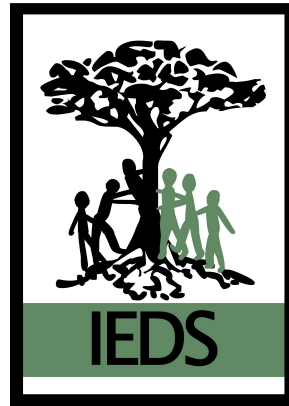


Science and Spatial Security: Building Peace Through Environmental Conservation in Southeastern Europe

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Science and Spatial Security

Building Peace Through Environmental Conservation in Southeastern Europe

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ABSTRACT

The fall of the iron curtain and subsequent political turmoil in the Balkans led to a redefinition of borders and a realignment of security in spatial terms. Ecological systems defy political borders and this shifting of power led to the development of novel governance regimes to manage these shared ecosystems. Within this region, the trans-boundary politics surrounding Lake Ohrid and Lake Prespa in the Balkan peninsula were studied to test our research question about how natural resource scarcity, environmental impairment, and environmental security interact. This study suggests that even in highly acrimonious post-conflict settings, there is clear potential for ecological cooperation. However, we cannot assume that science will be objectively used as an arbiter of decision-making and to achieve regional cooperation, external spheres of governance are essential for success. Fortunately, there has been interest from external agents to consider environmental factors and new nations aspiring towards linkages with regional governance structures such as the European Union and the United Nations Environment Programme. With the involvement of such agents and a mechanism for continued monitoring and enforcement, it is indeed possible to redefine environmental security in spatial terms beyond conventional political borders.

KEYWORDS: *Balkans, conflict, ecology, environmental security, spatial security, Lake Ohrid, Lake Prespa*

Introduction: defining ecological versus political space

Much of the early discourse around environmental security attempted to elevate ecological issues to salience by focusing on their potential as **the** fundamental source of conflict between countries. Cases that might otherwise have been considered by policymakers as rooted in issues of territorial contentions, based on ethnic tensions or interests of economic or political hegemony over a region were instead argues as the result of resource scarcity.¹ While this had a short-term impact of bringing environmental issues to prominence in conservative defense circles, the long-term policy impact was relatively limited. A focused analysis of each case fairly quickly found enough intervening variables that any causal connection to resource scarcity was widely contested. Two parallel schools of thought developed and became increasingly polarised in their perception about the environment-conflict linkage. While liberal politicians continued to champion the importance of the environment as a security imperative, political Realists began to dismiss the connection. In some ways this debate mirrored the polarization between conservative and liberal elements within the conventional political spectrum.

Some of the more analytically driven research institutions such as the Peace Research Institute in Oslo (PRIO) began to present empirical evidence that countered earlier assumptions about the connection between environmentally-driven resource scarcity and conflict. In an editorial following the awarding of the first Nobel Peace Prize to Wangari Maathai in 2004, the following statement was made by two prominent PRIO researchers:

Environmental destruction and scarcity of renewable resources can present a danger to life and livelihood in many third-world countries. But these hazards are not primarily linked to a danger of war. Exaggerating the security aspects of environmental decay hardly helps our efforts to overcome the negative effects of resource scarcity.²

Amidst all these conversations, an underlying question was missed - the ecological constraints that all political constituents are ultimately limited by could still serve to foster cooperation even if the conflict in question had not been caused by environmental factors. Several questions emerged. Is it possible to create a recognition of inherent ecological space out of previously defined political space so as to transform a conflict? Can the cooperation on ecological factors between players itself transcend that limit and allow for a more lasting peace? What might be the defining variables for such a transformation? In this chapter we hypothesise that such a transformation is possible with a confluence of scientific decision-making and external mediation.

An important area to study such interactions is Southeastern Europe. Here nascent governance regimes are rapidly evolving in newly democratised or seceded states but

¹ Thomas Homer-Dixon, *Environment, Scarcity and Violence*. (Princeton NJ: Princeton University Press, 1997).

² Nils-Petter Gleditsch and Henrik Urdal, "Roots of conflict: Don't blame environmental decay for the next war." *International Herald Tribune*, November 22, 2004.

the region is still beset by a legacy of prior tensions and conflicts. There is tremendous interest from external agents to consider environmental factors and new nations aspiring towards linkages with regional governance structures such as the European Union are considering anew both their natural resource policies and their interactions with the global environmental community. Within this region, the trans-boundary politics surrounding Lake Ohrid and Lake Prespa in the Balkan peninsula were studied to test our hypotheses about how natural resource scarcity, environmental impairment, and environmental security interact. While we recognise the limits of applying insights from this case across all geographic regions, the structural factors that emerge here in terms of the role of scientists and the emergence of regional governance mechanisms have broad applicability.³

Post-Cold War Cooperation and the EU Imperative:

The lifting of the Iron Curtain, following the demise of the Soviet Union in 1991, was a momentous time for environmental planners as there had been serious concerns about the impact of communism and inefficient state enterprises on pollution. Around the same time we saw the strengthening of the European Union and the signing of the Maastricht Treaty in 1992. Given the strong sense of suspicion and the long history of conflict along ethno-linguistic lines in this region, the treaty was premised on the concept of 'subsidiarity' which was reformulated in the Treaty of Nice in 2003 and reads as follows:

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.⁴

The recently promulgated European Constitution (2007) in Article 9 further strengthens this concept as:

Under the principle of subsidiarity, in areas which do not fall within its exclusive competence the Union shall act only if and insofar as the objectives of the intended action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level.

