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Using Risk and Participatory Communication to Support Community-Based Decisions: The Paducah Gaseous Diffusion Plant Future Vision Project

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Using Risk and Participatory Communication to Support Community-Based Decisions

The Paducah Gaseous Diffusion Plant Future Vision Project



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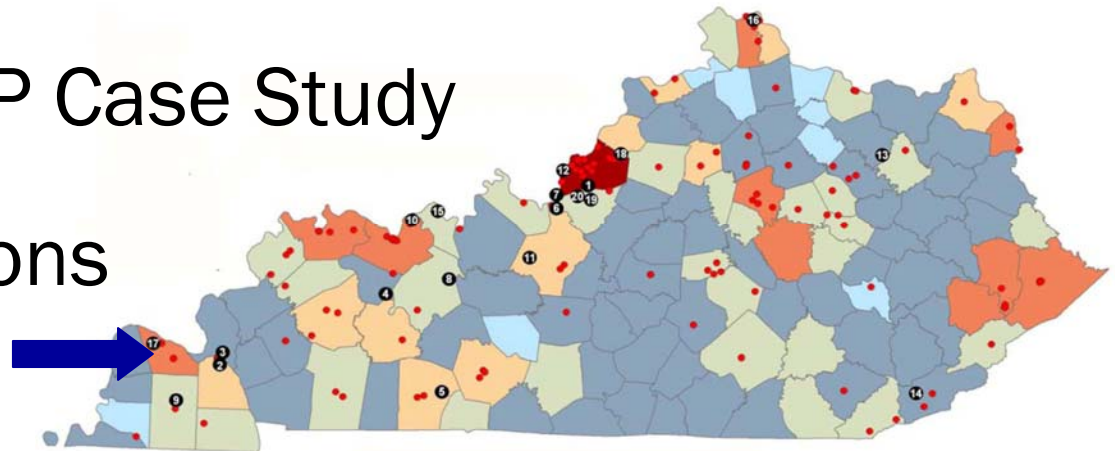
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Where We Are Going

- Risk Communication
- The Superfund Tapestry
 - Locals
 - Outsiders
- Participatory Communication
- The PGDP Case Study
- Implications



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Risk Communication

- Hazard vs. Outrage
- US EPA's Seven Cardinal Rules (1988)
 - 1) accept/involve the public as a legitimate partner;
 - 2) plan carefully and evaluate your efforts;
 - 3) listen to the public's specific concerns;
 - 4) be honest, frank, and open;
 - 5) coordinate/collaborate with other credible sources;
 - 6) meet the needs of the media;
 - 7) speak clearly and with compassion
- National Resource Council (1989)



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The Superfund Tapestry

- Historically Situated
- Long-Term
- Environmental and Health Concerns
- Stakeholder Heterogeneity
- Complex Statutory Environment

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Locals

- Homeowners/Landowners Near the Site
- PRP Employees
- Environmental/Health Advocates
- Healthcare Providers
- Educators
- Local Media
- Religious Community
- Hunters/Fishermen
- Tourism Industry
- Local Government
- SSABs/CABs



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Outsiders

- Federal Agencies
 - US EPA
 - ATSDR
 - NIEHS (SRP)
 - DOE
 - DOD
- State Agencies
 - Environmental Protection
 - Divisions of Water
 - Divisions of Air Quality
 - Divisions of Waste Management
 - Superfund Branches
 - Health Departments
- University Researchers



The Goals of Community-Based Participatory Communication (CBPC)

- Engagement
- Empowerment
- Collaboration
- Context
- Trust



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The Tools of CBPC

- Visualizations
- Projective Techniques
- Interviews
- Group Work
- Dialogue
- Ranking and Scoring





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Paducah Gaseous Diffusion Plant



- Only operating US uranium GDP (1952-present)
- 1,200 workers/\$121M payroll
- TCE and Tc-99 in nearby private drinking wells (1988)
- EPA Superfund National Priority List (1993-94)
- One of the largest TCE plumes in the world
- Plant to close in 5-10 years

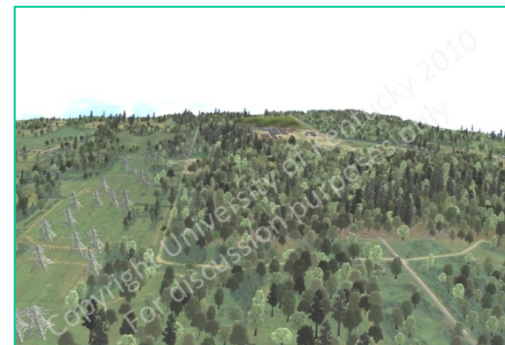
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Project Goals

