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CONFLICTING RIGHTS TO RURAL RESOURCES: A Research Strategy for Improved Public Choice

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INTRODUCTION

There are two basic underlying premises for this paper. The first one is that economics is **still** a useful discipline. That is, an understanding of economic concepts can contribute to a diagnostic analysis of socio-economic change in the Northeast (among other things), identification of policy options, and even choice. Economic paradigms are versatile and mobile. They help people decide how to deal with all difficult social problems. This assertion is certainly not a foregone conclusion and has in fact been contested rather vigorously. In some circles, clearly those less informed, economics **as a discipline** has been labeled the villain, the cause for social ills from poor roads to dirty air and water. I would not suggest that all economic advice is good, but that is the fault of the practitioner, not the discipline. Economics, like any other social science, can generate apparent scientific objectivity to support just about any motive of the user. There are virtually no sterile concepts in the discipline. When used to guide choice, all economic principles acquire a normative flavor, inevitably benefiting some interests more than others. Scarcity, the beginning of economics, means interdependence and choice based normative judgments. The challenge for economists as social scientists and particularly as policy analysts is to employ the robustness for the discipline for useful purpose, to provide insights helpful to policy and avoid being intimidated by our own discipline. This leads me to my second premise, that judgments, prescriptions and analyses by economists are probably as good as or better than those offered by anyone else. We owe it to ourselves to be involved.

My purpose in this paper is to examine several policy issues surrounding our conference theme in the context of providing information useful for decisions. I am not reporting on a specific research project, but will draw on recent studies in suggesting an appropriate research theme. In essence, my assertion is that to be helpful in current efforts by society to render timely, sensitive decisions on use or misuse of natural resources, economists must pay more attention to the process and rules by which rights, access and opportunities to use those resources are distributed among people. First, the straw man.

THE EFFICIENCY STRAITJACKET

In his recent lecture for AAEA, Maurice Kelso identified some upsetting limitations of conventional neo-classical economics in dealing with natural resources problems. "Maximization of throughput within an individualized myopic time frame . . ." is an inadequate conceptual foundation for dealing with the resource use phenomena characterizing socio-eonomic change in the Northeast or any other place. Most economists with a grain of candor would acknowledge that their discipline needs help. But many simply refer those messy institutional questions to some other social scientist. This "passing the buck" denies my two premises — that economics as a conceptual apparatus **can** facilitate analysis of important natural resource problems and that economists **may** have some thoughtful observations about what should be done. Following Kelso's prescriptions, we must consider resource institutions as endogenous variables, even the focus for analysis, not some pre-determined rules of the game that must be studiously ignored.

Several recent contributions to the literature may serve as benchmarks in my effort to suggest research emphasis. My intention is to suggest points of departure, not impugn the validity or usefulness of these papers. First is a recent book by Ervin, **et al,** which examines various public land use rules and policies. Several chapters contain valuable insights about specific land use control techniques. But those insights are almost lost in the determined effort to apply a neo-classical efficiency test to these policies. The assumption is that government acts to correct inefficiency, therefore, a test of performance is to measure how these laws and institutions enhance land use efficiency. Not surprisingly, land use policy flunks the efficiency test. The authors seem distressed by this dismal performance, yet can not quite articulate the source of that discomfort. Zoning does not achieve "optimum" land use, they say, and may even be "inequitable." So what? Zoning exists in various forms, at all levels of government. It is a policy instrument which implies a certain distribution of rights and obligations among owners, between owners and a government, and among governments. It may alter the pattern and pace of land use change. It may be compared to other institutional devices in terms of distribution of cost and impact. To observe that zoning is inefficient begs the crucial policy questions — like efficient for whom, and whose preferences are served? Resource economists must address **these** issues to really influence social choices affecting the character of rural areas. Ervin, **et al,** sense the limitations of the neo-classical paradigm, but can't overcome their reverence sufficiently to take on the real issues.

Del Gardner is similarly intimidated in his analysis of farm land preservation programs. He builds his entire case around neo-classical concepts of market failure and social intervention in a presumably free market. Property rights and other institutions creating selective access to land are assumed to be exogeneous to the policy analysis, as if they were somehow naturally ordained. Their initial distribution is taken as given and appropriate. To tamper with those rights, he says, would distort the market to the point that it could not function efficiently. We would lose all indicators of scarcity. He raises the same equity concerns mentioned by Ervin, **et al** involving "loss" of rights by land owners. Perception of loss assumes something about the way rights were distributed in the first place. There is a strong normative tone to all of this — that efficiency and equity, both defined in terms of the existing distribution of rights and privileges, must be sought or maintained.

