartz

Project Team Background

- Dr. Ormsbee and Steve Hampson have been working at Paducah since 1994 and have been involved in over 30 separate projects at the site with funding from US DOE, KY Energy and Environmental Protection Cabinet (non rad issues), KY Cabinet for Health and Family Services (rad issues), and the NIH.
- Dr. Grossardt and Dr. Bailey pioneered the Structured Public Involvement (SPI) process more than 10 years ago; SPI has been successfully applied to several large scale infrastructure public involvement projects.
- Dr. Anyaegbunam helped pioneer community based participatory communication processes that have been successfully applied around the world.

Project Background

- This project, initiated at US DOE's request and funded through a congressional earmark, seeks to identify a community vision that could be integrated into the US DOE Risk Based End State document.
- The final report also will be provided as a stand-alone document for use by the local community in promoting its vision for the site.
- DOE is only one of several different stakeholders in the process and has no editorial control on the either the process or the final report.

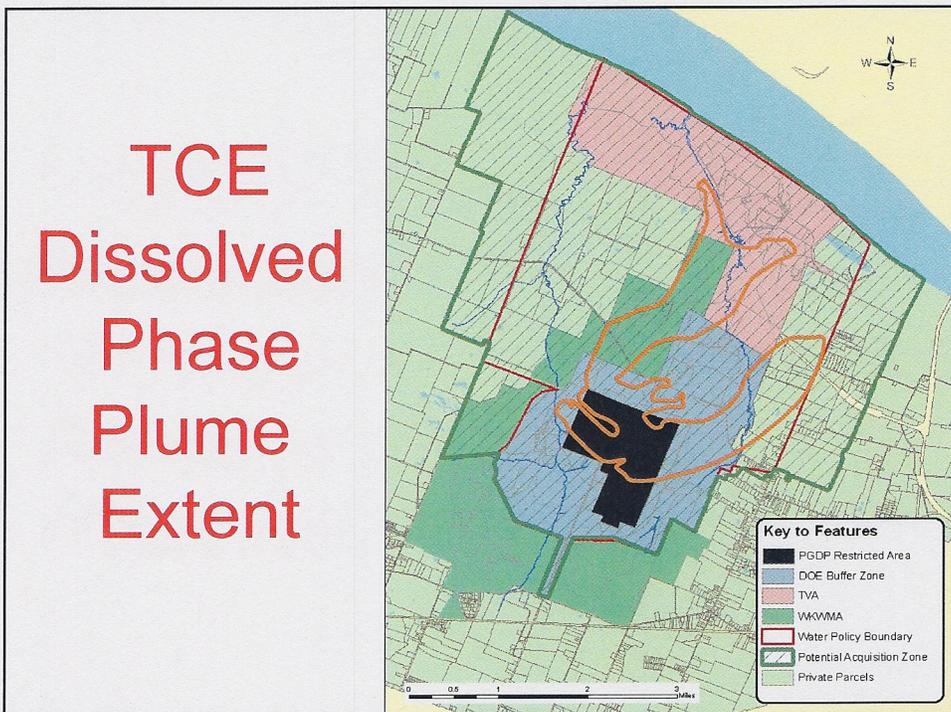
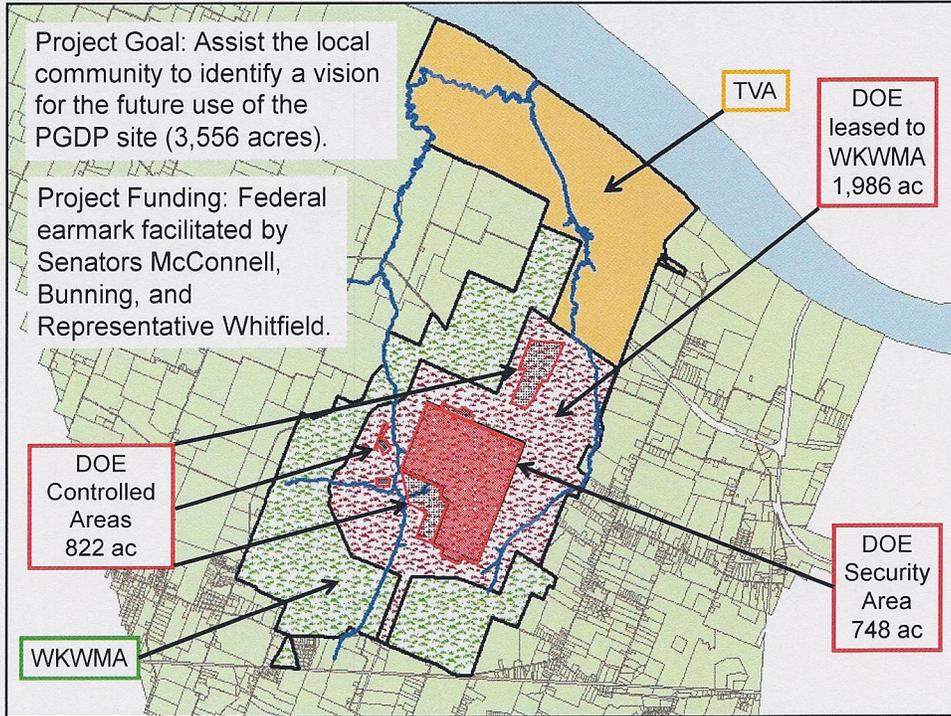


