Private Lands River Protection: Balancing Private and Public Concerns

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Introduction - The State of our Nation's Rivers

Increasingly, scientists are coming to understand the importance of rivers and their associated riparian habitat to the nation's overall ecological health. River systems are the heart of virtually every major ecosystem on the continent. While carrying water, and transmitting soil, minerals, and other nutrients along their corridors, they serve as pathways for biological exchange and movement, as well as for the genetic mixing of plant and animal species among different eco-regions. Rivers also transport water, sediment and nutrients from the land to the sea, thereby playing a significant role in building deltas and beaches, and nourishing estuaries, freshwater wetland communities and natural lakes.

Likewise, rivers are essential to human health and safety. They carry off and disperse waste materials, filter out pollutants, and provide much of the nation's supply of water for residential, agricultural, and industrial uses. Rivers and their adjacent riparian vegetation provide natural flood control protection by first absorbing storm waters then releasing the water gradually.

Furthermore, a variety of recreational as well as economic benefits stem from our nation's rivers. Canoeing, kayaking, fishing, swimming, hiking and birdwatching are among the many activities enjoyed in or around a river, as well as a sense of aesthetic beauty and personal replenishment. Historic centers of commerce and population, the nation's rivers have provided enormous economic benefits for hundreds of years, including transportation, fisheries, commercial recreation, and energy use.

Rivers are also important environmental indicators, and unfortunately the indications are not too promising. A recent study by the Nature Conservancy shows that aquatic species are disappearing at a rate far greater than that of terrestrial species. (Master 1990) One third of all freshwater fish species are imperiled and approximately 20% of the freshwater shellfish and invertebrates are in a similar state. Similarly, a recent report by the State of Arizona indicates that it has lost 90% of its original low-elevation riparian areas (*Governor's Riparian Habitat Task Force*, 1990)

The pressure on riparian ecosystems is tremendous - from pollution, dams, development, diversion, timber, grazing, and mineral activity. Nearly 20% of the nation's 3.5 million miles of rivers are impounded by dams, and thousands more downstream miles are adversely affected. Dams inundate wild and

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natural areas killing important riparian vegetation and wildlife habitat; block the transmission of sediment and other nutrients downstream, concentrating toxic materials behind the structure; impede or prohibit fish and wildlife passage; flood wetlands; dramatically alter water temperatures; and cause serious bank erosion downstream due to wide fluctuations in flows.

Diversions draw water out of rivers and streams; cause fishery mortality; de-water and destroy streamside vegetation; diminish the streams' natural pollution flushing and assimilation capacities; limit important groundwater recharge; and ruin recreational use. Diversions have quite literally dried up hundreds of streams in the West and are devastating natural aquifers.

Channelization is a nationwide problem that is most evident and comprises the greatest river threat in the farm-belt states. In agricultural areas, rivers are islands of natural diversity in otherwise massive monocultural regimes. By curtailing erosion and thereby reducing the influx of nutrients getting into the stream, channelization makes otherwise fertile riparian soil sterile. It often causes additional flooding by increasing the speed of the natural flow and cutting off major areas of the natural flood plain.

Streamside development and commodity uses, such as timber harvesting, mining, grazing and residential construction cause additional significant harm. The denuding of the all-important immediate riparian zone caused by these activities as well as the rampant erosion by road-building associated with these activities destroys valuable fish and wildlife habitat and greatly increases the amount of sediments in the stream. The added sedimentation impedes plant growth by impairing the ability of light to get through, hampers visibility for predator species, drastically affects temperature and oxygen content of the river, and causes streams to become wider and shallower.

Fortunately, on the approximately one third of the nation's lands which are in federal ownership, a number of mechanisms exist that at the least limit, and in many cases prevent, activities which are harmful to rivers and riparian areas. However, on lands surrounded primarily by private lands, few such protections exist. The Wild and Scenic Rivers Act, the only federal legislation dedicated specifically to river protection, has protected hundreds of rivers on federal lands through its study and designation process, but has offered little protection to rivers on private lands.

The Difficulties Inherent in Managing Rivers on Private Lands

Because the country lacks a comprehensive, national policy regarding river conservation, protection efforts on rivers surrounded primarily by private lands have for the most part been piecemeal, uncoordinated and inconsistent. Dozens of different federal laws and programs, administered by a variety of agencies, and handled by an assortment of Congressional committees guide riparian management today. Adding to the confusion is a complicated panoply of state laws, as well as varied local zoning ordinances and regulations. Oftentimes these programs and legislation overlap and contradict one another.

