

ANALYSIS OF THE DEVELOPMENT OF THE DAIRY GATEWAY AND GREEN TIER

DRAFT

David Laws & Matthew Amengual
MIT Department of Urban Studies and Planning
September 29, 2004

INTRODUCTION: FRAMING ANALYSIS

To understand and analyze the Dairy Gateway it is essential to frame the developments in a manner that provides a sense of the problem that actions respond to, focuses analysis at the appropriate level, and differentiates the facts that matter from the broader play of development. In our analysis we associate the Dairy Gateway with the broader program of reform that we will refer to by its original and more descriptive name—Green Tier. A history of the development of Green Tier and its link to the Dairy Gateway is described in the paper, *Reframing Regulation*, that was produced as part of our work with the Wisconsin Department of Natural Resources (DNR). The main features of Green Tier that we will draw on in the report are:

- 1) Green Tier is a reform effort initiated within the DNR out of direct experience with existing regulatory programs.
- 2) The development of the reform proposal was organized around an (successful) effort to build consensus between the DNR, civic organizations concerned with environmental protection in Wisconsin, and representatives of industry.
- 3) The consensus of these groups was presented to the legislature, engaging this branch of government in the dialogue over the need for and character of regulatory reform.
- 4) After a substantial period of legislative politics, a revised proposal passed the legislature providing a legislative foundation for administrative reform.
- 5) The original consensus supporting the proposal has not remained intact during the prolonged legislative debate.
- 6) Passage of the Environmental Results Act creates the potential for a variety of forms of regulatory initiatives. Actions that give shape to this potential will provide the best basis for learning about the character and organization of legitimate and effective action and the nature of superior environmental performance.

We feel it is essential to cast these developments in light of two broader in patterns of development. These are the development of a diverse family of new approaches to environmental regulation and management and broader shifts in the organization and character of public action that are often summarized as a transition from government to governance. The latter is essential because it highlights important features of the reform effort that are not as much dismissed as neglected in reform proposals. The legitimacy and effectiveness of the new forms of regulation hinges on details about practice that may seem unproblematic from within the frame set by a particular approach to environmental regulation and management. Focusing the debate on whether these developments should

be endorsed or resisted misses the point and puts the development of environmental protection in jeopardy in our view. Too little attention to the broad political issues that are answered in these details of practice risks results that confirm the fears of the most strident critics about a lack of accountability and a serious erosion of our foundation of environmental protection. Failure to focus on these questions about implementation risks irrelevance on one side, and on the other side we may have a dedicated program that fails to respond to the character and magnitude of the changes that are necessary to meet challenges like sustainability, environmental justice, and climate change.

We want to be quite explicit that this seemingly cautionary approach is not prompted by specific observations about the development of Green Tier or the Dairy Gateway. As our commentary makes clear, these efforts include many elements that respond to the broader framing we advocate here. We seek only to provide an appropriate frame to understand the challenge the policy practitioners and other stakeholders face and to make sense of their efforts to respond to real pressures felt in practice and of the comments of skeptics from different corners.

Next Generation Environmental Regulation

The first piece of the frame we want to place around Green Tier and the Dairy Gateway is a broad and diverse group of proposals that highlight the limits of current regulatory practices, the need for alternatives to meet environmental goals, and the alternatives that are available. This is not a homogeneous group and the differences among the proposals are important, as are questions about their compatibility. It is significant that much of the thinking about and support for these initiatives has developed out of the efforts of the public administrators responsible for implementing the existing legislative framework of regulation.

This experience highlighted the character of regulation not just as a set of public commitments, but as a template for practice, for interaction, and for organizational relationships. It put public agencies in the position of what Charles Sabel, Archon Fung, and Bradley Karkanien called “modest omniscience.” Regulators were caught by the demands of the regulation and even as they:

Renounce[d] the pretension to complete knowledge of a complex and changing world, they nonetheless attempt to determine enduring solutions to well-specified problems. The result of this combination of confidence and self-deprecation is regulation that, piece by piece, attempts too little and too much.¹

In the view of Sabel, Fung, and Karkanien and other critics, the existing framework of regulation through setting and enforcing standards (usually referred to as command and control) regulates too little because the standards “require sharp boundaries between what is regulated and what is not.” These boundaries create frustrations for public officials, citizens, and members of firms who have a detailed knowledge of environmental

¹ Beyond Backyard Environmentalism. Boston Review. 10/99

problems. They see that problems are complex and changing and that “problems just outside the regulated zone will be just as significant as those within it.” They know that protecting habitat is as essential to preserving endangered species as protecting animals and that the diffuse mix of chemicals that residents of large cities are exposed to is as or more important as the large stationary sources that demand most regulatory attention.

Command and control also regulates too much because the long-term commitment to technology-based standards can generate unintended consequences and unanticipated costs. Compliance, rather than superior performance, becomes the day-to-day game punctuated only rarely by rounds of bargaining over new rules and standards. In the broad sense this creates a system that has difficulty adapting or responding to new insights and in the small sense it throws cold water on initiatives to come up with innovative ways of solving environmental problems.

The template of command-and-control shackles government officials, citizens, and industry alike. Richard Stewart captures the frustration that is shared by these groups.

In my view, these headaches are primarily due to excessive reliance on command-and-control methods of regulation--the dominant approach that we have used for achieving regulatory goals over the past hundred years. This method, especially when centralized through federal regulation, suffers from the inherent problems involved in attempting to dictate the conduct of millions of actors in a quickly changing and very complex economy and society throughout a large and diverse nation. These problems have become more acute as regulation has intensified. The inflexibility and rapid obsolescence of the detailed conduct blueprints issued by federal agencies make them simultaneously more burdensome and less effective. In addition to undermining the efficacy of regulation, the proliferation of rigid and unresponsive controls undermines the legitimacy of regulation in the eyes of the regulated community and impairs regulatory accountability. These problems have become worse as federal command regulation has spread and intensified in response to public demands.²

The defenders of command and control recognize these inefficiencies and do not defend the system because of them. They see a set of commitments that provide a foundation for environmental protection that has been and can continue to be leveraged to produce change and improve environmental quality. They also see legislation as laying down rules of the game in administrative law and conventions of practice that they have learned how to play efficiently with the comparatively modest resources at their disposal. Moreover, like most of us, they are reluctant to give up a certain benefit for the potential for a larger one.³

The alternatives to command-and-control that are espoused can be separated into two families. The first originate in a belief in and commitment to market forms of organization and propose to achieve environmental protection through the use of price

² Richard B. Stewart, “ADMINISTRATIVE LAW IN THE TWENTY-FIRST CENTURY,” New York University Law Review May 2003

³ See Daniel Kahneman and Amos Tversky, “The Framing of Decision and the Psychology of Choice” in J. Elster (ed) *Rational Choice* New York: NYU Press 1986.

signals and incentives that will seamlessly coordinate private action with public interests. Green Tier does not seem to us to draw primarily on this family and we do not dwell on it here. The second family also grows out of private sector experience, but not with market patterns of organization but with patterns of decentralized coordination in the reorganization of firms and the capacity for problem-solving, learning, and even strategic direction setting highlighted by experience with these practices.

