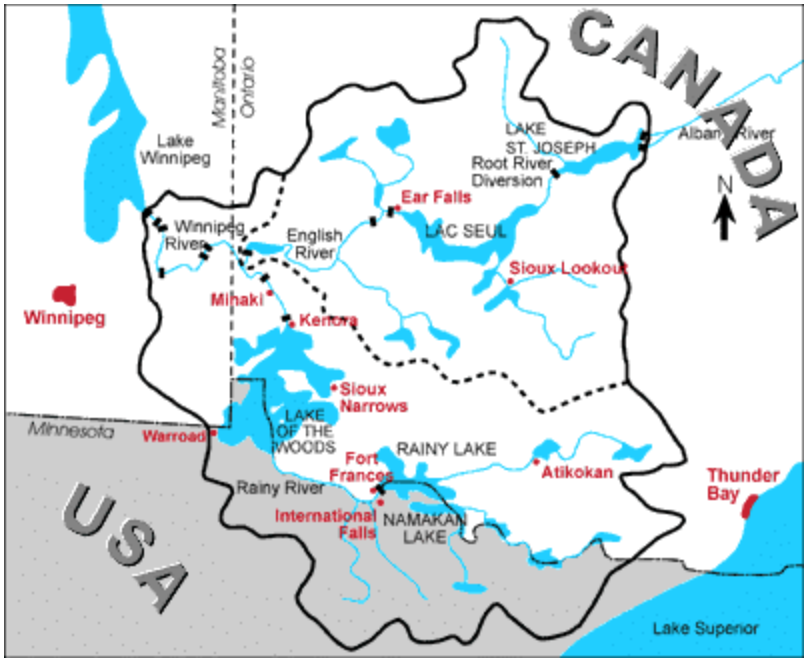
THE MANOMIN WATERSHED

Manitoba and Ontario, Canada – Minnesota, U.S



From: Canadian Lake of the Woods Control Board

INTRODUCTION

The ManOMin[+] watershed is an interesting case of transboundary management. This is not a single case with one unified effort working on both sides of the border, but instead is an amalgamation of many activities along the 49th parallel. It is interesting to consider both the individual activities of these groups as well as the increasing interaction among them. While they have each experienced successes, they are beginning to understand that there cannot be a true transboundary effort unless the separate efforts work together and consider the entire watershed as a single system. Leading the charge to bring these separate groups together is the Rainy River First Nation, who hopes to increase communication and cooperation within the entire watershed to improve the health of the ecosystem.

This case provides a number of lessons about working across an international border besides the fact that transboundary management can take many forms and does not have to be a single, unified effort. The activities in the ManOMin watershed illustrate the

[+] Joe Hunter, Manager of the Manitou Fish Hatchery for the Rainy River First Nation created the word ManOMin to describe the many jurisdictions responsible for management of this area and to illustrate the need for cooperation.

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important role that all levels of government play in transboundary management. Federal, state, and provincial officials as well as representatives of the First Nation were vital to the success of the efforts in the ManOMin watershed. Another lesson from this case is the importance of opening lines of communication for any transboundary effort. While this seems a simple act, stakeholders throughout the watershed highlighted open communication with different jurisdictions as one of the greatest accomplishments of all of the efforts in the watershed because this increased communication is leading to a more holistic consideration of the ecosystem.

Why Transboundary Management?

This is a large area geographically, but it does not include a large number of people. The watershed is sparsely populated, yet there is a great deal of cooperation in the region and many stakeholders concerned about the health of the ecosystem.

There are a number of reasons why there is so much cooperation across the border in this seemingly unlikely watershed. The historical presence of the International Joint Commission (IJC) in the watershed is an important factor in encouraging cooperation among jurisdictions. The U.S. and Canadian governments requested the IJC's help in the 1920s due to the fact that there were hydroelectric dams in the region that altered water levels in the lakes and caused a number of water related concerns. These same concerns are a large part of why there is so much activity in the watershed today. The economy is intimately linked to the water bodies in the region, as tourism, fishing, and power generation all depend upon the lakes. In addition, the changes in water levels increase the risk of flooding which can have major economic consequences.

In addition to the long-term presence of the IJC and the economic concerns of the region, transboundary collaboration is occurring in this region due to the efforts of the Rainy River First Nation. Being good stewards of the land and water are a part of the culture of the First Nation, and in recent years they have become an active participant in the region, bringing diverse groups of stakeholders together to improve the health of the watershed.

