Research Technical Completion Report Project C-7511

A POST AUDIT EVALUATION OF METHODOLOGY FOR WILD AND SCENIC RIVER DEVELOPMENT AND MANAGEMENT THE CLEARWATER RIVER, IDAHO: A CASE STUDY

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Idaho Water Resources Research Institute University of Idaho Moscow, Idaho

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ABSTRACT

The passage of the Wild and Scenic Rivers Act, P.L. 90-542, in 1968 created a national wild and scenic rivers systems which preserved selected free-flowing rivers in their relatively natural state. The Middle Fork of the Clearwater River from Kooskia, Idaho, upstream including the Lochsa and Selway rivers was one of the eight instant rivers in the system. A management plan was formulated for the Middle Fork System which included the purchase of scenic easements from the private landowners located within the boundaries of the wild and scenic corridor to regulate land uses.

Questions arose as to the economic effects the restrictions, imposed by the act and the scenic easement program, would have on the area's resources including land values. To answer these questions, data was collected on the area's major resources which include agriculture, timber, mining, and the scenic easement program.

Regression analysis was used to analyze the scenic easement program while descriptive analysis was used to assess the impacts on the area's other resources.

The results of the analysis showed that the classification of the Middle Fork System has not adversely affected any of the area's major resources studied, except the value of land. The restrictions imposed on the agricultural, timber, mining resources have not and will not curtail their productive services or limit their growth.

Private landowners have felt that the appraisal techniques use to value the scenic easements have been inconsistent. The results of the regression models indicated that the process used to appraise these

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easements have been consistent and found the number of acres in the easement and the percentage of the easement area developable to be significant.

The effect of the restrictions on land values was determined by comparing the appraised value of the property unencumbered with an easement and the actual sale price of the same property encumbered with an easement. Next, the encumbered sales were compared to a recently purchased tract of land outside the corridor with similar characteristics as the encumbered sales. This analysis showed that land values have decreased in the corridor although some buyers have paid more for restricted tracts of land to have the open space characteristics offered by the scenic easement.

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Thanks go to the numerous Forest Service personnel of the Clearwater and Nez Perce National Forests for their time and assistance in compiling data. Special thanks go to Gerald Curnes and Dick Bruce of the Nez Perce National Forest, Grangeville, Idaho, for their help with the scenic easement data, and Richard Deden, Group Leader, Timber Management, Forest Service Regional Office, Missoula, Montana, for his insights with the timber resources in the area.

INTRODUCTION

The National Wild and Scenic Rivers Act, Public Law 90-542, enacted in October 1968 by the 90th Congress, established a policy whereby selected free-flowing rivers which possess exceptional scenic, recreational, cultural, and/or fisheries and wildlife environments be preserved in their unique state for present and future generations (U.S. Congress, 1968).

The components which comprise the original National Wild and Scenic Rivers System were designated by Congress and included eight "instant"¹ rivers or sections of rivers throughout the United States. In addition to the instant rivers, 27 study rivers were chosen for further evaluation to determine if they contained the necessary characteristics for inclusion into the Wild and Scenic Rivers Act. The Middle Fork of the Clearwater River from Kooskia, Idaho, upstream including the Lochsa and Selway rivers (referred to as the Middle Fork System in this paper) is one of the eight instant rivers designated by Congress.

The Lochsa and Selway rivers both originate on the western slopes of the Bitterroot Mountains on the Idaho-Montana border and flow westward to their confluence to form the Middle Fork of the Clearwater River at Lowell, Idaho (see Figure 1).

The canyons through which the Selway and Lochsa rivers flow are steepwalled and narrow, causing the river beds to be boulder strewn and steep, with fast-flowing currents and exciting rapids. The Middle Fork's canyon

¹"Instant river" - the river was protected by law with the passage of the Act while study rivers only have the potential of being under the Act.



is gentler in slope and wider with rolling benches suitable for limited agricultural use and possible residential and commercial development adjacent to the river. The riverbed is wider, the rapids more subdued, and inviting sandbars more numerous.

A classification system was outlined by Public Law 90-542 to define the different levels of development. These classifications are:

- Wild river area those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- Scenic rivers area those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by road.
- 3. Recreational rivers area those rivers or sections of rivers that are readily accessible by road or railroad, they may have some development along their shorelines, and that may have undergone some improvement or diversion in the past.

The Middle Fork of the Clearwater and the Lochsa rivers are classified as recreational rivers since they are both readily accessible by Highway 12, which parallels these rivers from near the Lochsa's headwaters to the Middle Fork's confluence with the South Fork of the Clearwater at Kooskia, Idaho. The Selway River is classified both a recreational and wild river. The lower Selway River and a section near Magruder Ranger Station is classed recreational while the rest is classified as wild (see Figure 2).

According to the Wild and Scenic Rivers Act (PL 90-542) the boundaries of the wild and scenic river shall encompass only those lands directly related to the protection of the scenic and environmental aspects of the program, and include not more than an average of 320 acres per mile on both sides of the river (U.S. Department of Agriculture, 1969). Within the

CLASSIFICATION





classified boundaries of the Middle Fork of the Clearwater there are 5,880 acres of private land, the majority of which lies along the Middle Fork of the Clearwater and Lower Selway rivers. The management of these lands is the responsibility of the Secretary of Agriculture; and under Sec. 3 (b) of PL 90-542 a management plan was to be formulated which considered the developments necessary to administer the program given the area's resources and land ownership patterns.

The recreational opportunities offered by this area are numerous and varied. Because of its proximity to a major east-west route across Idaho, the Middle Fork provides a wide variety of recreational pursuits. As a result, substantial revenue is brought into the area's economy by recreationists and tourists who purchase gas, food, lodging, and recreational supplies to be used in this area.

The timber industry provides many of the jobs and most of the income for people working in the local area. National Forest lands account for 89 percent of the total acreage within the classified corridor while private holdings account for 10 percent of the acreage (U.S. Department of Agriculture, 1973). Private lands along the Middle Fork contain mostly second growth timber which has been allowed to regenerate naturally resulting in sparse stands. Harvestable timber located on public lands within the river corridor has never been a significant source of timber since this area has been maintained in special aesthetic management zones by the Forest Service.

The timber stands located on both public and private lands within the corridor are not considered a primary resource in a commercial sense. All timber harvested within the wild river corridor will have to meet the

guidelines set forth by the Wild and Scenic Rivers Act, although some management will be required to maintain a healthy cover free from large stands of diseased and dying trees which may create fire or watershed problems.

Agriculture within the wild and scenic corridor is limited to lands located adjacent to the Middle Fork of the Clearwater. Even along this stretch of river the small acreage devoted to agricultural production consists mainly of forage crops. This forage is used to feed the small number of cattle that are raised within the corridor. The amount of grazing land within the river corridor on both private and public land is also limited. Grazing allotments on federal lands have been phased out although some grazing on State of Idaho lands along the Middle Fork does exist; however, this is not an important factor in the area's economy.