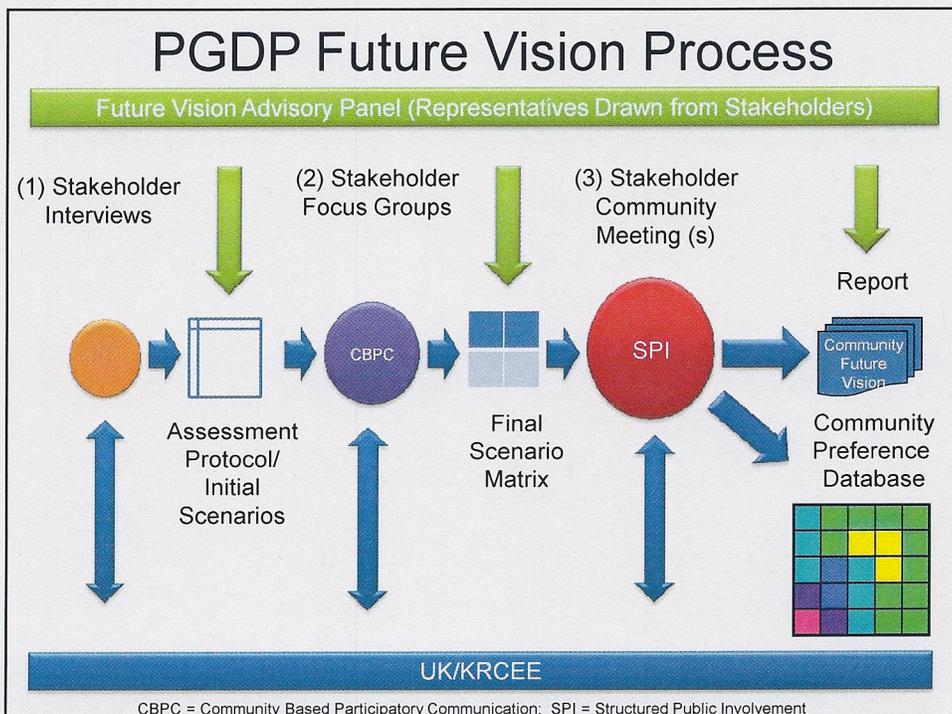
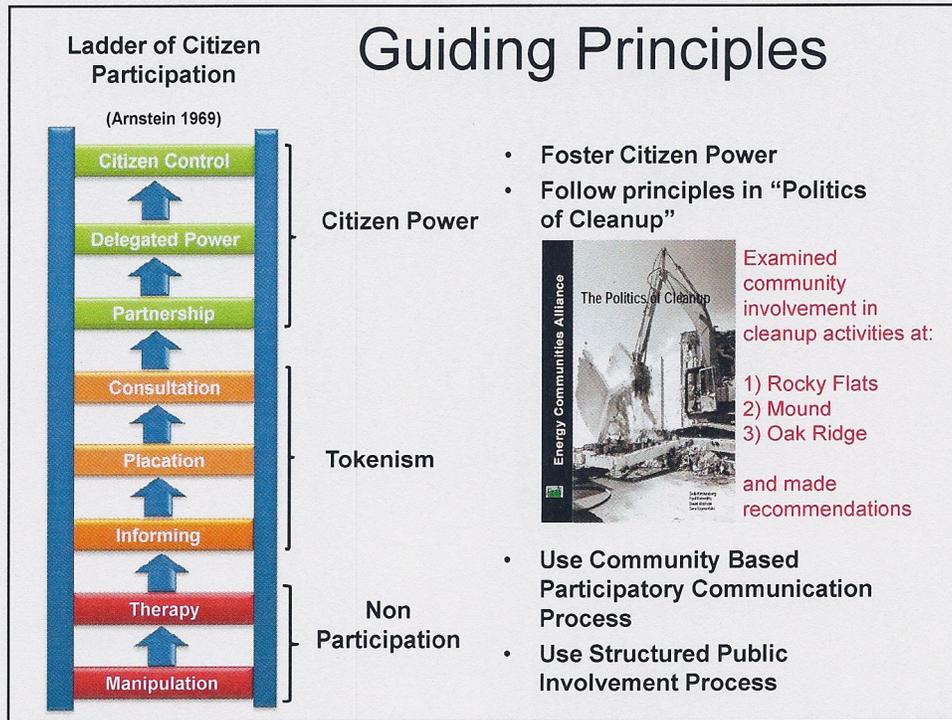