This principle would initially lead one to consider that environmental issues might be confined to the local level as suggested by the aphorism of 'thinking globally but acting locally.' However, the inherent transboundary aspects of ecological systems soon began to surface as paramount among European policy-makers and environmental issues began to quickly trump subsidiarity. At the same time, one would have envisaged the post-communist states to be more receptive to the notion of

³ Saleem H. Ali ed. *Peace Parks: Conservation and Conflict Resolution*. (Cambridge MA: MIT Press, 2007).

⁴ The Treaty of Nice.

environmental governance, having endured enormous pollution during the communist era. Yet as Robert Darst has noted in his study of East-West environmental relations, there was a paradoxical resistance to embracing environmental concerns. Instead what he observed was an 'instrumental manipulation of external environmental concerns' by the post-communist states since they realised that many of their woes did not require external cooperation to fix since they were largely 'self-inflicted', rather than downstream impacts from the West.⁵

In his detailed study of the European Union's participation in the Convention on Long-range Transboundary Air Pollution, Stacey Vandever found that environmental assessments generally do not 'enhance public debate' or influence policy 'except in the event that they contain cost estimates for additional regulations that attract policy maker attention.'⁶ The analysis also revealed that there was a considerable difference within Europe between the core western European states and the 'peripheral' states of the Eastern Europe where the efficacy of environmental assessments in shaping regional policy and potential cooperation is possible only when they are linked to non-environmental policy goals. In the context of many developing nations or indeed former communist bloc countries, this entails the potential for membership in an elite international institution such as the European Union.

While the goal of instrumental cooperation through environmental knowledge-sharing might be more challenging at the state level, it has already gained considerable traction at the civil society level. The need to establish infrastructure across the EU prompted several civil society organizations that previously had no relations with each other to form alliances. Hein-Anton van der Heijden has termed this phenomenon 'multi-level environmentalism' that provides an opportunity for constructive confrontation between various stakeholders in environmental conflicts.⁷ In the short-term this may be perceived as a threat to cooperation but in the long-run such efforts provide ways of developing collective social capital around environmental causes that can move from the grassroots to the policy-making level.

Theoretical Aspects of Science and Security

Environmental policy has inevitably had to rely on science as a touchstone for authenticity since ecological issues have an inherent scientific premise. Yet the

⁵ Robert Darst, *Smokestack Diplomacy: Cooperation and Conflict in East-West Environmental Politics*. (Cambridge MA: MIT Press, 2001).

⁶ Stacey Vandever, 'European politics and a scientific face: framing, asymmetric participation and capacity in LRTAP' in Alexander E. Farrell and Jill Jager eds. *Assessments of regional and global environmental risks: designing processes for the effective use of science in decision-making*. (Washington DC: Resources for the Future Press, 2006).

⁷ Hein-Anton van der Heijden, "Multi-level environmentalism and the European Union: The case of trans-European transport networks." *International Journal of Urban and Regional Research* 30:1 (March 2006), 23-37.

objectivity of science is still questioned repeatedly by social theorists and has led to the emergence of an entire field of inquiry called “science and technology studies” (STS) which emerged from the writings of biologist Ludwik Fleck⁸ and others. Scholars such as Fleck contended that scientific “fact” emerged out of a complex social process which was not always objective. Each decision made by a scientist during empirical inquiry has certain subjective attributes. While this subjectivity is circumscribed by conventional scientific methods, the incremental impact of repeated decisions by scientists can greatly erode objectivity. This has also been revealed in work by French sociologist Bruno Latour in his studies of endocrinology research. Later, Latour developed “action-network” theory to show how such subjectivity is manifest in human institutions such as scientific laboratories more generally.⁹

Other protégés of Fleck such as Thomas Kuhn expanded this social constructionism to also consider the trajectory of scientific progress, which could be punctuated rather than gradual. Thus social concerns such as security could stimulate scientific inquiry in spurts of enterprise but also make it more biased in a particular direction. The rapidity of research in nuclear technology during the Cold War is emblematic of this trend. Science was thus politicized and became an instrument of preexisting security mindset rather than framing security discourse itself.

