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OPENINGS FOR PUBLIC POLICY IN THE WATER RIGHTS

The conflict at the Zapotillo dam (Mexico)

Lorena Torres Bernardino

Introduction: water management questioned from below

Water management, as an environmental concern, reveals how a new issue is integrated to a State's political administration. Roth (2006) examines the evolution of the interaction between the State and its natural environment, indicating the changes in values that were developed in the public conscience during the twentieth Century. This evolution has tended to drive political life and action as issues of stewardship of natural resources, and it became paramount in both public policy and political life. The study of public policy for water usage is a case study of the closed nature of the institutions in charge with the creation and dissemination of water usage policies as well as the collective action brought forth by various advocacy groups concerned with the topic. Likewise, the study of the various processes that lead to action in this sector and their impact on both the environment and society is linked to a collective action designed for the environment, industry and advocacy groups, and the stewardship of water resources is a vital component of this developing conflict. This paper will show the political character of water management issues and focus on the examination of the evidence of these concerns in the Zapotillo dam Conflict.

The conflict that began with the construction of the Zapotillo dam (a full description of this process can be found in chapter eleven of the Zapotillo by Eric Mollard) illustrates the paradigmatic nature of how water management has been handled in Mexico. The same process repeats itself in the hydroelectric project Canon de Usumacinta in the southeast of the country and the Lerma System in central Mexico. The specific consequences and their protracted length contraction timelines have been felt in a sustain manner over the long planning and construction phases of these hydroelectric projects and their effect on the affected communities. Many of these conflicts have arisen from the narrow opportunities for input and negotiation between the various community stakeholders in these projects. These events also serve as a mean for studying the effects of water management policy and the type of governance that has been developed over the limited water resources involved. The analysis of these conditions is also a convenient vehicle to examine

and frame the positions of other stakeholders such as government entities, industry groups and other actors in the evolving challenge for water management policy (Chhotray & Stocker, 2009: 23), governance frames these issues by recognizing the complex architecture of government. For example, in practice there are many centers of power and diverse links between agencies of government at neighborhood, local, regional, national and supranational levels. In turn, each level has a diverse range of horizontal relationships with other government agencies, privatized utilities, private companies, voluntary organizations, and interest groups.

It is clear that the struggle for water management and governance has resulted in diverse strategies by the government, advocacy groups, and others competing for that precious resource. These conflicts have regional characteristics as the protagonists of water struggle to better their positioning in the conflict for control. These struggles denote strategies organized as social covenants that ultimately results on social change. As a consequence, the conflicts on the construction of the Zapotillo dam can be viewed through the context of the Advocacy Coalitions Framework (ACF), and that the nature of stakeholders involved in this process motivates to them cooperate and collectively attempt to influence public policy based on their real or perceived covenant for social change via public policy (Sabatier, 1988). The internal factors of a given coalition have tended to be determined by the learning curve for political action of the coalition's membership. Members of a coalition often begin at different stages of political awareness and their degree of involvement in the coalition may depend on other factors such as membership in an affected community, institutional and personal resources, their daily life experiences translated into the adaptive behavior, compromise, and/or points of involvement in the political activity of the coalition. This shows a special character, as these daily routines and habits influence the development and implementation of their strategies to affect their concerns.

The process obviously involves many variables such as social class, education, psychological deposition and past experiences. As previously noted, the effect of these variables can be seen in the attitude adjustment, compromises, and/or growing political sophistication and strategic position learned through their very involvement in the attempt to influence public policy on a specific issue such as water management. In this process, the central thesis of the ACF model for changing public policy becomes apparent as well. The ACF notes that change does not solely rely on external factors to the politics and politicians involved in the decision-making process, such as advocacy groups and campaigns, but also on internal factors in governmental and political institutions. Both of these forces are part of an internal potential for change within the political structure(s) being affected. In these process, the institutions undergoing change include other stakeholders such as congressmen and the internal dynamics within government. This process may lead to change (Roth, 2006 p. 169) and such a scenario concerns not only institutions and policies targeted for reform, but also the political communities' advocacy

coalitions and other stakeholders. Sabatier (1988) defines these change agents as individuals with different agencies, politicians, political parties, investigative bodies, the makeup of a system of shared beliefs and values and a set of shared assumptions, perceptions of a given problem that in turn, experience a degree of coordination of activities and strategies that shape the response to a specific issue. The positions, strategies, and actions of all these stakeholders ultimately determine the resolution of some issues. These variant political communities often constitute a subset or subsystem of political activity and positioning, allowing attempts to form coalitions. It is noteworthy to clarify that these coalitions are dynamic by nature, as the interest of a given group are subject to change or evolve to address the actual results of their actions and their effectiveness about actual political and policy changes.

The interest of this chapter is to provide a methodological framework for the political analysis of water conflicts, based on the study of types of coalitions and networks constructed by social and political actors, emphasizing the interests and values in the struggle and in the opening of the public policy in Mexico. The focus given to the Zapotillo Hydroelectric dam project allows to examine and analyze how these forces forge coalitions, political networks, and ultimately public policies. This research is also based on the review of the gradual changes in the building and the operation of the dam brought to the affected communities of La Presa (Los Altos de Jalisco, Temacapulín, Acasico and Palmarejo, Guadalajara city, León city). Three primary perspectives emerge from our research: First we will summarize the work of the planning process for the construction and operation of the Zapotillo dam and the Zapotillo - Leon, Guanajuato watershed Aqueduct, and the conflicts that arose from this planning phase in the project. The political network that resulted from the planning process will also be summarized. The second perspective will emerge from our analysis of the various coalitions that evolved around the conflict(s) in the building and operation of the dam, using sociograms as a tool to shed light on the perspectives, strategies and actions of the stakeholders, their often emergent self-interest position, and the role subject matter experts played in this real time scenario. The third perspective of the coalitions identified at the beginning of the debate over the water management issues in our chosen area of inquiry (the Zapotillo dam) will be analyzed.

Framing the opposition to building the Zapotillo dam and aqueduct and the resulting political network

Origins of the conflict

The opposition to the Zapotillo project takes roots in local opposition to the hydroelectric infrastructure projects planned by the Federal Government and the government agency (known as CONAGUA). The agency proposed the development

of a hydroelectric project that primarily impacted the ''Los Altos" region and three particular communities (Temacapulín, Acasico y Palmarejo) in the municipality of Cañadas de Obregón. The goal of the project was to supply the city of Guadalajara in Jalisco state with a source of drinking water and, in 2005, to divert the water from the Rio Verde for use in the city of León in Guanajuato state. In subsequent, twelve years opposite to the project having taken on many nuances and colors that can be summarize by two items that emerged from the many discourses delivered by the stakeholders: 1) Those in opposition to the dam because of decanting or transfer of water; 2) Those in favor of the dam if the government guaranteed no water will be diverted from the Rio Verde. Those who organized and mobilized against the building of the dam and aqueduct have, at times, taken both a national and international dimension, often intermittent and without continuity. However, the stakeholders that have come in and out of the opposition to the dam have created a movement against it; the juncture of this fragmented position has managed to stop the construction of the dam at 79.7 meters as of 2017, substantially short of the 105 meters height required to complete the project as the State's government initially requested for.

The stated reason for building the Zapotillo dam and the Zapotillo - León, Guanajuato Aqueduct is to secure drinking water for the region, resulting in 8.6 m^3/s of water (the distribution of the water will be as it follows: León 3.8 m^3/s, Altos de Jalisco 1.8 m^3/s, and Guadalajara 3.0 m^3/s). This water however, has also been targeted to support the industrial needs of The City of Leon Guanajuato and the ranching and forestry interest in the "Los Altos" region. Among the many factors coalescing the opposition to the Zapotillo dam is the flooding of three historic communities (Temacapulín, Acasico, and Palmarejo). The community of Acasico accepted a relocation proposal submitted by the federal government at the beginning of the project. Temacapulín has never wavered in its opposition to the project and has engaged stakeholders in a complex community-based effort that has involved the local and regional press, as well as digital networks and social media. These community-based efforts have become mediating factors between the community and the federal government as the community has forged international alliances and has secured the direct support of churches, universities, advocacy groups and other domestic[1] and international interests.

Plans to build a dam to supply drinking water for the city of Guadalajara were developed in 1941. However, it is not until 2006 that an agreement to build the dam is signed between the federal government and the state of Guanajuato, in order to build the Zapotillo - León dam and aqueduct. In 2007, the memorandum of understanding and mutual aid is signed by the federal government and the states of Jalisco and Guanajuato, resulting on the construction of the dam to a height that

1 These are social organizations with a special goal, geographically defined, usually of social claim.

increased from 80 meters to 105 meters. Currently, the Zapotillo project is included in the National Infrastructure funding for 2014-2018 and is listed as a priority for the state of Guanajuato in its 2017 goals.