The lack of mineralization along most of the classified sections of the river is due to the fact that the Idaho Batholith underlies the majority of the area. Due to the limited mineral supply, income and employment from mining accounts for an insignificant part of the area's economy.

Mining on private land since the passage of PL 90-542 is subject to the provisions of the river plan. Claims existing prior to the Wild and Scenic Rivers Act, while not subject to the restrictions of the river plan, will be evaluated and an agreement reached to reduce any detrimental impacts to the river environment.

Public lands classified as a wild river area have been withdrawn from entry, while lands classified scenic or recreational do allow mineral leasing subject to regulations specified by the Secretary of Agriculture and the river plan (U.S. Department of Agriculture, 1973). In 1970 the Idaho

Legislature passed an amendment to the Idaho Dredge Mining Law, 47-1323, which forbids dredging of minerals from the Middle Fork Wild and Scenic River System (U.S. Department of Agriculture, 1973). An area of concern though involves mining activity along the tributary streams of the Middle Fork System. Operations of this type could contribute to sediment and pollution in the main river. The Idaho Dredge Law appears to offer protection of water quality from operations of this type.

A proposed open pit mining operation of kyanite located on Woodrat Mountain might have posed problems for water quality from mine tailings in watersheds draining into the classified river areas. However, Ethel Corporation has withdrawn their mining application after determining that the project was not economically feasible.

The demand for private recreational land suitable for development within the Middle Fork System has been increasing in the last few years. To regulate the degree and type of development on private lands located within the river boundaries the Act empowers the administering agency to purchase rights to the land either in fee title or through scenic easements. If 50 percent or more of the land within the boundaries of a wild and scenic river is publicly owned, PL 90-542 prohibits the acquisition of fee title rights through condemnation. This does not preclude the acquisition of scenic easements by condemnation where access is necessary (U.S. Congress, 1968).

Fee title acquisitions transfer all the rights and interests the landowner has in the land to the United States government. Realizing that not all landowners are willing to sell their land fee title to the United States, scenic easements have been and are being purchased from private landowners within the classified area.

A scenic easement is a legal instrument which conveys to the United States certain rights to use or control private property for a public purpose. The rights conveyed by scenic easements enable the administering agency to preserve the environmental quality, enhance the scenic qualities, and control land use to meet the management objectives of the river plan. Scenic easements do not limit past, present, or future use which is compatible with the intent of the Wild and Scenic Rivers Act.

Scenic easements have been compared to city zoning ordinances with one notable exception. Zoning ordinances are generally applied by proceeding without compensation to the owner. Use restrictions under scenic easements, on the other hand, have an effect on the value of the property and the landowner is compensated for this loss or damage. The difference in present restricted use and potential unrestricted use is estimated by a qualified appraiser and the compensation is based on this valuation.

Statement of the Problem and Objectives

The classification of the Middle Fork of the Clearwater River as a component of the National Wild and Scenic Rivers System and the subsequent river management plan drawn up by the Forest Service have raised questions regarding the economic impacts of this classification on the area's resources. The wild and scenic designation has caused a number of restrictions concerning land use and land practices which affect the present and future use of the area's resources. The assessment of the economic impacts caused by the river plan is the purpose of this study. To effectively evaluate these impacts, the following objectives were formulated:

- 1. Compile an inventory of public and private lands within the wild and scenic corridor.
- 2. Analyze the processes used to establish the value of scenic easements and evaluate the impacts of the scenic easement program on land values.
- Quantify and evaluate the economic impacts of this classification on agriculture, mining, and timber including tax payments.

The objectives were designed to answer questions raised by private landowners and public land managers. Specifically (1) What effects have the scenic easements had on land values? Has the compensation been equitable and consistent? (2) What economic effects has the classification had on agriculture, timber, and mining? Has there been a decrease in productive activities due to the restrictions? The answers to these questions regarding resource use will provide both landowners and river managers a means to more effectively administer the river environment and its resources.

Theoretical Framework

The economic benefits and costs associated with classifying the Middle Fork System can be assessed using the economic theory of value. This theory is the essence of economics and constitutes the foundation for deciding on the value of a good or service (Young, 1978). According to Ferguson and Gould (1975) the theory explains how demand, supply, and a market price of a good are determined.

The classification of the Middle Fork System as a wild and scenic river may have had some impact on the value of the area's resources. A market value for resources like agriculture, timber, and mining is easily established using the theory of demand and supply due to their homogeneous nature. Land does not lend itself well to being valuated using this method

due to the unique characteristics exhibited by each parcel which precludes its being considered a homogeneous resource and the relatively inelastic supply of land which results in a demand determined market price. These factors make the valuation of land and scenic easements difficult and subjective.

Literature Review

Although there have been no studies of a post-audit nature on a wild and scenic river per se, studies do exist on the effects of scenic easements on property values. The following literature review will present an overview of the different approaches to the effects of the scenic easement acquisition program on land values.

The economic impact on land values caused by the acquisition of scenic easements has been estimated using both appraisal techniques and regression analysis. A study of scenic easement purchased on the Blue Ridge Parkway in North Carolina estimated with and without land values using appraisal techniques, while a study done on the St. Joe River in Idaho estimated the value of land with and without easements restrictions based on a regression model (Williams and Davis, 1968). Both studies indicated a loss in land value due to the scenic easement restrictions. The use of regression analysis as a tool for estimating land values is limited due to the lack of available data, although it provides an objective measurement of the factors which influence value.

A paper by Christophersen and Butcher (undated) examined the possible economic effects of scenic easement restrictions on the major resources in the St. Joe River area. After compiling data about the agriculture, timber, and mining industries along the St. Joe River, including income,

yields, and potential reserves, the researchers examined the effects of wild and scenic restrictions on the present and future use of these resources.

The type of restrictions imposed on the St. Joe for that study were based on recommendations by the Forest Service and restrictions adopted on other rivers in the system. After analyzing these industries in a restricted state, it was concluded that the resources or the productive services they provide would not be significantly affected by the various restrictions imposed by the Wild and Scenic Rivers Act.

RESEARCH METHODOLOGY

The methodology developed for this research included statistical techniques which enabled the researcher to analyze the scenic easement program, and descriptive statistical techniques allowed for analysis of impacts on the value of the agricultural, timber, and mining resources.

Specifically:

- 1. Ordinary least squares regression techniques were used to evaluate the scenic easement program. The technique permitted the determination of significant variables which influence easement payments. This allowed for an evaluation of the consistency of the appraisal process and the equity of the easement payments.
- 2. The economic impacts on the other resources, agriculture, timber, and mining were estimated using descriptive analysis. By compiling data on these resources over time, it was possible to estimate the change in value caused by the Wild and Scenic Rivers Act.

The collection of data necessary to achieve the research objectives was extensive. Both structured and unstructured interviews were held with Forest Service personnel, county officials, and local industry owners and managers. Structured questionnaires were also administered to private landowners within the river corridor. The following sections describe the collection of data.