This fragmented decision-making leads to a "tyranny of small decisions" which in turn results in incremental degradation that is difficult to trace and even more difficult to conquer. Lack of coordination and consistency is particularly damaging given the integrated nature of river systems. Local efforts to

protect the aesthetic nature of a downstream segment through greenways and development setbacks are futile if a federally- authorized dam upstream is de-watering the river.

Adding to the problems created by the lack of a national riparian policy is the absence of a "national river ethic." Historically, rivers have been areas of commerce and development, and a greater understanding by the public of their ecological importance, as well as their significance to human health, safety and the economy, has simply not emerged. Consequently, decisions on private land rivers are often short-sighted, and oriented toward short-term economic gains, rather than long-term public objectives.

Perhaps the greatest impediment, however, to the prudent management of rivers surrounded by private lands is the nation's deeply-rooted belief in personal property rights and the perception by the public that river protection efforts threaten those rights. The fear of the "taking" of personal property expresses itself in two primary ways

1) the fear that a government entity, usually the federal government, will actually take away the ownership of a citizen's land; and

2) the fear that a government entity will unreasonably limit the citizen's use of his/her land.

A detailed history of personal property rights is relevant to this discussion but better left to another treatise. Suffice it to say that modern property law has its roots in feudalism where the disposition and ownership of property was the basis of wealth and authority. As it developed, our nation took steps to protect property rights through a variety of means, the most significant of which were the Fifth and Fourteenth amendments to the Constitution which ensure that property cannot be taken without due process of law and that any such taking must be compensated.

Importantly, however, the founding fathers chose not to prohibit the taking of individual property, protecting the power of eminent domain which gave the sovereign the ability to condemn property for the service of the greater good. Furthermore, since early in this century the power of individual states to regulate and zone private property has never been questioned.

Regardless, personal property still remains, within our society, a sign of personal well-being and status. It is important to remember that only within the last 150 years were those without property allowed to vote. Given the importance of personal property in our economic and social structure, it is no wonder that the taking, or the perception of taking, of personal property or any right thereto is virtually always contentious. Clearly, few property owners would concur with Rousseau, who expressed the following view:

> "The right exercised by each individual over his own particular share must always be subordinated to the overriding claim of the Community as such. Otherwise there would be no strength in the social bond, nor any real power in the exercise of sovereignty."
> (Rousseau 1747)

An important corollary to the importance of personal property rights is the protection of livelihood and lifestyle. If river protection efforts are perceived to conflict with local economic objectives for the river, thereby risking economic gains to the area and the resultant taxes and employment, resistance may follow.

Because of the country's strongly held beliefs in personal property rights and the limitation on federal restrictions of those rights, regulation of private land is carried out primarily at the State or local level of government, not by federal agencies. Accordingly, private land regulation varies dramatically by State, county, and township and is often subject to intense pressure by local economic interests.

Private landowners along a given stream or those who use the stream may feel threatened by the concept of increased zoning or regulation. However, most State and local regulatory river management plans are very respectful of current uses of

the river. They seek primarily to exert some authority over new development, and even then work not to curtail growth but to limit it to sustainable levels. Kevin Coyle and Chris Brown, in *Conserving Rivers: A Handbook for State Action*, maintain that "most land-management programs in support of river conservation are little more than common-sense blueprints for conserving the most environmentally fragile and potentially hazardous areas from unwise development."

"More often than not, controversies surrounding river protection on private lands stem not so much from actual threats to personal property and livelihood, but rather the perception of such threats."

More often than not, controversies surrounding river protection on private lands stem not so much from actual threats to personal property and livelihood, but rather the perception of such threats. Accordingly, communication and involvement with those who live on the river or who use the river are imperative to successful river management programs.

Experience with securing National Wild and Scenic River designation on rivers which run through private lands has earned us hard lessons on this subject. When activists and agencies do not take the time and make the effort to explain carefully what designation will entail, and how little if any effect it will have on adjacent private lands or private uses of the river, Wild and Scenic designation will most likely fail. Lack of communication and involvement with local citizenry in river conservation efforts also invites misinformation and misconceptions often fueled by those with personal interest in ensuring that river protection does not move forward. In contrast, when actual landowner concerns are respected and resolved, and local citizens are brought into and become invested in the process, efforts to designate the river are most often successful.

