



Social Science Research and Chesapeake Bay Restoration:

Results from Key Informants



Elizabeth Van Dolah

Chesapeake Research Consortium

STAC Coordinator

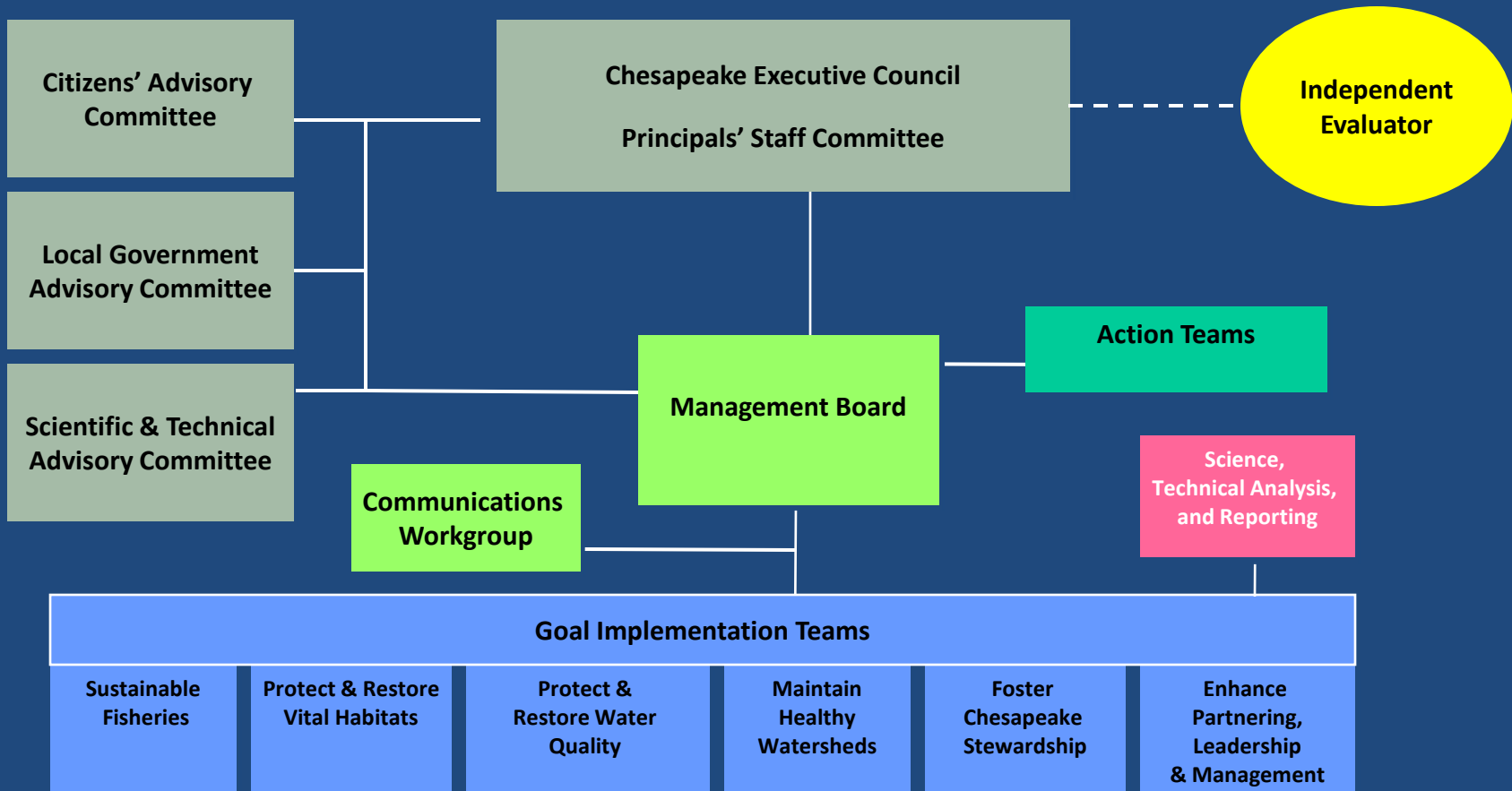
The Interview Process: A Few Numbers

- 12 key-informants
- 3 interviewers
- 45 – 60min semi-structured interviews
- 8 questions
- 30 pages of notes
- 1 qualitative data analysis program



Who were our key informants?

Chesapeake Bay Program



What questions were asked?

- *Date, name, current position/occupation?*
- *How many years have you been involved in Chesapeake Bay restoration work?*
- *Do you have examples of how social science research has played an important role in advancing Bay restoration? Do you have any examples that are not Chesapeake Bay related?*
- *In your opinion, what Bay restoration priorities should be addressed from a social science perspective? Why is the social science perspective important?*
- *What do you think are the constraints to generating and utilizing more social science research in Bay restoration efforts?*
- *Any other thoughts or suggestions on the role of social science research in supporting Bay restoration?*

Identifying Themes from Interviews

Interviewer: Michael Paoliso

Key Informant Interview Guidelines
STAC Social Science Workshop Project

1. Date: 4/27/10

2. Name: [REDACTED]

3. Current Position/Occupation: [REDACTED]

4. Years Involved in Chesapeake Bay restoration work: 12 years

5. Do you have examples of how social science research has played an important role in advancing Bay restoration? Do you have any examples that are not Chesapeake Bay related?

He felt, generally, social science had been useful to water/restoration efforts for the Chesapeake Bay. Some particular examples that he mentioned included focused stream restoration efforts, in terms of making these efforts cost effective, and he mentioned that urban stream restoration was an important place where social science was/could be helpful.

He also thought that social science had helped to make local environmental issues relevant to local stakeholders and, more broadly, to make the Chesapeake Bay relevant to individuals living in the watershed in areas far from the Bay.

6. In your opinion, what Bay restoration priorities should be addressed from a social science perspective? Why is the social science perspective important?

He thought there were three areas where restoration could be improved by social science research. First, research is needed to find out what motivates people to protect and restore. Second, what motivates people to protect healthy watersheds. Third, what motivates people to practice conservation.

He argued that for the Chesapeake Bay, there is no "one size fits all." What motivates one group may not be the same for another group. There may be patterns to be found, and that is an important role for the social sciences. He said it is important to know how to scale up, to use lessons learned from one area or scale and apply them to another area. He used the example of

TNC's work in the Nanticoke watershed, and how they are trying to link local, regional and state policies. Social science research could help them make those linkages. He mentioned that at TNC, the focus is less on "the Bay" and more on identifying criteria (for restoration/conservation) for key areas that have lessons learned for "the Bay."

He also talked about improving bay-wide water quality. He felt it was necessary but not sufficient. Related to his points above, he talked about how we could improve overall water quality across the Bay watershed, and/or we could improve water quality more in specific areas, and by doing the latter we would involve more local stakeholders. He was talking about working from the local up to the regional, rather than working at the regional/watershed level and then transferring that information down to the local. If we worked at the local level and up, we should be able to involve and empower and engage more people, in meaningful ways. So, a key social science research question becomes how to involve people and at what scale. Related, we need to know more about what people care about, and how to create indicators of restoration/conservation that are relevant to the people we want to get involved. He called "how to make the dots care about other dots." Furthermore, he talked about our work needs to be less about the Bay, and more about the watershed. He asked "How the Bay got meaning?" Again, he emphasized we needed understand the local within the watershed and then we needed to connect the locals across the watershed.