Data Collection

Scenic Easement Data

The scenic easement program was started along the Middle Fork of the Clearwater River in 1970. From November of 1970 through May of 1979, eighty-seven (87) scenic easements were purchased from private landowners within the wild and scenic corridor. The information necessary to evaluate

the consistency and value estimates of the easements was collected from appraisal reviews of the properties compiled by the Forest Service in Grangeville, Idaho.

The Summaries of Estimated Just Compensation (Appendix I) contain all the relevant data concerning the properties and demonstrate the methodology used in calculating the easement values.

Agriculture, Timber, and Mining Data

Data dealing with the agricultural production along the Middle Fork of the Clearwater is difficult to obtain. Although the benches located along the Middle Fork are used to raise some forage crops, there is no major agricultural production. The Idaho Agricultural Statistics and the United States Agricultural Census do not list production by areas within counties. Consequently, it was difficult to determine the effect the wild and scenic restrictions have had on the value of agricultural production within the river corridor.

A review of the river plan for the Middle Fork System and informal discussions with local residents led to the conclusion that there is no significant agricultural production within the Middle Fork's wild and scenic corridor.

The collection of timber data to assess the impacts of the Wild and Scenic Rivers Act on the value of this resource involved structured interviews not only with the Forest Service but with private mills around the area. Mill operators in Kamiah, Kooskia, Grangeville, and Syringa, Idaho and Hamilton, Montana, were contacted.

Forest Service personnel were also contacted using personal semistructured interviews. The Nezperce and Clearwater forest supervisors'

offices supplied timber harvest data from 1967-1977 on each ranger district affected by the Act. This time series data provided a basis for evaluating the impacts on timber production in the area. Finally, unstructured interviews were held with district rangers, forest supervisors, and regional supervisors to record their feeling and insights on the impacts of Public Law 90-543 on the timber industry.

The information on in lieu of tax payments made to Idaho County was collected through interviews with the assessor for Idaho County and the Forest Service's regional accounting office in Missoula, Montana. The data consisted of payments made from 1970 through 1977 based on the 25 percent criterion².

Descriptive analysis was applied to the Middle Fork System's agricultural, timber, and mining resources to determine the direction these resources have taken since the inception of PL 90-542. Because of the nonspecific data for these resources, no statistical analysis could be employed to assess the impacts of the wild and scenic designation on them. Based on interviews held with Forest Service personnel and affected mill operators and on data collected from the above mentioned sources and questionnaires, conclusions were arrived at on the effect of this program on the Middle Fork's agriculture, timber, and mining resources.

Regression Analysis: An Application to The Scenic Easement Program

In this study ordinary least squares regression techniques were used to identify important variables which determine scenic easement payments

²The Forest Service is required by law to return 25 percent of the revenue collected from products of national forest lands in a county back to that county.

and based on these variables, determine the consistency and equity of the payments made.

The general function form of a regression model is:

 $Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n + \varepsilon$

where

Y = dependent variable

a = intercept term

 b_n = regression coefficients

 X_n = independent variables

 ε = error term

The determination of significant variables which influenced scenic easement payments was based on regression techniques. Factors which may have influenced the price were decided on prior to the analysis. These factors then became the independent variables used in the model. The level of significance at which the variables were judged to be important was also decided on a priori, and they were compared using a student's t value. The resultant model was then used to decide if the payments have been equitable.

Appraisal Techniques: An Application to Valuing Scenic Easements

Real estate value has traditionally been estimated based on three appraisal techniques. These methods are the income capitalization approach, the market data or sales comparison approach, and the cost or inventory approach. Typically all three methods are used in valuing a property. There are instances, though, depending on the nature of the property, the reason for the appraisal, and which method provides the best supportive information,

where one approach may influence the final determination of value more than the others (Suter, 1974).

The income capitalization approach to value assumes that the main reason for buying the property is its potential income stream. Considering this fact, only those properties generating income are valued using this approach. The market data or sales comparison approach uses other properties that have recently sold on the market and exhibit the same general characteristics as the subject property. Determining the value of the subject property based on comparisons with the comparables' selling price after adjusting for dissimilarities is the most realistic approach to value. The inventory or cost approach requires that the appraiser classify the various types of lands found on the subject property, valuing each based on comparable sales in the area, and inventory all the buildings and improvements, valuing them based on replacement cost and their contributory value to the property.

Scenic easement values were determined by qualified appraisers contracted by the Forest Service. To arrive at a fair estimate of the effect of the scenic easement restrictions, only the market data and cost approach were used in a before and after technique, since the income approach is used only when valuing a commercial operation.

The before and after technique allowed the appraiser to value the property in its highest and best use without the easement restrictions and then reappraise the property in its highest and best use, assuming the easement restrictions were in force. Highest and best use is typically that land use which yields the highest net benefit to the landowner. Building or improvement values were calculated on local replacement cost

less the depreciation due to time. The value of the improvements is not affected by the scenic easement restrictions since the contributory value of the improvements remains the same in the before and after estimates. The estimated land values before the restrictions are based on sales of similar properties which, in most cases, lay outside the wild and scenic boundaries but in the Clearwater River corridor. This allowed for appraised values to be determined which were not influenced by the Wild and Scenic Rivers Act. The comparable sales were all adjusted for time, size, location, slope, frontage, and other features to give a fair estimate of value per acre for the property being appraised. The after value is arrived at in similar fashion except sales encumbered with similar restrictions are used as comparables. The loss in value attributable to the scenic easement is the difference in the before and after figures. After the Forest Service has checked the appraisal process and found it acceptable, the landowner is then offered the difference as just compensation. Just compensation is the payment for private property taken for a public use (Suter, 1974). The amount the purchasing agency pays and the amount the owner receives will equal the difference between the fair market value³ before the taking and after the taking.

Indexed Scenic Easement Values

Land values change over time reflecting changes in demand and supply of land and changes in the value of money. To demonstrate any consistency within the appraisal process and to determine easement values from the model,

³Fair market value is "the highest price, estimated in terms of money, which a property will bring if exposed for sale in the open market..."

a basis for comparison needed to be established. The indexing of easement values established this base. The indexing or adjustment in value to a common point in time insures that all land prices are compared under the same supply and demand conditions and with the same value for the dollar.

The formula generally used to determine a price index is the Laspeyres formula because of its computational simplicity and ease of use. The formula is:

$$P = \frac{\Sigma pl qo}{\Sigma po qo}$$

where

P = price index q = quantity p = price of product Σ = Sum of 1 = given year which is being compared with the base o = base period from which changes are being measured

To give a product its proper weight commensurate with its importance, the price should be multiplied by the quantity sold. There is some debate as to whether base year quantities or the given year's quantity be used to weight the price. The Laspeyres formula uses base year quantities (Shephard, 1950).

A base year of 1970 was selected a priori since the program was inititated at that time. The indices issued by the Farm Real Estate Market Development reports were used to establish the comparable 1970 land values and easement payments (U.S. Department of Agriculture, 1978). Because the report's indices are calculated where 1967 equals 100, the following ratio of the indices will establish 1970 as a base for comparison.

