U.S.-SOVIET RELATIONS: AN AGENDA FOR THE FUTURE

14. COOPERATION TO PROTECT THE ENVIRONMENT AND CONSERVE RESOURCES

David McClave
The Johns Hopkins Foreign Policy Institute (FPI) was founded in 1980 and serves as the research center for the School of Advanced International Studies (SAIS) in Washington, D.C. The FPI is a meeting place for SAIS faculty members and students as well as for government analysts, policymakers, diplomats, journalists, business leaders, and other specialists in international affairs. In addition to conducting research on policy-related international issues, the FPI sponsors conferences, seminars, and roundtables.

Current research activities at the FPI span the complete spectrum of American foreign policy and international affairs. In the project on "U.S.-Soviet Relations: An Agenda for the Future" FPI fellows and outside experts evaluate the recent evolution of U.S.-Soviet relations and develop original ideas for increased superpower cooperation in new and established areas. Through the project on foreign policy consensus the FPI seeks to advance the national dialogue on central issues of U.S. foreign policy; specific recommendations are prepared by selected experts and endorsed by a bipartisan commission for wide distribution in the policy community.

Other current FPI programs examine the impact of the landmark Goldwater-Nichols defense reorganization act; the relation of arms control to force structure and military-political doctrine; the politics of international terrorism; the role of the media in foreign policy; American and Soviet national security policymaking; and other leading international issues. These programs are usually directed by FPI fellows.

FPI publications include the SAIS Review, a semiannual journal of foreign affairs, which is edited by SAIS students; the FPI Papers in International Affairs, a monograph series designed to make public the best and most cogent scholarly work on foreign policy and defense issues; the FPI Policy Briefs, a series of analyses of immediate or emerging foreign-policy issues; the FPI Case Studies, a series designed to teach analytical negotiating skills; and the FPI Policy Consensus Reports, which present recommendations on a series of critical foreign policy issues.

For additional information regarding FPI activities, write to: FPI Publications Program, School of Advanced International Studies, The Johns Hopkins University, 1619 Massachusetts Avenue, N.W., Washington, D.C. 20036-2297.

© November 1988 by The Johns Hopkins Foreign Policy Institute. All rights reserved. Printed in the United States of America.
U.S.-Soviet Relations: An Agenda for the Future

In January 1988, The Johns Hopkins Foreign Policy Institute (FPI) of the School of Advanced International Studies, with the generous support of the W. Alton Jones Foundation, launched a program to assess the changing nature of U.S.-Soviet relations and devise an agenda for the future.

The project has been two-fold in thrust. First, the opinions of experts--participants as well as historians--were canvassed to review the experience of recent decades, identify past errors, and explore the possibilities and pitfalls of the expanded horizon that emerged in the waning years of the Reagan administration.

Second, the FPI launched a nationwide search for innovative ideas for increased cooperation between the United States and the U.S.S.R. in such fields as education, the arts, science, and business--in addition to arms control and economic relations. The FPI gave special consideration to proposals that might not only expand the menu of U.S.-Soviet interaction but might also, by the very nature of the rewards provided to both sides, be insulated from the vagaries of the overarching political relationship and perhaps, over time, help to stabilize that relationship.

From the more than 225 proposals that were submitted by junior and senior academics, active and retired foreign service officers, doctors, lawyers, scientists, union leaders, businessmen, architects, peace activists, students and housekeepers from 40 states and a few foreign countries, the FPI selected 20 for further development. The authors were invited to present their ideas to panels of experts in a series of meetings carefully planned and executed by Betty Lenson Katzner. The final papers, presented now as Policy Briefs, have been revised by the authors in light of these discussions and have been edited by Alan Tomelson.

The FPI wishes to acknowledge the contributions of all those who participated in the meetings which took place at the FPI. While final responsibility for the ideas presented here belongs to the authors alone, it is hoped that publication of these papers will serve to advance public discussion toward a lasting consensus for the next decade of U.S.-Soviet relations.

Simon Serfaty
Project Director
Cooperation to Protect the Environment and Conserve Resources

David McClave

The forthcoming change in administrations in Washington is coinciding with a major resurgence in popular and governmental concern about environmental issues in the United States. New warnings about the depletion of the Earth's ozone layer and the accelerating disappearance of tropical rain forests, the scorching summer of 1988, and water pollution bad enough to close major northeastern bathing beaches have dramatically reminded Americans of their planet's increasingly frail health.