In talking about regulatory approaches, and the Executive Order, he thought we would need to have more community impact studies, along with ecological impact work.

7. What do you think are the constraints to generating and utilizing more social science research in Bay restoration efforts?

There are some technical constraints: we just don't have the social science expertise working on Bay restoration issues. There has not been enough integration of social and cultural issues, in the working groups for the CBY, now and in the past. State and federal agencies do not think in social science terms. It is just hard to get, for example, land use planning/conservation information linked to TMDL research.

8. Any other thoughts or suggestions on the role of social science research in supporting Bay restoration?

It would be helpful if social science could help us learn how to replicate something that works (see pt. 5 above). It would be helpful to have more of a socio-ecology approach. He mentioned the LGAT circuit rider approach, with spokespeople passing along lessons learned to others. He thought the EO could be used to strengthen the notion of the Chesapeake as a treasured landscape, where we could connect the dots to make sustainable communities.



atlas.ti
qualitative data analysis

Text Analysis

1. Inductive coding of themes/sub-themes
2. Comparison and re-alignment of themes
3. Deductive coding of themes/sub-themes
4. Qualitative assessment using Networks

Five Predominant Themes Identified

- Strong Role for Social Science Research
- No Strong Role for Social Science Research
- Program Opportunities for Social Sciences
- Social Science Research Needs
- Constraints to Using the Social Sciences



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A Sample of Atlas.ti Coding

The screenshot displays the ATLAS.ti software interface. The title bar reads "CBP STAC Interviews_evd - ATLAS.ti". The menu bar includes "File", "Edit", "Documents", "Quotations", "Codes", "Memos", "Networks", "Views", "Tools", "Extras", "A-Docs", "Windows", and "Help". The toolbar contains icons for file operations, editing, and navigation. Below the toolbar, there are tabs for "P-Docs", "P 1: Key Informan", "Quotes", "Codes", "D_b: water quality", and "Memos".

The main text area shows a document with the following content:

partnership culture to not conduct economic analysis.

053
054 6. In your opinion, what Bay restoration priorities should be addressed from a social science perspective? Why is the social science perspective important?

055
056 Permanent change in activities is critical. How do we as a community (CBP partnership, federal agencies) work together with social science as part of the solution?

057
058 At what point does all the good will, voluntary effort come up against a glass ceiling of Bay restoration that is not expanded unless we take regulatory action? What does it take for citizens to change actions that affect the Bay?

059
060 Farming: what's the mix of boots on the ground, cost-share programs, and regulation necessary to get enough participation to restore the Bay? What are the social dynamics of delivery systems that accomplish that result? How do we do in farming what we did with wastewater treatment, which has a better delivery system. How would we evolve our delivery system for differing types of farmers?

061
062 7. What do you think are the constraints to generating and utilizing more social science research in Bay restoration efforts?

063
064 {Listed the following points:
065 1. Don't know how to tap into experts that we can interact with. We interact with many, many physical scientists, but we know only a handful of social scientists.

066
067 2. No clear sense in CBP partnership of how social science tools can be used in management decisions. The partnership is comfortable with physical models, but nobody can tell you the whole physical and social story of the Bay restoration plan.

068
069 3. We have little up-to-date economic info about Bay restoration benefits and costs.

070
071 4. We don't know anything about the social characteristics, values, and activities of immigrants into Bay watershed, or of new farmer migrants to the country.

072
073 5. There are few social-oriented state departments, MD Planning as exception. There are no social scientists in CBP (many lawyers), and only a few on STAC. There is a constituency for lots of issues in the Bay, such as rockfish, stream restoration etc; but nobody demands economic and social research.

074
075 6. Research results may not be consistent with political wishes.

076
077 8. Any other thoughts or suggestions on the role of social science research in supporting Bay restoration?

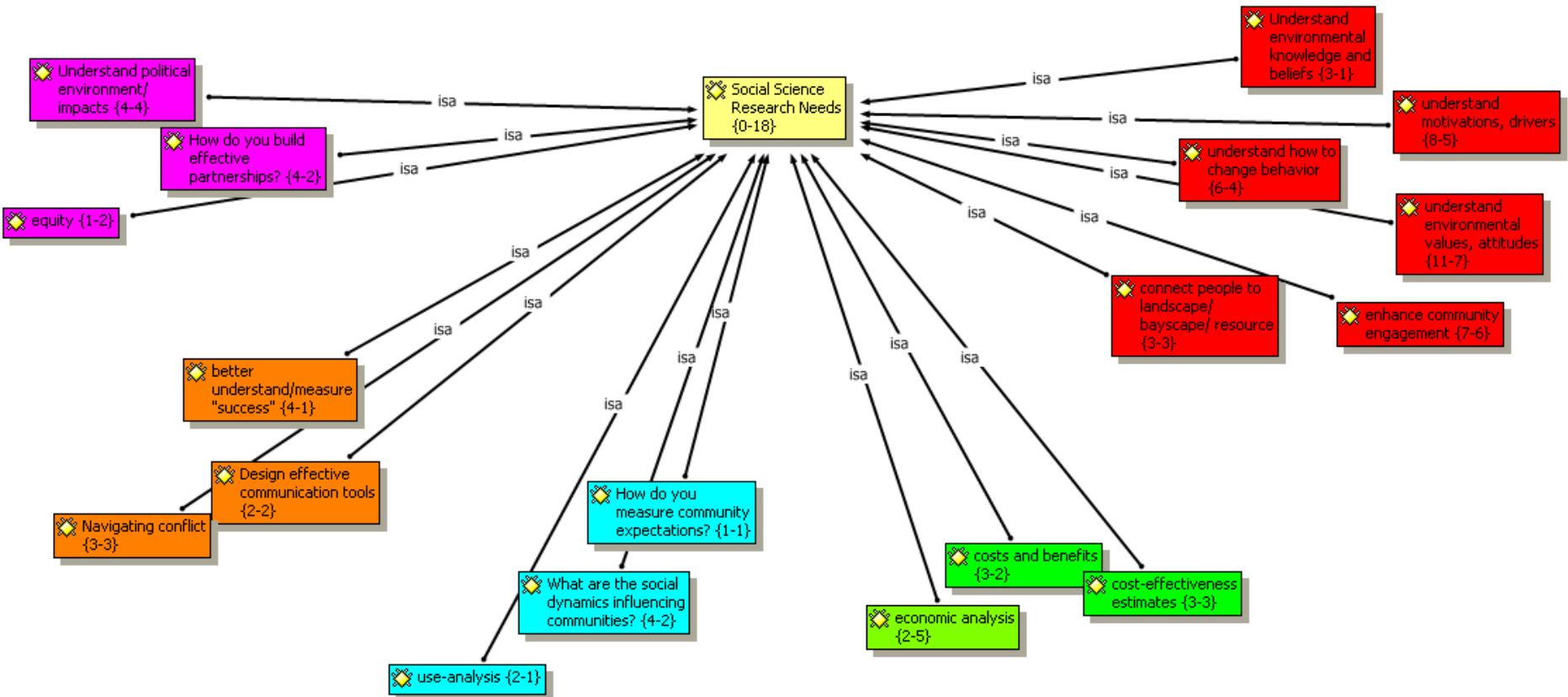
078
079 Would like to see social scientists, particularly economists, organize for promotion of their approach to social issues in Bay restoration. This would provide them more support, including potential letters of support from CBP/EPA for research proposals.