CONTEXT

Description of the ManOMin Watershed

The ManOMin watershed is a large system that includes a chain of lakes as well as a river. The major bodies of water that make up this watershed include the Rainy River, Rainy Lake, the Namakan chain of lakes, Lac La Croix and Lake of the Woods. The Rainy River makes up the eighty-mile border between the Province of Ontario and the State of Minnesota.[1] The three major lakes in the system, Lake of the Woods, Rainy and Namakan Lakes, each transcend the U.S. Canadian border. The final lake in the system, Lake of the Woods, feeds into the Winnipeg River in Canada,[2] which begins the Hudson Bay watershed. This is a large area geographically, as the drainage area of just the Rainy Lake portion of the watershed covers 14,900 square miles.[3]

The entire drainage basin has been named the "ManOMin" watershed by the Rainy River First Nation. This is a complex word with multiple meanings that attempts to describe a complex ecosystem that falls within multiple jurisdictions. There are two nations, two states, a province and a First Nation involved in the management of this area. ManOMin represents all of these jurisdictions as "Man" stands for Manitoba, "O" for Ontario, and "Min" for Minnesota. The word is important to the First Nations in the area, as it means wild rice in their language, Ojibwe. This crop was an essential staple for the survival of their people and needed a great deal of water to thrive.[4] The term ManOMin will be used throughout this case study to refer to the entire watershed or drainage basin.

Multiple Stakeholders

This is a complex region with many different players trying to manage a single system. The pure number of stakeholders responsible for management of the area is one of the reasons transboundary collaboration had to occur. The traditional management of the ManOMin watershed is closely linked to the land ownership and usage patterns throughout the region. The majority of the land on both sides of the border is privately owned, making comprehensive management of even a single part of the watershed difficult. There is also a small amount of public land, but much of this is managed independently by the states and the province. These public lands include Voyageurs National Park in Ontario, Quetico Provincial Park in Manitoba, and a number of small state and provincial parks. There is also land in this system which is owned and inhabited by both First Nations and Native Americans.[5]

Economic and Ecological Values

The fact that there are so many players involved in the management of this region is not enough to motivate the stakeholders to work together. The economic and ecological values of the region explain much of the reason for the different groups coming together and trying to look at this area more holistically. According to the coordinator of the First Nation's efforts in this region, "We must be binational because … all things are connected. What happens in one country affects the other."[6] This is clear in terms of both economic and ecological issues in the region.

There are a number of species that must be protected for both the economic and ecological well being of the area. The ManOMin watershed is home to numerous fish species such as the walleye, yellow perch, and northern pike and waterfowl such as the loon, which uses shoreline marshes for nesting habitat.[7] The region benefits economically from the area's resources through tourism, including fishing, summer cottages and resorts, and through commercial fishing.[8] Tourism in the watershed from fishing alone generates over $10 million annually according to a 1992 Minnesota Department of Natural Resources study.[9]

Not only are the lakes important to the economy because of fishing and tourism, but they are essential to power generation in the region. There are a number of dams on the lakes that fall on both the Canadian and American sides of the border. These dams generate electricity for the region and are an important source of jobs and income for many people living in the area.[10]

Ecosystem Stresses

Many of the important species in the watershed are being threatened by traditional management practices on both sides of the border. Some of these threats include poor forest management practices on the public lands in the region, development of land, over-fishing, poor agricultural practices, and increased tourism in the region, especially in Canada.[11] Another important stress on the region comes from the hydroelectric dams that are so important to the economy of the area. Water levels must be carefully controlled in order to produce enough power to meet the demand, and this is causing a number of problems for fish and other species that rely on the lakes.

In order to produce reliable power from these dams, it is necessary to alter the natural water levels throughout the system. Both raising and lowering the water levels to produce power negatively impacts species in the system, since fish-spawning habitat is altered and nesting habitat for birds is destroyed.[12] Researchers in the area found that Namakan Lake, which is controlled for power generation, had less abundant and less diverse near-shore aquatic vegetation than Lac La Croix, which is not regulated and has natural water level flows throughout the year. Researchers also found that the aquatic vegetation in Namakan Reservoir is situated in such a way that the winter "draw downs" for power generation often expose and kill much of the emergent vegetation. The destruction of important habitat in the lakes is causing stress to the species that use this system and even causing deaths among some species. For instance many loons and grebes that use these lakes are not able to survive the unnatural changes in water levels that occur each year in the spring and destroy their nests just when they are about to lay their eggs. Pike cannot access their natural spawning area because water levels are held 3 feet below it in the spring.[13] These stresses on the system are yet another reason that action needed to be taken.