Site Facts*

- Total Federal Acreage: 3,556
- Gaseous Diffusion Plant Acreage: 748
- Total Number of Buildings: 161
- Process Buildings: 4
- Process Building Dimensions: 1,100 ft. long, 970 ft. wide, 90 ft. high
- Process Building Acreage Under Roof: 74 acres
- Number of Enrichment Stages: 1,760
- Peak Design Power Capacity: 3,040 megawatts
- Largest Process Motor: 3,300 horsepower
- Water Utilization: 26 million gallons per day
- Number of Control Instruments: 85,000
- Miles of Process Piping: 400 (approximately) Miles of Roadway: 19
- Miles of Railroad: 9 Miles of Perimeter Fence: 5 miles
- Number of Employees: 1200
- Annual Regional Economic Impact: \$147 million

*www.usec.com



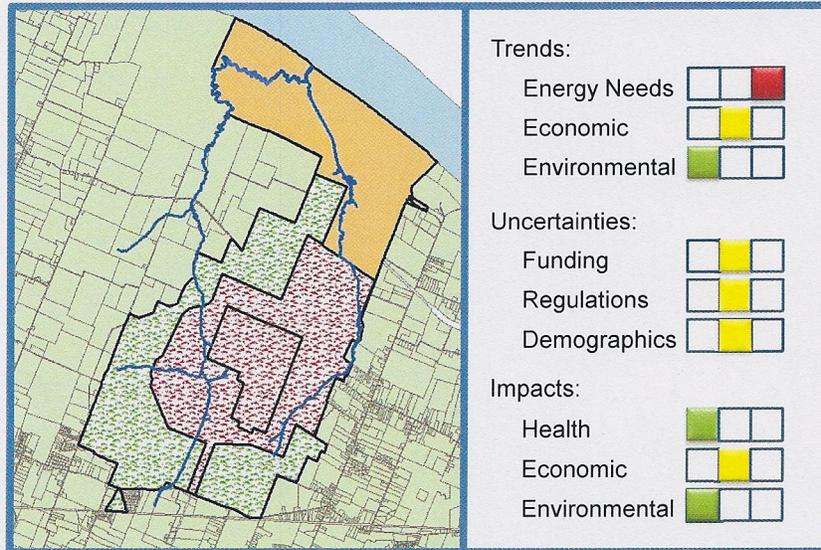


Example Scenario Matrix

Categories	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
DOE PGDP Land Use					
1. Nuclear					
2. Industrial					
3. Wildlife					
4. Institutional Controls					
DOE WMA Land Use					
1. Industrial					
2. Commercial					
3. Recreational Facilities					
4. Wildlife					
Groundwater Remediation					
1. Pump and Treat					
2. C400 Building Source					
3. On site source reduction					
4. On and off site reduction					
CERCLA Waste Disposal					
1. Onsite					
2. Partial Onsite					
3. Transport Offsite					
Burial Ground Wastes					
1. Leave in Place					
2. Excavate/Bury Onsite					
3. Excavate/Transport Offsite					