Environmental consciousness is rising in the Soviet Union as well, and for similar reasons. The near-destruction of the Aral Sea, the befouling of Lake Baykal—the world's largest body of fresh water—and of course the 1985 nuclear accident at Chernobyl have belied the standard communist line that pollution is a byproduct of capitalism only. Moreover, Soviet leader Mikhail Gorbachev's policy of glasnost (openness) has led to the astonishingly uninhibited discussion and debate of environmental problems by Soviet officials and scientists; in fact, on January 17, 1988, Moscow established its own version of the U.S. Environmental Protection Agency—the State Committee for the Protection of Nature (Goskompriroda).

Thus an unusual opportunity seems to have opened up for the superpowers to pool their scientific and technical expertise to stave off a series of environmental crises threatening the planet they share. This paper urges the president to make good on campaign promises and from the outset of the new administration, by thoughtful and wise appointments to key positions for starters, commit this country to the urgent task of cleaning up the national environment and, with other nations, the global environment. Exercising their powerful leadership roles in bilateral relations, among their allies and in the United Nations, the Soviet Union and the United States as environmental advocates could help to ensure that the ecological record for the next century will represent a vast improvement over the one for this century.
The Incentives for Cooperation

Elementary facts of geography and ecology provide the most persuasive argument for mapping out a joint U.S.-Soviet strategy for mutual assured protection of the environment. First, the expanse of each country’s territories and the size of their economies confer on both superpowers unique responsibilities for protecting the world’s environment.

As the first and fourth largest countries in the world, the Soviet Union and the United States together serve as custodians of almost one quarter of the Earth’s inhabited area, for the air above it, and for large portions of the seas surrounding it. Together they control more than one billion hectares of forests. More than half the world’s supply of fresh water is found on or below Soviet and American territory.

Moreover, although their combined population is only ten percent of the world’s total, the two countries account for about 36 percent of the world’s economic output and more than 40 percent of its industrial production. They produce approximately 43 percent of the world’s energy and consume almost all of what they produce (40 percent). Further, in 1985, the superpowers combined operated 40 percent of the world’s 373 working nuclear power plants, and accounted for about 40 percent of all carbon dioxide emitted from burned fossil fuels into the Earth’s atmosphere.¹

Thus the management of these two countries’ environments alone has a profound impact far beyond their national boundaries and affects the quality of the biosphere as a whole. The entire globe will benefit if the superpowers can forge a prudent and visionary bilateral trusteeship; if, however, Washington and Moscow take an exploitive

¹ These and other statistics come from the two most important single sources of facts on the two countries: the Statistical Abstract of the United States 1987 and Narodnoye Khozyaystvo SSSR za 70 Let 1987, which for the first time began publishing a section on environmental protection in the 1982 edition.

and short-sighted approach to environmental questions, the planet’s rendezvous with disaster could be greatly hastened.

The U.S. Record

To date, the United States has made far greater progress in environmental protection, although plainly much more remains to be done. In the strict sense of the term, environmental protection has been a major explicit U.S. national value for less than a generation, even though almost from its origins America’s natural beauty has had eloquent champions and protectors in the persons of Henry David Thoreau, John James Audubon, Theodore Roosevelt, and John Muir. Yet a genuine American environmental movement did not emerge until after World War II. One particularly gifted and courageous scientist and writer played a singular role in awakening national ecological consciousness—Rachel Carson.

In 1962, Carson published a war story unlike any other. Her book Silent Spring described in scientific and poetic language “man’s war against nature,” and in particular focused national and later international attention on the dangers posed by nearly un restrained pesticide and insecticide use on the land and by extension into the food chain. Carson boldly condemned this activity as the “universal contamination of the environment.”