The derived ratio is:

where (1) converts the 1975 price to 1967 prices and then (2) indexes the 1967 price to 1970 values. To simplify the calculations the formula was reduced to the following indices ratio (x) easement payments:

$$\frac{PI(70)_{67}}{PI(75)_{67}}$$
 (x) easement payment

PRESENTATION OF DATA

This section will present the data collected on agriculture, scenic easements, and the timber industry including in lieu of tax payments for the Middle Fork System. The results were used to analyze the effects of the classification on the area's economy based on the objectives set forth in the Introduction. In addition, the results will inform the interested river managers and planners of the characteristics and attitudes expressed by the people living in and using the Middle Fork River System.

Scenic Easement Data

The scenic easement program initiated along the Middle Fork System was designed to preserve the quality of the river environment free from adverse land practices on private properties. An inventory of the private and public lands located within the boundaries of the wild and scenic Middle Fork System revealed that private lands account for 10.6 percent of the total acreage while state and federal lands comprise the remaining 89.4 percent. Table 1 summarizes the breakdown in actual acreages.

Table 1.	Inventory of public	and private	ownerships	located	along
	Middle Fork System,	1977			

Ownership	Acres	% of total
National Forest	49,869	89.0
Other federal	111	0.2
State	100	0.2
Private	<u>5,880</u> 55,960	$\frac{10.6}{100.0}$

Source: U.S. Department of Agriculture, Forest Service, Management Guides: Middle Fork of the Clearwater, 1973.

To accomplish the goal of maintaining an aesthetically pleasing environment on the private lands, the Forest Service authorized the acquisition of four types of easements based on the land use in effect on a particular parcel of land. The most restrictive easement classification accounting for 4.5 percent of the total easements purchased is the agricultural-timber easement which, while allowing the landowner a homesite, prohibits recreational subdivision completely. Commercial easements are acquired only where prior commercial uses exist and account for only 1 percent of the total easements excluding Syringa and Lowell. Residential easements are the most common type of easement purchased and account for 91 percent of the total. These easements allow for recreational homesite development, subject to limitations specified by the easement. The final easement category, no buildings, prohibits buildings of any type due to the locational characteristics of the property. They account for 2.3 percent of the easements purchased. A breakdown of these easements is presented in Table 2.

Classification	Number	Acreage
Agricultural-timber	4	257
Commercial	80	2,422
Residential	1	.4
No buildings	_2	13.5
Total	87	2,693

Table 2. Scenic easements by classification purchased by the Forest Service from 1970-1978

Source: U.S. Forest Service, Grangeville, Idaho, Acquisition Program, Wild and Scenic Rivers--Middle Fork of the Clearwater. The number of acres subject to easement restrictions varied from 0.1 to 250 with an average of 33 acres per parcel. The amount of land suitable for homesite development on each parcel of land was determined and varied from 0 to 100 percent developable. The number of feet of highway and river frontage by parcel was determined, and varied from 0 to 10,000 feet.

The types of scenic easement purchased by the Forest Service were also included in the data set but were difficult to assign a value. Dummy values were specified which attempted to show the effects of the different easement types.

A private landowner's questionnaire, designed and administered by Van Leuven (1977) in the Middle Fork System, provided basic information concerning attitudes and opinions of private landowners regarding the classification of the Middle Fork. At the time the questionnaire was administered, 43 easements had been purchased. Of the landowners who had sold easements, 84 percent felt that it would have no effect on the operation of their land, while 16 percent felt it would. The impact of the easement restrictions on future use showed that 60 percent of the landowners believed there would be none, while 2 percent felt that the restrictions would affect future use in some way, and 38 percent of the landowners were not sure. The reaction to the Clearwater's wild and scenic classification indicated 66 percent of the landowners favored it, with the remaining 34 percent feeling the program was a mistake.

Timber Data Including in Lieu of Tax Payments Data

The wild and scenic Middle Fork System lies completely inside the boundaries of Idaho County, which contains a large acreage of harvestable timber. The impacts of wild and scenic restrictions on this resources are undocumented at this time. In order to evaluate the impacts, a presentation of the data and a study of the wild and scenic restrictions and other influential factors is essential.

Data obtained from the Forest Service show the actual volumes cut and sold, in millions of board feet, from the three affected ranger districts. As Table 3 illustrates, there does not appear to be any trend in the amount of timber harvested from the affected ranger districts in Idaho County.

Timber harvest figures compiled by the Western Wood Products Association's 1977 Statistical Yearbook are shown in Table 4. These data are gathered from all producing mills in the county. Once again, because of the aggregation problem, no figures are computed for only the Middle Fork System.

District	Year	Cut	Sold
Selway	1968 1969 1970 1971 1972 1973 1974 1975 1976 1977	(MMBF) 15.00 33.85 40.28 29.32 28.75 9.05 7.15 3.77 10.54 <u>3.55</u> 18.13	$50.38 \\ 14.85 \\ 3.36 \\ 4.49 \\ 6.01 \\ 25.94 \\ 4.15 \\ 2.99 \\ 19.29 \\ .51 \\ 13.20$
Lochsa	1968 1969 1970 1971 1972 1973 1974 1975 1976 1977	$ \begin{array}{r} 14.16\\ 19.49\\ 25.61\\ 18.21\\ 5.58\\ 15.08\\ 8.70\\ 8.90\\ 20.50\\ 30.34\\ 16.65 \end{array} $	$14.42 \\ 3.15 \\ 16.35 \\ 17.33 \\ 13.46 \\ 18.77 \\ 25.89 \\ 1.10 \\ 17.40 \\ 15.32 \\ 14.32$
Powell	1968 1969 1970 1971 1972 1973 1974 1975 1976 1977	$\begin{array}{c} 8.21 \\ 13.11 \\ 14.37 \\ 13.63 \\ 15.06 \\ 15.74 \\ 9.75 \\ 15.10 \\ 14.50 \\ 17.21 \\ 13.67 \end{array}$	18.9122.2312.8113.47.6322.2116.279.0819.2034.4216.92

Table 3.	Volume	of timber	cut and	sold f	rom th	e three	affected
	ranger	districts	in the I	Middle	Fork S	ystem,	1968-1977

Source: Unpublished Forest Service records supplied by supervisor's office, Orofino, Idaho, 1978.

Year	MMBF	<u> </u>
1969	180	
1970	174	
1971	195	
1972	213	
1973	214	
1974	166	
1975	185	
1976	247	
1977	<u>251</u> 203	

Table 4. Timber production in Idaho County in million board feet, 1969-1977

Source: Western Wood Products Association, 1977 Statistical Yearbook.

Harvestable timber on private property within the Middle Fork System is limited to two or three parcels of land which are restricted by scenic easements which permit only selective cutting. Commercial timber of public lands lying within the corridor is classified by the Forest Service in unregulated and special management categories to maintain the aesthetics of the river environment (see Figure 3). The affected areas have been under special management for years because of soil stability problems, extreme slopes, and preservation of scenic qualities associated with U.S. Highway 12.



