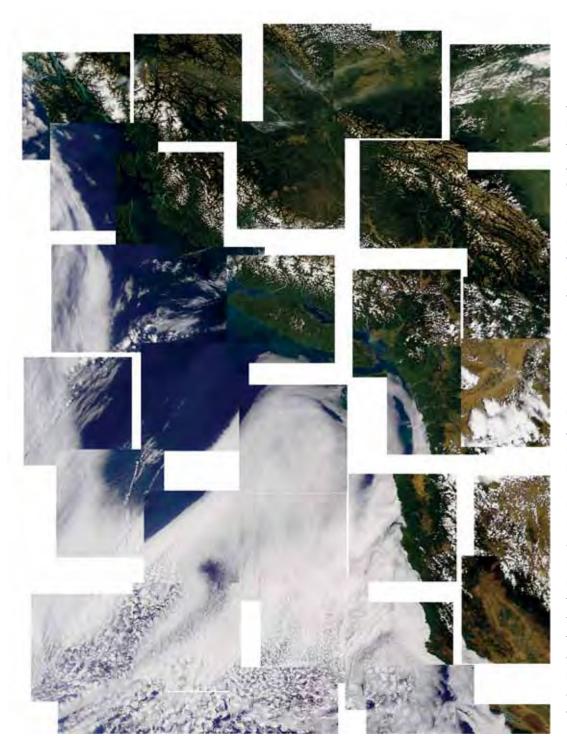
## Why Place Matters In Environmental and Resource Economics



## **Emery N. Castle**

Emery Castle joined RFF in 1976 as vice president and senior fellow and became president in 1979. During his tenure, Castle played a pivotal role in guiding RFF as it transitioned to financial independence from the Ford Foundation and developed its endowment and headquarters. In 1986, he returned to Oregon State University, where he taught and held various administrative positions before coming to RFF, to serve as the first chair of the University Graduate Faculty of Economics. He is currently Professor Emeritus at Oregon State.

The study of land and water economics, especially comparative measurements of market and non-market goods and services arising from natural resources, was a prominent theme in Castle's research prior to coming to RFF. Upon his return to Oregon State his research shifted to the study of rural people and places. He conceived and subsequently served as chair of a multi-disciplinary committee to study problems of rural America. The National Rural Studies Committee, funded by the W. K. Kellogg Foundation and in existence from 1986-98, engaged scholars in the study of rural problems on a regional basis, with the objective of assisting colleges and universities to better address rural issues.

great deal of traditional micro- and macroeconomics is "placeless." Microeconomics is concerned mainly with producers and consumers in decentralized markets, and macroeconomics is the study of aggregates for an entire economy. Consequently, relatively little emphasis is given to group decisions associated with people and places intermediate to these two extremes.

From the outset RFF has directed attention to place-related economic decisions. RFF helped establish urban economics as a respected specialization in economics. RFF staff such as Harvey Perloff, Lowden Wingo, and Edgar Dunn directed attention to urban place-related issues and problems associated with economic growth. RFF also served as an important catalyst in the development of resource and environmental economics. As this field developed, it became apparent that a theoretical framework was needed that would permit non-market values, such as access to wilderness and water quality associated with particular places, to be recognized. Pioneering RFF literature by Marion Clawson, John Krutilla, and Allen Kneese contributed greatly to the emergence of resource

and environmental economics as a recognized specialization in economics.

A precise definition of place is necessary if place is to be accorded an important role in economic and public policy discussions. Place is defined here as a nexus of geography or natural environment, community of interest or shared objectives, and formal or informal jurisdiction. In economic terms, this means that place can be determined by the output judged to be important and the mechanisms that allow that output to be changed, just as firms are defined by the goods and services they provide. With this definition, it is possible to construct economic models of group decisions in a place.

All resource and environmental investigations need not give explicit attention to place, of course. This is unnecessary and inappropriate in some instances. Nevertheless there are two basic reasons I believe place should not be neglected in contemporary discussions. First, the quality and nature of many non-market goods and services forthcoming from natural resources and the environment vary among places. In other words, place cannot be separated from the good or service desired. Second, it is not obvious that decentralized markets and public policies serve people equally well regardless of population density. In recent decades per-capita income has risen more rapidly in densely populated than sparsely populated places, even though younger people have migrated in record numbers to metropolitan places. These two basic considerations are supported by the following generalizations based on a decade of work by the National Rural Studies Committee:

*Rural America is highly diverse, but with commonalities, a vast place with a varied landscape.* Rural places, with their uniqueness and diversity, are subject to common, rapidly changing external economic, institutional, and natural forces. Many localities exercise a degree of autonomy in addressing common concerns. The division of powers between federal and state government with delegated local autonomy is relevant.