Over the intervening quarter-century, the cause of environmental protection has recorded both triumphs and failures. Sadly, Silent Spring’s short introduction, “A Fable for Tomorrow,” which describes a fictitious village devastated by pollution, forecast the fate of two American towns: Love Canal, New York, found in 1980 to be contaminated by an old toxic waste dump site, and dioxin-poisoned Times Beach, Missouri, which was abandoned in 1983. And in March 1979, skill and luck narrowly averted a terrible environmental disaster at the Three Mile Island nuclear power plant in Pennsylvania.
But victories have outnumbered defeats. The Clean Air Act of 1963 and the Clean Air Act Amendment of 1970 led to a 90 percent reduction in automobile emissions of pollutants by 1981. By 1983 more than 90 percent of American industry was in compliance with air quality requirements. As a result, in the short span of twenty years, air quality across America has improved dramatically, with the number of "unhealthy days" in urban areas dropping significantly.

America's rivers and lakes were once so dirty that they could catch fire--as actually happened to the Cuyahoga River in Cleveland in 1969. And the Hudson and Delaware rivers and Lake Erie were nearly declared dead. But private citizens, environmental groups, local, state, and federal agencies have brought these and many other bodies of water back to life.

The most conspicuous sign of the nation's commitment to the environmental clean-up effort was the establishment of the Environmental Protection Agency (EPA) in 1970, which institutionalized ecological sensitivity and signaled the nation's determination to protect its air, land, water, and wildlife. Largely because of the EPA, phrases such as emission control standards, maximum permissible doses, environmental impact statements, endangered species protection, and recycling are now part of the national vocabulary. Over the past eighteen years, buoyed for the most part by strong bipartisan support, the EPA has become the most powerful regulatory agency in government.

But as made painfully clear by the recent appearance of poisoned and deformed marine life, and disease-carrying hospital waste on the beaches along our northeastern shores, the job is far from finished. Acid rain continues to deforest portions of New England and Canada and kill fish in northeastern lakes and rivers. Urban and commercial development continues to shrink the borders of rare and irreplaceable habitats and preserves such as the Everglades. Unmanaged use of underground water sources such as the Ogallala Aquifer and the draining of once mighty surface resources such as the Colorado River threaten to spark "water wars" in the West and Southwest. Thousands of toxic waste dumps are awaiting permanent clean-up. Thus, whoever wins the White House in 1988 will face a full slate of pressing environmental issues.

The Soviet Record

Unlike the U.S. Constitution, the Constitution of the USSR explicitly obliges its citizens to "protect nature and conserve its riches." De jure environmental protection in the Soviet Union is almost as old as the state itself. The founder of the state, V. I. Lenin, for example, approved the establishment of the first Soviet nature preserve (zapovednik) in 1919. Yet the Soviet Union still lacks anything like America's well-developed legislative and administrative system of environmental protection and conservation. Indeed, de facto environmental protection in the Soviet Union is a relatively recent phenomenon.

The crux of the problem has always been that the chief polluter and wastrel of natural resources has been the state itself--a charge confirmed by Fedor Morgun, first chairman of the new Soviet environmental protection agency, in a July 1988 report to the Nineteenth All-Union Party Congress. After all, whereas the federal government owns one-third of U.S. territory, in the Soviet Union the state owns and manages all land and resources. Moreover, traditional Soviet resource allocation policies, which have provided resources without the disciplines imposed by a market-oriented pricing system, actually serve as disincentives to conserve and use resources wisely. In addition, during most of its seventy year history, the Soviet Union has had precious little time and capital to expend on environmental protection. Decades of purges, epidemics, famines, and wars that have claimed tens of millions of lives have placed survival, not quality-of-life considerations, at the top of Moscow's scale of priorities.

The origins of the current Soviet environmental movement can be traced to Siberia and the waters of Lake Baikal. Since the 1960s, the lake has been the site of a battle between conservationists on the one hand, and industrial and municipal agencies on the other, over the proper context of industrial and recreational development. Obviously dissatisfied with the results of earlier decrees, the Central Committee and the Council of Ministers have passed at least four separate resolutions to protect the environment of the lake and surrounding areas, the most recent coming in 1987.
An Agenda for the Future

Under the regime of Leonid Brezhnev, the Soviet government enacted important environmental legislation. These laws addressed such issues as the use of water, land and minerals, the quality of the air, and the use and protection of animal species. The "Brezhnev" constitution also codified environmental protection as a state objective, declaring:

In the interests of the current and future generations, the necessary steps are taken in the USSR to protect and make scientific, rational use of the land and its mineral wealth, and the plant and animal kingdoms; to preserve the purity of air and water, ensure reproduction of natural resources, and improve the environment of man. Article 18. Constitution of the USSR.