Controversy surrounding private property rights is by no means limited to river conservation. In fact, these issues are being debated in the context of every significant natural resource in the nation today. These property rights battles are becoming increasingly sophisticated as activists on both sides of the issue become more skilled and experienced. One manifestation of this increasing sophistication is the advent of the so-called "Wise Use" movement, (WUM) a significant force against river conservation efforts.

An offshoot of the Sagebrush Rebellion, the WUM agenda formally emerged from the National Multiple Use Strategy Conference in Reno, Nevada. Sponsored by the Center for the Defense of Free Enterprise, (CDFE), the conference included the major constituencies holding an economic interest in the use of the nation's natural resources, including mining, timber, petroleum and agriculture groups. While the agenda is dedicated primarily to virtually unfettered commodity use of federal lands, such as opening millions of acres of designated wilderness and national park lands to mineral and energy extraction, the agenda also enumerates tenets that affect private lands, such as the significant weakening of both the Endangered Species Act and the Clean Water Act.

The WUM, its devotees and affiliated

organizations also actively oppose river conservation activities throughout the nation, particularly those at the federal level. Increasingly skilled at using the media and swaying popular opinion, the WUM has become a significant player in river protection campaigns. Specifically, in the last few years, such groups were involved in efforts to stop Wild and Scenic designations in the State of Washington, on the Niobrara River in Nebraska, and the Farmington River in Massachusetts and Connecticut. Unfortunately, the tools used included scare tactics, intimidation and inflammatory statements. Taking advantage of landowner questions and concerns about Wild and Scenic designation, these activists overstated the threat of federal presence and condemnation to influence public attitudes regarding the legislation.

River protection activities are often contentious. Pertinent concerns should be raised and discussed fully and fairly. A frank, open and honest airing of varied viewpoints serves the public good. Rhetoric, hyperbole, misinformation and deception on either side of the issue serves only to obfuscate rather than to enlighten, and provides no legitimate political purpose.

Summary of Existing and Proposed Private Lands River Protection Tools

Traditionally, rivers on private lands have been protected by a complicated array of federal and State legislation and programs, either designed specifically for river protection or for broader purposes. Each of these programs attempts to balance the public need to protect rivers with private uses and landownership. Furthermore, other effective resource protection programs, while not focussed specifically on river protection, can still offer important models which could be tailored to river protection.

Accordingly, a summary of existing river protection laws and programs, as well as other environmental laws with potential applicability to river protection, is provided below. Also included is a review of alternative river protection strategies

proposed by river advocates and others over the last several years.

The discussion below is not intended to be an exhaustive survey, but rather to emphasize those provisions which have particular applicability to the protection of rivers surrounded primarily by private lands.

The Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to protect "certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable" qualities. The National Wild and Scenic Rivers System currently includes 153 rivers, only a handful of which flow through private lands.

In enacting the Wild and Scenic Rivers Act, Congress's goal was to preserve selected rivers in their "free-flowing condition, to protect the water quality of such rivers and to fulfill other vital national conservation purposes." The Act prohibits the construction of federally-licensed hydroelectric projects on designated segments and limits the United States' participation in the permitting, licensing, funding or construction of other water resources projects which have a "direct and adverse effect" on the segment.

With the exception of the outright ban on federally-licensed hydroelectric projects and harmful water resources projects, the protections on designated wild and scenic rivers running through private lands varies significantly from the protections afforded federal lands rivers. While the Act provides that a 1/4 mile corridor on each side of a designated segment is to be protected on both federal and private segments, the authority to enforce those protections is substantially different on private lands.

While section 12 of the Act lays out specific responsibilities for the land-managing agencies for the protection of designated segments on federal lands, no specific corresponding guidance exists to manage or limit activities on private lands which border wild and scenic rivers. Rather, Congress approached the management of private lands indirectly through the provision of the Act which limits condemnation. Section 6(c) prohibits condemnation on lands which are located in an area which has a "duly adopted, valid zoning ordinance that conforms with the purposes of this Act." The Act then goes on to require the appropriate Secretary to issue guidelines for such ordinances.

It appears that the original authors of the Wild and Scenic Rivers Act believed, for the most part, that private lands rivers would enter the Wild and Scenic Rivers System through section 2(a)(ii) of the Act which provides for State management of selected rivers. To date, only 13 of the 153 designated wild and scenic rivers have come into the System through this route.