Historical Cooperation in the Watershed – the IJC

Clearly the health of the ManOMin watershed is important to the economic vitality of the area. Due to this fact, there has been interest in the joint management of the Rainy and Lake of the Woods (LOTW) areas for over seventy-five years. While there has been great interest in particular parts of the ManOMin watershed, in the past and even today it has not been managed as a single, comprehensive ecosystem. Instead it has been managed as a number of small, distinct areas including Lake of the Woods, Rainy Lake and the Rainy River.[14]

Lake of the Woods

The first concerns about binational management in this region came from changing water levels in the Lake of the Woods in the early 1900s. Canada and the U.S. signed the Lake of the Woods Convention and Protocol in 1925 after a five-year IJC study of the situation. This treaty dealt primarily with the water level issue, as it established both elevation and discharge requirements for the lake. It requires management action only if the lake level climbs above or falls below a certain level. The treaty established two boards to deal with issues on the Lake of the Woods. The Canadian Lake of the Woods Control Board was given daily responsibility for the management of the lake.[15] It is

made up of four members who represent the federal government and the two provinces.[16] The treaty also created the International Lake of the Woods Control Board to ensure the U.S. had adequate oversight if the lake strayed from the acceptable levels.[17] This International Board includes one U.S. member and one Canadian member, as well as engineering advisors for each nation. The Canadian member of the International Board is always one of the members of the Canadian LOTW Board, in order to maintain coordination between the two boards and to prevent duplication of efforts. The International Board does not become involved in the activities of the lake very often since it rarely exceeds the established water level limits.[18]

Rainy Lake

The two governments expressed interest in Rainy and Namakan Lakes early as well, asking IJC to consider managing these lakes in 1938. In 1941 the IJC established the International Rainy Lake Board of Control to look at water levels of the lakes. This board had a slightly different task than that of Lake of the Woods because the natural flows of these lakes were altered due to the use of the water in the lakes for hydroelectric power. There are two dams in this system, one at Kettle Falls and one at International Falls – Fort Frances. The Board's role was to establish and enforce "rule curves for the water levels of Rainy and Namakan Lakes to preclude the occurrence of emergency conditions."[19] The Board still has this charge today and defines the upper and lower water level limits within which the dams must operate. Like the international LOTW Board, the IJC International Rainy Board of Control includes two members, one from each nation.[20]

Rainy River

Historically, neither the International LOTW nor the Rainy Lake Control Boards had any charge concerning management of the Rainy River, and it has not been a top priority for the IJC. They did establish the International Rainy River Water Pollution Board to monitor water quality on the river. This Board looked at discharges coming from the dams into the river but did not give much consideration to impacts on the river from changing water levels.[21] There was little consideration for the river because the IJC was not looking at the entire system but instead focused its energy on the individual lakes. There are very few people who reside along the Rainy River in comparison to the number of people who depend upon the lakes in the region which may help explain the lack of IJC activity on the river.[22]

APPROACH TO TRANSBOUNDARY MANAGEMENT

The active involvement of the IJC in the basin helped set the tone for binational cooperation in the region.[23] This backdrop of transboundary management has allowed new efforts to rise relatively easily, and cooperation is the rule in the watershed, rather than the exception. Some of these efforts revolve around the IJC, while others, such as the Rainy River First Nation's activities, do not rely on this framework. Each of these new efforts is structured slightly differently, and they use their unique structure to help increase coordination and move the project forward.

Activity Surrounding IJC Boards

Although it is still active in the region, the IJC is no longer the only actor in the ManOMin watershed. The 1990s brought a deluge of activity to the region. In the late 1980s and early 1990s, there were a number of important studies, many by Voyageur National Park, looking at the effects of the regulation of water levels on both Rainy and Namakan Lakes on aquatic vegetation, fish, and other species. These studies sparked interest among citizens in the region and led to an extended look at the management of the lakes. In addition, a First Nation became actively involved in protecting The Rainy River watershed, a sub-basin of the ManOMin watershed and began to push for a more holistic treatment of the system.