- Involve communities in visioning for site remediation, use, and monitoring
- Ensure that future use goals help advance local needs and values

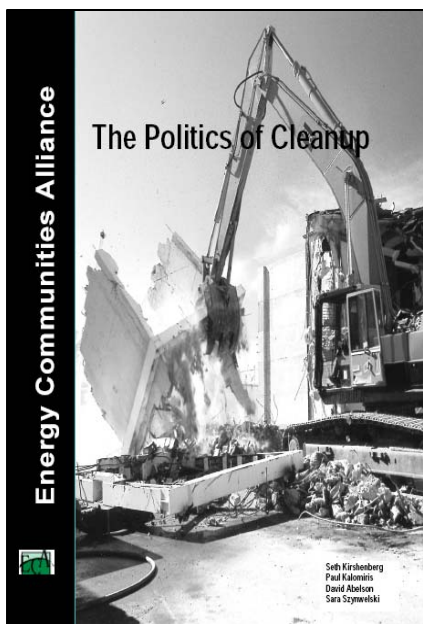




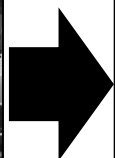
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Mixed-Methods Approach



Guiding Principles



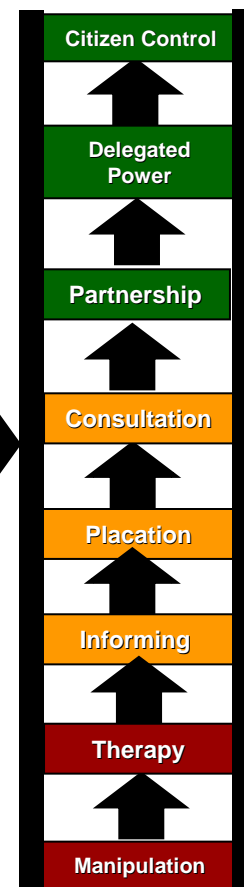
Qualitative Tools

- Community-Based Participatory Communication

Quantitative Tools

- Structured Public Involvement
- Casewise Visual Evaluation

Tool Box



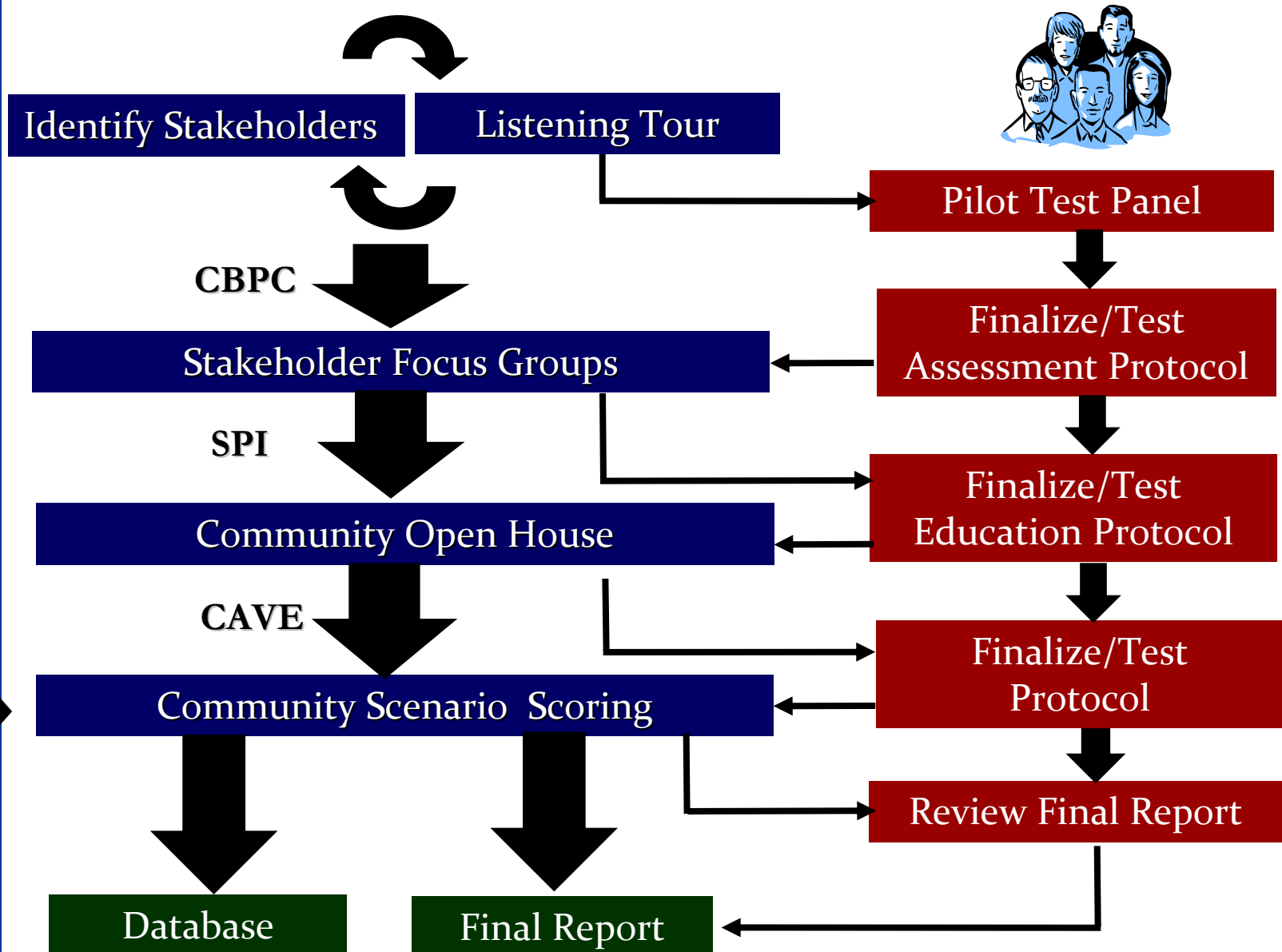
**Evaluation
Metric**



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Adapting the Participatory Communication Process





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Methods: Listening Tour Protocol

Overview: Project and Process

What are your individual/organizational concerns?

What long-term development opportunities exist?

What long-term development challenges exist?

What is your individual/organizational long-term vision for the site?

What do we need to know?

Who should be involved?

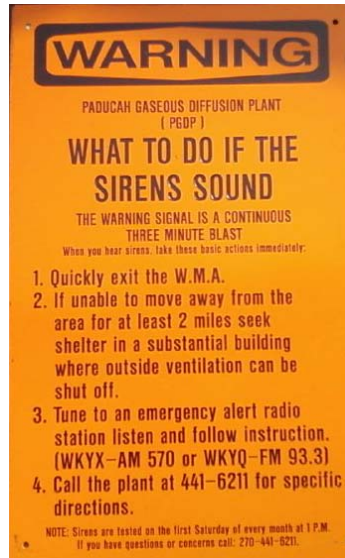




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Findings: Outrage



- “...[I]t’s all on the ATSDR/CDC site, and we even had a sick worker get up at one of the meetings and talk about some of this stuff... They never told anybody anything. And they’re still not doing it.”
- “So why didn’t ASTDR [sic] do an epi study? They [i.e., ‘the government’] never do any honest stuff...”