While few would argue with the premise that the Wild and Scenic Rivers Act has resulted in the protection of many of the nation's outstanding rivers, critics maintain that the Act is not well-suited to protect a broad range of important, but less significant, rivers, primarily those bordered by private lands. Among the concerns are:

1) The Act's emphasis on only "outstanding" rivers, which keeps tens of thousands of rivers from being considered for protection. Even if the breakthroughs in federal land management planning for rivers produce a ten-fold increase in the size of the Wild and Scenic Rivers System, only 3% of the nation's streams (approximately 100,000 miles), would be protected. In addition, many rivers that have great natural or cultural value do not qualify for national river designation because they have been modified by human activity.

2) The inefficiency of protecting one river or group of rivers at a time, each needing a separate act of Congress. Critics of the Wild and Scenic Rivers Act maintain that protecting one river through the study/designation process may take anywhere from five to ten years. Others say that the time frame required by the Wild and Scenic Rivers Act is not inappropriate for permanent protective management.

3) Landowner resistance to federal overlay and corresponding political fallout. When Congress passed the Wild and Scenic Rivers Act in 1968, it underestimated the political power of landowners concerned with loss of their homes and livelihoods. Organizations exploiting landowner fears have successfully blocked many wild and scenic efforts on private lands. Contributing to landowner fears is the provision within the Act calling for the preparation of a detailed management plan after designation instead of during the study process. Consequently, the agency cannot offer specific, reassuring information before a river is designated as to what landowners can expect.

4) The Act's focus on river "segments" as opposed to river system or watershed protection, and the arbitrariness of protecting only 1/4 mile on each side of the river. Scientists agree that to protect river resources, the management of the entire watershed should be addressed. Often wild and scenic rivers are only relatively short segments situated between major developments. Many significant segments have been left out due to resource conflicts. Also, the headwaters of rivers, which are the most significant indicators of downstream health, are often excluded because they do not contain sufficient water flow to meet the criteria for inclusion under the Act.

Applicability to the Protection of Private Lands Rivers: Despite the criticism the Wild and Scenic Rivers Act has endured, its successful protection of over 10,000 river miles, some of which are on private lands, cannot be ignored. The Wild and Scenic Rivers Act does offer some lessons for designing a new private lands river protection system.

One of the reasons for the success of the Wild and Scenic Rivers Act is that Congress and the land-managing agencies have become invested in the System and in the process. Over the last few years, the land managing agencies have found some 700 rivers eligible for inclusion in the System through their land management planning processes, which will ultimately turn into recommendations to Congress for the designation of hundreds of rivers. Congress, for its part, is enthusiastically passing wild and scenic rivers legislation at record pace.

In regard to private lands, experience with the Wild and Scenic Rivers Act has taught the importance of partnership among the administering agency (usually the National Park Service), State and local governments, and concerned citizens. The Park Service has had particular success when, during the stage in which a river is being studied for potential designation, the agency works with the public to prepare a draft management plan. This approach allays landowner fears through public understanding of wild and scenic management prior to designation. It also promotes public investment in the process and in river protection.

The Clean Water Act

As defined in the Clean Water Act of 1972, the legislation's purpose is to "restore and maintain the chemical, physical and biological integrity of the nation's waters." While the Act envisioned a much stronger and more active federal role than had earlier clean water legislation, it also reaffirmed the states' primary responsibility to control the pollution of their respective waters: "It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of states to prevent, reduce and eliminate pollution, to plan the development and use . . . of land and water resources, and to consult with the Administrator (of the Environmental Protection Agency, EPA) in the exercise of his authority under this Act."

The Clean Water Act established a dual system of pollution control based on 1) water quality standards and 2) effluent discharge limitations. The Clean Water Act directed EPA to issue effluent guidelines, and states were required to set water quality standards based on federal criteria. The Act also contains a policy of non-degradation. In other words, those waters which are

already pristine are not allowed to be further degraded. Pursuant to the Act, EPA, the states, and individual citizens can enforce the Act's provisions

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Wetlands

When Congress was considering the Clean Water Act in the early 1970s, scientists were only beginning to understand the significant value of wetlands for flood storage, water supply, sediment filtering, groundwater replenishment, pollutant removal and fish and wildlife habitat. Unfortunately, by that time, the Fish and Wildlife Service estimated that a full one-half of the wetlands which existed in the lower 48 states when settlement of the United States began had been lost. Responding to the astonishing rate of destruction, Congress included a provision in the Act that required a permit for anyone dredging or filling a wetland.

The so-called Section "404 permit" program is jointly administered by the Army Corps of Engineers and EPA, with EPA establishing guidelines for permits and the Corps issuing and enforcing them. While 404 permitting can be delegated to the states, only Michigan runs it own statewide program.

