SAVING THE LAST GREAT WILDERNESS: A CASE STUDY OF ENVIRONMENTAL MOVEMENTS IN THE BAIKAL, PRIMORSKII AND KHABAROVSK REGIONS OF THE RUSSIAN FEDERATION; POTENTIAL IMPACT ON THE DEVELOPMENT OF A DEMOCRATIC POLITICAL SYSTEM

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In memory of Giacinto Baldera and Maria Bartoli,
individuals who understood that success is only a matter of will.

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ABSTRACT

The objective of this work was to analyze the emergence of environmental activism in the late 1960s, its evolution into a social movement and its contribution to the development of a democratic system in the post-Soviet era. Particular emphasis was placed upon the examination of the role of the Soviet intelligentsia in raising environmental consciousness around the issue of the preservation of Siberia's Lake Baikal, the contribution of glasnost to the formation of environmental organizations as articulators of public interest and as measures of the existence of a Russian civil society. Environmentalism has shown that the desire for personal autonomy, which has long existed within the shadows of an authoritarian and paternalistic political order, is still an intrinsic part of the Russian character. Upon this foundation a democratic system can be built and the future course of the Russian people, the state, and the rest of the Eurasia altered significantly.

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CHAPTER I

INTRODUCTION

A disturbing naiveté has arisen among many in the Western community concerning the applicability of the Western economic and political model as a panacea for the ills that currently plague the Russian Federation. The dissolution of the Soviet system and state signified not the inevitable triumph of liberal democracy but the disruption of a 45 year old status quo, heralding a new age in history in which both hegemon and satellite must now struggle to redefine their roles in the global system. It is within this context of disruption that many in the West have logically sought to promote the values of a democratic-capitalist political system into once totalitarian states. Although good intentions abound, the process they have chosen to promote this objective may ultimately lead to its failure.

Support for the process of democratization by the West has been a largely procedural affair. The experiences of centuries of gradual evolution towards a democratic political system have been conveniently summarized, canonized and unloaded upon an unprepared and inexperienced Russian polity. The process of building a democratic state begins at the societal level; the aggregation and articulation of a common interest to an otherwise unresponsive political structure is the cornerstone from which a democratic system is built. The majority of Western aid has been directed at large scale privatization and economic restructuring schemes, virtually ignoring smaller, yet crucial, citizen-

empowerment projects. Such a policy belies the professed doctrine that the establishment of a democratic system is the primary motivation for Western assistance. But if such a condemnation is too harsh for most to accept, then it is appropriate to draw the next most logical conclusion; a politically participatory society is seen as being dependent upon a pre-existing free market economy.

While discounting neither the role nor value that economic and procedural assistance will have in helping shape Russia's future, it is nonetheless important to bear in mind potential repercussions of current Western policy. Operating under the auspices of international financial institutions and through direct bilateral economic assistance, the West is attempting to impose a set of standards and procedures that mimic its own development pattern. Expecting to help foster the growth of an economic and, almost by default, political system similar to its own, the West has directed most of its assistance to large bureaucratic and mostly inefficient governmental organizations within the Russian Federation. This "top-down" approach has virtually undercut the relative strength of independent and organizational actors on the societal level.

Although Western assistance has been largely welcomed by the Russian establishment, the terms attached to much of it have engendered a certain degree of resentment. Within the span of a few years, the Russian Federation has gone from international power to international pauper, painfully witnessing the gradual erosion of its power, position, and prestige within the global system. As economic and political demands are pressed, age-old suspicions about the West's' true agenda are reinforced.

For many, Western involvement in the process of Russian economic and political reform promises to bring not salvation, but subjugation. Stripped of an empire and an identity formed after 74 years of Communist rule, a sense of powerlessness, of a Russia not in control of its own future, grips the nation. In the midst of this social chaos, the voices of chauvinism and demagoguery find a growing number of receptive listeners.

Where then does the key to successful reform lie? Though international assistance will undoubtedly influence the direction the reform process takes, it would be unreasonable to believe that whatever emerges in the end will even remotely resemble the Western capitalist system. It is precisely this expectation that may doom the reform effort long before any perceptible benefits of the process can be witnessed. The course of economic and political reform must be determined by the Russian nation alone. Whatever system eventually emerges must be a genuine Russian creation if it means to maintain both its credibility and promote economic and political stability. The "re-invention" of Russia is in itself a daunting and seemingly impossible task, but a far greater challenge lies in promoting the concept of political democratization; a concept practically alien to a culture that has been historically characterized by a paternalistic and authoritarian political tradition.

Much like economic reform, the process of democratization will rely heavily upon Western assistance and experience. But this is a process that cannot be forced upon the political system from above. While the continuation towards a rule of law state is essential to facilitating its development, democratization must be championed by individuals and

groups operating outside official state structures. Social activity based upon the principle of free association, rather than mass mobilization, and the articulation of interests from below provides one of the fundamental underpinnings of a democratic society. Operating within the context of a legally defined state-society relationship, the organization of political and social participation at the grassroots level is an important prerequisite to the establishment of a democratic political system.

Whether such prerequisite conditions existed in the Soviet Union prior to the economic and political reforms of the Gorbachev era has been the subject of continued debate among Western scholars. The development of a democratic culture requires an infrastructure of non-arbitrary behavior, respect for law, and the legitimization that such practices confer, as well as the existence of a "civil society", i.e., a sizable segment of the population that, through its spontaneous social, economic, and political interactions and organization, can participate actively in the life and governance of the state. Above all, such a society requires not only toleration of and respect for pluralism, but the institutionalization of group rights--whether these be of a political, ethnic, socioeconomic, religious, professional, or civic character.[1] In many respects the totalitarian system which emerged under Stalin was in fact the antithesis of civil society, in that it atomized Soviet society, ruling its subjects from above and systematically denying them the rights and civil liberties essential to the formation of a public and private sphere separate from that of the state. This, plus the authoritarian tradition in Russian political culture under the Tsars, has

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[1] Uri Ra'anaan, ed., Russian Pluralism - Now Irreversible? (New York: St. Martins Press, 1992), 1.

caused many theorists to doubt the viability of political and economic reform. Yet, it should be remembered that Imperial Russia between the mid-19th century to 1914 made great strides in the direction of creating a "civil society," even to the point of establishing such basic freedoms as speech and assembly. These were confirmed by the February Revolution of 1917 but were subsequently abrogated by the Bolsheviks.[2]

While totalitarian power certainly eliminated what could of been considered to constitute the beginnings of a civil society in pre-1917 Imperial Russia, whether it succeeded in completely eradicating the movement within Soviet society towards the creation of a social sphere separate, and to varying degrees, independent of the state remains in question. The information presented hereafter will attempt to offer some evidence that Soviet society was indeed beginning to distance itself from the ideological and political uniformity epitomized by totalitarianism. Yet most important to this analysis is the identification of particular instances and trends in Soviet society which might indicate conditions favorable to the future development of a Soviet, and now Russian, civil society. Hence, the primary objective of such an exercise would be not to attempt to prove whether civil society existed, but rather whether the fundamental principles of interest aggregation and articulation were present within society and if so, how the existence of such basic principles might provide the framework for the development of Russian civil society.

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[2] S. Frederick Starr, "Civil Society and the Impediments to Reform," in Toward a More Civil Society? The USSR Under Mikhail Sergeevich Gorbachev, ed. William Green Miller (New York: Harper & Row, 1989), 307.

Moshe Lewin, in his seminal work Political Undercurrents in Soviet Economic Debates (Princeton University Press, 1974), was perhaps the first Western scholar to raise the idea of the existence of a Soviet civil society. Lewin postulated that the formation of Soviet economic policy, rather than being the product of uniform consensus among the ruling elite, had more to do with the internal struggles of interest "groups" within the bureaucratic establishment and the pressure exerted (however indirectly) by the population at large. While the formation of Soviet economic policy is not to be the focus of this analysis, the value of Lewin's observation lies in his acknowledgment that the Soviet state was not as "totalitarian" as had been previously assumed by Western comparative theorists; the wants and needs of Soviet society did indirectly influence the decisions made by political authority. Granted that the articulation of interest was neither organized nor as effective as in a Western democratic political system, but the fact that it could be proven to exist dealt a serious blow to what was considered up until this point to be the undisputed veracity of "totalitarian" political theory. As Lewin would go on to point out in a follow up work, The Gorbachev Phenomenon: A Historical Interpretation (University of California Press, 1991), the making of Stalinism in the 1930s loomed so large as to make observers believe that the state was the main, if not the only, actor in the history of the Soviet system. This would appear to suggest the existence of something quite ahistorical: A political system without a social one, a system which, Lewin remarked, "floated over everything else, over history itself."[3] The rich and complex social fabric

[3] Moshe Lewin, The Gorbachev Phenomenon (Berkeley: University of California Press, 1991), 4.

which made up Soviet life, and the impact it bore on the evolution of the political and economic system, had gone largely ignored. Little effort was made to understand Soviet culture, its subcultures and countercultures, those factors which helped shape the minds, attitudes, and expectations of Soviet citizenry.[4]

The process of modernization which the Soviet state underwent since 1917, the large scale migration to the cities and the education of large sections of the population created a new class of professionals within Soviet society. The rising expectations of this new class, for greater economic rewards as well as expanded political and social freedoms, placed increased demands on a political system which, by the 1970s, was rigid and almost completely separated from the people it ruled over. Within this context, Lewin maintains, Soviet society developed into a dynamic entity onto itself, advancing in a haphazard fashion interests often in contradiction with those of the state and, when encumbered by the unresponsiveness of political authority, advocating and achieving its own solutions. This was, the author maintained, one of the defining features of a developing civil society.

Other theorists, such as Andrew Arato, have noted with a certain degree of veracity that those examples which Lewin provided as proof of a elementary civil society were more of an exception rather than the rule in Soviet society. While such activities could be considered rudimentary indicators for the potential development of a civil society, the lack of a "rule of law" which firmly established and protected basic civil liberties such as speech and press and allowed for self-mobilization and association of

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[4] Ibid.

liberties such as speech and press and allowed for self-mobilization and association of people independent of the state prevented the emergence of a civil society in the Western sense of the term. Even if the ideal circumstances are not present, Arato concedes, independent collective action in Soviet society could be best understood in terms that link the concept of social movements to that of civil society. In other words, the complex reality of social movements in the Soviet Union (particularly during the Gorbachev era) can best be studied by a theory capable of distinguishing between movements dedicated to the establishment of a new system and those seeking to construct identities and defend their interests within the existing system or the one that is, or anticipated to be, emerging.[5] The study of the objectives and conduct of social movements within the existing political system would provide a means of differentiating between what could be termed a "political society"--or the parties and organizations which generally arise from civil society but are directly involved with state power and seek to obtain and control the structures of authority-- and "civil society," which is not directly related to the control or conquest of power but to the generation of influence, through democratic associations and discussion in the public sphere.[6]

Autonomous social participation in the midst of a state-directed society, especially after Gorbachev's glasnost and perestroika reforms unleashed tens of thousands of unofficial groups and political parties, theorists have attempted to apply variants of the

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[5] Andrew Arato, From Neo-Marxism to Democratic Theory: Essays on the Critical Theory of Soviet-Type Societies (New York: M.E. Sharpe, 1993), 313.
[6] Ibid., 314.

civil society concept to characterize independent social activism. Again, the distinction between what could be considered to be the emergence of a viable civil society grounded within the framework of Soviet society, gradually developed over time despite policies of repression and social atomization, and the spontaneous explosion of political participation of individuals and groups recognizing their opportunity to seize the reigns of power, begins to blur. It in order to clarify this distinction, and at the same time determine the extent in which a civil society was actually emerging in the (now former) Soviet Union, comparativists Marcia A. Weigle and Jim Butterfield have been able to identify discernible trends in its development based upon its pattern of emergence in Central Europe during the 1980s. They maintain that the experience in Central Europe suggests that there are four stages in the ongoing development of civil society: defensive, in which private individuals and independent groups actively or passively defend their autonomy vis-à-vis the party-state; emergent, in which independent social groups or movements seek limited goals in a widened public sphere which is sanctioned or conceded by the reforming party-state; mobilizational, in which independent groups or movements undermine the legitimacy of the party-state by offering alternative forms of governance to a politicized society; and institutional, in which publicly supported leaders enact laws guaranteeing autonomy of social action, leading to a contractual relationship between state and society regulated by free elections.[7]

[7] Marcia A. Weigle and Jim Butterfield, "Civil Society in Reforming Communist Regimes: The Logic of Emergence." Comparative Politics 25 (October 1992): 1.

While the trends identified by Weigle and Butterfield will serve more as a reference rather than a framework for analysis in this document, the work of comparativists H. Gordon Skilling and Franklin Griffiths on interest group politics will provide perhaps our most useful tool in identifying the potential for development of civil society during the Soviet period. Alongside Lewin, these comparativists were one of the firsts to seriously challenge totalitarian theory. Acknowledging that the Soviet system was far from being without internal conflict and that a genuine struggle between rival groups was taking place behind the facade of the monolithic party-state, they embarked upon a survey of the field of interest groups possessing the ability to exert influence within the policy making establishment. Although acknowledging that the classical Western definition of the term "interest group" could not easily be applied to groups within the context of Soviet politics, the identification of "occupational groups" (scientists, writers, military, etc.) and within them, "opinion groups" (i.e., reformist or conservative) which existed within the middle and upper echelons of the Soviet establishment exerted an influence on the formation of policy by the Communist Party. Whereas this could not be described as genuine pluralism; it appeared rather to be a kind of imperfect monism in which, of the many elements involved, one --the party-- was more powerful than all the others but was not omnipotent.[8] Just as in Western political systems, the making of policy was a highly political affair

[8] H. Gordon Skilling and Franklyn Griffiths, eds., Interest Groups in Soviet Politics (Princeton: Princeton University Press, 1971), 17.

which reflected not only the conflicting forces and interests within the party, but within the structure of the Soviet political establishment as a whole.

While not focusing on all groups or all forms of group action within Soviet society, Skilling and Griffiths concentrate their analysis upon what they describe as "political interest groups," or an aggregate of persons who possess certain common characteristics and share certain attitudes on public issues, and who adopt distinct positions on these issues and make definite claims to those in authority.[9] Opting to concentrate upon a relatively small circle of elite groups (excluding the broader social groups into which Soviet society was divided) which are active politically in that they are able to express attitudes and make demands concerning public policy, the authors provide a framework by which to analyze the dynamics of interest articulation (or at least the tendencies towards that articulation) within the Soviet political establishment. Such a framework can then be expanded to analyze the existence, extent, and effectiveness of interest articulation on the part of groups within Soviet society. Although the repressive activity of the state may have driven "society" underground, independent contents of what could be considered the "private sphere" --aspects of cultural or religious life, associations based upon common interests, etc.-- were not entirely eliminated. These emerged to form the basis of a new social realm based not upon any legal authority or political power, but on the authority of conscience. Unorganized and unable to directly challenge the state, this new "society" would instead seek to create spaces of opposition to distant and disempowering

[9] Ibid., 24.

bureaucratic structures. The institutional spaces for this new "society" were provided initially by homes, cafes, clubs, and educational institutions. The activities of groups within this "society" would eventually find a medium through legal, illegal (samizdat), and émigré publications.[10] It would then seem to make sense to speak of a sphere of social life that, at least in principle could be the foundation for the constitution or reconstitution of an independent civil society.

Although the term "civil society" has been used frequently and quite loosely by scholars and activists, with no systematic application by either group, one point is definite; the topic of civil society emerged only with the appearance of social activity based on free association, not participation orchestrated by the state, and the articulation of interest from below as well as above. Civil society, at least within the context of post-totalitarianism and as it was defined previously, consists of two parts. The first is the legal framework which permits social self-organization and defines the terms of the state-society relationship, thereby guaranteeing the autonomy of social groups. Given this works focus and the difficulty entailed in gathering adequate information concerning the legal framework (then and now) which would support such a study, this aspect has not been addressed in the following analysis. The second part is the identity of the social actors and goals toward which their activity is directed further specifies the character and organization of civil society.[11] This is what can be identified as the "orientation" of civil

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[10] Ferenc Feher and Andrew Arato, eds., Crisis and Reform in Eastern Europe (London: Transaction Publishers, 1991, 1.

[11] Weigle & Butterfield, 3.

society, which can vary radically from society to society, depending on the values underlying independent activity in the public sphere. It is this aspect of civil society which will provide us the focus by which to conduct an analysis of the environmental movement in the Soviet Union, perhaps the most widespread and enduring citizen's movement in recent history.

Widely unacknowledged until the advent of the glasnost era, a fledgling tradition of grassroots activism has exerted a modicum of influence over the development of Soviet domestic policies. Under a totalitarian system, most activism (particularly in the area of human rights) was simply equated with political dissidence and brutally suppressed. Where public activism did enjoy a slight respite from government suppression was in the area concerning issues of environmental quality. Although the organization of groups unaffiliated with the state would remain illegal until the latter part of the 1980s, toleration of this sort of activity lent environmentalism a certain questionable legitimacy. Within this context the seeds of citizen advocacy were planted and environmental activism would grow to increasingly incorporate highly political overtones.

By the end of the 1980s, Russian environmental activism had emerged from the underground to play an integral part in forming the political landscape of the Russian Federation. The success of this young movement is indebted to Gorbachev's reform policies which not only granted a relative degree of freedom of expression and press, but allowed for access to environmental data and information that were previously tightly guarded secrets.

Although Russian environmentalists have only recently been allowed to play an active role in the political process, the roots of the Russian "green" movement can be traced back at least 35 years.[12]

Russia's strong conservationist tradition was suppressed early on by a state determined to pursue industrialization at whatever cost. Allowed to gradually resurface during the Khrushchev era, advocacy by individuals and government sanctioned groups was generally limited to calls for the protection of nature preserves (zapovedniki) and bio-diversity.[13] Exposing the extent of environmental devastation incurred by industrialization was, however, considered to be subversive; not only would it call into account the judiciousness of Soviet development policy, but acknowledging that there was a problem would create an ideological quandary not easily dismissed by Communist authority.[14] It was not until industrialization threatened Russia's magnificent Lake Baikal, the veritable spiritual center of the nation, did a broad movement of scientists, writers, and ordinary citizens emerge to question and protest official state policy.

The movement to save this unique region in the Russian Far East was not only a precursor to the wave of environmental activism that would sweep the USSR in the post-

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[12] Use of the term "green movement" in this context is intended to signify the emergence of an active and vocal public opposition to Soviet environmental policies as opposed to the conservationist tradition represented by the late 19th century writings of V.I. Vernadsky.

[13] Hillary F. French, "The Green Revolution," WorldWatch 99 (September 1990): 31.

[14] The official communist line was that pollution could not exist in a communist society. It occurred only in capitalism because greedy capitalists seek to push off their waste onto their neighbors, thus sparing the polluters the cost of their own cleanups. Such a phenomena, which economists refer to as "negative externalities," were absent in communist societies --the theory went-- because a polluter's neighbor is not a competitor but a fellow socialist and member of the state.

Chernobyl period, but was perhaps the first significant evidence of the emergence of a fledgling civil society in a state generally characterized as totalitarian. The independent self-organization of society, the process in which societal actors voluntarily engaged in public activity to pursue individual, group, or national interests began in earnest in the Baikal region in the early 1960s. Confronting state authority through whatever legal (albeit, limited) means at their disposal, activists eventually forced the state into a series of concessions aimed at preserving the ecological integrity of Lake Baikal. It is precisely this sort of activity that holds one of the keys to the process of democratization in post-totalitarian Russia; strengthening the new non-governmental sector in the Russian Federation serves not only to empower the average citizen, but also limits the relative degree of power the state may claim. With the struggle to save Baikal as its forebear, environmental activism in the Russian Federation appears to be the only societal movement at this time capable of exerting any substantial degree of influence over the process of political reform. Analyzing the role of environmental activism in the Russian Far East provides a unique laboratory for exploring the relationship between citizen advocacy and democratization. The disruption suffered by the breakdown of the Russian economy has set local industries and governments on a frenzied course of resource extraction and development in this vast, but ecologically fragile, region of the Russian Federation. Operating almost independently of the center, local authorities have all but foregone environmental considerations for immediate short-term economic gain. To many, the current situation differs little from that which existed under Soviet authority;

after all, resources are still being exploited for economic gain with little attention being paid to the ecological consequences. But the central authority of the state has been noticeably reduced and a new factor has been introduced into the situation; the presence of foreign commercial interests eager to exploit the vast resource wealth of the region. Ironically, the current situation poses a greater threat to the regions environmental integrity than centralized planning ever did. In the midst of this chaos, the environmental movement has grown decisively stronger.

Environmental non-governmental organizations (NGO) in the Far Eastern region reflect both the spectrum of issues and differing degrees of organizational development. Many are primarily single-issue NGOs, quickly disbanding after succeeding or failing in their confrontation with authorities, enterprises, and the like.[15] Others have a broader regional environmental agenda and by virtue of the nature of their organization, bridge the gap between the intelligentsia and the ordinary citizen, thereby actively encouraging public participation in matters effecting the regions ecology. It is this type of NGO activity that may help determine the course of democratization, particularly if it succeeds in affecting change in the environmental policies of local and regional governments.

The movement to save Lake Baikal and the current efforts to halt deforestation in Khabarovskii and Primorskii Krai provide an appropriate context for analyzing the relative strength and influence environmentalism exerts within the regions political and social

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[15] Murray Feshbach, Ecological Disaster: Cleaning Up the Hidden Legacy of the Soviet Regime (New York: Twentieth Century Fund Press, 1995), 101.

structures. Considering that all subsequent activism can be traced in some way, shape, or form back to the Baikal movement, analysis of the movement's history and effectiveness is fundamental in establishing the foundation between citizen advocacy and political democratization. The Baikal ecological movement also provides evidence of the transition of Siberian environmental activism from the Soviet to the post-Soviet era. How has the movement weathered the transition and has its position within the political system been strengthened or weakened now that its defining adversary, the Communist Party, has disappeared? Is the movement still capable of garnering widespread support within Russian society, despite the current economic predicament of the region's population?

The response to the growing threat of large scale deforestation provides yet another case study with which to analyze possible implications environmental activism may have on the process of democratization. The uniqueness of the situation in the Khabarovskii and Primorskii Krai is two-fold; first, the environmental movement in these regions has emerged only recently and carries little political baggage from the communist era and second, the presence of foreign logging interests further compounds the issue. Conceivably for the first time in its history, Russian environmentalism will have inexorable ties to international economic and environmental interests. The proliferation of a number of grossly unequal joint-ventures in logging and oil exploration presupposes the need for environmental groups to cease being parochial in orientation and begin to establish a network of professional relationships with both Russian and Western organizations. Will inter-regional and international NGO cooperation influence forest-use legislation, thereby

establishing an independent grassroots presence in the official decision-making process, or will they be effectively marginalized by both political authority and economic necessity?

More than simply a question of environmental politics and preservation, the relative success of the NGO community in the Russian Far East may provide the Russian people with their first real hope at "bottom-up" democratization. If such is the case, let us then proceed from the assumption that perhaps Russia truly has made a break with its past, and that the future of the Russian nation is in fact, for the first time in history, in the hands of its people.

CHAPTER II

SIBERIA: A COUNTRY IN RESERVE

Often perceived by many in the West as a vast wasteland of frozen tundra and prison camps, the region collectively known as "Siberia" in fact holds the key to the economic development of the Russian Federation. Stretching from the Urals to the Pacific, Siberia constitutes almost 70%, roughly 12.4 million square kilometers, of the nations total land mass.[1] Endowed with the broadest and richest range of natural resources in the world, Siberia could contribute significantly to economic growth not only in Russia, but also in the European and Pacific community of nations as well. Despite its harsh terrain and climate (the coldest temperature on earth outside of Antarctica was recorded at -71 degrees Celsius at Oymyakon) the region in fact exists within an extremely fragile environmental setting.[2]

Approximately 48 percent of Russia's territory is underlain by permafrost; soil or rock of which the temperature remains below zero degrees Celsius continuously for a year or more.[3] Varying anywhere from a few centimeters to several hundreds of meters thick, permafrost is highly susceptible to disruption by human activity. Construction and off-road transport

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[1] Violet Conolly, "Siberia: Yesterday, Today, and Tomorrow," in Siberia and the Soviet Far East: Strategic Dimensions in Multinational Perspective, ed., Rodger Swearingen (Stanford: Hoover Institution Press, 1987), 5.
[2] Terence French, "Panel on Siberia: Economic and Territorial Issues," Soviet Geography 32 (June 1991): 364.
[3] Terence Armstrong, George Rogers, and Graham Rowley, The Circumpolar North: A Political and Economic Geography of the Arctic and Sub-Arctic (London: Methuen & Co., 1978), 24.

vehicles have been known to leave track impressions that remain for years, expanding with erosion to become permanent linear rivers. Stripped of its protective layer of soil or vegetation and exposed to sunlight, the exposed layer quickly becomes waterlogged. Once in this state, the permafrost layer is no longer able to maintain sufficient moisture near the surface and becomes incapable of supporting vegetative regeneration, thereby rendering the terrain unreclaimable for decades.

The problem of maintaining permafrost integrity is further compounded by the indiscriminate logging practices conducted in some of the more mountainous regions of Siberia. Rugged terrain and the general lack of any developed transportation infrastructure mandates the use of waterways as the main mode of transporting felled timber to processing. Unable to access the more remote areas of the region, timber companies opt instead to conduct extensive clear cuts along the steep slopes of the river valley. With no root systems to hold the soil in place, erosion slowly denudes the mountain side, dumping several metric tons of silt into the waterway. Although no exact statistics are available for the whole of Siberia, it is estimated that 133 rivers and rivulets have been lost to siltation in the Baikal region alone.[4]

Heavy cloud cover and a harsh winter climate decisively reduce the amount of photosynthesis that occurs in the regions lakes and rivers. Timber lost in the transport process usually ends up at the bottom of rivers and lakes, where decomposition further depletes the already low-level of oxygen, placing additional strains on aquatic bio-organisms. Oxygen

[4] John Massey Stewart, "The Great Lake is in Great Peril," New Scientist, 30 June 1990, 58.

consuming micro-organisms that breakdown waterborne pollutants are not as active under these conditions, resulting in a slower oxidation of wastes during the winter months. Even though the body of water may not smell or lose its color, pollutants may remain 8 to 10 times longer (and in the case of rivers, travel farther) than in more temperate climes.[5] Usually untreated, discharges of industrial and human wastes are carried by such major rivers as the Ob', Yenisey, and Lena as well as countless other tributaries directly into the Arctic Ocean.