During the last few decades, the process of scientific inquiry has been democratized at multiple levels. The availability of data through rapid communication methods and internet technologies has empowered individual citizens to consider scientific impacts independently. Often such citizens can also play the role of citizen or “street scientists” in diagnosing environmental impacts as noted by the work of environmental planner Jason Coburn.¹⁰ This process of democratization of science has the potential to negate some of the negative effects of centrally planned and controlled scientific enterprise.

Nevertheless, many states are still contending with tremendous challenges around the cooptation of science by security interests. Concerns raised by social theorists such as Michael Foucault about the use of environmental knowledge, in particular, towards such ends by government agencies has been noted in theories of “ecogovernmentality.”¹¹

⁸ Fleck’s most important work in this regard is *The Genesis and Development of a Scientific Fact*, which was published in German as *Entstehung und Entwicklung einer wissenschaftlichen Tatsache. Einführung in die Lehre vom Denkstil und Denkkollektiv* Schwabe und Co., Verlagsbuchhandlung, Basel. The first English translation of the book was published in (edited by T.J. Trenn and R.K. Merton, foreword by Thomas Kuhn) (Chicago: University of Chicago Press, 1979).

⁹ Bruno Latour and Steve Woolgar, *Laboratory Life: the Social Construction of Scientific Facts*, Sage, Los Angeles, USA, 1979. Also see Bruno Latour, *Reassembling the social: an introduction to Actor-network theory*, (New York, Oxford: University Press, 2005).

¹⁰ Jason Coburn. *Street Science: Community Knowledge and Environmental Health Justice*. (Cambridge MA: The MIT Press. 2005).

¹¹ Michael Foucault. “Governmentality” in Burchell, G.; Gordon C.; and Miller, P. eds. *The Foucault Effect*. London : Harvester Wheatsheaf. 87-104. See also Timothy W. Luke “Environmentality as Green Governmentality.” in Darier, E. ed. *Discourses of the Environment*. (Malden, MA: Blackwell Publishers. 121-151, 1999)

Political ecologists such as Arun Agrawal have further developed theories of “environmentality,” in the context of forest policy.¹² What our analysis in the case study of Lake Ohrid and Lake Prespa shows is that scientists themselves may be knowingly complicit in this process of ostensible manipulation. Thus even with the structural safeguards in scientific inquiry that critics of social construction such as Ian Hacking have propounded,¹³ the potential for the politicization of science in matters of spatial security remains high.

Comparative Case Analysis: Lake Ohrid and Lake Prespa Watersheds

The Lake Ohrid – Lake Prespa ecosystem is located in the southern part of the Balkan Peninsula, and includes territory governed by the Former Yugoslavia Republic of Macedonia, Albania, and Greece (Figure 1). Lake Ohrid is an ancient lake, formed by tectonic forces 2-3 million years ago: it is shared by two countries, Macedonia and Albania. Lake Prespa is younger, but was also formed by tectonic forces, and is shared by Macedonia, Albania, and Greece. The two lakes are connected hydrologically. About half the water in Lake Ohrid comes from springs that originate in Lake Prespa and flow through underground karst channels into Lake Ohrid.¹⁴

Although the species vary, both lakes share a rich biodiversity and unique cultural heritage. Lake Ohrid is one of only a few “ancient” lakes, isolated by surrounding hills and mountains, and containing a high level of endemism and many relict species.¹⁵ Lake Prespa, though younger, contains a number of rare and threatened water birds, including the largest remaining nesting population of Dalmatian pelicans. People have lived around both lakes for thousands of years; in mediaeval times, the town of Ohrid was the cultural center of much of the region and the Macedonian side of Lake Ohrid has been designated a UNESCO Cultural Heritage site. There are also several designated RAMSAR sites in the Macedonian, Albanian, and Greek portions of the Lake Ohrid – Lake Prespa watershed.

Political tensions have likewise also existed in this region for centuries, as Romans, Ottomans, and Austrians traversed and occupied the land. After World War II, communist rule isolated Macedonia, Albania, and Greece. There was no communication between Macedonia and Albania during this era, and thus no

¹² Arun Agrawal. *Environmentality: Technologies of Government and the Making of Subjects*. (Durham : Duke University Press, 2005)

¹³ See Ian Hacking, *The Social construction of What?* (Cambridge MA: Harvard University Press, 1999)