I do not suggest that these writings are invalid. I agree with Gardner that we have little evidence that bureaucrats can handle

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the job of distributing rights to land any better than can a monetary price mechanism. I may have more trouble than he does in perceiving a land use pattern that is socially optimal, but perhaps that's my inexperience. My contention is that normative terms like social optimality, market failure, and equity create the illusion of choice without the substance. These terms have no intrinsic meaning for real policy decisions that will affect real people. They lead the resource economist down the primrose path to irrelevance — the analyst **thinks** he's involved in policy analysis when he really isn't. In the exciting, even terrifying day to day conflict over access to land, **nobody** really cares about "efficiency" as an abstract concept. But they do care about the distribution of dollars and rights implicit in a decision deemed by someone to improve efficiency. People out there understand, at least implicitly, that efficient use of any resource implies a great deal about **whose** costs and benefits are considered. Efficient land use might be a real windfall for a few people lucky enough to have inherited rights to certain acres. I would expect their support for "efficiency." Equity is even **more** a matter of opinion.

Far more useful, it seems to me, is to explicitly examine the distribution of rights and access to decision authority that evolve from any land use decision rule, including a market. Only then can the consequence of alternative actions be weighed. A land use proposal emerges because somebody wants it to, as a way to realign access in his or her favor. "Efficiency of land use" may become a catchy shorthand way to push for a certain realignment, but is not the goal in itself. Gardner may be right that the California proposal to designate and zone prime agricultural land would prove to be a political and economic disaster. As a decision rule, the program may allocate rights and responsibilities in ways deemed inappropriate by just about everyone. I might also agree that farmers would be asked to bear an unreasonable burden under that program. But his and my positions are just that — points of view. They are not enhanced by any reference to efficiency or equity.

RESEARCH EMPHASIS FOR CURRENT RESOURCE ISSUES

These matters of research emphasis by policy economists may be further explained in the context of specific resource issues. Results or conduct of existing projects will be mentioned and directions for further attention identified.

208 Planning

Land use planning is underway throughout the country with funds and focus under Section 208 of the Federal Water Pollution Control Act (PL 92-500). The purpose of all this activity is presumably to arrange activities on the landscape, and use the land itself in ways that will improve water quality. While both point and non-point pollution sources are included in the Act, attention in this paper is devoted entirely to non-point sources and particularly agriculture. Farms and farmers are going to be right in the middle of efforts to implement non-point aspects of areawide water quality plans. Few plans are at that stage yet, but they will be in the next several months. Farmers are notoriously disinterested in land use policies that might constrain management choices in some way. They are likely to be equally suspicious of any new rules emerging from water quality planning. The real political battles in 208 planning are yet to come. Most research thus far has focused on technology of water pollution. Basic descriptive data are needed. Several economists have examined cost implications of alternative water pollution control techniques (Alt, **et al**, Kasal, Seitz and Osteen, Wade and Heady, White and Partenheimer). In general, these employ linear programming to test impacts of various land use constraints on the earning capacity of farmers. Some examine sample farms by type of enterprise, others by geographic area, others by soil type. The purpose is to permit some degree of generalization about economic impact of pollution control methods by detailed analysis of selected economic enterprises.

These analyses are extremely useful for evolution of water quality policy. They help those affected by programs identify the stake they have in options proposed. And that is the fundamental issue in 208 planning. If all of that planning is to have any impact at all on water pollution, farmers and other land users must agree to do things differently. There must be political support for plans, some general feeling that successively higher levels of water quality are worth the cost. Those asked to bear the costs may feel quite differently from those free riders who simply feel good about knowing the water is clean. The most useful research focus in all of this, I submit, is the distribution of rights and dollar costs implicit in alternative planning structures and implementation techniques. Resource economists can be most useful to the cause of clean water by helping sort out the consequences of pollution controls for key participants. Information does not always create support, but it can at least help specify motives of the participants. Further, resource economists can help prepare for the next round of federally financed, state administered, regionally conducted and locally implemented resource planning exercises by examining the performance implications of alternative ways of organizing the job. **All** levels of government are involved in 208 planning. Various rules are imposed at each level to assure the bureaucrat in charge that his "tail is protected." The form and chances for success of the planning output are influenced by organizational structure. These institutional questions are at the heart of the water quality matter. They are the bargaining rules that facilitate compromise in the intense political bargaining yet to come in 208 planning. They are not exogenous to resource allocation, they **are** resource allocation.