The durability of pollutants in bodies of water also is dependent upon the relative "turn-over" rate of lakes and rivers. The "turn-over" rate is the amount of time that is required for inflows of new water to replace the existing stock of water in a section of a river, or in a lake.[6] Most of the lakes in Siberia are small and kept relatively pristine because of a fast turn-over rate. Larger bodies of water, by virtue of sheer volume, experience the effects of human and industrial pollution for far longer periods of time; the turn-over rate for Lake Baikal, for example, is 400 years.[7]

Many cities in Siberia are situated in low-lying geographic regions that are climactically suited to pollution build up. While most cities are located in the more arid portions of the region, the ones situated closer to the Arctic suffer what are known as atmospheric inversions. Inversions occur when warmer air overlies cooler air near the earth's surface, thus creating a

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[5] Theodore Shabad and Victor L. Mote, Gateway to Siberian Resources (The BAM) (n.p.: Scripta Publishing Co., 1977), 98.
[6] Philip R. Pryde, Environmental Management in the Soviet Union (Cambridge: Cambridge University Press, 1991), 81.
[7] Ibid.

"lid" which traps and concentrates pollutants in the immediate atmosphere.[8] Heavy cloud cover and a long winter season dramatically reduces the amount of sunlight to the region, thereby increasing the demand for electricity which in turn releases more pollutants into the atmosphere. Atmospheric pollution is further compounded by the tendency to leave automobiles and machinery running overnight in sub-zero weather for fear that they will fail to start up again in the morning.[9]

Although the potential for environmental disruption is high, the allure of the regions vast resource base and the demands of Soviet industrialization has superseded any ecological considerations. Siberia has long been considered by economic planners as a "country in reserve"; a source of virtually inexhaustible resources capable of fueling the economic growth of the entire country. The Bolshevik victory of 1917 essentially ended the debate between the "Westerners" and "Slavophiles" over the pace and scope of industrialization. Where Slavophiles stressed the reassertion of traditional Russian peasant culture, glorifying the organic harmony of society and man's unity with nature, Westerners sought to emulate Western economic growth through the manipulation of both man and his environment.[10]

Nature was viewed as being subject to the domination of man, something to be conquered by a combination of engineering skill and sheer manpower. Although Lenin's

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[8] Ibid., 24.
[9] Marvin S. Sooros, "Arctic Haze: An Explanation of International Regime Alternatives," in Politics and Sustainable Growth in the Arctic, ed. Jyrki Kakonen (n.p.: Dartmouth Publishing Co., 1993), 36.
[10] Donald R. Kelley, Kenneth R. Stunkel, and Richard R. Wescott, The Economic Superpowers and the Environment: The United States, the Soviet Union, and Japan (San Francisco: W.H. Freeman & Co., 1976), 22.

original plans for the "electrification" of Russia entailed an expanded utilization of Siberian resources, Stalin's policy of forced and rapid industrialization placed the conquest of Siberia squarely at the center of development policy. Primarily geared to the establishment of heavy industry, the Soviet economy paid little or no attention to the potential environmental impacts of development.[11] Administered by a centralized bureaucracy, built by an army of forced labor and populated through a policy of permanent resettlement, most of the cities of Siberia were created for the sole purpose of extracting and processing mineral wealth. By the late 1960s, the Soviet government had undertaken a colossal construction program, building hundreds of new cities, throwing oil and gas pipelines across the landscape and constructing huge chemical complexes. Although official policy pronouncements repeatedly stressed the overall economic development of the Soviet state, the situation that emerged was in fact decisively colonial; the raw material and resources extracted from the Siberian region were going to further the process of industrialization in European Russia and the republics.

The process of rapid industrialization and the Soviet emphasis on speed in completing projects, tasks, and quotas virtually guaranteed that any concerns regarding environmental integrity would be dismissed outright. Either unaware or simply unconcerned with the impact industrial development would have on the region, resource extraction and processing continued at a steady pace. The unchecked power of Soviet communism and its obsession with heavy

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[11] Up to 85 percent of capital investment was devoted to what Soviet planners called "production group A" --their designation for the heavy industries involved in mining, the energy sector, transportation and the production of the means of production. Only 15 percent of total Soviet economic investment went into the consumer production sector. The result was "production for its own sake," a condition that served to contribute greatly to the increase in environmental stress.

industry, economic growth, national security and secrecy combined to produce an environmental catastrophe of unrivaled proportions.

Pollution was simply accepted as being a tolerable consequence of economic development. Characteristic of the Soviet mentality was not only the belief that nature must be conquered and manipulated but that science would eventually provide a solution to whatever ecological problem might arise. Problems of resource depletion and pollution would be solved by new technology; new energy sources would be found and depleted natural raw materials would be replaced by synthetics. The first official acknowledgment that the Soviet Union's rapid economic expansion could pose environmental problems came several years after World War II. In 1949 the USSR Council of Ministers adopted a "Resolution on Measures Against Air Pollution and on the Improvement of Hygienic Conditions in Populated Places". The resolution required local authorities to take steps to reduce emissions of harmful substances into city air basins.[12]

By the late 1950s, the sheer magnitude of the problem forced Moscow into taking belated measures to address the extent of industrial pollution. Although many of the more remote regions of Siberia escaped the degree of environmental devastation visited upon European USSR, many of the region's major waterways and a large portion of its atmosphere were heavily polluted by industrial effluents. Between 1957 and 1964, each of the fifteen republics of the USSR had adopted fairly comprehensive environmental laws. In regards to the

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[12] Georgii S. Golitsyn, Ecological Problems in the CIS during the Transitional Period (n.p.: Radio Free Europe/Radio Liberty Research Report, 1993), 34.

Siberian region, the USSR Council of Ministers began to issue a growing body of legislation concerning the protection of water, timber and wildlife resources, the regulation of sewage and mine waste, the limitation of air pollution and forestalling soil erosion.[13] Much of the legislation tended to focus upon the shorter rather than longer-term pollution abatement measures, although in 1969 a new public health law did deal in part with issues of overall environmental health.[14]

It was not until the early 1970s, however, that central and regional authorities began to take positive action to combat first air and then water pollution. Given the scale of the problem, most of these efforts were grossly inadequate and the state of the Soviet environment continued to decline as the nation continued on its course of rapid industrial development. Although many of the more pressing environmental problems were officially recognized and dealt with on a case-by-case basis, the fact that any relatively successful pollution abatement project had to first be elevated to the status of a crisis program and then launched by forceful pronouncements from top Soviet leaders (usually only after sustained pressure from below), demonstrated the systems inherent inadequacy in implementing routine pollution abatement procedures.

When environmental protection was thought of as being one of the nuisances of industrialization that could be controlled relatively inexpensively and without any major economic dislocations, there was little opposition to the wave of environmental and

[13] Kelley et al., 16.
[14] Ibid.

conservation laws that were passed in the late 1950s and early 1960s. When it became apparent that environmental protection would require large amounts of capital and ultimately set limits on the rate of industrial development, key ministries began to engage in a pattern of resistance and evasion, sustained by bureaucratic skill and close ties to political elite concerned with giving priority to economic development. Stringent environmental regulations for industry and resource development were rarely enforced; fines that were levied were often so minuscule as to be dismissed by industry as an acceptable cost of operation, thereby affecting absolutely no change in ecologically harmful production practices.

Further undercutting the efficacy of environmental legislation was the Soviet Union's pervasive secret police force, which ensured that the public never found out about the extent of pollution visited upon them in the name of progress and that, if they did, were powerless to stop it. It took Soviet officials 30 years to admit that an explosion had occurred at a nuclear storage site in Chelyabinsk in 1957. The explosion released over 80 tons of radioactive waste into the air, spreading huge amounts of long-lived strontium-90 and cesium-137 radio nuclides and forcing the evacuation of an area as large as 1,000 to 2,000 square kilometers.[15] It is believed that several nuclear "mishaps", at nuclear plants, storage sites, research institutes and aboard nuclear submarines, occurred long before the 1986 meltdown at Chernobyl, but were quickly covered up by KGB and government elite. Even after glasnost, a cult of silence within the bureaucracy continues to suppress information on radiation leaks, dumping and other

[15] Zhores A. Medvedev, The Legacy of Chernobyl (New York: W.W. Norton & Co., 1990), 280.

nuclear hazards. According to former Environment Minister Nikolai Vorontsov, the biggest environmental problem facing the Russian Federation today remains a general "lack of information."[16]

Nevertheless, the ecological damage would have been much worse if not for the measures taken by the Soviet government over the last 20 years. According to Georgii S. Golitsyn, vice president of the Russian Academy of Sciences, environmental deterioration proceeded at a considerably slower rate until the mid-1980's, largely because the governments' efforts to limit industrial pollution and protect the environment were still relatively effective. Although difficult to determine why this situation changed between 1985 and 1986, a contributing factor was certainly the social and economic disruption engendered by perestroika, which brought about an erosion of technological discipline in industry. According to industrial officials, the introduction of elections for plant managers was one aspect of a more widespread process of democratization that was unaccompanied by any corresponding increase in social responsibility, including responsibility for the environment.[17]

Communism has left the people of the former USSR (FSU) with a catastrophic legacy of environmental devastation unprecedented in the history of industrial civilization. As Murray Feshbach and Alfred Friendly Jr. state in their book Ecocide in the USSR;

> "When historians finally conduct an autopsy on Soviet communism, they may reach the verdict of death by ecocide. No other great industrial civilization so systematically and so long poisoned its air, land, water and people. None so loudly proclaiming its efforts to improve public health and protect nature so degraded both."

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[16] Douglas Stanglin, "Toxic Wasteland," U.S. News & World Report, 132.
[17] Golitsyn, 34.

The 290 million people of the FSU have been left to breathe poisoned air, eat poisoned food, and drink poisoned water. According to a report published in 1989 by the USSR State Committee for Environmental Protection (Goskompriroda), 290 areas, totaling 3.7 million square kilometers and containing about a quarter of the Soviet population, were considered to be at environmental risk.[18]

More recent statistics show that in Russia alone, some 70 million out of 190 million people living in 103 cities breathe air that is polluted with at least 10 times the allowed limit of dangerous chemicals. The infant mortality rate nationwide is 2.4 to 2.5 times greater than that of the industrialized nations of the West and in many Russian cities, life expectancy rarely exceeds 65 years.[19] A dual legacy of poverty and environmental destruction has all but forced the former republics to chose between rebuilding their economies or repairing the ecological damage that threatens not only the health and well-being of millions, but global environmental integrity as well.

The brunt of ecological devastation has been borne by the Russian Federation. Pollution-intensive industrial development, combined with the irresponsible dumping of untreated wastes into the region's water system, has all but rendered European Russia's water supply undrinkable. The state of Russia's atmosphere is no better; using antiquated production technology, Russian industries produce up to twice as much pollution per unit of output as

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[18] Pryde, 2.
[19] John Massey Stewart, ed., The Soviet Environment: Problems, Policies, and Politics (Cambridge: Cambridge University Press, 1992), 223.

Western industries do.[20] Thirty-six cities, half of which are located in Siberia, are listed as having unacceptably high levels of atmospheric pollutants. The main airborne pollutants include carbon monoxide (CO), sulfur dioxide (SO2) and nitrogen oxides, by-products from the burning of fossil fuels that combine with water in the atmosphere to produce acid rain. Soil degradation, desertification, deforestation, and an increasing threat of bio-diversity loss further compounds Russia's environmental situation.

The extensive and irresponsible exploitation of natural resources, and the pollution-intensive processing of mineral wealth, as well as the wide scale dumping of untreated hazardous and toxic wastes has irrevocably scarred Siberia's pristine ecology. An emphasis upon raw material extraction and energy production has resulted in a disproportionate number of Russia's most polluted cities being located within the Siberian region.

The processing of nickel, copper, aluminum, and other minerals has drastically increased the level of atmospheric pollution in Siberia. The problem is compounded further by an almost exclusive reliance upon highly-polluting lignite coal as a source for energy production. With 16 cities registering atmospheric pollutants 10 times above the nationally accepted average, air pollution is now considered to pose the gravest threat to human health east of the Urals.[21] The city of Noril'sk, for example, is constantly covered in smoke from three huge nickel smelters. Around 90 days every year the level of toxic pollutants in the air is so high that inhabitants are advised to stay indoors. Thirty days each year the air pollution is so

[20] Pryde, 19.
[21] French, 403-4.

heavy that to go outdoors means the risk of acute injury.[22] The emission of sulfur dioxide from the Noril'sk combine has increased in the last few years and is now 2.3 to 2.4 million tons per year; more than twenty times the total sulfur dioxide emission of Sweden and nearly equal to that of Canada.[23]

While the threat to human health in many industrial cities in Siberia is acute, a greater destruction has been visited upon surrounding forest ecosystems. Acid rain has destroyed or disrupted millions of hectares of forest throughout the region. Around the city of Noril'sk, 500,000 hectares of forest are already dead or dying. Cynically referred to by residents as Russia's "Black Forests," the situation at Noril'sk is fairly representative of that of other industrial cities in Siberia.

The effect of industrial pollution is not limited solely to the handful of cities that pocket the Siberian region. Heavy industrial activity in Siberia and European Russia have contributed significantly to a seasonal phenomenon called "Arctic Haze." During summer, the prevailing Eurasian wind flow into the Arctic is south-east, but in winter, the seasonal low pressure areas occurring over Europe combine with persistent high pressure over Siberia to trigger strong air surges that transport large quantities of polluted air into the Arctic region.[24] The resulting acid rain kills off the thin vegetative layer essential to maintaining both the fragile food chain of the tundra and permafrost integrity. Concentrations of large amounts of particulate matter in the atmosphere and snow cover traps solar radiation closer to the Arctic's surface, significantly

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[22] "The Taiga: A Treasure? Or Timber and Trash?" Taiga Rescue Network, Summer 1993, 39.
[23] Stewart, The Soviet Environment, 226.
[24] Soroos, 37.

warming the Arctic troposphere. Warmer conditions would cause the permafrost line to recede deeper into the ground, thereby reducing moisture levels in the tundra and threatening the survival of the regions' flora and fauna. Although industrial plants in Europe and the United States contribute to the Arctic Haze phenomenon, Canadian scientists believe the smelters at Noril'sk to be a significant contributor and, most recently, U.S. scientists identified suspended particles in central Alaska as being consistent with the nickel and other heavy metals processed at Noril'sk.[25]

Compounding the stress on the environment of the Far North has been the indiscriminate dumping of nuclear reactors and other radioactive waste into the Arctic Ocean. Long used by the Soviet Navy as a graveyard for decommissioned vessels, several rotting nuclear-powered ships lie anchored a few miles from Murmansk, steadily leaking radioactive waste into the frigid waters of the Arctic. At least one nuclear submarine is known to have gone down off the coast of Novaya Zemlya, its reactor all but forgotten.[26]

The Soviet Navy also has also disposed of a considerable amount of what it describes as "low-level" radioactive waste in the Sea of Japan. Through the action of Western environmental organization Greenpeace and pressures by the Japanese government, the practice has been temporarily halted. The Russian government has stated that if it is unable to find a suitable means of containing the waste it may in fact resume dumping in the near future. In the Far Eastern city of Petropavlovsk, radioactive waste has been found in the local dump.

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[25] Stewart, The Soviet Environment, 227.
[26] Stanglin, 130.

Plans currently exist to expand the permanent radioactive waste disposal site on Shkotovo Peninsula by 1995.[27]

The situation surrounding the Russian government's decision to not only expand its disposal facilities in the Pacific but also its threat to resume the dumping of radioactive waste in the Sea of Japan, despite the international attention and condemnation such actions have received in the past, owes much to Russia's current economic situation. Unable, perhaps even unwilling, to finance the construction of state-of-the-art disposal facilities, the Russian government finds itself in the unenviable position of either resorting to sub-standard storage facilities on the mainland or to dumping, secretively of course, radioactive waste in international waters. The government's willingness to even consider resorting to such an environmentally devastating solution suggests that in Russia, as has often been the case in many other nations, environmental considerations are quickly sacrificed for short-term economic benefit. The jettisoning of untreated waste into the marine environment frees up capital which could otherwise be invested in developing efficient, long-term waste storage and disposal facilities. If the Russian government does indeed decide to pursue this option, its rationale for doing so, however reprehensive, is justifiable; Money not spent on waste disposal can now be invested into developing and stabilizing the Russian economy which, once productive, will generate revenue that can then be invested in efficient waste management technologies. By "robbing Peter to pay Paul," the Russian government is gambling both its future economic and

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[27] Douglas Pasternak, "Moscows Dirty Secrets," U.S. News & World Report, 10 February 1992.

ecological stability; the effects of radioactive waste on the marine environment cannot be easily reversed, inevitably effecting the maritime industries of Russia, North and South Korea, and Japan. Should the economic growth which will provide the capital for waste management never materialize, dumping will undoubtedly continue. On the other hand, if better waste technologies are implemented at some future point, the damage already done to the ecosystem will adversely affect the development of industries (i.e., fishing) and areas of the Russian Far East heavily dependent upon the Sea of Japan for economic survival.

This sort of gamble on the part of the Russian government is nothing new. The Soviets routinely ignored environmental considerations for the sake of economic development, believing that they could rectify the damage done in the present with better technologies in the future. In the eyes of Soviet planners, the environment, like the Soviet people, was expected to make sacrifices for the greater good of the Soviet nation. Despite the ecological destruction which has been systematically perpetrated on Siberia since the inception of the Soviet state, and despite the rather obvious environmental repercussions which have made themselves clearly evident to both the Soviet and Russian leadership, Siberia continues to be considered a "country in reserve." A region full of natural resources to be exploited for the economic benefit of the state. A region too vast to really be adversely affected by policies of industrialization and economic development. And yet despite all the evidence to the contrary, why do such attitudes about Siberia persist?

Although economic considerations have undoubtedly always played a part in determining the course of official policy, the rather ambivalent attitude taken by the Russian government towards waste disposal in the Pacific, and towards the Siberian environment in general, reflects the deep-rooted tendency of government to look to only short-term economic and political opportunities. In this regard, the Russian government is no different than those of the West and developing nations; environmental considerations have always (and regrettably, will continue) taken a back seat to economic priorities. Yet the environmental devastation wrought by the Soviet Union, continued almost unwittingly by the Russian Federation, has far exceeded that of any other nation in history. In only 75 years, this nation has all but destroyed its ecosystem, mortgaging the future health of both its economy and people. And although officially recognizing the dire ecological situation the nation has been placed in, the Russian leadership continues to move along in the same direction.

The Russian proclivity to carelessly throw environmental considerations aside cannot be attributed simply to ignorance on the part of the decision makers, for they are all far better informed than the average citizen concerning the environmental impacts their decisions will have. Nor cannot it be rationalized away through the almost religious belief among many Russians, from bureaucrat to factory worker, that science will somehow provide a remedy in the future for whatever environmental devastation has been inflicted in the name of "necessity". Disregard for the environment, at least at the official level, is just one of the many legacies inherited from the totalitarian Soviet political establishment. The emphasis which was placed

upon the rapid industrialization and economic development of the Soviet nation precluded any considerations regarding environmental preservation. Complicated even further by its almost complete separation from Soviet society, which made it virtually unaccountable to the Soviet people for the consequences of its actions, the state paid only the most superficial attention to issues concerning the ecological health of the nation.

One would be hard pressed to suggest, let alone prove, that the conditions engendered by the totalitarian state created under Stalin and perpetuated, in one form or another, by his successors bore little responsibility for relegating environmental considerations to position of non-importance in the formulation of economic policy. Indeed it is the creation of this kind of centralized, goal-oriented decision making which virtually guaranteed conservation a role of nominal importance in Soviet policy making. Yet despite the supposed "totalitarian" nature of the system, the adverse effects of the excesses of economic development succeeded in attracting attention within the upper echelons of the Soviet decision making establishment. As evidenced by the 1949 Resolution on Air Pollution adopted by the USSR Council of Ministers and the series of environmental laws passed by each of the fifteen republics between 1957 and 1964, the environmental repercussions of rapid Soviet development were gradually being acknowledged. The passing of legislation concerning the protection of water, timber and wildlife resources, the regulation of sewage and limitation of air pollution and soil erosion, while focusing on short-term rather than long-term goals, suggest that environmental considerations were not entirely absent in the minds of Soviet decision makers. While much of

this legislation ultimately came to be circumvented and ignored by the various offending ministries, the fact of its existence suggests that perhaps the Soviet political establishment was not as uniform and "totalitarian" as Western theorists assumed. Concern for the environmental impacts of development co-existed with imperative for industrialization, but its proponents were often defeated during the struggle within the bureaucratic establishment to determine overriding national priorities.

Bureaucratic politics notwithstanding, the drafting and adoption of environmental legislation upon the initiative of governing bodies has a formidable consequence upon the nature of this analysis. The objective has been to focus upon the growth of public participation in the Soviet, and now Russian, political process through an examination of environmentalism as a form of interest articulation. The "totalitarian" nature of the early Soviet period essentially precluded participation by the average citizen in the political process, at least to the extent in which they could directly influence the formation of environmental policy. Yet at this time, the debate between economic development and environmentalism was just beginning to emerge within the Soviet bureaucratic establishment. In admitting the necessity for environmental preservation and, more importantly, acknowledging the negative repercussions of Soviet development policy, the political establishment laid down the framework for a discussion within the bureaucratic establishment in which different sets of individuals and organizations, or "groups," would find themselves articulating their particular shared "interest" in an attempt to influence the formation of official economic and/or environmental policy. While competition

between different "interest" groups within the Soviet bureaucracy was nothing new, the debate which arose around environmental preservation would expand beyond the confines of the establishment, finding enthusiastic support among a populace long excluded from the political process.

It was precisely this combination of bureaucratic struggle and the slow re-emergence of the Soviet intelligentsia from the suppression of the Stalinist era which initiated an irreversible process towards political participation by a supposed "subject" population. It would be this "subject" population which would eventually succeed in placing environmental issues on both the Soviet, and now Russian, political agenda. It would be this "subject" population, rallying around the environmentalist cause, which would participate in bringing about the dissolution of the Soviet state. And it is this same population which, having learned the lessons of environmental activism, is still undergoing its haphazard initiation into the process of political democratization. Environmentalism during the Soviet period was to cut its teeth on the issue of the construction of the Baikalsk Pulp and Paper Plant on the eastern shore of Lake Baikal in Eastern Siberia. Opposition to the construction of this plant, shared by members of the Soviet intelligentsia and the public, would serve to galvanize opposition to the rapacious nature of Soviet economic development and would bring the issue of environmental preservation to the forefront of Soviet politics.

CHAPTER III

THE BAIKAL AWAKENING:

THE ROLE OF THE SOVIET INTELLIGENTSIA IN RAISING ENVIRONMENTAL AWARENESS

The 1960s witnessed a quiet revolution in environmental awareness. Relatively free from the terror and suppression that characterized the Stalin period, members of the Soviet intelligentsia began increasing to question the environmental costs of rapid economic development. Members of the scientific community were among the first to become aware of the potential disruption Soviet economic policy posed to environmental integrity and were among the most aggressive advocates of pollution abatement and conservation programs.[1] Soviet resource and industrial development plans rarely incorporated what in the West is termed an "environmental impact statement" prior to project implementation. Even if such studies were carried out, unfavorable conclusions were often dismissed outright. Conditioned by five-year plans and reinforced by an inflexible bureaucratic mind set, the completion of the plan remained pre-eminent in the minds of Soviet planners; the environmental repercussions could be dealt with later, if at all.

[1] Kelley et al., 130.

Even among the scientifice stablishment, opinions about the pace of industrial development were subtly divided. The active role of scientists and geographers in promoting environmental awareness did not necessarily mean that they opposed further industrial and economic development. Many scientists spoke of the rational use of nature, of achieving some sort of balance between exploitation and conservation to alleviate the worst offenses without limiting economic growth.[2] Regardless, the dangers that reckless industrial development posed to the environment were openly admitted, and scientists from other fields increasingly voiced their support. More than any other group, the scientific establishment played a pivotal role in raising environmental awareness in the 1960s and, although smothered by a bureaucratic structure that commanded a begrudging allegiance of dependency, emerged in the forefront of the Soviet environmental movement.

While the often ignored voices of the scientific establishment cautioned against the environmental consequences of reckless development, it was the threat to Russia's magnificent Lake Baikal, the world's oldest (25 to 30 million years old) and deepest (1,637 meters, or more than a mile) body of fresh water, that sparked the beginning of a nation-wide environmental movement. In open and active opposition to Moscow's central planners, the fight to save Lake Baikal fostered the growth of grassroots environmental and political activism, in itself indicative of the emergence of a civil society inherently distrustful and independent of central authority. Lake Baikal would serve as the progenitor of environmental movements that would

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[2] Ibid., 131.

sweep the nation in the latter part of the glasnost era, assuming greater nationalist aspirations that would contribute significantly to the breakup of the USSR.

Located in the Far Eastern region of the Russian Federation, just north of the Mongolian border, Lake Baikal is 400 miles long and 4 miles wide. The entire Baikal watershed encompasses an area roughly the size of France.[3] Fed by 338 tributaries, the lake contains 1/5th (almost 20 percent) of the world's fresh water resources. It is estimated that at 125 liters per person per day, Baikal could support the entire earth's population for well over one hundred years.[4] Lake Baikal's significance is not just its size, however, but rather its unique biology. Biologically, Baikal is best known for its Nerpa, or fresh water seal. Believed to have made its way to the lake during the last ice age, the Nerpa is the world's only fresh water seal and is endemic to Baikal. Beneath the waters are the Omul, a variety of whitefish that Russians consider a delicacy and is an indispensable part of the diet of many who reside within the watershed. Baikal's rich marine life also includes a fish eating flatworm about a foot and a half long known as the Golomyanka and a variety of green sponges, many of which are normally salt water fauna, which carpet the lake's bottom. Ecologists maintain that of all the species of flora and fauna to be found in the Baikal watershed, 70 percent (1,083) are to be

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[3] Ibid., 83.
[4] Ruben Mnatsakanian, Environmental Legacy of the Former Soviet Republics (Edinburgh: University of Edinburgh Press, 1992), 180.

found nowhere else in the world, making Lake Baikal an object of worldwide scientific importance.[5]

Among them are many species of zooplankton, for example, a species that plays a key role in maintaining the ecological integrity of the lake--the Epishura, a tiny crustacean which feeds off of bacteria and plankton algae. Functioning as a powerful biological filter, the Epishura is capable of filtering about 460 cubic kilometers of water a year, seven times higher than the amount of water contributed annually by Baikal's tributaries.[6] As a result, Baikal's waters are believed to be among the purest in the world; a fact that would eventually spark the interest of Soviet industry.

Culturally, Lake Baikal has always held a deep spiritual significance to both its Russian and Buryat inhabitants. Its various winds have their names and myths, and it is not uncommon for fishermen to give up symbolic offerings of vodka to the various "gods" that inhabit Baikal's depths, hoping to ensure safe passage across Baikal's often turbulent waters.[7] All Russian school children are taught that Lake Baikal is special and, for many, a trip to its shores is a dream of a lifetime. Commonly referred to as the "Pearl of Siberia" or the "Sacred Sea", Lake Baikal can almost be considered to be a cornerstone of Russian identity.

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[5] Tapan Das, "Siberia's Lake Baikal," World Press Review, 1 June 1991, 44.
[6] Ze'ev Wolfson, "Ecological Problems as National Problems: Lake Sevan in Armenia, Lake Baikal, and the Volga," Environmental Press Review, 1 January 1987, 8.
[7] Donald Belt, "The World's Great Lake," National Geographic, 1 June 1992, 28.