But performance during the Brezhnev years never came close to fulfilling this promise, owing largely to mismanagement, neglect, and conflicts of interests between industrial production, urban development, and environmental protection. Until the 1988 creation of Goskompriroda, Moscow lacked a national-level mechanism, the political will, and the sense of urgency to enforce a raft of well-intentioned environmental laws and regulations.

The Aral Sea Catastrophe

No more poignant and distressing example exists of the general mismanagement and short-sightedness of the Brezhnev years than the apparently deliberate obliteration of one of the world's great inland water resources—the Aral Sea in Soviet Central Asia. Although it ranks as one of the greatest ecological disasters of the twentieth century, this episode is largely unknown in the West.

As late as 1973, the Aral Sea was larger than any of the Great Lakes except for Superior. It supported a thriving commercial fishing industry whose catches included dozens of species. Some of these fish were found nowhere else. But the last commercial

nets were cast in 1983; most aquatic life in the shrunken lake had died because salinity had more than doubled between 1955 and 1982. From 1960 to 1987, the Aral Sea lost almost 40 percent of its surface area and half its volume. It fell from fourth to sixth position among the world's largest lakes. The once active seaports of Aral'sk and Muinak now find themselves located fifteen to twenty-five miles from the water's edge. Rusting freighters litter the newly-formed dunes nearby. In the words of S.K. Kamalov of the Academy of Sciences of the Uzbek Soviet Socialist Republic, the Aral Sea's demise constitutes "the most enormous, the most catastrophic single 'experience' of man's influence on nature."

Today in the Aral region, man and nature are under assault from three trends: an increasingly drier and sharply changing climate; rampant desertification that has produced barren, salified soil; and a water supply that has been rendered unfit for irrigation and drinking, contaminated by millions of tons of wind-blown salt. The entire ecosystem has been so degraded that the Soviet government recently declared the Aral zone an ecological disaster area.

The Aral Sea is dying for much the same reason that the Colorado River has been reduced to a trickle—shortsighted irrigation policies. The sea is fed by two of Central Asia's great rivers, the Syrdarya and the Amudarya. Although inflow has fluctuated over the years, in the early 1960s the Aral was receiving an average of sixty cubic kilometers of water annually from these rivers. But by the mid-1980s, these flows had stopped. Instead, they were siphoned off for the inefficient irrigation of expanding cotton and rice fields south and east of the sea, and for industrial and residential use. Between 1950 and 1986, the Soviet Union's irrigated lands more than doubled in size. Cotton cultivation swelled so that the country became one of the world's leading producers. Yet

some Soviet Central Asians, seeing the effect on the sea, worried about the potential consequences of what they called a 'cotton at any price' policy.3

Through the 1970s, as the Aral crisis was gathering force, Moscow held out the hope that the enormous quantities of water being diverted would eventually be replenished. The government's proposed solution was a typically monumental Soviet project to redirect portions of the north-flowing Siberian rivers southward. Yet for various reasons, chiefly the objections of certain nationality groups, cost, and uncertainty over the environmental consequences of the rescue effort itself, in August 1986 this colossal undertaking was discontinued. To date, the sea has been robbed of an amount of water and surface area larger than Lake Erie (see Figure 1, p. 17). By 2010, it may exist only on old maps. According to Soviet scientists, the direct annual losses from the desiccation of the Aral Sea amount to 2 billion rubles—about as much as the direct costs of the Chernobyl accident.4

Glasnost, Perestroika, and Environmental Protection

We are already living at the expense of the natural wealth of our grandchildren and our great-grandchildren—we are breathing their air, drinking their water, felling their trees, and exploiting their minerals.5

This quote comes not from The Village Voice or the Whole Earth Catalog, but from an article by two Soviet biologists that appeared in the May 1988 issue of the popular magazine Ogonёk. Titled "While It's Not Too Late," the piece is an excellent example of

3 P. Khabibullaev, "Aral—Neoplachennyy kredit," Naush i zhizn', no. 11, 1987, 79. The author points out the ultimate consequences of destroying the ecological balance of the region. It will inevitably lead to lower cotton and rice yields as the salt from the dried up lake blows onto the fields within hundreds of kilometers of the Sea.


glasnost' applied in an effort to raise ecological consciousness. The scientists boldly expose woefully inadequate Soviet measures to protect the environment and conserve resources in what the international scientific community agrees is the world's largest repository of natural wealth. Inspired by a genuine sense of urgency, the article forcefully presents specific ideas for organizing and operating the new Soviet environmental agency.