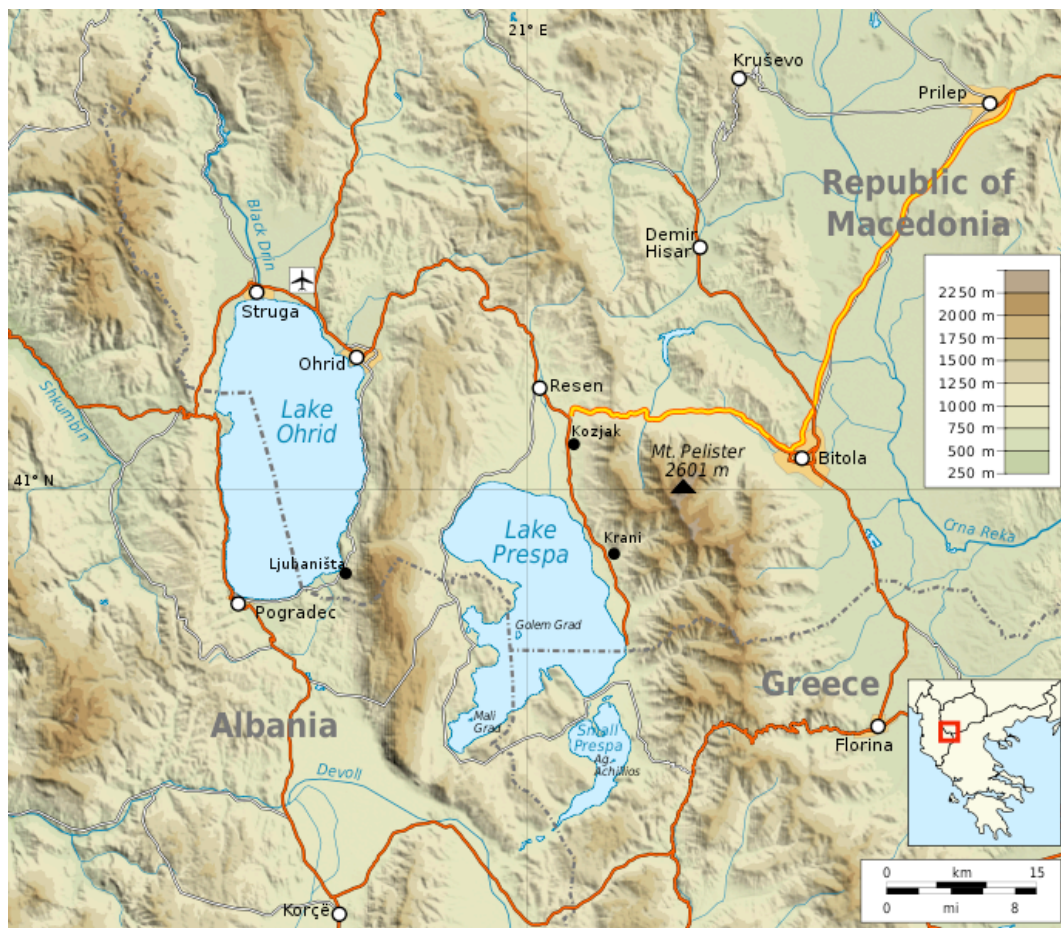
¹⁴ Mary Watzin, V. Puka, and T.B. Naumoski, eds. *Lake Ohrid and its Watershed, State of the Environment Report*. (Tirana, Albania and Ohrid, Macedonia: Lake Ohrid Conservation Project. 2002).

A. Matzinger, M. Jordanoski, E. Veljanoska-Sarafiloska, M. Sturm, B. Mueller, A. Wuest. “Is Lake Prespa jeopardizing the ecosystem of ancient Lake Ohrid?” *Hydrobiologia* 553(2006), 89-109

C. Popovska and O. Bonacci, “Basic data on the hydrology of Lakes Ohrid and Prespa.” *Hydrological Processes* 21:5(2006), pp. 658-664

¹⁵ S. Stankovic, “The Balkan Lake Ohrid and its Living World.” *Monographiae Biologiae* Vol. IX.(1960), 357 pp.

coordinated management on the lakes. Although the communist regimes ended in both Macedonia and Albania in the early 1990s, national, ethnic and religious rivalries, weak governments, and organized criminal networks continue to threaten regional security.



Ohrid and Prespa Lakes map reprinted from Wikimedia Commons, Future Perfect at Sunrise, 9/13/09

Lake Ohrid In 1994, the World Bank, in cooperation with the Republics of Albania and Macedonia, began preparation for a Global Environment Facility (GEF) grant to fund the incremental costs of a Lake Ohrid Conservation Project (LOCP). In November of 1996, Albania and Macedonia concluded a Memorandum of Understanding (MOU) concerning the Lake Ohrid Conservation Project. The MOU established a joint Lake Ohrid Management Board (LOMB) that was “responsible for the preparation of the regulations related to its activities” and authorized to approve projects “based on the previously prepared Feasibility Study.” The Parties agreed to “coordinate and adopt laws and

regulations necessary for the protection of Lake Ohrid with regard to pollution prevention, water use and fisheries management, etc.;" to follow appropriate international pollution prevention regulations and standards; to develop a long-term plan to establish separate monitoring facilities; and to strengthen and develop protection institutions. When the grant was awarded, each party also agreed to carry out the activities needed to implement the LOCP, but they were given no real authority to do so. The LOCP began in late 1998 with a combined budget of about \$4.3 million available from the GEF.