International LOTW Board

Inherent in any IJC board is transboundary collaboration. The ultimate charge of the IJC is to "prevent or resolve disputes" between the two nations regarding boundary water issues.[24] These boards always include equal representation from each nation, forcing the nations to work together to manage the resource. The International LOTW Board follows this general model with members from each nation as well as staff to support the board members. The International LOTW Board saw little controversy and little action in the 1990s, as the Canadian LOTW Board maintained jurisdiction over the lakes 95% of the time, as water levels rarely exceeded the acceptable limits. [25]

Because there is little activity surrounding the LOTW, the International Board is quite small and relies heavily on personal interactions between the members and their small staffs. There is a strong personal relationship among the two staff members, and this assists immensely with binational work. According to the Canadian Engineering Advisor, "We have very good relations working across the border, but those are the sorts of things that can change overtime with the certain individuals who are in place."[26]

Significant Milestones

1925 - U.S. and Canada sign the Lake of the Woods Convention and Protocol, which creates the LOTW Boards.

1941- IJC establishes the International Rainy Lake Board of Control

1991 - International Steering Committee formed.

1993 - International Steering Committee submits recommendations to IJC

1997 - Rainy River First Nation begins their Watershed Program

2000 - IJC alters the water levels for Rainy and Namakan Lakes

While the people can change, the basic structure and process remains the same, and this helps maintain the institutional memory of the Boards. The LOTW boards have been in place with the same structure since the 1920s. The mission of the IJC facilities joint management because it encourages parties to work towards a common goal rather than just for the interests of their own organization or jurisdiction. "One of the basic tenants of an organization like IJC is probably important, too. It is pointed out to each member of a board that the IJC

appoints them not to represent their employer or country, but they were appointed because of their knowledge, expertise, and experience."[27]

While there is a formal structure under which they work, the board is actually not run very formally since it is so small. According to the U.S. Engineering Advisor, "The decision process within the International LOTW Board is fairly…informal…because all that you're dealing with here is two members and two staff/support people…. We talk and we make decisions and agreements, typically on conference calls."[28] There are some decisions which cannot be made solely by the board members and staff but must go through the IJC before they can be finalized. In these cases the Board members and staff make recommendations to the IJC. Generally the IJC follows the suggestions of the Board members who are more familiar with the particular issues in the region than IJC staff.[29]

Rainy Lake Board of Control and the International Steering Committee

Much of the activity and controversy of the 1990s in the ManOMin watershed surrounded the IJC Rainy Lake Board of Control. After the extensive studies that raised concerns about the effects of water level changes on species in the lakes as well as economic concerns about impacts of these low levels on fishing and tourism,[30] a new transboundary effort, the Rainy Lake and Namakan Reservoir Water Level International Steering Committee, emerged to reconsider the management of the water levels for both lakes.[31] The International Steering Committee had no direct power to change the regulation of water levels because the lakes were under the control of the IJC Rainy Lake Board. While the new International Steering Committee could not directly change management of the lakes, it hoped to influence the decisions of the Board.[32]

The evaluation of the water levels and the IJC management of Rainy and Namakan Lakes began with a few citizens from International Falls, Minnesota. These citizens were members of the Citizen's Council for Voyageurs National Park and were well aware of the recent studies that raised concerns about species in the lakes. While the citizens wanted change, they needed help from government actors and approached the resource agencies in the region, such as Minnesota Department of Natural Resources (DNR) and the Ontario Ministry of Natural Resources (MNR), for assistance.[33] In 1991 the Rainy Lake and Namakan Reservoir Water Level International Steering Committee formed with the goal of "analyz[ing] and mak[ing] recommendations regarding the management of water levels of the Namakan Reservoir system and Rainy Lake."[34]

Principal Transboundary Actors: International Steering Committee Membership

- Employee of the Minnesota Department of Natural Resources
- Employee of the Ontario Ministry of Natural Resources
- Representative of Boise Cascade
- Private Citizens

Role of Government Officials in the International Steering Committee

The role of government in this ad hoc committee cannot be overstated. The co-chairs for the group were both government employees and while they were not acting in their "official" capacities at the beginning of the process, by the end of their study the

respective agencies did recognize and sanction their work.[35] The Committee relied heavily on the co-chairs, who took care of many of the logistical and administrative issues and provided resources for data collection, analysis, and report writing. According to the American co-chair, "most of the participation by the Minnesota DNR and Ontario MNR was in-kind participation."[36]