Example Scenario Fact Sheet

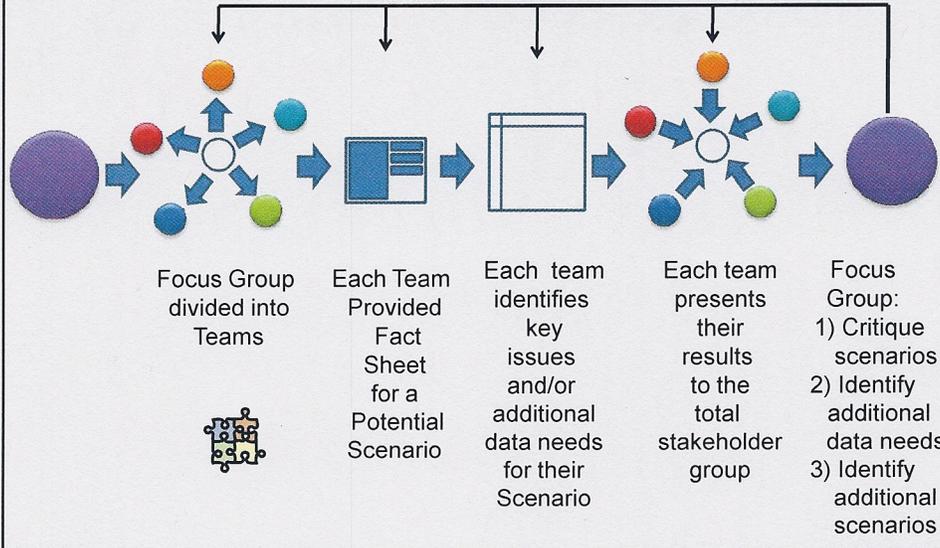
(To be generated from discussions with advisory panel and focus groups)



(2) Stakeholder Focus Groups

(Community based participatory communication - Dr. Chike Anyaegbunam - UK)

4) Critiques Process



Stakeholder Clusters

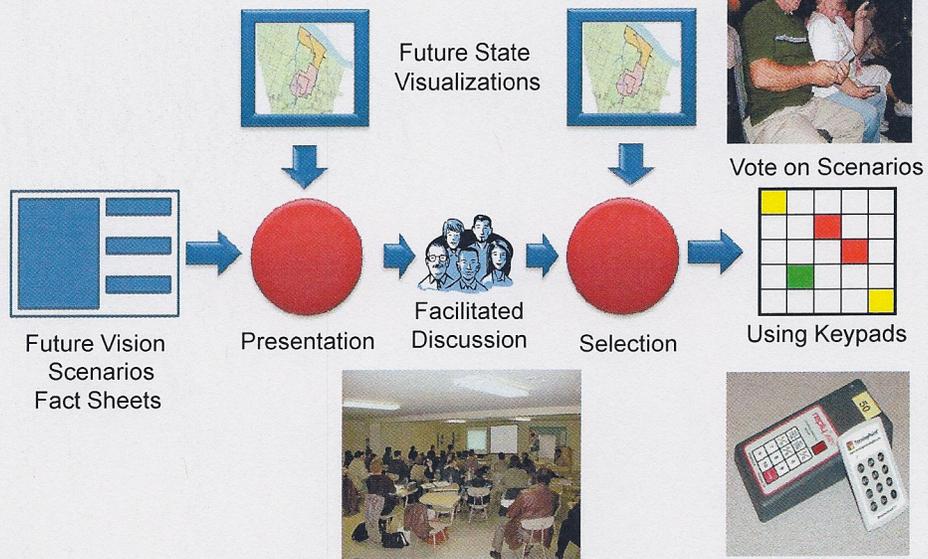
Cluster
Residents
Employees
Environmental/Health Activists
Economic Development
Healthcare
Education - WKCT
Education - UK Paducah
Media
Religious/Spiritual
Wildlife/Recreation
Tourism
Ballard
DOE
DOE Contractors
Paducah Government
CAB
Regulatory