From the beginning, the LOCP served as a vehicle to bring officials from the governments of Albania and Macedonia together, to stimulate the development of citizen environmental groups in both countries, and to reconnect peoples that were isolated by post-World War II divisions and events. However, the initial LOMB had limited authority and the representatives that both countries sent to the LOMB changed regularly. Infrequent meetings made it difficult for these representatives to understand the complexity of the issues surrounding the lakes, or to make the difficult decisions that needed to be made. This created an interest in creating a more structured management board, one that included high-level representatives of all major stakeholders on the lakes, and which was empowered with specific authorities.

In June 2004, a new transboundary treaty, the "Agreement for the Protection and Sustainable Development of Lake Ohrid and its Watershed," was signed by the Prime Ministers of Macedonia and Albania. The treaty was ratified by both countries in 2005 and is currently being implemented. The transboundary agreement called for the creation of an international "Lake Ohrid Watershed Committee" that would coordinate and direct management activities on the lake and in the watershed. The joint bodies created by the LOCP and the former Lake Ohrid Management Board, including the Lake Ohrid Monitoring Task Force, the Watershed Management Committee, the Organization of Fishery Management, and the Prespa Park Coordinating Committee (discussed in the following section) all continue their responsibilities under the Committee. The work of the Committee is being implemented by a Secretariat, which coordinates activities and sets the agendas for the Watershed Committee.



Image of Lake Ohrid reprinted from Wikimedia Commons, Markus Bernet, 6/28/09

Lake Prespa and the Prespa Park. As the LOCP worked with a primary focus on Lake Ohrid, a coalition of Park interests was also growing around Lake Prespa. In an international effort, in February of 2000, the Prime Ministers of Albania, Macedonia, and Greece issued a Declaration announcing the creation of “Prespa Park” as the first transboundary protected area in southeastern Europe. The joint declaration declared that Lake Prespa and its surrounding watershed were unique for their “ecological wealth and biodiversity. The Declaration promised “enhanced cooperation” and “joint actions” to “a) maintain and protect the unique ecological values of the “Prespa Park,” b) prevent or reverse the causes of its habitat degradation, c) explore appropriate management methods for the sustainable use of the Prespa Lake water, and d) to spare no efforts so that the “Prespa Park” becomes a model of its kind as well as an additional reference to the peaceful collaboration among our countries.”

In the following year, the Ministers of the Environment of the three countries established the Prespa Park Coordination Committee. While the three governments made no financial commitments to the Committee, it received some funding from the Greek Government and from international donors, including the Swiss and German Governments. In 2001, the 40-year old Galicica National Park in the Macedonian part of the watershed, and the new Prespa Park in Albania signed a partnership agreement to share information and experiences and cooperate in joint management of their common ecosystem. In 2005, the GEF, through UNDP, initiated its project “Integrated Ecosystem Management in the Prespa Lakes Basin of Albania, FYR-Macedonia, and Greece” to catalyse the adoption and implementation ecosystem management interventions in the region. The full implementation of this project is currently underway.



Image of Lake Prespa reprinted from Wikimedia Commons, Elen Schurova, 6/19/07

The Role of Scientists versus Community Organisers in Conflict Resolution

The role of science in environmental conflicts has been studied in considerable detail within the United States policy context because of a presumption in many regulatory agencies that it can objectively be used as an “arbitrator” in decision-making.¹⁶ However since environmental research is still often divorced from the larger discourse of security, the salience of ecological research as a means of fostering cooperation is still dependent on a primary recognition by authorities that environmental factors are of consequence in economic or political terms. Furthermore, there can be disagreements within the scientific community that have to be reconciled often through community consensus around a preponderance of evidence as well as risk perception.

Both the LOCP and the Prespa Park network reached out to local citizen organizations and scientists. The citizens groups that have become involved in each effort differ and Greece has only been interested in becoming involved in the Prespa effort, where it felt it had a direct ecological and jurisdictional stake.¹⁷ As the Prespa Park network developed, the participants sought independent identity and their own international profile, separate from the Lake Ohrid Conservation Project. Although most participants in both the LOCP and the Prespa Park network acknowledged and accepted the

¹⁶ Connie Ozawa, *Recasting Science: Consensual Procedures in public Policy Making*. (Boulder CO: Westview Press, 1991)

¹⁷ A.Antypas, and O. Avramoski. “Polycentric environmental governance: towards stability and sustainable development.” *Environmental Policy and Law*. 34(2004), pp. 87-93

hydrologic data showing a connection between the two lakes, they did not believe that this was a compelling reason to treat the two basins as a single ecosystem. Instead these individuals felt that the cultural and political differences between the two regions and the equal cultural importance of the Prespa basin argued for separate management, with incremental steps towards coordination. Conversely, those more closely associated with the LOCP believed that the hydrologic connection clearly argued that the two basins should be managed as one ecosystem.¹⁸