The wetlands permitting process has been fraught with controversy since its inception. Many agricultural and development interests found EPA's original wetlands definition to be too broad and ambiguous, and several legislative initiatives have been initiated to force EPA into adopting a more limited form. Earlier this year, EPA sought to fend off Congressional action by changing the wetlands definition in its "delineation manual." However, field testing found the new definition difficult to understand and to implement, and demonstrated that a significant portion of existing wetlands would be "redefined" out of existence.

While the permitting program has not stopped wetlands destruction, it has significantly slowed the loss of these valuable resources. One of the reasons for the success of the wetlands permitting process is that wetlands, unlike rivers, are generally contained in a specifically defined area. Furthermore, while some wetlands can clearly be developed, they do not come under the same development pressure as do generally upland river sites.

Outstanding National Resource Waters (ONRW)

The Clean Water Act contains no explicit statutory prohibition against degrading streams of high water quality. However, EPA has established "anti-degradation" regulations based on section 101 of the Act which declares that the purpose of the legislation is to "**restore and maintain**, [emphasis added] the chemical, physical, and biological integrity of the Nation's waters." The anti-degradation regulations provide for special protection of the nation's highest quality waters (so-called "Outstanding National Resource Waters," or ONRW): "Where high quality waters constitute an outstanding National resource, such as waters of national and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected."

Unfortunately, the effectiveness of the ONRW policy has been limited by the

absence of clear criteria for eligible waters, the lack of consistency among the states in implementing the ONRW regulations, and EPA's unwillingness to provide guidance and oversight. The ONRW program could offer significant protections to pristine rivers if it were effectively implemented by the states and supported at the federal level. In its efforts to strengthen the Clean Water Act when it is reauthorized this year, the environmental community has encouraged Congress to expand the provisions within the Act relating to ONRW.

While the Clean Water Act has restrained water pollution, 30% of the nation's rivers, streams and estuaries still do not meet chemical clean water standards. EPA estimates that this percentage would rise to 50% if biological criteria, such as aquatic biodiversity, were included in the standards. In regard to river protection, the Act suffers from weaknesses in addressing threats from "non-point" sources of pollution, the absence of adequate statutory direction for non- degradation of existing pristine waters, the lack of credence given the Act's goal of restoration and maintenance of the "biological integrity of the nation's waters," its neglect of water quality issues related to land management decisions, and the absence of appropriate monitoring and enforcement.

Applicability to the Protection of Private Lands Rivers Despite the weaknesses inherent in the law, the Clean Water Act offers a number of important insights into resource protection which can be useful for a river protection program. The Act provides one of the few river-protection mechanisms which specifically addresses water quality, and clearly the nation's rivers are healthier because of its enactment. The Clean Water Act also successfully protects a wide range of rivers, regardless of State boundaries or agency jurisdiction. The Act is nationally known and recognized, and accordingly has a broad and diverse national constituency, which is essential for any successful resource protection program.

While its implementation has often been uneven, in concept the federal/State/local government partnership model provided in the Clean Water Act is sound. The framework within the Act that calls for the establishment of federal water quality criteria, State-defined standards based on those criteria, and both State and local implementation of a water quality program based on those standards could be adapted for river protection. Importantly, the Clean Water Act also encourages State and local implementation by providing grants, cost-sharing and technical assistance.

The Coastal Zone Management Act

The Coasal Zone Management Act of 1972 (CZMA") established a national program to manage, protect and enhance coastal resources such as wetlands, tidal areas, estuaries and beaches. Declaring that "there is a national interest in the effective management, beneficial use, protection, and development of the coastal zone," and acknowledging the significance of coastal resources for their "ecological, cultural, historic and aesthetic values," CZMA established an ambitious national partnership between federal and State government in the management of the nation's coastal zone.

The purposes of the Act as set forth in the legislation are as follows:

1) to preserve, protect, develop and restore coastal zone resources;

2) to encourage and assist the states in the development and implementation of CZMA programs which meet specified national standards;

3) to provide for reasonable coastal-dependent economic growth, improved protection of life and property in hazardous areas; and

4) to encourage the participation and cooperation of public, State and local governments, regional authorities and federal agencies in the implementation of the Act.

Administered by the Office of Coastal Zone Management of the National Oceanic and Atmospheric Administration, the Coastal Zone program establishes objectives for coastal zone management and protection then provides the states with funds, policy guidance and technical assistance to help them establish and maintain State programs which meet these objectives. State programs must be approved by the Secretary of Commerce and are regularly monitored with in depth evaluations coming at least every two years.