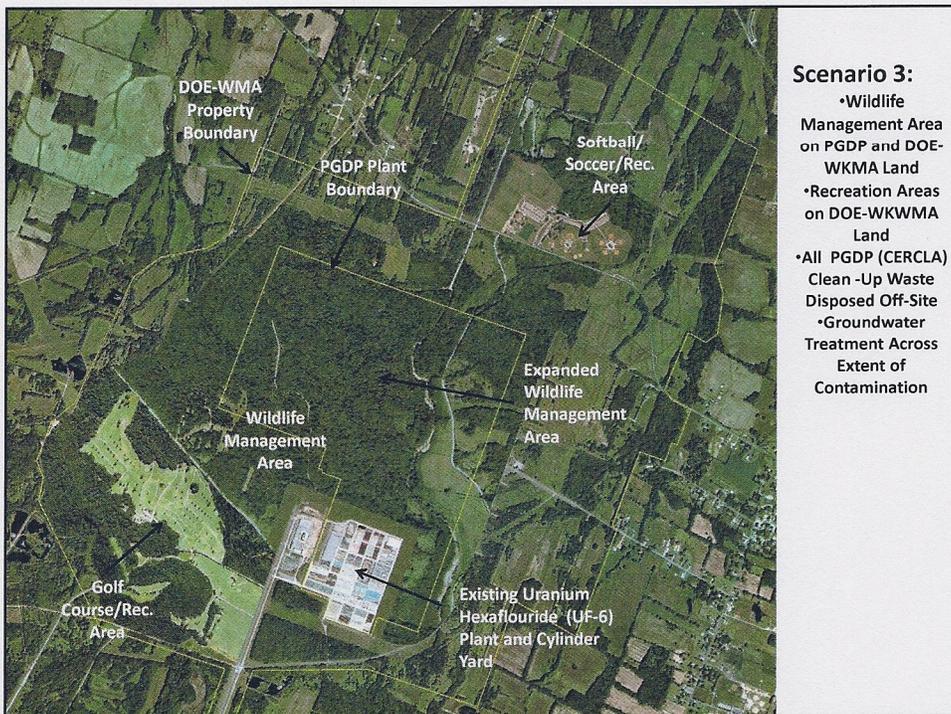
(3) Stakeholder Community Meeting

(Structured Public Involvement - Dr. Ted Grossardt - UK)