Until the latter part of this century, the ecological integrity of the Baikal watershed went fairly undisturbed, surviving even Stalin's "Great Campaign for the Transformation of Nature" which devastated so many other regions of Siberia in the 1930s. Human settlements were limited to only a handful of small towns and villages scattered along the Lake's shoreline.[8] Despite being intersected by the Trans-Siberian Railway around its southern shore and the BAM (Baikal-Amur Mainline) railway to the north, the region's economy was limited primarily to small-scale fishing and agrarian activities. While a few relatively small logging and industrial processing operations were established in the region during Stalin's reign, their cumulative environmental impact on Baikal was never significant enough to warrant any considerable attention.[9]

A greater threat to the ecological integrity of Baikal first arose in July of 1954 when a group of scientists and economic planners arrived with instructions from Moscow to determine a site for the construction of two cellulose mills in the Baikal Basin. Experts in the group believed that the nearly mineral-free waters of Lake Baikal, when heated and run through the pulp of Siberian pines, would produce a "super-cellulose" that could be used to make exceptionally durable tires for Soviet jet aircraft.[10] Some chemical pollution of the lake would

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[8] Stewart, "Great Lake," 58.
[9] James Ridgeway, "Environmental Devastation in the Soviet Union," Multinational Monitor, 8 September 1990, 11.
[10] Belt, 8.

undoubtedly result but it was deemed to be an acceptable consequence of Cold War necessity.[11]

Urged on by the Ministry of Timber, Paper, and Woodworking, Soviet planners decided in 1957 to permit the construction of the two plants, one at the southern tip of the lake at Baikalsk, and a smaller one on the Selenga river. Construction plans were made public in 1958, but it wasn't until 1960 that the first conservationist outcry came from a local writer, who cautioned in poorly circulated essay published in Ulan-Ude that the mills would have serious environmental consequences.[12] That same year, the Soviet government issued a decree mandating that all industries located along the lake or its tributaries install purification equipment before initiating operations.[13] In clear violation of this enactment, plant officials at Baikalsk began operations before the purification facilities were completed. To avoid the plant's closure, officials of the Ministry of Timber, Paper and Woodworking requested that emission standards be "temporarily" lowered until the facilities were completed. Out-maneuvering and out-lobbying the state agencies concerned with various aspects of environmental protection, these "temporary" standards soon became the norm for the Baikalsk plant. The gradual deterioration of Baikal's waters had nothing to do with inadequate legislation. In fact, the Soviet government passed several decrees concerning industrial

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[11] Then-premier Nikita Khrushchev is said to have received information that the Americans were building a similar cellulose plant in Florida. To this he is reported to have declared, "Then Baikal too must work!" (Ibid.)
[12] Kelley et al., 174.
[13] Ibid., 175.

pollution within the basin. If these regulations had been enforced, however, much of the deterioration that presently afflicts Baikal would have been avoided. It would take a new-found environmental awareness among the Soviet literary and scientific intelligentsia to push the issue of Lake Baikal's preservation onto the Soviet policy making agenda.

The first scientific warning to reach a national audience came in 1961 from G.I. Galazii, the highly respected director of the Limnological Institute of the Siberian branch of the Academy of Sciences, who cautioned that discharges from the plant would not only disrupt Baikal's delicate ecological balance, but also endanger the water supply of the nearby city of Irkutsk.[14] Writing in Komsomol'skaya Pravda, the major organ of the Soviet youth group, G.I. Galazii's warnings went largely ignored by the Ministry of Timber, Paper and Woodworking. The Ministry promised to raise the effluent to drinking water standards, producing water a good deal less pure than what was found naturally in the lake.[15] Officials also pointed to the existence of extensive environmental regulations designed to safeguard the integrity of the lake. But as Galazii was quick to point out, Soviet environmental legislation was essentially based upon the principle of establishing pollution "norms" or effluent standards. The assumption underlying this concept would prove to have disastrous consequences, since in condoning nominal pollution it also assured the eventual destruction of the environment. As Galazii is said

[14] Thomas B. Rainey, "Siberian Writers and the Struggle to Save Lake Baikal," Environmental History Review 15 (Spring 1991): 51.
[15] Ibid.

to have remarked, "Even the slowest drip will fill the pail."[16] Baikal's frigid waters, slow turnover rate, and permanent atmospheric inversion virtually guaranteed that any pollutant introduced into the lake's environs would disrupt the delicate ecological balance of the entire watershed. Underscoring Dr. Galazii's warnings was the discovery that the plant was being built on the precise spot were the famous Verninsky earthquake had caused the lake to engulf 35 acres of shoreline in the 19th century.[17]The plant would be located in a seismically active region. Despite this knowledge, authorities continued the project, drawing up new plans for earthquake-resistant aluminum and glass buildings supported by steel piles. Regardless, the buildings would still be vulnerable to the major earthquakes that occur there once or twice a century.[18]

Other scientists, often from other fields, also voiced their concern about the project. In 1962, physicist and human rights activist Andrei Sakharov and a group of other noted scientists traveled to Moscow to take up the issue directly with Khrushchev.[19] Exerting influence among the higher levels of the Soviet policy establishment, individual scientists were able to get government officials to at least consider some of the more pressing issues facing Baikal. The ability for such noted scientists and activists like Sakharov to get government officials to acknowledge the adverse effects of the Baikalsk Pulp and Paper Plant had more to do with

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[16] G. Gordon Davis, "Looking at Long-Term Solutions for Lake Baikal," Surviving Together: A Quarterly on Grassroots Cooperation in Eurasia 11 (Winter 1993): 36.
[17] Andrei Sakharov, "Who Murdered Lake Baikal?" Time Magazine, 21 May 1990, 55.
[18] Ibid.
[19] Ridgeway, 14.

their respected position within the Soviet scientific establishment than with a growing sensitivity to environmental issues on the part of bureaucratic policy makers. Generally perceived as being indispensable because of their scientific accomplishments (Sakharov was one of the "co-fathers" of the Soviet hydrogen bomb), celebrated scientists were often allowed greater leeway in expressing their personal convictions than most ordinary Soviet citizens. Often holding strong moral convictions, scientists-activists such as Sakharov confronted the many injustices of official state policy, using their positions of relative impunity to openly criticize the Soviet establishment. While often just "voices in the wilderness," the opinions they voiced on issues such as Baikal were often reflective of the greater sentiment of Soviet society. Whether due to a sense of moral obligation or intellectual haughtiness, many scientists viewed themselves as mouthpieces for a society largely silenced by a state policy of censorship and terror. Although the Soviet state had nearly succeeded in suppressing all open dissidence among the population at large, it could not, nor could it afford, to silence the intelligentsia. As was the case in Tsarist Russia, Soviet intellectuals once again rose to take up the banner of protest and reform on behalf of a public silenced by authoritarianism and marginalized from the realm of political power.

By 1962, the movement to save Baikal was on the verge of going national. A growing number of scientists, writers, and later, ordinary citizens banded together to oppose the plant, signaling the beginning of an environmental movement that was to provide the foundation for future Soviet grass-roots activism. Although their initial protests were largely ignored as

Moscow proceeded to construct the Baikalsk plant, an environmental movement was born nonetheless, and for the first time in 40 years, Russian society openly began to voice its opposition to official Soviet policies.

The scientific establishment was never entirely free of the pressures of Soviet political authority; many were beholden to it for their positions and avid supporters of the regime's political ideals and policies. Some science institutions received their funding directly from industrial enterprises within the region and, logically, saw no problem with lowering emission standards "now and again". Ideological divisions within the scientific establishment were common, with each "faction" within the "group" aspiring to have its particular viewpoint recognized as being the dominant opinion. To borrow terminology from comparativist H. Gordon Skilling, the scientific establishment was an "occupational" group which, while they shared a community of interests on certain issues (substantial cohesiveness), they were also marked by sharp clashes of opinion on others (internal differentiation).[20] The Soviet scientific establishment was an occupational group that within itself was divided into "opinion" groups, possessing either "conservative" or "liberal-reformist" elements. While opinion groups stressing the preservation of Baikal and a cessation to the destructive activities around the lake may not have had direct access to top decision makers, it could be logical to assume that they may have been able to indirectly influence the formation of policy through the persuasion of individuals within the lower levels of the political establishment.

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[20] Skilling & Griffiths, 384.

The scientific establishment's dependence on the Soviet bureaucratic machine for funding and project support often commanded a begrudging allegiance even at the highest levels. During the construction of the plant at Baikalsk, Mstislav Keldysh, then president of the USSR Academy of Sciences, was asked by Prime Minister Alexei Kosygin, "What does the academy recommend? If the safeguards aren't reliable, we'll stop construction." Keldysh quoted a report that the water-purification system and other safeguards were completely reliable, neglecting to mention the warnings of G.I. Galazii and others, and left the matter at that.[21] Although he may have acted in good faith, it is far more likely that his stand was influenced by the academy's dependence on the bureaucratic machine. Keldysh, like many others in the scientific community, had been conditioned to respect the establishment and ignore the warnings of whistle blowers.

Nonetheless, scientists did succeed in raising environmental awareness, at least among Soviet policy makers. The first attacks on the Baikalsk plant thus originated with knowledgeable and concerned scientists who, although respected, lacked a established means of shaping and influencing public opinion. The continued arrogance and evasiveness of the Ministry in charge of the Baikalsk plant, however, would soon draw some of the Soviet Union's pre-eminent authors into the struggle to save Lake Baikal.

For generations, fiction writers have served as the social conscience of the Soviet Union. It reflects a tradition within Russian society that predates the Revolution of 1917.

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[21] Sakharov, 55.

Contemporary writers, much like Tolstoy, Dostoevsky, or Chekhov, view literature as a way to transmit moral values and to comment upon major issues of the day. Often operating under enormous political pressure and the threat or censorship or worse, Soviet writers have managed to critique virtually every major social problem of Soviet society. Russian writers accept the burden of responsibility for the moral health of their society, in way quite different than is customary in the West.[22] Russian literature has served the nation as the kind of public forum that political culture and government censorship have historically denied the Russian people.

Therefore, it is not surprising to find that Soviet writers quickly assumed the moral leadership in the fight to save Lake Baikal. While Soviet scientists could provide the scientific facts and figures that so impressed policy makers, members of the Soviet literary intelligentsia were primarily responsible for raising environmental awareness throughout Soviet society. The effect of this unacknowledged partnership between Soviet scientists and writers, as well as the writers attempts to expand the fight for Baikal to Soviet society, signified the emergence of a broad alliance of people from divergent backgrounds united in their opposition to an official policy. While there were no public protests and groups of individuals did not "march on the Kremlin," the "Baikal Awakening" cut across conservative-liberal lines and provided a cause which would serve to further undo the social atomization institutionalized by Stalinism. Still very much in its nascent stages, the almost accidental collusion of two intellectually distinct

[22] Rainey, 48.

groups sharing a common social concern (both represented within the official political establishment) represented what can be considered to be a fundamental prerequisite for civil society; the recognition of a mutual interest and cooperation articulating that interest to an unresponsive political authority. Although no evidence exists regarding the formation of an official or semi-official association between the two groups, members of each group were aware of the efforts of the other. Numerous magazine and journal articles, critical of Baikal policy, repeatedly reference the findings and efforts of scientists advocating a cessation to the destruction of the Lake's environs.[23] Based upon such evidence, the grounds for speculation concerning the interaction between writers and scientists appears to be lukewarm at best. Yet there may be an abundance of information, information suggesting that a mutual concern was shared and communicated between these two groups, information such as personal correspondences, letters-to-the-editor, chance conversations, which were either unavailable for review or have been lost forever.

Judging by the controversy that the Baikalsk Pulp and Paper Plant aroused among the Soviet intelligentsia and population, it seems difficult to believe that communication between activists within the scientific and literary establishment, especially given the greater latitudes afforded to them for personal expression, never occurred.

Articles by noted scientists concerning the uniqueness of Baikal and the need for its preservation were often published in various scientific journals, but their influence in sparking

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[23] Ibid., 52.

public awareness was limited due to the specific audience these journals targeted. In the late 1950s and 1960s, however, discussion about Baikal spread from scientific journals to more popular journals and newspapers such as Literaturnaya gazeta (Litgazet), Novii Mir, and Komsomol'skaya Pravda. Litgazet, then considered a rather conservative organ of the Soviet Writers Union, launched a series of attacks on the Ministry of Timber, Paper and Woodworking.[24] Litgazet was soon joined by Komsomol'skaya Pravda in a running debate with the Ministry over its plans, a debate which quickly spread into such mass circulation dailies like Pravda and Ivestiya.

The debate culminated in May 1966, with the publication of an outspoken open letter signed by over thirty distinguished scientists, writers and other personalities demanding that the government dismantle the cellulose mills within the Baikal basin and take immediate steps to protect the lake. As American geographer Philip Pryde noted, this letter was "one of the most dramatic and noteworthy public appeals on behalf of natural resource conservation which had ever been publicized by the Soviet news media."[25]

This public appeal to Soviet authorities was preceded by an impassioned defense of Lake Baikal by Nobel prizewinner Mikhail Sholokhov, who complained bitterly at the 23rd Communist Party Congress about the potential devastation that would be visited upon Baikal by polluting economic ministries.[26] While the more conservative Sholokhov would later go on

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[24] Ibid.
[25] Philip Pryde, Conservation in the Soviet Union (Cambridge: Cambridge University Press, n.d.), 148.
[26] Pravda (Moscow), 2 April 1966.

to urge the Writers Union to clamp down on some of his more outspoken colleagues of the "thaw" period, his opposition to the reckless development and exploitation of Lake Baikal shows the extent to which environmental awareness had cut across the ideological lines of the Soviet intelligentsia.

Between 1966 and 1969, the combined pressure from both the literary and scientific establishment pushed the preservation of Baikal onto the highest levels of Soviet policy making. In February 1969, the USSR Council of Ministers issued a series of stern regulations for the creation of a water conservation zone around Lake Baikal. This enactment banned timber cutting on slopes steeper than 25 degrees, mandated the removal of sunken logs from river and stream beds, and severely restricted log rafting across Baikal and other waterways. The new regulations also applied to the cellulose mills within the region, which were ordered to enlarge purification facilities.[27]

This milestone law signified that, at last, the Soviet Union's highest authorities had recognized the threat to Baikal and were determined to do something about it. The Ministry of Forestry and the Ministry of Timber, Paper and Woodworking, however, largely ignored the regulations. Cellulose mills and logging practices continued to pollute the lake and local enterprises opted to pay the relatively minor fines imposed by the regulations than to implement the more costly pollution abatement measures that might prevent them from meeting their production quotas. In the summer of 1970, a report which appeared in Komsomol'skaya

[27] Izvestiya (Moscow), 8 February 1969.

Pravda noted that pollution levels were greater than in 1969 when the new regulations supposedly went into effect.[28]

Ministerial evasiveness and evidence of mounting pollution prompted an even tougher enactment on the protection of Baikal in September of 1971.[29] This time, the USSR Council of Ministers was joined by the Communist Party Central Committee, indicating that the preservation of Lake Baikal had finally provoked a response from the Soviet Union's top leadership. Although the 1971 enactment primarily repeated earlier instructions, it did order the USSR People's Control Committee to monitor the ministries compliance to the central government's regulations concerning Lake Baikal's water quality. The offending ministries continued to evade and resist, prompting the central government, in late 1974, to issue even stricter and more specific regulations.

Even with the best environmental intentions, Soviet officials had to overcome bureaucratic inertia and vested ministerial interests at virtually every level in order to implement effective environmental policies. Skilled at the practice of bureaucratic politics and exploiting loopholes in environmental legislation, many of the polluting industries in the Baikal watershed managed to circumvent government regulations. Despite the enforcement efforts of central control agencies and the Ministry of Land Reclamation and Water Management, the agency then responsible for water quality, the ecological integrity of Lake Baikal continued to

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[28] Komsomol'skaya pravda (n.p.), 11 August 1970.
[29] Rainey, 60.

deteriorate. The bureaucratic establishment could simply afford to ignore, or at least delay, the implementation and enforcement of any government enactment concerning Baikal. The enormity of the bureaucratic structure enveloped every aspect of Soviet society. The institutions which comprised it carved out their own political and economic fiefdoms and, when not in competition with one another, jealously guarded their "territory" from intrusion by central political authorities. Over time, the various economic and political institutions which comprised the Soviet bureaucracy were beholden to no one. The exercise of power could no longer be considered the exclusive domain of the central political leadership. No longer able (or willing) to control these institutions through terror, the political establishment could often only count upon the good intentions of the various ministries to carry out the policy in question.

Urged on by Siberian writers and scientists, the central government issued yet another enactment, its third, in 1977. Although the 1977 enactment would go largely unfulfilled much like its 1969 and 1971 counterparts had, the fact that the preservation of Lake Baikal had reached the highest levels of Soviet policy making was testimony to the role the Siberian scientific and literary establishment had played in alerting authorities to the consequences of destructive practices employed by the economic ministries in the region. The exposure the issue was afforded within the Soviet media was crucial in raising public awareness concerning the Baikal issue. The rapid expansion of the Soviet reading public in the 1960s and 1970s, a reading public which expected writers not only to entertain but also to educate them on

important issues of the day, led to the pre-eminence of literary fiction as a public forum for the discussion of environmental issues.

In the vanguard of the fight to save Baikal were a group of Siberian writers, collectively known as the derevenshiki, or "village prose writers". Extolling the vast expanse of the Siberian taiga as the last earthly paradise, they have made the salvation of Lake Baikal the abiding moral concern of their lives. Carrying on in the pre-Revolutionary literary tradition, which was highly critical of the social costs of economic development, village prose writers stressed the harmonious relationship between man and nature, exalting the old peasant ways and morality. The Russian peasant, particularly the Siberian peasant, lived in closer harmony with nature, understanding and respecting its cycles more than the urban dweller or government bureaucrat did.

Russian nationalists more than naturalists, village prose writers viewed the assault upon nature as an assault upon the Russian identity. Environmental protection, therefore, was simply not just the protection of the Siberian landscape but the preservation of traditional mores and all that is unique to Russian culture. Although they did not reject modern civilization altogether, they possessed a firm belief that centuries-old Russian values must transcend material progress.[30] A land of freedom and opportunity, with rich resources, no history of serfdom and few social distinctions, Siberia represented the last stronghold of the "real Russia,"

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[30] John Dunlop, The Faces of Contemporary Russian Nationalism (Princeton: Princeton University Press, 1983), 120.

with Lake Baikal as its spiritual center. With strong nationalist and almost religious tones, village prose would come to exert a strong influence over the environmental awakening of the late 1960s and 1970s.

In the forefront of village prose writers was Valentin Gregoryvich Rasputin, a Siberian native whose struggle to save Baikal occupied most of his adult life. The Lake and the Angara River that flows out of it provide the natural settings for all of his major novellas and short stories.[31] Like other village prose writers, Rasputin's prose attempted to convey the virtue and moral superiority of the Siberian land and its peoples to the cynical urban populations of European Russia. The fiction of village prose writers opened up a new perception of what Siberia represented in the minds of many Moscow and Leningrad intellectuals:

> "Thus known for centuries mostly as a land of curse and exile, Siberia, due to the overwhelming influence of its writers, has been evolving in the minds of the Russian intelligentsia everywhere into a land of innocence, freedom, and moral superiority --in short, a sacred land which should be protected and preserved at all costs."[32]

Through the subtle use of allegory, Siberian writers delivered a message to the Soviet reading public; destroy Siberia for the sake of short-term economic gain and you destroy both the identity and the last great hope for the future of the Russian nation. Able to appeal to a well read Soviet population through descriptive and allegorical tales far more entertaining than the

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[31] Rainey, 48.

[32] Author G. Diment briefly reviewed Rasputin's vision of siberia in "Through Experience to Innocence: Rasputin's and Astaf'ev's Siberia"; see also Rasputin's own "Your Siberia and Mine," in Siberia on Fire, pp. 169-179.

dry technical accounts presented in scientific journals, naturalist writers could expand knowledge of the state's environmental abuses beyond the limited confines of the intellectual establishment. Reaching out to a wider audience, regardless of their social or economic position, Siberian writers contributed to the birth of an environmental movement by disseminating both factual information and a powerful message concerning the immorality of Soviet policy. Perhaps inadvertently, writers were able to further breakdown the social atomization of the Soviet state by giving the population a common cause which could provide the basis for a challenge to the political legitimacy of Soviet authority.

The threat that rapid industrialization posed to Siberia, and to the Baikal region in particular, was made apparent in the 1976 publication of Rasputin's best known novella, Farewell to Matyora. In a barely masked allegory, Rasputin questions the social costs incurred by rapid economic growth, challenging the very core assumption of Soviet development policy. The story depicts the final days of Matyora, a village on an island in (presumably) the Angara River, slated for destruction by local economic planners in order to make way for the construction of a huge hydroelectric plant. As the village is razed and the island slowly becomes engulfed in the reservoirs waters, many of the older inhabitants choose death near the graves of their ancestors rather than relocate to settlements of the "urban type." Consciously playing on the Russian word for mother, "Mat," Rasputin intends the reader to mourn not just the passing of the Siberian village of Matyora, but for "Mother Russia" itself.[33]

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[33] Rainey, 56.

Government officials were far from pleased with Rasputin's suggestion that the destruction of traditional Siberian society by communism was all but complete. Shortly after Farewell to Matyora was published, Rasputin was accosted and severely beaten by local hooligans (or KGB agents) in the streets of Irkutsk. Undaunted, Rasputin continued his advocacy on the part of Siberia and the Lake Baikal region, writing several allegorical short stories even more critical of the government's approach to modernization. Not surprisingly, a second and more severe beating was visited upon him in 1980, rendering the author incapable to resume writing for some time.[34]

The immense popularity of Rasputin's prose placed him as the leading literary figure in the struggle to save Lake Baikal. Although the popularity of village prose began to wane somewhat in the late 1980s, Rasputin has maintained his reputation and influence as an outspoken defender of Baikal's unique ecology. Rasputin, and other authors like him were instrumental in raising public awareness about the environmental issues surrounding industrial development in the Baikal basin.

Although writers held no official role in Soviet government, the greater degree of independence afforded them in comparison to the scientific establishment allowed them to exercise a largely moral influence upon the formation of environmental policy. Writers were able influence public opinion through plays, novels, short stories, or poems that possessed pointed environmental messages. Even more importantly, they were able to attack offending

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[34] Ibid.

ministries in the public press, thereby bringing the environmental debate directly to the Soviet reading public. Despite restrictions and their inability to organize political pressure groups, the role of the Soviet media should not be under-emphasized; environmentalists were able to deliver their message and focus the public's attention upon the polluting ministries.

Despite the attention that early environmental activists among the Soviet intelligentsia were able to bring to the issue of Lake Baikal, the plant continues to pose a grave ecological risk to the overall integrity of the lake. The increase in shoreline logging necessary to provide the abundant amounts of Siberian pine and larch for the cellulose-making process has resulted in the degradation of forested areas within the Baikal watershed. The timber industry has also been a leading culprit in Baikal's exploitation. Employing the use of large and highly disruptive clear cuts, loggers have cleared large areas of the seemingly inexhaustible taiga.[35] The taiga's slow regeneration rate has resulted in erosion and landslides along the watershed's more mountainous terrain, carrying vast quantities of silt into the region's waterways, eventually ending up in Baikal itself. The rafting of logs down the region's rivers and even across the lake itself has resulted in large quantities timber being "lost" or sunk. Between 1958 and 1968 alone, 1.5 million cubic meters of logs ended up at the bottom, clogging many of Baikal's tributaries.[36] As these logs decayed, bacteria depleted the water of oxygen. Some rivers are said to have become 3 to 4 meters deep in logs. Although shoreline logging was banned in 1987, it has

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[35] The Taiga is the vast, predominately coniferous forest lying immediately south of the Arctic tundra in Eurasia; effectively the same as the boreal forest, the term most frequently used in North America.
[36] Stewart, "Great Lake," 58.

been estimated that approximately 150 rivers and rivulets have disappeared due to excessive logging, and local fish, including the Omul, can no longer spawn in 50 tributaries.[37]

Water quality is further jeopardized by wide scale dumping of human waste into the lake. Over 200,000 people live along Baikal's shores: the only sewage treatment plants in the region are located in Baikalsk and Slyudyanka, 24 miles away.[38] The few hotels or "tourist stops" along the lakes western shore possess only the most primitive of sewage systems, using Baikal as both a waste receptacle and as a water supply. The threat most difficult to control is the industrial, agricultural, and human waste that flows into the lake from Mongolia, via the Selenga River.[39] Even if an agreement is reached as to how the threats to Baikal's ecosystem can be minimized, cooperation on the part of the Mongolian Republic will be essential to guarantee the environmental integrity of the region. Therefore, the task of preserving Lake Baikal becomes a trans-national one, which in itself promises to engender even further complications.

Initially constructed with purification and effluent control devices partially installed and operating far below official standards, the Baikalsk Pulp and Paper Plant has dumped an estimated 1.5 billion cubic meters of waste directly into Baikal's waters within the last 25 years.[40] Everyday the plant ejects 230,000 cubic meters of waste water and uses more than

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[37] Ibid.
[38] "Pollution debate at Vast Russian Lake," New York Times, 18 August 1993, 4 (A).
[39] Davis, 39.
[40] Belt, 33.

400,000 cubic meters of water in the cellulose-making process. Assuming that the these figures are consistent with the time-span of the plant's operation, it is estimated that over 15,000 cubic kilometers of water, more than half of the lake's total volume, has been through the plant and is no longer in its normal condition.[41] The discharge of such large amounts of waste has had a profound effect upon the lake's marine ecology.

The Epishura, the tiny crustacean largely responsible for filtering Baikal's waters, has been hardest hit. Like many endemic species, the Epishura has adapted to existence in very stable conditions in deep areas of the lake. Even in unpolluted areas near the shore, where the chemical composition or temperature of the water varies, there are no Epishura. In the course of one year, only 30 to 40 percent of the wastes (industrial and human) discharged into the lake manage to be broken down. Near Baikalsk, the pollution zone has been continuously expanding since the plant came on line in the early 1960s. In the beginning of the 1980s, the pollution zone comprised several square kilometers. The amount of dying Epishura in the zone reached between 44 to 47 percent, whereas outside of this zone the usual death rate is 0.5 to 1 percent.[42] The reduction of the Epishura population, which forms the base of the food chain, has a negative effect on the state of the entire ecosystem of the lake and not just upon the purity of Baikal's water.

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[41] Stewart, "Great Lake," 60.
[42] Wolfson, 9.