Federal incentives built into CZMA include federal matching grants and federal consistency. Federal consistency assures that federal activities affecting the coastal zone must to the "maximum extent practicable" not conflict with State coastal zone policies and programs. CZMA is one of a very few resource protection programs which offers such federal consistency.

While participation by the states is voluntary, all 35 coastal states and island territories have participated in the program. Of these, 29 states and territories, including 94% of the nation's coastline, have received program approval and are moving on to implementation. Individual State programs are tailored to meet specific State needs and vary significantly in their effectiveness.

Applicability to the Protection of Private Lands Rivers: CZMA offers a potentially good model for private lands river protection. Like rivers, coastal resources are most imminently threatened by development on private lands which must be addressed primarily at the local level. The Coastal Zone program offers a prototype for federal/State/local partnership where national standards are established and implemented through the states. The combination of incentives through federal consistency, grants and assistance is apparently attractive and workable to the states as evidenced by the overwhelming participation rate. CZMA also provides an effective monitoring and enforcement program.

While CZMA has been moderately successful in protecting the 95,000 miles of the nation's coastline, it is unclear whether the approach could be transferred to protect millions of miles of rivers and streams nationwide. One of the reasons for CZMA's success is the limited nature of the resource it seeks to protect.

National Flood Insurance

In 1968, Congress enacted the National Flood Insurance Act which provided low-cost insurance for those who resided in floodprone areas, (the "National Flood Insurance Program" or NFIP). In 1973, Congress strengthened the Act to provide that in exchange for otherwise unobtainable flood insurance, flood-prone communities were to adopt floodplain management ordinances which met minimum federal standards. The federal program is administered by the Federal Emergency Management Agency, (FEMA). States have participated by adopting statewide floodplain management regulations.

Currently over 2.4 million flood insurance policies are in effect in some 18,000 communities located in flood-prone coastal and riparian areas. While these figures indicate that NFIP has been successful in providing flood insurance which otherwise would be unavailable, the program has had less success in meeting its land management goals. While the National Flood Insurance Act clearly states that NFIP is "to encourage State and local governments to makeappropriate land-use adjustments to constrict the development of land which is exposed to flood damage and minimize the damage caused by flood losses," and "to guide the development of proposed future construction, where practicable, away from locations which are threatened by flood hazards," the Flood Insurance Administration has admitted that "what is indisputable is that the NFIP has not restricted coastal development to any measurable degree."

A 1982 GAO study found that NFIP may well provide developers with a financial "safety net" and actually encourage development in high-risk areas. This study is

particularly disturbing given the ecological importance of floodplains. Floodplains, which may include wetlands, beaches, dunes and riverbanks, serve a variety of purposes from water purification, fish and wildlife habitat, groundwater replacement and sedimentation reduction.

Applicability to the Protection of Private Lands Rivers: In theory, floodplain management offers a particularly good framework for resource protection, not unlike the Coastal Zone Management Act model - federal direction, State program implementation, roots in existing federal laws, a general requirement in most states, a high level of federal consistency. Yet, the floodplain protection goals of the enabling legislation have clearly not been met. The lesson best learned from NFIP may come from an analysis of why a program which works on paper may not work as well on the ground.

The weaknesses with NFIP seem to stem primarily from the lack of appropriate agency implementation, particularly enforcement. Recent FEMA studies indicate that only about 14% of flood-prone properties are insured. Federal lending institutions have been terribly lax about enforcing the Act's requirement for mandatory flood insurance purchase (which subsequently triggers floodplain management requirements) for flood-prone properties that are mortgaged with lending institutions backed by federal deposit insurance. Another weakness in the implementation of NFIP comes from inadequate funding.

Any discussion of NFIP's weaknesses should be tempered by the fact that the program has issued over 2 million flood insurance policies nationwide. Thousands of communities throughout the nation are already familiar with and invested in flood management programs. A river management program could potentially be developed by utilizing the existing structure of NFIP and adding significant river protection provisions.

River/Resource Commissions

While not a new concept in river protection, river (or watershed) commissions continue to be brought up in the discussion of the development of a river protection program. The Pinelands Commission, while not specifically oriented to river protection, is often held up as a good example of a representative organization which effectively manages and protects a diverse natural resource area.