080

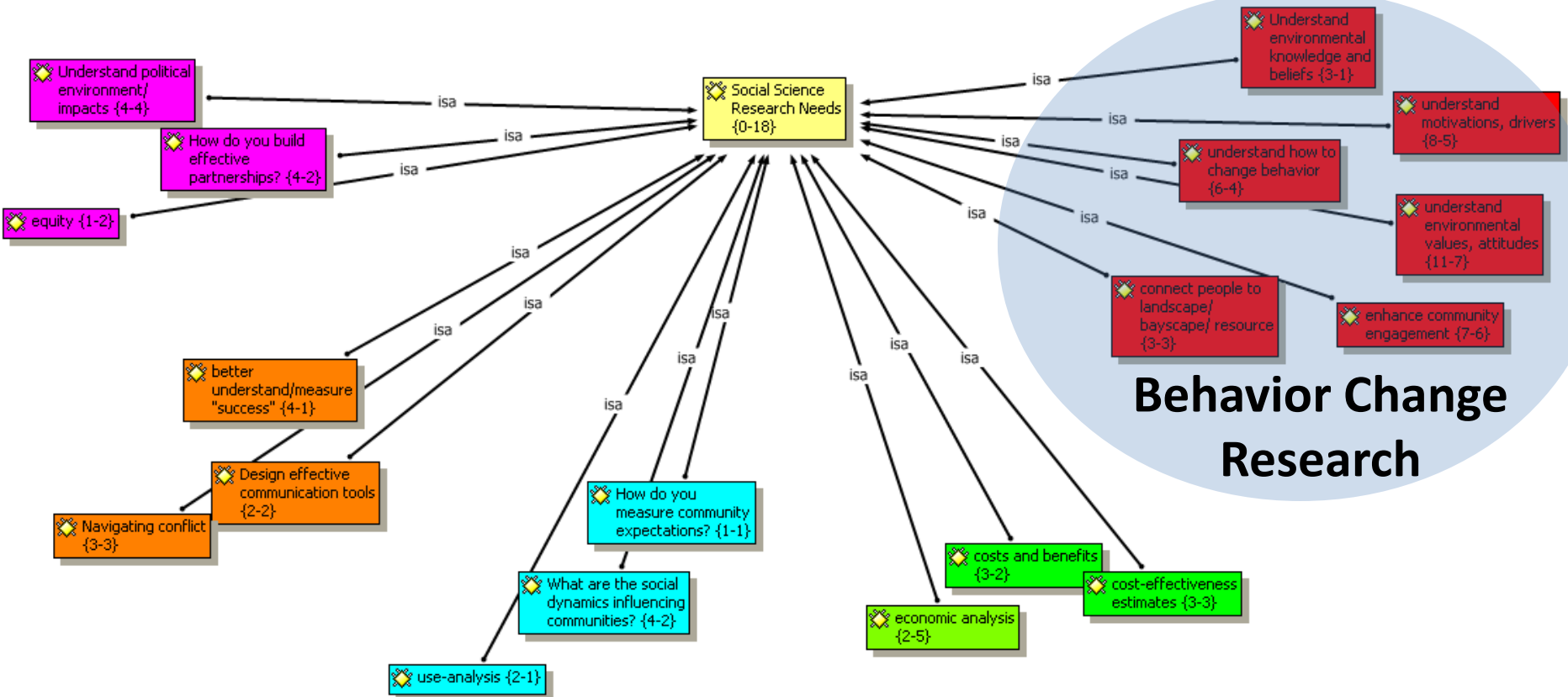
The right-hand side of the interface shows a list of codes applied to the text:

- D_1: How do you build effective partnerships?
- D_5: understanding how to change behavior
- D_a: agriculture
- D_7: What are the social dynamics influencing communities?
- D_6: enhance community engagement
- A_1: Don't know how to tap experts
- A_7: No sense of how to use social science tools
- D_8: costs and benefits
- D_4: understanding environmental values, attitudes
- D_a: agriculture
- A_3: conflicting interests/priorities
- A_6: lack of social science promotion