Organizational Structure

While the International Steering Committee was an ad hoc group that came together for a limited period of time in order to accomplish a single goal, they had a fairly structured process. The Co-chairs ran regular meetings with agendas, minutes, etc. There were specified members of the committee and designated alternates in case an original member could not be present. The Canadian co-chair felt that this formal structure was essential to accomplishing their overall goal, as committee members did not all know each other and there were too many members to rely on a completely informal process.[37]

While they did set up a formal process with official representatives, none of these individuals were required to participate, as membership in this group was completely voluntary.[38] This helped the process tremendously because the majority of those involved wanted to do what was best for the ecosystem and the community. While the group was made up of volunteers, they did make a concerted effort to bring in representatives who reflected the differing views present in the basin.[39] The existing transboundary infrastructure provided by the IJC Boards made collaboration across the boundary both necessary and natural. Membership had to be transboundary from the outset in order to gain credibility with the IJC Board. The Steering Committee included individuals who represented: both federal governments, the relevant provincial and state governments, private citizens, and Boise Cascade, the company which owned the power generating facilities in the region.[40]

Factors that Influenced Effectiveness of the Effort

The help of government employees, the voluntary nature of participation and the diverse membership of the group were not the only factors that led to a successful process. The fact that the water was allocated equally between the two nations made transboundary collaboration easier because the group was concerned with overall water levels rather than apportionment issues. Each side had an equal interest in the issue of the water levels on the lakes. According to the Canadian co-chair, "We were looking at an environmental and a level issue which affected both sides equally."[41] This fact facilitated cooperation because one side was not more invested in the project than the other. Another reason the Steering Committee was able to work effectively together was the fact that they had a specific goal in mind and a single question to answer. The group knew its purpose and more importantly used joint fact-finding to find the answer to its question. They did not assume a specific answer prior to the extensive studies and were able to learn together through these objective scientific studies. According to the Canadian co-chair of the group this made all the difference in bringing the individuals together as "pursuit of the truth is a very unifying force."[42]

Early Challenges

While there were a number of factors that helped the different parties work together, there was not full agreement on what should be done about the water levels, making it more difficult for the entire group to come to a consensus. Membership in the Steering Committee was entirely voluntary, but the company that would be affected by any changes, Boise Cascade (Boise), felt obliged to join the process due to a Federal Energy Regulatory Commission (FERC) decision a few years earlier. Prior to 1987, the Boise power generating facility was not licensed under FERC, as it was grandfathered because it opened around 1910. In the 1980s there was a push to try to license these older facilities, so Boise applied to FERC for a license for their facilities in the ManOMin watershed. According to a Boise employee, FERC granted the license, but "one of the articles that they put on our license was that we would be required to do a water level management plan in conjunction with Voyageurs National Park, the Minnesota Department of Natural Resources, and others."[43]

Boise saw the formation of the International Steering Committee as a perfect opportunity to fulfill this FERC requirement. While they attended meetings and even gave financial support to the board, throughout the process, the Boise representative maintained the position that "we were satisfied with the rule curve the way it was."[44] This position was in part due to a desire to maintain generating capacity, as the demand for electricity was greater than Boise's capacity to generate power at the International Falls facility;[45] but was also due to a concern that changing the curves would increase the risk of flooding, making the company liable for any flood damage.

Boise did not try to advocate or push for its position within the Steering Committee but instead attended the meetings, "kept a low profile," and stayed up to date on possible outcomes of the group to anticipate any changes to the rule curves.[46] While Boise was participating in the process, they understood that there was not much of an opportunity for the group to reach consensus due to "fundamental differences" between the members of the Committee and the company.[47] They preferred to defer to the authority of the IJC rather than negotiate with members of the Steering Committee. Boise stated they would follow any suggestions of the IJC, and did follow through with this promise later in the process.