Water pollution has also taken a toll on Baikal's fresh water seal, the Nerpa. In 1987 and 1988, between 6,000 to 7,000 seals washed up on Baikal's shores, apparently victims of the same toxins responsible for the mass kills of Epishura. It is uncertain as to whether the death toll was attributable to their direct contact with pollutants in the water or whether they were poisoned via the food chain, but the staggering number of Nerpa killed underscored the delicate ecological balance that characterizes the lake. Although Soviet officials were loathe to admit it, many ecologists now believe that effluents from the Baikalsk Pulp and Paper Plant were largely responsible for the tragedy.[43]

The plant's airborne emissions make Baikalsk one of Russia's most polluted cities east of the Urals.[44] Atmospheric pollution, as well as the acid rain it engenders, threatens the rare mountain flora of nearby zapovedniki and forests along Baikal's southern tip show unmistakable signs of degradation. Baikalsk, however, is only one offender here. In 1985, industries within the Irkutsk region are believed to have released 1.2 million tons of atmospheric pollutants. In the less industrialized Buryat Republic, on the eastern and northern shores of Baikal, approximately 204,000 tons were emitted.[45] Compounding the problem is the Irkutsk-Cheremkhovo industrial area. Straddling five towns, atmospheric pollutants are carried by a westerly wind directly into the Baikal watershed. Trapped by the snow in winter,

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[43] Gary Cook, Baikal Watch Director, interview with the author, 26 October 1994, San Francisco, Earth Island Institute, San Francisco.
[44] Belt, 33.
[45] Stewart, "Great Lake," 60.

the pollutants are released directly into the lake once the spring thaw occurs. Because of heavy industrial development in the region, air pollution can be considered to pose a bigger threat to the environmental integrity of Lake Baikal than water pollution.

With environmental destruction still facing the region, the efforts of Baikal's early activists would hardly have seemed to have made any impact upon government policy at all. Yet despite the absence of so many of the basic civil liberties which constitute the Western democratic political system, liberties which allow the articulation of public concerns directly to political authority, the outcry of a few Soviet intellectuals and citizens warrants consideration. As the Soviet political system slowly began to distance itself from the practice of Stalinist terror, a handful of Soviet citizens began to test the limits of what was considered permissible in the realm of personal expression. While they were still very much disorganized and (except for the more indispensable members of the intelligentsia) never able to directly confront the perpetrators of Baikal's destruction, the environmental awareness which was slowly manifesting itself in Soviet society contained within it one of the most fundamental prerequisites for the growth of civil society; the desire to challenge the injustices of political authority.

It is difficult to conclude whether Soviet writers or scientists played the decisive role in bringing the problems of Lake Baikal to the attention of party and government. A largely utilitarian society, the Soviets had an almost mystical faith in scientific expertise. Therefore it is possible that scientists, like the ever persistent G.I. Galazii, played an even more crucial role in

convincing the government to take steps to mitigate the damage being done to the lake. Scientists, however, mostly depend upon the government for employment and project funding and thus tend to be more constrained in their criticisms of development policies. Although identifying themselves as environmentalists, many scientists preferred to take a middle-of-the-road position on the Baikal issue, cautioning that the protection of the watershed must be balanced with the wise use of its unique resources.[46] Moreover, scientists tend to express their views on the issue through technical journals and publications that are generally inaccessible to the public.

Enjoying a greater degree of freedom of expression, writers such as Valentin Rasputin were able to arouse the environmental conscious of the Soviet people, reviving their love for "Mother Russia" and shaping the development of what could tentatively be called an environmental consciousness.[47] Although writers were instrumental in laying the foundations for environmental activism among the Soviet citizenry, neither writers nor the public were able to express their concerns directly through organized interest group action typical of Western democratic systems. The activities of many of these early "environmentalists" was similar to what comparativist H. Gordon Skilling has referred to as the role of organizational, or opinion, groups in the articulation of interest in the Soviet Union. While organized by the state and dominated from within by party functionaries, organizations such as the Writers Union

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[46] Kelley et al., 132.
[47] Rainey, 59.

provided members with a platform for their activities. Since the formation of associations independent of state control were in most cases banned and freedom of expression severely restricted, membership in an organization sanctioned by the state could be used by an activist to present their attitudes and claims and, as proved to be the case among the literary and scientific establishment, to effectively exploit the institution for their purposes. Whether the individual truly believed in the preservation of Lake Baikal, or was more interested in his own personal aggrandizement within the institution, should be considered irrelevant. As Skilling noted while analyzing the role of opinion groups within the Soviet political establishment:

> "Whether organized or not, group action usually takes the form of the statements or deeds of a few outstanding individuals, who arrogate to themselves the authority to express group interests and are not selected by or authorized to act for the group."[48]

Environmental activists among the literary and scientific intelligentsia during the Soviet period then should not be looked upon as being the appointed leaders of the Baikal movement, but the only individuals capable at that time to express their personal opposition to Soviet development policy through the liberty afforded them as members of a state-sanctioned institution. Using their position within the establishment, Soviet writers and scientists were not only able to criticize, but to educate the mass of the Soviet population, to begin to promote widespread awareness to the issues surrounding Lake Baikal.

Yet the increase in environmental advocacy was only one instance in which the Soviet intelligentsia began to place itself in opposition to political authority. Within their professions,

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[48] Skilling & Griffiths, 382.

these like-minded individuals sought to create for themselves "spaces of freedom" from political control. Individuals like Andrei Sakharov, whose scientific pursuits led him to become a resister to Soviet policy, joining together with others to form a loose network of people dedicated to supporting freedom of thought and conscience. Journalists, writers, and historians who sought to preserve the integrity of their professions, and in doing so created their own "spaces of freedom" within a repressive political order.[49]

The movement within the Soviet intelligentsia towards its own intellectual liberation from the existing political establishment, how certain issues such as the preservation of Lake Baikal cut across professional and institutional lines, impacted not only the birth of environmentalism as a social movement but was indicative of some of the preconditions necessary for the development of civil society. In an effort to raise public awareness over issues routinely ignored by the Soviet establishment, the intelligentsia had become challengers to the system. They had taken the initiative for advocacy upon themselves and without even noticing it, had begun to create a public space between itself and the state where freedom could appear. At the most rudimentary level, intellectual activists were engaging in a process of asserting a personal ideology separate from that of the state. While their activities were (at least up until the Gorbachev era) hardly typical of the process of interest articulation so fundamental to the existence of Western civil society, the advocacy of individual opinions and the concerted efforts to raise awareness and seek support in the public sphere represents a

[49] Jeffrey C. Isaac, "Civil Society and the Spirit of Revolt," Dissent 15 (Summer 1993): 358.

significant step towards overcoming the social atomization of the Leninist-Stalinist system which maintained the Communist Party's hegemony over state power. The widespread appeal of such "enviro-nationalist" writer such as Rasputin or a humanitarian like Sakharov, suggests that Soviet society did indeed have mutual concerns which helped to further establish the divide between themselves and the state. As society drifted farther and farther away from its union with the state, as more and more opposition to policies such as those surrounding Baikal were voiced from responsible professionals within the establishment, the state gradually began to lose the grounds for its continued legitimacy as the dominant political system.

The struggle to save Lake Baikal, while being championed primarily by the Soviet intelligentsia before 1985, was one of many pressing social issues which served to further unite public opinion against the policies of the state. The effort to preserve Lake Baikal (reflected in the emergence of the Soviet environmental movement in the late 1980s) was the beginning of active, although as of yet disorganized, participation on the part of the Soviet citizenry in advocating an interest separate and distinct from that held by the state. Spearheaded by the intelligentsia, yet finding widespread support among the Soviet populace, environmental activism soon provided the essential grass-roots foundation for interest articulation; upon which the framework of civil society, and with it a democratic political system, could be built. It would take the initiation of Gorbachev's policy of glasnost, a policy which encouraged the formation of groups independent of government control, to bridge the gap between the public and the intelligentsia.

CHAPTER IV

GORBACHEV, GLASNOST AND THE ENVIRONMENTAL MOVEMENT

The implementation of Gorbachev's policies of glasnost and perestroika represented a watershed event for environmental politics in the Soviet Union. Although Gorbachev claimed repeatedly that the objective goal of glasnost was to be the democratization of Soviet society and the transition to a rule of law state, the expansion of political and economic participation to groups and individuals formerly excluded under the Communist state was a thinly veiled attempt to reign in the nation's flourishing second, or "underground" economy. The existence of this "second economy" was, as comparativist Moshe Lewin maintains, an indication that a civil society had in fact been steadily emerging since the 1960s in a supposedly statist society where there should have been none. Soviet society had gradually created for itself a separate social realm, virtually independent of state control. As civil society took root, it instigated changes "from below" in the social, economic, and political structures of the country. The Soviet economic model, essentially a product of the 1930s, had by now reached its limitations and was on the verge of bankrupting the country, actors within this new social realm began to seek and create solutions of their own to overcome obstacles to economic growth and access to goods and services. The Soviet political system, so deeply intertwined with the economic system and structured so as to exclude citizens from political participation, was incapable of

fully accommodating the needs, aspirations, and expectations of this new social reality.[1] The economic stagnation engendered by the Brezhnev regime and the continued vitality of the Soviet underground economy, despite the regime's repeated efforts at a crackdown, signaled to Gorbachev's economic advisors that a fundamental reform of the centralized command economy was required. The restoration of economic rationality, incorporating nuances of the market system to encourage the active participation and reintegration of individuals into the Soviet economy, was clearly in order.

Economic reform in the past had been largely administered from above, exclusively targeting the economy and excluding participation at the societal level. The new Soviet leadership soon came to the realization that economic reform that would go far enough to actually work would only be possible if actors other than the party and state participated.[2] It was therefore extremely important to stress the need for a new social environment to facilitate the creation of a vibrant economy. However, neither the creation of such an environment, nor its ability to affect genuine economic change in the overall system of economic coordination could occur without the mobilization of independent actors. So intertwined were the economic and political system that the mobilization of independent actors and the reintegration of society back into the state system would require not only economic, but political reform. Successful economic reform would become dependent upon re-politicizing the system, of involving civil society in the political process.

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[1] Lewin, 158.
[2] Feher & Arato, 10.

Glasnost and perestroika were essentially designed to facilitate the mobilization of independent actors within the system. Gorbachev's highest priority was not to introduce liberal reforms but to reinvigorate the ailing Soviet economy. The new social, and by extension economic, environment needed to achieve this objective could not be achieved without a movement or movements for the constitution of civil society. However, the Soviet leadership had to first answer for itself two essential questions: Was the need on the part of the regime to rely on these new actors greater than their desire to control them? And subsequently, should a genuine movement for the constitution of civil society emerge, would it stay within parameters acceptable to Soviet authority?[3] In typical Soviet fashion, Gorbachev attempted to create and cultivate selected elements of "civil society" and mobilize these actors on behalf of reform. The attempt to create a self-active civil society from above, keeping it within powerful but never strictly defined limits, would in itself prove to be self-defeating. Movements operating within the relative uncoerced sphere of human association that characterizes civil society would not remain within any limits acceptable to reformers from above.

Gorbachev's assumption that the stagnation that was manifest in the official economy and governing bureaucracy pervaded Soviet society as well was seriously wrong. Soviet society under Brezhnev in fact experienced great ferment, despite the corruption and lethargy that reigned in the official world. In unprecedented numbers young Soviets became contributing participants in the global youth culture, forcing the government to accept what it

[3] Ibid., 18.

could not alter. Individual citizens in countless fields plunged into innovative work, ignoring official taboos and following wherever their interests led them.[4] The gradual move to individuation, coupled with a virtual revolution in personal communication (tape recorders, VCR's, ham radios, etc.) slowly overcame the "atomization" of society imposed by V.I. Lenin and Stalin. Resourceful citizens sharing common interests were able to "network", albeit to a limited degree, with one another through legal or semi-legal means.

The emergence of these new types of networks, the informal groups they engendered, and the unofficial forms of public expression that their activities symbolized, did represent the seeds for larger-scale social mobilization. Glasnost facilitated the entry into "official" Soviet society of a bewildering range of views on virtually every major issue of the day. More importantly, glasnost allowed individuals to form informal issue-oriented organizations unaffiliated with the state.[5] What Western political scientists call "interest group articulation" began to take place on an unprecedented scale as various groups jockeyed to influence both government elite and public opinion. Filling a void left by a waning adherence to ideology, public opinion came to exert a more aggressive and potent influence on Soviet decision-making. Nowhere would this influence be more strongly felt than in the field of environmental politics.

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[4] S. Frederick Starr, "Soviet Union: A Civil Society." Foreign Policy, no. 70 (Spring 1988): 26.
[5] Marshall I. Goldman, "Environmentalism and Ethnic Awakening," Environmental Affairs 19 (n.d.): 512.

Environmental destruction was not instrumental in provoking Gorbachev's fundamental reform of Soviet society and economy, but by 1986, evidence of the crisis could no longer be ignored.[6] Perestroika and glasnost were generally perceived to be essential prerequisites first to halting, and then to reversing, the environmentally destructive practices of Soviet industry. In theory, perestroika at the policy-making level would promote the critical review and overhaul of project objectives, emphasizing how the implementation of these objectives could ultimately impact environmental integrity. Glasnost not only would increase public knowledge about the extent of the crisis, but also would endorse debate and political participation at the non-governmental level.[7]

Prior to glasnost, the articulation of environmental concerns or, for that matter, any great social issue was primarily limited to individuals within the more privileged positions of the Soviet intelligentsia. Essentially unorganized and depending more upon the power of moral persuasion more than the pressure of organized interest articulation to influence government policy, the activists of the pre-Gorbachev era could hardly be considered to be "interest groups" in the Western sense of the term. Rather, early environmental activists were an example of a larger phenomenon which was occurring within Soviet society; a phenomenon which would inevitably lead to the first vestiges of civil society. Party primacy and its institutional controls no doubt severely limited the emergence of groups that had any degree of

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[6] Rowland T. Maddock, "Perestroika, Glasnost, and Environmental Regeneration in the Soviet Union," International Environmental Affairs 3 (Summer 1991): 181.
[7] Ibid.

autonomy from the state, yet within that framework had evolved widened possibilities for group articulation. Groups, usually constituted informally of scientists or other specialists, managed to sometimes escape the power and pervasiveness of the party and defend their own interests and attitudes with some degree of independence. Moreover, these groups were able to use institutions and organizations as arenas of discussion and bases of operation, and in some cases, establish control over them.[8] These "informal groupings" of like-minded individuals, "groupings" which managed in some unorganized way to communicate (however directly or indirectly) their concerns to the political establishment provided the basis for the development of organized interest articulation in the Gorbachev era.

Franklin Griffiths, the comparativist who along with H. Gordon Skilling began to study interest articulation within the Soviet political establishment, identified a mode of analysis which used the concept of "tendency of articulation" and focused on the streams or tendencies of activity within the system as a whole rather than on the inter-relations of groups within sub-systems. Griffiths looked beyond the group dynamic, instead focusing upon the commonalties of opinions and actions outside the framework of what he referred to as the "occupational group". What types of "issues" cut across occupational group boundaries? As was demonstrated in the previous chapter, the concern over the environmental destruction of Lake Baikal was certainly prevalent among the literary and scientific intelligentsia. However, besides occasionally acknowledging one another, they hardly constituted a "group" which cut across

[8] Skilling & Griffiths, 411.

social and professional boundaries since both professions were still very much a part of their own occupational group and instances of communication between the two were rare. Yet individuals within both occupational groups shared the same concern over Lake Baikal which they independently articulated in an unorganized manner to the political leadership. This "tendency" among different occupational groups to independently "articulate" a common interest was the intermediary step between individual and organized group articulation.

The groundwork had already been laid prior to Gorbachev's reforms but it would take glasnost and perestroika to significantly bolster the development of independent environmental organizations and break down even further the social atomization which severely hampered organized group articulation. In their haste to re-establish control over a society which had out grown the Soviet economic and political system, Gorbachev's reformers had hoped to create for themselves a "civil society" which could be afforded a few more liberties and harnessed for the rejuvenation of the Soviet state. Yet this was a society which had been developing the framework for a civil society since the late 1960s. It had already established the basis for interest articulation within the scientific and literary intelligentsia, and no doubt among other occupational groups within the Soviet bureaucratic and political establishment. While constrained politically and unable to effectively work in mutually supportive roles, these groups had found a unifying cause; the preservation of Baikal and environmental reclamation. Gorbachev's reforms would gradually break down the barriers to the organization of a multitude of citizen interest groups capable of autonomous action. It would take perhaps the

world's worst nuclear mishap to galvanize the citizenry behind a common cause and assist in the development of informal environmental groups which would soon evolve to be effective articulator's of public interest on the new Soviet political landscape.

The April 26, 1986 explosion at the nuclear facility at Chernobyl breathed life into a dormant environmental movement determined to exploit its new found freedom and access to information. Groups representing those directly touched by the accident (for example, the Moscow-Chernobyl Alliance and the Veterans of the Chernobyl Atomic Power Station) politicized the grossly inadequate response to the disaster by state and regional governments.[9] Their activities in turn legitimized the campaigns of other groups against environmental decay at the local level.

At the non-governmental level, well organized official and non-official environmental groups sprung to life. Although the agenda of many of these groups varied, most tended to express similar objectives and principles--ecological glasnost, comprehensive environmental monitoring, public education, grassroots cleanups, and direct political action.[10] Many of the larger and better organized groups attempted, with varying degrees of success, to set themselves up as alternative and credible sources of information. While actively championing environmental causes at the political level, these groups also sought to inform the public about the cause and cost of environmental degradation.

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[9] Pravda (Moscow), 11 November 1989, 3.
[10] D.J. Peterson, Troubled Lands: The Legacy of Soviet Environmental Destruction (Boulder: Westview Press, 1993), 207.

The ability of these groups to influence Soviet decision-making through the careful manipulation of public opinion scored a few impressive victories. Informed public opinion forced the government in 1986 to cancel its plan to divert water from Siberian rivers southward to water the arid steppes of central Asia, a plan long opposed by scientists and ecologists on the grounds that a river diversion scheme on the scale imagined by Soviet planners would cause irrevocable damage to both the Siberian and global environment. Similarly in 1987, a water-control scheme for the Kamchatka Peninsula in the Russian Far East was thwarted in the planning stage by local activists, many of them blue-collar workers.[11] The ability of grassroots activists to mobilize the citizenry into action in itself signifies a significant accomplishment and represents a watershed in the development of civil society. Regardless of whether they were successful or not, the ability of these groups to form autonomously of the state and then articulate their common interest to political authority represented what could be termed the "self-actualization" of Soviet society. The Soviet social realm was gradually being re-politicized, re-introducing itself into the political dynamic that had so long been the exclusive domain of the party.

The new political and social environment that had been engendered by glasnost had become a means of empowering individuals, giving them a new manner by which to challenge a rigid bureaucratic system that had long since impenetrable and unaccountable to the forces of change. What victories environmental activists were able to score, through the persistent

[11] Starr, "Soviet Union", 34.

articulation of interests which were widely shared and supported by ordinary citizens throughout Soviet society, also suggests that the political establishment was indeed becoming more responsive to the demands of its subjects. If the Soviet system was as "totalitarian" as some have suggested, why would it have felt the need to react to an interest articulated to it by a supposedly "subject" population? Perhaps the political leadership had finally realized its precarious state, understanding that the system as it existed could no fulfill the expectations of the people it ruled over. In the seemingly insignificant act of reversing a decision which would have had adverse consequences for the environment, a decision which had already been approved within the higher levels of the policy making establishment and that would have been implemented if not for popular outcry, the party leadership had inadvertently acknowledged the existence of a separate and powerful social realm. Encouraged by new freedoms and a few brief successes, this new "society" was able to take on a pro-active role, demanding and expecting greater accountability from its leadership. The party, realizing that it could no longer continue to ignore pressure from "below" and still expect to survive politically, had no other choice than to gradually acquiesce to many of the demands placed upon it by environmental and other social interest groups. While it continued to fight a rear-guard action to preserve its political and social dominance and deny, through bureaucratic maneuvering, fulfilling many of the demands won by environmental activists, the Soviet system had already begun to collapse in upon itself. Environmental activism was but one of the many social forces unleashed which would ultimately contribute to the dissolution of the Soviet state.

The success of environmental groups at both the local and non-governmental level was greatly enhanced by concurrent reforms in the Russian legal system. The type of legal mechanisms traditionally viewed as fostering political responsiveness and participation are those in which government agencies develop regulations with input from the public, and private citizen actions compel government and industry compliance with environmental laws.[12] By the late 1980s, the Soviet (soon to become Russian) legal system had begun to incorporate similar mechanisms, attempting to encourage public participation in environmental decision-making and enforcement. Although these mechanisms have enjoyed limited success to date, environmental groups have been able to employ one particular mechanism to their advantage.

Article 58 of the Soviet Constitution granted the citizen the right to lodge a complaint against the actions of officials and government bodies. However, it was not until 1989 that a law was passed allowing for the implementation of Article 58. The October 1989 law, "On the Procedure of Appealing Unlawful Actions of State Administrative Bodies and Officials Infringing Upon the Rights of Citizens," gave Soviet citizens the right to lodge a complaint in court against both the collective and individual decisions of officials and state agencies. The 1989 law was limited, however, because it allowed the citizen the right to sue only if individually wronged or deprived of the opportunity to exercise the rights granted to them by law.[13]

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[12] J. Eugene Gibson, "Legal Mechanisms to Promote Public Participation in Decision Making and Enforcement of Environmental Laws in Russia" (Arlington, Va.: Winrock International Environmental Alliance, 1993), 1, photocopied.
[13] Ibid., 3.

The December 1991 revision of this law attempted to redress some of these deficiencies and increase the relative potency of citizen suits. Of particular significance to environmental groups were Articles 13 and 91 of the new law which stated that:

> "Environmental associations and other public associations which perform environmental functions have a right...to raise the question of prosecution of guilty officials and to file in court or with an arbitration tribunal lawsuits seeking compensation for damaging to citizens' health and property stemming from violations of environmental legislation." (Article 13)

and

> "Enterprises, institutions, organizations and private citizens have a right to file lawsuits in court or with an arbitration tribunal, and citizens have a right to file lawsuits in court, demanding termination of environmental harmful activities which are damaging the health and property of citizens, the economy and the environment." (Article 91)[14]

The clarification of citizen suit provisions in both the October 1989 and December 1991 laws allowed Soviet citizens to challenge the environmental transgressions of municipal governments legally for the first time. As public concern about environmental degradation increased in the late 1980s (a 1989 USSR Goskomstat survey revealed that 1 in 10 people surveyed said that the environment was the country's most serious problem) the number of suits brought against violators by both individuals and groups increased dramatically.[15] Responding to the public's concern, many politicians were quick to make a point of their

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[14] Ibid., 4.
[15] Peterson, 194.

awareness of the problem and their desire to resolve it. Likewise, political and nationalist elements within the Soviet Union increasingly began to link themselves to environmental causes, furthering their own political agenda under the guise of environmental defenders.[16] The "green" movement of the late 1980s became not only a powerful mobilizing force in Soviet society, but also a means of protesting Communist authority.

Unlike environmental organizations in the West, which generally tend to embody class and often apolitical values, many of the groups active during the glasnost period were decidedly political. While the "green" movements in the Baltic and Ukraine were indeed concerned with issues of national self-determination, environmentalism was often couched in a broader anti-Russian sentiment. As an official in the USSR Council of Ministers wrote in 1989, "The degradation of natural areas, which people identify with their national heritage, aggravates relations between ethnic groups."[17] Even in Russia itself, environmental activism often turned decidedly anti-Soviet and anti-Moscow, as regional activists attempted to break the center's "environmental colonialism."

The environmental movement in the Soviet Union, particularly within the Russian Federation, was and remains ideologically diverse, attracting individuals from all points of the political and social spectrum. Soviet journalist Viktor Yaroshenko noted that the Soviet Union had "left-greens, right-greens, eco-socialists, and even eco-fascists."[18] Many environmental

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[16] Marshall I. Goldman examines the link between nationalism and the environmental movement in the former Soviet Union in "Environmentalism and Ethnic Awakening," Environmental Affairs, vol. 19 (n.d.)
[17] A. Tsygankov, "Gde ugodno, tol'ko ne u nas," Pravitel'stvennyi vestnik, no. 20 (November 1989): 9.
[18] Peterson, 219.

organizations in the late glasnost period were directly affiliated with both moderate and radical political parties which dotted the country's political landscape following Gorbachev's repeal of Article 5 of the Soviet Constitution.[19] Environmentalism created strange and diverse bedfellows; the Ecological Society of the Soviet Union maintained links with Pamyat (Memory), for example, an extreme Russian nationalist organization often accused of anti-Semitism.[20] It should also be noted that Valentin Rasputin, the influential Siberian writer who long championed the preservation of Lake Baikal, was also associated with this organization.[21]

Despite the ideological diversity and geographic impediments to communication, large umbrella groups have emerged that loosely link citizen associations throughout the Russian Federation and the former Soviet Union (FSU). Formed at a national congress of environmentalists in December 1988, the Socio-Ecological Union (SEU) is by far the largest umbrella group, with over 100 affiliated organizations drawn from all over the FSU.[22] In April 1991, the Soviet Ministry of Justice issued the SEU a charter, giving the organization the same legal status as a political party and the right to monitor the enforcement of environmental legislation.[23] The SEU was the first non-governmental organization (NGO) in the Soviet Union to receive such privileges.

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[19] At a February 1990 plenum, the CPSU Central Committee expressed readiness to relinquish the party's guaranteed monopoly on power. This recommendation was then inacted into law by the USSR Congress of People's Deputies in March 1990.
[20] Maddock, 182.
[21] Peterson, 219.
[22] A more detailed discussion of the Socio-Ecological Union's (SEU) role in the Soviet environmental movement is presented in D.J. Peterson;s work Troubled Lands: The Legacy of Soviet Environmental Destruction (Boulder: Westview Press, 1993).
[23] Gibson, 5.

The rights enumerated under this charter allowed the SEU to expand its agenda beyond environmental activism to include public health issues, grassroots education programs, and the ability to furnish expert information to the former USSR Supreme Soviet Ecology Committee. Believing that ecological problems can only be solved through political reform, the SEU has maintained its influential presence on the Russian political landscape, playing both the role of adversary and advisor. The SEU has repeatedly sued the government for its failure to conduct environmental assessments on proposed projects, while on the other hand, one of the SEU leaders, Svetaslav Zabelin, is a close advisor to Alexei Yablokov, who in turn serves as Boris Yeltsin's advisor on the environment.[24]

The various activities of groups such as the SEU are in part an example of the growing trend among Russian environmental NGOs in the 1990s towards participation in the political process. Although many of these groups do not see themselves as political, their activities are nonetheless an attempt to influence the formation and/or implementation of environmental policy at the legislative level. At the very least, environmental NGOs are what most western political analysts would describe as "special interests groups"; an association of individuals sharing a common interest who, either through petition or direct political action, attempt to exert influence over the decision-making process at either the national, regional, or local government level. Even organizations professing a purely professional and scientific interest in environmental issues, loudly rebuking any suggestions that they too may have some political

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[24] Peterson, 220.

agenda, indirectly influence the development of environmental policy. If the conclusions of a particular study do not influence the policy maker directly, they frequently serve as fuel for organizations whose stated objective is to alter or implement environmental legislation.