When the LOCP began, a joint monitoring program was considered essential to provide a scientific basis for guiding the work of other project components, and both jurisdictions worked to establish appropriate programs. However, in order to provide management support to the projects and their governmental implementors, it was essential that the lead scientists collecting the data communicate regularly with policy-makers. This communication was challenging in the LOCP.¹⁹ Because of the legacy of the communist era, when the LOCP began, there was no regular communication between the scientists in Macedonia and Albania. Although the scientists in both nations enthusiastically endorsed the LOCP, the lack of existing personal relationships and the legacy of isolation and mistrust made the early dialogue difficult. As the monitoring program was implemented, each nation kept its data to itself and neither was especially willing or adept at sharing their findings with the other or with the broader community of stakeholders and policy-makers.²⁰ In part, it seemed that data were viewed as commodities that should be purchased, not as information that might be freely shared to support sound public policy.²¹ Even among the academic community, data were not always freely shared; for example, a recent hydrologic analysis of the groundwater connections between Lake Prespa and Lake Ohrid used only Macedonian data, noting that data from Greece and Albania were “not available”.²²

To facilitate data sharing and to foster joint interpretation of data, considerable time and attention were directed to preparing a “State of the Environment” report in 2002, including hiring an outside expert to facilitate communication between the Macedonian and Albanian teams and to focus the analysis on key management concerns. This effort culminated in the publication of “Lake Ohrid and its Watershed: A State of the Environment Report” in October 2002.²³ This report represented the first time that Albanian and Macedonian data were used in a common assessment of the ecological conditions in the basin. Forty-nine Albanian and Macedonian scientists and other specialists contributed to this report and through its preparation, got to know each other and learned to work together more effectively. This kind of collaboration is essential for

¹⁸ Ibid. 87-93

¹⁹ Mary Watzin, “The role of law, science and public process: practical lessons from Lake Champlain (USA and Canada) and Lake Ohrid (Macedonia and Albania).” *Pacific McGeorge Global Business and Development Law Journal*, 19, no. 1 (2006).

²⁰ Ibid.

²¹ Global Environment Facility. *Assessment of the Management of Shared Lake Basins in Southeastern Europe*. (Athens, Greece: GEF IW:LEARN Activity D2, 2006).

²² Popovska and O. Bonacci, “Basic data on the hydrology of Lake Ohrid.” pp. 658-664.

²³ Watzin et al. Lake Ohrid and its watershed.

the ecosystem-level assessments needed for comprehensive management of a large watershed and lake system. In 2004, the monitoring programs in both countries were restructured and incorporated into the state monitoring efforts in both countries.

Although the State of the Environment Report was a step in the right direction, challenges remain in bringing scientific information into the decision-making process and there have been frustrations when some information was not deemed credible or relevant. For example, the scientific data suggest that over the long term, the higher levels of eutrophication in the Lake Prespa watershed might threaten the health of Lake Ohrid.²⁴ Currently, about 65% of the phosphorus that flows out of the Lake Prespa into the karst ground water channels is retained by the aquifer, however, potential increases in the phosphorus load to Lake Ohrid from either agricultural development or water losses to irrigation, which increase phosphorus concentrations in Lake Prespa, could change this situation.²⁵ Therefore, coordinated management will soon become an ecological imperative if both countries want to maintain their unique biodiversity and the ecosystem services the lakes provide.

As personal interactions increase across the border and trust continues to be built between the participating scientists, greater progress may be possible on some of the more difficult and complex management issues. It is also likely that the technical community will be more comfortable in designating leaders who might participate in the public debate as individuals begin to know one another. This may help ensure that the issues are increasingly framed by the science that is available. As scientists from both countries are freer to participate in international scientific conferences and other venues, confidence in regional analyses and expertise will also be legitimized. If the experts participate more freely and openly in the public discourse, showing how their data are useful, public and governmental support for data collection efforts and science-based decision-making might also grow.

The LOCP invested considerable effort into public outreach and education and these efforts were quite effective in increasing awareness about the environmental problems on the lake. In the critical first years of the project, the work concentrated on increasing the number and capability of citizen groups in the basin. Workshops were held to build the capacity of the NGOs, focusing on organization skills, meeting facilitation skills, public outreach and involvement, and other topics. "Green Centers" were established in both Macedonia and Albania. These Centers served as clearinghouses to connect the NGOs to each other and to provide the critical information they need to mobilize public interest and public action. As a result of this effort, the number of NGOs on the Albanian side increased from 13 to 19, and on the Macedonian side, from 19 to 42 during the implementation of the LOCP.²⁶ With the financial support of the LOCP, the NGOs in both Macedonia and Albania carried out a variety of activities including

²⁴ Matzinger et al. 2006

²⁵ Ibid.