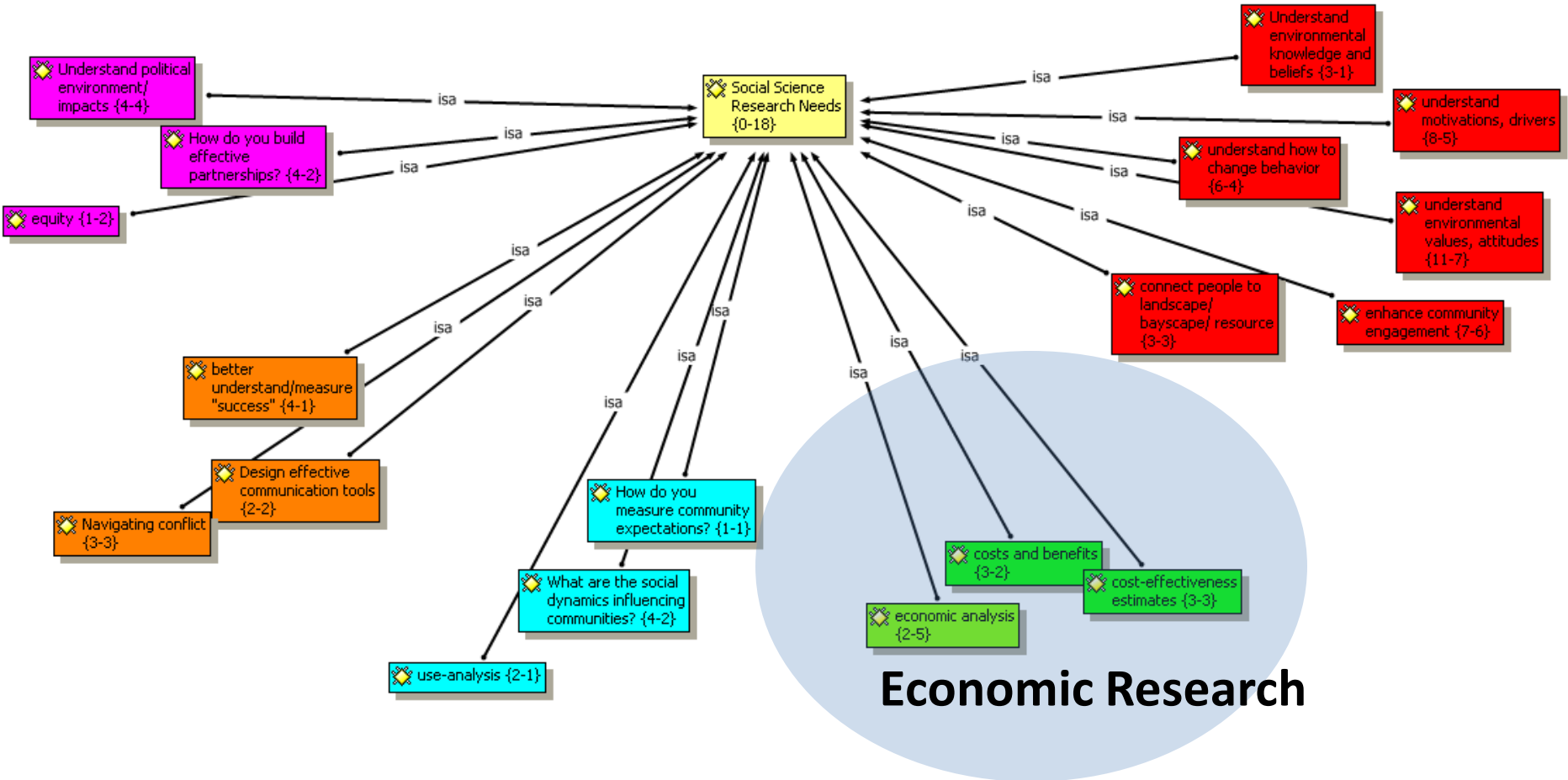
Results: Social Science Research Needs



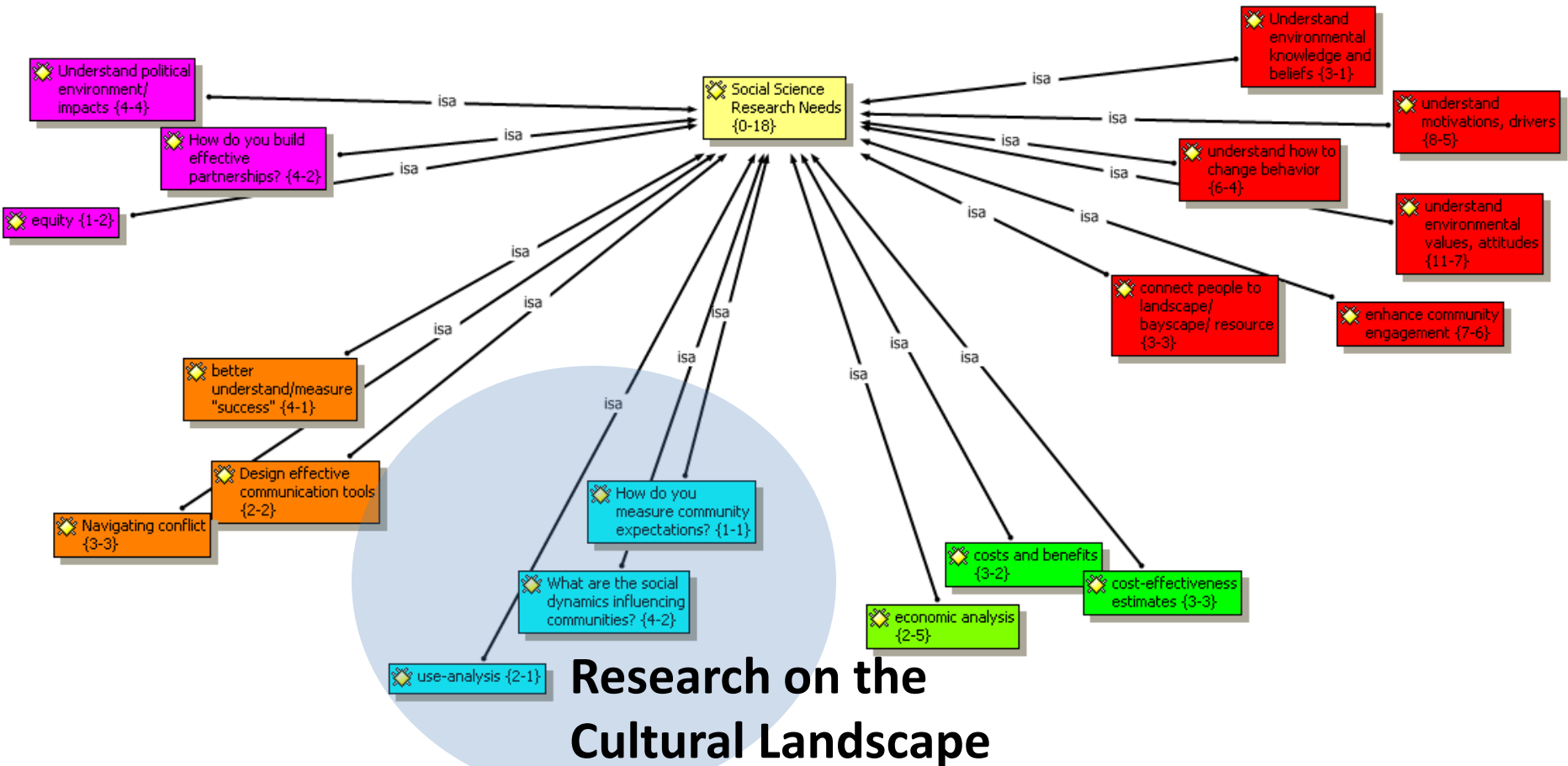
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