In fact, the past two years have witnessed a burst of new articles on environmental issues. Practically every major domestic ecological disaster has been discussed in one forum or another, including the damming of the Kara Bogaz Gol Gulf next to the Caspian Sea, the deadly consequences of a chemical plant's toxic emissions in Kirishi not far from Leningrad, the reported anthrax outbreak near Sverdlovsk in 1979, and the Chernobyl nuclear accident.6 And in a remarkable 1988 interview in the weekly newspaper Nedeliya, Aleksandr Sukharev, general prosecutor of the USSR, candidly discussed failures to comply with and enforce environmental regulations and laws. In 1987, for example, not a single instance of environmental damage was prosecuted in the Soviet republics of Azerbaijan, Lithuania, Moldavia, Tadzhikistan, Turkmenia, and Uzbekistan. The interviewer boldly asserted that "ecological problems have now become a kind of touchstone of our strengthening democracy."7

Moreover, the same interview revealed that many meetings and even some mass demonstrations have occurred throughout the Soviet Union protesting what has been termed "ecological adventurism": a poorly designed flood control project near Leningrad; the widespread contamination of Western Siberia's rivers with petroleum products; and annual discharges of as much as a ton and a half of airborne pollutants per capita in the Ural region city of Nizhny Tagil. Indeed, urban air pollution is an especially serious problem in the Soviet Union; pollution levels in 102 Soviet cities, affecting more than 50 million people, are often ten times higher than the law permits.

6 See, for example, Literaturnaya gazeta, February 24, 1988, and March 2, 1988.

7 Aleksandr Yakovlevich Sukharev, "Kuda zhe smotrit' prokuror?" Interview by Vladislav Starchovskiy, Nedeliya, no. 29, 1988, 6.
One Soviet commentator, writing in the February 4, 1988, issue of Komsomol'skaya pravda, likened the situation in his country today to that in the United States in 1972. There he "observed an outbreak of ecological horrors, similar to what we are now observing here at home. Everyone got worked up about it, and this led to the necessary results." The author also sharply criticized the old policy of covering up environmental disasters.

And some perestroika (restructuring) has followed this outburst of environmental glasnost. The establishment of Goskompriroda was only one of several initiatives in the January 1988 resolution, "On the Fundamental Restructuring of the Work of Protecting Nature in the Country." The most significant of these included measures to increase the participation of the scientific community in designing and building pollution control equipment and to delineate the environmental protection responsibilities of various state and party organs; and instructions to Goskompriroda and other appropriate agencies to draw up a law on protection of nature. In addition, a new publication called Nature is slated to appear in 1989, and a USSR Union Society for the Protection of Nature is to be created.

Regarding international cooperation, the new resolution encouragingly stated:

Planned is the implementation of measures to enhance the effectiveness of the USSR's international cooperation in the field of protection of nature. This is based on the assumption that the global character of ecological problems requires for their solution closer interaction between the USSR and all foreign countries and international organizations.

Some concrete achievements can be cited as well. The recent establishment of National Nature Parks and the expansion of the State Nature Preserves have significantly expanded the acreage of protected Soviet wilderness. And the concentration of much of this expansion in northern central Siberia may assuage some of the fears expressed by writers and environmentalists over the disappearance of flora and fauna essential for maintaining the distinctive ways of life of Far Northern hunters and herders.

Yet on balance, the environmental picture in the Soviet Union seems as bleak as the tundra, and the USSR is still allocating only a bare 1 percent or so of national income to environmental protection. 8

U.S.-USSR Cooperation in Environmental Protection

Since 1970, at least two environmental cooperation accords have been reached by the United States and the Soviet Union: the May 1972 Agreement on Cooperation in Environmental Protection signed by former president Richard Nixon and Brezhnev and a similar bilateral agreement signed at the first Reagan-Gorbachev summit in Geneva in November 1985.