Hamilton examined some of these institutional questions in a recent study conducted at Michigan State University. Particular attention was given to the implications of ways in which 208 planning is structured at the state level. All 50 states were surveyed to determine the range of organizational types. Analysis was then focused on likely performance differences between state and multi-county regional direction of planning for non-designated areas. The general hypothesis is that ultimate success in 208 planning, including improvements to water quality, will depend on the degree to which "opportunity sets" of the planning and implementing levels of government correspond. That is, plans must be based on preferences similar to those held by the implementing unit, or action consistent with the plan is unlikely. Implementation techniques proposed as "best management practices" to control non-point pollution in non-designated areas basically rely upon the traditional zoning and other regulatory powers of local governments. Local soil conservation districts and county ASCS offices would play major roles in any incentive programs. Neither EPA nor anyone else has yet had the temerity to seriously recommend shifting that implementation power to a higher level. Thus, if success depends on local action, some attempt to educate and even facilitate compromise at that level is necessary. From the survey, regional agencies were found to be more inclined to perform that "infor-

mation subsidy" (Bartlett) for local groups and governments that are state 208 agencies. We suspect, therefore, that states where this planning authority is assigned to regional agencies are likely to do better than states which retain that authority at the state level, given the apparent political cost of drastic redistriburtion of implementation authority.

Other such institutional variations in 208 planning deserve attention. They will influence the flow of events from formal planning, including articulation of preferences, to bargaining on acceptable levels of pollution, reasonableness of control options, and distribution of costs. Source of planning funds, for example, may well make a difference. Those regions that must rely on local people for 25 percent of the planning dollars are likely to have a much different planning strategy than those getting all their funds from the Feds. It is much easier to hire a consultant and be done with it than it is to squeeze those dollars and participation out of the local people. But the latter situation may produce a "better" plan.

The Environmental Protection Agency has selected seven case study areas around the country for testing various strategies and techniques for implementing 208 plans. These "model implementation programs" (M.I.P.s) would provide an excellent setting for examining various public choice issues. The cases presumably represent various types of water problems, governmental mixes, and techniques for improving water quality. I would suggest two related foci for institutional research within this M.I.P. structure — transactions cost of implementation process, and techniques for accomplishing useful involvement by farmers and others whose land use behavior is directly related to success of the program. Transactions costs are a crucial part of overall implementation cost. EPA, the states, and local governments must be concerned about the monetary and other costs of writing and enforcing rules that change the way water and adjacent land are used. Mandatory farmland conservation practices, for example, would constitute a major departure from voluntary programs administered by SCS for over forty years. Farmers may see the rationale for mandatory practices, but it will take some education. Enforcement will be difficult. Additional people must be hired, vehicles purchased, gasoline burned, etc. At least these and other transactions costs should be tallied for comparison with costs of an incentive program or some other option. Those requiring the greatest behavioral change by the land owner may entail the greatest transaction cost — to convince the owner he should use land differently, and enforce the rules on those who are hard to convince.

Procedures for involving farmers in the implementation process deserve special attention (Vanes and Keasler). Successful 208 plans will require some opportunity for bargaining and compromise between government and land owner. Decisions must be reached — public involvement is not a substitute for choice. But timely involvement by farmers can help specify distribution of the burden under various implementation schemes, and may lead to compensation or other compromise. Research should note the performance implications of different timing, structure, and voting rules for public involvement.

My contention is that within this 208 planning process the issues that really make a difference are the institutional ones. We are involved in an expensive exercise in public choice. Human beings are making decisions about the economic relevance of technical information about water quality. Various rules selectively grant access to those decisions. Other rules allocate the cost of clean water. These rules are at the heart of the matter.

Control of Growth

Guiding the pace and pattern of economic changes is still our most crucial rural policy issue. The literature on this theme is immense, from broad policy documents to precise economic analysis of specific control techniques. My purpose here is to simply re-emphasize the importance of studying the question of whose opportunities are enhanced or constrained by different government policies. The problems with trying to force land use control into an efficiency framework have already been discussed.