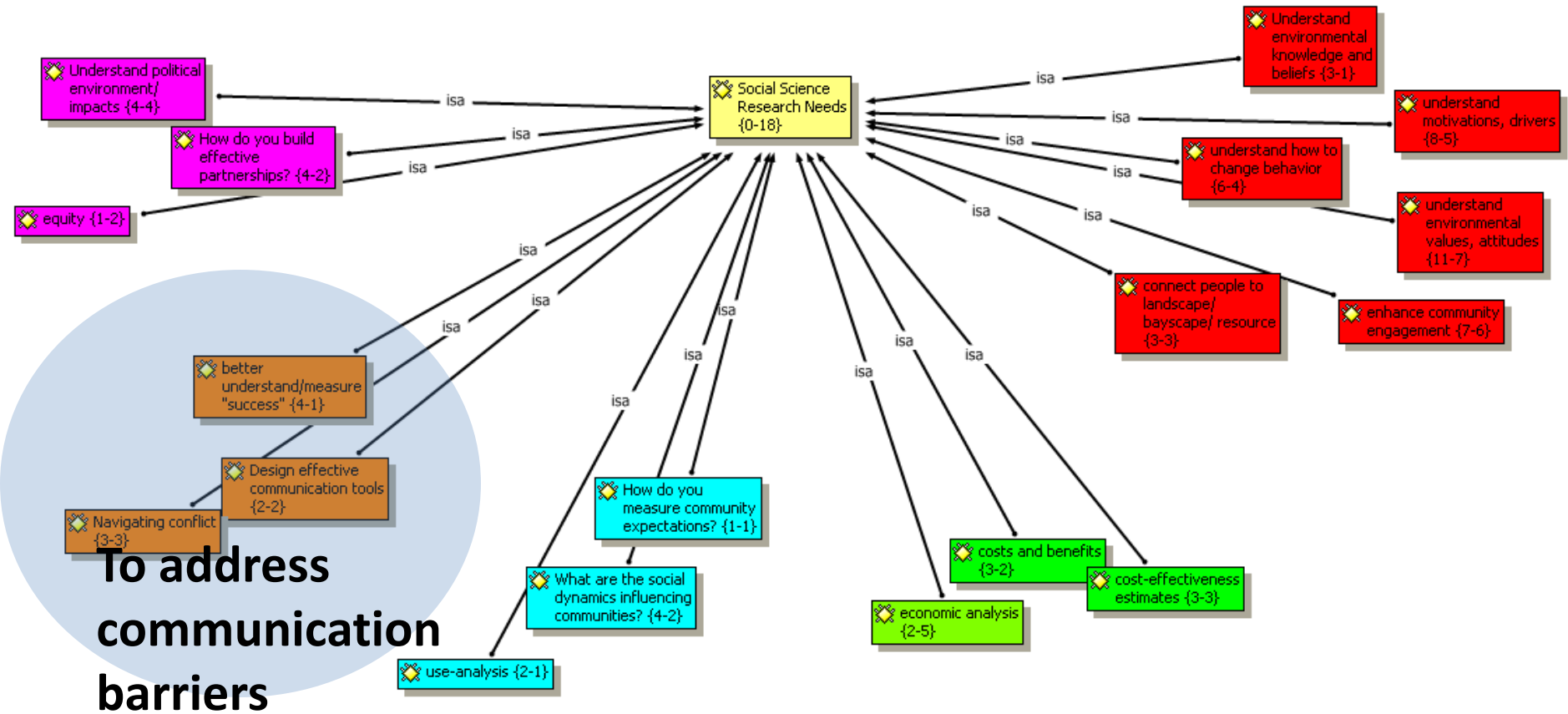
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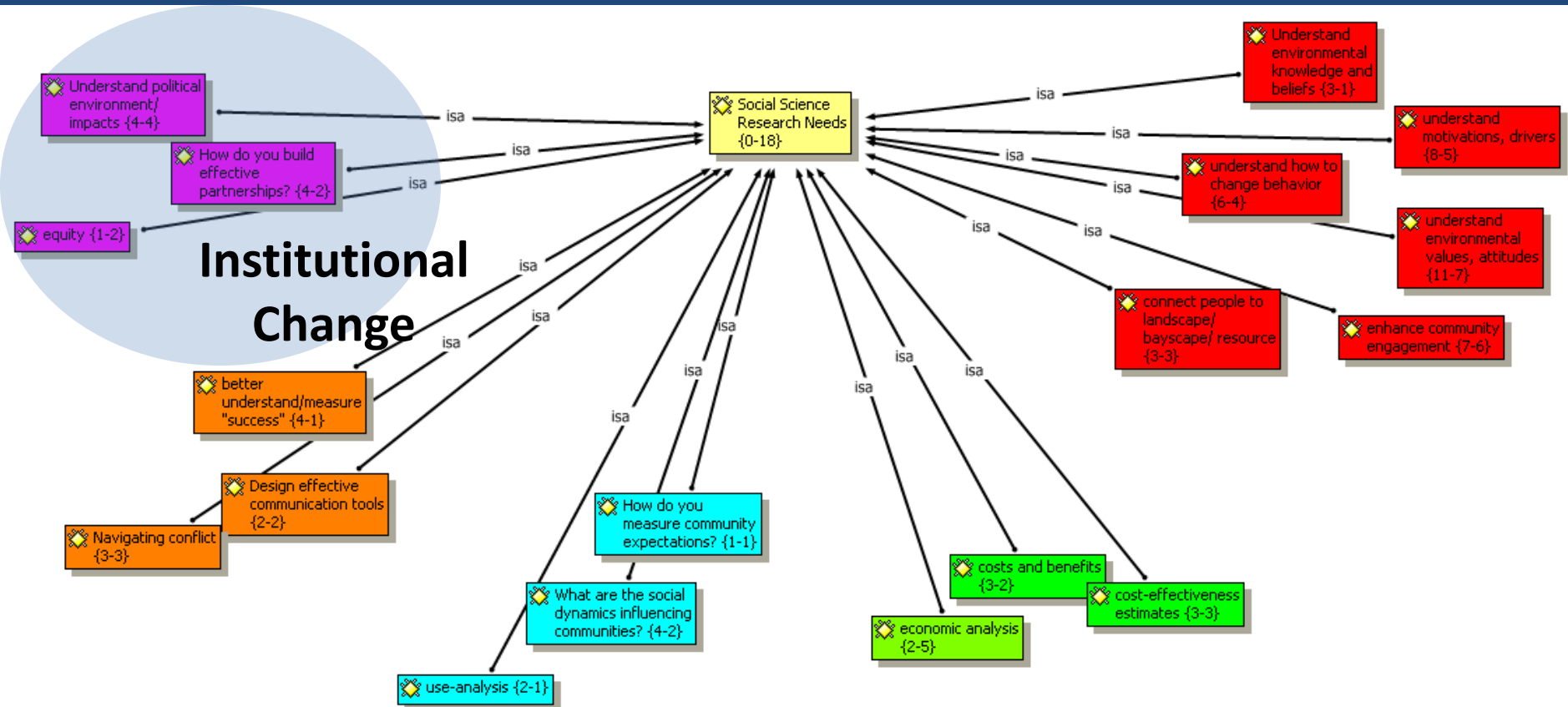
Results: Social Science Research Needs