Those fluent in the vocabulary and disciplines of work teams, kan ban, just in time manufacturing, and continuous improvement saw in environmental problems another area for applying the insights of practice. And the more uncertain, volatile, and complex environmental problems seemed, the more they seemed to demand continuous action and cross-sectoral coordination, the more apt these practice insights seemed. Moreover, regulatory practitioners had long since admitted that private actors had knowledge and insights that were relevant to addressing environmental problems and that their active participation was helpful, if not essential, in meeting environmental goals. Finally, what they said made sense. To these actors, their reform proposals seemed to

“apply basic "Management 101" concepts to the environmental protection system. Indeed, every organization needs a process for strategic planning, setting priorities, measuring progress, making course corrections, and articulating and communicating what the organization is trying to accomplish for the benefit of both employees and external stakeholders.”⁴

The family of regulatory reforms that Green Tier and the Dairy Gateway is situated in and should be understood in terms of. These reforms highlight systems approaches to management, coordination through collaboration in horizontal relations, and learning and improved performance to joint monitoring and deliberation of the effectiveness of means and aptness of ends in light of experience. Stewart again offers a useful summary of these approaches.

Various forms of flexible agency-stakeholder networks for innovative regulatory problem-solving have developed in order to avoid the limitations of top-down command regulation and formal administrative law procedures. Rather than attempting to dictate unilaterally the conduct of the regulated, regulatory agencies have developed a number of strategies to enlist a variety of governmental and nongovernmental actors, including business firms and nonprofit organizations, in the formulation and implementation of regulatory policy. Here are some examples: agency-supervised regulatory negotiation among representatives from industry, public interest, and state and local government to reach consensus on new agency regulations outside the formal administrative law rulemaking processes; cooperative arrangements involving governmental and nongovernmental entities in delivering family services or administering Medicare; and negotiation, in the draconian shadow of the Endangered Species Act, of regional habitat conservation plans by federal natural resource management agencies, private landowners, developers, and state and local governments. In these examples, federal agencies are active, often

⁴ Karl Hausker, “Reinventing Environmental Regulation: The Only Path to a Sustainable Future,” *Environmental Law Reporter*, April 1999.

dominant partners in the process, and the result is a quasi-contractual working relationship among the participants to solve regulatory problems on a coordinated basis. Rather than centralized mass production, this method embraces a post-industrial strategy for producing regulation. Its watchwords are flexibility, innovation, benchmarking, transparency of performance measures, and mutual learning by doing. In the European Union, this approach is being widely used, under the title of the Open Method of Coordination (OMC), to implement social service regulatory programs in the member states.

These developments are part of a broader orientation to regulation that:

discounts the possibility of central, panoramic knowledge more steeply than either centralized command or market-simulating regulation, and it puts a higher premium on collaborative processes that allow central and local actors to learn from one another and from their actions in the world. It would use these surprises to revise the rules that frame collaboration, then seek further discoveries under guidance of the more capable frame, and so on. The philosophy of this architecture is pragmatist: while it rejects immutable principles, it keeps faith with the idea that we can always institutionalize better ways of learning from the inevitable surprises that experience offers us.⁵

A variety of methods and techniques give expression to these general insights on the potential for development that inheres in regulatory practice. The Environmental Management System (EMS) is one of the most prominent and provides a good example of the kind of practice level perspective we are addressing. A recent description by proponents describes EMS in the following terms:

EMSs are intended, among other things, to reduce environmental risks, including the potential for regulatory violations. Consequently, most EMSs begin with an environmental policy statement that establishes compliance as a goal. To deliver increased value to external customers on certainty of compliance, however, the organization's policy statement should commit the organization to achieving, maintaining and communicating actual legal compliance with all applicable statutes, permits, and rules.

Often managed in an EMS as part of a process of setting, measuring, and reporting progress on "objectives and targets," projects and processes such as product substitutions, process changes, or other pollution prevention efforts may eliminate waste streams entirely or reduce their concentrations below regulated levels. This can obviate the need to obtain permits or comply with rules in the first place, a true "win-win" for all concerned parties.

Employees should also be informed, and trained, on their responsibility to determine, verify, address, and report to management on past, continuing, and potential future violations or potential violations. This includes their responsibility to measure and document all relevant factual information for use by management and regulators to determine whether a problem exists, its extent, and the appropriate corrective/remedial actions. The organization's procedures

⁵ Sabel et. Al., (October/November 1999)

should establish accountability, within the organization, for any consequences and remedial actions flowing from employees' departures from operating procedures designed to ensure compliance.

Because "what is measured is managed," monitoring and measurement systems should be designed and implemented with consideration for legal requirements.

Checking and corrective action procedures should be used whenever noncompliance problems occur. The root causes of the noncompliance should be identified and addressed...The findings and corrective action should then become a part of the management review process so that upper management is informed and can make the necessary decisions to address the organization's compliance and business needs.⁶

This description makes clear how EMSs are supposed to work, and how management systems have worked in production processes more generally, through institutionalizing habits of monitoring, reporting, and review. By making performance a central concern and focus of interaction and maintaining a low tolerance for underperformance (this is carried to the extreme in processes like just in time manufacturing) actors are able to improve performance over time.

This kind of operational perspective has the virtues of providing clear guidance on how to act that is rooted in the practical experience of regulation and management. It risks distortion, however, when it tries to extend the framework to address demands outside its original scope and focus. The notion of external value that is at the heart of the document quoted at length above suggests something of the flavor of overreaching. The impetus is the sensible insight that the network of stakeholders engaged by environmental concerns is likely to extend far beyond the boundaries of an organization. External value is an attempt to capture within the language of management systems a broader set of concerns that proponents of EMS and other forms for regulatory reform must address. As quoted above, one can see a drift in language that focuses on internal management and external communication: "To deliver increased value to external customers on certainty of compliance, however, the organization's policy statement should commit the organization to achieving, maintaining and communicating actual legal compliance with all applicable statutes, permits, and rules." This deviates from governance in which a group of parties are trying to solve a shared problem together—instead of having one party try to solve the problem and communicate the results of this to tertiary stakeholders. Environmental management systems are, however, devices for organizing relationships among internal and external units and achieving regular, disciplined, and open reflection on performance. Contracts and covenants are ways of formalizing the informal relationships that are essential to sustaining productive cooperation in networks. Even in their private sector roots, these conventions are not substitutes for the qualities of trust and openness that characterize successful collaborations and partnerships.