In 1978, Congress established the 1.1 million acre Pinelands National Reserve in southern New Jersey and called upon the State of New Jersey to create a planning agency to preserve and protect the area's significant natural resources. In 1979, the New Jersey legislature passed the Pinelands Protection Act which directed the Pinelands Commission, in partnership with all levels of government, to preserve and protect the Pinelands. The State law authorized the Commission to develop a Comprehensive Management Plan for the Reserve, and required all counties and municipalities within the Pinelands to revise Master plans and zoning ordinances to be in conformation with the plan.

The fifteen-member Commission is made up of seven members appointed by the Government, seven that represent and are appointed by each of the Pinelands counties, and one member to be appointed by the Secretary of the Interior. The Commission monitors development within the Reserve as well as implementation of the Comprehensive Plan and local planning compliance. The Pinelands Commission has received high praise for its ability to meet the federal mandate provided in federal law, while at the same time fostering and implementing a protection ethic with local zoning authorities.

Applicability to the Protection of Private Lands Rivers: The Pinelands Commission approaches resource management through an innovative partnership between the federal government, the states and the local zoning boards. One of the primary reasons for its success is that it recognizes the

importance of coordination at all three levels as well as the significance of public investment and input. However, the Pinelands Commission relies heavily on State preemption of local land use authority. Such a heavy-handed top-down approach is potentially very politically contentious.

National River Registry

Responding to the concern that the National Wild and Scenic Rivers System is too exclusive to protect many of the nation's less spectacular, albeit important, rivers, many advocates favor the establishment of a National Register of Scenic and Recreational Rivers patterned after the National Register of Historic Places. The American Whitewater Affiliation has assumed a leadership role in promoting this alternative.

Under this proposal, river segments would be nominated for inclusion on the Register by a State or local government entity or by a private organization. A federal agency, most likely the Park Service, would make the final determination as to whether a river would be added to the list. To qualify for inclusion, the river need not be pristine or entirely free-flowing, but have at least one outstanding recreational, scenic or natural characteristic together with a significant local government interest in its protection and management.

The River Registry concept includes three basic provisions:

1) federal recognition of a large number of deserving rivers;

2) a requirement that federal activities cannot degrade the values of rivers on the Registry unless no feasible alternative is available, (so-called "federal consistency"), and

3) encouragement to the State and local governments to take actions to preserve the values for which the river was added to the Registry.

Applicability to the Protection of Private Lands Rivers: The River Registry proposal includes a number of provisions which would provide protection for private lands rivers. Prohibiting federal actions from degrading protected rivers is a particularly important concept. Currently, while a river may enjoy protection through State law, it is not necessarily protected from federal activities, the most onerous of which is a FERC-licensed hydroelectric project.

The River Registry is also attractive because it could potentially protect a large number of rivers in a very efficient manner. Congress would not have to pass a law to protect each river, as is the case with wild and scenic rivers, nor would rivers have to meet the Act's stringent criteria to be offered some protection. While rivers on the Registry would not enjoy the same level of the protection as those rivers designated wild and scenic, the potential exists for giving moderate protection to thousands of rivers.

Importantly, the River Registry would also avoid many of the pitfalls of the federal river protection tools by keeping management of protected segments at the local level. The lack of federal presence would allay landowner fears and encourage local investment in protection.

Other River Protection Mechanisms

A number of other mechanisms have been used to protect riparian areas on private lands. They can be utilized to support and implement federal and State legislation and standards. Several examples follow:

Zoning

Traditional zoning prohibits those uses within riparian corridors that would degrade streams, and permit those uses which are more compatible. Recently, more creative zoning has been utilized for stream management and protection, including "incentive zoning" which mandates that developers "proffer" or contribute to resource

protection if they develop the riparian area; the transfer of development rights outside of sensitive areas; "open space set-asides" which require developers to retain a percentage of the developable land as open space; and impact zoning which prohibits incompatible uses, permits compatible uses and conditionally allows other uses on a case-by-case basis.

National Designations

As an alternative to wild and scenic designation, Congress has enacted a number of other federal designations designed to protect specific rivers. These have included national recreation areas, national rivers, wilderness designation, national ecological areas, permanent study protections, hydropower bans, dam bans, dredging bans, and special management areas. These designations allow river protection to be tailored to individual situations and are not as apt to be as contentious as wild and scenic protection.

Land Acquisition

One of the most successful mechanisms in resource protection is to simply buy the land one wants to protect. Unfortunately, traditional land acquisition is probably the most costly river protection technique and often undesirable to the local landowner. However, less expensive alternatives to traditional "fee title" acquisition do exist and can be effective management tools. For example, fee title donation, the purchase or donation of conservation easements, sale and leaseback programs, and purchase and resale with restrictive covenants are less costly acquisition alternatives. All of these acquisition alternatives can be time consuming and may be stymied by landowner reluctance to deal with government officials.