The impact of environmental movement on the policy making process is also evident in the growing alliance between government environmental officials and activists. Since the "Baikal Awakening" of the late 1960s and early 1970s, government officials have increasingly come to rely upon environmentalists as a useful ally in their bureaucratic battles against polluting industries. The effort to save Lake Baikal, as well as many other significant environmental issues, did not always pit individual against government. Just as Soviet, and now Russian, society should not be viewed as being universally sensitive to environmental concerns, nor should every government institution be considered a menace to ecological integrity. Albeit limited in power, government institutions charged with the protection of the environment did exist and confront the excesses of Soviet industry. Outmaneuvered politically, these institutions relied increasingly upon individual activists, and later, upon environmental groups, to bring the plight of the environment to the public's attention. The growth of environmental awareness among the Soviet public and the subsequent political pressure that could be brought to bear would ultimately result in action being taken against the offending industries by the upper-most echelons of the Soviet regime.

The increase in the prestige and influence of environmental groups within the political system grew tremendously as a result of Gorbachev's reforms. Able to organize and ultimately,

attain political and legal recognition as NGOs, many environmental groups such as the SEU have evolved from simply mechanisms of protest to generators of scientific study and potential solutions to problems. Local, as well as national officials, are increasingly turning to environmental groups for both input and expertise. Sometimes these groups are called upon to do the job that environmental ministries find they cannot do because of pressure from industrial interests. Thus, although Russian industries are required to submit an environmental impact statement (EIS, or Ekspertiza) for development projects, they are often able to pressure agencies at local and regional levels to lower environmental standards and accept their plans with only moderate revisions. Environmental groups frequently conduct their own ekspertiza, aiding the beleaguered agency's attempts to enforce environmental regulations by providing expert and scientific evidence on the potential ecological repercussions of industrial projects.

Another notable example of the interaction between environmental groups and the government is the profusion of ecology orientated publications that have sprung up since the glasnost period. The joint publication of environmental literature allows environmental groups to gain access to publishing facilities, encouraging the development of a forum from which these groups can both educate and raise the public's environmental consciousness. Alternately, government officials can seek to draw upon the popularity and respect earned by these organizations, somewhat solidifying their standing among an increasingly restive political public. For example, the Kurgan oblast Committee for the Protection of Nature joined with the local branch of the All-Russian Society for the Protection of Nature to publish

Ekologicheskaya gazeta (The Ecological Newspaper). Similarly, the RSFSR environmental agency has collaborated with the Ekopress information and publishing association to put out Zelenyi mir (Green World).[25]

Despite increased cooperation between government and grassroots environmental organizations, federal agencies have, as a rule, been generally resentful of citizen involvement in matters of environmental policy. Accustomed to running things for decades without interference from the public, bureaucrats on the whole are hard pressed to accept the idea that non-governmental actors can offer substantial contributions to the formation and enforcement of environmental regulations. While government officials readily welcome the public's support for their various environmental initiatives, they resent the "watchdog" role many NGOs perform: monitoring regulation development and compliance, criticizing agency performance, and offering unsolicited advice. While this attitude is not constrained solely to environmental officials in the region, it is undoubtedly reinforced by the prevailing Russian political culture.

Having little historical experience with public participation in the governing process, both the bureaucratic and public mind set retains a decidedly negative attitude towards the democratic movement as a whole. Environmental groups spend an inordinate amount of their time and resources working to establish themselves as viable participants in civil society, attempting to consolidate a position within the system from which they can exercise an influence on policy. The overwhelming power of the bureaucracy often frustrates many of

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[25] Ibid., 197.

these initiatives. Officials have routinely obstructed environmental groups from registering as independent organizations. Once registered, environmental groups obtain not only official standing within the legal system, but access to office space, telephones, and other resources generally taken for granted by Western NGOs.

In hindering the formation and operation of Russian NGOs, the bureaucratic establishment not only preserves its own power and influence within the system, but reinforces a centuries-old tradition of "top-down" political management. The proclivity of government agencies and officials to flout democratic principles and practices in order either to consolidate their power or to achieve policy objectives is further compounded by an acquiescent society. Conditioned to accept, rather than contest, authority, many citizen activists faded into the background once the initial euphoria of glasnost disappeared. Although the thinning in the ranks of environmental activists could, although unfairly, be attributed to "dilettantism," a deeper psychological insecurity exists concerning society's perception of its role within the political process.

Environmental activism provided a vehicle with which the long-suppressed voices of Soviet society could protest the environmental policies, and by extension, the legitimacy of the Communist regime. With the dissolution of the Soviet state, many of the individuals active in the glasnost period opted to retreat into anonymity and returned to the security engendered by a submissive political culture, thereby deferring the initiative for political reform to established actors and interests within the system. The inability of Russian society to maintain the degree

of activism that characterized the late 1980s into the post-Soviet period, while undoubtedly affected by other factors, is nonetheless testimony to the potency of the authoritarian tradition. Environmentalism, especially the "group" dynamic it engendered which spread across educational and professional lines, did help significantly reduce the social atomization which characterized the Soviet system. Yet, democracy does not, cannot, emerge in the course of a few years. The role of environmental groups, and of the independent activists before the Gorbachev period, is remarkable because of the rapidity in which the Soviet (and now, Russian) population was able to progress from the relatively early stages of "tendencies of articulation" to actual organized interest articulation. However, the legacy of over 1,000 years of autocratic tradition is not easily overcome in a time of economic and political uncertainty which currently faces the Russian Federation; to many citizens, the "old ways" at least provide some sense of security and continuity. While some of the relative successes of environmental NGOs mark the beginning of a gradual redefinition of civil-political relations, it will take decades of "democratic" interaction and a firm belief in the value of such interaction among a majority of the population to eliminate many of the authoritarian tendencies ensconced in Russian political culture.

Most of the successes of environmental groups can largely be attributed to their vociferous opposition to large-scale development projects, such as the Siberian rivers diversion scheme, whose consequences promised to be ecologically devastating. Even here, their triumphs were partly the result of indifference at the highest political levels where planners

concluded that such projects were either economically unfeasible or based upon questionable technological merit.[26] Although effective at influencing public opinion and political discourse, environmental groups still remain fairly parochial.

Despite the existence of umbrella organizations such as the SEU, the Russian environmental movement is generally characterized by its overall divisiveness. Usually concentrating on issues of local interest, the activities of many of these groups engender a "not in my backyard" mentality, ultimately preventing the formation of a unified national environmental front now that the specter of communism has disappeared. In many cases, environmental groups reserve the same amount of distrust for one another as they do for government officials, often professing ignorance and indifference to each other's activities--a legacy of social atomization imposed by seven decades of Communist rule.

Problems of divisiveness in the environmental movement are further compounded by the fact that most of these groups and organizations are generally inexperienced, unfinanced, and poorly organized. Many organizations possess neither full-time nor properly trained personnel, the latter of which has a profound effect on their ability to obtain and capitalize upon information that could bolster their position on environmental issues. Although often commanding a significant degree of respect and support in the public sphere, these groups have largely proven unable to harness their advantage to expand beyond single-issue activities.

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[26] According to the SEU, environmental protests resulted in about one-half of the nuclear projects being scrapped in the Soviet Union during the late 1980s. Rossiiskaya gazeta (n.p.), 14 June 1991.

The efficacy of many of these groups is further undermined by their relative lack of financial resources and access to essential communications technology such as telephones, faxes, and computers. Even when such technology is made available, groups rarely use effectively, thus foregoing the opportunity to "network" with other environmental groups both regionally and nationally. This apparent lack of networking skills among environmental organizations and their continued indifference to each other's activities frustrate attempts to create a unified environmental front. The movement's divisiveness naturally defers the initiative in drafting and implementation of environmental legislation to government agencies who, by virtue of their position in the political system, are far more susceptible to the bureaucratic pressures of industry.

The economic difficulties that have beset the region's economy have also dealt a serious blow to environmentalism. Negative attitudes towards environmental groups have been reinforced by the general perception that their continued activities are blocking or slowing economic recovery. These accusations are not completely unfounded: while lacking the experience and resources to offer credible alternatives to ecologically damaging enterprises, the tactics many environmental groups pursue ultimately result in the shutdown of industries vital to regional economies. More concerned with survival than ecological issues, enthusiasm for environmental activism has waned among the Russian populace. This fact is further substantiated by evidence that in the last elections to Soviet parliament, 15 percent of the seats

were won by green candidates, whereas the "Green" party failed to win even one seat in the 1993 Duma election.[27]

In some cases, the persistent protests of some activists, which threaten the livelihood of those dependent upon the continued operation of environmentally disruptive industries, has engendered a backlash against the environmental movement. This backlash has even found its way into the commentary of the more liberal Literaturnaya gazeta, one of the first newspapers to carry the banner of environmentalism, which has accused the "green" movement of acting with "a red fury", detailing how environmentalists had sought to shutdown worthy enterprises and to assign guilt for environmental transgressions.[28]

The significance of the growing resentment towards the objectives of environmental activists does not suggest that Russian society is no longer concerned with matters of environmental security; rather, it has begun to take exception to the tactics that many of these groups pursue. As has often been the case in many Western nations, the debate comes down to a basic argument of jobs versus environment. The failings of environmentalism as a social movement has been its inability to provide solutions to problems that would avoid engendering additional economic hardships on the Russian populace. This shortcoming has been readily acknowledged by many in the movement, and a few organizations have emerged to lead the environmental movement in a new direction.

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[27] Feshbach, 101.
[28] Literaturnaya gazeta (n.p.), 11 January 1990.

The early 1990s did indeed bring a decrease in public activism, but environmental issues are not disappearing entirely from the political agenda, and environmentalism continues to shape the region's evolving political culture.[29] Mainstream political parties and movements have made significant efforts to incorporate environmental issues into their platforms, and the environmental movement must now compete with them to secure public support. Environmental organizations are beginning to realize that they must begin to offer solutions to the problems facing the nation if they are to remain legitimate participants on the new Russian social and political landscape. In the place of mass movements, many environmental organizations are becoming professionalized, employing both full-time scientists and staffs. Their efforts have attracted the attention and support of international NGOs, a significant first step in overcoming the atomization and parochialism characteristic of the environmental movement that emerged under glasnost.

Despite their lower profile, environmental NGOs are becoming both more focused and efficient, increasingly receptive in working to reach a satisfactory compromise between the goals of ecological preservation and the economic well-being of the Russian population. In this aspect, environmental groups will have a prominent role to play in deepening democracy through the promotion of public awareness about the value of an unpolluted and healthy society.

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[29] Peterson, 227.

CHAPTER V

GRASSROOTS ENVIRONMENTAL ACTIVISM

AND THE STRUGGLE TO SAVE LAKE BAIKAL ; 1987 TO THE PRESENT

The existence of environmental and other public interest groups, as well as the many noncommunist and anti-communist parties active in the political realm, should not be equated with the introduction of democracy. Democratic aspirations are not equivalent to the creation of a democratic party system. Democracy requires the existence of a civil society, resting upon a law-based state (Rechtsstaat), and pluralism (e.g., spontaneously and freely organized political, religious, and social institutions, as well as media that are legally protected rather than constrained).[1] The infrastructure which could support the evolution of a democratic political system--free and open political debate and organization, truly independent media, freedom to choose (and practice) religious observance, and a genuine legal basis to alleviate constant exposure to arbitrary action by the state--had not yet been firmly established. While environmental organizations were reflective of a general trend towards pluralism, a "civil society" was still very much in its developmental stages. Gorbachev had declared his goal to be the democratization of Soviet society. Yet, since the 1960s, Soviet society had already made tremendous progress in that direction. Bolstered by Gorbachev's reforms, millions of people had begun to actively affirm their ights under law, to seek the guarantee of basic liberties and the redress of grievances. Those who constituted the elements of this emerging civil society

[1] Ra'anaan, 4.

had begun to view themselves as citizens rather than subjects, the government as separate and distinct from society, as but one of several institutions coexisting within a pluralistic social fabric. The key question now became whether the party and state would follow suit.

Freed from the constraints against public organization and activism by glasnost, the stalwart defenders of Baikal among the Russian intelligentsia were increasingly joined by ordinary citizens eager to exercise their new found political liberties. Thousands of people across Siberia and the USSR launched a highly vocal campaign to save the Baikal watershed, ultimately resulting in the formation in 1987 of The Movement to Save Lake Baikal, the regions first "official" environmental organization. Serving primarily as a banner organization to unite the efforts of environmentalists, scientists, and concerned citizens, the organization spearheaded the campaign to bring the Lake's continued degradation to the attention of the political elite. Under the indefatigable leadership of Valentin Rasputin, the organizations objectives were partially realized with the passing of yet another resolution regarding the Lake's preservation in April of 1987.[2] This resolution, "On Measures to Provide for the Rational Use of Natural Resources within the Lake Baikal Watershed, 1987-1995," was distinguishable from previous decrees because of its greater reliance on input from the scientific establishment.

While the first three resolutions ultimately proved to be nothing more than statements of good intentions by Moscow, the 1987 resolution was praised by many environmentalists as a significant step forward. The resolution contained provisions for the development of a

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[2] Valerian Vikulov, "Views from Ecologists of the Lake Baikal Region," Surviving Together: A Quarterly on Grassroots Cooperation in Eurasia 11 (Winter 1993): 39.

long-range integrated plan for the development and protection of the entire Baikal basin and called for the implementation of 162 projects to clean up the local environment by 1995. Among these was a project designed to convert the Baikalsk Pulp and Paper into an environmentally safe plant for furniture production by 1993. The resolution also created a series of water protection zones which set strict limitations on, in some cases prohibition of, industrial development within the region. Finally, a "Baikal Commission" was established to oversee the implementation of the resolutions provisions.[3]

The significance of the 1987 resolution is two-fold: First, after almost two decades of warnings and persistent, albeit repressed, activism in the wings, the scientific establishment was finally allowed a center stage in the environmental policy-making process surrounding the Baikal issue. Although their influence was undoubtedly held in check by powerful industrial and bureaucratic interests, their inclusion in the process nonetheless signified a greater willingness on the part of the political establishment to turn away from the troika which traditionally held sway over the development of Soviet policy: the military, security, and industrial establishments. At least in regards to matters of environmental policy, it would not be too farfetched to assume that the increasingly important role scientists played in the decision-making process was not restricted exclusively to Lake Baikal.

Second, the Movement to Save Lake Baikal bridged the pre-existing gap between the intelligentsia and the ordinary citizen. The implementation of the 1987 resolution was largely

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[3] Peterson, 86.

the result of the combined effort of scientists, writers, and public activists. The Sixth Congress of the Writers' Union in 1986 provided writers like Valentin Rasputin a platform with which to defend Lake Baikal and to plead for a strong central environmental protection agency, powerful enough to out muscle industrial ministries and to coordinate and implement pollution control and habitat preservation regulations.[4] While the literary establishment broadened its campaign against environmental offenders in the ministries, activists at the grassroots level worked to galvanize public opinion against the continuing degradation of the watershed. The regional party committee initially attempted to limit the activities of local greens through the implementation of a series of prohibitive measures. Many activists responded by engaging in hunger strikes, a tactic that proved to not only bring considerable public attention to the plight of Lake Baikal, but placed regional authorities in a difficult and increasingly unpopular political position.[5]

Popular opinion combined with the support of scientific facts proved to be a particularly powerful force for the Soviet government to reckon with. The joint effort of scientists and activists placed the issue of Baikal's preservation squarely on the Soviet political agenda. While the activities of the Movement to Save Lake Baikal were often loosely organized and consisted primarily of the peaceful articulation of ecological viewpoints to ministerial and government personnel, the organization significantly raised public environmental

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[4] For speeches of Rasputin and other important writers on the 1986 Congress see Literaturnaya gazeta (n.p.) 2 July 1986 and 18 December 1986.
[5] Vikulov, 40.

awareness. As a result, not only did Moscow attempt to redress some of environmental grievances afflicting Baikal, but it also concurrently authorized the formation of the first central government committee to regulate and enforce environmental policy.[6] Formed in 1988, the All-Union State Committee for the Protection of the Environment was primarily responsible for coordinating the work of ministries and committees accountable for environmental management and nature protection.

While it would be naive to promote the idea that public activism was solely responsible for the central government's decision to create an environmental ministry, (evidence to substantiate such a statement is presently unavailable, although the claim itself warrants further investigation) individuals in the scientific, literary, and public realm did exert a decisive influence. The creation of such an agency was in fact a central plank in the platform of the Sixth Congress of the Writers' Union. Exhorting government officials to form such an organization, the opinions of many writers naturally carried through in their works, thus helping form the environmental consciousness of the Soviet reading public. As the severity of environmental situation became increasingly acknowledged by individuals in both the political and public sphere, the notion of a powerful central environmental agency became a credible option.

The fact that it took nearly 70 years for the Soviet government to create an environmental protection agency at the All-Union level reflects the changing roles of players in

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[6] Feshbach, 100-1.

the Soviet political system. Prior to glasnost, environmental considerations were deliberately ignored in the name of economic development and national defense. Construction of the Baikalsk Pulp and Paper Plant proceeded precisely because the Ministry of Timber, Paper and Woodworking promoted the project on the grounds that it was vital to national security. While environmental awareness was growing among the Soviet intelligentsia and public, its relative effect on environmental policy was slight due to a political belief-system that gave preferential consideration to economic and military enterprises. Blanket approval for virtually any project that presented itself as being in the "national interest," coupled with the virtually intractable power of the Soviet economic bureaucracy, guaranteed the circumvention of any environmental regulations that happened to be passed.

The decision by Gorbachev to utilize public pressure to effect change in a stagnant bureaucratic structure essentially meant that economic and military enterprises could no longer expect a "carte blanc" for development projects as they had in the past. Although issues of economic growth and national defense continued to remain a priority, the process of political reform necessitated the introduction of actors previously marginalized in the bureaucratic process: scientists, writers, and the Soviet public. The ideological thread common to these three actors in the late 1980s was the growing concern for environmental issues, therefore it is not surprising to find the revered Lake Baikal emerging as the focal point for ecological activism. While the economic and military establishment continued to exert enormous pressure on the policy-making process, the Soviet political establishment, unable to ignore the severity

of the environmental crisis, was increasingly predisposed to consider input from Baikal activists. The attention that activists were able to muster collectively around the issue was so widespread within the policy making establishment that even so conservative a hard-liner as then-Politburo member Yegor Ligachev defended Lake Baikal publicly.[7]

Despite high hopes for the 1987 resolution, its objectives were never fully realized. According to the Buryat Committee on Ecology, one of the many environmental watchdogs charged with monitoring ministerial compliance, the measures prescribed in the resolution were 92 percent achieved in 1987, 72 percent in 1988, 70 percent in 1989, and 58 percent in 1990. Today, the resolution is considered to be totally ineffective.[8] The failure to maintain a reasonable degree of compliance to the standards set down in the 1987 resolution reflects not only the continuing ability of economic ministries to circumvent environmental legislation, particularly in a growing political vacuum that has made enforcement efforts all but impossible, but the growing economic pressures that make such acts of circumvention acceptable to the Russian public. Given the current economic situation, many of Baikal's residents are more concerned about bread than about air or water.

Nonetheless, the implementation of the 1987 resolution proved to be a watershed moment for grassroots environmental activism within the Baikal region. Moscow's decision to embark upon a comprehensive program of protection for the lake, as well as the recognition the Movement to Save Lake Baikal brought to the issue encouraged many would-be activists

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[7] Rainey, 58.
[8] Vikulov, 39.

within the region to organize informal groups to advocate ecological and health related concerns. The environmental movement came to life in 1988 over an effluent pipeline proposal which would carry wastes from the Baikalsk Pulp and Paper plant into the Irkut River.[9] In a genuine, yet terribly misguided attempt to reduce harmful waste emissions into Baikal's waters, central planners in Moscow proposed the construction of a 35 mile pipeline that would ultimately lead to the contamination of the water supply of the nearby city of Irkutsk. Enraged by this direct threat to the health of the city's population, local activists embarked upon a campaign to thwart Moscow's pipeline proposal.

Collecting well over 100,000 signatures, activists successfully petitioned Moscow, forcing the central government to shelve the pipeline idea later on that year.[10] Arguably for the first time in the struggle to save the Baikal watershed, the collective action of the citizenry forced the central government to take public opinion into consideration, ultimately resulting in the cancellation of a project generally approved of among the higher echelons of the Soviet policy-making establishment. Environmentalists in Irkutsk would score yet another impressive victory the following year when plans to build a coal-fired 800 megawatt electricity generating station (complete with smokestacks 500 feet high intended to discharge pollutants into Irkutsks' upper atmosphere) were stopped by popular pressure.[11]

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[9] Ibid., 40.
[10] Charles P. Wallace, "Green Movement Flexes Muscle in the Soviet Union," Los Angeles Times, 27 October 1991, 10 (A).
[11] Ibid.

After these initial victories, the intensity of environmental activism in the Irkutsk region began to gradually dissipate. During the first few years of the "Baikal rush" many activists neither realized the extent nor the time that it would take to arrive at possible solutions to the ecological problems confronting the region. As such, it is not surprising to find that many of the more radical greens have since moved on to other activities, leaving behind a handful of individuals truly committed to resolving the problems afflicting Baikal. In short, "dilettantism" was perhaps the biggest problem faced by the environmental movement in its first years of activity. Nonetheless, the activity in Irkutsk helped activate ethnic Buryat activism, further bridged the gap between scientists and citizens (the victory over both the pipeline and power plant proposals were largely attributable to joint effort), and resulted in the creation of the region's principle NGO, the Baikal Fund.

Founded by a Constituting Conference on the 5th of April 1989, the Baikal Fund has established offices in the Buryat Republic, as well as in the Irkutsk and Chita oblasts.[12] Although professing no fixed membership, the Baikal Fund is estimated to have well over 100,000 members. Having almost no full-time paid staff and virtually dependent upon donations and public support, the Baikal Fund serves as an important intellectual presence and environmental watchdog. Initially founded to mobilize the public on behalf of Lake Baikal, the organization has actively campaigned to shut down heavy polluters in the area and has sought to clean up factories deemed worth saving. Combining scientific expertise with public activism,

[12] Based upon an informal survey of environmental groups in the Soviet Union conducted by the Institute for Soviet-American Relations (ISAR) in June of 1991.

the Baikal Fund has conducted environmental ekspertiza's on a house building factory in 1989 and a shoe factory in 1991.

In June 1990, the Baikal Fund engaged in unsuccessful public protests against the "Camel-Trophy" auto rally. Sponsored by the American tobacco company, 30 or so Land Rovers set off on an international endurance event over 1600 kilometers, cutting through a national park on Baikal's west coast.[13] While the ecological damage they inflicted may in fact have been minimal, the very fact that the regional government allowed them to traverse through a protected nature area exemplifies the general attitudes towards the environment that organizations such as Baikal Fund need to overcome in order to bring to a halt the continued degradation of the Baikal watershed.

As such, educating the public about the environment ranks as the organization's number one priority. The primary means by which Baikal Fund has attempted to promote environmental awareness over the Baikal issue has been through the publication of a 16 page tabloid entitled "Our Baikal".[14] While financial and transportation difficulties have made the publication of the tabloid haphazard, the organization has continued to disseminate information on the lake and its environs via newsletter, newspaper articles, as well as through television and radio announcements. While awakening an environmental consciousness in the midst of an economic crisis has been an arduous, if not impossible task, there have been a few remarkable successes.

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[13] Stewart, "Great Lake", 62.
[14] Das, 44.

From the beginning, the activists comprising the Chita branch of the Baikal Fund encountered difficulties attempting to convince both bureaucrats and local people why they were getting involved with the problems afflicting Lake Baikal. The Chita oblast after all, is not adjacent to the lake but located on the periphery of the Baikal watershed. Yet Chita is rich in wildlife with beautiful and extensive Siberian pine forests commonly referred to as "Baikal's lungs".[15] The sources of many of Baikal's feeder rivers originate within this region, thus any pollution or deforestation occurring within the Chita oblast would ultimately effect the ecological integrity of Baikal itself. According to Tatyana Strizova, chairwoman of the Chita branch of Baikal Fund and assistant director of the Chita Institute of Natural Resources, educational activities using television and radio to influence the local population were conducted. Rather than stressing the protection of distant Lake Baikal, the organization emphasized the need to protect the ecology of the Chita oblast, thereby giving the local citizenry a reason to support environmental activities while indirectly aiding the effort to minimize the degradation of lake's watershed.

While raising environmental awareness through the effective utilization of public education and advocacy programs remains the Fund's primary objective, this established and generally well-received organization has been able to exert varying degrees of influence within the political system of the region. Often opposed by conservative members in the local Soviets and central ministries, the Baikal Fund has put forward and promoted candidates generally

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[15] Tatyana Strizova, "Views from Ecologists of the Lake Baikal Region," Surviving Together: A Quarterly on Grassroots Cooperation in Eurasia 11 (Winter 1993): 41.

thought of as being supportive of regional environmental remediation efforts.[16] Although the extent to which the organization has been successful in implementing change via the political process is difficult to ascertain given the paucity of the data available, the political support offered has resulted in the election to the local Soviets of a handful of "green" candidates.

Although declining to identify themselves as a political organization, the actions and support of the Baikal Fund for certain candidates has undoubtedly helped affect some change in regional environmental policies. As the principle NGO in the region, the support the Baikal Fund has been able to muster among the general population has allowed it to serve as an effective counterbalance to government pressures to haphazardly develop the Baikal basin. Through a combination of public protests, environmental education programs, and support for certain political candidates, the Baikal Fund embodies what could classically be defined as a "special-interest group"; the existence of which serves as an essential prerequisite to the development of a democratic political system.

Articulating its particular concerns to both central and regional authorities, the Baikal Fund has also assumed responsibility for developing potential solutions to the regions environmental problems when confronted by government inaction on the issue. In many cases, the organization has often done a better job at determining the environmental impacts of industrial development on the watershed than the government agencies responsible for carrying out such studies. Hence, the environmental ekspertiza's conducted on house-building and

[16] ISAR survey, June 1991.

shoe-production facilities in the region (the government failed to provide an adequate environmental impact study) and the Fund's current plans to establish and equip a series of independent scientific research stations along Baikal's shores to monitor the effect of pollution on the lake's environs.[17] With the aid of professional lawyers, the Baikal Fund has also begun drafting a law on the protection of the lake and has continued producing fundraising programs for television.[18]

The activities of the Baikal Fund have been complemented by the emergence of other smaller and less well-established environmental organizations that have sought to employ similar education and problem-solving approaches. While the environmental movement has grown weaker in the face of mounting economic pressures, the groups that have managed to survive have become both better organized and more active. There are indications that the ecological movement has gained a fairly strong foothold among teenagers in the region. In Irkutsk, the group Green Oasis has begun establishing ecological trails and creating "green zones" around their schools.[19] Although a "green zone" is often little more than an area free of litter and debris, it is nonetheless an effort that has been undertaken by the private initiative of concerned citizens in the region (in this case, the disenfranchised youth of Irkutsk). While its impact on alleviating the overall degradation of the Baikal watershed may in fact be negligible, the ecological movement among teenagers has the desired long-term impact of raising

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[17] Ibid.
[18] Vikulov, 40.
[19] Grigorii Galazii, "Views from Ecologists of the Lake Baikal Region," Surviving Together: A Quarterly on Grassroots Cooperation in Eurasia 11 (Winter 1993): 39.

environmental awareness among the region's future leaders. It is precisely this sort of activity which may, in fact, determine the future of the Baikal watershed and, as such, should be supported by both Russian and international NGOs currently involved with the issue.

