

In thinking about this relationship between stakeholders—and again, this was an early cut at me trying to understand this particular system of interest, especially from the De Beers perspective—I started to see a potential feedback loop emerged that was self-reinforcing, in the sense that entrenched positions were leading to incomplete understanding of different relevant stakeholders, leading to an increase in the complexity of the process, leading to increased cost, decreased speed, and decreased profitability, which would likely lead to more entrenched positions. There, I could start to see a feedback loop emerge.

As the relationship started to deteriorate, you could see that there was less communication, less interest in trying to work together, and less understanding, which led to a more complex process. Then again, this is a very simple dynamic, but as you'll see once I start to map the Fort Albany perspective, the positions were very different to start with and I think there was probably some lack of understanding on both sides that led to the formation of this particular feedback loop.

Again, this is a really simple first cut at this particular relationship and the other

diagrams that I have of this that I worked through are much larger and much more spaghetti-like, in several pages. I'm not going to bore you with those, but this was just an initial cut at trying to define and understand this particular relationship, surface some of these kinds of relationship, the nature of them, the polarity of them, and then think about whether there might be a feedback loop there.

The other case—the same case actually but from the other perspective—was when we started to explore this case from a Fort Albany perspective. One of the things that became apparent was there was a lack of understanding or even an ignorance [of environmental assessment processes], and not because of people's expertise but just because, in these cases where you have a Chief and Council of a small community in Northern Ontario, they wear many hats.

They did not have a very sophisticated understanding of EA [environmental assessment], just because they haven't had a lot of experience with it, and they end up dealing with everything from treaty issues all the way down to inter-family relationships. They have a huge spectrum of responsibilities; so, when you add something

like environmental assessment or land use planning, that requires a whole level of expertise, which may or may not have.

This ignorance of government processes decreased the effective participation in these kinds of processes, which led to decreased effectiveness of the process overall, and decreased the community interest being met through the process. Again, this was me, trying to take an initial cut at some of the key variables in terms of understanding the environmental assessment process, effective participation in it, and whether the community interests were being met. These were some of the things that were surfaced in interviews with community members of a process that was imposed upon them, and that they didn't have a lot of understanding of, because again this was something relatively new and they didn't have a lot of expertise with it.

I took this initial cut and I tried to add some other variables, intervening variables and I started to document the relationships and put in some polarities. I talked about the nature of the interactions with government and the private sector, which led to an increase in apathy to these kinds of processes because of the historical interactions with

government and other private sector companies. Generally, in this area, [interactions] have not been positive and that led to apathy related to these processes. Some of the quotes were, "Well, they don't listen so why would I participate?" Which in the past was true. That led to a decrease in understanding of government processes so that they backed away from them. They won't likely understand them. They don't have time for them. They have enough responsibilities, these leaders of these communities, and that led to a decrease in the nature of the interactions with government.

You can start to see again, a feedback loop emerging there. As apathy and negative interactions increase, you can see people step away from these processes. They don't have a lot of understanding and don't have a lot of time for them, and that begins to present itself as a feedback loop. Again, this was me trying to take an initial cut at this and as I said before, the resulting system diagrams that came out of this work were much more sophisticated and had many, many variables and several feedback loops, but this was one that emerged very early on.

Again, what I'd like you to take out of this, and out of your work trying to map this, is that these can be really useful tools in understanding the underlying dynamics—probably dynamics that wouldn't have been apparent on first blush or even that if you're approaching the problem, even if you've been immersed in a particular system for a long time you might not have thought about in this way. Taking the time to work through this kind of tool set should help you when you are constructing your own system diagram, your own causal loop diagram.

Again, the other thing that I want to emphasize is to be patient with yourself. Do initial cuts just like this, where you're trying out these tools with just a few variables. Don't try and blow it up and do a massive system diagram with 43 variables. Work on an initial set that makes sense to you. Again, start with those three to five key variables that are really pushing the system. Change the mode if you need to. Think about what the boundary is. Think about whether the boundary is different for different perspectives.

In this case, the Fort Albany boundary was a huge spatial area and they were talking about a temporal boundary of 450 years in

the past and seven generations into the future; whereas the De Beers Company, from their perspective, were thinking about a particular study area on the West Coast of James Bay around their potential mine. They were thinking of the life of the mines, of exploration and decommissioning.

Very different spatial, very different temporal perspectives and also different purposes, in the sense that the Chief and Council in Fort Albany were seeing this as perhaps another imposition through a long process of colonization; and the De Beers Company was just looking to get their mine in the ground and to make a profit. Very different perspectives; very different purposes.

What I'm hoping these tools will help you to do is to see your system in a different way, and perhaps to help you develop a more sophisticated understanding of some of the dynamics of your system and to help you understand that when you first do a cut through of a system description, you're only going to see certain things. You need to be patient and work through and ask more detailed questions and perhaps even go out and seek experts that may know about the nature of a particular relationship, or even

Describing systems | Causal flow diagrams | Examples

seek out data: existing data, or even seek out new data, and develop an empirical data set that will help you answer those kinds of questions.

You can use these tools to help your understanding of your system, maybe see your system in a different way, but also develop a more sophisticated understanding of your system.