⁶ The External Value Environmental Management System VOLUNTARY GUIDANCE
DRAFT August 29, 2003 Prepared by the MSWG EVEMS Subcommittee Bob Minicucci, EVEMS Chair

We believe it is more direct to simply tie these management practices to a second set of concerns that can help practitioners grasp the political nature of regulation and administrative action. The language of governance provides a vocabulary that on the one hand is friendly to the kind of systems and learning orientation associated with EMS, covenants, and contracting and, on the other, provides a way to grasp the breadth and significance of the developments that regulators and other policy practitioners find themselves immersed. It is not just the analytic vocabulary that this perspective offers but also the practical significance of the “range of political practices [that] has emerged between institutional layers of the state and between state institutions and societal organizations.”⁷

The governance perspective shares the emphasis on horizontal relationships, collaboration, and the potential for learning and development that exist in intra- and inter-organizational relationships when properly organized. What the governance frame highlights, however, is that these are not just operational adjustments, but proposals for new forms of democratic politics. This highlights concerns about the organization and implementation of these designs that are important for ensuring that the outcomes of interaction are legitimate as well as effective. The governance frame also highlights the tensions that are bound to be raised as, for instance, administrative agencies seek to create legitimacy directly rather than relying exclusively on their relationship with the legislature. These concerns, particularly about how such arrangements can avoid democratic deficit, are at the heart of the concerns of responsible critics.

These are not antagonistic perspectives. They overlap and comport around three themes. First is the centrality of interaction and its potential as an occasion for joint problem solving. Second is the deliberative moments in processes of change. And third is the notion of learning as a central concept in the process of developing new practices and institutional frameworks. Interaction and joint problem solving within the context of regulatory relationships are important because part of the failure of past practice (i.e. command and control regulation) was the distinct roles it created for industry and government, and the polarized and antagonistic relationships it fostered. New approaches to environmental regulation attempt to reformulate these roles and foster cooperative, interactive relationships as a means to improving environmental protection.

The deliberative aspect of reform rejects the political foundation of command and control regulation and alternatives like market mechanisms, which treat policy as a process of aggregating established interests. In the pluralist tradition, this aggregation occurs in an incremental and reactive process of change, rather than a pro-active one.

Traditional environmental regulation, stemming from the pluralist tradition, fails to produce the kinds of policy resolutions that are suited to contemporary environmental challenges. In addition, decision-making in such an institutional environment is by nature exclusive and precludes the opportunities that arise in regulation and management for citizens and public officials to “deliberate in public about matters of common

⁷ Maarten Hajer and Hendrik Wagenaar, “Introduction” to *Deliberative Policy Analysis*. (Cambridge: Cambridge University Press, 2002 p. 1)

concern” and thereby enhance both the legitimacy and effectiveness of policy-making processes. Most proposals for new practice arrangements provide for conversations among the parties who participate that fit the general outlines of deliberations.

Learning is a third element of these proposals. The translation of this new architecture of regulation and innovation into organizational contexts demands an account of organizational change. Organizational learning “theorists”, like Chris Argyris, Donald Schon, and Peter Senge, provide an account of organizational change and learning that draws on similar foundations as proposals for institutional reform and a new architecture of regulation. The theory of organization learning offers insight into how public agencies or industries may confront the challenges of innovation in the face of a changing environment and in spite of institutional lassitude.

...The core challenge faced by the aspiring learning organization is to develop tools and processes for conceptualizing the big picture and testing ideas in practice. All in the organization must master the cycle of thinking, doing, evaluating, and reflecting. Without, there is no valid learning.⁸

Donald Schon captures this “cycle of thinking, doing, evaluating and testing ideas...” in his account of a “reflective practice, in the spirit of Deweyan inquiry that seeks to integrate thought and action, theory and practice...”⁹ Engaging in reflective practice, Schon suggests, demands the creation of “communities of inquiry” that can pursue a collaborative process of learning and problem-solving. “In science and common sense alike, Dewey thought, inquiry is inherently social. Like Pierce before him, he saw individual inquirers as members of communities of inquiry, bound by community responsibilities of a contractual nature.¹⁰ ...They would need to develop...environments designed to help learners discover how they already see things and to confront them with surprises that trigger the search for new ways of seeing things.”¹¹ Schon’s account resembles the construction of learning offered by Sabel et al.: “...we can always institutionalize better ways of learning from the inevitable surprises that experience offer us.”¹²

If “inquiry is inherently social” as suggested by Schon, collaboration between industry and regulators, as well as the involvement of other actors, is central to successful problem solving. While command and control regulatory decisions largely stem from an exclusive set of “experts,” more nuanced regulatory decisions would incorporate the views of a wider array of social groups. Collaboration becomes, according the Ulrich Beck, a “reflexive learning process”¹³ that “necessarily”¹⁴ involves “negotiation between different epistemologies and subcultural forms, amongst different discourses; and as such it...entail(s) the development of the social or moral identities of the actors involved.”¹⁵

⁸ Peter Senge, quoting Ray Stata, President and CEO, Analog Devices, Inc., *The Fifth Discipline: The Art and Practice of The Learning Organization*, (New York: Doubleday), 1990, 351.

⁹ Donald A. Schon, “The Theory of Inquiry: Dewey’s Legacy to Education,” *Curriculum Inquiry*, vol. 9, no. 2, (1991): 122.

¹⁰ Schon, (1991): 122

¹¹ Schon, (1991): 136

¹² Sabel et al., (October/November 1999)

¹³ Ulrich Beck, translated by Mark Ritter, *Risk Society: Towards a New Modernity* (London: Sage Publications), 1992, 5.

¹⁴ *Ibid*

¹⁵ *Ibid*

As Ulrich Beck suggests, it is precisely through the process of interaction among groups with “different epistemologies and subcultural forms” that learning is achieved. Policy and regulation thus become a forum for this interaction. Collaboration also helps to ensure accountability and legitimacy in the policy-making process.

Performance of Next Generation Regulatory Proposals

In our view drawing these “next-generation” regulatory proposals into the context of governance focuses attention on four aspects of performance.

Networks

Networks are the primary way of capturing the patterns of organization in governance relations. The notion of a network has the flexibility to capture the changing character of relations between institutions of the state and market and civic organizations. The important characteristics are the richness or density of ties that exist within networks and the qualitative characteristics—e.g. trust—that characterizes relationships. An effective program would need to enhance the density of ties—particularly across boundaries between public, private, and civic actors and organizations—and promote the development of trust, openness, and other qualitative characteristics associated with collaboration. A second feature that is important is that interaction (and deliberation and action) not be limited to top-down or bottom up processes, but provide a rich set of interactions and ties between them. In our studies of innovation, we have been drawn to how development can be traced through the elaboration of networks to meet the changing demands of the situation. There are many other private sector examples—venture capital and startups being one of them—that show similar patterns and bear a family resemblance to the kind of network development that we believe will characterize apt and robust forms of regulatory innovation.¹⁶

Deliberation

The democratic roots of governance relations are in deliberation at a variety locations in the system of governance, rather than in elections and adversarial bargaining among interest groups in the legislative process and rule making. Fung captures the distinctive features of deliberative democracy.

The distinctive idea of deliberative democracy is that binding rules and practices should be determined through open and fair processes of public reason in which parties—be they citizens, political officials, or groups—offer arguments and evidence to persuade others. Such processes can improve governance at three levels. First, individuals—as citizens, workers, or officials—can become more knowledgeable and other-regarding in the course of exchanging views and reasons. Arenas of deliberation can thus function as “schools of democracy” in which people learn the skills and dispositions necessary to be good citizens.

¹⁶ It is important to emphasize the prospective quality of these judgments since it is early in the process and clear cases of success are hard to find, much less a map of where to go or how to get there.

Second, deliberation can increase the wisdom and efficacy of standards and rules by introducing additional information and diversifying the perspective considered. When participants are engaged in implementing resulting policies, public action also gains from the cooperation and contributions. Finally, deliberation can also enhance the legitimacy and credibility of standards and rules, and of the entities that set them as well as those that follow them, by subjecting them to the scrutiny of open public debate, review, and determination.¹⁷

In our view policy deliberation has three hallmarks. First, it is a form of communication or discussion that is distinguished by openness. This means it is open to participation by the diverse groups affected by policy programs, it is open to different forms of knowledge and expression, and it is open to critiques from the inside about how patterns of organization or practice limit any of its essential features. Second, it is based on respect that is made manifest by a commitment to listen so that other feel they are heard and to make available to all the full range of opportunities available in the forum. This means, for example, the right to raise questions, offer evidence, participate in the design of proposal, offer counter-proposals, and raise questions about the grounds and assumptions on which the discussion is proceeding. Finally, deliberation leads to the kind of enlargement of perspectives highlighted by Fung above and to the enlargement of practical options. Good practice will be affirmative with respect to organizing and upholding these qualities of opportunities for deliberation.

Learning and action

In the framework of governance it is not possible to talk about action without talking about learning or about learning without talking about action. Action expresses the collective insights of the policy community in a tangible form and provides the grist for the kind of contesting and revision of proposals that is an essential feature of continuous improvement and the other disciplines of governance and “next-generation” regulation. Effective programs must be able to secure commitments to act and treat the results as sufficiently provisional to be open to scrutiny and revision without undercutting the commitment to act.

Institutional and organizational development

The kind of changes contemplated by Green Tier and other proposals for reform are not as simple as putting on a new suit of clothes. They involve changes in organizational roles and practices, conventions, and inter-organizational relationships that will surface long standing habits of thought and action. Moreover, they involve tinkering with basic political relationships in ways that are likely to (or should) raise legitimate concerns about the democratic foundations of governance and policy. Reform programs must find a way to surface and address these challenges or risk being swamped by them.

¹⁷ Archon Fung, *Deliberative Democracy and International Labor Standards*, Governance Vol 16 no 1, January 2003, p 52

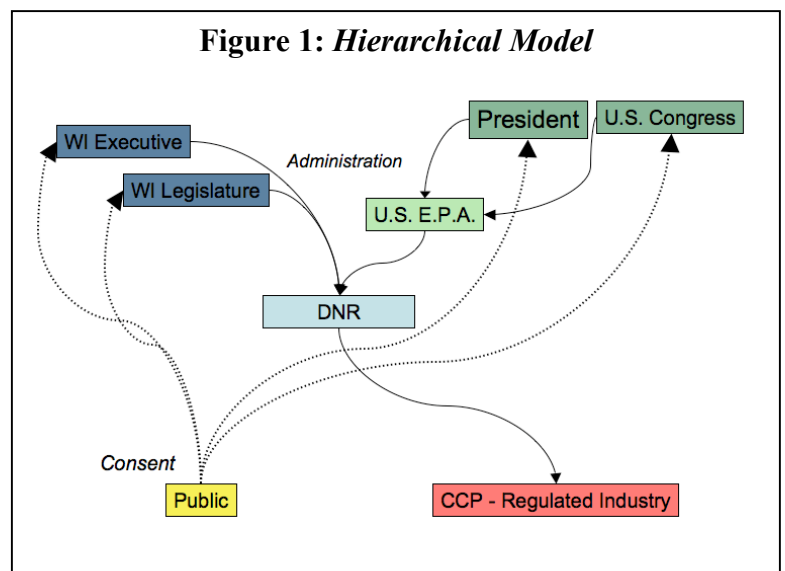
COOK COMPOSITES AND POLYMERS AGREEMENT – AN ILLUSTRATION OF THE NEW POLICY MODEL

An agreement between Cook Composites and Polymers (CCP) and DNR provides an illustration of the new policy model in practice. This agreement that is commonly cited as an example of “when things went the way they should.” Through its development, it exhibits many of the features of the next generation of environmental regulation described above.

Setting the Stage

In the fall of 2001, CCP and DNR signed an agreement under Green Tier’s pilot program. CCP is a polyester and alkyd resins manufacturer located north of Milwaukee. The CCP agreement effectively created a new institution for regulation within the existing institutions—*governance within government*. The agreement created new norms of behavior between the traditional actors—government and industry—and involved citizens who had previously been direct participants the regulatory game. These norms of behavior created a network of interconnected actors where previously there had been a hierarchy—from which actors were effectively excluded. Figure 1 shows the flow of consent and administration in conventional regulation. In this model, consent flows from the public through voting, up to the Federal and State legislatures and executives. These bodies create policies and manage the agencies—EPA and DNR—that implement them.

The new practices created by the CCP agreement work as an institution within the broader framework of the hierarchical model. An institution in this context can be defined as “the rules of the game” of regulation.”¹⁸ Under these new rules, DNR, CCP, and other participants developed a local capacity to interact under norms of cooperation, rather than confrontation. This would include, for instance, being open in discussing performance with citizens, instead of managing information about performance defensively. Keeping with the framework of this paper, the CCP agreement will be presented by describing the networks that it formed, and the spaces it created for deliberation.

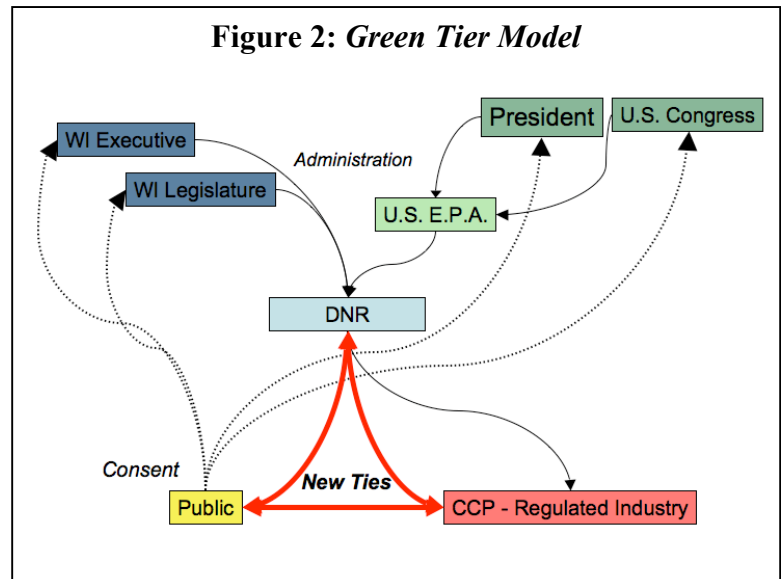


¹⁸ P.3 North Douglas, *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, 1990

Networks

The CCP agreement created a dense network made up of DNR, CCP, community members, and involved other actors such as an independent facilitator. Some prominent features of this network are rendered in Figure 2, as the network developed within the broader framework of government. In contrast with Figure 1, information and consent flow in multiple directions through a dense set of ties. As these ties become prominent they generate interaction in horizontal relationships (which admittedly still take place in the hierarchy that contains the new network).

For simplicity, we will primarily use organizations as the unit of analysis. We recognize, however, that the network is also made up of individuals who relate to one another as individuals, as well as through their organization roles. Recognizing this allows us to describe personal relations that impact performance. As we suggested above, one of the characteristics of the relationships between actors is trust. Trust can develop at the individual level even if organizations remain skeptical about one another. Consequently, while using the organizations as the primary unit of analysis, we will at times shift to the individual when it is important for describing this new policy model.



Each of the nodes in the network created by the agreement relates to others by setting expectations about action with other nodes and getting information about performance from the other nodes. These expectations can be grouped into two categories: formal and informal. In the case of CCP, formal expectations were laid out specifically in the agreement, whereas informal expectations grew out of the relationships among the three main parties. To begin with, CCP was expected by both DNR and the community to cease burning hazardous waste one year before CCP would have been legally required to do so. The agreement also required CCP to create a waste minimization plan and reduce waste streams. The agreement laid out specific chemicals for which CCP had to make significant reductions in generation and incineration. CCP was also expected to establish an environmental management system (EMS). The EMS comes from the family of private sector management practices that we discussed earlier. In this case, there was an expectation that CCP would meet some of the goals that it set in the EMS. This is an example of the systems approach placed within a network of accountability. Finally, CCP was expected to conduct community outreach and to gain feedback from the

community throughout the five-year period of the agreement. This is within the realm of governance in which direct public involvement is used to legitimize actions. Specific steps were outlined in the agreement, including the formation of an “interested persons group” to meet quarterly. The community was described as a consultant to the formation of the EMS. Not only was CCP expected to meet with the public, but CCP was also expected to address issues brought up at these meetings. In the agreement, deadlines were set for CCP to implement these expectations.

These expectations created a thick tie between DNR and CCP. The expectations are formal, and go beyond the minimum required of CCP by law. Additionally, these expectations are almost exclusively about performance. This responds to one of the problems with command and control that, according to Mark McDermid of DNR, encourages companies to “just get to a point, it is not about performance, it is about meeting the minimum.” The way the agreement was created, CCP was obligated to achieve the minimum, but was also expected to go beyond it. The agreement created the context for an ongoing discussion about Cook’s environmental performance.

Keeping with the network model, expectations flow in all directions. Consequently, DNR was expected to meet performance standards as well. These performance expectations mainly involved reviewing applications from CCP for permit modifications in a timely way. Specific timelines for processing applications were set in the agreement. Consequently, when CCP needed DNR’s feedback, or approval, CCP knew exactly how long it would take. This was important to CCP because changing the hazardous waste incinerator into a non-hazardous waste incinerator caused large operational uncertainties that had the potential to be very costly. Delays that might seem standard to a regulator with a heavy caseload might seem long delay to a private firm with a different perspective, particularly when costs flow from those delays. While changing its permit, CCP would have had to pay for its waste to be disposed off site. In short, the performance expectations of DNR created by the agreement allowed CCP to save money by engendering more certainty in the decommissioning process.

Again, these expectations are formal, and create thick legal ties between CCP and DNR. The third major node in the network—the community—has been largely left out of the discussion up until this point. The ties to the community are not as thick as those between CCP and DNR. The sole formal expectation was that members of the community participate in the meetings with CCP and DNR. In the agreement, the formal expectations put on the community may have been limited because, although the agreement specified that CCP had to engage the community, members of the community were not signatories to the agreement.

But as we stressed, a characteristic of this kind of network is the importance of “informal” norms. These alter the performance of the system, and may be just as important as formal norms created through the agreement. Although the formal tie between the community and the other two actors is a thin, the informal became thick through as the institution developed.

The most important informal norm was for all parties to act in a cooperative rather than adversarial way. This informal norm is critical for the other aspect of performance that will be discussed next—deliberation. The agreement helps establish norms of cooperation instead of norms of competition. Through the quarterly meetings, DNR, CCP, and the community were expected to work more as partners than they had in the past. Evidence that this expectation was formed can be found in the language used by respondents describing interactions between the groups. For example, the facilitator of the meetings Steven Skavroneck (a consultant to CCP who was also trusted by the community as a neutral third party) described an interaction in which a member of the community discussed CCP's failure to meet its goals, he said: "she very kindly talked that the problem was continuing and at the end summarized all of her remarks by saying, 'I still think you guys are doing a really good job, I want you to keep at it, but you still got a little ways to go'." As described by Steven Skavroneck, all parties expected this type of interaction.

Other important informal expectations were created through the dialogues organized as part of the regulatory arrangements. For example, after conducting a community survey, CCP found that the community's largest complaints were with noise pollution and odors. As we discussed earlier, this new model of governance blurs the line between what is regulated and what is not. Although certain types of orders were not officially regulated, they became regulated in a way because they were included in the priorities set by the actors in the network. Through dialogue, an expectation was created that CCP would work to remedy these issues. In addition to the expectations that the community put on CCP, CCP asked that the community help work constructively to resolve the issues. This was a truly informal expectation that did not come from the language of the agreement or any other rule. CCP put in a hotline for the community to call when they smelled an odor. This feedback mechanism was important to CCP because, according to Steven Skavroneck, "in order to address the problem [CCP] needs to know right away who's smelling what, where, [and] when, so they can go back and figure out what batch process was going on then and trace it back to something they were doing during that batch process." Without this information CCP would be unable to solve the odor problem. In this case, both CCP and the community are accountable to one another—the community can ask for improvements, but they have to be willing to contribute. If no one calls the hotline, no one can complain about odors. The network needs to gain value from all of its nodes in order to maximize performance.

The informal ties between the participants from the community and the rest of the community are also important for the democratic legitimacy of the CCP agreement. The mechanism for obtaining consent from the community for is a small group of individuals who volunteered to be on the citizens' advisory panel. The agreement generated ties among these individuals by requiring them meet on a regular basis, agree on steps they would take, and discuss performance. The reform then relies on the weaker ties of the members of the citizens' advisory panel to the rest of the community to legitimize the agreement.

This is not a conventional way to secure legitimacy. Without it, however, the arrangements that create the flexibility to pursue a more aggressive environmental management strategy would face a democratic deficit that would be difficult to sustain. These concerns about legitimacy raise questions about representation and administrative accountability must be addressed to secure the long-term viability of the new arrangements.

The early experience at Cook does raise and inform discussion about these questions, but it is not conclusive about how these concerns should be addressed. Indeed, one of the features of these new systems is that the legitimacy of arrangements, like performance, must be addressed through continuous monitoring and discussions of performance. Even a preliminary view of the arrangements at CCP demonstrates that the direct interaction and ongoing conversation about performance generated more direct discussion of regulation and local knowledge about performance than had existed under the prior arrangements. Moreover, this is not a question that demands a categorical answer. It is more likely that legitimacy will hinge on how people do things as well as what they do in formal terms. One of the goals of the practice experiments that are being organized under Green Tier should, in our opinion, be to inform debate about these issues.

Deliberation

The other aspect of this new policy model is deliberation. The CCP agreement creates a space for deliberation through the meetings held with the community, a number of requirements for reflection, and the informal norms of cooperation we discussed earlier. Changes in the character of the interactions between groups made for an open exchange.

The community meetings were the primary space for deliberation. The members of the citizens' advisory panel meet with representatives from CCP and DNR on a regular basis. The committee was made half of neighbors to the plant, and half of other members of the community. Through deliberation, this group prioritized issues that were important for CCP to solve. These meetings did not proceed like a typical public hearing—in which people list off their comments one by one and receive no response. The meetings were places for dialogue. Questions were asked of Cook, and when possible responses were given. Presentations were given to the community, but feedback was also taken.

Also, through deliberation trust developed between the community members and CCP. Under the particular conditions organized as part of the CCP agreement a vicious cycle of mistrust was recast as a more virtuous cycle that reinforced participants' ability to trust one another. This trust allowed the community to work with CCP as a partner, and cooperate to achieve better outcomes. At first the community was skeptical of CCP and the process. After CCP responded to the community member's suggestions they began to see, in the words of Steven Skavroneck

It seemed to me that what was most important was that after a few meetings I think most of these folks realized that the company was trying to make a genuine effort to address their problems and recognizing that they were willing to work

with the company on an interactive basis.

Conversely, through these interactions CCP also began to trust the community. Mike Gromacki of CCP illustrated this by stating:

In other words, we're going to be open on mistakes and accidents and things, incidents that happen. We'll tell you what has happened. Our expectation is not that you take that information and then y'know twist it or use it in a way that's harmful to us.

This trust created new possibilities in the relationship between the community and CCP that, in this case, led to better environmental and economic outcomes. It created alternative ways for actors to secure their immediate interests that allowed for consideration of a broader range of interests and did not demand the kind of defensive reasoning and practice that characterizes antagonistic relationships.

A critical aspect of the arrangement that produced this open behavior in the conversations between Cook and its neighbors was the participation of Steven Skavroneck as a facilitator. Hired from a community organization by CCP to facilitate the meetings, Steven Skavroneck was seen by all involved first as an environmentalist. Mike Gromacki of CCP recounts the choice of Steven Skavroneck, stating:

We hired him as a facilitator, and so we essentially hired an environmentalist in effect. A guy who has traditionally been involved on the environmental side of the equation. But the ground rules with Steve were clear, you know that he has his own professional reputation, he has his own vision and ideas on things, and I told him, I said you know obviously your time's not free we can't you know monopolize your time without paying for it. We are willing to do that but you know understand there's no strings attached. You facilitate the meeting, the only thing I ask of you is you keep things constructive, both for us as well as the public... I think it was probably one of the best moves we made because you have a person who obviously has a legitimate standing in the community and the environmental community.

It is difficult to assess the importance of the legitimacy that Skavroneck brought to the process—but he undoubtedly was a catalyst in the process of building changing the tone of the dialogue towards openness. This clarifies an important challenge that will shape the future of Green Tier. To the extent that legitimacy and openness are tied, as seems to be the case in the CCP agreement, to certain arrangements will have to consistently find ways to generate openness and trust to be viewed as legitimate.

The norms of interaction that contributed to this legitimacy are not the kind of thing that can be formalized in an agreement. The interactions that characterize deliberation elude meeting summaries in the traditional sense. Evidence of deliberation lies in the details of communication and the relationships that are formed in the process. At this stage in our research we do not yet have access to the data we need to assess the details of the deliberative nature of the community advisory panel. We have seen evidence of the openness that formed through secondary description by participants, but we do not yet

have evidence of the generative nature of problem solving that the normative theory of deliberative democracy predict. The content of the deliberations will be explored further as our research progresses.

We do, however, have evidence that suggest how aspects of the design of the CCP agreement facilitated deliberation. For example, the presence of DNR at the meetings with the community made participants more open. Mike Gromacki described this by saying:

Some of the people will start out by saying well you know you are noisy, and you stink, but on the other hand they will come back and say, but y'know you are really pretty good neighbors overall and you are talking with us, and that's really what's important. So in the same breath, you'll see that sort of discussion, and I think the openness of having the DNR there, not again, they may not say a lot sometimes but just being there creates an environment that I think they feel fosters their open communication. And if it was just a company function, I think it's like being a guest at a party, you know you go in and you don't feel...you've been invited and you know you are there to give your opinion and voice things but on the same token you don't really know what the ground rules are.

Design characteristics such as this provide an opportunity to learn general lessons from the CCP agreement and apply them to future agreements under Green Tier.

The agreement created other spaces for reflection that fostered openness and deliberation. Cook was required to report to the public and to DNR throughout the process at regular intervals. These reports created opportunities for all groups to reflect on the process of implementation, and to make adjustments in light of reflection on performance. These adjustments were not made in a hierarchical way, but through conversation among CCP, DNR and the community. For example, if CCP does not meet the goals set in these interactions, it is possible to reflect on the conditions that may have produced the shortfall and on the goals themselves. This is the signature of a deliberative process that helps groups adapt intelligently to changing conditions rather than of react by rote. In discussing the CCP agreement, Mark McDermid summarized the deliberative nature of implementation: "I'm depending on you to do X, and if you can't do it you need to let me know so I can help out, and help to get there, and we can draw someone else in." This is evidence of actors deliberating about the way they achieve their goals during implementation itself.

Outcomes

In the end, this new policy model will be evaluated on whether it is effective as well as legitimate. The initial results from the CCP agreement demonstrate that environmental performance has improved. CCP stopped burning hazardous waste in its incinerator two years before it was required decreasing emissions. There has been a net decrease in waste generation— 1.8 million pounds of xylene in 2000 and 2001, as well as 1.57 million pounds in 2002. CCP itself saved \$400,000 in consultant and contractor costs, as well as "hundreds of hours of CCP staff time" because it was not required to conduct a

testing. In 2003, CCP projected that it would save \$172,500 in solvent purchasing because of waste minimization. These are just some of the concrete environmental and economic outcomes of this new policy model.

ASSESSING GREEN TIER AND THE DEVELOPMENT OF THE DAIRY GATEWAY

In this section we turn to assess developments in the Dairy Gateway in light of the preceding discussion. A few comments are in order to situate the Gateway. First, the development of the Gateway fits with both the specific and broad patterns we have described above. It is an attempt to promote improved environmental performance in the context of regional sustainability by encouraging informed discussion of problems among a broad group of stakeholders in a diverse set of forums, by securing commitments to act, and by fostering and supporting initiative from different starting points. It is also a program in which the DNR is exploring, reflexively, how to understand its role in achieving superior environmental performance in the context of these goals and processes. Thus it is not, and should not be understood as, a simple program of devolution. It involves reframing the role of a regulatory agency as simultaneously the steward of baseline commitments and an affirmative partner in promoting innovation and action.

As much as there is agreement on the need for such a reframing of regulatory practice, there is not a clear roadmap that describes where we need to go or a manual that describes how to act along the way. We believe that the proper context for judging these efforts is against this pressing sense of need and the blank canvas of the map and manual. The latter are compounded by the early stages of the program, the sense of urgency in the Gateway region that is only just emerging, and the uncertainty that lingered over the effort until the Environmental Results Act became law in May, 2004.

The reader will have to make her own judgments about the influence of such contextual factors as we have in our assessment. The analogy to investment decisions that venture capitalists make is suggestive in this context. They always face choices about whether to invest or continue to invest in start-ups that have a very uncertain future. The projects that are the most difficult to assess are those that will alter the market and thus reshape the conditions in which their success and significance will be secured and interpreted. They offer the biggest opportunities and the biggest risks and compound the uncertainties that attend these decisions. One characteristic that we noted in a set of interviews we did with venture capitalists a few years ago was the choice of appropriate criteria for the decision. Investment decisions in the early rounds are made on different grounds than investment decisions on later rounds.

What we have focused on here is signs that would suggest the development of the points of initiative and lines of interaction that could develop into the kind of networks that can deliver the cascade of environmental, social, and economic benefits that we associate with vital entrepreneurial and regulatory networks. This neglects to some degree the

institutional learning that we have stressed repeatedly in the preceding sections as an essential element of these efforts to reframe regulatory practice. This is not a contradiction. It reflects our sense that such learning can only occur around efforts that are initiated out of commitments to address proximal problems that address clear and present needs and interests as well as invoke broader and deeper questions about the shape of governance and the legitimacy and effectiveness of arrangements.

Networks

The commitment to build ties among organizations and across boundaries between public, private, and civic organizations is rooted in the history of Green Tier. The advisory committee that shaped the proposal presented to the legislature was based in an effort to build ties across these boundaries. This approach has been adopted examples from the Cooperative Agreements pilot program and in the Dairy Gateway.

Creating enduring ties marked by trust and the potential for development has been more of a challenge. In other cases we have examined the origins of networks are elusive. The networks that prosper are rooted in practical efforts to take action and reason about what to do. It is through these problem-focused interactions with real stakes that the kind of “studied trust”¹⁹ that is one of the hallmark of vital networks develops. In retrospect the initial problems that set the process in motion can be seen to contain a generative potential so that solving them extends rather than closes the perception of interdependence and the basis for interaction.

The passage of the Environmental Results Act expands the potential for defining benefits and a common stake that could provide the basis for interaction and development. In the Dairy Gateway it is both the potential for flexible ways of meeting regulatory goals but also the sense that dairy agriculture faces a diverse set of threats that galvanizes attention. The program so far has managed to raise the possibility of both these potential benefits and common threats as a stake in the ground that could provide the basis for the kind of focused interaction that in our experience fosters and sustains the development of effective networks, like the public entrepreneurship networks we have studied.

At the same time, the perception of a stake (whether a threat or benefit) is a necessary, but not sufficient condition for promoting the development of networks. Here the kind of formal and informal facilitation that Nancy Skadden has undertaken and the efforts of Harry Webne-Behrman are essential. Their work spans roles that we elsewhere differentiated as superintendents and mediators. Superintendents create the background conditions for cooperation and the development of effective networks. Nancy Skadden’s efforts to listen, to identify opportunities to bring local actors together, and to frame topics for their conversations is a clear example of the importance of these activities. A number of networks within the farming communities are beginning to develop and were supported and initiated by her activities. She has also managed to create initial ties between farmers and neighbors that could become more active in the development of

¹⁹ Sabel, 1990

local networks. Without such groundwork, it is unlikely that ties would develop across these boundaries. The work of Harry Webne-Behrman appears to be accomplishing much the same thing at the state level. Perhaps most important is the yet unrealized potential created by the combination of their activities for the kind of state—local coordination and interchange that could develop when these conversations are joined. The latter in particular seem essential for realizing the vision of the Dairy Gateway.

The conversations we had on a recent visit to the Gateway suggest that developments are underway that have the potential to transform regulatory policy and practice. As we have often discussed of local organization, oriented to engaging issues, rather than protesting policies and decisions, and developing a local capacity for problem solving and deliberation is an essential complement to the efforts that DNR is making and to the activation of a state-wide policy community. There is clear evidence that awareness of the public challenge and the need for local action is growing. This is broad in some cases, as in expanding awareness in the farming community that this is not just about big farms, but about the future of all agriculture in the region. It is expressed across the farming community in the recognition that within the complaints of neighbors is a set of issues that will shape the future of everyone in the region. Groundwater and surface water quality is of course prominent on this agenda. But so is concern about the divisive potential of what look like nuisance issues, but express a kind of alienation as the farming and non-farming parts of the community share less common history and experience, and as fewer and fewer institutions provide for the kind of sustained interaction that might generate awareness of interdependence and an ability to talk about contentious issues.

Simple awareness, of course, is not enough and could as likely end in irony or tragedy as in real progress on policy goals. So what makes me feel my hope is grounded is that there is also plenty of evidence of the kind of conversations, nascent networks, and organizational initiatives that can give awareness tangible expression. The Gateway initiative has had considerable success in generating substantive conversations between farmers and their neighbors and among farmers and local officials. These conversations serve as the first step in building the trust that anyone can tell you is need and in short supply in the region. Such trust building frequently involves small action steps that are precursors to larger ones. The development of these networks also raises the significance of joint fact-finding efforts like the stream and groundwater monitoring initiatives that are underway. These streams of organizational activity (no pun intended) can join and pull policy development along with them.

The following interaction may give you a sense of what we're talking about. We were meeting with the conservation agent for Kewanee County and an assistant, who is also a farmer. We were talking about what Green Tier meant as an alternative policy framework in practical terms. We asked whether they thought farmers might be interested in what could be called "innovation circles" that would engage their experience, knowledge, and ingenuity in identifying practical measures that could advance policy goals like groundwater protection. The idea that farmers could be sources of ideas (as opposed to the consumers of rules) was clearly intriguing to them. As we developed the idea it became clear that they thought it would also be attractive to other

farmers. What made this conversation compelling to me, was the fact that we could also talk in very definite terms about which organization could organize and manage this initiative. Moreover, the farmer who was present was the chair of the environmental committee of that organization.

Overall, there are three developments that make the Gateway promising from a networks perspective. First, there are multiple points at which the kind of factors are coming together that could provide the starting point for the development of the kind of break-through networks that can deliver benefits and change the institutional context for action. These factors are a group of actors pursuing ends they care about and a set of ties that connect these actors to one another. At the local level, this includes farmers who have begun to organize, their neighbors who have concerns about farming practices, and public officials who see it as their responsibility to ensure that these issues are addressed.

The second is the presence of a group of go-between who are working to support these distinct initiatives and build ties across them. These actors include Nancy Skadden and Harry Webne-Behrman. Nancy has been extremely resourceful at identifying points where people care about an issue, at helping them create ways to talk about it and about how to address it, and at looking for ways to tie these conversations together. Harry's efforts at the state level are equally significant and promise to create a statewide context for shaping, supporting, and extending action in the Gateway region. Many of the local officials we talked with also had a clear sense that their role was changing in part and that creating ties among actors involved with related issues was a new and promising line of practice to develop.

The presence of initiatives at the state and local level provides distinct starting points from which a broader effort might develop and the potential for these efforts to join, particularly because their membership overlaps. The overlapping membership of these groups and overlapping participation in the forums is the third factor that underlines the potential of the gateway from a network perspective. The effort is not dependent on any single stream prospering or on any single forum for the kind of interchange that is essential for the development of practice.

Deliberation

A significant feature of the development of Green Tier has been the effort to organize and sustain a particular kind of conversation. This was remarked upon by those who participated in the Green Tier Advisory Council and by participants in pilot projects like Cook Composites. In the latter, the constructive conversation was seen as a draw to get people to participate—and essential for continued participation. This was only one of a myriad of impacts that the types of interactions described above affected the success of the CCP agreement.

Two aspects of these developments seem worthy of comment. First, the role of organizing and managing such conversations seems to conflict with the DNR's need to speak for specific responsibilities and interests within these conversations. DNR has so

far adopted what seems to us to be an appropriate strategy and to outsource the convening and management of these conversations. This should provide the freedom to act affirmatively on public responsibilities and also acknowledge that these responsibilities are best served when they are debated and when actions are designed and commitments secure within a diverse group of stakeholders.

The particular individuals the DNR has turned to are mediators. This is true not only when DNR is contracting directly, but also when another organization does the contracting, as the Lakeshore Natural Resource Partnership has done with Nancy Skadden. What characterizes mediation as a practice is precisely the ability of mediators to open and sustain a particular kind of conversation that fits with many of the characteristics of deliberation. Lon Fuller described this “central quality of mediation” as “it capacity to reorient the parties toward each other, not by imposing rules on them, but by helping them achieve a new and shared perception of their relationship, a perception that will redirect their attitudes and dispositions toward one another.”²⁰ Such conversations are difficult to start can develop self-organizing capacity once they are up and running. The prevalence and perceived relevance of mediators in the project raises a point for reflection of what characteristics of their practice make them fit with this role and whether aspects of this could be adopted into other domains of organizational action.

These efforts look so far to have responded affirmatively the demands for openness and respect that we highlighted above as essential characteristics of deliberation. We have not had a chance to observe the statewide dialogue directly or to interview participants, but the knowledge and commitment are in clear evidence and suggest that the approach will secure the openness and respect that are necessary for good policy deliberation.

Interviews with farmers who have participated in the farmer—neighbor dialogues suggest that these conversations have maintained the commitment to open discussion that have been a persistent feature of Green Tier. The curiosity people express in interviews suggest indirectly, but convincingly, habits of conversation consistent with deliberation. A short description of the kind of progress that has been made at Cook Composites, for instance, repeatedly generated interest. On more than one occasion, we received in response to such a description comments that were effectively, “I’d like to know more about that.” It was also on display in candor about the kind of traps that are contained in the existing policy framework—the dependence on cost sharing and reluctance to examine or try steps not covered—and a desire on the part of farmers to work outside of these boxes.

We would suggest that these conversations be monitored to see who participates and tracked, either through regular interviews or direct observation, to see that these qualities continue to characterize the interactions. In addition, it is important to try to track whether and how there is the kind of expansion of perspective—other-, fact-, and future-regarding—that characterizes participation in deliberation.

²⁰ “Mediation: Its Forms and Functions,” *Southern California Law Review* Vol 44 1971 p. 325

Action and learning

Experience in the development of Green Tier supports the importance of this tie in developing effective networks and open deliberation. In the case of Cook Composites, it was the efforts of the firm to understand the concerns of its neighbors, to take actions that address these concerns, and to check back and ask about new problems that has built trust and underwritten the firm's ability to openly discuss performance with neighbors who could easily become opponents. This kind of reflection on practice is essential for securing and sustaining the commitment to action and to learning through action over time. Similar developments can be observed in the early interactions between farmers and neighbors in the Dairy Gateway. These need to be enhanced and tied to the discussion of superior environmental performance in the statewide policy dialogue.

Institutional and organizational development

Three aspects of Green Tier and the Dairy Gateway seem promising in this regard. The first is effort to engage the legislature and the support that the Green Tier has received. This is important for the long-term future of the Dairy Gateway and the broader effort. The legislature must continue to learn from Green Tier about the problems practitioners are trying to overcome, and through a continuing relationship improve the program.²¹ Second, there is an effort to build a program of organizational development within the DNR as part of the broader effort. Third, is an effort to organize a forum—a conference at UW-Madison, in which it will be possible to reflect on experience and assess its significance for institutional development. These features distinguish Green Tier among reform initiatives. Institutional development is a long-term process and it is still early to comment other than on the potential evident in the early returns.

²¹ Hassett et. al. Wisconsin's Green Tier Law, Innovation Management Systems, and Trading Newsletter, August 2004