Tax Incentives/Disincentives

Tax incentives and disincentives can be applied at the federal, State or local level and can be very effective tools for river protection. Taxing uses of a river or related riparian lands which are incompatible with the health of the stream is the most obvious use, but a number of other techniques may be applied as well.

Among those that have been suggested are:

1) the "current use assessment" which evaluates lands for tax purposes based on its current use as opposed to an assessment based on potential development;

2) a tax rebate for the donation of conservation easements;

3) the exclusion of lands put aside for conservation purposes from inheritance taxes to discourage the selling off of property by heirs trying to meet the tax burden the inheritance brings; and

4) tax breaks for not developing open space and for habitat enhancement.

Applicability to the Protection of Private Lands Rivers: While none of these mechanisms is sufficient by itself to respond to all of the river protection issues, each of these has merit in the context of broader private lands river initiatives.

Outline of a New Private Lands River Protection Program

While each of the tools summarized above seeks to resolve specific issues relating to riparian protection, none addresses the major threats to rivers today in an integrated manner. Consequently, a more comprehensive program based around watersheds should be developed on private lands rivers. The program should protect significant riverine resources and also recognize and safeguard existing uses of the rivers whenever possible. Accordingly, we recommend the following outline of such a program:

The Proposals

Protection of the riparian area to be protected must be clearly defined.

Emphasis should be placed on the protection of entire watersheds.

Harmful federally licensed or permitted activity should be prohibited.

Non-federal activities that affect the river or river system should be managed and controlled. In determining the appropriate uses of the river, the affects of a particular activity should be evaluated using both chemical and biological criteria.

> ***"River conservation on lands primarily privately held simply will not work unless the local citizenry and local governments are invested and committed to protecting their local stream. No amount of Congressional legislation, government regulation or the like will succeed without the assistance of those who live and work along the river."***

Emphasis should be placed on protecting the most significant rivers and river systems. Criteria used to evaluate significance should include, but not be limited to, the importance of the river for:

- fish and wildlife habitat
- biodiversity
- public and commercial water supply
- recreation use
- aesthetics

B. Organization

Public involvement/investment in river protection program should be included through provisions for public input and the development of local river constituencies.

- To the extent possible, private property rights should be retained.

- To the extent possible, state and local compliance with the federal river protection program should be voluntary.

- Coordination among and within federal, state, and local agencies should be provided.

- Consistency among federal, state, and local laws, policies and programs should be provided.

- Incentives/disincentives for state/local involvement through grants, cost-sharing, recognition, tax incentives, corporate profits, and other means should be included.

- Mechanisms for monitoring and enforcement should be included.

- Mechanisms to enforce timely and appropriate agency implementation should be included.

- Existing programs, policies, funding, and expertise should be utilized wherever possible.

- Mechanisms for adequate funding at federal, state, and local levels should be included.

- Federal technical assistance should be included where appropriate.

Conclusions

River conservation efforts on private lands and federal lands alike will not be successful until the nation develops a clearer and more thorough understanding of what is at stake. Consequently, agencies, activists and individual citizens who are concerned about rivers must work together to educate the public on the importance of river systems not only to the country's ecological health but also to our collective and individual well-being.

The new Administration should assist in that effort by developing a comprehensive "State of the Nation's Rivers" report which explains the importance of rivers systems and the degradation they now face. The Administration should also develop a national riparian policy which protects the immediate streamside environment of all rivers on federal lands and establishes incentives for the protection of such riparian habitat on private lands. Moreover and most importantly, the Administration should undertake an ambitious campaign to enact a comprehensive watershed protection program on all rivers similar to the one outlined in the previous section.

However, given the contentiousness regarding river protection on private lands rivers, the old saw, "all politics are local" seems particularly applicable. River conservation on lands primarily privately held simply will not work unless the local citizenry and local governments are invested and committed to protecting their local stream. No amount of Congressional legislation, government regulation or the like will succeed without the assistance of those who live and work along the river. Fortunately, there are many examples of such individuals who have a passion and commitment to protect their river that no bureaucrat or inside-the-Beltway environmental activist could muster. Consequently, the most effective river protection programs are partnerships between various layers of government and individuals, where appropriate river protection standards are met and private property rights protected.

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