The obstacles facing environmental groups in the region are enormous. Russian ecological legislation is still very much undeveloped and ineffective. The governmental agencies charged with the task of enforcing environmental protection regulations are seriously under-funded. Although the new Russian government passed its first environmental law in 1991, a law that provides a legal framework for local authorities to assess pollution damage and levy fines, the current economic situation has left the ruble in such a weakened state that fines levied against offending industries are generally viewed as a joke.[20] In many cases, local government officials are often the worst offenders. Underpaid and facing unemployment, local agency officials have begun to discover that their positions can in fact be very lucrative; accepting bribes from local industries, government officials have increasingly turned a blind eye to the illegal dumping of hazardous materials, the over-felling of timber in ecologically sensitive areas, and the poaching of protected species for sale in foreign markets.[21]

While evidence that this pattern of corruption is a factor in the continued degradation of the Baikal watershed is currently unavailable, given its widespread practice in other areas of the Russian Federation, it is not too farfetched to assume that official malfeasance has complicated environmental remediation efforts. Almost by default, environmental NGOs must

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[20] Feshbach, 102.
[21] Ibid., 75.

assume not only the task of raising ecological awareness among the leaders of industrial enterprises and the populace of the region, but must monitor both industry and government compliance to established environmental regulations. In most cases, it is often common knowledge which officials in local government agencies are engaged in bribe-taking, but environmental activists are often powerless to do anything. The insular and self-preserving nature of the governmental bureaucracy virtually guarantees that no punitive measures will be seriously undertaken through the initiative of higher-ups in the bureaucratic chain of command.

Environmental groups and individuals can take either the offending individual or agency to court, but the vagaries of Russian ecological legislation as well as the general lack of specialists in environmental law usually results in the dismissal of a majority of citizen-suits. The legal situation of environmental NGOs is compounded not only by their lack of court experience and financial support, but by a law passed in March of 1992 that limits NGOs to suing over damage to health and property. Prior to this legislation, environmental NGOs were able to sue to protect public land and wildlife.[22] Since much of the ecological destruction in the Baikal region occurs on public land (over-cutting of trees in the basin) and effects primarily the watershed's wildlife (industrial pollution of the lake, poaching, etc.), environmentalists have been denied a fundamental means of achieving their objectives through the legal process.

The only recourse that is often left to environmental activists is to raise the public's awareness of the problem, thereby hoping to pressure either the official or his superiors into

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[22] Richard Stone, "Grassroot Greens in the Former Soviet Union," Science 257 (August 1992): 1210.

taking action. Unfortunately, at a time when the bending of an environmental regulation means the alleviation of economic burden for certain individuals or groups, it is difficult to raise and sustain the sort of public pressure necessary to force the political establishment into action. Unable to count on officials at the central level to either enforce legislation or to arrive at possible solutions for the complex problems of the lake, environmental organizations and individuals have begun to take the initiative. Stressing economically viable solutions rather than protest, environmental groups in the region have begun to reach out to the international community for financial, technical, and moral assistance.

The beginning of the 1990s marked an unexpected explosion of international attention to the problems facing Baikal. With greater access to previously guarded information on the environmental status of the lake, coupled with the accelerated economic and political breakdown of the Soviet system, provided Western environmental NGOs with the opportunity to offer organizational support to Russia's fledgling non-governmental sector. Faced with both a decline in the appeal of public environmental activism and financial assistance, the interjection of Western assistance proved vital in the revitalization of many environmental organizations in the Baikal region. Concern about the lake's future now became international. Although Western environmental organizations have often been confronted by the obstacles and obstinance engendered by centuries of Russian xenophobia, their presence has nonetheless come to be valued and considered essential towards the fulfillment of regional environmental objectives.

Environmental NGOs in the region are receiving needed start-up project assistance through institution strengthening and training grants from Western organizations at both the federal and non-governmental levels. Under a USAID grant administered by the Washington-based NGO ISAR (formerly the Institute for Soviet-American Relations), an E-mail network is being established to link environmental NGOs throughout the Russian Federation.[23] While this technology has yet to be fully utilized by groups in the Baikal region, the opening lines of communication between both Russian and Western NGOs has facilitated access both to information and support. The introduction of foreign aid and expertise has allowed many of these groups the opportunity to pursue detailed studies on the complex bio-diversity of the watershed, thereby greatly enhancing their ability to forward ecologically-sensitive economic solutions to regional authorities. The general breakdown of central environmental management, coupled with the organization and professionalism of environmental groups, has resulted in the elevation of activists from just protesters to powerful new voices in the political system.[24] The changing role of Baikal's environmental organizations in raising ecological awareness and cooperating with government officials can be illustrated with a glance at one of the region's more active citizen-groups, the Baikal Environmental Wave.

Characterizing themselves as an independent voluntary organization, the members of Baikal Environmental Wave first began working together in July of 1990. During that first year, the organization completed a number of translations of Western environmental studies,

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[23] Peterson, 223.
[24] Stone, 1210.

covering topics such as Integrated Waste Management, the economics of energy and the means of dealing with contaminated sediment. These materials were subsequently given to people's deputies participating in environmental committees in the local government.[25] The hope was to supply political officials with information on the Western experience of dealing with specific environmental problems.

Officially registered as an NGO in April of 1992, the Baikal Environmental Wave has primarily involved itself with projects aimed at environmental education and international cooperation to protect and improve the Baikal region. The organization is currently pursuing three projects at various stages of development: a program of environmental education and the preparation of material for teaching purposes for school teachers; the setting up of a center for alternative technology, including energy-saving home building, renewable energy sources, waste treatment, recycling and organic farming; and an environmental information and monitoring project whose aim is to collect data on the present state of the environment in the region and take appropriate action when and where possible. This last project has already resulted in a modest victory for Baikal's environmental protectors. Local Wave activists were able to halt the illegal cutting of timber in a recreational zone not far from Irkutsk and have continued to work to see that appropriate restoration of the area is carried out by regional government authorities.[26]

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[25] Information was recieved via an electronic mail correspondence with Georgii Nurullin, Co-Chairman of the Baikal Environmental Wave, November 1994.
[26] Ibid.

The Baikal Environmental Wave has sought out possible joint programs with several Western environmental organizations including the Centre for Alternative Technology in Wales, and the Live Water Trust at Stroud (United Kingdom) that could be started up immediately with the proper funding.[27] While these two organizations have agreed to cooperate on the programs, they have asked that the Wave come up with its own funding. As such, collaboration between the two is presently at a standstill. Nonetheless, the organization has actively pursued contacts with environmental NGOs and educational institutions in the United States and Japan: the Environmental Program at the University of Vermont, Baikal Watch at the Earth Island Institute, and the Rural Enterprise Adaptation Program International (U.S.); the Ecological Business Forum and the Eco-Institute Citizens Bank (Japan). While acknowledging the importance of creating a network of contacts with environmental organizations throughout the world, the organization has maintained communication with the environmental committees at local government levels, with the Irkutsk State Committee for the Environment and Natural Resources, other environmental NGOs within the region and with individuals and firms dealing with environmentally or scientifically oriented tourism.[28]

Baikal Environmental Wave represents a new and significantly more effective variety of environmental organization. Whereas activists in the past stressed public protest and the immediate cessation of activities harmful to the region's environment regardless of economic

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[27] Information was recieved via an electronic mail correspondence with B.J. Chisholm, Vladivostok-based representative for ISAR, August 1994.
[28] Galazii, 39.

repercussions (although some of the newer and less well-established ecological groups persist in this activity), the Wave has attempted to enlist the assistance of participants at the grassroots, government, and international level. Simultaneously engaging in programs of environmental education and scientific study, the organization has welcomed cooperation in arriving at ecologically and economically sound solutions for the problems facing the region. While the social atomization and distrust which pervades the relationship between government and grassroots organizations (indeed, even among grassroots organizations themselves) has far from been overcome, the acknowledgment of environmental urgency and the begrudging acceptance by all involved that some degree of collaboration is necessary, is perhaps the best indicator that Russian environmentalism (at least within the Baikal region) is gradually altering its parochial character.

Local activists are now working with regional and national governments, international NGOs, and the private sector (mainly enterprises seeking to promote ecological tourism) to protect Baikal. The establishment of an inter-regional body by the Buryat Republic, and the Irkutsk and Chita oblasts, called the Baikal Parliament bears hope that some of the more serious problems can be addressed and resolved through cooperation at regional and local governmental levels.[29] A second Baikal Commission, created by presidential decree in 1992, is largely considered to be ineffective because it fails to include local and regional representatives and is presently administered directly from Moscow. There is an increasing realization

[29] Ibid.

among the people of Baikal that the dual problems of environmental preservation and economic development must be tackled through regional initiatives, and not by the political authority of a distant and uninformed central government. The growing tendency to seek regional solutions to regional problems, greatly enhanced by the unraveling of the traditional center-periphery power relationship, more often than not places government officials at odds with local environmental organizations. While there appears to be a genuine concern over the need to protect the environmental integrity of the lake's environs, there continues to be a general disagreement concerning the process and degree with which this protection should be implemented.

The traditional method of economic development would undoubtedly result in the ecological devastation of the watershed, but given the current economic pressures and general lack of capital for the installation of pollution reduction technologies and ecologically-sensitive production processes, the immediate cessation of environmentally destructive activity would result in severe economic repercussions for the region. Therefore, environmental activists, fully utilizing foreign expertise and in cooperation with their government counterparts at local and regional levels, found it necessary to develop a program of environmentally sustainable economic development for the Baikal watershed.

In 1991, Russian and U.S. ecologists undertook a cooperative effort to develop a "Comprehensive Program of Land Use Policies for the Lake Baikal Watershed." Led by the American ecologist, George D. Davis, the team set as its goal the development of an

ecologically sustainable development plan, complete with implementing legislation, for the Baikal drainage basin.[30] Sponsored by the U.S. NGO Center for Citizen Initiatives (CCI) in San Francisco, with in-country costs underwritten by the governments of the Irkutsk and Chita Oblasts and the Buryat Republic, the idea for the program originated in 1990 during a visit by some twenty American ecologists to Severobaikalsk (on the shores of Lake Baikal). This convocation, known as Ekspertise-90, was the beginning of an intensive exchange between Russian and American ecologists and conservationists in the Baikal region. Baikal Watch, a joint Russian-American conservation effort, was one of the programs to emerge as a result.[31]

Within a two-year period, the 30 million hectares of the Baikal watershed within the Russian Federation had been studied and mapped in accordance with international principles of zoning sensitive to ecological and carrying capacity limitations.[32] The Comprehensive Program specified ecologically appropriate land uses and identified performance standards and criteria for land development, which would ensure sustainability. The Program also put forth several recommendations on reducing existing levels of pollution in the basin and proposed the reclamation of certain impacted areas as well as advocating the creation of a strong regional

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[30] Davis, 35.

[31] Baikal Watch was formed to assure the permanent protection of Lake Baikal and its environs, seeking to strengthen the region's system of national parks and nature preserves (zapovedniki). Baikal Watch is actively working to assure UNESCO World Heritage Site and Biosphere Reserve status for the Baikal basin.

[32] Davis, 36.

"Baikal Commission" with juridical authority to administer and enforce regional land-use controls.[33]

The map apportions the Baikal region into some 25 zones, each structured to allow the best economic use while protecting its natural resources. The "core area," where ecological integrity must be preserved and hence new development must be severely restricted, includes the lake itself, its immediate shoreline, and a number of national parks and other legally protected territories. Seven of the 25 zones make up this "core area."[34] The other 18 zones make up what is called the "buffer area," where land and water resources can be managed and economic development can be tailored to proceed in harmony with nature.

The final report and map were published in Russian and English and presented by George Davis and his Russian counterpart Sergei Shapkhaev at public hearings in Irkutsk, Chita, and Ulan Ude in March 1993.[35] Even before its completion, the Comprehensive Program began to define the parameters of debate on the Baikal question. At a public hearing in Irkutsk in 1992, Baikal's long-time defender and Russian nationalist, writer Valentin Rasputin demanded to know why Americans had been included in this study group of Siberia's "blue pearl." While the international makeup of the team was endorsed and its recommendations supported by Yeltsin's chief environmental adviser, Alexii Yablokov,

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[33] Victor Danilov-Danilan, the current Russian Minister of Ecology, resisted the Program out of an apparent fear that its promotion of regional controls ould diminish his Ministry's authority. Danilov-Danilan rushed to co-opt the Baikal Commision (created by presidential decree), assuring that it would be controlled from Moscow and not the Baikal region.

[34] G. Gordon Davis, "Baikal, Bring Us Together," American Forests, November/December 1993, 56.

[35] Ibid.

Rasputin's query is characteristic of a deep-seated Russian uneasiness of foreign involvement in what is largely considered to be a domestic issue. Nonetheless, the gradual acceptance of the sincerity of the American presence eventually assuaged many of the doubts held by the Russian members of the team.

Fundamental to the Program's development and reflecting the growing tendency of non-governmental actors to incorporate democratic elements in the decision-making process was the team members insistence on the use of public hearings at every stage of the proceedings, with full access to that process for citizens and groups.[36] Citizens would be able to bring suit in a special environmental court, which would also handle appeals from regional decision-makers on sustainable development issues. In addition, Russian and American participants urged government authorities at both the regional and local level to enact a freedom-of-information law to facilitate public access to previously guarded environmental data.

With neither side dominating the proceedings, the development of the Comprehensive Program can truly be regarded as the first successful Russian-American cooperative effort at environmental remediation. Hailed in both Russia and the United States as a global model, the "Comprehensive Land Use Program for the Baikal Region" is believed to be the first ecologically sustainable economic development program in the world.[37] Reaction to the

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[36] Ibid.

[37] "Comprehensive Land Use Program for the Baikal Region Implementation Proposal," Center for Citizen Initiatives (CCI), March 1993. Draft copy.

Comprehensive Program reflects the growing struggle in Russia between former Communist officials seeking to preserve the status quo ante and reformers pursuing a rapid transition to a market economy. The current Russian Minister of Ecology, Victor Danilov-Danilian, has resisted the Program out of an apparent fear that its promotion of regional controls would diminish his Ministry's authority and perhaps even its funding. Dr. Mikhail Grachev, Grigorii Galazii's successor as Director of the Baikal Limnological Institute, repeatedly refused to cooperate with the study group and has supported alternatives to regional environmental protection that would preserve the central role and authority of his Institute.[38]

Regardless, all of the Comprehensive Program's recommendations have been endorsed by the Chita Oblast and the Buryat Republic (full cooperation on endorsement by the oblast government of Irkutsk does not exist), both of which have gone ahead to create governmental departments with the mandate of implementing the Comprehensive Program.[39] Following a joint statement on the conservation of Baikal signed by Yeltsin and then-President Bush on June 17, 1992, the U.S. Department of State has agreed to provide funding for the first three years' administrative costs of implementing the Program's recommendations.[40] In addition, a dozen or so modest development projects intended to demonstrate the workability of the proposed zoning and the concept of sustainable development are being considered for funding by the U.S. Agency for International Development.[41]

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[38] Davis, "Long-Term Solutions," 37.
[39] Ibid.
[40] CCI Implementation Proposal, March 1993.
[41] Davis, "Bring Us Together," 56.

The momentum for implementation of the recommendations may ultimately result in Baikal's designation by UNESCO as a World Heritage Site. A delegation visited Lake Baikal in 1990 and compared the region with the Galapagos, already a World Heritage Site, because of its large number of endemic species.[42] At that time, the UNESCO delegation advised postponing Baikal's designation until the environmental problems of the region were solved. Thanks in large part to the activities of Russian and international environmental NGOs and the acceptance, at least in principle, of the Comprehensive Program by regional and local actors at the government and non-governmental level, UNESCO has stated that Baikal will qualify for World Heritage Site status if the proposed recommendations are implemented. This enforced delay should add great weight to the pressure for change on the part of regional environmental and development policies. Regional and national political authorities already know that once designated as a place of global significance, protection of the site lies in their hands.

Despite increased international attention and the promise of funding for various projects outlined in the Comprehensive Program, the ecological integrity of Baikal is still very much at risk. Environmental organizations within the region continue to do battle with polluting industries, local government officials and, ironically, with governmental agencies charged with the protection of Baikal's pristine ecology. In the current period, Baikal's greatest enemy has not been human indifference, but the pressures of economic necessity. Although the pulp and paper plant at Baikalsk was ordered closed by the regional government more than five

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[42] Stewart, "Great Lake," 62.

years ago, it continues to operate, employing 4,500 workers and with over 20,000 people dependent upon it for survival.[43] While environmental activists have insisted that the plant be closed and fitted with Western designed pollution control devices, plant officials have stated bluntly that the costs of doing so would far exceed the actual value of the plant itself.[44]

The national parks and zapovedniki that ring Lake Baikal have also begun to feel the pressure exerted by local authorities intent upon the economic utilization of these legally protected lands. In the winter of 1993-94, local authorities attempted to take over almost half of the land comprising Pribaikalsky National Park, located on Baikal's eastern shore.[45] Although this effort was defeated with help from Moscow, a "cold war" situation continues to exist between the park and the local government: local officials continue to hold back almost half of the money funded for the park by Moscow and are continuously encroaching upon park land by allowing locals to graze cattle along the erosion prone slopes surrounding the lake. With only six firefighters and a handful of underpaid and ill-equipped park rangers to cover an area roughly 1,096 square miles, the problems confronting the Pribaikalsky National Park are fairly characteristic of those faced by Russia's conservation system as a whole.[46]

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[43] New York Times, 18 August 1993, 4(A).
[44] Ibid.
[45] Daniel Sneider, "Saving Siberia's Unique Lake Baikal Region," Christian Science Monitor, 2 August 1994.
[46] Park rangers in Russia's expansive system of national parks and nature preserves (zapovedniki) average about $US20 a month, forcing many of them to subsist off of home-gardens, livestock and fishing. Scientists employed by the parks system fair only slightly better with an average monthly pay of only &US40.

Recent estimates maintain that only 30 percent of the Russian conservation system's funding needs are being met.[47] Parks located in the Siberian region, especially those within the Baikal basin, lack such basic transportation vehicles as motorcycles and snowmobiles and even the most rudimentary equipment necessary to control and fight forest fires. Environmental activists and conservation officials have long advocated that the preservation of the land surrounding the lake is the preservation of the lake itself and as such, the plight of Baikal's national parks and zapovedniki has also attracted international attention. A recently completed study by World Wildlife Fund concluded that the pressures faced by parks and nature preserves in the region threatens the preservation of a biological diversity of global significance.[48] Ironically, while Baikal's zapovedniki have received about $100,000 in international support, the World Bank has already spent $750,000 on two studies regarding their ecological significance and USAID funded a similar study which concluded in 1994.[49] Understandably, nature conservation officials are getting tired of receiving endless delegations of Western "experts" while waiting in vain for desperately needed equipment and financial aid.

While awaiting assistance from international conservation agencies, many nature preserves are seizing the initiative and seeking to promote eco-tourism as a supplemental source of income. The Baiko-Lensky Preserve has begun to allow in small groups of tourists who are willing to endure the basin's rugged conditions for various camping and hiking

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[47] Christian Science Monitor, 2 August 1994.
[48] Vladimir Krever and others, eds., Conserving Russia's Biological Diversity: An Analytical Framework and Initial Investment Portfolio (Landover, Maryland: Corporate Press, 1994), 102.
[49] Feshbach, 59.

excursions. The Preserve has already opened up three hiking routes through territory once accessible only to scientists and conservation personnel.[50] The reaction of environmental activists and organizations has been somewhat mixed. On the one hand, the idea of promoting eco-tourism promises to bring in a modest amount of capital and to increase international attention to the need to preserve the unique bio-diversity of the Baikal watershed. The promotion of eco-tourism is in fact one of the main recommendations of the Comprehensive Program: Funded primarily through American foundations and U.S. government agencies, the Sustainable Land-Use Project has planned and directed the construction of traditional log cabins to house future tourists in the village of Bolshoi-Galushnoi, on Baikal's western shore.[51] Despite admirable intentions, the revenue that eco-tourism may eventually generate will have only a marginal impact upon the region's economy. It would be absurd to assume that eco-tourism, however successful, could provide a viable economic alternative to the already well established industries in the basin. Likewise, although the more immediate needs of national parks and zapovedniki may be met in the short-term, eco-tourism provides no panacea for the political and economic instability which threatens to engulf Russia's conservation system. Virtually cut-off financially from Moscow and with dwindling resources of their own, the protected lands that ring Lake Baikal may soon find themselves under the jurisdiction of environmentally rapacious local authorities.

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[50] Christian Science Monitor, 2 August 1994.
[51] Journey to the Sacred Sea, produced and directed by Frances J. Berrigan and Yuri Beliankin, 60 min., NOVA, 1990. Videocassette.

Individuals and groups concerned with preserving Lake Baikal's exceptional ecology face a great quandary. How can the region join the rest of the world while still protecting everything that makes the Baikal region unique? Environmental organizations have championed their cause at both local and national political levels, have sought international expertise and assistance, and have played a leading role in developing conservation and education programs. Environmental NGOs realize that protection must proceed hand-in-hand with ecologically sustainable development. They have campaigned persistently to shut down some of the more offending industries, but as illustrated by the situation at Baikalsk, the pressing economic situation has erected a number of obstacles. While environmental groups no longer command the level of support they experienced in the late 1980s, they are better organized and more effective than ever before. Although hampered by financial constraints, these organizations have sponsored and engaged in scientific research in an effort to provide both information on and solutions to the environmental problems afflicting the Baikal basin.

Unlike the environmental movement that emerged during the glasnost era, the activists campaigning to preserve the Baikal watershed's ecology are more than just mouthpieces of political dissatisfaction. Dedicated citizens, scientists and members of the academic and technical intelligentsia, these individuals realize that the environmental problems of Lake Baikal cannot be solved overnight. More importantly, they realize the need to cooperate with government authorities, international environmental organizations, and with one another. While the level of cooperation that has been reached thus far leaves much to be desired, the

recognition of this need is an important first step towards arriving at a viable and mutually agreed upon solution to the problem. Their tendency to take the initiative in environmental matters, either through the solicitation of international support or by conducting environmental ekspertiza's and studies of their own, has often pressured local authorities to follow suit and has borne a noteworthy impact upon the formation of official environmental policy. Although the objective of preserving the ecological integrity of the Baikal watershed has far from been met, this vocal and dedicated minority has managed to exert a respectable degree of influence at both the regional and local levels of government.

Although based on legitimate environmental concerns, the environmental movement in the Soviet Union was largely a means by which the Soviet people could voice their disapproval with the policies and leadership of the State. But once the State withered away and the reality of the post-Soviet political and economic situation became clearer, the ranks of environmental activists thinned considerably.

Navigating their way through the political and economic uncertainties that have characterized the current period, a few of Baikal's environmental activists have managed survive the transition from the Soviet to the post-Soviet era relatively intact. Like any other public interest group in the post-Soviet era, environmental groups have been adversely affected by the growing public indifference borne by the economic and political uncertainties facing the Russian population. But those dedicated individuals who have chosen not to abandon the cause have emerged in a stronger position vis-à-vis the regional and local government.

Although still lacking the financial resources and legal mechanisms which could put their effectiveness on par with similar groups in the West, environmental groups in the Baikal region are better organized internally and are slowly beginning to overcome the Soviet legacy of social atomization and suspicion by increasingly cooperating and coordinating amongst themselves.

Much to the chagrin of Russia's political authorities, environmental organizations such as those in the Baikal region have emerged as significant players in the brokering of international involvement in matters of environmental remediation and assistance. Given that Russia's historical suspicion of Western motives will certainly not reverse itself overnight, environmental organizations ultimately may find their effectiveness and credibility among the Russian population adversely effected. Nonetheless, their continued presence in the overall process guarantees that at least the views of a few concerned private citizens are articulated to a governing structure that would just as soon prefer to disband them than to listen to their grievances and recommendations.

While they have never viewed themselves as being political organizations, the activists of the Baikal basin promise to be instrumental in helping define the private citizen's role in the emerging Russian political system. Each time an organized group of concerned citizens is able to show its dissatisfaction with official policy openly and without substantial fear of retribution, each time it is able to halt, shape or direct the development and implementation of said policy, the chances that a political system will evolve which will be slightly more responsive to the needs of its citizens than was its predecessor greatly improves. The unique cultural and

historical experiences of the Russian nation will undoubtedly influence the development of a political system that may be altogether different than what we in the West commonly envision as being a "democracy"; nonetheless, it will be a system developed to some degree with the participation of those whom will live under it.

In many ways, environmental activism in the Baikal region provides a unique case for the development of public participation in the political process in the Russian Federation. Lake Baikal is both an ecological and spiritual treasure to the Russian people. On the surface, the effort to save Lake Baikal was an effort to preserve both its majestic environs and unique bio-diversity from the ravages of Soviet industrialization. On a far deeper level however, the fight to save Baikal was a fight to preserve one of the last remaining pieces of traditional Russia from the onslaught of Communism. Baikal is a symbol. During the Soviet period, it was a reminder to many of their unique Russian heritage, of how alien all the trappings and consequences of Communist rule were to their traditional way of life. Not surprisingly, the cause drew champions from the scientific and literary intelligentsia, dedicated groups of private citizens, and after the Soviet Union's collapse, financial and moral support from around the world. In other words, the fight to save Lake Baikal became a cause celebre.

The effort to preserve Lake Baikal's ecological integrity laid down the ground rules for Russian environmental activism. The impressive growth of environmental activism in the late 1980s and the subsequent dissolution of the Soviet State brought out into the open the enormity of environmental damage that had been inflicted by Soviet industrialization. Whereas

advocacy for the preservation of Lake Baikal had earlier been within the domain of activists among the ranks of the Soviet intelligentsia, it was not until 1987 that an organization, the Movement to Save Lake Baikal, was formed which provided the framework for cooperation across the educational, professional and social divisions within Soviet society. Although enabled by the social and political reforms of glasnost, the establishment of this organization signified the progression of interest articulation from what Franklin Griffths had identified as "tendencies of articulation" to an actual public interest group. No longer was the effort to save Baikal an individual one, characterized by activists acting strictly within the confines of their "occupational groups" independent of one another. As an organization, the Movement to Save Lake Baikal united the efforts of individuals in all fields, among the intelligentsia and the ordinary public. At this stage the ecological movement was still primarily an effort championed by the intelligentsia (Siberian writer Valentin Rasputin headed the Movement to Save Lake Baikal), relying more upon persuading Soviet leaders to change environmental policy rather than developing solutions of their own in the absence of government initiative. Nonetheless, it was effective. The organization's ability to amass a substantial show of support, communicate its interest effectively to the central government and succeed in not only getting a resolution to preserve Baikal's ecological integrity passed, but ultimately to convince the Soviet leadership of the necessity of creating the first central government agency to regulate and enforce environmental policy, suggests that independent elements within Soviet society were indeed capable of exerting considerable influence within the political establishment.