*Powerful exogenous economic, institutional, and natural environmental forces affect rural as well as urban places and regions.* Contemporary examples abound—globalization, environmental mandates, and the demand and supply of energy. Yet such forces do not affect every place in the same way. For example, since 1980 per-capita income has risen much less in rural Oregon than for the entire state.

*Rural resource use and relative economic well-being have profound implications for environment and resource policy.* An inevitable tension exists between those who make use of natural resources to produce food, timber, and energy and those who desire access to the natural environment for ecosystem services, such as natural amenities and recreational opportunities. These tensions come into the open and revolve around the use of, and access to, natural resources in less densely populated places.

*Local group decisions matter.* In every rural community, there's at least one group focused on an issue of common concern. Common objectives and mutual trust apparently permit group, relative to individual, decisions to be an effective way to achieve individual goals. Yet, taken literally, much economic theory would have us believe that important economic decisions are made at either the micro (household or firm) or the macro (federal government) level of the economy. This would not matter if all places were identical. False choices arise from an assumption that public policies should emphasize either people to the exclusion of places or places to the exclusion of people. In fact, in many circumstances public policies need to address the two simultaneously. This false choice is the source of a divide between economics and ecology.

## An evolving curriculum

Three subject matter groupings would better integrate considerations of place in resource and environmental economic literature.

*The changing comparative advantage of particular places.* Even though the features of a place on which its comparative advantage is based are relatively stable, the external environment may not be. The greater the capacity of a place to adjust to external change is an important dimension of comparative advantage. As this is written, resource use conflicts in coastal areas are in the headlines; national energy concerns conflict with regional interests in environmental amenity protection.

An important issue is whether a place can offer a good or service that commands a premium over its closest substitute available in another place. And this has to be related to who has control over the resource or environmental feature that gives rise to comparative advantage. For example, at one time the Yaquina Bay in Oregon was a desirable site for the location of pulp or paper mills. This estuary also provided unique environmental amenities that would have been destroyed by the uncontrolled discharge of pollutants. When these two potential uses came into conflict some years ago, the relative desirability of the place as a pulp and paper mill site as contrasted to other possible locations permitted the community to impose environmental controls on a pulp and paper mill such that key natural amenities were preserved.

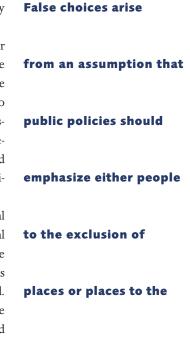
If a single owner had controlled access, a different outcome likely would have resulted. Existing local decisionmaking at a given time or place is not necessarily optimal or benign. Even so, there are practical reasons for local involvement in environmental and resource management apart from local control of the final outcome. Those with experience in local resource and environmental conflicts will know that it is not unusual for local interests to make information available that otherwise would have been overlooked.

*Exogenous economic, institutional, and natural world forces are always undergoing change.* Three contemporary examples come to mind: globalization, the Endangered Species Act, and the demand and supply of energy. Given the division of power among national, state, and local government, it is clear that a multiplicity of interests will want to participate in public policymaking about such matters. This is not to argue that local interests should prevail but it is important to know who is affected and in what way.

Place-based decisionmaking needs to be considered in the technical aspects of environmental and resource economics. Techniques such as benefit-cost analysis used for public policy purposes tend to be oriented to economywide conditions and national objectives. They often assume full employment and homogeneous goods and services. Such assumptions often do not describe regional or local conditions accurately. Not surprisingly, when local and regional group decisions are made, such measurements typically do not carry great weight. The application of technical resource and environmental economics in regional and local group decisions is a neglected subject.

In conclusion, thoughtful analysis of resource and environmental problems, together with empirical measurements in particular places, provide environmental and resource economists with opportunity for great service. A caution flag is raised regarding the mechanical application of traditional micro- and macroeconomic decision models to problems of particular places. Assumptions of featureless plains, homogeneous products and services, and constant costs may yield results that are more misleading than helpful.

Not all important environmental and resource problems are captured by inside the Washington, DC Beltway policy debates.



exclusion of people.