The New Rule Curves

The entire International Steering Committee studied the issue of the rule curves, the regulated water levels on each of the lakes, for about two years and published an extensive report with recommendations to the IJC in November 1993. The original hope of the group was to work by consensus and to come up with a set of recommendations that all members of the Steering Committee could accept. This did not happen, as the representatives of industry could not agree to the final recommendations and broke from the group. The Steering Committee was sure to clearly state that the companies did not agree with the recommendations to change the rule curves for both Rainy and Namakan Lakes, and Boise provided its own recommendations to the IJC.[48]

The new curves proposed for Namakan Lake were a much greater departure from the original regulations than those proposed for Rainy Lake because there were more ecological concerns on Namakan. This worked well for Boise, as their facility was on Rainy Lake.[49] Once the Steering Committee gave their recommendations to the IJC, the Commission spent over five years studying the issue before making a decision to change the rule curves on both lakes. They did not consider all possible rule curves but instead confined their study to the new and proposed curves.[50] In January 2000 the rule curves were changed.[51] The new curves reflect most of the concerns of the Steering Committee, but the IJC did make minor alternations to take into account all concerns in the basin.[52] The Steering Committee hopes to continue monitoring efforts of the effects of the new rule curves, but has disbanded as they accomplished their original goal.[53]

Rainy River First Nation

The situation in the Rainy River is different than what is happening around the lakes in the region because it is not framed by active IJC involvement. While the IJC has had a Rainy River Water Pollution Board in the past, the current status of the Board is unclear.[54] The low priority of the River was clear in the IJC deliberations over changing water levels of Rainy and Namakan Lakes. There was only brief mention of the impact on the river in this discussion[55] even though some stakeholders requested a comprehensive study of the downstream impacts on the river before altering water levels.[56] In recent years the IJC has started to consider the need for a more holistic approach to watershed management along the border. They combined boards in several watersheds, including the Red and Souris River watersheds. The IJC has not yet combined their boards in the ManOMin watershed, but they intend to look at that possibility in the near future.[57]

While the IJC has not been particularly active in recent years in the Rainy River, there has been a great deal of activity in this part of the watershed. In the early to mid 1990s the Rainy River First Nation, a native community of 300 people living along the river, began to express concerns about the health of the river. In 1997 they started the Rainy River Watershed Program in order to "protect, conserve, and revitalize the Rainy River drainage basin."[58] The program began with a few small projects that reached across borders to bring in all stakeholders for that particular issue, and today includes thirty different projects that include parties in both the U.S. and Canada. These projects bring together local businesses, different levels of government, private landowners, and of course members of the First Nation.[59] Those working for the First Nation feel that the fact that it is viewed as a separate government entity has made it more effective in the region and helped them bring together these diverse interests. According to the Rainy River Watershed Program Coordinator, "The main thing that has helped us is the fact that we are a first nation, and we are seen as independent…. We are seen as a different sort of political animal, so we can work at a federal, provincial, and local level."[60]

To this point the Rainy River First Nation has focused on projects in the Rainy River watershed that fulfill one of their three main objectives of education, monitoring and rehabilitation. For example the First Nation has an environmental education project called River Watch that involves 300 Canadian and American seventh graders each year.

This program teaches the students about stewardship of rivers but also collects data on the health of the Rainy River and its tributaries. In order to fill the monitoring objective, the First Nation runs programs such as the E.coli program in which they partnered with Health Canada to "locate faulty sewage disposal systems"[61] along the Rainy River. Projects that fall under the rehabilitation goal include working with farmers in the region to "control cattle access to Rainy River tributaries by planting trees, and installing electrical and barb wire fences, cattle ramps and water pumps."[62]

While they hope to make a direct impact on the health of the river through many of these projects, they also understand the importance of establishing lines of communication among the many different jurisdictions for the future health of the river. They work tirelessly to foster these networks, as they understand that everything is connected and must be considered as a system. The Watershed Program Coordinator explains, "I see watershed management on an applied basis as being a communications process. What we are really trying to do when we do watershed management is facilitate communication between the stakeholders."[63] In the last two years, a major activity of the First Nation has been an annual conference that brings the entire watershed together to talk and to begin to work together. They have dubbed this conference the ManOMin Watershed Conference in order to illustrate the importance of each of the different jurisdictions in management of the area.

Unique Organizational Structure of the Rainy River First Nation Efforts

While it is now several years old, the First Nation's Rainy River Watershed Program staff and core funding are still quite small, making it difficult to accept unlimited projects. While the staff is small, ranging from two to twenty people depending on the season, they are able to accomplish a great deal and are currently managing thirty projects in the basin. The organizational structure of the effort reflects both the small number of staff and the cultural traditions of the First Nation. In addition to the staff, there is a Watershed Steering Committee that helps determine which projects to implement. This group is made up of community members, Band staff, and watershed program staff. It meets regularly to discuss new projects and to determine the direction of the program. While the watershed program staff implements the different projects with the help of the Steering Committee, they are responsible ultimately to the entire community. According to the Watershed Program Coordinator, "The organizational structure is like a circle. In the very center of that is the community. There is an outside ring and that is the chief and council. The ring outside that is the Band staff and the ring outside that would be say the watershed program."[64] Normally the outer ring, the watershed program, reports to the Band staff who then reports to the chief and council. On particularly controversial issues the watershed program might go directly to the chief and council or even to the community. On all issues, they report ultimately to the community because they are in the center of the circle.