But the ups and downs of U.S.-Soviet relations in the thirteen years between agreements greatly restricted bilateral environmental cooperation. In EPA's own words, until late 1986 "environmental cooperation was sustained mostly by individual scientists and technicians working without policy-level leadership." 9 Between the agreements, symposia were held, dozens of comparative studies were written on wildlife and habitat protection, soil erosion, nature preserves and other topics, and some low-profile joint projects were launched.

To a large extent this lackluster performance was unavoidable. Through the 1970s, the glaring asymmetry in the two countries' de facto environmental protection programs and mechanisms would have made genuine cooperation difficult and awkward no matter how warm the political climate. The Soviet invasion of Afghanistan in 1979 and the downing of a Korean civilian airliner in 1983 created additional obstacles. And during


the first Reagan administration, not only was the superpower military competition heating up, but Washington's commitment to environmental protection flagged.

But Reagan and Gorbachev have now removed many of the political barriers to upgraded joint endeavors, which has promptly given rise to a series of promising bilateral environmental and conservation projects. Ecological consciousness is taking root in Soviet officialdom. And despite some major differences in mechanisms and processes (balancing public versus private interests in the United States and balancing competing public interests in the USSR), the two countries now have roughly equivalent executive agencies with similar mandates to protect the environment and to manage resource use and disposal.

Prospects for Cooperation

Building upon the foundation provided by several joint ventures already underway (for example, working groups on climate and ozone protection, joint research expeditions in the Bering Sea), specific cooperative endeavors should be initiated between the two countries' agencies responsible for environmental protection and conservation of resources—EPA, Interior, Fish and Wildlife Service, Park Service, on the U.S. side, and Goskompiroda, Gidromet, Ministry of Land Reclamation and Water Resources, Ministry of Fisheries, and Academy of Sciences, on the Soviet side. Glasnost and democratization notwithstanding, for the sake of fairness and in the interests of resiliency, the projects should be constructed with mutual assured benefit in mind. If cooperative ventures do not advance major mutual interests, they will surely be overwhelmed by the periodic setbacks that history and ideology teach us to expect in superpower relations.

The place to begin to look for potentially mutually beneficial projects is "the commons"—those resources shared by the superpowers and all of humankind, such as the oceans and the ozone layer. The depletion of this layer of the Earth's atmosphere, which protects the surface from dangerous ultraviolet solar radiation, threatens all peoples. And no two countries are better equipped to study the problem up close and investigate ways to restore the balance in ozone levels than the two superpowers and their state-of-the-art space programs. A good start has been made in this direction with the discussions about placing an American monitoring device on a Soviet satellite. But bolder steps should be taken, joint shuttle missions using both countries' orbiters, for example, should be dedicated exclusively to studying the most critical global environmental problems, including the "greenhouse effect," deforestation, and desertification. For the most essential and most prevalent commons is of course the air that we breathe. Responsibility for polluting this air falls disproportionately on the United States and the Soviet Union; the superpowers generate most of the world's acid rain. Hence, cleaning the air above their territories should make all the world's air substantially cleaner.

To carry out this project, EPA and Goskompiroda scientists should be frequent and welcome visitors at each other's field offices where the "ecological vital signs" of the two countries are taken. These environmental bases should be charged with missions such as monitoring ambient air quality in industrial cities. Such activities in turn would foster the kind of specialist-to-specialist communication that is vital to achieving the full potential of environmental cooperation. At the same time, teams of experts in pollution-control technology for both factories and automobiles should hold regular consultations. Ways of making the manufacture of such equipment profitable, especially in the East, would be an excellent initial challenge to assume; the whole notion of catalytic converters and lead-free gasoline, after all, is still foreign to most of the Soviet bloc.

New and dramatic ways of jointly cleaning up the lungs of the planet—the oceans—should be explored as well. In the summer of 1988, the Atlantic waters washing portions of the New Jersey coast and the Sea of Azov waters washing the coast of Donetsk Oblast had something in common: they both were too polluted to bathe in and marine life was imperiled. A joint U.S.-Soviet task force could work on such projects as developing pollution-free ocean waste disposal methods and equipment, investigating the possibility of joint naval deployments for cleaning up heavily polluted waterways, such as the Baltic Sea.
An Agenda for the Future

There surely is no more fertile ground for cooperation in waste disposal than the civilian nuclear power sector. Today, both countries stand poised to finance separate studies and costly procedures to ensure the safe, relatively permanent, disposal of spent nuclear fuel. Even though both superpowers pursue substantially different nuclear policies (safety standards are a prime example), the sharing of expertise and experience should naturally yield major dividends for both countries. This project is bound to be expensive, but by pooling their resources the two countries could make precious dollars and rubles go much farther.