The Movement to Save Lake Baikal was, however, more of an example of an actor within social movement in what comparativist Andrew Arato refers to as a "political" rather than civil society. While a political society is rooted within civil society, it tends to be characterized by a narrowly defined pursuit of interest within the political realm by parties or organizations seeking to control, obtain or influence the structures of power. The mediating role of political society between civil society and the state is indispensable because the political role of civil society is not directly related to the control or conquest of power but to the generation of influence, through democratic associations and unconstrained discussion in the public sphere.[52] Such a role is a diffuse and inefficient means by which to communicate an interest directly to political authority. A social movement operating within a political society is primarily interested in constructing an identity and defending its interest within the present social system, and is not dedicated to the establishment of a new one.

At one level, the Movement to Save Lake Baikal was a watershed for the organization of the environmental movement in the Soviet Union. It united a variety of individuals from diverse backgrounds in a number of different geographical locations under a single common cause, effectively articulating an interest to, and prompting reaction from, an otherwise unresponsive political establishment. Yet while it was comprised of many of the elements which comprise civil society, the fact that the organization existed alone does not constitute evidence of the existence of a viable civil society. The Soviet Union was still in the gradual

[52] Arato, 314.

process of becoming a law-based state and basic civil liberties and guarantees of organizational autonomy were far from being implemented. Until this infrastructure was in place, a civil society could not effectively emerge to provide an alternative to the then-existing Soviet social system. The Movement to Save Lake Baikal, while never identifying itself as a "political" organization but nonetheless interested in generating influence at the political level, acted within the structures for participation that had been defined and set up by the state, ultimately relying upon the state for resolution of Baikal's ecological degradation.

This is in stark contrast to the other prominent environmental organizations which emerged only a few years later: the Baikal Fund and Baikal Environmental Wave. While they too engaged in some limited activity within the realm of political society--e.g., the articulation of a specific interest at the local, regional and national levels of political decision making--these two organizations provide definitive proof that a civil society (although still struggling to entrench itself) has indeed emerged in post-Soviet Russia. Baikal Fund and Baikal Environmental Wave not only are representative of "formal" (established by charter, legally registered and possessing established organizational and financing mechanisms) public interest groups, but have proven to be capable of expanding beyond interest articulation at the political level and creating solutions to resolve issues which the official establishment is unable or unwilling to do. Placing minimal reliance on government action, these organizations have independently engaged in environmental education campaigns, sought and acquired foreign assistance, conducted their own environmental ekspertiza's, provided consultation on the

formation of environmental policy and, in a few rare instances, enforced environmental legislation. In the face of government inaction, these individuals have taken the initiative upon themselves and have successfully operated within (and as a consequence, have helped expand) a public realm independent of the state. Preferring to lead (if by nothing else by example) rather than await direction from the state, organizations such as these are representative of a self-aware, pro-active civil society. The ability to pursue an objective with minimal reliance on assistance or permission of political authority is a strong indication to the degree to which Soviet (and now, Russian) society has developed its own system of human networks which exists independently, if not anterior to, the political state. The new citizens of Russia's emerging civil society have created for themselves a kind of citizenship which, paradoxically, is anti-political, defined against the state. Growing economic pressure to further develop the Russian Far East's extensive resource wealth has redefined the mission of Siberian environmentalism. While Baikal has continued to draw attention from both Russian and international environmental organizations, loosely organized environmental groups in the Khabarovskii and Primorskii Krai's are struggling to prevent the whole-scale deforestation of the world's largest boreal forest, the Taiga.

CHAPTER VI

SAVING THE TAIGA:

ENVIRONMENTAL ACTIVISM IN THE RUSSIAN FAR EAST

DURING THE POST-SOVIET PERIOD

Although often overshadowed by Baikal, the struggle for environmental preservation has roots just as long and as deep in the Russian Far East.[1] Like the struggle to save that magnificent lake, the effort to conserve the environs of the Taiga was championed first by members of region's scientific intelligentsia. And like Baikal, it has been these individuals who have remained to establish themselves as the backbone of the Siberian green movement. In many ways, they were once the torch-bearers of glasnost, activists who had gathered even more strength and conviction after the Chernobyl disaster.[2] While never allowed to organize themselves officially until the late 1980s, and with their observations and warnings routinely ignored by a system more concerned with industrial development than with ecological stability, they were nonetheless representative of the beginnings of a democratic awakening within Soviet society. Much like their counterparts in the Baikal region, their continued efforts helped to lay the groundwork for the formation of environmental organizations in the glasnost and post-Soviet period.

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[1] Armin Rosencranz and Antony Scott, "Siberia's Threatened Forests," Nature 355 (January 1992): 294.
[2] Gary Cook, The Russian Far East: At the Forefront of Change (Washington, D.C.: United States Agency for International Development, Office of Private and Voluntary Cooperation, Bureau for Humanitarian Response, 1994), 72.

As a readily accessible and (at a low processing cost) easily exportable commodity, timber stands at the present to offer the most viable solution to the current economic malaise. Following the dissolution of the Soviet Union, tree felling in Siberia has dropped to about 300 million cubic meters each year; cutting by state-owned companies (accounting for about 90 per cent of the overall Russian timber industry) has decreased by 30 to 50 per cent as regional separatism, the collapse of industry, and societal upheaval have weakened Moscow's control.[3] Given the existing political power vacuum and over-riding economic needs, regional (and in some cases, local) authorities have stepped in and have routinely circumvented or simply ignored federal forestry regulations for the sake of immediate profits.

With regional governments essentially left to fend for themselves, the increased exploitation of forest reserves to bolster sagging local economies seems at first to be both logical and practical. Within the current context however, two factors tend to compound and exacerbate the imminent problem of deforestation. First, the lack of enforceable environmental legislation fails to hold regional and local authorities to any particular standards of extraction or export policy. Second, the recent completion of the Baikal-Amur Mainline (BAM) and its subsequent "spurs"[4] has opened a vast area (geographical equivalent comparable to that of Western Europe) of Eastern Siberia and the Russian Far East to increased timber harvesting.

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[3] Divish Petrof, "Siberian Forests Under Threat," Ecologist 22 (May 1992): 267.
[4] Additional rail lines deviating from the principle railway into more remote areas of Siberia and the Far East.

A fact that is less recognized when addressing the environmental impact of the BAM is the labor surplus that has resulted with its completion. At its construction peak in 1987, the BAM employed roughly 160,000 workers, a majority of which came from the European regions of the USSR.[5] The BAM's completion, coupled with economic and social uncertainties in the European zone, has acted as an inducement for many to remain in Siberia to stake their economic fortunes. With logging promising immediate financial returns with little capital investment, the labor ranks of timber companies have been significantly bolstered, placing additional pressures on regional and local governments to increase logging concessions to domestic industry.

The devolution of power in the former Soviet Union has accelerated the threat of deforestation in Siberia by as much as five years.[6] Currently, loggers fell an average of 10 million acres of Siberian forest a year, with Siberian timber representing approximately 2.6 percent of Russia's total foreign currency earnings. Although official timber harvesting rates were in a period of steady decline during the latter half of the last decade, economic dislocation and a growing demand for timber products on the world market promises a dramatic increase in logging. Many local and regional governments in the Russian Far East have already claimed control of their forest resources from Moscow's centralized forest ministries and have begun to

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[5] Milka Bliznakov, "The New Towns on the Baikal-Amur Mainline: A Study of Continuity and Contradiction in the Urbanization of Siberia," Environmental Problems in the Soviet Union and Eastern Europe, ed. Fred Singleton (London: Lynne Rienner Publishers, 1987), 129.
[6] Alexei Grigoriev, "Leaving the Door Wide Open for Ruthless Exploitation," Taiga News, 1 March 1993, 4.

enter directly into logging agreements with foreign timber corporations. Faced with difficult economic conditions and a desperate need for hard currency, raw timber is currently being sold to foreign interests for less than 1/20th its world market value.[7] To a considerable extent, Russian forests are still logged by forced labor --a remnant of the Soviet GULAG system. Approximately 200,000 prisoners are living and working under severe conditions in these camps. In fact, during the last few decades the Ministry of Internal Affairs, the department that administers these camps, has been the third biggest timber company in the former USSR.[8] In the Khabarovskii Krai and Amurskaia Oblast of the Russian Far East, 15,000 to 20,000 North Korean loggers are working in two North Korean-Russian joint ventures ("Tyndales" and "Urgalles") under slaves-like conditions.[9] Officially, the North Korean workers are volunteers but the logging camps are under strong North Korean secret police control; workers caught attempting to escape are sent home to North Korea, where they simply "disappear".[10] In the last 25 years these camps have clear-cut approximately 700,000 hectares and have destroyed nearly all the productive forest within 100 kilometers of the Urgal-Izvestkovaya railroad. Although fined repeatedly by both central and regional government administrations, the original agreement had no provisions for financial compensation. The North Koreans simply "paid" for their environmental infractions by felling even more trees and then turning them over to the

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[7] Ibid.
[8] Alexei Grigoriev, "Slave Labour Loggings - No Issue for Clinton," Taiga News, 15 August 1994, 7.
[9] The Russian-North Korean joint venture is the product of a mid-1960s bilateral agreement on collaboration in field forestry. The two logging camps at "Urgalles" and "Tyndales" were originally set up as North Korean "re-education camps".
[10] Jeff Lilley, "Great Leaders Gulag," Far Eastern Economic Review, 9 September 1993, 22.

local forest ministry.[11] The "Tyndales" enterprise in the Amurskaia Oblast alone cuts an average of 2.5 million cubic meters of wood per year to compensate the local government for over-harvesting.[12]

The North Korean government has been criticized by regional officials in Khabarovsk for both its environmental short-sightedness and failure to live up to the initial conditions by which the logging concessions were granted; the logging camps have repeatedly expanded their operations into marginal forest lands. Furthermore, loggers have sought to supplement both their diets and income by poaching rare species of musk deer, Himalayan Black Bear, the Far Eastern Leopard and Siberian tiger; species whose internal organs and pelts are known to fetch a handsome price in the Orient for their alleged medicinal values. The poaching of endangered species for market is a lucrative and growing trade which by no means has been dominated by prison camp loggers. Since August of 1992, no less than 12 Himalayan Black Bear skins were sold through the Vladivostok store "Lyuks." Despite the fact that the animal is protected as an endangered species in the Red Book[13] of the Russian Federation and hunting of the bear is forbidden, skins are sold openly.[14]

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[11] Ibid.

[12] Julia Levin, "Siberia for Sale: A Russian Timber Rush in a Regulatory Void," Audubon, May/June 1993, 24.

[13] In 1991 an estimated $US 1 billion of contraband trade in rare and endangered animals and plants took place, with two-thirds of the business emanating from the former USSR. To date, 603 varities of vegetation and wildlife are now listed in the Russian "Red Book" of endangered species.

[14] "Siberian Forests Fact Sheet #1," Pacific Environment and Resources Center (PERC), San Francisco, n.d.

In the summer of 1993, a committee led by S.A. Kovalev, chairman of the Human Rights Committee of the Supreme Soviet, examined the North Korean joint ventures. The committee's final conclusion was that working conditions in the camps violated both national and international human rights legislation. As a result, the Russian government refused to extend the agreement and, since January 1st 1994, the North Korean timber enterprises no longer have any legal basis for continued operation on Russian territory.[15]

Nonetheless, Russia's prison camp system has been given new financial possibilities. Legislation adopted in the summer of 1992 allows prison camps to take part in, or be converted into, any type of enterprise under private ownership. Logging camps were also given limited timber exporting privileges, designed more to promote the idea of a self-financing prison camp system than to bolster the nation's coffers. In a 1993 interview with the Russian magazine "Business People", Vladimir Bukin, deputy director of the prison camp department of Russia, was quoted as saying:

> "We have already established partnership relations with 40 commercial organizations from other countries, including the USA, UK, Germany and Finland. Our prison camps make shoes for Italy, jackets and other clothes for China. With the help of American investments we are establishing a big enterprise for log processing in the Krasnoyarsk region."[16]

Bukin's seemingly innocuous statement exemplifies the distinction between the efforts of preserving the Baikal watershed and those of forest conservation in the Russian Far East. It is

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[15] Grigoriev, "Slave Labour," 7.
[16] Ibid.

precisely those elements to which Bukin alludes to which will prove to be a complicating factor to the environmental conservation efforts of the latter.

International timber concerns pose perhaps one of the greatest threats to the ecological stability of the Russian Taiga. Promising quick hard currency returns to local industry and government officials, Japanese, Korean, and U.S. corporations have been quick to take advantage of Russia's regulatory void, expropriating a majority of both product and profit and leaving only marginal benefits to the local economy. With the Moscow administration eight hours away and unable to enforce its own forestry regulations, international timber corporations have found eager partners in the regional administrations of Khabarovskii and Primorskii Krai's. Felled timber is often exported unprocessed (logs), so local processing industries are unable to derive any economic benefit from the joint venture. Even the sale of unprocessed timber brings little monetary reward to the local economy; logs are routinely purchased for just $US6 a cubic meter and then resold on the world market for between $US45 and $US60 a cubic meter.[17] As it stands now, anyone controlling a large stand of timber can technically do with it as he or she pleases, either logging it themselves and exporting to the world market, or initiating a joint venture with a foreign concern. The terms of the exchange are often less than equal; the potential for environmental disruption, enormous.

Over the last few years, the South Korean multinational Hyundai has been poised to expand its already extensive logging concessions into the Bikin River valley, one of the last

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[17] "Hyundai has Go Ahead to Log Native Forests of the Udege People in the Russian Far East," Pacific Environment and Resources Center (PERC), September 1992.

virgin forest regions in Primorskii Krai. In 1989, Hyundai and the Primorskii State Timber Industry formed the "Svetlaya" joint venture in order to log more than one million cubic meters of timber annually for the next 30 years on the eastern side of the Sichote-Alin mountain range.[18] According to the original agreement, Hyundai was to limit its operations to the mountain's eastern side, fell only dead or dying trees, and implement a reforestation program. Instead, the multinational has clear-cut vast expanses of mountainous terrain (thereby greatly accelerating erosion and siltation) and has made no effort at instituting any type of replanting operation.

In order to make the venture even more profitable, Hyundai proposed expanding its already disruptive logging operations to the top of the Bikin River basin. The environmental consequences of such a move would be enormous; Not only would the region's unique bio-diversity be adversely effected, but the livelihood of the region's indigenous inhabitants, the Udege, would be permanently disrupted. After the collapse of the Soviet Union, the new Russian government enacted various laws ("Ukas") in order to protect the ethnic minorities of the Russian Far East.[19] These laws guarantee unrestricted hunting and fishing rights for ethnic minorities provided they are carried out in a traditional, non-disruptive manner. Numbering only a few hundred, the Udege depend upon the forests of the Bikin Valley for survival. Surviving primarily off of the region's game and fish, the logging operations proposed by

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[18] David Gordon and Bill Pfeiffer, "Hyundai Hacking Siberia's Forests," Earth Island Journal 2 (Fall 1992): 18.
[19] Netzwerk Okologischer Bewegungen (Hamburg), 16 June 1992.

Hyundai would tragically upset one of Siberia's last indigenous cultures. Through questionable acts of "generosity" and the promise of substantial profits, Hyundai has managed to secure the support of Primorskii administration officials. Although Hyundai's plans have received neither a positive environmental ekspertiza nor permission by the Udege, both of which are required by Russian law, loggers nonetheless began to mark trees for felling.[20]

The South Koreans have not been alone in exploiting Siberia's regulatory void. International pressure to preserve the rain forests of South East Asia and the last remaining stands of old growth forest in the Pacific Northwest has forced many Japanese timber companies to look towards Siberia as a reliable source of wood. While Japan's imports from Russia may be relatively small compared to Russia's total timber production, Japan is the largest importer of Russian wood. A July 1993 report by the Japan External Trade Organization (JETRO) found that there were at least 12 Japanese-Russian joint ventures involved in timber processing in the Russian Far East as of 1992.[21]

Beginning in January of 1992, KS Sangyo (or the Fourth Siberian Forest Development Project) is a large scale barter agreement between the construction machinery company Komatsu, nine other Japanese trading firms, and the Russian Far East Timber Exporters Association.[22] Six million cubic meters of logs and 400,000 cubic meters of lumber are to be exchanged over a five year period (January 1992-December 1996) for Japanese-made logging

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[20] Gordon & Pfeiffer, 18.
[21] Grigoriev, "Slave Labour," 8.
[22] "The Taiga: A Treasure? Or Timber and Trash?" 44.

equipment, bulldozers, and other heavy machinery.[23] Increasingly interested in taking advantage of the current regulatory and political vacuum, some Japanese trading companies, such as C. Itoh, have been pressing for the removal of the minimal forest protection and re-planting requirements instituted under the Soviet regime.

U.S. timber giant Weyerhauser Corporation has nearly concluded almost four years of negotiations with Russia that would give it access to over one million hectares of forest in the Botcha River basin.[24] Weyerhauser has already gone ahead and constructed a large loading dock near Khabarovsk, a move that has outraged local environmental activists who insist that the fragile Botcha basin be preserved as either a nature reserve (zapovednik) or national park. The Russian counterpart in this joint venture, Kopinski Lesokombinat is due to be privatized within the span of a few years; the Weyerhauser Corporation has already stated publicly that it plans to acquire 49% of the newly privatized company's shares, thereby getting almost full control of the joint venture.[25] Attempting to allay some of the regional administrations fears, Weyerhauser has undertaken an intensive public relations campaign to convince environmentalists, scientists, and local residents of its commitment to responsible forest management. Weyerhauser has also contributed a substantial amount of funding to the Far Eastern Scientific Research Institute for Forest Management, an institution which had come

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[23] Ibid.
[24] Tom Brokaw, "Save the Taiga," New York Times, 22 October 1992, 27 (A).
[25] "The Taiga: A Treasure? Or Timber and Trash?" 42.

out publicly against the joint venture on environmental grounds just prior to receiving Weyerhauser's sizable grant.[26]

Weyerhauser's public relations campaign is an attempt to "greenwash" the fact that the timber giant intends to employ (and refuses to consider any alternatives to) large-scale clear cuts in the Botcha basin. Although local scientists have warned that such practices would inevitably inflict irreversible damage to the forest ecosystem, industry officials have tried to minimize the urgency of their warning by insisting upon massive re-planting programs.[27] Weyerhauser's sincerity is unfortunately oblivious to the region's environmental reality; large-scale clear cuts on mountainous terrain inevitably removes both the protective covering and soil nutrients necessary for seedlings to take root. Even if such large areas were immediately re-forested, both soil and seedling would be washed away with the next rain.

Joint ventures in the timber industry may not have entirely negative repercussions to Siberia's forest ecosystem, however. Russian timber harvesting and processing practices are notoriously inefficient. Nearly 90 per cent of Siberian timber is logged by large-scale clear cuts; exposure of the frozen peat to the sun results in the formation of large swamps and bogs which foster weed infestations which in turn hinder the natural cycle of forest regeneration.[28] Recklessly transported down Siberian waterways, anywhere from 65-90 per cent of the felled timber never even reaches the processing plants, washing up along the shoreline or sinking to

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[26] C.W. Gusewelle, "Siberia on the Brink," American Forests, May/June 1992, 20.
[27] David Gordon and Antony Scott, "Weyerhauser: The Anatomy of a Joint Venture," Pacific Environment and Resources Center (PERC), San Francisco, 1992.
[28] Petrof, 267.

the bottom of the river where it contributes to the decline of the aquatic environment. What does reach the mill is inefficiently processed: Russian mills typically use three-times more timber than their Western counterparts to produce the same product.[29]

The introduction of more efficient Western logging technologies could conceivably reduce the amount of waste incurred in current harvesting and processing operations and contribute significantly to promoting conditions favorable to a more sustainable means of timber extraction. Russian foresters have very little in terms of quality processing equipment; wood products processed with old Soviet equipment are, for the most part, unacceptable on the international market.[30] Even environmentally, Western timber corporations tend to take into consideration the impact logging practices have on forest ecosystems, generally attempting to avoid employing destructive clear cutting techniques and instituting reforestation programs where applicable.

While many of their environmental concerns may in fact be genuine, their decision to implement and pursue costly environmental safeguards was in large part a response to the pressures placed upon them by a vocal and active public citizenry. Public participation in the decision-making process of government, industry, or any other organization whose actions ultimately impact the societal good, is one of the central tenants of Western-style democracy. The effective use of public participation is, however, as yet still in its most nascent and

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[29] Gusewelle, 20.

[30] Information received via electronic mail correspondence with Paul Soler-Sala, ISAR representative, Russian Far East, February-March 1995.

undeveloped stages in the Russian Federation. With the complicity of regional authorities, international timber corporations can embark in joint ventures under the pretense of bestowing technological and environmental assistance only to renege upon their commitments if such an opportunity to do so avails itself. Although to suggest that every multinational doing business in the Russian Far East cannot be trusted to fulfill their side of the bargain would be unfair, the Russians know that foreign firms are after one thing --Siberia's natural resources. If the opportunity arises in which such a firm can acquire the desired goods without having to incur additional costs (i.e. environmental precautionary measures), the logic of market capitalism dictates it do so.

Logging the Bikin Region of Primorskii Krai by the South Korean firm, Hyundai, provides a particular case in point. It is common knowledge that the South Koreans have been violating the conditions of the "Svetlaya" joint venture contract by employing both large clear cuts and Soviet equipment on marginal forest land. The contract stipulated that Hyundai would institute a reforestation program, employ selective cuts, and use only higher quality South Korean logging equipment. From August 1990 to May 1991, Hyundai cut over 50 thousand cubic meters of timber. Cutting in a remote, mountainous region four hours by helicopter from Vladivostok, Hyundai's actions went largely unnoticed by the region's population. The economic incentives the joint venture offers are very attractive to Primorskii's regional politicians, however. There is evidence that the head local politician of the region here

where the South Koreans are cutting was given a brand new car, one of the personal incentives to induce his continued positive relation to the venture.[31]

With environmental regulations haphazardly enforced and a political establishment easily influenced by the many economic and personal benefits joint ventures have to offer, foreign timber corporations are often given a "carte blanc" to operate in the Russian Far East. Aside from a handful of well-meaning and dedicated regional government officials, the task of holding both Russian and foreign logging enterprises environmentally accountable has fallen to a few committed grassroots organizations which have emerged to champion the Taiga's conservation.

In the last decade, the international environmental community has focused considerable attention on the preservation of the tropical rainforests of South East Asia and the Amazon. While governments and environmentalists alike grapple with solutions to tropical deforestation, a greater threat to one of the world's last pristine forest ecosystems has gone largely unaddressed. Totaling 600 million hectares and covering an estimated 2.3 million square miles, an area roughly the size of the continental United States, the forests of Siberia represent 57 per cent of the world's coniferous forest volume and 25 per cent of the world's total inventoried wood volume.[32] The Amazon rainforests of Brazil, by comparison, are almost 50 per cent smaller. Like Baikal, the Taiga too is home to a variety of endemic (and endangered) species of flora and fauna. Its southeastern regions constitute one of the last remaining habitats of the

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[31] Ibid.
[32] Gusewelle, 17.

endangered Siberian (Ussuri) tiger and the Far Eastern Leopard; species now threatened with extinction as unregulated logging and poaching practices encroach upon their once protected ecosystems.[33]

What is at stake in Siberia is more than a question of nature and species preservation; the Russian Taiga, containing an estimated carbon "sink" of 60 million tons, plays an important role in mitigating global warming.[34] This compares rather impressively with the much publicized Amazon basin, which accounts for approximately 80 million tons of stored carbon. Some environmental experts have speculated that the total carbon content of Siberian forests is actually higher than that of the Amazon basin rain forests.

Officially Russia loses 5 million acres of Siberian forest to fire, pollution, and over cutting --almost as much as the total annual losses of rain forests in Brazil (estimated around 7 million acres). Reforestation is officially recorded as covering approximately 3.7 million acres a year.[35] Yet additional information gathered from satellite observations provided by Grigorii S. Golitsyn's report on forest lands indicates that official data understates the Taiga's losses by 200 to 300 per cent.[36] Unofficial estimates have placed the figure at 35 million acres lost annually -

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[33] The habitat of the Siberian tiger covers all of the Primorskii Region and the very southern part of the Khabarovskii Region. Although the Far Eastern Leopard used to roam throughout the Primorskii Region, now it is found only in the very Southwestern corner of the region. There are only 250-300 Siberian tigers and between 28-31 Leopards left in the wild.

[34] William K. Stevens, "Experts Say Logging of Vast Siberian Forest Could Foster Warming," New York Times, 28 January 1992, 3 (A).

[35] Feshbach, 76.

[36] The Golitsyn report was prepared in July 1992 for Radio Free Europe/Radio Liberty. It was entitled "Ecological Problems in the CIS during the Transitional Period," RFE/RL Research Report vol. 2, no. 2 (January 8, 1993): 37.

-six times the official figure.[37] If these figures are correct, the destruction of the Taiga may prove to be potentially more decisive in influencing global climate change than the assault on the Amazon basin.

Why then has the international environmental community largely ignored the potential global consequences of the Taiga's deforestation? In part, the harshness of climate and geography, coupled with the political secrecy of the old communist regime, served to keep the issue of large-scale deforestation in the Russian Far East out of the world's eye. Equally as guilty has been the wide-spread ignorance in the West of the importance of the Siberian forest ecosystem in maintaining global ecological stability.

The collapse of the Soviet regime has, ironically, brought more problems than solutions to the situation facing the Russian forest ecosystem. The dissolution of Soviet state and the increasing power vacuum between center and periphery has placed not only forest resources, but natural resources as a whole, at the immediate threat of over-exploitation. Soviet policies concerning the exploitation of the Taiga were by no means ecologically sound or sustainable,[38] but the aftermath of economic collapse has created a condition which promises to foster devastation of the Siberian ecosystem well beyond the degree currently underway in the Amazon basin.

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[37] Feshbach, 76.

[38] The Russian concept of a "country in reserve" tended to treat Siberian resources (and people) as such; the supply of needed resources to the European centers of the nation was viewed as being above addressing local or regional needs.

Environmentalists in the Baikal region waged a struggle for the Lake's survival against central and regional authorities for over 20 years, eventually receiving both international recognition and assistance for their efforts and successfully forcing government concessions on key ecological issues. Conservationists in the Russian Far East, on the other hand, not only must confront government and industry officials, economic instability, and a population increasingly apathetic to ecological causes, but well-established foreign timber interests who possess the financial wherewithal to virtually guarantee logging concessions from local government officials. As relatively new environmental concern, the issue of forest conservation in the Russian Far East has not captivated the public's attention for any significant period of time and groups working with the issue are still fairly disorganized; even by Russian standards.

Environmental NGO's in the international sense of the term do not exist in the Russian Far East. For the most part, they are groups of scientists and naturalists, many dropped from the Ministry of Ecology because of down-sizing, advocating environmental causes on their own time and often at their own expense. They receive virtually no financial support from either the Moscow or regional administrations, depending instead upon expanding their contacts with international NGO's to secure funding to implement a wide-array of ecological initiatives. This is why the NGO movement in the Russian Far East could be better characterized as being comprised of NGI's (non-governmental individuals).[39] Unlike their Western counterparts, they lack the financial resources to permanently hire a core staff to carry

[39] Author's interview with Gary Cook, Baikal Watch Director.

out the day-to-day responsibilities of NGO management (fund-raising, computer and communications specialists, etc.).