Figure 3. Unregulated and special management zones

A major concern of the timber industry regarded access to productive lands lying outside the corridor but with potential access only possible through the impacted area. Those sections of the river classified as recreational pose no problems regarding either existing or potential access for timber cutting. On the other hand, sections classified as a wild river area prohibit timber harvesting and access through them is not possible.

Wild river restrictions on the Selway River, though, are superseded by the more restrictive guidelines imposed by the Selway-Bitterroot Wilderness, which prohibits timber harvest within the wilderness boundaries.

Idaho County receives payments from the federal government to compensate them for their loss in tax revenues from federal lands within their boundaries. Twenty-five percent of the revenue the Forest Service received from timber sold from national forest lands located in Idaho County was returned to Idaho County through 25 percent fund payments. In 1976, though, Congress passed the National Forest Management Act, Public Law 94-588. This act requires that the Forest Service return 25 percent of the revenue from not only timber sales, but also grazing, purchaser road credits, and other uses to the county of origin. In addition to this law, Congress enacted Public Law 94-565, Payment in Lieu of Taxes Act, which requires the federal government to make payments to units of local government in which entitlement lands are located (U.S. Congress, 1968) Appendix II shows the computational formula for calculating this payment and the definition of entitlement lands. Table 5 presents the payments made to Idaho County through the 25 percent fund and the payment in lieu of taxes act from 1970-1978.

Fical year	Payment in	25 pei	rcent fund
FISCAL year	lieu of taxes		Nezperce
1970		326,268	342,120
1971		249,476	185,305
1972		342,009	410,212
1973		476,702	764,339
1974		463,563	546,404
1975		253,683	327,655
1976		104,424	543,171
1977	416,000	1,262,707	1,364,024
1978	416,000 average payment	<u> </u>	<u>819,506</u> 589,192

Table	5.	Payments made to Idaho County by National Forest through
		the 25 percent fund and Public Law 94-565, 1970-1978

Source: Unpublished Forest Service records provided by the regional Forest Service office, Missoula, Montana, 1978.

Payments made to Idaho County through the 25 percent fund went from \$668,388 in 1970 to \$1,680,759 in 1978, a 151 percent increase.

The timber and related tax payment data will be analyzed and interpreted to determine the economic impacts of the classification on this resource.

ANALYSIS

Analysis of the Scenic Easement Payments

The acquisition of scenic easements from the private landowners within the Middle Fork System has resulted in numerous statements alleging inconsistencies in the appraisal techniques and inequities in the easement payments. Even though 66% of the landowners favor the wild and scenic program, they resent the controls imposed by the easements.

The formulation of the regression model which estimated scenic easement payments and was used to analyze the appraisal techniques used for valuing the easements was based in part on past studies. Although a number of studies have been done using regression analysis to estimate land values, many of their variables are not applicable to a scenic easement model. The final accuracy and quality of a regression model depends on (1) its compliance with the Ordinary Least Squares assumptions, (2) its statistical significance, and (3) whether or not the variables and their signs are theoretically probable.

The variables examined in this study were taken from the Summaries of Just Compensation of the scenic easement appraisals compiled by the U.S. Forest Service. The dependent variable (Y) in the model is the value of the scenic easement payment per acre based on 1970 dollars. This value was hypothesized to be a function of the various independent variables shown in Table 6.

Variable	Description
×1	Number of easement acres
x ₂	Type of easement
x ₃	Distance to Kooskia
× ₄	Percent of easement acreage developable
× ₅	River frontage in feet
Х _б	Highway frontage in feet

Table 6. Variables used to develop a scenic easement model for the Middle Fork System, 1970-1978

The Least Squares Regression Program (LSR) developed at the University of Idaho by Hamilton et al. (1977) was used to construct the regression models for the easement program. Based on the variables in Table 6, numerous combinations of these variables were tried and the best equation determined.

The first equations were estimated in linear form; Table 7 shows the best linear model based on the data. The regression coefficient for X_1 , number of easement acres, has a negative sign. This inverse relationship tells us that as the number of acres increases the price per acre will decrease, which is consistent with actual market phenomena. The positive sign on the X_4 , amount of land developable, is logical too. As the fraction of developable land increases the price paid per acre for the land will also increase. Variables X_2 , X_3 , X_5 , X_6 were not included due to their highly insignificant statistics.

ŷ	=	157.05	-	1.33X ₁	÷	904.73*X ₄
				(1.18)		(6.08) ^a
R ²	=	.42				
F	=	29.21				
N	=	83				

Table 7. Linear regression model developed to predict easement payments in the Middle Fork System, 1978

 a The number in parentheses are t statistics and the * and ** show whether regression coefficients are significantly different from zero at the 5% and 1% level of significance, respectively.

This model was determined to be statistically significant. Although only one of the regression coefficients was significant based on t tests, the other test of significance was acceptable at the .05 level.

The R² value for the linear model showing the relative fit of the model to the data was .42. The F statistic, which measures the ability of the independent variables to explain the variation in the dependent variable, was significant at the .01 level. A more rigid criterion of assessing a regression model's significance is that the calculated F be at least 4 times greater than the theoretical F value used for comparison, which the model also met.

Multicollinearity, a linear relationship among two expanatory variables which causes their regression coefficients to be biased, was not found to be a problem in this model. The simple correlation coefficient between X_1 and X_4 equaled |-.475|. The linear model was also not affected by hetroscedasticity as shown by the low Spearman rank correlation values

in Table 8. Hetroscedasticity, the breakdown of one or more of the assumptions concerning the error term in the regression equation, cases large variances of the estimates and makes tests of significance inapplicable (Koutsoyiannia, 1973).

Variable	Spearman value	
x ₁	2361	
X ₄	.4516	

Table 8. Spearman rank correlation values for the linear easement equation indicating hetroscedasticity

Initial plots of the data revealed three observations to be outliers. After reviewing the Summaries of Just Compensation and consulting with R.K. Steinhorst, assistant agricultural statistician at the University of Idaho, all three were eliminated from the data set. Case one involved the purchase of a small commercial operation with a residential easement. Case two involved a residential easement requiring removal of existing structures with accompanying compensation, a special situation. The third case, the purchase of a commercial easement, also compensated the owner for lost building value which is not consistent with the other properties.

A logarithmic transformation of the data was done to determine if a better fit could be obtained. Linear-log, log-linear, and log-log transformations were tried. Depending on which logarithmic model was used (1) only the explanatory variables were transformed into logarithms, (2) only

the dependent variable was transformed, or (3) both were transformed. The log-log model resulted in the best nonlinear model as shown in Table 9.

· · · · · · · · · · · · · · · · · · ·			······································
	$Ln \hat{y} = 6.880 =$	0.9095 Ln X ₁ *	+ .6515** LnX ₄
		(-2.15)	(9.06)
	$R^2 = .62$		
	F = 66.72		
	N = 83		

Table 9. Logarithmic transformed regression model used to estimate scenic easements in the Middle Fork System, 1978

A comparison of the two models' independent variables and the important test statistics was revealing. The log-log model's regression coefficients were both significant at the .05 level and the signs were still theoretically plausible. The log model's F statistic was considerably more significant than the linear model's, but any comparison of the R^2 values was meaningless until the log model's had been adjusted.

