Fall 2000

Border Farmers, Water Contamination, and the NAAEC Environmental Side Accord to NAFTA

Margaret Wilder

Recommended Citation
Available at: https://digitalrepository.unm.edu/nrj/vol40/iss4/6

This Article is brought to you for free and open access by the Law Journals at UNM Digital Repository. It has been accepted for inclusion in Natural Resources Journal by an authorized editor of UNM Digital Repository. For more information, please contact amywinter@unm.edu, lsloane@salud.unm.edu, sarahrk@unm.edu.
ABSTRACT

This article examines the social mobilization strategies of small farmers in the border region of Sonora, Mexico, in light of a new international environmental institution, the Commission on Environmental Cooperation (CEC), involving Mexico, Canada, and the United States. Border farmers have used both traditional and non-traditional strategies in an attempt to achieve a state-sponsored clean-up of contaminated river water. The existence of the CEC creates new ways for society to approach the state in Mexico, and gives a new spatial form to the discourse between small farmers and the government.

INTRODUCTION

In October 1996, Mexico’s National Commission on Water (CNA) refused planting permits to a group of small farmers in three communities in the northwestern state of Sonora. The CNA stated that the irrigation water used by the farmers, which came from the Magdalena River, had become too contaminated to be used on crops. The government agency cited municipal wastewater from three municipalities (Imuris, Magdalena, and Santa Ana) as the principal contaminant. At about the same time local farmers noticed that their crops had been damaged by water contamination. Farmers believe that root rot had set in in the fruit orchards, shriveling certain species of trees and contaminating the soil.

This article analyzes how local farmers in the Mexico-U.S. border region utilized a new trilateral environmental monitoring institution established through the North American Agreement on Environmental Cooperation (NAAEC), a side accord to the North American Free Trade Agreement (NAFTA). The Commission on Environmental Cooperation (CEC) was created in 1993 to conserve, protect, and enhance the North
The Sonoran border farmers invoked the CEC's core program, the Citizens Submission Process, which allows individual citizens and groups in Mexico, Canada, and the United States to initiate formal complaints regarding the violation of a nation's environmental laws. The case of the Sonoran farmers is significant in a number of ways. It demonstrates how urban growth, stimulated in part by NAFTA, has increased water contamination to unacceptable levels. This suggests that national economic restructuring initiatives may have unintended and unanticipated local effects. The case also shows the important but seldom acknowledged linkage between urban issues (for example, municipal population growth and contamination of potable water supply) and rural issues (for example, contamination of irrigation water supply). It further illustrates the ways in which urban situations inform and affect rural livelihoods and vice versa, especially in arid environments such as the one along the Mexico-U.S. border. The case also provides evidence for the importance of creating a communicative and adjudicative space where border environmental problems may be addressed. Finally, the case raises critical issues of theoretical import regarding the evolving role of the Mexican state in this new institutional environment.

While there is a vibrant body of literature developing on the border environment and the new institutions that emerged from NAFTA, little scholarship has focused on the impact of the international environmental institutions in non-urban settings along the border. This article seeks to make a significant contribution to the question of how rural social groups

1. The CEC indicates the breadth of its charge on its web page: "The Commission for Environmental Cooperation (CEC) is an international organization created by Canada, Mexico and the United States under the North American Agreement on Environmental Cooperation (NAAEC). The CEC was established to address regional environmental concerns, help prevent potential trade and environmental conflicts, and to promote the effective enforcement of environmental law. The Agreement complements the environmental provisions of the North American Free Trade Agreement (NAFTA)." North American Commission for Environmental Cooperation, Who We Are (visited Sept. 13, 2000) <http://www.cec.org/who_we_are/index.cfm?varlan=English>.

2. Important studies have analyzed the international environmental issues and institutions generally, or focused on, for example, the activities of the Border Environment Cooperation Commission in a particular urban area. See generally Vivienne Bennett, The Politics of Water: Urban Protest, Gender and Power in Monterrey, Mexico (1996); Helen M. Ingram et al., Divided Waters: Bridging the U.S.-Mexico Border (1995). See also Robert Varady et al., The U.S.-Mexico Environment Cooperation Commission: Collected Perspectives on the First Two Years, J. BORDERLANDS STUD. Fall 1996, at 89, 89-109; Maria Carmen de Mello Lemos & Antonio Luna, Public Participation in the BECC: Lessons from the 'Acuaferico' Project, Nogales, Sonora, J. BORDERLANDS STUD., Spring 1999, at 43, 43-58; Pierre Marc Johnson & Andre Beaulieu, The Environment and NAFTA: Understanding and Implementing the New Continental Law 734 (1996).
utilize the new institutional environment to advance a rural community agenda.

The principal questions on which this research focuses are the following: How have border farmers mobilized against the problem of water contamination and the loss of their planting permits? What specific strategies have they utilized in their mobilization? and, Has the existence of new international environmental institutions changed the nature of state-society relations in the rural border region?

The central argument of this article is that the institutional environment created by the NAAEC creates a new way for society to approach the Mexican state in the border region. This is not an unfettered approach, but one that is narrowly delimited by the particular review and approval processes practiced by the new institutions. Traditionally a group of small farmers would have little access to or influence with the Mexican federal government. This case documents how border farmers have used the new institutional apparatus to gain access to the state, to elicit a response, and to raise international awareness of local environmental violations.

The first section of the article provides an overview of the three municipios that were affected by the denial of permits. It also discusses the development of this case since October 1996 when the planting permits were refused. Section two discusses the new institutional apparatus created in the aftermath of NAFTA’s adoption, with particular focus on the trilateral CEC. This discussion focuses on the procedures of review and response practiced by the CEC, and how those procedures have shaped the state-society discourse in the case of the border farmers. The involvement of the Border Environment Cooperation Commission (BECC) in the Magdalena River region is also briefly detailed. Section three considers the theoretical framework in which the transformation of state-society relations and social mobilization strategies can best be understood. This section focuses on the transformations that have occurred in state-society relations in recent years and the growth of social movements organized around environmental issues. Section four addresses the conclusions that can be drawn from the case to date, and the implications of the case for future state-society relations along the border.

3. A municipio is a local governmental jurisdiction in Mexico, equivalent to a U.S. county, but with powers and responsibilities similar to those of a U.S. city. The municipio is governed by an elected ayuntamiento, equivalent to a city or county council. The presidente municipal is the equivalent of a U.S. mayor.

4. This study draws upon 20 hours of in-depth, open-ended interviews with local farmers, including the treasurer and president of the Comité Pro-Limpieza del Río Magdalena (Committee to Clean-Up the Magdalena River). The author also interviewed officials at the CNA, the BECC, and the CEC. The author also had access to the farmers' original data.
I. WATER CONTAMINATION AND FARMERS IN THREE SONORAN COMMUNITIES

Overview of the Three Municipios

Farmers in the Magdalena River valley grow vegetables such as lettuce, onions, garlic, carrots, squash, and beans. Local orchards also yield a wealth of fruit, including peaches, quince, and cherries. Many of the field crops (for example, lettuce, onions, garlic) can be harvested three to four times a year under irrigated conditions. Forage crops, such as alfalfa, are also grown locally.

Within the three municipios there are 1,589 farms. Of these, 80 percent are small farms of one to 20 hectares. Land tenure arrangements include private property, ejidos, agrarian communities, and mixed private/communal holdings. In Imuris and Magdalena, one-half to three-fourths of the farmland is in private holdings; in Santa Ana, ejidal property comprises about two-thirds of the total. In all three municipios, however, the preponderance of farmland itself, measured in hectares rather than by number of farm units, is in private ownership. Even in Santa Ana where ejidos are the majority type of farm, approximately 80 percent of the actual area is privately owned. Private properties in all three municipalities are typified by small landholdings in the one to 20 ha range. Thus, the predominant land tenure in the Magdalena River region is the private smallholding. The majority of landholdings in all three municipalities is

correspondence, and drew upon the CEC and BECC websites for data.


6. The remaining 20 percent of farms in the region range from mid-size (21-100 ha.) to very large (over 2,500 ha). One hectare is equivalent to 2.2 acres. See id. at tbl.3.

7. An ejido is a type of collective farm whose members typically each farm a specific parcel of land and who share resources such as pasture and forests in common. There are approximately 28,000 ejidos in Mexico, created to satisfy the demands of rural landless peasants after the Mexican Revolution (1910-1920). Prior to 1992, ejidos were granted concessions to use the land but were prohibited from legally renting or selling ejidal lands. Due to neoliberal reforms instituted in 1992 with the revision of Article 27 of the Mexican Constitution, ejidos may now legally sell or rent their lands if a majority of members agree to do so. However, most ejidos continue to be farmed collectively. See JONATHAN FOX, THE POLITICS OF FOOD IN MEXICO 48 (1992).

8. An agrarian community (comunidad agraria) is a type of land concession similar in most respects to the ejido. However, agrarian communities were originally formed primarily to satisfy the demands of indigenous rural people for farmland. See id. at 48 n.16.

9. See INEGI, supra note 5, at tbl.3.

10. See id.
irrigated. Pumped groundwater (bombeo) accounts for 41 percent of the irrigation system, and gravity (gravedad) irrigation dependent upon the Magdalena River accounts for 38 percent. In all three municipios, a total of 16 percent of the cultivated land area is rainfed (or temporal) only. Over half of all farm units in the three municipios use pesticides and about two-thirds use some form of technology, including improved seeds or fertilizer. About 90 percent use a tractor, which they own, rent or borrow, but use of burros or horses for farmwork is also common.

In 1990, the three municipios carried approximately 53,000 head of cattle. However, it is probable that this number has diminished significantly over the past decade, due to drought and the consequent higher cost of producing forage. In spring 1999 the federal government declared Sonora one of 12 drought-stricken northern states eligible for federal emergency funds.

Local Environmental and Economic Crisis

In October 1996, the National Commission on Water and the Secretary of Agriculture, Ranching, and Rural Development precipitated a local environmental and economic crisis when they refused to issue planting permits to farmers in several communities in the Magdalena River valley of northern Sonora. The CNA had determined that levels of contamination in the Magdalena River water used for irrigation had reached unacceptably high levels. Data cited by the farmers in later correspondence indicated the presence of fecal coliforms of over 46,000 MPN/100 ML. The CNA proposed that local farmers begin to chloridate

11. See id. at tbl.6. In Santa Ana, two-thirds of all farms are irrigated, while in Magdalena and Imuris slightly more than half of the lands receive irrigation.
12. See id. at tbl.19.
13. See id. at tbl.6.
14. See id. at tbl.16.
15. See id. at tbl.18.
16. See id. at tbl.22.
18. See Letter from Manuel Arturo Copetillo Luque, Magdalena District Chief of the Secretary of Agriculture, Ranching, and Rural Development, to C. Francisco Corrales Garcia, Water Judge of the Comaquito Irrigation Unit in San Ignacio Pueblo (Oct. 14, 1996) (on file with author). At that time, the CNA was under the auspices of the Secretary of Agriculture.
19. See Letter from Comité Pro-Limpieza del Río Magdalena to Vernon Perez Rubio, Secretary of Infrastructure and Ecology (Sept. 8, 1997) (on file with author). Jesus Sanchez of the Comité confirmed in an interview that the source of this finding is biologist Francisco Montes de Oca Canastillo, Head of Laboratory for Water Quality, Subdirectorate of Water Administration, CNA, Sonora office. The "MPN" stands for Most Probable Number. The most probable
the irrigation water themselves if they wanted to continue planting fruits and vegetables.20

The decision to refuse planting permits affected 1,500 farmers along the banks of the Magdalena River on approximately 7,200 ha of land, stretching from Imuris in the north to Santa Ana in the south, and including Magdalena, La Mesa, Terrenate, San Ignacio, San Lorenzo, and other communities located in between.21

The denial of permits reinvigorated a non-governmental organization (NGO) that had been formed by local farmers years earlier. The Committee to Clean-Up the Magdalena River (Comité Pro-Limpieza del Río Magdalena) had officially existed for 17 years, although it had been dormant in recent years.22 Over the next several months, the Comité issued an urgent appeal to a number of Mexican state and international agencies for intervention in this local crisis, including, within Mexico, the general director of the CNA for the state of Sonora, the National Commission on Human Rights (CNDH), the president of the municipio of Magdalena de

---

20. See Letter from Manuel Arturo Copetillo Luque to C. Francisco Corrales Garcia, supra note 18.


22. Interview with Jesus Sanchez, Treasurer, Comité Pro-Limpieza del Río Magdalena, in San Ignacio, Sonora, Mex. (June 1999). The Comité has existed since the early 1980s, when local farmers and members of the community organized to protest the discharge of municipal sewage and wastewater into the Magdalena River. At that time, a meat packing plant was in operation and farmers would see blood-colored water in their fields. The plant closed a few years ago. Once, farmers orchestrated by the Comité poured cement into the channels where the discharge entered the river, plugging the holes. On another occasion in the early 1980s, the Comité took over city hall in Imuris and closed it down for a day to protest the decision of the CNA to grant a permit to the municipio of Imuris to discharge untreated sewage into the river. Jesus Sanchez, treasurer of the Comité, stated,

One day about 3,000 of us closed the door of the municipal palace (city hall) and didn’t allow anyone to enter or exit, until they [the government] gave us a response. In that sense, we “kidnapped” the mayor, council and workers. At about 10 P.M., a representative came from the Ministry of Government. He said they were going to give the permit [to Imuris] for 15 days, but it’s gone on for... years.
Kino, and President Ernesto Zedillo. At the international level, the Comité wrote to the general manager of the BECC and the president of the United States. The Comité requested that the parties intervene to ensure that any water discharged into the Magdalena River be treated prior to discharge, and that local farmers not be asked to bear the cost of the contamination problem. Both the CNDH and the CNA responded to the farmers’ appeal by stating that government agency officials and the presidents of the municipios in the Magdalena River area would form a commission to investigate the sources of the contamination. Neither the CNA nor the CNDH made good on its proposal that such a group be formed.

The Comité also took its case to the local public media, via press releases issued December 10, 1996, and September 8, 1997. The December 10, 1996, release noted the passage of a “new environmental law” that “opens new channels that can and may provide specific and concrete solutions to just social demands, that is, that farmers may once again use their surface water, healthy as it ought to be.” The September 8, 1997, release stated that the aguas negras, or sewage and wastewater, had overflowed an oxidation lake in the nearby community of San Lorenzo. The statement discussed the serious health dangers presented by the aguas negras problem. On May 26, 1999, a public meeting was held on the contaminated water issue. The Treasurer of the Comité requested that a local pediatrician with broad municipal contacts and political ties organize the meeting. The event was hosted by an elected state representative and approximately 50 people attended. Representatives of the National

23. See Letter from Miguel Angel Jurado Marquez, Regional Director, National Commission on Water, to Jesus Alberto Sanchez Sanchez, et al., Comité Pro-Limpieza del Rio Magdalena, (Jan. 14, 1997) (on file with author); Letter from Enrique Montaño Guzman, President, Comité Pro-Limpieza del Rio Magdalena, et al., to Severino Colosio F., Municipal President, Magdalena de Kino (Jan. 6, 1997) (on file with author); Letter from Comité Pro-Limpieza del Rio Magdalena to Ernesto Zedillo Ponce de Leon, President of the United Mexican States (n.d.) (on file with author).


25. See Letter from Dr. Enrique Guardarrama Lopez, Visiting Deputy General, National Commission on Human Rights to Jesus Alberto Sanchez Sanchez et al. (Nov. 29, 1996) (on file with author); Letter from Miguel Angel Jurado Marquez, to Jesus Alberto Sanchez Sanchez, et al, supra note 23.


27. See Press release from the Comité Pro-Limpieza del Rio Magdalena (Sept. 8, 1997) (on file with author).

28. See id.
Commission on Water and other local environment and water commissions sat at the head table. The principal issues raised at the meeting included a dispute about a scientific laboratory that was to have been set up to monitor the contamination; complaints about the lack of action on this problem by municipal, state, and federal officials; and concern that the monies that had been allocated by BECC had been misappropriated by the three town councils and used toward different water projects. Almost no one at the meeting had any knowledge of the forthcoming master plan process coordinated by BECC. There was no mention of the CEC submission.

Local farmers in the Magdalena River region found themselves in a position in which they were forced to resist the authority of the CNA. Reliant upon the food they produce for household consumption as well as for cash income, the farmers believed they had no choice but to continue irrigating in contravention of the CNA. Although fines were levied upon them, farmers could not afford to pay them. The treasurer of the Comité, Jesus Sanchez, stated, "Yes, the CNA has tried to fine us, but we haven’t paid. Since we haven’t been paid for the damages to our crops, we couldn’t afford the fines."29

Although contamination of the river has continued, the planting permits were approved in subsequent years. The farmers believe this was due to political pressure exerted locally by the Comité, and international awareness of the issue due to the farmers’ CEC submittal, although an engineer in the CNA’s Rural Clean Waters Program explained that the permits were approved after 1996 due to regulatory changes that took effect in that period.30 Members of the Comité state that certain species of fruit trees, including cherry, apricot, and peach, will no longer grow due to the contaminated soil. Quince trees are now showing signs of dying out as well.31 Many other crops, such as potatoes, that used to grow large and full have now shriveled in size. Today much of the land has gone to waste and only grass will grow where healthy crops once thrived.32 A CNA official with the Rural Clean Waters Program acknowledged that the contamination has caused environmental deterioration in the area, but that the prolonged drought of the last five years has also been a major factor in the damage.33

31. Interview with farmer from Ejido San Lorenzo, in San Ignacio, Sonora, Mex. (Feb. 27, 2000).
32. Id.
33. Interview with anonymous engineer, supra note 30.
The government has made modest efforts to provide treatment of the contaminated river water in two of the three affected communities. Oxidation lakes that serve as natural wastewater treatment reservoirs have been installed in the communities of Imuris and Magdalena, although not in Santa Ana. A series of lakes with intake and outtake channels exists in these two locations, but there have been no plant materials or chemicals added to further clean the water. It may be that the oxidation lakes are insufficient to clean up the volume of municipal wastewater being pumped into them each day. These lakes can be an extremely effective method of treating wastewater; however, their effectiveness depends on the volume of wastewater being managed and the capacity of the lakes themselves.\(^{34}\)

Local farmers and members of the Comité are convinced that the oxidation lakes are ineffective, and that the water discharged from the lakes into the river is contaminated. As an officer of the Comité stated, "In Imuris, there are oxidation lakes, but every once in a while they [the government] plug them and they think we won't notice. In Magdalena, there are no oxidation lakes, there are just big holes but there’s no treatment, so the water drains contaminated into the River."\(^ {35}\) They blame the loss of specific species of fruit trees on root rot that set in due to the polluted irrigation water. "We want to get together and sue the Mexican government [to clean it up]...we’ve lost everything, the fruit from the orchards that was our living."\(^ {36}\) The farmers also report that a green film covers the soil in their field in many areas.\(^ {37}\) No officials spoke at the public meeting to counter the claims that the discharged water was still contaminated.

The CNA conducted a comprehensive analysis in 1997 of the stretch of the Magdalena River in question.\(^ {38}\) They found that the water was of generally good quality, but in ten percent of the points tested there were problems with high levels of bacteriological contamination. The problem areas were the points along the river where municipal discharges enter into the water, where people dump garbage, and where there are animals pastured or being raised for domestic use. To date, nothing strategic has been done to address these points of contamination. In fact, after recent

34. Interview with Dr. Craig Tinney, Ph.D., P.E., environmental and wastewater engineer, in Tucson, Arizona (May 1999). Dr. Tinney kindly provided information of a general nature regarding the potential effectiveness of oxidation lakes as a form of wastewater treatment. He had not personally evaluated the oxidation lakes in the Magdalena River region and did not have access to information on the lakes’ capacity or the volume of wastewater being pumped into them.

35. Interview with Jesus Sanchez, supra note 29.

36. Id.

37. Interview with farmer from Ejido San Lorenzo, supra note 31.

38. Interview with anonymous engineer, supra note 30. The area where testing was conducted began upstream of Imuris and continued south to Santa Ana.
results from the monitored sites were requested, one engineer stated that lab results must be requested in writing from the engineer in charge of the lab. He also stated that even officials in his program did not always have access to lab results, which often made their jobs difficult as well. He speculated that the levels of coliform contamination had dropped, but were still slightly higher than allowed by regulations.

Traditional strategies of social mobilization against injustice have included corresponding with government officials, appealing to the community’s health concerns, public meetings, acts of civil disobedience, and staging protests at city hall. However, in recent times the farmers have astutely recognized that the new environmental law\textsuperscript{39} opened new channels through which they could also pursue redress for the contamination problem.

On March 15, 1997, the Comitê submitted its initial complaint to the newly established CEC in Montreal. A July 18, 1997, addendum to the submittal cited violations by the Mexican government of both federal and state laws governing environmental protection and surface waters.\textsuperscript{40} The next section discusses the CEC submittal process in detail and reviews the history of the Magdalena River case to date. It also discusses briefly the involvement of the BECC in the Magdalena River region.

II. THE NEW INTERNATIONAL ENVIRONMENTAL INSTITUTIONS

The CEC is not the only new institutional player in the Magdalena River region. While Sonoran farmers have submitted a formal complaint regarding river contamination to the CEC, Sonoran towns have called upon the resources of the Border Environment Cooperation Commission (BECC) to develop a master plan for water in three communities in the same region. This article focuses on the Sonoran farmers’ strategy in utilizing the CEC process to gain the attention of the Mexican government and the international community. However, in order to fully understand the involvement of international institutions in this region, it is important to explain BECC’s current activities there as well. BECC is a bilateral


\textsuperscript{40} The submittal states that the Mexican Government was in violation of the following laws: Law 217 of the Equilibrio Ecologico y la Proteccion al Ambiente of the state of Sonora; State Law 38 governing waters; State Law 109 governing health; and the general Federal Law of the Equilibrio Ecologico y la Proteccion al Ambiente. See Comité Pro-Limpieza del Río Magdalena, Addendum to Original Submission to the North American Commission for Environmental Cooperation (July 18, 1997) <http://www.cec.org/citizen/guides_registry/registry text.cfm?&varlan=english&documentid=124>. 
commission formed in 1993 by Mexico and the United States to certify water resource and water treatment projects in the Mexico-U.S. border region.

The chart below provides a brief comparison of the major components of the two international institutions.

<table>
<thead>
<tr>
<th>Border Environment Cooperation Commission (BECC)</th>
<th>Commission on Environmental Cooperation (CEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created by Executive Agreement between presidents of Mexico and United States, September 1993</td>
<td>Created September 1993 by the North American Agreement on Environmental Cooperation (NAAEC)</td>
</tr>
<tr>
<td>Bilateral institution involving Mexico and United States</td>
<td>Trilateral institution involving Mexico, United States, and Canada</td>
</tr>
<tr>
<td>Main charge is to certify water resource and water treatment projects in Mexico-U.S. border region</td>
<td>One of its main charges is to establish a registry of citizens' complaints regarding violations of national environmental laws, and to review and assess such complaints.</td>
</tr>
<tr>
<td>North American Development Bank (NADBank) established as financial affiliate of BECC. NADBank can help to finance or package financing for BECC-certified water projects. Funded 50% U.S./50% Mexico.</td>
<td>North American Fund for Environmental Cooperation established by CEC Council resolution to fund community-based projects in North America. Funded in three equal parts by the three participating countries.</td>
</tr>
</tbody>
</table>

Both the BECC and the CEC have become key players in addressing the Magdalena River water contamination problem. These institutions were created prior to the adoption of NAFTA in response to concerns about the potentially damaging effects of free trade on the environment. This section will discuss the involvement of these two institutions in some detail.

**BECC: Water Project Certification**

The BECC was created to coordinate environmental cooperation between local authorities, provide specialized expertise, and certify
environmental projects for financing from the NADBank. Its mandate is to work in the Mexico–U.S. border region to resolve environmental issues, with a principal focus on water. NADBank is an affiliated institution funded in equal parts by the Mexican and U.S. governments. NADBank’s role is to finance or structure financing packages for water projects that are certified by the BECC.

The BECC has two technical assistance programs, both of which have been implemented in the Magdalena River region. The Institutional Development Program, funded by NADBank, provided funding to the three communities of Santa Ana, Magdalena, and Cananea. Those funds were directed toward improving operational efficiency in such areas as accounting processes and computer technology. The Project Development Assistance Program, funded by the Environmental Protection Agency, is designed to help communities develop solutions to their environmental infrastructure problems. Once a project has been defined, a BECC certification document is prepared and presented before BECC’s board for certification consideration. In general, if a project is certified it may be eligible for financing under NADBank’s Border Environment Infrastructure Fund. However, projects funded under this program must have transboundary impacts; therefore, the Magdalena River region would not qualify for such funding.

In early 1999, the municipio councils of Cananea, Santa Ana, and Magdalena requested BECC’s assistance, under the Project Development Assistance Program, to prepare a master plan whose objective will be to identify strengths and weaknesses of the water utilities, identify the needs, and develop solutions for the short, intermediate, and long terms. BECC recently selected consultants from Mexico City to carry out the master plan. Once alternatives are ready to present to the public, BECC will form a citizens’ council. Once the master plan is completed, the three communities will decide which projects to pursue and request BECC certification. Evaluation of the adequacy and effectiveness of the oxidation lakes is an element of the master plan.

The BECC process may have great influence in the eventual resolution of the water contamination issues in the Magdalena River region.

43. See Electronic correspondence from Bernardino Olague, Project Manager, Border Environment Cooperation Commission, to author (July 8, 1999) (on file with author).
44. See Electronic correspondence from Bernardino Olague, Project Manager, Border Environment Cooperation Commission, to author (Feb. 10, 2000) (on file with author).
45. Telephone Interview with Bernardino Olague, supra note 42.
46. Id.
47. Id.
However, it is likely that the border farmers will have little direct role as the BECC process plays itself out, although they may be active participants in any public participation opportunities.

**CEC: International Environmental Monitoring**

On March 15, 1997, the Comité submitted its complaint to the recently established CEC in Montreal. A July 18, 1997, addendum to the submittal cited violations by the Mexican government of both federal and state laws governing environmental protection and surface waters. The submittal asked for three forms of redress from the government: (1) that the nation's and state's environmental laws be respected; (2) that the municipal wastewater of Imuris, Magdalena de Kino, and Santa Ana be treated in conformance with the law prior to discharge into the river; and (3) that local farmers be allowed once again to use Magdalena River water for irrigation for regional agriculture. The Secretariat of the CEC determined that the CEC did have jurisdiction over the complaint and requested a response from the Mexican federal government.

On July 29, 1998, the Secretary of Secretaria de Medio Ambiente, Recursos Naturales y Pesca (SEMARNAP), Mexico's lead environmental agency, issued an 18 page response to the Comité's submittal. The government's response began with a summation of the complaints detailed in the Comité's submittal, and includes a response to each charge. The major claims made by the government are that the Comité's complaint was invalid because it pre-dated the adoption of the NAAEC accords, and that the rules strictly state that only those violations of environmental law that transpired after adoption may be considered by the CEC. In addition, the government cites the millions of pesos that have been or will be spent on constructing drainage projects and wastewater treatment in the Magdalena River region as evidence that it had not neglected the problem but had done

---

48. The submittal states that the Mexican Government was in violation of the following laws: Law 217 of the *Equilibrio Ecológico y la Protección al Ambiente* of the state of Sonora; State Law 38 governing waters; State Law 109 governing health; and the general Federal Law of the *Equilibrio Ecológico y la Protección al Ambiente*. See Comité Pro-Limpieza del Río Magdalena, supra note 40.


51. See id.

52. See id.
what it could to address it.\textsuperscript{53} The government’s overall argument was that it simply does not have sufficient financial resources to deal with the problem.\textsuperscript{54}

Owing to a peculiarity of the CEC process, the author of the government’s lengthy response, Secretary of SEMARNAP Julia Carabias Lillo, is also the Council Minister who represents Mexico on the Council of the CEC. Should the Magdalena River submittal ever be moved forward by the Secretariat to be considered directly by the Council, she is one of the three individuals who will evaluate the merits of the case. The Citizens Submittal Process is one of the core programs of the CEC, and it is administered by a professional staff, called the Secretariat of the CEC. It is the Secretariat that receives submittals and evaluates whether they satisfy the requirements of Articles 14 and 15 of the NAAEC accords, which set forth the criteria and procedures to be followed in the Citizens Submittal Process. The Secretariat can request additional information from any of the participating governments on a specific submittal, and ultimately renders a decision as to whether a factual report should be developed on the case. This recommendation is then forwarded for consideration by the CEC Council, comprised of the environment ministers from Canada and Mexico, and the administrator of the Environmental Protection Agency in the United States. The Council may decide on a two-thirds vote whether to instruct the Secretariat to develop a factual record or whether to dismiss a case without further process. Thus, the parties that respond to the citizen submittals regarding government violations of environmental law are the very people who serve on the CEC Council. An independent committee review of the CEC conducted in 1998 points out the potential conflict created by these dual roles: “As representatives of the Parties [in other words, the respective governments], the ministers articulate and defend their national interests. In their second, and potentially contradictory, role they further the national interest by identifying and achieving a broader joint interest that may, at times, be somewhat at variance with the original conception of the national interest.”\textsuperscript{55}

On September 13, 1999, more than a year after its receipt of the lengthy response from Mexico City, the CEC requested additional

\begin{flushleft}
\textsuperscript{53} See id.  \\
\textsuperscript{54} See id.  \\
\textsuperscript{55} Bendesky et al., \textit{Independent Committee Four-Year Review report on Commission on Environmental Cooperation} (visited Aug. 27, 2000) <http://www.cec.org/pubs_info_resources/law_treat_agree/cfp3.cfm?varlan=english>. About the authors—Leon Bendesky is partner and director of ERI economic consultants, Mexico City; Barbara J. Bramble is senior director of international affairs, National Wildlife Foundation, Washington, D.C.; and Stephen Owen is Lam Professor of Law and Public Policy and Director of Dispute Resolution, University of Victoria, Canada.
\end{flushleft}
information from the Mexican government. The nature of the information requested has not been made available.\(^{56}\) Prior to September 13, 1999, the CEC had stated in its website that it was reviewing the state’s July 1998 response and assessing what action the CEC should take in the matter. That the CEC has now taken the step of requesting additional information from the Mexican government may at least initially be interpreted as a positive action from the perspective of the small border farmers. This is evidence that the submittal is still alive and under active consideration by the CEC. The CEC had the option of dismissing the case outright, based on the original response from the Mexican government, but chose instead to request additional information.

Once the submittal and response phases of the process are complete, it will be up to the Secretariat to determine whether to recommend moving forward to the next stage, the development of a factual record, or to dismiss the case altogether.\(^{57}\) Again, the final decision is rendered by a two-thirds vote of the CEC Council. When asked about the likelihood of a recommendation to develop a factual record in this case, a Secretariat staff member responded that “at this point we could very well decide a factual record is not warranted and the case could be dismissed.”\(^{58}\) This is an indication that the mere request for additional information from Mexico should not be taken as evidence of which way the Secretariat is leaning in this matter.

There is at least a statistical reason to think that termination of the case without further action is probable. Twenty cases were submitted to the CEC through 1998, 18 by non-governmental organizations, and two by individual citizens. Four of these name the U.S. government as the party against whom the complaint is lodged, and eight each name Mexico and Canada respectively. Of the 20 cases, one was withdrawn by the submitter, three submittals were rejected for not meeting the submittal criteria, three were determined not to warrant a response by the government, and two submittals are under review. In four cases, including the Magdalena River case, the submittal and response are under review to determine whether there are grounds to move forward to the factual record stage. Four cases are awaiting a response from the government. In the two cases where factual records were developed, one has been terminated and the other is

\(^{56}\) In a telephone interview on February 23, 2000, Carla Sbert, Legal Officer, Secretariat of the Commission on Environmental Cooperation, Montreal, Canada, clarified that CEC policies established in the NAAEC do not allow disclosure of the content of requests to parties (governments), but do allow disclosure of the fact that additional information was requested.

\(^{57}\) A factual record is a detailed investigation and assessment of the area of alleged violation, carried out by the CEC Secretariat. See Johnson & Beaulieu, supra note 41, at 152-58.

\(^{58}\) Telephone interview with Carla Sbert, Legal Officer, Submissions on Enforcement Matters, Commission on Environmental Cooperation (Feb. 23, 2000).
pending. It is also important to note that the CEC has tended to agree with the assertion that violations that began prior to the adoption of the NAAEC accords are invalid for CEC consideration and should result in a dismissal without development of a factual record.

A brief review of other submittals to the CEC provides an indication of how much the Comité has achieved in simply putting together a successful submittal. The fact that it has survived the rigors of a legalistic and demanding submittal process is testimony to a certain degree of success to date. Given the decisions made in other cases, the likelihood of dismissal at earlier stages of the process was high. The Comité is one of the smallest and most grassroots of the organizations who have made submittals. For example, of the submittals initiated in Mexico, other submitters to date have included the Group of 100 (Grupo de Cién), Mexico's best known environmental group; the Institute for Environmental Rights (Instituto de Derecho Ambiental); and Manglar Ecological Group (Grupo Ecológico Manglar, A.C). Submittals initiated in other countries have been generated by very large NGOs, such as the Sierra Club, Canadian Environmental Defence Fund, and the Animal Alliance of Canada.

The CEC process is a highly legalistic one, requiring a great deal of attention to the specific characteristics of certain laws and a focused presentation of alleged violations. That a group of small farmers working on their own without legal counsel was able to successfully reach the point where the CEC is assessing the merits of its complaint is a substantial achievement in itself. However, it is fair to say that the Comité achieved this success in spite of the CEC process, not because of it. The CEC process was structured along similar lines as trade agreements and is not readily comprehensible to the average citizen. Due to its complexity, the majority of submitters are major, relatively well-funded NGOs who have legal staffs to craft the submittals and present the case in the most effective ways. Moreover, grassroots groups or individual citizens without the benefit of legal counsel may have difficulty in understanding fully the complex and legalistic CEC processes. The border farmers are placing great faith in these international processes, without fully realizing the implications of what is under consideration and what it will mean to the future of their complaint if the CEC dismisses the case.

The case also raises serious questions regarding access to information and the attendant power such information can convey. Border farmers do not have ready access to computers and the internet, and, thus, do not benefit from the information available on the CEC website. In small villages like San Ignacio few homes even have telephones, making it difficult for farmers to place a call to Montreal to check on the status of their case. According to a Secretariat staff member, there is great variability in the
sophistication level of submittals turned in to the CEC. She noted that the Secretariat staff makes every attempt to weigh submittals evenly based on the merits of the case, despite the fact that it is difficult to assess less sophisticated submittals on an equal basis with highly sophisticated ones. These considerations regarding access to information and the support and knowledge required to craft a successful submittal underscore the limitations of the CEC process for grassroots groups, particularly in Mexico. If the Council directs the Secretariat to proceed with the development of a factual record, the Council will subsequently have the opportunity to vote on whether to release the factual record to the public. The publication of the factual record is the final step in the CEC process. "[T]he main effect of the factual record may be, on occasion, to alert public opinion and even to prompt another party to initiate procedures for formal dispute settlement....A government espousal of the claim is necessary to proceed from NGO submissions into formal dispute settlement since formal dispute settlement under NAAEC is the exclusive domain of the states." The CEC's Citizens Submittal Process does not have the power to enforce or enjoin sanctions upon any of the participating governments.

III. TRANSFORMATION OF STATE-SOCIETY RELATIONS

The 1990s have witnessed a growth of understanding of the environmental problems along the Mexico-U.S. border as transboundary rather than local or national in nature. The development of BECC, the adoption of the NAAEC accords as a required precursor to NAFTA, and the creation of the CEC are evidence of this trend. The borderlands have come to be understood as a particular region with unique properties. Thus, resolution of the region's environmental issues must also transcend geographical boundaries.

The 1990s have also been a decade of change in the political culture of Mexico. Long dominated by a single, powerful political party, the Party of the Institutionalized Revolution (PRI), Mexico in recent years has experienced a political shift that has allowed opposition parties such as the rightist National Action Party (PAN) and leftist Party of the Democratic Revolution (PRD) to gain power through more transparent electoral procedures. Breaking a 71-year one-party rule, an opposition candidate was recently elected as the next president of Mexico. This democratic

59. Id.
60. Id.
61. JOHNSON & BEAULIEU, supra note 41, at 158.
transformation has also meant that social groups have greater access to power. The traditional system of corporatism, clientelism, and patronage of local power brokers has given way to a system in which, through the participation of social groups in new social programs, the state has incorporated these groups into a new social pact.  

Given these changes, state-society relations have been under transformation during the 1990s. As several scholars have shown, the new social programs introduced by the Salinas and Zedillo administrations have created new linkages between the state and social groups. For example, while the National Solidarity Program (PRONASOL) has been criticized as largely ineffective in addressing root problems of poverty in rural Mexico, it was, nevertheless, more successful in crafting a more open, participatory framework of relations. Scholars have shown that environmental movements in particular have been on the increase in Mexico in the 1990s. Environmental studies of water use along the border have typically concerned urban areas in the Mexico–U.S. borderlands. The Magdalena River region, however, raises the issue of how urbanization of near-border communities affects rural water users. While there has been widespread recognition of the urban environmental issues stimulated by free trade, there has been little focus on the rural aspects of environmental change and impact generated by this phenomenon. In the Magdalena River communities, rural agricultural water users are dependent upon a river that is also the site of wastewater discharge from growing northern border-region cities in Mexico.

State-society relations in the border region have begun to take on a new shape due to the mediating presence of bilateral and trilateral international environmental institutions. Border environmental problems are now understood to be transboundary and to require bi- or tri-lateral resolution in many cases. Border farmers are among the social groups that have taken advantage of the newly available channels to initiate a discourse with the state. The CEC Citizens Submittal process has changed the geography of discourse between the Mexican state and society. The process


64. See generally Dresser, supra note 63; Fox, supra note 63.


66. See generally de Mello Lemos & Luna, supra note 2; INGRAM ET AL, supra note 2; BENNETT, supra note 2.
etches a new set of long-distance spatial relations, with the intermediary located in Montreal. As one border farmer commented, "When the government responds to us, they send their letters to Canada and then [the CEC] in Canada sends it to us here in San Ignacio and Terrenate." The expanded geography of this discourse has intra-national as well as international implications. Border farmers in the north now have a way to elicit a response from Mexico City. The CEC process has enabled them to supersede local government officials and involve top agency officials from the capital, including the environment minister herself. Since the federal government is highly centralized, and most budget decisions that affect local jurisdictions are made in Mexico City, this connection is not an insignificant one. The Magdalena River contamination complaint means that federal officials at the highest levels in Mexico City are now not only aware of the problem, but are also aware that the international community is watching to see how it will respond. The environment minister will also have to take a public stand should the case be recommended for development of a factual record.

This atmosphere of heightened vigilance may urge not only the Mexican government, but also those of the United States and Canada, to attend more quickly and thoroughly to environmental problems brought to the attention of the CEC. What is less certain is how the CEC will ultimately be viewed by participating governments, nations, and citizens. As noted earlier, four years after its inception, there is only one case that has gone forward to the final stage of the process, publication of the factual record. Only two (including the one made public) have gone forward to the factual record stage. These early years will be important ones in establishing the character and purpose of the CEC. Governments are likely to be watching closely to see if there are teeth to the CEC's processes. At the local level, there is a potential for grassroots groups like the Comité Pro-Limpieza del Rio Magdalena to feel spurned if their cases are summarily dismissed. In case of dismissal, the Mexican government may feel it has received an international stamp of approval indicating that its actions vis-à-vis the Magdalena River situation have been adequate and effective. Thus, the government may interpret dismissal of citizen submittals as a license to continue violating environmental laws. Similarly, citizen groups may feel that they have no recourse at the federal or local levels to force the government to act when the case has been dismissed by an international tribunal. This is a particular concern in the case of grassroots groups that do not understand the technicalities of the CEC process and the reasons that cases may be dismissed. The publication of a factual record may be a significant

international statement about a particular environmental violation. Such a statement may be sufficiently compelling, or embarrassing, to the government in question so as to urge the state to take all steps to resolve the matter quickly. However, it may also be that the factual record could be published with no practical effect, other than to give satisfaction to the submitting party. The case in which a factual record has been published is a complaint against the Mexican government, so that case may indeed serve as a bellwether of Mexico's reaction to such international findings. According to the CEC, no formal dispute resolution has been set in process to date in that case. In fact, the procedural rules for formal dispute resolution between states are still being written.68

IV. IMPLICATIONS OF NEW INTERNATIONAL ENVIRONMENTAL INSTITUTIONS

The Magdalena River contamination case is indicative of the changing shape of state-society relations in the Mexico–U.S. border region. The new international environmental institutions, BECC and CEC, have given Mexican social groups a new way to approach the state and to seek redress for environmental problems. As Blaikie and Brookfield and Peet and Watts have shown in their works on political ecology, environmental problems are closely related to issues of economics, poverty, and health in the Third World.69 Thus, these new institutions may have widespread impact in a number of sectors, including, but not exclusive to, the environment.

The Magdalena River case shows that it is possible, albeit not easy, for Mexican grassroots groups to make a successful submittal to the CEC. The process ensures that valid submittals will receive at least a substantive response from the Mexican government. The CEC process successfully elicited such a substantive response from the Mexican state within 12 months, while the Comité had been requesting assistance for some 16 years. However, given the inherent difficulties in crafting a valid submittal, this "new channel" may turn out to have limited usefulness for Mexican grassroots social groups.

The CEC process has a number of attributes that may uniquely affect Mexico. The independent committee's four-year review of the CEC, conducted in 1998, pointed out a number of these relating to the Mexican

68. Interview with Carla Sbert, Legal Officer, Secretariat, Commission on Environmental Cooperation, in Montreal, Canada (July 20, 1999).
government. The report indicates the widespread perception of those in high Mexican government circles, including the environment secretary, that the CEC was created to deal with the "Mexico problem." The report states the Mexican government and the environment secretary were unwilling participants in the CEC from the beginning. Participation in the CEC was presented to Mexico as a necessary condition for the United States to sign onto NAFTA. "Mexico did not ask for this agreement but was given little 'choice.'" Government officials told the review committee "no environmental agreement was required between the United States and Canada when their first free trade agreement was completed, but one was required as soon as Mexico came to join the club." Mexico was not pleased when the first Secretariat recommendation to prepare a factual record was decided "against" Mexico, an indication to the government that the CEC was designed primarily for oversight of Mexico. 70 Also, as the report notes, the budget apportionment for the CEC has a significantly larger impact on meeting environmental priorities in Mexico than the same apportionment (one-third each) has in Canada or the United States. "Although the concept of equal participation is generally agreed upon, the reality of the costs this imposes on Mexico's budget for environmental protection has helped support a sense of their disproportionate financial commitment. This is magnified by the view that little environmental benefit to Mexico has resulted from this use of environment ministry funds." 71 The NAAEC accord calls for each participating country to establish a National Advisory Committee (NAC) and a Government Advisory Committee (GAC) to advise each government on its own positions on CEC matters. Mexico had not established either, while the United States and Canada have each established both groups. 72 The lack of action on forming these committees appears to be an indication of Mexico's tepid response to the CEC as a whole.

The independent review committee report highlights a number of areas in which the Mexican government may be uniquely situated with respect to the CEC. However, the case of the Sonoran border farmers' fight for clean irrigation water underscores the unevenness of the playing field for Mexican citizens wishing to initiate formal submittals to the CEC review process. It can be argued that the new institutional environment created by the NAAEC opens a new path for society to approach the state in Mexico. This is not an unfettered approach, but one that is narrowly delimited by the particular review criteria and submittal processes of the CEC.

70. See Bendesky et al., supra note 55.
71. See id.
72. See id.
CONCLUSION

At the May 26, 1999, Magdalena community meeting on the water contamination problem, it was clear that members of the Comité and other citizens had not placed all their eggs in the basket of international adjudication. The Comité appears to view the CEC process as one channel among a number of courses it is pursuing to resolve the contamination problem. Border farmers believe that despite the international trappings of the case, the problem remains fundamentally local.

The new international processes have added to but not replaced traditional means of social mobilization. Nevertheless, the outcome of the border farmers' case will be a significant determinant of how the CEC Citizens Submittal Process may be utilized by other Mexican grassroots groups in the future. Publication of a factual record in the case might exert enough political pressure to cause the government to act, which would be likely to create enhanced interest in the CEC process among other small environmental groups. On the other hand, if a factual record is published to no apparent effect, or if the Magdalena River submittal is dismissed with no further action, Mexican grassroots groups may well view the CEC submittal process as futile. International processes that may in the best case have the potential to create great benefits for the border farmers, in the worst case may be interpreted as giving the Mexican government international approval to do nothing.

Clearly, the new international environmental institutions, BECC and CEC, are positioned to be important new ingredients to the social action mix in the Mexico–U.S. borderlands. By virtue of their very existence, the institutions have reshaped state-society relations in the region. Grassroots social mobilization efforts such as that represented by the Comité's struggle for clean irrigation water now have a new palate of potentially potent options available to advance their agenda. These options lead them to the highest corridors of environmental knowledge and adjudication represented by powerful tri- and bi-lateral institutions. The case of the border farmers will prove important in determining whether, ultimately, the CEC process will help improve the border environment and how, precisely, the society-state relationship will be reshaped.