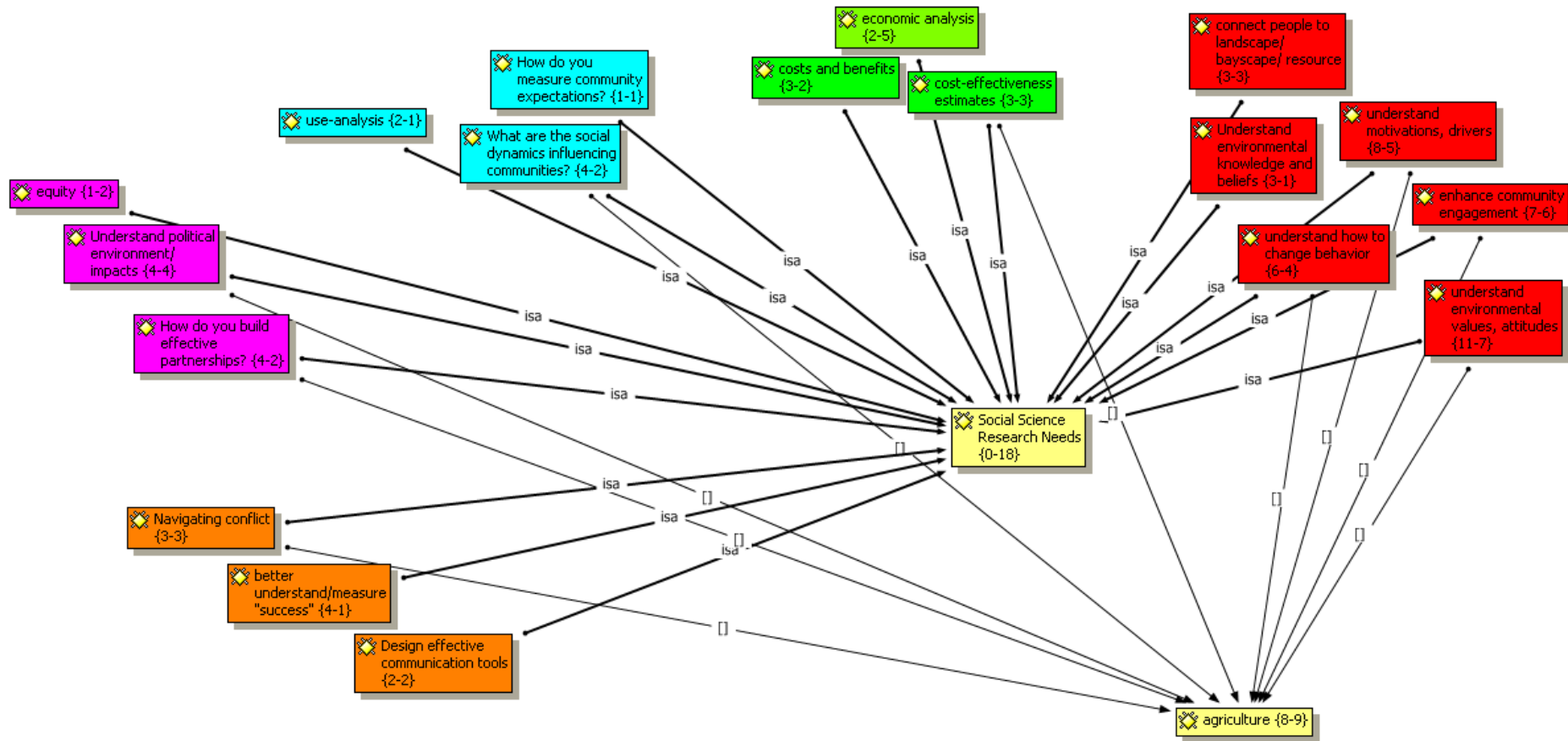
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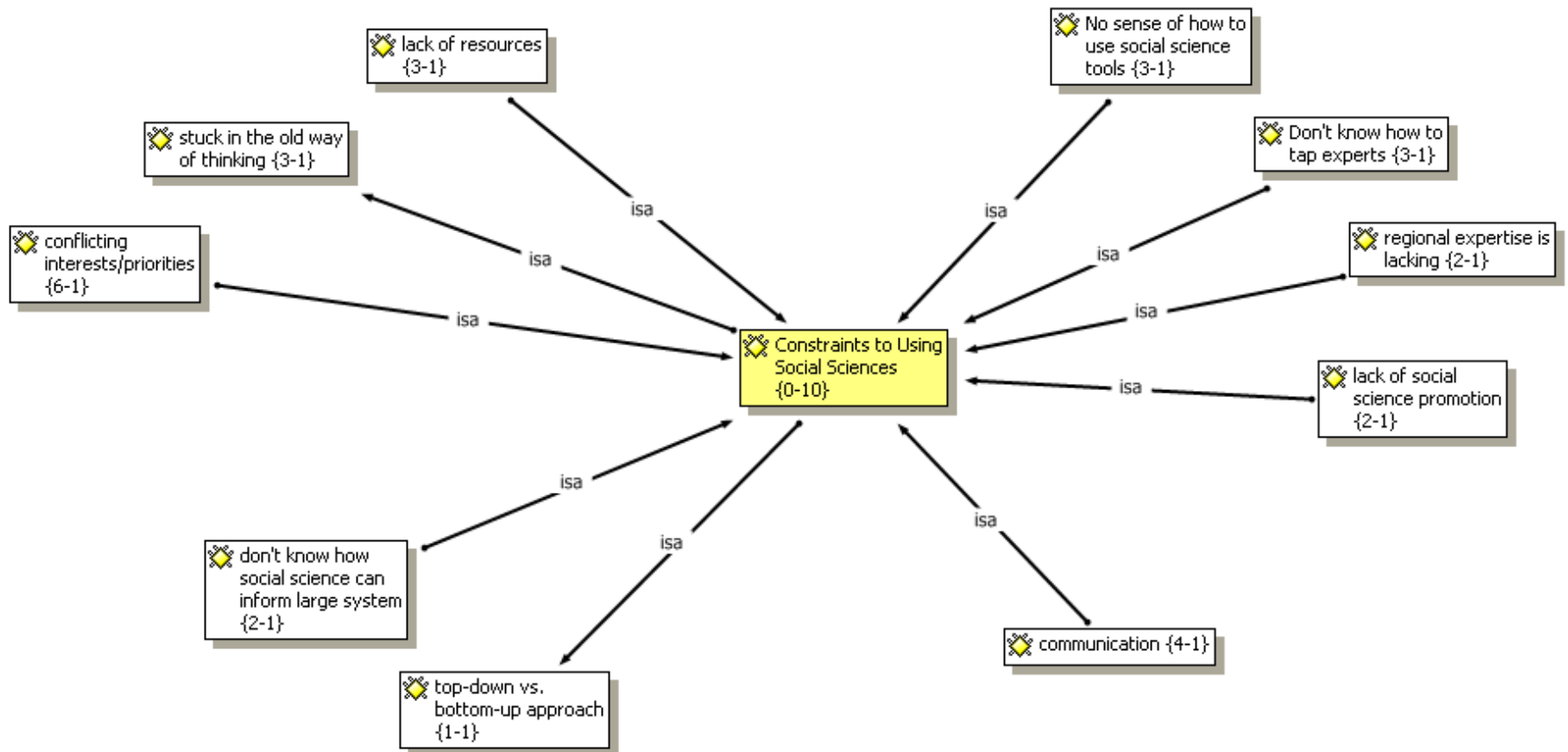
Results: Social Science Research Needs