Nevertheless, many dedicated individuals continue to advocate environmental awareness, running ad hoc conservation programs without a continuous means of financial support, investing time and money into vital ecological programs. In the Russian Far East, the line between environmental professionals affiliated with official government agencies and private individuals becomes blurred when it comes to securing financial support. Some of the fledgling NGO's have teamed up with international partners, other advocates from the traditionally scientific institutions have managed to secure various short-term sources. The Institute for Biological Problems of the North in Magadan, for example, received the bulk of its support from the government in 1991, from eco-tourism in 1992, from joint projects with Japanese colleagues in 1993, and was left more or less empty-handed in 1994.[40]

Despite the obvious financial shortcomings, many environmental activists remain, above all else, professionals. During the initial euphoria of glasnost, environmental "groups" emerged from the woodwork, protesting one policy or another but never capable of offering solutions. Anatoly Lebedev, representative of the International Environmental Center in Vladivostok, made the following comment:

> "There is the common perception that the more people you have taking part in a (environmental) movement, the more that environmentally destructive practices can be halted. But many of those people were just trying to realize their democratic 'rights' by simply participating in any organization. They ended up playing no serious role because they choose only to speak about problems instead of taking action. To solve

[40] Cook, 74.

> these (environmental) problems, you need specialists, people who are familiar with the political establishment. You need to be close to the decision-makers."[41]

While the desire to exercise these new found "democratic rights" represents both a political and social awakening of the Russian population, the haphazard articulation of public interest ultimately disrupts the efforts of more organized advocacy groups by promoting internal division within the movement and further increasing competition for already scarce funding sources.

Taken at face value, the connotations that can be drawn from Lebedev's remark do not appear to be especially conducive to the promotion of Western-style democratic interaction within the environmental movement. In many ways, we must continue to bear in mind that what is developing politically and socially in the Russian Federation may ultimately bear little resemblance to what is commonly recognized as being "democratic" in Western political thought. Yet the attitude taken by many environmental "professionals" towards the inclusion of groups and individuals more interested in the idea rather than the ultimate goal of environmental activism is firmly rooted in realistic considerations.

Environmental groups in the Russian Far East have few of the luxuries which allow their counterparts in the West to support the inclusion of groups and individuals pursuing a wide array of personal and political agendas. Scattered throughout an area one-third the size of the continental United States and operating within a virtual political vacuum with no

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[41] Information received via electronic mail correspondence with Anatoly Lebedev, representative of the International Environmental Center, Vladivostok, November 1994.

constant means of either financial or organizational support, the narrow self-aggrandizing activities of so-called ecological "clubs" in the Russian Far East often only draws attention and desperately needed funds away from the efforts of more established and professional organizations which possess the ability to affect change in current environmental policy. Western environmental organizations operate at the very least within a relatively stable political and economic environment, able to pursue their agendas through established and effective legal mechanisms. These groups are also adept at guaranteeing financial support for their activities via fund-raising campaigns, sales of various ecological publications, and through donations secured from a relatively affluent public. Unfortunately, the potential contribution of environmental groups in addressing deforestation and other pressing issues in the Russian Far East has been continuously hampered by the fact that they are sorely lacking even the most basic supplies essential to maintaining an effective organization; photocopiers, fax machines, personal computers, and even paper supplies. Most of these organizations lack reliable information on sustainable forestry practices and up-to-date books, journals, and technical manuals are largely unobtainable.[42] Without even basic technical supplies, it becomes increasingly difficult for groups in the region to attempt to educate communities on the value of their forest resources or to mount and sustain effective environmental campaigns. Yet despite such drawbacks, environmental activists in the region have continued to champion the preservation of the Taiga and its unique bio-diversity. Whether through the self-financed

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[42] "Siberian Forests Protection Project," Pacific Environment and Resources Center (PERC), San Francisco, 1992.

publication of newsletters or magazines, petition-drives, or even direct involvement in the regional politics, a handful of environmental activists and organizations have managed to survive the economic straits of post-Soviet Russia.

Organized in early 1988 in the city of Vladivostok, the Committee for Ecology and Nature Use in the Primorskii Krai region views itself as being a professional organization, with many of its members being former foresters and engineers let go from their positions within their respective ministries as a consequence of Gorbachev's economic reforms. The Committee presently maintains anywhere from two to six employees in each of the subregions of Primorskii Krai, and is equipped with a laboratory and has departments of water resources, fisheries, atmospheric contamination, flora and fauna, ecological expertise, economy, nature use, and ecological information.[43] Their main efforts have been to assist the forest protection agencies by monitoring cutting practices and the health of the regions trees. The reality of the matter is that because the regional government needs to sell vast amounts of raw timber to simply stay afloat economically, many of the efforts of the Committee are often negated out of economic necessity.

On the other hand, the Committee has been instrumental in organizing efforts to add to the regions six zapovedniki. According to its Chairman, Aleksey Medvedev, the Committee does get many letters of encouragement and requests from the region's population. In addition, the Committee also puts out a newspaper in an effort to keep the population-at-large informed

[43] Soler-Sala, February-March 1995.

about regional environmental issues and current initiatives, claiming to work closely with the Primorskii Krai political establishment by taking a more proactive role in the decision-making process by emphasizing the potential impacts certain development and trade initiatives may have on the environment.[44]

Semi-professional organizations such as the Committee for Ecology and Nature Use have been joined by other similar organizations in their effort to preserve the unique environment of the Russian Far East. The Politechnical Ecological Society (originally formed in 1988 as the Society for Ecological Actions) is, as its name would suggest, a loosely organized group of scientists and academics whose foundations as an ecological advocacy organization were created at the Vladivostok Politechnical Institute. Although many of its members remain affiliated with the Institute and therefore technically are still considered to be government employees, the organization itself has managed to maintain its independence from the government, using its professional knowledge to advocate on behalf of ecological causes. While the realities of Russian bureaucratic politics has often muted the collective voice of the regional scientific establishment, individual members of the Politechnical Ecological Society have nonetheless contributed their time and efforts to elevating key environmental considerations onto the political and social agenda. Contributing research and vital statistics on ecological issues ranging from forest bio-diversity to sewer treatment emissions, local scientists have formed the basis for what could loosely be described as an environmental movement in

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[44] Ibid.

the Russian Far East by providing incontrovertible evidence on the current state of ecological degradation in the region.

Able to maintain their independence from the official Russian ministries in charge of nature and resources, these types of groups play a key role in helping bridge the gap between the often disorganized but vocal grassroots organizations and the political establishment. Composed mainly of professionals once employed by the Soviet Forest Ministry, these individuals understand both the political and bureaucratic environment within which they operate. Their input is generally respected and taken into consideration by official policy makers. Their apparent indecisiveness on certain key issues, particularly regarding Hyundai's proposed cutting in the Bikin River basin, should be seen as an unavoidable consequence of the political position they find themselves in rather than a measure of official complicity. While not pushing the grand and bold solutions which other grassroots environmental groups champion, the presence of such "semi-official" organizations ensures that major ecological issues will be brought to the attention of the regional establishment. Like their more "grassroots" counterparts, they function as an articulator of a public interest, operating within a system which historically has had little experience with public participation in the formation of political or economic policy.

However, the interaction of such semi-professional environmental organizations with the regional political establishment has not been limited solely to identifying and documenting the causes of ecological degradation. Besides their efforts to establish additional protected

forest areas, their exhortations to local political establishments to implement more efficient waste management technologies and to restructure and enforce existing environmental legislation, members of the scientific community are also motivated individual activists, turning the wishful thinking and idealistic phrases of the environmentalism into the basis for political action. Much like the situation which emerged around the issue of Lake Baikal's preservation, here too scientists have emerged as the de facto leaders of a splintered and disorganized environmental movement. Yet while similar in their role as leaders of the environmental movement, scientists in the Russian Far East have increasingly substantiated forest activist Anatoly Lebedev's contention that in "order to solve the environmental problems of the Russian Far East you need to be close to the decision-makers"[45] by involving themselves directly in the regional political process.

Lebedev himself, as a former representative of the Socio-Ecological Union (SEU) in Vladivostok and historically one of the most active people in this region's ecological struggle, won election as a Primorskii Region People's Deputy in the late 1980s.[46] Throughout his career, Lebedev has participated in promoting other activists from this region to become elected People's Deputies --many of whom were elected to the regional and Russian Deputy Committees. Similarly Andrei Kubanin, one of the founders and de facto leader of the Politechical Ecological Society, was in fact one of several candidates nominated by the Society

[45] Lebedev, November 1994.
[46] Soler-Sala, February-March 1995.

and elected as a People's Deputy of the City of Vladivostok in 1989.[47] While it would be difficult to ascertain the degree to which these "green politicians" were successful in translating their environmental agendas into viable and enforceable legislation, their decision to actively participate in the political system as elected officials is particularly significant within the context of understanding the dynamics of interest articulation in the post-Soviet period as well as determining whether the activities of environmental groups in the Russian Far East reflect the existence of a viable civil society.

The environmental movement in this region does indeed reflect some of the more common attributes which characterize civil society; namely, the articulation of interests by groups of citizens who have independently organized themselves in an attempt to influence and change an official policy which adversely effects their interests. However, unlike the more established and better financed environmental organizations in Baikal, ecological activists in the Russian Far East are unable to effectively communicate, associate, and cooperate with other environmental organizations at both the regional and national level. This inability to form "horizontal networks" --mutually beneficial associations between groups within society which serves to provide not only networks of support and cooperation, but establishes a barrier to state intrusion into the individual's "private sphere"-- has been particularly acute among ecological groups in the Russian Far East. Individual activists concerned with the ecological integrity of the Taiga have been active for at least as long as those who have campaigned for

[47] Ibid.

the preservation of Lake Baikal, but their numbers have been fewer and their cause never taken up as enthusiastically by the Russian people as Baikal has been. Baikal served primarily as a focal point for political protest by the population against the abuses of the old Soviet regime and retained that function until the country's breakup in 1991. The preservation of a forest covering an area roughly the size of the continental United States, an area so large that in popular opinion, the matter of a few hectares of deforested land could hardly seem to be a significant factor in Siberia's ecological balance, the environmental movement in this region has been more an effort of dedicated individuals, rather than groups.

Operating in uncertain economic and political times, without the benefit of a repressive Communist regime to serve as a catalyst for a popular movement, and divided internally by mutual suspicions and a fierce competition for funds, groups within the region's environmental movement have perhaps done more to perpetuate the social atomization of the Leninist-Stalinist system than they have to establish a "horizontal network" among themselves. This is not to suggest that the necessity for cooperation between groups in the region has not been recognized and that the movement's collective leaders have not attempted to establish such a network among themselves, but the realities of the current situation in the Russian Far East has severely limited their efforts.

While the establishment of "horizontal networks" among groups in the Baikal region is still very much in its infancy, these groups have shown a greater proclivity to cooperate on major issues than their Far Eastern counterparts. In addition, environmental groups in Baikal

have expanded their "horizontal network" beyond one another to include international actors, seeking and implementing solutions to environmental problems often independently of government participation. Groups in the Far East have approached international organizations for assistance (often with some success) but their lack of efficient organization and group cooperation has limited their ability to maintain promising contacts and use the support provided in a resourceful manner. The inability of these environmental groups to effectively cooperate and coordinate their actions in order to achieve their common objectives, to establish what constitutes a "horizontal network", signifies that (at least at the present time) environmental groups in this region are not reflective of what could be considered a Russian civil society.

Rather, the manner in which individual activists and organizations in the Russian Far East have chosen to advocate environmental concerns is far more reflective of actors in a political society. Outlined briefly in a previous discussion concerning the actions of certain environmental groups in the Baikal region, an actor in a political society (although ideologically rooted in the principles of civil society) seeks to either control or influence the mechanisms of power in the existing political structure in order to guarantee that their interests will be considered and addressed. A turn to political society can involve four mutually non-exclusive forms: The first is the formation or generation of a political party; second, the expression of various forms of electoral support for a particular candidate(s); third, the establishment of

ongoing mechanisms of pressure and influence; and fourth, the formation of parliamentary groupings.[48]

To a certain extent, the Russian environmental movement has touched upon all four of these forms at various times in its history. The turn to a political society is quite logical and, especially during a period when civil society is still attempting establish itself, the most effective way for activist organizations to articulate their interests. Yet while environmental groups in other parts of Russia have moved away from direct involvement in the political process, those of the Russian Far East still rely heavily upon that type of participation in order to further their particular objectives. The almost exclusive reliance upon utilizing the mechanisms of political society, while promising in terms of increasing the participation of actors in the political process who were previously excluded under the Soviet system, signifies that environmental activists in the Russian Far East as of yet unable to turn to the forces of civil society to exert pressure on the regional and national political establishment. At the political level, organizations in this region perform a lobbying function on behalf of a constituency concerned with issues regarding the preservation of the Taiga.

However, the electoral activity of these groups increasingly tends to put them at risk of being controlled or even monopolized by professional organizers. Thus, the involvement of a few environmental activists in the political process has the potential to evolve into the practice of politics as profession, motivating individuals to portray themselves as being representative of

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[48] Arato, 326.

an interest in order to guarantee their continued political position rather than to actually see that interest addressed by the system. This has the adverse effect of promoting passivity and demobilization at the grassroots level, creating conditions which can ultimately lead to what can be referred to as an "elite democracy"; separating real political power and influence from the groups within Russian society which they profess to represent and ultimately leading to the functional equivalent of what could be considered a reform dictatorship. The co-optation of social activism by the political system effectively neutralizes the ability of a grassroots movement to affect change on the structure and conduct of the political establishment by giving environmental activists a stake in maintaining and perpetuating the system.

Environmental groups in the Russian Far East cannot continue to waste all of their energy on political society activity. On one level, environmental groups in this region have turned decidedly political and are active in the regional political process. However, participation in the political process in no way guarantees the establishment of a democratic system. In order for a democratic political system to exist, it must above all else be founded upon a legally and constitutionally anchored, open and pluralistic civil society. It is imperative that these groups begin to attempt to follow the path already taken by the region's oldest environmental movement, that to save Lake Baikal, and work to strengthen the "horizontal network" among themselves and other activist groups in the nation. Only once this has been achieved can environmental groups in the Russian Far East effectively communicate their interests to political authority and contribute to the establishment of a vibrant civil society capable of supporting a functional democratic political system.

CHAPTER VII

CONCLUSION

The emergence of environmentalism as a social movement, particularly the activities of ecological groups in the Baikal, Primorskii and Khabarovskii regions of the Russian Far East, provides a unique opportunity to examine the evolution and current practice of interest articulation within the Russian political establishment. Understanding how the process of interest articulation evolved within the Soviet scientific and literary intelligentsia under a supposedly "totalitarian" regime, eventually manifesting itself as an established feature of Soviet society, affords an occasion to determine the relative degree to which Russian civil society has developed in the last few decades. Comparativist Moshe Lewin maintained that civil society began to develop as early as the 1960s, essentially as an unexpected by-product of a Soviet campaign to urbanize, modernize and educate a significant portion of the country's then-rural population. The expansion of the country's urban centers, populated by a newly created professional class, provided the foundation for a civil society to begin to emerge in part as a reaction to the unresponsive, restrictive and exclusionary Leninist-Stalinist system incapable (and unwilling) to satisfy the economic and political demands of actors within this new "society". As the official state system continued to function in the manner to which it had become accustomed, resisting adaptation to the changes which were steadily transforming Soviet society, it gradually separated itself from the population which it presided over.

No longer rooted within society, the Soviet system began to experience what could be referred to as a "crisis in legitimacy"; Soviet society had created for itself a public realm capable of operating almost independently of the state. Within this realm, a variety of actors began to establish amongst themselves new types of networks, organizing informal groups formed on the basis of shared interests, and generating unofficial forms of public expression. The existence of an independent society, although restricted officially within the public realm by Communist authority and still unable to exercise any relevant pressure on the regime, provided the seeds for a possible larger-scale mobilization of societal forces against the political establishment. The party-states' inability to reconcile the differences between the official Soviet economic and social system and the one which in reality had been emerging all along, provided the basis for the development of organized interest articulation on the part of the Soviet populace. With a framework for confrontation between actors at the societal level seeking a change to the status quo and those at the political level seeking to preserve it in place, all that was lacking was a catalyst which could unite a broad strata of the Soviet public in opposition to the party-state. The issue of the conservation of the Siberian environment would soon provide such a catalyst.

The rapacious nature of Soviet economic and industrial development inflicted tremendous damage to the ecological stability of virtually every region of the USSR. Yet while the environmental costs of development were well known early on in the Stalinist period, a combination of institutional terror and dire economic necessity relegated the issue to the political back-burner. Only during the final days of the Stalinist regime and well into the

beginning of the Khrushchev period did debate concerning the pace of economic development and its subsequent ecological cost begin to emerge within the Soviet bureaucratic establishment. While the passing of a few environmental regulations is hardly evidence of the articulation of ecological interests on the part of institutional actors, it does substantiate the claims made by H. Gordon Skilling and Franklin Griffiths that there was indeed some form of "interest articulation" (or rather, competition) between institutional groups comprising the Soviet political establishment. The justification in making such a statement without the basis of hard evidence is based purely on logic; the economic ministries, unencumbered by environmental considerations during the Stalinist period, would hardly find it to their advantage to advocate restrictions to economic and industrial development. The initiative for such legislation would apparently have had to come from some other "group" (e.g., Forest Ministry, ecologists, botanists, et al) within the political establishment capable of influencing relevant Soviet decision makers. At the very least, this would suggest that even within this supposedly "totalitarian" state there was room for discussion and that many decisions resulting in state policy were often the product of the efficient articulation of an institutional interest.

The passing of broad environmental policies could be considered to be the result more of the practice of institutional politics within the bureaucratic establishment, as each group sought to influence the formation of policy ultimately to the advantage of their particular institution, than it was a product of a genuine concern for a specific ecological issue. Only when industrial development threatened the ecological integrity of Lake Baikal did the debate concerning environmental regulation find a common focus.

The campaign to preserve Lake Baikal provided the beginnings for organized interest articulation in the Soviet Union. As a cause first championed among the scientific and literary intelligentsia, it served to set up a framework in which concerned individuals could begin to voice their opposition to Soviet environmental policies (and ultimately, the legitimacy of the political regime) thereby establishing the basis for a social movement which would eventually encompass individuals across a broad strata of the Soviet population. In its initial stages, the articulation of interest by the scientific and literary intelligentsia could hardly be considered reflective of the operations of what is commonly considered in the West to be an "interest group". To borrow once again from Skilling and Griffiths' terminology, early environmental activism within the Soviet establishment was more indicative of what could be termed as the "tendencies of articulation"; while advocating a resolution to the same issue, there was no evidence of communication and cooperation across institutional boundaries. Interest articulation by actors within the Soviet establishment, while effective in promoting discussion and official consideration of the issue, was still unorganized and ineffective as a mechanism to affect change. Only when allowed to expand the debate into the public sphere, thanks in large part to the political and economic reforms of the Gorbachev period, could interest articulation take on a more organized and effective manner occur.

The environmental movement provided a common ground upon which Soviet society, isolated from the political system and increasingly disenchanted with the promises of communism, could articulate concerns not only on such specific issues as Baikal or the conservation of the Taiga, but their political and economic aspirations as well. The civil society

that Lewin maintained was developing in the Soviet Union had finally found a means by which to express and, ultimately, exert itself. As a social movement, environmentalism was able to unite a broad strata of the Soviet population in what in actuality was political protest. The actual articulation of interest to the Soviet establishment was still conducted in a fairly haphazard manner. Environmental groups were, as Andrew Arato has pointed out, still actors within a political society.

Although reflective of an emerging civil society, these actors were primarily concerned with the generation of influence and acquisition of some form of control over the structures of state power. A turn to political society was at times the most logical recourse for environmental groups operating within a civil society still in the process of establishing itself; without engaging in the game of politics, no components of the "green programs" advocated by these groups could be actualized, resulting in devastating consequences for the environment. These organizations functioned primarily as lobbying organizations on behalf of the "public", and while scoring a few impressive victories, they cannot be considered harbingers of democracy; while a democratic system is built upon the foundation of civil society, a democratic civil society is not the only possible outcome of the passing of a communist regime.

The dissolution of the Soviet state provided a litmus test to the strength of environmentalism as a social movement and as a manifestation of the components of civil society. With their focus for political participation and protest --the Communist Party-- gone, the ranks of the environmental movement thinned greatly. Yet, the movement itself did not disappear entirely. A handful of environmental organizations had survived. Better organized,

professional and more disposed to provide solutions to environmental problems rather than merely engage the government in protest, these groups were more reflective of the elements of civil, rather than political, society. Although engaging in political action when necessary, groups such as the Baikal Fund and the Baikal Environmental Wave operate almost entirely at the societal level: conducting awareness campaigns; running radio, television, and newspaper ads; setting up their own ecological remediation efforts, etc. Rather than waiting upon the political regime to take action, these groups seek solutions and assistance from within the rank and file of the Russian citizenry.

For all the promise that citizen activism holds for the establishment of civil society and the potential emergence of a democratic political system, the phenomena is still very much in its initial stages. As was evidenced by the activities of environmental groups struggling to save the Taiga, civil society is, in many respects still too weak to successfully articulate its agenda to the political establishment. Often the only recourse for environmental groups is to revert to political society; supporting candidates or platforms, engaging in political protest, and generally seeking to influence environmental decision-makers. In this respect, the practice of interest articulation is a well established feature of most environmental groups. Yet, this guarantees neither short-term (policy objective) or long-term (securing civil society) success. Environmental groups such as these increasingly enter into conflicts with market-oriented reforms, schemes for privatization and attracting foreign capital. This is because uncontrolled markets, even if less destructive then Soviet-type economies, cannot correct and more likely will exacerbate the harm that has already been done. Ecological movements need demonstrate

that the objectives they seek can be made to be compatible with economic reform or else they may soon become associated in the public eye with some element of the old regime, effectively undermining their legitimacy within their respective communities. Since the basis of power for all grassroots movements is, logically, at the societal level, the de-legitimization of environmental groups as representatives of public interest would effectively take them out of the process of political and economic reform.

The environmental movement in Siberia and the Far East is perhaps one of Russia's most enduring instances of citizen advocacy. It is within this type of citizen-advocacy that Russia's greatest hope for the institutionalization of a democratic political system lies. While democracy is directly tied to the existence of a civil society, and to a certain degree we have determined that some of the most basic attributes of a civil society do already exist, a civil society cannot function without the presence of freely formed citizen-groups. These groups serve to not only advocate public or special interests to the political establishment, but are institutions which provide a boundary between political authority and the individual citizen. They form networks among other like-minded groups within society which provides the basis for communication and cooperation, further eradicating the legacy of social atomization. They can function as protectors of the individual interest or as the watchdogs of governmental authority. While they may chose to participate politically, they are not dependent upon the political establishment in order to achieve their objectives. They form the link that keeps society separate and independent from the political state, relegating the government to being just one of the many institutions comprising the pluralistic social fabric.

If the Russian nation has truly embarked down the path towards democratization, the measure of a successful effort will be reflected in the degree of autonomy societal actors possess vis-à-vis the state. The environmental movement in the Russian Far East provides evidence which suggests that Russian citizens have gradually become politically and socially pro-active, uniting beneath a common cause and articulating their demands directly to political authority. As a measure of the degree to which civil society exists in the Russian Federation, environmental groups have shown that they are capable of formulating and implementing their own solutions to problems in the face of government unresponsiveness. This ability to exist and to function independently of state control, even of state assistance and reliance upon its institutions, is testament to the resourcefulness and self-confidence of Russian society. While the environmental movement has lost some of its vigor and backing among the citizenry due to the conditions which have been created by the post-Soviet economic disruption, environmental groups continue to operate, often better organized and funded than their counterparts at the local and regional government levels.

Organized from below, formed almost spontaneously by citizens from diverse educational and professional backgrounds who found themselves faced with a common threat, environmental groups epitomize grassroots activism. They have helped to dispel to many in the West the notion of a powerless, subjugated Russian people, a people who desperately seek an autocratic ruler because that is all that they have ever known. Environmental groups have shown that ordinary, but committed, individuals can indeed shape the future course of a nation. That even history's most authoritarian state, utilizing every mechanism at its disposal for

ensuring its continued dominance and control of the Soviet nation, could not defeat a movement by its people to preserve a unique body of water in Eastern Siberia. The confrontation between state and society (inevitable since the Soviet state had lost whatever foundation for legitimacy it had with the people by the late 1970s) and society's ultimate triumph in 1991, shows that Soviet (and now Russian) society is fully capable of taking the initiative in shaping a new political and social system.

Can the perseverance of environmentalism as a social movement and indicator of the tentative existence of a civil society be grounds for assuming that Russia is truly making the transition towards a politically democratic system? Environmental groups only provide an example of the types of citizen groups which can impact the development and operation of a political system. Alone, they cannot be considered proof of anything politically substantive. A democratic system will take at least a generation to develop, a generation uninterrupted by war or social strife and marked by sweeping changes in the legal and constitutional basis of the current political system. Citizen action and advocacy groups can operate within this framework, helping shape the development of the political system and thereby cementing its foundations within Russian society. International assistance, while beneficial at the macro-governmental level cannot ignore the smaller actors at the societal level.

It is they who create the link between state and society, ensuring that society's voice is heard within the realm of political authority. Aggressive public interest groups provide a counter-balance to the authority of government. While they may not be able to ensure the development of a democratic political system, their involvement in the process opens the

operations of government to inspection by the society which it presumably presides over. If not able to significantly influence the development of the system, environmental and other public interest groups can at least hold the government accountable for its actions. The risk of ignoring the role of these groups is significant. If society is once again excluded from the political process, Russia will once again become ruled by an elite few who, by playing upon the fears and economic insecurities of the population and consolidating their power within the ruling institutions, will undoubtedly herald a return to autocracy. Such a result could hardly be considered to be in the best interests of either the West or of a majority of the Russian population.

The activities of environmental organizations and individual activists, the manner in which the environmental movement persevered during the Soviet period and the ferocity with which it exploded onto the political and social scene in the late 1980s, are strong indications that Russian society is indeed capable of taking a pro-active role in shaping the environment which surrounds them. If nothing else, environmentalism has shown that the indefatigable desire for personal autonomy, which has long existed within the shadows of an autocratic and paternalistic political order, is still an intrinsic part of the Russian character. Upon these foundations a democratic system can be built and the future course of the Russian people, the state, and the rest of the Eurasian world altered significantly. Exemplified by the grassroots activism of Siberia's ecological groups, the elements for social and political transformation exist, but are in desperate need of the type of assistance which the West squanders on efforts to modernize and privatize the obsolescent institutions of communism in an attempt to secure

for themselves at least a modicum of profit. Environmentalism proved a force capable of hastening the collapse of a communist empire; perhaps now it has come time to assist these movements in helping shape the future of the Russian nation.

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