While there is a core staff that works on the watershed projects for the First Nations, all of their programs involve coordinating a diverse set of stakeholders from both sides of the 49th parallel. The First Nation takes the lead on the projects but works to include all stakeholders who might be able to assist the project and improve the overall health of the

ecosystem. The First Nation understands that no project can take place in a vacuum but must include all relevant stakeholders. The Watershed Program Coordinator sees this as the most challenging part of running the watershed program. "The hard part is trying to pull together the stakeholders…. Sometimes it is difficult to get stakeholders motivated to be involved."[65]

In order to have an effective overall effort and to successfully run each project, the First Nation ensures that each project they accept falls under the specified goals of the program. Before starting the program, the Band spent time figuring out who they were and what they wanted to accomplish. These goals guide all projects and keep the effort focused on its long-term objective of "increasing public awareness and involvement, monitoring and inventorying potential impacts and rehabilitating areas of concern."[66]

The First Nation is considering expanding its work because it has been asked to begin many other projects in the basin, but they have a small staff and small core budget and cannot coordinate an unlimited number of projects. The First Nation wants to ensure that they do an excellent job with the projects they have, rather than taking on more than they can currently run effectively. They have been approached by other stakeholders and asked to expand the geographic area that they are working in, for instance including the rest of the ManOMin watershed in their projects. Again the First Nation decided to concentrate their efforts on the Rainy River basin in order to effectively implement these projects. The one area where they have widen the scope of their projects is the ManOMin Watershed Conference which highlights the interconnectedness of the entire basin and opens lines of communication among stakeholders throughout the region.[67]

ACCOMPLISHMENTS

The efforts in the ManOMin watershed have resulted in a number of significant accomplishments. The IJC Boards established the atmosphere of cooperation that facilitated the formation of many other efforts in the region. The International Steering Committee successfully brought together citizens and governmental officials to consider and rectify a local concern. The Rainy River Fist Nation raised the profile of the river and helped open lines of communication throughout the watershed which will hopefully lead to improved coordination among the separate efforts.

Lake Boards

The Lake Boards have been active in the region for over fifty years and have established a climate of cooperation between the U.S. and Canada. According to the IJC Public Information Officer, "We have helped build the base for binational cooperation and have helped develop the relationships across the border at the working level."[68] Not only did the IJC establish the necessary conditions for cooperation, but its boards also provide vital information to the public as well as a forum for citizens on both sides of the border to raise issues and concerns about the management of the lakes. The Rainy Lake Board considered in-depth the concerns raised about the rule curves and implemented a change in the management of both Rainy and Namakan Lakes that balances the many diverse

local and regional concerns. In addition to process-oriented accomplishments, the Boards have been successful from what the Canadian advisor calls an "engineering water resource management perspective."[69] For instance the LOTW Boards have been able to keep water levels within the prescribed zones over ninety-five percent of the time. The Boards are able to control water flows in order to reduce flooding risk to the residents of the region while also providing recreation and fishing opportunities that are essential to the economic viability of the region.[70]

International Steering Committee

At first glance, it seems obvious that the Steering Committee was extremely successful because it accomplished its goal of studying and ultimately changing the regulations of water levels of Rainy and Namakan Lakes. While this is an important accomplishment, some believe that completing the process of studying the rule curves and making recommendations while including so many differing local concerns was the greatest accomplishment of the group. The Canadian co-chair explained that the issue of the rule curves was a "grassroots environmental issue for local people which was not being addressed at higher governmental levels…. So the local people took it upon themselves to look at it and sought the participation and assistance of government…and industry. There was enough common interest there to motivate everybody to cooperate to look at the question together even though they suspected they might have differing views. That process was able to sustain itself to a conclusion even though it was not consensus."[71] The Steering Committee successfully tackled a difficult issue that affected many people on both sides of the border. Despite the very different opinions of what should be done on these lakes, they were able to come up with a solution that satisfied, at least in part, most of the local stakeholders.[72]

Rainy River First Nation Watershed Program

The Rainy River First Nation has enjoyed a great amount of success so far with its watershed program. They have implemented thirty projects throughout the basin and hope to both improve these projects and begin more in the future. Many of these projects, such as the education of farmers concerning limiting cattle's access to the river, have led to direct improvements in the health of the Rainy River. Their work with farmers on nine separate projects led to the rehabilitation of 8.5 km of the Rainy River and its tributaries. Many of the monitoring and educational programs may not have such direct results, but certainly lead to improvements in the long-term health of the ecosystem.