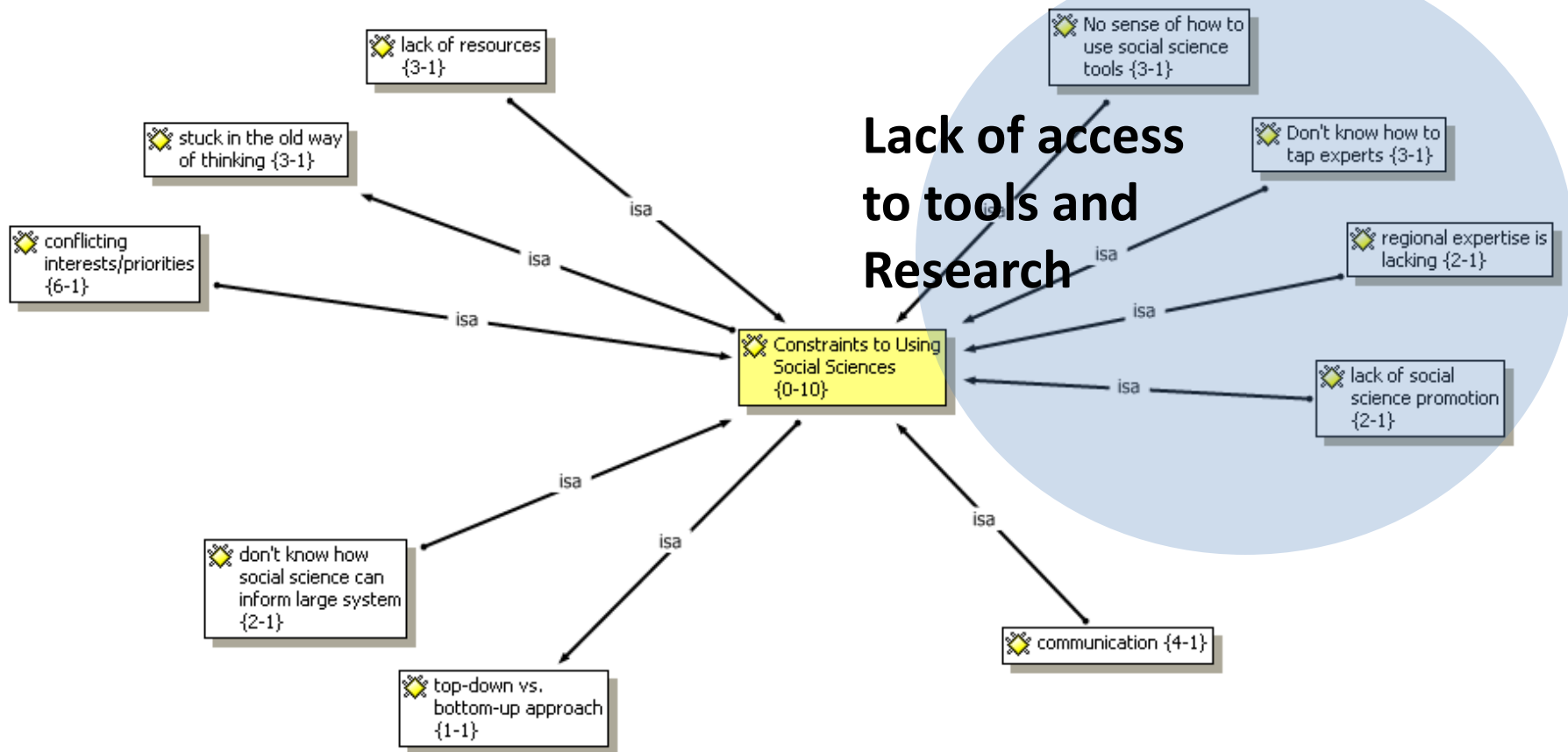
Social Science Research Needs in Relationship to Environmental Sector