As part of the development initiatives lead by Sistema Intermunicipal de los Servicios de Agua Potable y Alcantarillado de Jalisco (SIAPA) - System of Intermunicipal Water and Sewage of the district of Jalisco - and the State commission for drinking water of both Jalisco and Guanajuato, the creation of private public partnerships in the funding of water and sewage districts as well as distribution systems have been prioritized. These private investors represent a new schema for the management of water resources and have introduced a new set of variables to this development process, as these private investors have secured commissions and other investment instruments to secure potential profit margins and to protect their financial interests. This new governance and development dynamic has faced opposition from civil society in Guadalajara. A particular note in this conflict is that the aqueduct is being financed primarily with private funds from the Ranching Consortium (59.6% from the consortium and 40.4% from the National Infrastructure Fund). These type of private-public partnerships have a poor success rate in the free Water Resources market in Latin America and are, therefore, viewed with deep suspicion and distrust by community and civil society stakeholders and their allies.

Sustain Opposition to the project: Judicial efforts for Resolution and the Stakeholders

A major factor in the continuance of opposition efforts to the project and its relative successes has been judicially reviewed. The mobilization of stakeholders has resulted on judicial review and judgments favoring the opposition at various levels and courts. These legal efforts have been well funded by contributions from both regional and international supporters. The first law suit was filed in 2005 and brought the conflict to the public's attention. The case has moved through courts since 2008, resulting on appeals (both individual and collective) and constitutional disputes[2].

The first judgement or finding against the binding contract processes and content was rendered in December 2008 (Case files 2244/ 2008, 2245/2008, 2261/2008 y 2262/2008). Since 2010, several other individuals have filed for

2 An "Amparo" is a means to protect people against general norms, acts or omissions by the public or private authorities, and it's intended to safeguard fundamental rights and assumed as a means of constitutional control. While the constitutional controversy refers to a process followed by the Supreme Court of Justice of the nation that derives from a grievance produced by a general rule or an act, and only the federation, the federal state authorities and the municipalities can present it. (Political Constitution of the United States of Mexico, articles 103.105 and 107).

injunctions against the project and over 80 individuals have filed law suits seeking specific injunction to stop the project. In 2011, the courts decided in favor of the affected communities citing fundamental rights violations, and it ordered the project to be cancelled. The judgement also granted a temporary injunction halting the construction of the dam at no more than 80 meters height, and it stated that the original blue prints for the project should constitute the construction guidelines. In 2012, a constitutional dispute arises to the Mexican Supreme Court or "La Suprema Corte de Justicia de la Nación "(SCJN) (Expediente 69/2012), filled for the city council of Cañadas de Obregon, claiming an invasion of competitions in relation to the change in land use since the work was built without municipal permits. By 2014, the civic advocacy association "Salvamos Temaca" also files a successful suit, claiming that the authorities had failed to comply with SCJN's order of the constitutional dispute 93/2012[3], as well as having kept moving on with the construction of the unauthorized project, ignoring the rights of the affected communities.

In November 2015, the Supreme Court of Justice upheld a lawyer court's ruling (for Jalisco communities) that halted the construction of the Zapotillo dam at no more than 80 meters height (File 3/2015). In October 2016, the SCJN approved the construction of the aqueduct, the final portion of the Zapotillo project, although its possible effective operation has been stopped for the time being. However, the construction of the 140 kms aqueduct is being completed by the Spanish firm Abengoa since May 2016. The Zapotillo dam is scheduled to be fully operational by 2018, according to the official media. Lastly, the León Guanajuato Projects and Programs entity schedules the macro circuit channeling of the water from the Zapotillo dam for the 2015-2018 cycle, with its cost estimated at 6778 million pesos and counting. The Ranching constrain is comprised of companies such as Isolux México, S.A. de C.V.; Corsan-Corviam, Construcción, S.A.; Ayesa Ingeniería y Arquitectura, S.A.U.; Ayesa México, S.A. de C.V. (DOF, November 16th, 2012's binding process decision).

Our review of the events surrounding the Zapotillo dam clearly shows that the conflict resulting in the "back and forth" assertion, claims and counterclaims of both side of the conflict has created a regional conflict affecting the productivity and prosperity of the Altos de Jalisco region, the city of Guadalajara Jalisco, and the city of León Guanajuato, the destination location of the Rio Verde transfer. The issues arising from the changing water locations to these stakeholders has aggravated

3 This requires the invalidity of the coordination agreement concluded by the Federal executive, through the Secretariat of State for the Environment and Natural Resources, driven by the National Water Commission, for its acronym CONAGUA, and the executives of the states of Guanajuato and Jalisco, to carry out a special program for the studies, projects, construction and operation of the Zapotillo dam and Aqueduct Zapotillo - Altos of Jalisco - León, Guanajuato, subscribed on the October 16th, 2007, among others, by the Head of the executive power of the state of Jalisco, C.P. Emilio González Márquez and other authorities defendants.

the political tensions between the cities of Guadalajara and León, as the struggle to adjust to the percentage of water available. The Guadalajara concession will substantially be provided with a lower percentage of drinking water which would be directed to meet the needs of León based industries.

The rise of a social movement in the Jalisco's water resources management

The opposition to the Zapotillo dam, as previously noted, is rooted in the collective community reaction to the project in the affected communities scheduled to be flooded as a result of the dam's construction. Although a grassroots movement in essence, the communities' stakeholders have been highly influenced by their regional and international supporters. These supporters have made it possible for the opposition movement to continue playing a long-term role in this region conflict. Specifically, they have provided financial backing to judicial filings, mobilization efforts, and financial movements.

In May 2014, from the outskirts of the opposition movement, seemingly out of nowhere, emerged the Observatorio Ciudadano para la Gestión Integral del Agua para Jalisco (OCGIAEJ)[4]. This group was viewed with suspicion and seen as a government sponsored puppet group whose goal was to infiltrate the legitimated grassroots organizations and opposition movement. The Observatorio has strategically managed its membership key positions and has at times influenced coalition decisions in favor of the state. The Observatorio members have been identified as key players in the government's ability to influence community groups in the decision-making processes on water management in Jalisco. These views of the Observatory group have led many community members to challenge the legitimacy of the groups, its leadership, and its role in the opposition movement. They are seen as obstructionists in the legitimate opposite movement rooted in the affected communities and as a government appeasement factor in the opposition. The observatories rise to power and influence within the Opposition movement began at the local level in the Altos de Jalisco Region and organized around the interest of the Rangers and Forestry concerns without actual knowledge of the consequences of building the dam and aqueduct on the local communities' soul and the judicial solutions previously noted. It is also noteworthy that although the Observatory membership has engaged with other stakeholders in the conflict over the Zapotillo project, it has not engaged the "Salvemos Temaca" (Save Temaca) coalition. We will examine the changes in leadership and membership in the opposition coalition against the Zapotillo project.

4 Technical and Citizen Collegiate Team, specialized in water matters to formulate opinions, rulings, proposals, technical and legal criteria, and recommendations, all of them of a public nature, oriented to promote informed and reasoned Management of water resources in JALISCO (art. 1 of the OCGIAEJ).

The opposition to the Zapotillo dam and Aqueduct as a Political Network

A complex net of institutions and organizations

The political network that has been organized around the stakeholder's civic involvement in the conflict over the Zapotillo dam has resulted in direct activism that has affected the social fabric of the affected communities and the region. An example of this activism is the civil society organization, Salvemos Temaca, whose explicit goal is to save the Temaca community from being flooded, and the Observatorio council. Experts on the matter, such as the Lawyers Collective (Colectivo de Abogados) and the Lawyer Alejando Lopez of the CONREDES network, have been key members of this network. Other experts from academia have been key in media relations and in exposing the issues of water management in public and private Universities. Their work has influenced and gained support for the issue locally, nationally, and some contend internationally. The political network is largely sustained by and involves 20 institutions membership in the Observatory coalition, including:

- Universities: Universidad de Guadalajara (UdeG), Instituto Tecnológico y de Estudios Superiores de Occidente (ITESO), Universidad del Valle de Atemajac (UNIVA), Instituto de Astronomía y Meteorología (IAM), Instituto de Limnología del Centro Universitario de Ciencias Biológico Agropecuarias.
- Los Altos Region: Diócesis de San Juan de los Lagos, Consejo Regional para el Desarrollo Sustentable (CONREDES), AC., Foro ganadero de Jalisco, Silvicultores de los Altos, A.C., Asociación de Avicultores de los Altos, Porcicultores de los Altos.
- International Members: Fundación Nueva Cultura del Agua (Zaragoza, España), Universidad Complutense de Madrid (área de Geohidrología).
- Guadalajara-based Institutions: Fundación Cuenca Lerma Lago de Chapala-Santiago, A.C, Parlamento de Colonias de la Zona Metropolitana de Guadalajara, A.C.
- Other institutions supporting the Zapotillo dam Process: Consejo de Cámaras Industriales de Jalisco (CCIJ), Cámara Nacional de Comercio de Guadalajara (CANACO), Consejo Económico y Social de Jalisco (CESJAL), Consejo Técnico Ciudadano, A.C, Centro Empresarial de Jalisco, S.P. (COPARMEX).