Since the R^2 value in the log model is based on a transformed y variable, the sum of squares used to calculate this statistic needs to be refigured taking antilogs. The following method was used to recalculate the log model's R^2 :

- 1. First calculate the simple correlation between the observed y and the antilog of the predicted $\hat{y}.$
- 2. Square the resultant simple correlation coefficient to calculate the adjusted R^2 .

In this model the simple correlation coefficient between the observed y and the corrected predicted y was .6290. After squaring this value, the adjusted R^2 equaled .40, compared to .42 for the linear model. The log-log model, though, provides greater significance in both the regression coefficients and F value with only a slight reduction in the goodness of fit (R^2).

The impact of the wild and scenic classification on land values within the corridor is extremely difficult to measure. The determination of the before and after land values in the Middle Fork System was based on the market data and cost approach. The market data approach supplies the most accurate estimate of value since it is based on transactions that have accurred recently in the market-place.

Since the scenic easement program was started, a number of tracts of land subject to scenic easement restrictions have resold on the market. An analysis of these transactions will help to indicate the effect the classification has had on land values. Table 10 presents the five sales that will be analyzed. This table shows the actual appraised value of the property and improvements before the easement restrictions were imposed and the actual selling price with the easement in effect. Before any meaningful comparisons could be made concerning the values, an adjustment to reflect the change in the value due to time was needed. The adjustment for time was made using the real estate indices used previously and a 15% annual increase in land value in this area used by the Forest Service. The adjusted per acre value of these tracts is shown in Table These values do not include the value of the improvements. 11. Improvement values were calculated using the cost method and listed separately so their value was subtracted from the total sale price.

Sale no.		Without eas	ement	With easement			
	Year	Acreage	Value (per acre)	Year	Acreage	Value (per acre)	
1	1970	160	\$ 56	1973	160	\$ 56	
2	1972	3.33	12,612	1974	3.33	10,810	
3	1975	5.42	4,483	1977	5.42	4,243	
4	1975	6.44	6,211	1978	6.44	10,093	
5	1977	1.50	16,667	1978	1.50	25,000	

Table 10. Unadjusted appraised and sale values for land located in Middle Fork System

Table 11. Time adjusted per acre land values for appraised values and actual sales values using real estate indices and a 15% per year adjustment for land in the Middle Fork System

Sale no.	Year		Time ad appraised (per ad	justed d value ^a cre)	Time adjusted sell value ^a (per acre)	
	Appraised	Sold	Index	15%/yr	Index	15%/yr
1	1970	1973	\$ 141	172	\$ 113	113
2	1972	1974	9,134	9,252	3,334	3,700
3	1975	1977	3,029	5,050	3,541	3,800
4	1975	1978	4,327	6,844	4,500	4,500
5	1977	1978	5,331	5,750	13,333	13,300

^a1978 prices.

The comparison of the adjusted land values in Table 11 indicated that the value of land encumbered with scenic easements was reduced by 25-60% depending on the tract in question. A notable exception was sale number 5, in which the adjusted sale price was 131% greater than its adjusted appraised value.

The comparison of value between properties sold outside the corridor not subject to scenic easements and those sold inside the classified area subject to scenic easements indicated the trend land values have taken within the corridor due to the imposed restrictions. One problem with this type of analysis in the Clearwater area is the lack of good comparable sales. Normally, three or more comparables are used to determine value. The comparable sale which is similar to sales 2-4 in Table 10 in size, slope, and access sold for \$4,500 per acre in 1977. Adjustments were made in value for those factors which may have biased a comparison. The adjustment for time was made using both the aforementioned real estate indices and a 15% annual increase in land values for this area used by the Forest Service, resulting in adjusted values of \$4,879 per acre and \$5,175 per acre, respectively.

The results of this section will be interpreted in the following chapter. The consistency and equity of the scenic easement program will be evaluated based on the results of the regression models and the impact of the program on land values will be assessed.

Analysis of the Timber, Agriculture, and Mining Data

The evaluation of the economic impacts of the wild and scenic designation on these resources was based on descriptive analysis rather than a statistical technique.

Timber is one of Idaho County's most abundant resources; consequently any restrictions or reductions in supply will have an impact on the economy of the area. According to the management guides for the Middle Fork System timber within the corridor will not be considered a primary resource value. Generally, private lands do not have commercially marketable stands of timber due to the method of regrowth. Timber on public lands within the corridor is an integral part of the river's beauty and has been in special management units for years. Public Law 90-542 does not prohibit timber harvesting on recreational sections. The harvesting methods used though must comply with management objectives and maintain the aesthetics of the environment. Access to potential timber resources lying outside the recreational corridor would not be restricted, so no loss in timber production could be attributed to this.

The potential yield of Idaho County's forests have been reduced in part by the Wild and Scenic Rivers Act but largely from the reduction in commercial forest land base to wilderness designations like RARE II and the Selway Bitterroot Wilderness. The anticipated lost timber volume due to these designations cannot be made up; but according to an interview with Richard Deden, Group Leader for Timber Management, U.S. Forest Service, the reduction in potential yield caused by the various designations will not decrease programmed harvest (annual sales program). Based on the

last intensive sampling of the timber resources, the latest estimates of total timber volume for Idaho County are higher and more accurate than their old estimates. Using this sample data, initial statistical results from Model II and RAM runs on several forests indicate that program harvest will stay at its current level or increase.

Table 3, page 24, shows the volume of timber harvested and sold since 1968 in the three affected ranger districts. Although there have been yearly fluctuations in both the volume cut and sold, the ten-year period from 1968 through 1977 showed an increase in timber cut.

An analysis of the tax payments made to Idaho County through the 25% fund and in lieu payments does not appear to have been adversely affected by the classification. Since the inception of the Act, payments from the 25% fund have varied but increased over the eight year period 1970-1978 as shown by Table 5. Payments in lieu of taxes are based on a county's population or the number of entitlement acres within the county, and thus are generally stable.

The agricultural and mining resources within the wild and scenic corridor of the Middle Fork System do not significantly contribute to the economy of the area. The small operations that do exist in the area are not affected by the act since existing uses in operation prior to the act are allowed to remain.

INTERPRETATION OF RESULTS

The purpose of this study was to evaluate the economic impacts of the Wild and Scenic Rivers Act on the major resources of the Middle Fork of the Clearwater River upstream from Kooskia, Idaho, including the Lochsa and Selway rivers. These resources are agriculture, timber, outdoor recreation, and mining. An evaluation of the scenic easement program was also done to review the appraisal techniques utilized, determine what the significant factors were which influenced value, and what effects this program had on land values.

Impacts of the Scenic Easement Program

The acquisition of scenic easements from the private landowners within the wild and scenic corridor raised questions concerning the equity of the payments offered by the Forest Service and the process used to arrive at their value. In addition, there were questions about the impact of the classification and restrictions on the value of land within the corridor.