²⁶ Watzin, M.C., O.Avramoski, S. Kycyku, T. Naumoski, D. Panovski, V. Puka, and L. Selfo. Lake Basin Management Initiative Experience and Lessons Learned Brief. (Lake Ohrid, Macedonia and Albania. Regional Workshop for Europe, Central Asia, and the Americas. Final Report, 2003).

summer eco-camps, education in the schools, clean-ups along the shoreline of Lake Ohrid, reforestation on tributary streams in the watershed, the production and distribution of public education materials, hosting round table discussions and workshops, and marking hiking trails in Galicica National Park in Macedonia. In Albania, 51 grants were made.²⁷ However, since the last grant session within the GEF-funded LOCP ended, there has been a decrease in NGO activities in the region. Individual environmentalists and community organizers continue to speak out, but organized activities have declined because funding to support them is lacking.

During the LOCP, the watershed management committees in each country filled the void in leadership left by the scientific community and worked to develop watershed action plans that outlined some of the environmental changes that were needed. These action plans were combined into a Joint Watershed Action Plan in 2003 and endorsed by the LOMB. The Action Plan stressed working in partnership, using an ecosystem-based, watershed approach that integrated environmental and economic goals, pollution prevention, a consensus-based, collaborative approach to management, and flexibility. The many small on-the-ground efforts that were part of the LOCP brought people together for a common purpose, one that transcended ethnic differences or other debates that were part of the governmental transitions.

Although enormous progress was made during the period of GEF investment in the Lake Ohrid watershed, local funding was not sufficient to support the full implementation of the Watershed Action Plan. Since 2005, the LOCP has been significantly reduced in scope and focus has shifted to the Lake Prespa basin, where GEF funds are still available. Unfortunately, these economic realities have slowed the momentum gained through the LOCP and may ultimately threaten the full implementation of an ecosystem-based management approaches in the region.

The Third Party Imperative in Environmental Cooperation

In the Lake Ohrid Basin, it is unlikely that steps would have been taken towards ecosystem management without the intervention of the GEF and the funding it has provided. These resources provided the necessary motivation to allow the formation of informal management structures. When these funds are expended, it is also unlikely that the countries themselves will have the necessary resources to fully sustain the programs that are created, despite the best intentions.

Borders can be strong barriers that isolate communities from one another. Because local communities often have strong connections to their surroundings, there is a natural interest in environmental protection and public discourse about environmental issues can sometimes transcend other ethnic and political divisions. The Regional Environmental Center, a non-partisan, non-advocacy, not-for-profit international organization with a mission to assist in solving environmental problems in Central and

²⁷ Watzin et al. 2003

Eastern Europe, writes: "Shared natural entities, when deeply embedded in the local culture, help unite communities divided by country borders. They provide a neutral topic for trans-boundary exchanges, which, when led by an independent facilitator, can serve as a bridge in politically, ethnically and economically difficult cross-border situations."²⁸

While the average annual per capita income in Greek part of the Lake Ohrid and Lake Prespa watersheds is the higher than that of Macedonia or Albania (\$10,000, compared to \leq \$2000), it is low for Greece as a whole ²⁹, and the people who live in the Prespa basin share a similar rural lifestyle. The investments of the GEF have attracted national and international interest and assisted in efforts towards sustainable development in this otherwise isolated, and internationally ignored region. Without these investments, it is unlikely that the same progress would have been made.

Building on the work of Dean Pruitt on negotiation and mediation theory, Steven Burg has noted that in the case of post-communist eastern Europe, there has been relative success of what might be termed "weak mediating institutions" whose main tool is "the realm of communication and formulation rather than manipulation.... they include the capacity to transmit and interpret messages, to bring realism to the parties' conceptions of each other, to reframe the issues, and to make suggestions for settlement." Using the example of the Project on Ethnic Relations, Pruitt presents five key principles for finding success in such cases: i) create credible, neutral forums for dialogue early; ii) maintain momentum; iii) work within political realities; iv) encourage indigenous solutions from within existing processes, and v) act with the backing of powerful states.³⁰

In the case of the LOCP, these principles were largely met during the the period of GEF investment. Other donors joined the GEF, for example, the LOCP project was also implemented in Macedonia and Albania under the "Mavrovo Process" (named after the resort where the negotiations occurred). At the initiative of the Macedonian government and with the help of the Swiss government, complementary investments in water and sewage infrastructure, environmental monitoring and impact assessment, and other related areas have shown considerable success.³¹

However, the larger global political situation also created challenges. The collapse of the former USSR left Eastern Europe in a paradoxical predicament: Many obstacles for environmental cooperation such as a war-mongering security apparatus were removed, while at the same time the economic collapse and fragmentation of the former satellite states precluded many such opportunities from reaching fruition. Western donors

²⁸ Regional Environmental Centre, *Trans-boundary cooperation through the management of shared natural resources*. (Szentendre, Hungary: self-published, 2007)

²⁹ UNDP. *Integrated Ecosystem Management in the Prespa Lake Basin of Albania, FYR-Macedonia, and Greece*." (Governments of Albania, FYR-Macedonia, United Nations Development Programme, Global Environment Facility, 2004)

³⁰ Steven L. Burg, "NGOs and ethnic conflict: Lessons from the work of the project on ethnic relations in the Balkans." *Negotiation Journal* 23:1 (January 2007), 7-33.