We know that growth policies create or at least profoundly influence land values. Rules permitting growth in some areas and denying it in others distribute substantial monetary benefits among land owners. The potential gains which result from policies such as zoning, sewers, and taxation influence particular owners to attempt to capture appreciation gains and this creates costs for others by putting pressure against the maintenance of a public development or development control plan. This is just one case where attempts by private individuals to re-direct and capture land value change not only affect income distribution, but simultaneously affect resource use. Those who do not own land still feel the differential impacts of growth policy. The political economy in a community may be largely defined by gainers and losers in growth processes. Schmid's early work on inter-urban variations in the land value increment attributable to growth or growth potential is being extended by Johnston to consider additional distributional aspects. Particular attention is paid in this study to zoning, provision of sewer systems, and taxation as discretionary instruments for local governments that affect distribution of land value appreciation. Their form and content are conditioned by those with access to appropriate decision authority. A change in rules for public participation or voting would change the content of the zoning ordinance or the direction that public sewer lines are extended. Individuals and political groups push for rule changes favorable to their interests. Those who stand to gain a great deal from land uses not currently permitted in an open space zone have consistently succeeded in gaining zone changes (White and Partenheimer). The issues then are **not** government vs. market, but government-market interactions and inter-dependence.

The amount, pricing, and location of sewers affect the supply, demand and spatial pattern of housing lots, hence land value. Schmid noted that, "The asset appreciation reflecting the value of amenities provided in limited supply at less than cost appears as a rent from the developers point of view, but is monopoly from the point of view of the whole economy, in that it results from a contrived rather than a natural restriction in supply." Obviously supply restrictions such as sewer moratoria will also affect size distribution of land values (Tabors). The processes by which these policies are selected and how they affect land value and other aspects of resource use are the meat of **economic** analyses.

My contention is that land value changes are the driving force of rural land policy. Distribution of that value appreciation is the key element of the local political economy. Public discretion is exercised in developing policy instruments that control growth and thereby distribute impacts. These rules, then, and the processes by which they are developed or changed, require careful attention by resource economists presuming to have some contribution to the course of events in rural areas.

Public Forests

At the risk of belaboring a point that may seem both obvious and obscure, a brief final reference to public forest policy may be a useful way to conclude. The forest policy literature is full of books about "multiple use," and balanced use of public lands. The more daring even talk about optimizing some sort of multiple objective welfare function for public land. The apparent assumption is that people attach themselves to a use of some kind. If we just assure that all "uses" are accounted for — timber production, wildlife habitat, wilderness, watershed protection — people will fall into line. Public managers, the Forest Service and their state level counterparts, even employ decision models that try to link human goals to uses. Land is then allocated to uses, with appropriate reference to joint products. The real allocation process, it seems to me, involves distribution of the **right to use** public land among competing interests. The "uses" are actually abstract proxies for property rights. Mr. and Ms. average citizen don't really care about timber or wildlife habitat. They even have a hard time in a goal programming exercise comparing 200,000 acres of timber management to 100,000 acres of wilderness and a deer management area. They **are** interested, though, in rights to experience the public lands in one form or another and the related right to exclude others from pursuing **their** interests. Actual physical capacity may be measured and discussed in terms like visitor days, board feet, or wilderness encounters. But these are not human categories. People are not so easily pigeonholed; their preferences change. Timber companies and some economists may argue for "efficient" management of public lands. The former really want a greater distribution of opportunity to use; the latter are just hung up on efficiency. Research on multiple use forestry seldom leads directly to worthwhile policy conclusions since it does not deal with the substance of political conflict, the distribution of rights. Rights are there, of course, but are obscured by verbiage about comparative advantage, physical output, and indirect benefits. I suggest that future research in this area focus on the decision mechanisms affecting distribution of rights to public lands. Whose preferences are recorded in those decision processes, and how might selected rule changes alter the mix of preferences considered? Further, **how** are political preferences gauged and how might it be done otherwise? These are the key questions of public forest policy. These are the questions to which forest managers must increasingly direct attention.

CONCLUDING THOUGHTS

I began this paper with two simple premises. I reiterate my contention that useful analysis and advice are still within the grasp of most resource economists. In Washington, program evaluation has emerged with a vengeance. Even such untouchables as the Extension Service and Soil and Water Conservation are suffering the detailed scrutiny of those "askers of tough questions," the policy economists. It is my observation that good analysts are a sort of "medium of exchange" among Assistant Secretaries of Agriculture in battles over program turf. These battles are not trivial for most of us.

In this case, as in other resource policy areas discussed above, we should help various political actors see the distribution of consequences implicit in alternative rule changes being considered. It's just not enough to raise the efficiency flag, and leave the real action to others.

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