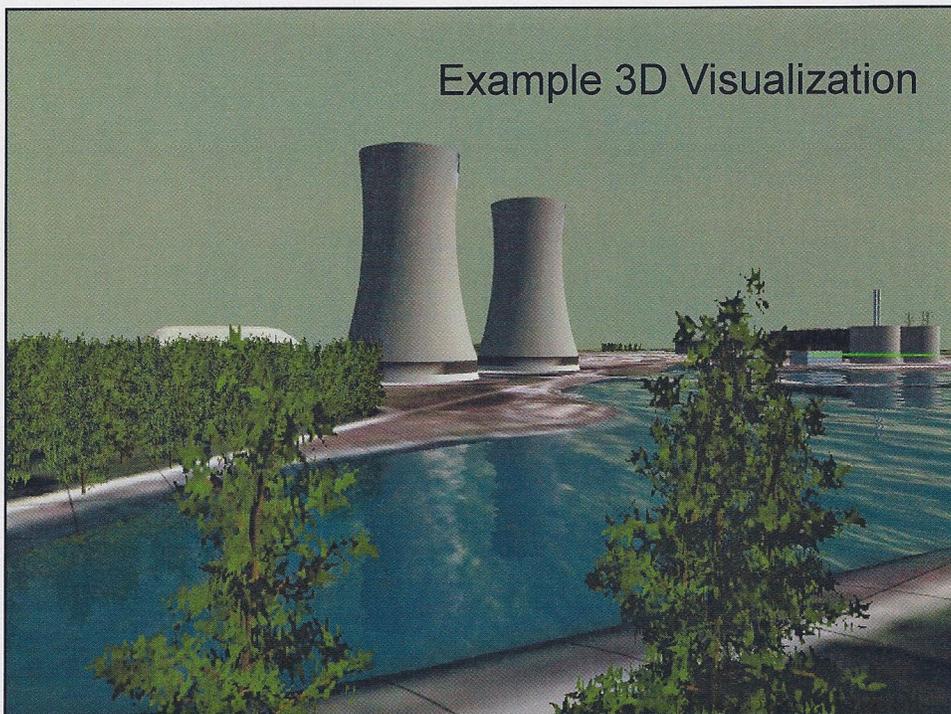
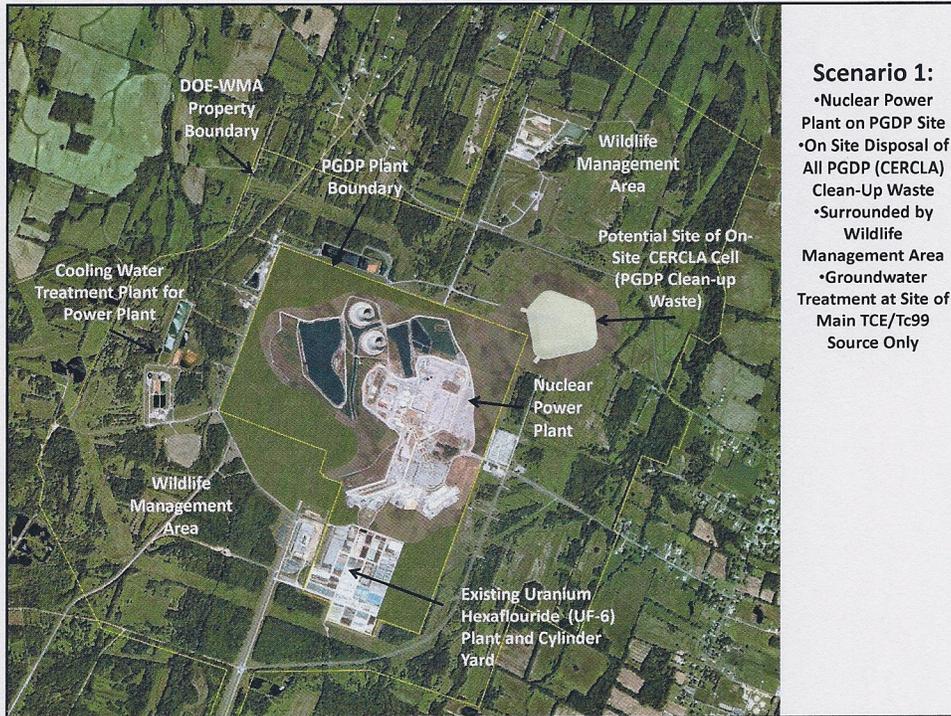




- Current:**
- PGDP Plant
 - Surrounded by DOE-Wildlife Management Area
 - Uranium Hexafluoride (UF-6) Conversion Plant
 - Limited Source Removal and Pump and Treat Groundwater Containment Strategy

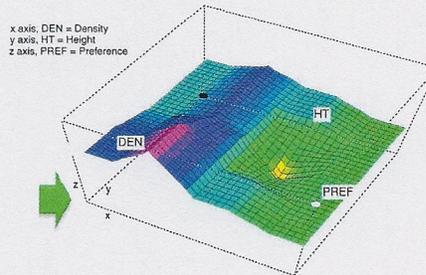
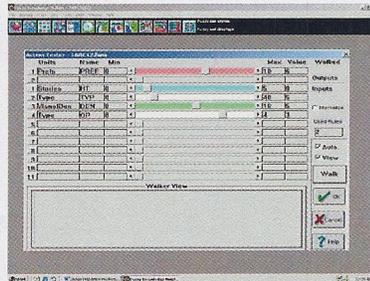


- Scenario 3:**
- Wildlife Management Area on PGDP and DOE-WKMA Land
 - Recreation Areas on DOE-WKMA Land
 - All PGDP (CERCLA) Clean-Up Waste Disposed Off-Site
 - Groundwater Treatment Across Extent of Contamination



Community Preference Model

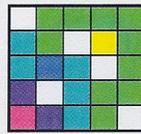
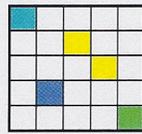
(CAsewise Visual Evaluation (CAVE) - Dr. Keiron Bailey - UA)



Fuzzy Knowledge Builder

Good Solution

Bad Solution



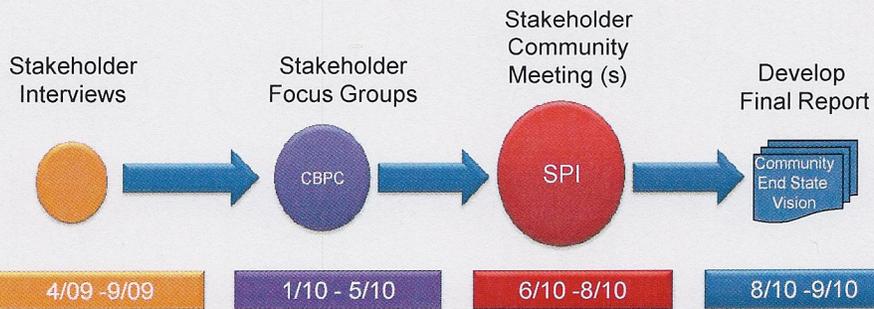
5	3	3	3	3
5	3	1	1	3
5	7	5	1	3
8	7	5	3	3
9	8	5	3	3

Sampled Scenarios

Modeled Scenarios

Solution Evaluation

Future Vision TIMELINE

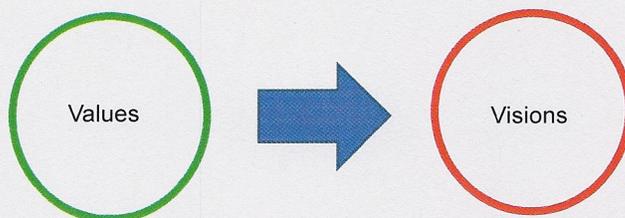


Key Values Exercise

Dr. Chike Anyaegbunam

Value Questions

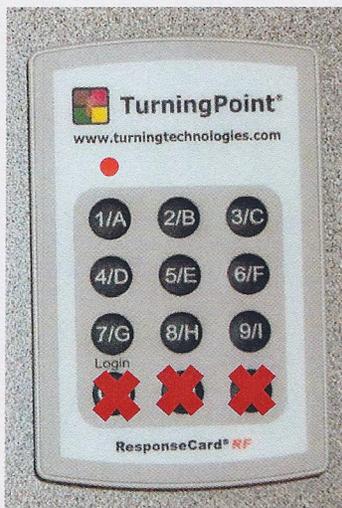
- What two things do you most appreciate or value about your local community?

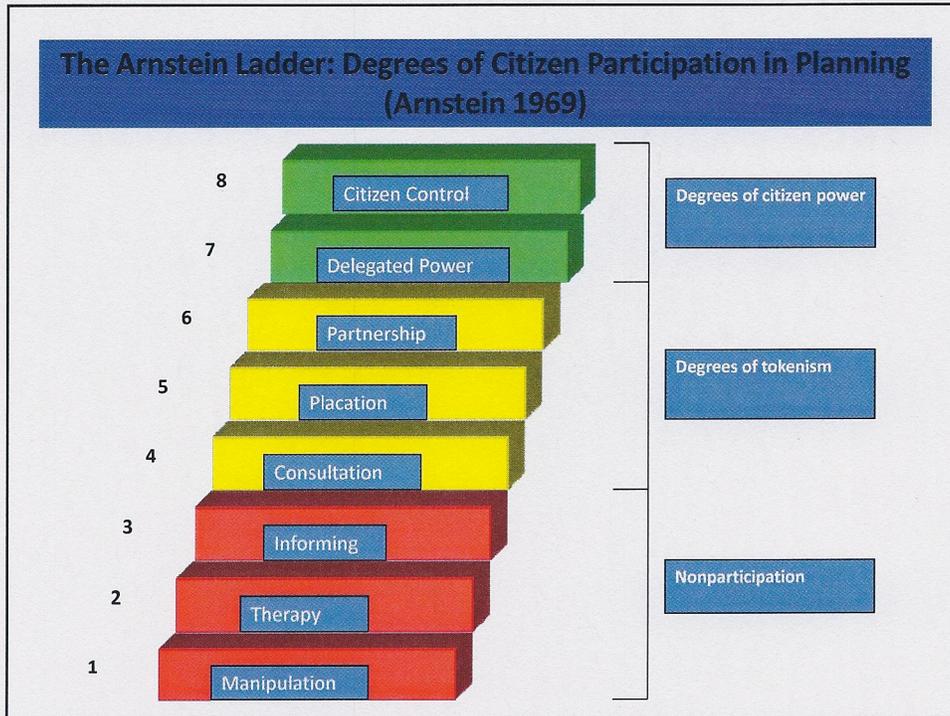


Key Pad Exercise

Dr. Ted Grossardt

RF Keypad System





How would you characterize your past experiences with public involvement?

1. Manipulation
2. Therapy
3. Informing
4. Consultation
5. Placation
6. Partnership
7. Delegated Power
8. Citizen Control

Mean =

What do you think the appropriate level of public involvement should be?

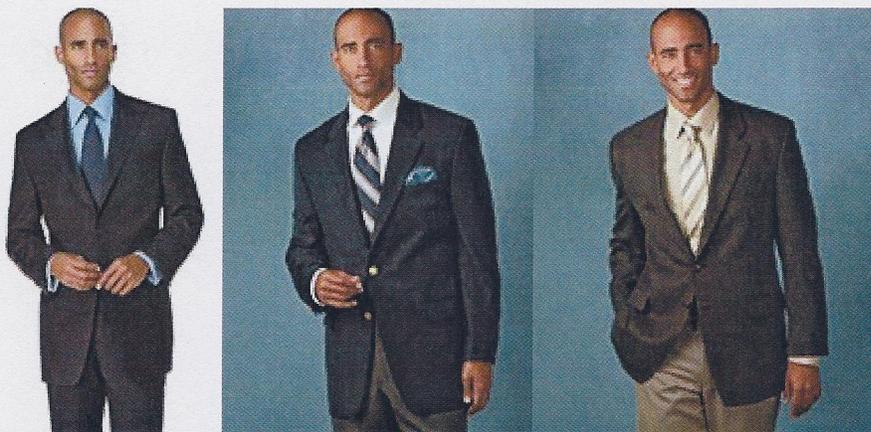
1. Manipulation
2. Therapy
3. Informing
4. Consultation
5. Placation
6. Partnership
7. Delegated Power
8. Citizen Control

Mean =

Case-wise Visualization Process

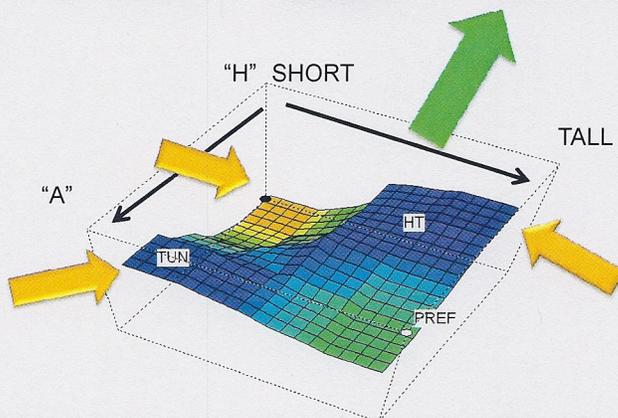
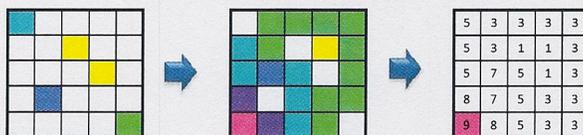
Dr. Keiron Bailey

Dress This Man



3 Jackets x 3 pants x 3 shirts x 3 ties = 81 combinations

CAsewise Visual Evaluation (CAVE) Decision Support



Scenario Visualizations

John Ripy

QUESTIONS?