- “What you’re seeing in their ASTDR [sic] reports is a lot of good information, and they do capture a lot of things in the buildings. But then it’s almost like I’ve got the real facts of the workers, and it’s not matching what you’re assessing here...”
- “...[T]here’s been recent testimony that the ASTDR [sic] report was biased. These people were intimidated by the past administration.”



Stakeholder Clusters/ Advisory Panel

- Water Policy District Residents
- USEC Employees
- Environmental/Health Advocates
- Healthcare Providers
- Education (Postsecondary)
- Media
- Religious/Spiritual
- Wildlife/Recreation
- Tourism
- Ballard County
- US DOE
- US DOE Subcontractors
- Paducah Government
- PGDP Citizens Advisory Board
- Regulatory Agencies

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Methods:

Focus Group Protocol



- Project Overview
- Exercise 1: Arnstein Ladder
- Exercise 2: Paducah's Best Qualities
- Exercise 3: Qualities of The Ideal City
- Exercise 4: Scenario Evaluations
- Exercise 5: Scenario Presentations
- Exercise 6: Scenario Discussion
- Exercise 7: Scenario Evaluations
- Exercise 8: Information Gaps & Credible Sources
- Process Evaluation



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Findings: Outrage



- “...[P]eople know that it’s a plant out here for the government...”
- “...The federal government is notorious about [using acronyms], if you’ve ever tried to read a federal government document...”
- “[J]ust get the government the ____ out... They came in and disrupted everything...”
- “I would not want [information from] anybody affiliated with the government in any way...”