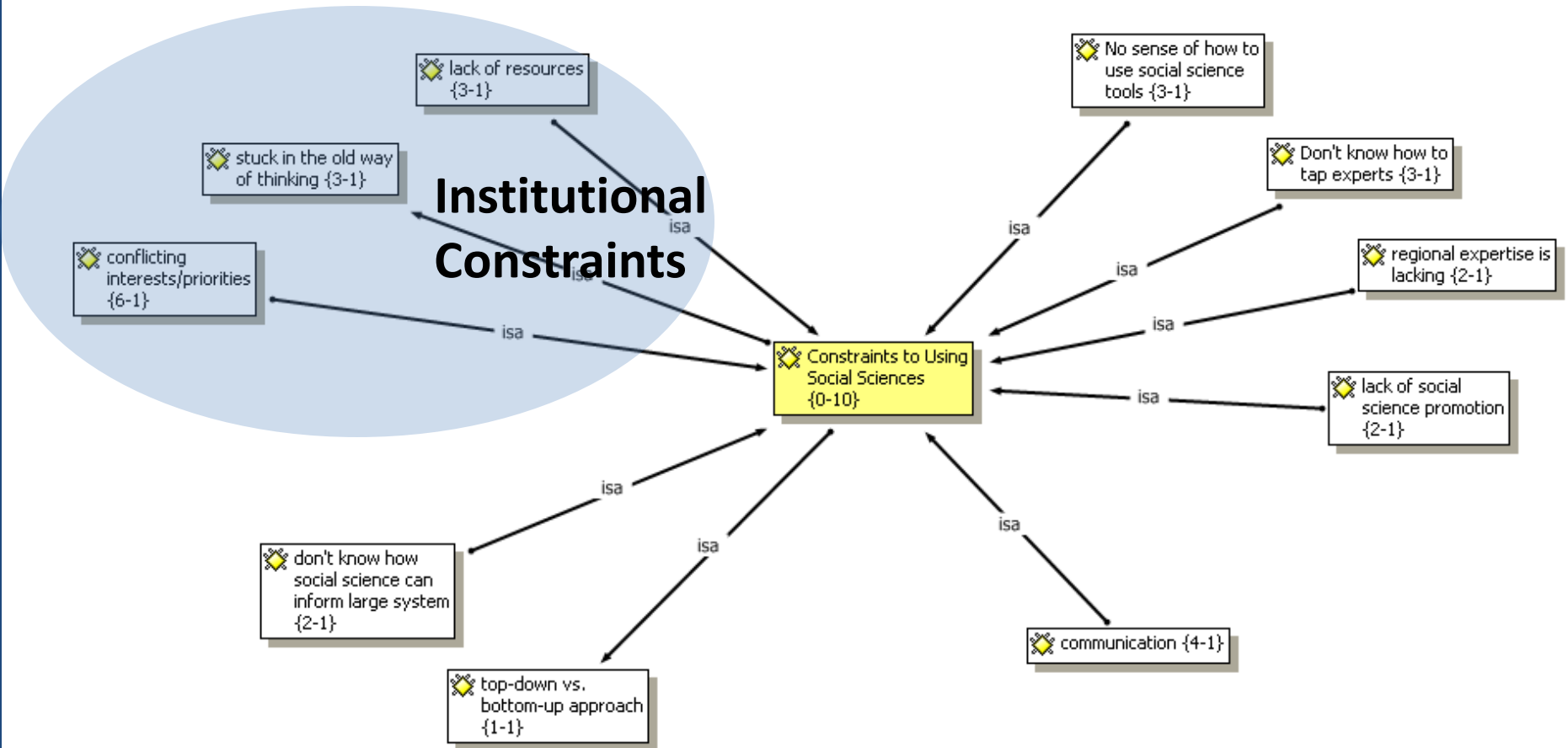
Results: Constraints



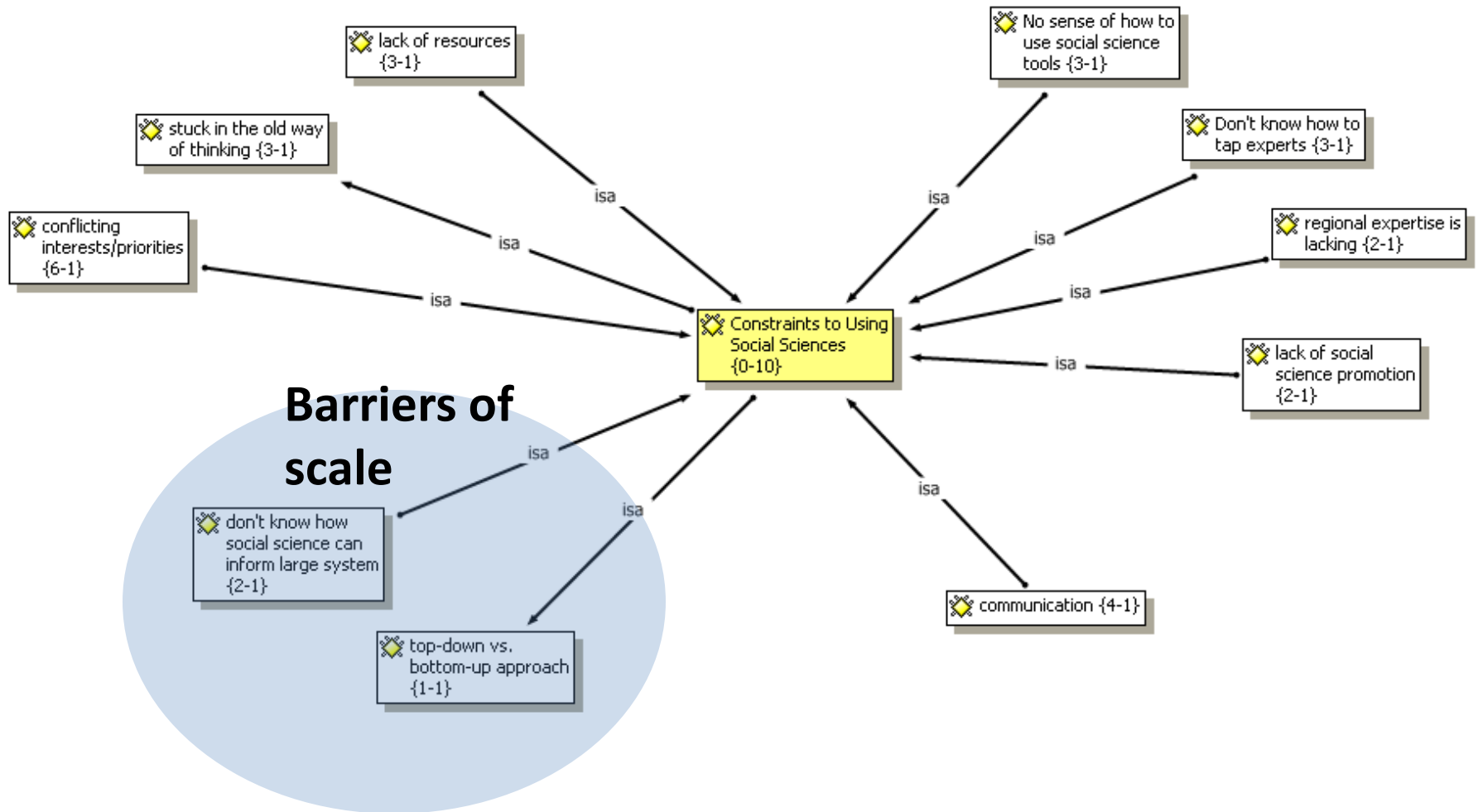
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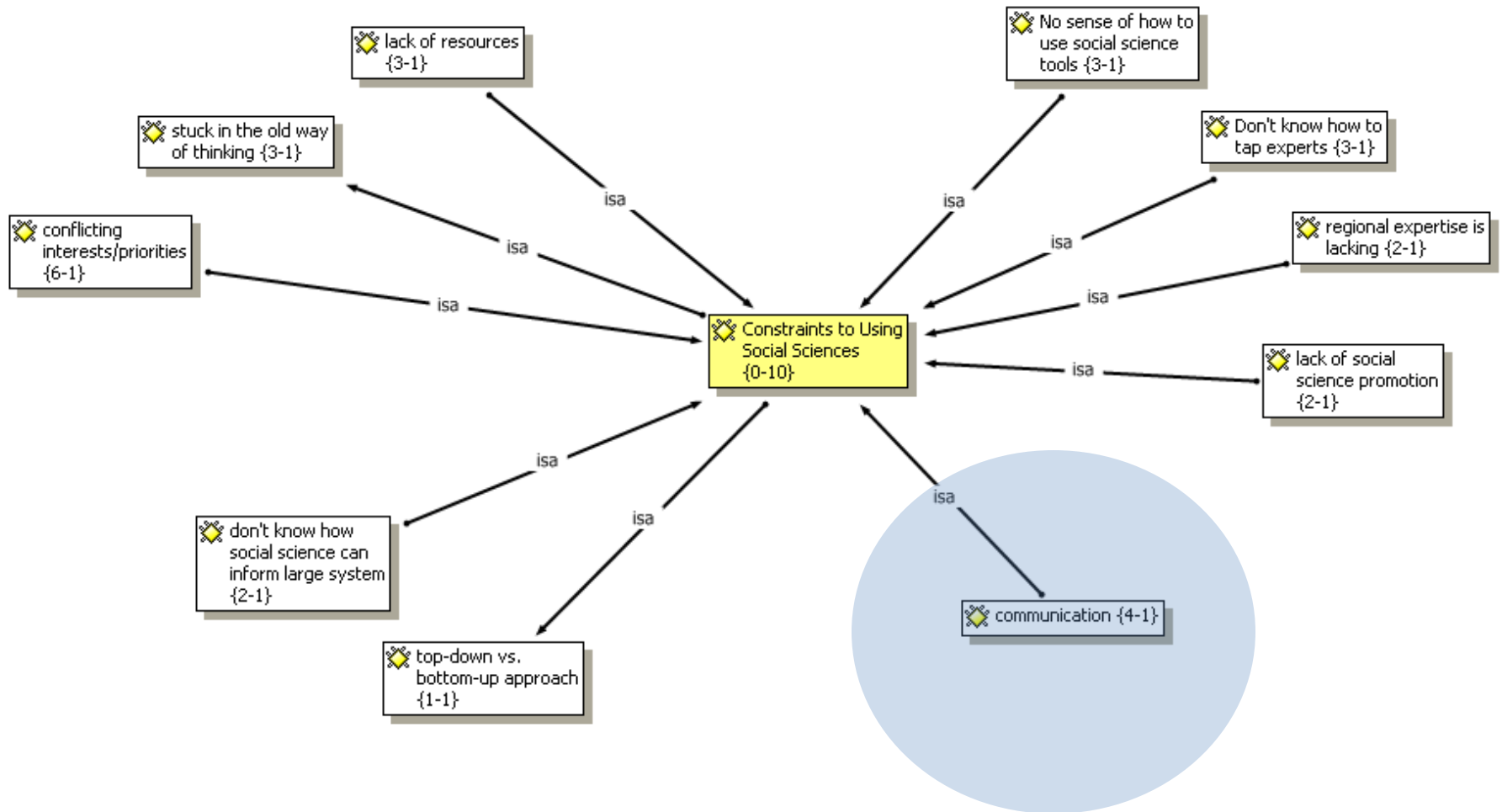
Results: Constraints



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Final Thoughts

- A lot of enthusiasm for social science integration
- Constraints not well developed, needs additional focus
- Social science research needs align directly or indirectly with CBP goals:
 - Water quality
 - Agriculture, urban/suburban sector, TMDL
 - President's Executive Order for the Chesapeake Bay
 - Land Conservation/Preservation
 - Ecosystem Services
 - Enhance Focus on Watershed
 - Public Access
 - Fisheries



“Physical or Social Science?”

Thanks!