The data collected from the Summaries of Just Compensation allowed for a regression model to be developed which showed that the number of acres in an easement (X_1) and the amount of developable land in the easement (X_4) were significant factors in estimating easement values.

The various appraisers contracted to determine values for the scenic easements in the Middle Fork System placed emphasis on the same factors $(X_1 \text{ and } X_4)$ indicating a consistency in the appraisal techniques. The values of the easements were based in part on the two significant regression variables $(X_1 \text{ and } X_4)$. The question of equity in the payments

was raised by landowners in the area. The appraisal process is in many cases subjective and the value placed on a tract of land a result of one's perception of this land. The large (60%) unexplained variation in the dependent variable (value of the scenic easement payment/acre) constrained any definitive statements as to the equity of the easement payments. At least 40% of the payment was based on the two significant variables identified by the regression equation. Several other variables which economic theory and appraisal practices indicated may influence value were found to be insignificant in this model. This lack of significance may arise from the inability to quantify the variables correctly or, in this case, a lack of data regarding these variables.

The economic effects of the scenic easement program on the value of private land within the wild and scenic corridor of the Middle Fork System is difficult to pinpoint. Landowners who sold scenic easements to the U.S. government were compensated for the potential loss in value due to the easement restrictions. Since the inception of the scenic easement program in 1970, a number of parcels of land have sold encumbered with easement restrictions.

Based on the adjusted values in Table 11, the land sold subject to scenic easements was reduced in value from 25-60% compared to the time adjusted appraised value before the easement was purchased. Sale number 5 was a notable exception, though, since it sold for considerably more than the adjusted appraised value.

The comparison of the one sale outside the corridor similar in size, slope, and access to sales 2-4 in Table 11 indicated a reduction in value for those tracts encumbered with an easement of 15-40%. Once again sale

number 5's market value was substantially higher than the sale outside the corridor.

The first method of comparison, comparing adjusted appraised values to adjusted sale value, was relied on most, since the values were for the same property. Because of the lack of comparable sales, reliance on the results from the second method, comparing sale outside the corridor with those sales in the corridor, becomes questionable even though they indicate the same trend in the value of land as the first method.

Due to the uniqueness of land and the wide perception of characteristics which cause land to have value, the effect of the scenic easement program on land values in the Middle Fork has varied. This study shows that although there is a decrease in land sold encumbered with easement restrictions compared to unencumbered land, there are exceptions. In some cases, buyers appear to value the open space characteristics of land provided by the scenic easement restrictions within the corridor as much as land outside the corridor. The overall impact of the easement program has been to decrease the price of land within the corridor but not to the extent that was first thought by land managers in the area.

The impact of the wild and scenic classification on the timber, agriculture, and mining resources located within the corridor has been insignificant. Timber harvesting on private lands is not economically feasible due to the sparse stands and generally small acreages. Timber on the public lands has been managed for years to preserve the river corridor environment and would have continued to be managed in that manner even without the restriction imposed by the Wild and Scenic Rivers Act. The question of access to potential timber acres lying outside the river

corridor will not be a problem under the recreational area classification in effect on all but two sections, both of which lie inside the Selway Bitterroot Wilderness. This classification allows access roads to be constructed across the corridor to potential resources so long as they meet the management plans requirements. Based on these findings, it was concluded that there has been no significant economic impact on the timber industry due to the Wild and Scenic Rivers Act.

Agricultural production within the corridor is insignificant. The restrictions imposed by the Act have not and will not adversely affect this production since land uses existing prior to the passage of the Act were permitted to continue.

The mineral resources found within the corridor amount almost entirely to gravel deposits located along the river. Other mineral deposits are small and cannot produce enough to maintain an economically feasible operation due to the fact that the Idaho Batholith, noted for its lack of mineralization, underlies the majority of the area. Although there is interest in the gravel deposits along the Middle Fork, the Idaho Dredge Mining Law prohibits any dredging in this area. Mining claims existing before the inception of the Act were allowed to continue, and new claims may be filed if they too meet the management plans restrictions.

SUMMARY AND CONCLUSIONS

The Middle Fork of the Clearwater River upstream from Kooskia, Idaho, including the Lochsa and Selway rivers was included in the Wild and Scenic Rivers Act as one of the eight "instant" rivers in the Act. This free-flowing river and the unique scenic, cultural, and wildlife environment that it provides have been preserved for present and future generations. Questions arose, however, as to the economic impacts of this classification on the area's resources and the effects of the scenic easement program on private land values located within the boundaries of the classified area.

The data used to estimate a regression model for the scenic easement payments was collected from the Summaries of Just Compensation compiled by the Forest Service. In addition data on land sales which occurred both inside and outside the classified corridor was collected in order to compare their values.

Data on the timber industry was collected from a variety of sources. Interviews were held with the area's sawmill owners and managers and with Forest Service personnel to collect information on timber harvest over time to estimate the impact on this resource. Due to the insignificant amount of agricultural and mining resources in the river corridor, no data was compiled on these resources.

Regression analysis was used to estimate a scenic easement model. The model derived for the estimation of scenic easement payments was used to analyze the appraisal techniques and the equity of the payments. Two factors were significant in determining the payments: the number of

acres in the easement and the percentage of land developable in the easement. Both the linear and logarithmic models found these factors to be important. The log-log model was chosen because its test statistics were more statistically significant overall than the linear model.

The conclusions of this study concerning the economic impacts of the Wild and Scenic Rivers Act vary from resource to resource.

The results of the regression model used to estimate scenic easement payments indicated that the appraisal techniques employed by the various appraisers were consistent and acceptable. Due to the unexplained variation in the model, though, no definitive conclusions could be drawn concerning the equity of the payments.

Land values within the wild and scenic corridor have been affected. Lands encumbered with scenic easements were compared with their adjusted appraised value before the easement restrictions and with recent land sales outside the impacted corridor. The results showed that land subject to scenic easement restrictions sold for 25-60 percent less than unencumbered land. Sales have occurred within the corridor which have not followed this pattern, though, indicating a desire for the open space characteristics provided by the scenic easement restrictions.

The timber resources, both public and private, have not been adversely affected by the classification. Public Law 90-542 does not prohibit timber harvesting on private land as long as the methods used meet the regulations set forth by the agencies in charge of administering the river. Timber on public land will only be harvested to maintain the aesthetic qualities of the river environment. Access to timber lying outside the corridor was a concern of those in the forest industry. Those sections of river

classified as recreational allow for access to potential timber resources outside the corridor; while the wild river sections lie inside the Selway Bitterroot Wilderness boundaries and are administered under the more stringent wilderness regulations.

The agricultural and mineral resources located within the wild and scenic corridor are insignificant. Any mining claims or agricultural operations in existence prior to the Wild and Scenic Rivers Act have been allowed to remain. Dredging is prohibited by Idaho law, but mining claims can be filed if they comply with federal, state, and PL 90-542 regulations.