These institutional members make the consortium an important local instrument in terms of its potential for influencing political action. The makeup of the Observatory as an institution is noteworthy, particularly due to its weight within internal debate of the Altos region members in the subsequent actions and strategic positions this coalition has taken. The power of the Altos members has been questioned by other members of the coalition and has led to internal debate of the

advocacy and public assertions of the coalition. The government has also indirectly participated in the political network via efforts of CONAGUA, the Jalisco state government, and the Jalisco counties/municipalities of Guadalajara and Cañadas de Obregón, since these institutions have been in constant communication with many stakeholders, especially the president of the Observatorio Coalition.

Equally important is the political network that has been developed around the opposition to the Zapotillo Project and the legal defense and advocacy efforts of the affected communities. These are the Salvemos Temacapulín Association, Acasico y Palmarejo committee, The lawyers Collective, The Mexican National Committee of those affected by Dams and the defense of Rivers (Movimiento Mexicano de afectados por las presas y en defensa de los ríos MAPDER), The Mexican Institute for community Development (el Instituto Mexicano para el Desarrollo Comunitario A.C. IMDEC), and the Absentee Sons of the Club Temaca. These stakeholders have lead the opposition to the Zapotillo dam, particularly in the seeking of a Judicial Solution to the conflict: the attention of the opposition to the project at the local regional, national and international levels; media advocacy and press conferences; social media; alliance both formal and informal with international water rights advocates and institutions; fund raising efforts to mobilize advocates against the dam.

Los Altos regional groups, such as the Civic Association for the Defense of our water, have recently joined the political network against the Zapotillo dam. Such groups have been organized by the Altos region trade groups and business interest. Their involvement is significant since they have solidified the opposition to the aqueduct portion of the project because of the uncertainty the project brings to those properties and businesses bordering the project. Also, at stake for these groups is the water allocation and distribution from Jalisco state resources to the Leon Guanajuato Industrial base. In particular, these groups fear a cost increase for water usage and a decrease in water resources for the region.

An important segment or subgroup of the opposition network is the role journalists have played in this conflict. Especially noteworthy are the efforts of Agustín del Castillo, whose tireless efforts have documented the opposition and the conflicts of interest in various media outlets such as local Guadalajara based newspapers, his own blog, and other independent traditional and digital media. Others working in this sector include the journalist association "¡Tómala! Un golpe de conciencia" whose consciousness building efforts have galvanized other civilly engaged organizations. In addition, there is the work of the "Cronica de Sociales" journalistic effort to chronicle the work of advocacy groups working in Jalisco. The presidents of these two organizations have played a vital role in publicizing the efforts of the opposition groups to the Zapotillo project. Another layer in this subgroup are the international organizations such as The Network against Latin American Dams (Red Latinoamericana contra Represas) and International

Rivers (Ríos Internacionales). These organizations have helped bring international attention to the Zapotillo dam conflict opposition. For example, "International Rivers" organized local community forums in the Temacapulín community that attracted local, regional and international concerns. From these community forums, the catholic priest Padre Gabriel, has emerged as spokespeople for the opposition efforts in the communities of Temacapulín, Acasico and Palmarejo.

Our study of the Zapotillo conflict undoubtedly found that civic engagement by members of civil society has played a vital role in defining the "rules of engagement" in the political process for both opponents and the proponents of the Zapotillo dam project, the forming of coalitions to advance the individual positions of coalition members and their interests. The individual and collective goals and incentives motivated stakeholders to engage in this issue and has not prevented dialogue and genuine debate between stakeholders who have drastically different points of view. Their dialogue has resulted on a genuine effort to find a democratic solution to the conflict over water management and usage that can potentially extend beyond the Zapotillo dam conflict. Their interactive efforts have led, in spite of the view of some members of a given coalition, negative view of the opposition to the possibility of mediation and compromise over the issues that arose from the Zapotillo Project. These efforts have challenged the status quo of the government power, business interests and their power, and, in particular, the individual power that some members of the Observatorio Coalition have acquired.

The relational capital of the Network

To analyze the socio-political dynamics of the Zapotillo dam conflict, we interviewed 23 key informants. We reached a total of 39 potential key informants for this study. Our research identified three coalitions: 1. The Conservative Coalition working to oppose the project, 2. The Pro Growth Coalition working to support the project, 3. The Historic Preservation Coalition working to oppose the project as a community preservation effort.

Based on Roth (2006: 177), it assumes two poles of the coalitions: A productivist one and a conservationist one. The first pole is characterized by considering as a priority the economic growth and the increase in the standard of living. While the second one fights for the preservation of flora and fauna, and is concerned about the degradation of the natural environment caused by industrial and agro-industrial growth, such as the felling of forests, the consequences of intensifying the productivity of the soils, the use of fertilizers and pesticides, industrialization, pollution of the rivers, the infrastructure works, and the energy and increasing urbanization. The historic coalition refers to the actors who have established legitimate and legal mechanisms of resistance to the conflict originated. And that, by its lengthening in the network of actors, have supported important

legal changes, including a professionalism in the management of conflicts. In addition, they are part of the legitimating side of the defense.

The conservative coalitions are organized around the preservation and stewardship of natural resources and the degradation of the environment once the dam became operational. They have also lead the debate over the loss of cultural and historical assets and traditions that will be affected by the Zapotillo project, specifically the flooding and subsequent displacement and relocation of these communities. The Pro Growth Coalition has focused its advocacy around a real possibility of economic growth, particularly in the Guanajuato region. They advocate that the economic stimulus the dam and aqueduct represent to the region will improve the quality of life for the area residents and affirm that the overall benefits of the project superseded the damage to the environment and the exploration of the Rio Verde waterway. Since 2014, The Historic Preservation Coalition has had intermittent contact with the other two coalitions. They have been key proponents and activist against the project and have garner much of the outside attention for the Zapotillo dam conflict. They have also played a major role in limiting the height of the Zapotillo dam to 80 meters, therefore mitigating the environmental impact of the project and subsequently triggering debate over the allocation and management of water resources and the possible conflict of interest within the public-private partnership financing the construction of the dam. The coalition legitimating community advocacy truly represents the cultural, economic and historic interest of the affected region.

The density of the political network that has emerged from the Zapotillo dam conflict represents a level of high connectivity *(Cf. Figure 4.1, p. 411)*. The coalitions had frequent and meaningful interactions, especially with the Observatorio president Juan Guillermo. These interactions have shaped the actions and modalities for all these coalitions, particularly technical support, information sharing and analysis. The peripheral stakeholders, according to the key innermost interview are members of the very institution that must be involved in the resolution of this conflict. Amongst the institution named as a key power broker is the CONAGUA Utility. Ironically, this institution has not interacted at all with the political network in question.

The centralization of the Zapotillo dam political network shows how coalition members are directly connected to each other. In the case of the Observatorio president, he is highly connected to all stakeholders due to his high visibility role and the power of his coalition. Therefore, his ability to come and go between the various coalition and their clusters is higher than any other stakeholders. Other stakeholders including Padre Gabriel, María González (executive director of IMDEC), Guadalupe Espinoza and Claudia Gómez of the Lawyers Collective also have high connectivity with the majority of stakeholders in the network. Padre Gabriel in particular has a high degree connectivity and importance due to his legitimate connection to both community groups and international supporters. Of

particular importance is the role he played in the early stages of activism and the international support he generated. The Lawyers Collective has obviously played a key role in the successful judicial advocacy efforts. Given the roles of the Observatory president, Padre Gabriel and the Lawyers Collective in the political network, it is not surprising that other stakeholders have luster arraign these three individuals and the institutions they represent. Many of the other stakeholders see these key players as vital to their inter stand. Although there is often little connectivity and or communication between them, they are able to connect around shared interests.

It is also noteworthy that the most active community stakeholders such as the Juárez family of the Temacapulín community, and Mario López (the representative of ITESO in the Observatory) have important connections and relationships with many other stakeholders, especially among academics and advocacy organizations. The significant role that the Juárez family has played in the Historic Preservation Coalition since its conception gives great legitimacy to their concerns and their ability to represent community concerns. Padre Gabriel (Temacapulín), María González (IMDEC), Guadalupe Espinoza and Claudia Gómez (Colectivo de Abogados) have the highest degree of mutuality (betweenness) and connectivity as a subgroup *(Cf. Figure 4.1, Sociogram of the network based on relational capital, p. 411)*, versus Juan Guillermo (Observatory President), who has the most pathways to connectivity with all other stakeholders (closeness).

Our research also documents the sustain resistance by the Temacapulín town to their forced relocation. Their resistance and opposition has generated several regional and international advocacy and support networks which help financing and allowed the continuance of the opposition movement to the Zapotillo dam project. In addition, resistance movement led by the people from Temacapulín has developed alliances with other community-based movements elsewhere in Mexico. They have evolved into an effective advice group for other related issues, such as land management and environmental protection. Since their inception as an advocacy coalition, the people of Temacapulín have had direct support from the Hijos ausentes coalition, IMDEC, COA, and various blogs on social media, traditional media outlets, and journalists, as well as other institutional supporters at the local, national and international level.

Their visibility translated in support from these various entities has, as previously noted, gained resources and facilitated opposition efforts. At the same time, because of their visibility and advocacy campaigns, the people of Temacapulín have been supported by politicians seeking votes in constituencies that support the anti-Zapotillo dam advocates. Their advocacy has dynamically engaged caravans, MAPDER, academics, international networks and has allowed them to sponsor public events, forums, fund raising campaigns and many other actives that have contributed to their sustained presence and leadership in the opposition movement to the Zapotillo dam and prevented their relocation and

the flooding of their town. It has also had a legal efficiency throughout their engagement with the Lawyers Collaborative and their successful arguments before the nation's Supreme Court.

The Observatorio Ciudadano para la Gestión Integral del Agua para Jalisco is an important local instrument, of which its importance in the anti-dam coalitions is clear. They continue to advocate for the interest of the Altos de Jalisco region and continue to maintain and cultivate allegiances with civil society. However, their role beyond that region is not as significant as it seems, as evinced by the 120 recommendations the group has made that have not been acted upon by other members of the Opposition, until May 31st, 2017. Furthermore, even though the Temacapulín community is part of the Altos region, it is not a member of the Observatorio. In recent efforts to form alliances with other coalitions and individuals, the Observatorio's president has managed to enjoy some success with some stakeholders from Temacapulín and has continued to garnish support amongst academics at ITESTO and the University of Guadalajara.

This network analysis gives us a glimpse behind the organized efforts of the coalitions that constitute the political network that has emerged from the Zapotillo dam conflict. The maneuvers and strategies behind many of their actions had little to no accountability in their opposition to the status quo and were largely centered around an anti-system mentality. This scenario may possibly lead to a compromise solution, particularly in light of the historic preservation coalition's more conservative approach and the radical solutions proposed by the pro-growth coalition. They have compromised, given how the historic preservation coalition has used the media (social and conventional), as tools to maintain their visibility and relevance in any solution to the conflict. Their mobilization around the issue of water management and the agenda they have put forth has driven the debate for all three coalitions (both publicly and privately). For example, human rights and their relation to water management and usage have been cited by all three coalitions and have driven the debate locally, regionally, and internationally.

The Role of Experts in the Coalitions

In spite of all the political and judicial solutions seeking to resolve the Zapotillo dam project conflict, the dispute continues and seems far from resolution. In November 2014, perhaps in resignation to the impasse, the Jalisco State Government in collaboration with the Federal Government, sought help from the United Nations Office of Projects and Services (UNOPS) for the resolution of the conflict. UNOPS was engaged to conduct technical studies on the viability of infrastructure projects on the Rio Verde[5]. Their work was completed in May 2017. The results of their

5 Abbreviated designation: "Jalisco Sostenible Cuenca Río Verde" Project 00096599.

studies have not been released yet and, as we wait for the government to propose the type of negotiations they are willing to participate in, the financing of the aqueduct has been approved and thus adding to the great uncertainty that this project has created for the region. Facing incertitude, experts have added their voices in opposition of the Zapotillo dam and Aqueduct Project, helping to mobilize both individual and institutional stakeholders. The UNOPS studies are seen by some as both a counter-measures to the "expertise" from the opposition side and as a neutral arbitrator to the conflict.

The role of experts in this conflict has obviously been an important component, particularly as many of these experts have become part of the three coalitions and their advocacy. There are five types of experts: law, education, engineering, development and political experts. The experts' role has become more integral and reoccurring in the coalitions as individuals representing organization participate in the coalition's work. These individual skills and expertise have influenced and supported coalition efforts, especially those in executive director roles and or those with skills set in a particular industry or enterprise relevant in the conflict, as Mario López (ITESO Coordinador), María González (Director of IMDEC), Enrique Romo (Businessman and Pro-growth Activist), Luis Antonio de Alba (Ranger and Land Owner) and Manuel Villagómez (Executive director at the Lerma Chapala-Santiago Foundation). The Executive director at IMDEC should be noted as a specially important expert/stakeholder of financial, technical, and analytical expertise, who has truly helped to mobilize the communities affected and hassling a genuine clear voice to the Historic preservation coalition in opposition to the Zapotillo dam conflict.

The experts have been a vital component of the viability, sustainability and relevance of the opposition both as a political network and as a public societal debate over the usage and management of water resources. In particular, they have led, funded and promoted the concept of a judicial solution to the conflict. The lawyers' collective led by Alejandro López, and their work with the Advocacy group CONREDES, have been of particular importance. They are members of the same coalition, yet it is noteworthy that they have chosen to not directly engage with other experts. Instead, they have connected with others through the most relevant stakeholder, (by measure of interactivity with others), Juan Guillermo of the Observatory. We have also observed that the law and engineering experts tightly coordinate strategic actions within the coalition. The "political experts" tend to be journalists and part of the conservative coalition. Héctor Castañón (¡Tómala!), Yariel Salcedo (Crónica de Sociales), and Agustín del Castillo (A journalist working in a local newspaper) are amongst the most active ones. We have observed that these stakeholders do not directly connect with each other.

We have also identified the social characteristics of the expert class participating in the coalitions *(Cf. Figure 4.2, Sociogram of the experts in the network, p. 412)*. They are mostly professional and five of the experts we interviewed hold doctorate degrees.

All of the "Experts" in the advocacy network have advanced degrees except the executive director at the Lerma-Chapala-Santiago Foundation. Their professional standing and credentials allow these individuals as members of profession networks to easily link with other similar professionals at the Universities, and other academics, as well as National and International entities. We have also found that the majority of these experts had previously established links with International Institutions. For example, the president of IMDEC was able to secure funding for her work in Temacapulín from the Rose of Luxembourg Foundation.

On the other hand, the Sabatier's (1988) hypothesis for coalition biding argues that stakeholders tend to coalesce around those holding similar belief and values. Yet, in this instance, we must ask if the academics and the Altos de Jalisco pro-growth coalition members hold similar values while they clearly hold similar credentials and professional standings. Do local elites share their values and priorities with national and international elites? At this juncture in our analysis, we can assert that the preeminence of interest exceeded in importance. Amongst the actors in the society, there are three expert groups prevailing: engineers and other technical experts, the lawyers and the journalists, as well as the social media bloggers.

In general, the majority of stakeholders interviewed have a clear understanding of the conflict over building the dam. Some have actively documented the events, especially the views of government stakeholders in the mass media outlets and electronic newspapers, such as Facebook and blogs written by experts in the matter. It currently seems that the experts with the greatest influence over coalitions are the technical experts such as engineers, scientists, development planners, and others with professional expertise. It would appear that these individuals have the greatest influence because Juan Guillermo of the Observatory holds an engineering degree and often presents his arguments and contentions from a technical perspective. He, therefore, is able to engage other technical issues and has used this strategy to position himself as a key stakeholder and voice in the political process and decision making. He tends to function more prominently in the Conservative coalition and as a representative of regional forestry interest of Los Altos.

Stakeholder's orientations

As stakeholders position themselves politically, they also play an important role on environmental protection and water management. Sometimes, most stakeholders declare themselves pro-agriculture. Only two stakeholders have asserted their position as sole focused on water issues. We have observed that the historic coalition lost power within the Observatory (as they shifted their mobilization tactics to a more populist approach). This loss of positioning is linked to Juan Guillermo. As the Observatory leader began positioning himself as a spokesperson and influential technical stakeholder, particularly in Los Altos base groups and interest (Forestry

Ranging/Husbandry, farming), he emerged as the primary leader of the Opposition movement to the dam.

Nevertheless, as of 2015, stakeholders defending the Temacapulín community have been able to implement several very successful mobilization campaigns against the projects of the National Water Commission. These efforts have cemented their leadership role as a strong legitimate voice and a strategic and logistic leader in the opposition to the Zapotillo dam and Aqueduct project. Therefore, it is extremely unlikely that they will be pushed out of their leadership role in the opposition movement. The interests of the highly productive region of Los Altos de Jalisco (conservative coalition) are also not going away. To maintain and expand their productivity, they will require a large volume of water. It is not in their interest to divert water away from the region and/or the region getting less water from the project.

The interests of Leon Guanajuato are another pain point into the conflict. Their multiple interests are complex and well founded, particularly in light of the strong support from the federal government making a strong argument for the water needs to León's industry. The needs of the Tanneries and related industries such as Shoe makers, leather goods manufacturers and others that are the historic economic lifeblood of the León Region, will continue to have government and business leader support. The growth of the León metropolitan area and the urbanization efforts surrounding it are directly tied to the Tanning industry. The industry, according to the findings of SAPAL, has been guaranteed 25 years access to water from the Zapotillo dam Project. In this environment *(Cf. Sociogram 4.2, p. 412)*, it is obvious that competing interests are facing a complex and difficult impasse. All these interests and their constituencies have both legitimate claim to water, and legitimate well-defined needs such as water for industrial use, drinking water, environmental preservation, etc.

Our analysis of how different stakeholders in the Zapotillo dam - León Aqueduct conflict see themselves and are perceived by others is seen through the lance of the management of water resources. The position emerges from true local needs and encompass other issues, such as environmental protection, water markets and pricing, and other dilemmas. These issues are focused on how the government (Local, State, and Federal) manages the needs of these competing interests.

The period during which the Zapotillo Project grew in importance has, whether by societal mobilization or consolidated legal efforts, brought to light and into the people's consciousness vital issues and needs. For example, in the period of 2011 to 2017, pertinent international Treaties regarding water have been reviewed. Other factors such as the human rights matter, water rights and management have become a vital component of the debate. The fundamental characteristics of water usage debated surrounding the Zapotillo dam have not changed. However, research shows changes in the perception of the issues surrounding this conflict.

The expected involvement in the debate of civil society, national and international stakeholders and grassroots community stakeholders has changed the nature of the debate. The political capital of these various interests has made this conflict much more relevant than the debate over water management would otherwise have been. This matter has brought to light other issues such as the public-private partnerships (Asociaciones Público-Privadas, APP) and their role in developing hydroelectric infrastructure projects, the role of elites and their position on this issue and other factors that may not have been discussed and examined without the Zapotillo dam issues taking on the dimension it has.

In framing the perspective of how stakeholders are seen by themselves and by others, we note that the vision of the Conservative Coalition is local in nature, in which they see the dam as a destabilizing force in the region both socially and politically. They also attest that the dam will also destabilize the water market and create pricing issues. Other stakeholders see their efforts as part of a worldwide debate about water management issues, the environmental impacts that hydroelectric projects have on the environment, and the displacement of people and communities. They clearly see water management as a worldwide challenge, and have brought to the debate an international perspective to position their arguments and resources within this context. Their intention was strengthened by the participation of international stakeholders such as the Spaniard Pedro Arrojo, who had a big legitimacy for his non-political character, which gained in weakness since his election to the Spanish Parliament in 2016 and his relocation to Madrid. (He was an international representative on the Observatorio Ciudadano de Gestión Integral del Agua in Jalisco).

The sociogram illustrating stakeholder's perceptions (Figure 4.4. *Sociogram of the actors' perceptions, p. 414*) also shows that the stakeholders in the conservative coalition have a global perspective. They are aware of the modalities within the environmental debate and their local input. They see the relationship between water management issues and global climate changes and are very much aware of the national and international regulatory bodies involved in the water management and development sectors. They have a local perspective, but they also are fully conscious of the fact that any solution to the Zapotillo dam issue will involve international concerns and perspectives. On the other hand, stakeholders in the pro-growth Coalition (Carlos Valencia, Enrique Romo and Luis del Valle) assume that international concerns are part of the debate, but the resolution of the Zapotillo dam conflict must be prioritized around pro industrial growth schemes balanced by the rule of law. The historic preservation coalition also sees themselves as active participants in the various levels of local, national and international solutions to the conflict. However, it is their contentions and strategic position that any solution to the conflict must first meet the needs of the communities affected. They contend that the community needs to have the most weight

in this debate. They also argue that they know the needs of the region and its people better than any other stakeholder, and, therefore, that their voice is vital to any resolution to the conflict. They acknowledge the role of the judiciary and the rule of law as a framework for a solution, but put forth the notion that local decisions must carry more weight. They fully recognize the importance of the legal framework that will lead to governance and the resolution of this conflict. They also acknowledge environmental protection, long term water management and international regulations, political and social concerns, as well as human rights, but contend and advocate that all of these factors must be viewed through a locally based perspective.

In our analysis of the various stakeholders' perspective within each coalition and their relative positioning in the debate and proposed solutions, some hold multiple positions and appear to be motivated to take this position due to their roles in multiple institutions and or groups. For example, the tuition stakeholders allow for multi involvement in the debate such as direct negations with other stake holders, mediation efforts, fund raising campaigns, as well as local, international, political and advocacy efforts. Another fact related to the multi position and involvement of some stakeholders are the skill sets of various stakeholders as they are related to the needs of their coalitions' efforts to mobilize and finance, and their ability to form alliances and links to other stakeholders and or coalition members. In the case of the Lawyers Collective, they have links to international lawyers and the interest they represent. Another example is the financial support that IMDEC provides to the Temacapulín community. Important factors in the Temacapulín efforts are the connections and support that Padre Gabriel has developed amongst academics at the local and international universities that have financed his personal appearances and efforts.

What all of the multi-positioning of stakeholders seems to indicate is that these stakeholders may not have much decision-making power. They are influenced by the various interests they are managing and, therefore, may not be able to make decisions. Some of these stakeholders, particularly those who have been key in keeping the Zapotillo dam project long term visibility in the public debate, may not be able to influence the decisions and mobilize resources of their partners in relation to their local needs and perspectives. Some of the efforts of these stakeholders are framed by their role as intermediaries between the mass media and their investment in the various means of communication and they propagate local, regional and international perspectives that may have significant differences in concerns and resources. Finding the proper positioning compromise between these many factors, slows down, if not prevents, decision-making for these stakeholders. Another factor worth mentioning is the relative closeness or relationship these actors have with each other, and the flow of communication between them. All of these stakeholders appear to have multiple means of communication with other coalition members both formal and informal.

The role of the Coalitions in framing Water Usage Public Policy: Tendencies and Perspectives

We have noted that during the length of the Zapotillo dam conflict, legal and institutional decisions have been the most dynamic factors in this debate. From the point of view of the ACF model, and gaining insight from this perspective, there is a way to help explain the political involvement and dynamic tendencies, since there has been no change in the socio-economic realities in the daily lives of coalition members. The government and its structures have also remained basically unchanged. However, it is clear that there has been a great radical regional awakening and shift in attitudes of stakeholders and their perception of regional needs. Perhaps the biggest factor in this conflict has been the resources of international stakeholders and their local and national allies. For example, the incorporation of human rights, sanitation, water rights into a regional water management dispute, as well as leading the opposition from seeking a judicial resolution. Their efforts have led to the review and, at times, invocation of international treaties and norms, judiciary issued protections and precedents addressing the issue of water usage for the entire Mexican Citizenry. The mobilization of entire sectors of society around the issue of water management forced the state to truly have a more transparent model for both policy development and governance. Protracted negotiation around the issues began in 2011 and culminated in a legislative solution: a law addressing the right to water. However, the implementation of the law has been slow, and it continues to favor judicial challenges and review, and a more general or rather less focused component of the debate over water rights.

We must note that part of the challenge is a disagreement over which institutions should be responsible for generating water usage public policy, and over the criteria to be used in the development of these policies. Issues of governance, jurisdiction over regional boundary line disputes are also part of the mix. The responsibility parameters regarding water policy among several government agencies and commissions is also an issue. In this environment, the pressure brought on the government around the Zapotillo dam conflict is a dynamic component of civic involvement that has brought about the possibility of policy and political change. The interest of the groups and individuals that were mobilized around the issues have led the way to a deeper examination and a greater opening for public policy indicatives and the expansion of social concerns. Those in opposition to the dam have led the way in a reinvestment and the human capital they represent must be underlined. Their involvement in the short term and their potential for long term involvement will create advocacy opportunities and means of addressing public policy concerns on many levels and for many issues. Their efforts have renewed civic involvement and have restructured the process for instituting and approving water use policy.

The outputs of the coalition reflect the interchanges and contacts between all coalitions and their membership. All the stakeholders interviewed for this study were referred to us by other stakeholders. We also observe that, the leading most active coalition is the Conservation coalition, that is to say that they have tended to dominate the debate against the building, development and operations of the project and that they have the longest history of opposition to the Zapotillo dam and aqueduct. It is noteworthy to underline the interconnectivity of many of the stakeholders in this coalition, especially the links between Juan Guillermo (principal stakeholder) to María González (IMDEC), Mario López (Académico of ITESO) and to Luis Antonio de Alba (another business leader of Los Altos de Jalisco).

Also noteworthy is the fact that, in spite of the political void between Juan Guillermo and Padre Gabriel, they appear to be in good terms with each other and very conformable in their respective roles as advocates and leaders within their respective coalitions. They are effective voices for their groups' concerns and they both enjoy a strong link to the Juarez Family and their allies. The Juarez family is very active in the historic preservation coalition, and although all of the stakeholders we interviewed mentioned the Juarez family and identified them as important stakeholders, the family appears to have very little to no connection to others interviewed. They maintain a pronounced distance from other stakeholders (excepting Padre Gabriel and Juan Guillermo) and the representatives of the Lawyers Collective (Guadalupe Espinoza and Claudia Gómez). The Juarez family was the first to mobilize against the dam in the Temacapulín community and their leadership role has continued through the conflict.

All stakeholders who were interviewed acknowledge the *Comisión Nacional del Agua* (National Water Commission) as part of the solution, for which they note that a successful initiative for the resolution of the conflict should originate from these institutions *(Cf. Figure 4.3. Sociogram of Policy Coalition Outputs, p. 413)*. They note that the role of Municipio de Cañadas de Obregón's government (site of the Dam) is important but not vital to the resolution of this protracted conflict, as the federal government has ultimate power over these matters. It is their hope and, at times, their demand that any solution proposed or implemented considers the views of the NGOs and the needs of the displaced persons, as well as those of the municipal State and federal governments. Another important notion in the opposition to the dam is the Clergy. Several stakeholders interviewed are members of this group and part of the Guadalajara Dioceses (such as Padre Gabriel). Padre Gabriel carries great weight in the mobilization and advocacy movements opposition to the dam. Another priest, Padre José Luis Aceves, has had direct contact with both state and federal governments, arguing that he is not against the dam, but against the water transfer.

Public policy has been driven by the values and interest groups to the stakeholders in the Zapotillo dam dispute. Their civic involvement has brought significant issues to light and has led to significant political and policy change. The

ACF model attempts to explain how these political and policy changes happen as a competitive process between the values of one group of stakeholders versus another. These groups have formed more or less formal coalitions based on shared values and strategies to best advocate for and make their arguments in favor of their perspectives and desire outcomes. The coalitions seek opportunities to manifest their positions, create a subsystem of supporters, advocate for their policy goals and objectives, and in this process, to learn the necessary skills to implement change (Roth, 2006). Based on our study, we have identified a set of tendencies toward a path's opening in public policy debate regarding water usage in Mexico. We based our observations on the analysis we have performed on the work of the coalitions involved in the Zapotillo dam and Leon Aqueduct dispute. These tendencies are:

Tendency 1: Land appropriation and dispute.

Stakeholders tended to have a strong base for their particular arguments and position based on a strong identification with their region and how land was managed and appropriated for the Zapotillo project. They mobilized around these shared values and ideates with their communities. Their advocacy efforts focused on land and community preservation and a genuine defense of their community and their homes. They were not necessarily concerned with the economic growth and the potential that project may bring, and were simply engaged in defeating their homes and way of life. Their indigenous identity with mother earth (Pachamama, or Gaïa) motivated their mobilization and advocacy efforts. Their collective action was rooted in a long history of communal identity and decision making regarding land use and other resources. The conflict generated a wave of community identity and pride and forced some to reexamine their territorial and cultural survival across Mexican history. For example, prior to the conflict, the community of Temacapulín had not highlighted their religious and anthropological importance. Their rented identity with their cultural past was based on artifacts found in the community that had religious and anthropological values. These objects helped them articulate the defense of their home and culture, and engaged other stakeholders in their struggle. Stakeholders who mobilized around their "Hometown" and their identity were also able to claim their ancestral past as an asset and looked for other institutional spaces, for the community to defend the values they stood for.

Tendency 2: Institutions of conflict resolution and trust builders.

A conflict is also the product of a structural policy view. How they cut or divide the specific policy initiatives they generate is a vital component of how these very policies will be perceive and implemented. Their attitude can balance power and social fabric of the communities and regions affected by the policies

the institutions generated, especially the natural and institutional resources involved in or affected by the policies enacted. This research shows the multiple means by which public trust can be affected, developed and promoted by how the different stakeholders, their interest and advocacy efforts are handled. It must be the goal of the policy-making body to engender the public in relation to conflict resolution and the stewardship of natural resources. Local judicial and social norms must guide policy makers as stakeholders to generate real public pressure in favor of their given position. They must act to resolve water usage issues, taking into account the evolving cultural norms and the legitimate concerns of the people they serve. Institutions must be an instrument of grievances address and inefficiencies, and should be seen as trustworthy independent public servants and policy makers.

In the different phases of the Zapotillo dam conflict, we have analyzed the emergence of distinct mechanisms for normative, regulatory, and institutional resolutions of the conflict. The first example of emergence was the 2005 Judicial judgement in favor of the community of Temacapulín. This judicial action was a precedent setting and the first of its type in the history of the court as it pertains to environmental issues. We also observed that the Observatory Coalition's emergence, in 2014, as a strategy of the Jalisco government, has paved the way to institutional changes. Curiously, some of the policies initiatives that have emerged from this body have been, at times, a counterweight against the Jalisco government. Currently, their role as a counterweight to state actions has evolved into the role of "witness" of the state's actions, as they pertain to the stewardship of water resources in general, and specifically the stewardship of the Zapotillo dam project.

Tendency 3: Judicial Judgements and findings.

Conflicts also make room for judicially actions. The judiciary has served as an anchor, and its courts as a forum for the advocacy groups that emerged from opposition movement and seek a Law expert to translate their work into arguments (Melé, 2006). The allies of these groups, both national and international, have advocated the notion that a judicial process is a means for independent arbitration and conflict resolution. Legal arguments, findings, judgments, and other mechanisms available to the judiciary, facilitated conflict resolution and propagated the laws and politics that emerge from judicial actions and review. Our study has shown that the opposition movements to the Zapotillo dam have bought time to develop their arguments in defense of their position each time the courts have ruled in their favor. On the other hand, these same rulings have allowed the Jalisco state government to strategize and legitimize their final argument in favor of the financing scheme for the dam project and the 105 meters height requirement that has been questioned by

the opposition. The involvement of international institutions such as UNOPS (a specialized body within the United Nations) have the potential to legitimize governmental action, even if at the present time, the courts have ruled against them. The role of the judiciary as a forum for debate and conflict resolution acts as a counter measure for those who attempt to delegitimize regulatory practices as well as community or legal arguments. The judiciary can address controversial issues and resolve conflicts between stakeholders, particularly those who framed water rights issues as Human rights.

Those who mobilized to defend the affected communities' water rights, have also advocated for a review of the water management and preservation's effect on the environment. They are very invested in this role and have enjoyed local support for their positions, and they also count on courts to legitimize their position. The court ruling validated their efforts and has vindicated their position as legitimate community representatives. The court's findings have put to rest the contention (by their opposition) that their arguments and positions were shaped by outside agendas and motivations, and not by local need. Much has been written by academics and other supporters of the opposition, documenting the effects of the Zapotillo dam project. Most of the time, these documents have no legal standing. Nevertheless, such findings have helped the work of the coalitions and have provided a well-constructed arguments' source for the resolution of this conflict. We also found that each coalition had a well-developed set of arguments for their respective positions and all shared a communal approach and attitude towards advocacy work and their overall position on the conflict. As stakeholders, they were all invested in their particular interest and perspectives and saw them as legitimate and vital in the debate over water use and its management. They all had their own sources of information and were not reluctant to share their perspectives and resources with other stakeholders. The collective actions of stakeholders and their information exchanges tended to drive the debate over the dam and to generate much of their mobilization campaigns for the opposition movement. They deliberated and acted in a contemplative manner, seeking appropriate solutions, from their point of view, to the conflict, and were not solely driven by reactionary instincts and societal divisions.

Conclusion

The conflict over the construction of the Zapotillo dam is a complex and multi-level affair**.** It has transcended local concerns and perspectives and has attracted international attention. It is also a regional conflict between the Jalisco and Guanajuato state governments and several other municipal governments

(Guadalajara and Cañadas de Obregón in Jalisco, and also Leon in Guanajuato). It is also a civic and social conflicting light of the mobilization against the project by traditional historic communities as well as civil society, regional business interests, farming and forestry concerns. The conflict underlines and examines the political and regulatory power of the state and the need for transparency and fairness to resolve this issue. Due to the financing scheme for the project and the private public-partnership that favors the business interest in Leon Guanajuato and the Altos de Jalisco region, the national water commission (Conagua) is viewed as an organization that issues or makes policies in an *ad hoc* basis, and often has preconceived notions and solutions to problems that do not take into account local and regional concerns and circumstances. There is a genuine distrust amongst stakeholders and their allies of the state institutions charged with the management of water resources. Community stakeholders tend to see these policies initiatives as legitimizing hydroelectric projects that were already developed and approved.

The Zapotillo dam conflict also shows several contradictions regarding the environmental policy. For example, the State makes the argument that initiatives and policies derive from local concerns, which developed and raised a "from the ground up" level and have been framed by an opened democratic process based on local needs. They frame their position around established regulations and norms, and assert their right as the state to act upon these "local initiatives". Another contradiction is the contention by environmental activists and experts to develop water usage policies without regarding the legitimate water usage and the development needs of the region. Our study notes that environmental and development concerns will both be ultimately included in this conflict resolution. The reality of the situation seems to be linked to the State, which must meet the challenges traditionally assigned to institutions. It is also noteworthy to point out that, since 1950 in Latin America, an emphasis on hydroelectric power supplies, access to drinking water, and the economic value of many of these projects have driven to a transnational agenda that has not often respected or even considered the needs of native communities, and/or other stakeholders affected by these efforts. These policy initiatives are being reviewed and often challenged inside of the environmental movement, water and human rights concern, and the changing societal attitude towards natural resources and their management.

In this environment, the Zapotillo dam project has become a change agent for water management public policy. However, the building of the dam has highlighted political issues and conflicts that are highly problematic. These conflicts have brought forth long standing issues surrounding the allocation of water resources and development initiatives. Mexican policies in this sector have also generated social conflicts and community preservation issues. This conflict has reconfigured the local struggle for control and power, and have added regional and international elements to other issues such as human rights, environmental

preservation and conservation concerns. Policy change hangs in the balance and, in spite of that, attitudes and concerns are changing as new socio-political perspectives and strategies are brought to the table.

In this chapter, we have analyzed the different interests of stakeholders and the thorny and problematic politics surrounding the building of the Zapotillo dam and the management of water resources. Water usage policy has been developed slowly in light of the complex, legitimated and conflicting needs of stakeholders. The goal for a resolution that is fair and transparent has been difficult to define and meet, as they attempt to reshape the "public space" or forum for the debate and resolution of the issues. We have analyzed some of the tendencies that the stakeholders, coalitions, and other power brokers have exhibited. The issue has grown in scope and has been scaled upwards from a local to a regional conflict, from a national and eventually to an international issue. In the coalition, stakeholders have been active in all these sectors and have scaled their efforts and advocacy concerns using traditional mass media, social media, community organization, and other efforts redefining the public debate on this issue. These outreach efforts have grown in scale and importance and have led to a transcendence of actions ranging from local to international campaigns. The issues have been examined from various ideological perspectives and influenced by "allies" on another outside concern. Therefore, we can conclude that the issue of water resource management brought to the public's consciousness has become a global concern. The political and social networks that have emerged from this conflict have transcended local concerns and have evolved to include other issues besides water usage (such as human rights and environmental preservation). These networks, in their capacity as negotiators and mediators in any possible solution, are key to the possibility of a fair and transparent public policy that addresses a lot of the stakeholders' concerns. These developments commit the coalitions to a social invested solution and to an intra-governmental process (within the institutions of the State nation). The formation of global political networks surrounding the Zapotillo dam conflict and the resulting water management and other concerns have given the Government an innovative path of generating policies, setting parameters for governance and collaborative instruments to involve all stakeholders and their concerns. Stakeholders will help to broker a political solution to this conflict and, in doing so, they will create new dynamic paths to a successful change.

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Chapter 4. Openings for public policy in the water rights

Figure 4.1. Sociogram of the network based on relational capital, p. 152

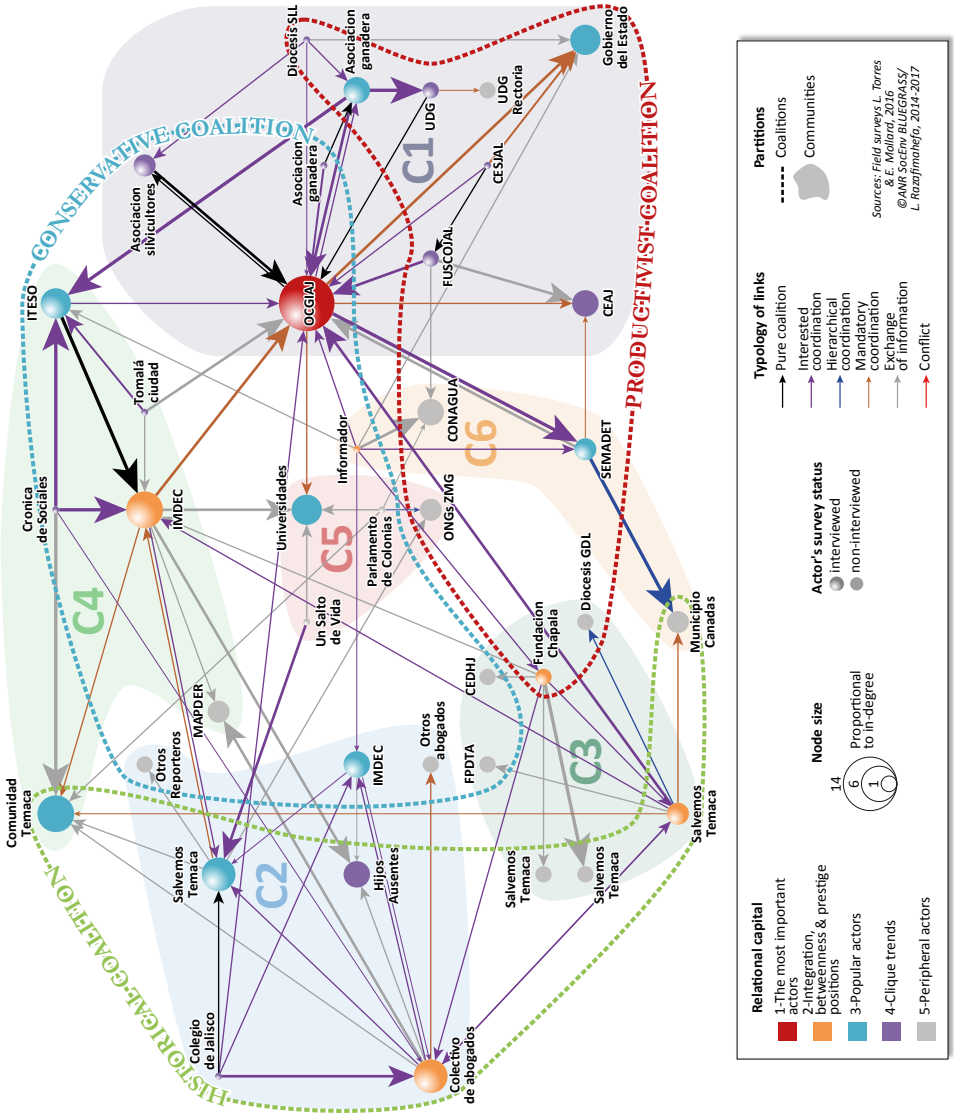


Figure 4.2. Sociogram of the experts in the network, p. 154

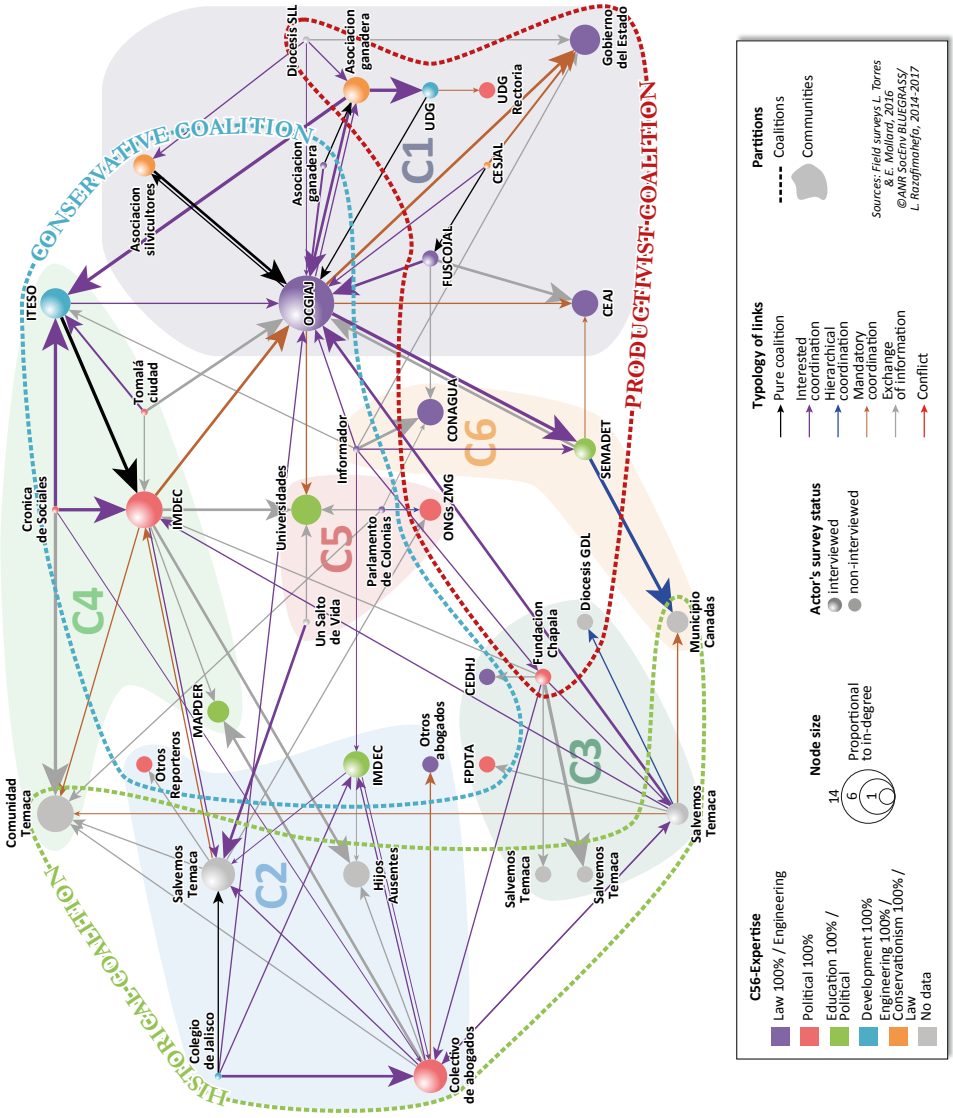


Figure 4.3. Sociogram of Policy Coalition Outputs, p. 160

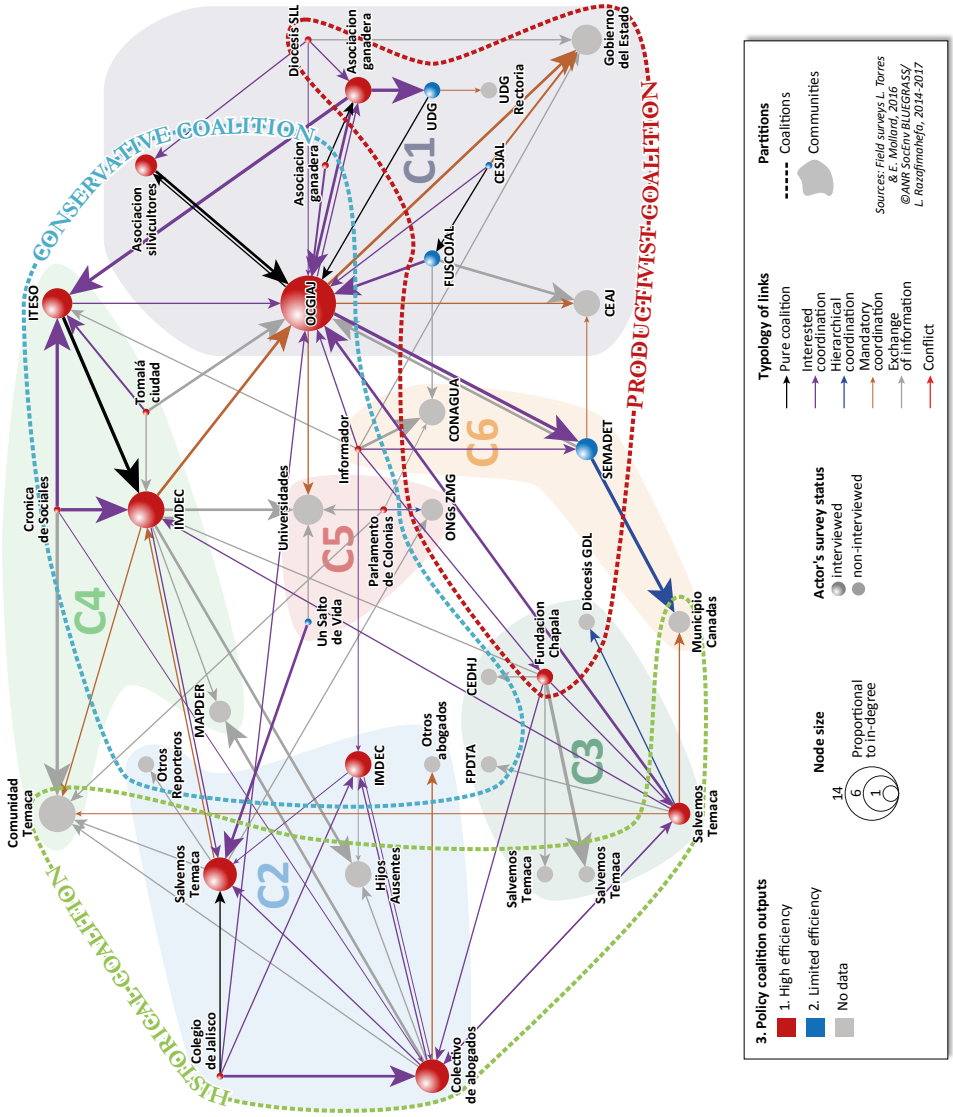
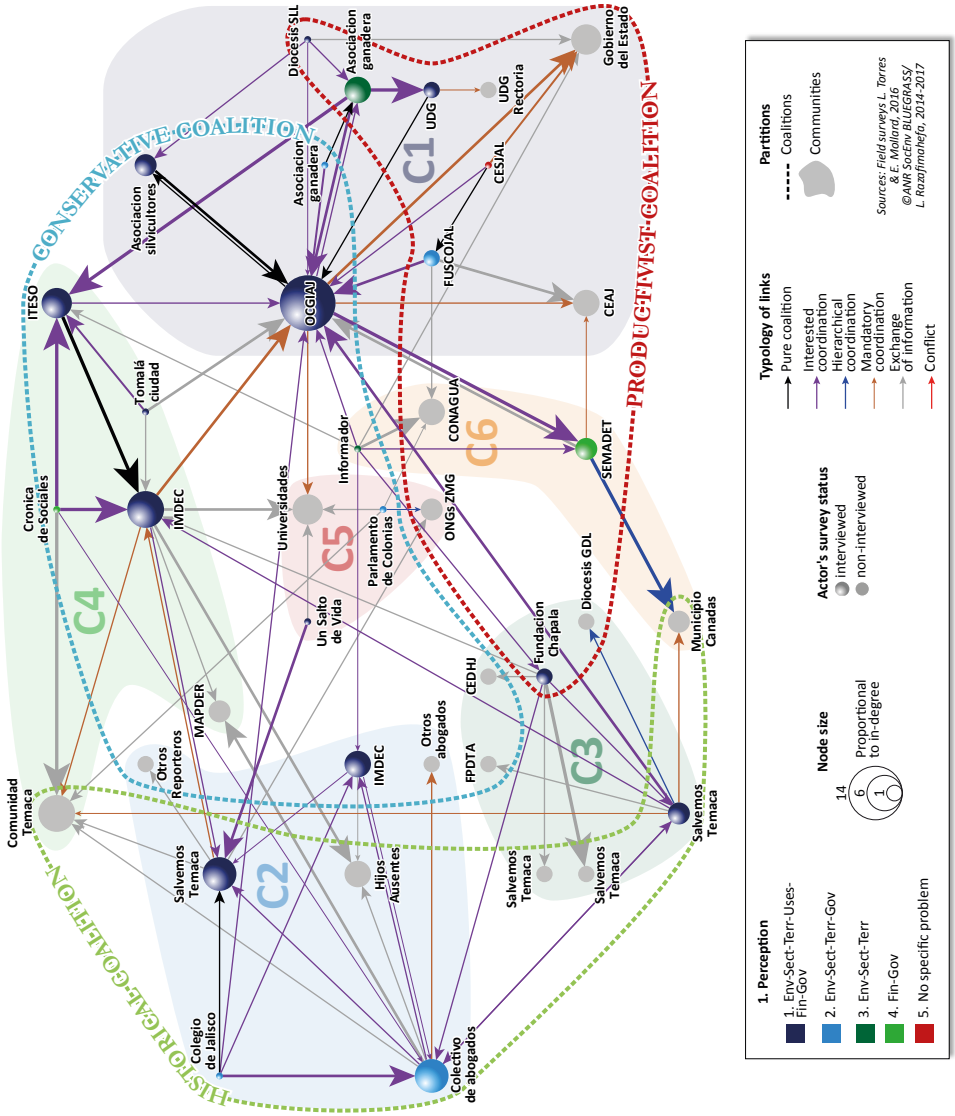


Figure 4.4. Sociogram of the actors' perceptions, p. 157



This book develops an international comparative approach to water conflicts in several American cities (USA, Mexico, Brazil, Peru, Bolivia). Struggles for water can be related to different issues: increase in water prices, installation of water catchment systems, negotiations of commissioning contracts, promotion of municipal plans for water delivery, etc. Such conflicts tend to structure coalitions which, in turn, influence policy-making; they impact local orders that are embedded at multiple levels of social practices; they involve most of the environmental and political institutions of a city or a country. In order to understand how these hydrocracies work, this book proposes a new framework of analysis taking into account the beliefs of the protagonists of the conflicts, their positions in the policy networks and their social characteristics.

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