Moreover, the Soviets have something in the civilian nuclear sector that Americans urgently need: up-to-date experience in cleaning up radiation-contaminated water and land. For years to come, the United States will have the greatest number of nuclear reactors. Prudence dictates that the United States try to acquire expertise in this field without having to go through the terrible exercise itself.

Further, the international response to the Chernobyl crisis was extremely encouraging. If this kind of effort can be mounted on short notice, surely greater accomplishments in environmental protection can be expected with a framework for broader cooperation.

Using the U.S.-Canadian Waterton Glacier International Peace Park as a fifty-year-old precedent and working model, Washington and Moscow should also consider establishing a transboundary (and transcontinental) World Natural Heritage Site that would include parts of Alaska and the Chukchi Peninsula, as well as the Bering Strait between them. Through joint administration this area would serve as an ecological workshop for water pollution control and for wilderness and wildlife preservation. In fact, the site would constitute a veritable Soviet-American Nature Preserve. In addition, some relevant spadework is already in progress in the form of discussions on a joint cleanup of the Bering and Chukchi Seas, and with the actual participation of teams of American scientists on Soviet research vessels.

Cooperation to Protect the Environment

Within the framework of the existing bilateral Project for Protection of Arid Ecosystems, the two superpowers should also upgrade mutual efforts to resolve the critical problems of water management and consumption that they both face. For the United States, the focus would be on the southwest; for the Soviet Union, Central Asia. The Aral Sea catastrophe, after all, stems partly from a faulty, ill-conceived irrigation system. U.S. irrigation and canal systems are among the world's most efficient. With access, American hydrologists and engineers (perhaps from the U.S. Army Corps of Engineers and the Department of the Interior) might quickly identify methods of conserving the Aral's water and at least partially replenishing the sea.

A final joint project would be helping the Soviet Union get its new environmental agency off and running. Establishing such an agency is easy—passing a resolution or law does the trick. The hard part comes in ensuring that the agency has the resources and authority it needs to function effectively. With eighteen years of wide-ranging experience in regulating the environment, the United States has accumulated a wealth of expertise that, when shared with the Soviet Union, would unquestionably improve the quality of the commons and also spare Moscow huge expenditures of time and capital.

Gospkompriroda's birth generally resembles EPA's. Similar to the way EPA was formed, it is being assembled from subunits of several ministries, including some that have been notorious polluters in the past, such as the State Committee for Forestry, the State Agroindustrial Committee, and the Ministry of Land Reclamation and Water Resources. The Agroindustrial Committee permitted widespread use of an extremely toxic defoliant, Buitifos. Outbreaks of hepatitis and other serious health problems in the Central Asian republics were blamed on this substance before it was banned. The State Committee for Forestry has been responsible for overharvesting of forests in Karelia, and the Ministry of Land Reclamation and Water Resources sealed off the Kara Bogaz Gol Gulf from the Caspian with a dam, and placed the Gulf's entire ecosystem in jeopardy.

EPA could provide invaluable advice in a number of areas: enforcement and compliance; the creation and management of regional centers to monitor air and water pollution; the establishment of constructive working relations with state and local
An Agenda for the Future

authorities; and the production of environmental impact statements and other valuable reports. To exchange information on these subjects, jointly staffed offices should be set up at the headquarters of EPA and Gaskompiroda.

The Price of Ecological Security

Though it has not produced a single direct battle, the cold war has been by far the most expensive conflict in history. Financing this war has been largely responsible for plunging one side's economy deeper and deeper in debt, and for miring the other side's in an unremitting state of decline.