³¹ For an enterprise analysis of cooperation in this region see M. Dmiitrov et al, "Cross-border cooperation in southeastern Europe - The enterprises' point of view." *Eastern European Economics* 41:6 (December 2003), 5-25.

attempted to address this perplexing situation by lavishing aid money in the region through “transnational subsidization” of various aid programs, however a clear purpose was lacking and, as noted by Robert Darst, this policy also had many negative security implications such as “moral hazard (complacent behaviour when insulated from threat), polluter life extension, and donor vulnerability to environmental blackmail”.³²

Conclusion: towards eco-regional policy formulation

As the influence of the former USSR wanes, the interest among the Balkan states in joining the European Union offers opportunities to revive the momentum of nascent environmental movements. River basin or watershed management and public participation are central to implementation of the European Union Water Framework Directive, something both Albania and Macedonia must address as they approach ascendancy. Albania, as well as Macedonia and all the countries of the former Yugoslavia have begun the major institutional and legal adjustments necessary to move towards meeting the environmental and social requirements of the EU Water Framework Directive. Transparency and capacity building among stakeholder groups and within communities are central parts of these changes, which foster connection and reduce tensions and conflicts.

Moving from the initial phase of new legal structures to the much more challenging phase of fully implemented national environmental policies, regulations, and monitoring and enforcement structures is an enormous additional step, one that even the countries of northern Europe have not fully achieved despite their much more powerful economies and governments.³³ The countries of the Balkan peninsula are among the poorest in Europe and their economies and governments are still democratizing and transitioning towards a market economy. Strategic choices to address poverty and unemployment as highest priorities can mean that environmental concerns remain lower on the national agenda.

In Macedonia and Albania, the environmental laws that have been passed are largely framework laws, which will require specific and detailed follow-up legislation before real changes will become apparent. Currently, responsibilities for water management are fragmented among different institutions and management agencies in both Macedonia and Albania, and therefore effective communication and coordination between different ministries and countries is difficult. The process of decentralization presents additional challenges in that local governments have been delegated significant responsibilities for water supply, water protection, and environmental management, but the technical assistance and funding to address these challenges has not followed. Most of these communities have very limited capacity to act on their new responsibilities, however well-intentioned they may be. Where communities are organized around historic ethnic

³² Darst, *Smoke Stack Diplomacy*, p. 199.

³³ Perkins, Richard., and Eric Neumayer. “Implementing Multilateral Environmental Agreements: An Analysis of EU Directives.” *Global Environmental Politics* 7, no. 3 (2007): 13-41

ties that reinforce cultural differences, tensions between groups can lead to environmental challenges as well.

In the last decade, much of the environmental focus of Macedonia, Albania and Greece has centered on the designation of protected areas, rather than on active management of their valuable natural resources like water or endangered fish and wildlife. While cooperation is necessary to create a park or other protected area, there is perhaps less inherent tension in such an action than in delegating water rights, negotiating water quality agreements, or establishing and harmonizing fishing harvest quotas. The establishment of a park can create positive energy that, over time, might be extended to other more difficult issues.

In Macedonia, parks and other protected areas are required to fund their own management activities and receive little or no support from the central government. In Albania, a protected status precludes local managers from managing their own finances. In Macedonia, Albania and Greece, there are no mechanisms to give local authorities or user groups more of a stake in the benefits of conservation³⁴ so local governments have little motivation to address more difficult issues or reach across borders to create transboundary partnerships. For the transboundary Prespa Park, the Prespa Park Coordination Committee functions as a trilateral semi-institutional structure for collaboration, and clearly the goodwill that has developed across all three national boundaries has facilitated its efforts to explore an ecosystem approach to management.

While there are still substantial political disagreements between Macedonia, Greece and Albania, a desire to protect the unique natural treasures in the Lake Ohrid and Lake Prespa watersheds has brought these nations and their people together. Over time, it may also help to transcend ethnic, cultural, and political divisions that exist both within and between the countries. If continued decentralization and economic growth provide for community ownership and responsibility, the goodwill that has been engendered may ultimately provide for better conservation and mutually beneficial sustainable development strategies. The potential for environmental cooperation as an instrumental means of conflict resolution is thus gaining greater empirical support and deserves greater attention by researchers and practitioners alike.

³⁴ Global Environment Facility. *Assessment of the Management of Shared Lake Basins in Southeastern Europe*. (2006).

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