While the work of the First Nation has led to direct ecological benefits in the area, both the Chief and the Watershed Program Coordinator for the First Nation consider their ability to facilitate communication among stakeholders as their greatest success. Members of the First Nation understand that this communication is the key to full rehabilitation of the Rainy River because they cannot clean up the river alone but must work with other stakeholders in the ManOMin watershed.[73] The Chief of the Band feels that opening the lines of communication is the most important role for the First Nation, as all stakeholders must understand the interconnectedness of the region.[74]

CONCLUSION

While there is no single, comprehensive management plan for the ManOMin watershed, a great deal has been accomplished, and there is a concerted effort to open the proper channels of communication to help the separate efforts begin to work together. For instance there is a great deal of coordination among IJC Boards because membership on the LOTW and Rainy Lake boards overlaps. The IJC is even considering combining its boards in the region to further improve binational management, as it has already done in other watersheds.[75] While combining the boards would improve coordination, this would not reach all transboundary efforts in the watershed, such as those of the First Nation. The Rainy River First Nation is taking its own steps towards improving communication and coordination throughout the watershed by hosting the annual ManOMin Watershed Conference "to promote cooperation and understanding of the boundary waterways."[76] While there is still a long way to go in this region before there is a unified effort at ecosystem management, they are taking important steps in this direction. The existing efforts have improved the health of parts of the ecosystem, but they most come together to manage the entire system binationally if they are going to protect the entire watershed.

Lessons Learned

The successful efforts in the ManOMin watershed illustrate a number of lessons about transboundary resource management in general.

- **Individuals play a vital role in facilitating transboundary collaboration.** The IJC Boards are effective in this watershed because the Canadian and American staff members respect each other and work well together.

- **Efforts can build on an existing transboundary infrastructure.** The International Steering Committee did not try to go around the IJC but worked within the existing infrastructure to accomplish their goal of altering the management of Namakan and Rainy Lakes.

- **Government officials can be an important resource.** The International Steering Committee benefited from the in-kind support and leadership of the two chairmen, who were government employees.

- **An organizational structure is helpful.** While the IJC Board members did much of their work informally, they do work under a formal structure. Both the International Steering Committee and the First Nation imposed an organizational structure to facilitate their work.

- **Opening new lines of communication can encourage stakeholders to take a more holistic approach to management of a region.** While the First Nation has accomplished important ecological results, they believe their greatest

accomplishment is increasing communication in the larger watershed. This communication is leading to more consideration of the entire ecosystem.

- **A single, unifying goal can facilitate collaboration.** Members of the International Steering Committee were able to work together effectively because they focused all of their energy around the single goal of influencing the IJC management of the water levels in two lakes.

- **An effort can benefit from diverse representation.** Although Boise Cascade did not agree with much of the work of the International Steering Committee, they had a large stake in the outcome of the effort and needed to be included in order to lend legitimacy to the Committee's work.

- **Native Communities can be an asset to transboundary efforts along the 49th parallel.** The Rainy River Fist Nation has proven to be an important actor in the ManOMin watershed. Their participation in the region has enhanced transboundary collaboration.

Interview Contacts

- **Frank Bevacqua**, Public Information Officer, International Joint Commission.
- **Bill Darby**, Co-Chair International Steering Committee, Ontario Ministry of Natural Resources
- **Ed Eaton,** U.S. Engineering Advisor to International LOTW Board, U.S. Army Corps of Engineers
- **Jim Leonard**, Chief, Rainy River First Nation
- **Jennifer Mercer**, Watershed Program Coordinator, Rainy River First Nation
- **Mike Romslo**, Steering Committee member, Boise Cascade.
- **Rick Walden**, Canadian Engineering Advisor to International LOTW Board, Environment Canada

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