Between 1980 and 1986, U.S. defense expenditures rose from 22.6 cents of every federal dollar spent to 27.1 cents. During the same period, expenditures for natural resources and the environment fell from 2.3 cents of every dollar spent to 1.3 cents. Soviet defense expenditures are no doubt higher than America's, but according to the latest budget figures, the Soviet government claims to be spending a mere two kopecks of every ruble on environmental protection.10

Given their size and their impact on the global environment, neither country is now doing enough to enhance national and international "ecological security." Yet, if superpower relations continue to improve, the next administration will have a historic opportunity to turn this latest armistice in the cold war into a durable peace. Along with arms control, cooperation in environmental protection and resource conservation can play a key role in building such a peace. One need look no further than today's national and international headlines to find compelling arguments for lifting bilateral ecological efforts to a higher plane without delay.


FIGURE 1. ARAL SEA IN RETREAT FROM 1960 to 2000 (PROJECTED). Former seaports of Aralsk and Muinak 15 to 25 miles from water.

ARAL SEA

Sources: Svartsevich and Kamalov articles (cited below) and early maps; drawing by Kimberly Lord.
SELECTED SOURCES

English-language Sources:


An Agenda for the Future


Russian-language Sources:


Central Committee of the CPSU and USSR Council of Ministers Resolution "O korennoy perestroike dela okhrany prirody v strane." Pravda, January 17, 1988, 1.


Malishauskas, V. "Skol'ko stoit 'neokhrana' prirody?" Interviewed by V. Sinitsyn, Sovetskaya Litva, February 24, 1988, 4.

Cooperation to Protect the Environment

Morgun, F. T. Speech before the Nineteenth All-Union Party Conference, Izvestiya, July 2, 1988, 5-6.


Ryshikov, A. "Zapovednaya real'nost'." Ekonomicheskaya gazeta, no. 11, March 1988, 13.


About the Author

David McClave is a senior research analyst (language specialist) in Soviet and East European affairs at the Federal Research Division of the Library of Congress. In addition to his own research, translating, and writing, he supervises and directs the research of two groups of foreign area and language specialists, who review the daily press of Eastern Europe and report on developments in specific fields or write studies.

Mr. McClave has two Master's Degrees from the University of Kansas: a M.A. in Slavic and Soviet Area Studies and a M.A. in Slavic Languages and Literatures (1974). His most recent publication was a commentary on the state of the Soviet Union's environment entitled "Dying Soviet Sea Points to Need for Global Resource Review." He recently completed a study describing the physical environment and population of the Soviet Union that will be published as a chapter of the U.S. Army's country study/area handbook.

The views expressed in this article are those of the author and should not be construed as representing the views of the Library of Congress or the U.S. government.

This essay is dedicated to the memory of Rachel Carson and to her Soviet counterpart, whoever he or she may be.
20 Initiatives for a New Agenda in U.S.-Soviet Relations

1. Joint Development of an Inherently Safe Nuclear Reactor, Jack N. Barkenbus
2. Converting Nuclear Missiles for Peaceful Use, William C. Potter and Ann M. Florini
3. A Bilateral Endowment for the Arts and Humanities, John Logan Burrow and Patricia O'Leary
4. A (Partially) Convertible Ruble, Steven Rosefielde
5. A $100 Billion Understanding, Barry Blechman with the assistance of Ethan Gutmann
6. Strategic Information Exchanges as Confidence-Building Measures, Paul Chramosta, William Dunlop, Peter Moulthrop, and George Stakle
7. An Advisory Council on American-Soviet Relations, Jack Perry
8. Cooperation in Surgical Oncology, J. Ralph Broadwater, M.D.; Michael J. Edwards, M.D.; Merrick I. Ross, M.D.; and Charles M. Balch, M.D.
9. Military Liaisons between NATO and the Warsaw Pact, John A. Fahey and Philip S. Gillette
10. Demonstration Centers for Educational Reform, Stephen T. Kerr
11. A Soviet Special Economic Zone, Charles E. Ziegler
12. A Radio Telescope Larger than Earth, George A. Seielstad
13. An American College in Moscow, Karen A. Weisblatt
14. Cooperation to Protect the Environment and Conserve Resources, David McClave
15. Promoting Public Diplomacy through Direct Satellite Broadcasting, Thomas F. Rogers
16. A Soviet-American Peace Corps, Alan Robock
17. Rethinking Business with the U.S.S.R., Laurence W. Britz
18. Combined Remote-Sensing Observations of the Earth from Space, Paul Adam Blanchard
19. A New Export Regime for Information Technologies, Judith A. Thornton
20. U.S.-Soviet Cooperation on Terrorism, John Marks