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Findings: Community Values

- Jobs
- Trust
- Family
- Safety & Security
- Free & Open Communication
- Outdoor Recreation Opportunities
- Clean Water & Healthy Environment
- Education and Cultural Opportunities





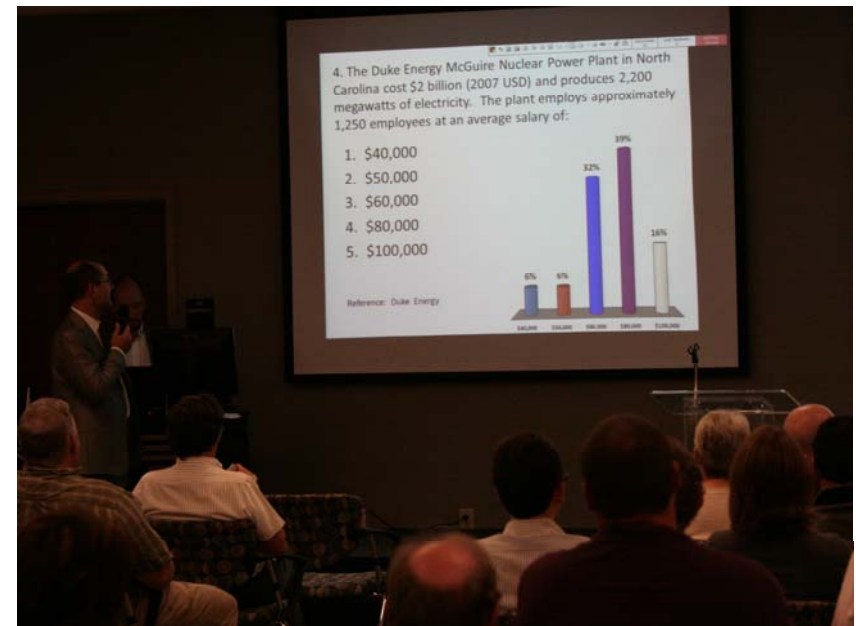
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Outputs:

Public Information Meetings

- Interactive Quiz Show Format
- Answers Included References to Existing Resources
- Five Categories
 - The Past
 - The Present
 - The Future
 - Science
 - Cleanup





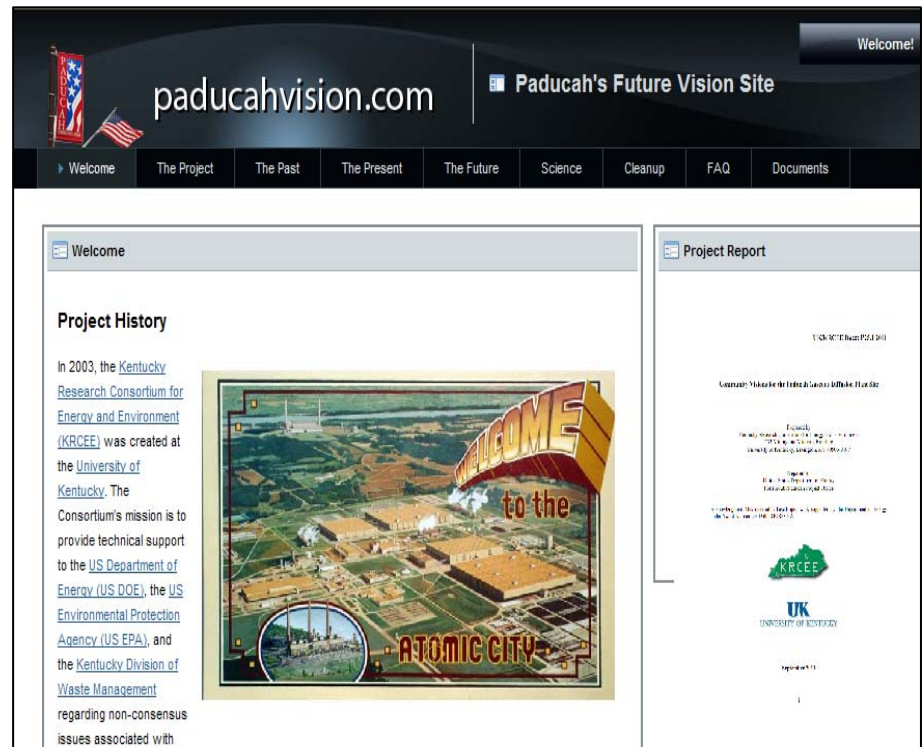
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Outputs:

Project Report and Website

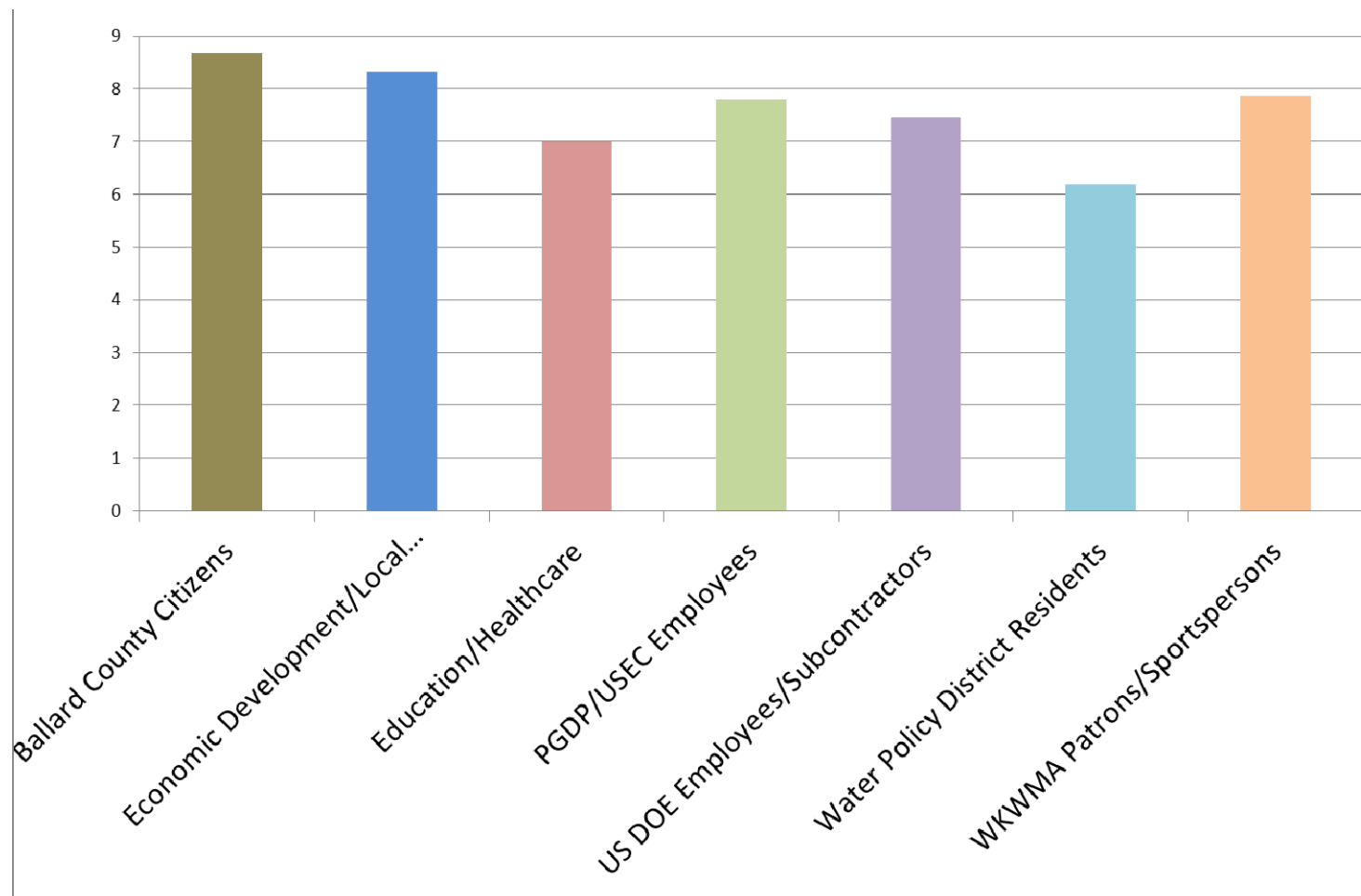
- Existing Reports and Resources
- Project Background
- FAQ and Quiz
- All Scenarios
- RSS News Feed
- Final Report





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Process Evaluations



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Outcomes

- Community members increased knowledge of PGDP-related issues and available resources
- Increased awareness of pending closure and potential future uses of the site
- Disparate stakeholders gained experience in collaborative visioning
- Community values and scenario preferences documented for future advocacy

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