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JUST COMPENSATION

EXAMPLE OF SUMMARY OF ESTIMATED

APPENDIX I

REPLY TO: 5440 Partial Land Interests

August 2, 1971

SUBJECT: Clearwater NF - Tract No. 550 (McPherson), L&WCFA Wild and Scenic Rivers - Middle Fork Clearwater



TO: Wm. A. Worf, Chief, Division of R&L

REGIONAL STAFF REVIEW

The appraisal report has been reviewed for the proposed easements. It was prepared by Joe R. Acuff, MAI, under the provisions of contract No. 26-2658, awarded May 7, 1971. The appraisal summary and my comments follow:

Appraisal Summary

- Owner of record: Leora Harrington Contract purchaser: Donald Davis McPherson Kooskia, Idaho
- 2. Date of appraisal: May 10, 1971
- 3. Total property area: 54.71 acres
- 4. Easement area: 54.71 acres

5. Highest and best use: Before condition - timber production, grazing, recreational-residential. After condition - the same except limited residential (Premise A - 3 homesites, Premise B - 1 homesite)

6.	Value	estimates:	Premise A	Premise B
		- Before	\$27,350	\$27,350
		After	15,000	8,200
		Easement	\$12,350	\$19,150

Appraisal Review

The property is located on the Middle Fork Clearwater River about 2 miles east of Kooskia, Idaho. Access is along a gravel county road across the lower portion of Clear Creek. There is approximately 300 feet of frontage along the south bank of the river, but the land directly behind this frontage is very steep. It is primarily valuable for grazing. Further west is an area of 14 to 15 acres which was cleared for farming at one time. It is practically level, sloping slightly downward towards the river. The balance of the property is steeper but also might be subdivided for residential purposes. The entire perimeter of the property is fenced. Other improvements include a small shop and barn. These are fairly new buildings of minimum design. They do not appreciably contribute to property value.

The before value is based on the market data approach. The last sale of the subject tract and four other transactions of comparable properties are used in the value estimate. The cited comparables range in size from 24 to 158 acres with sale prices from \$160 to \$550 per acre. The sale prices are updated using a time factor of 30 to 40 percent per year. This rate is based on an analysis of the transactions for Comparables 5, 6, 9, and 13. In the comparisons to the subject, the appraiser also considered differences in tract size, terrain, access, and location. The indicated values for the subject range from \$400 to \$650 per acre. A value of \$500 per acre is assigned for a total of \$27,355, rounded to \$27,350.

The after values also are estimated using the market data approach. Under Premise A, the easement limits subdivision to three homesites. Two sales are cited as evidence of value. Both have physical features similar to subject, but due to location and market demand, they are not too desirable for subdivision purposes. The first sale is a 40-acre tract at \$125 per acre and the second is 77 acres at \$260 per acre. Adjustments are made for time, tract size, location, access, and the effect of the easement. Both comparables indicate a value of \$275 per acre for the subject. The total value of \$15,045.25 is rounded to \$15,000.

A similar approach is used for Premise B which limits the property to one homesite. The two cited sales range from 40 to 320 acres in size and each sold for \$125 per acre. Adjustments are made for time, size, terrain, location, and the effect of the easement. Both comparables indicate a value of \$150 per acre for the subject. The total value of \$8,206.50 is rounded to \$8,200.

The appraised value of the easement is obtained by subtracting the after value from the before value.

Premise A: \$27,350 - \$15,000 = \$12,350 Premise B: \$27,350 - \$8,200 = \$19,150 APPENDIX II

PAYMENT IN LIEU OF TAXES ACT

Public Law 94–565 94th Congress LOCAL GOVERNMENT UNITS

than the county acts as the collecting and distributing agency for real property taxes, the payments shall be made to such unit of local government, which shall distribute such payments as provided in this subsection. The Secretary may prescribe regulations under which payments may be made to units of local government in any case in which the preceding provisions will not carry out the purposes of this subsection.

(b) Payments authorized under this section shall be made on a fiscal year basis beginning with the later of—-

(1) the fiscal year beginning October 1, 1976, or

(2) the first full fiscal year beginning after the fiscal year in which such lands or interests therein are acquired by the United States.

Such payments may be used by the affected local governmental unit for any governmental purpose.

(c) (1) The amount of any payment made for any fiscal year to any unit of local government and affected school districts under subsection (a) shall be an amount equal to 1 per centum of the fair market value of such lands and interests therein on the date on which acquired by the United States. If, after the date of enactment of legislation authorizing any unit of the National Park System or National Forest Wilderness Areas as to which a payment is authorized under subsection (a), rezoning increases the value of the land or any interest therein, the fair market value for the purpose of such payments shall be computed as if such land bad not been rezoned.

(2) Notwithstanding paragraph (1), the payment made for any fiscal year to a unit of local government under subsection (a) shall not exceed the amount of real property taxes assessed and levied on such property during the last full fiscal year before the fiscal year in which such land or interest was acquired for addition to the National Park System or National Forest Wilderness Areas.

(d) No payment shall be made under this section with respect to any land or interest therein after the fifth full fiscal year beginning after the first fiscal year in which such a payment was made with respect to such land or interest therein.

SEC. 4. The provisions of law referred to in section 2 are as follows:

(1) the Act of May 23, 1908, entitled "An Act making appropriations for the Department of Agriculture for the fiscal year ending June thirtieth, nineteen hundred and nine" (35 Stat. 251; 16 U.S.C. 500);

(2) the Act of June 20, 1910, entitled "An Act to enable the people of New Mexico to form a constitution and State government and be admitted into the Union on an equal footing with the original States, and to enable the people of Arizona to form a constitution and State government and be admitted into the Union ou an equal footing with the original States" (36 Stat. 557);

(3) section 35 of the Act of February 25, 1920, entitled "An Act to promote the mining of coal, phosphate, oil, oil shale, gas, and sodium on the public domain", commonly known as the "Mineral Lands Leasing Act" (41 Stat. 450; 30 U.S.C. 191);

(4) section 17 of the Federal Power Act (41 Stat. 1072; 16 U.S.C. 810);

(5) section 10 of the Taylor Grazing Act (48 Stat. 1273; 43 U.S.C. 315i);

(6) section 33 of the Bankhead-Jones Farm Tenant Act (50 Stat, 526; 7 U.S.C. 1012);

Rezoned land.

limitation.

Payment

31 USC 1604.

Regulations.

provisions of this Act such sums as may be necessary : Provided, That, notwithstanding any other provision of this Act no funds may be made available except to the extent provided in advance in appropriation Acts.

Approved October 20, 1976.

HOUSE REPORT No. 94-1106 (Comm. on Interior and Insular Affairs). SENATE REPORT No. 94-1262 (Comm. on Interior and Insular Affairs). CONGRESSIONAL RECORD, Vol. 122 (1976): Aug. 5, considered and passed House.

Oct. 1, considered and passed Senate.

Note .--- A change has been made in the slip law format to provide for one-time preparation of copy to be used for publication of both slip laws and the United States Statutes at Large volumes. Comments from users are invited by the Office of the Federal Register, National Archives and Records Service, Washington, D.C. 20408.

LEGISLATIVE HISTORY: