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Assessment of Endangered □
Species Act Enforcement on Real □
Property Values: A Case Study of □
Three Washington Counties

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Executive Summary

Assessment of Endangered Species Act Enforcement on Real Property Values: A Case Study of Three Washington Counties

The Washington Center for Real Estate Research (WCRER) at Washington State University conducted a geographic and statistical case study analysis of the impacts of enforcement activities related to the Endangered Species Act (ESA) on property values in three counties in Washington state:

- ◆ Clallam County (Port Angeles/Sequim, rural)
- ◆ Clark County (Vancouver, suburban Portland)
- ◆ Snohomish County (Everett, suburban Seattle)

The study was designed to identify other potential sources of price effects, especially other policy or regulatory initiatives, in an effort to isolate the impacts of the ESA. Especially important is the relationship of Washington's Growth Management Act which directs development into urban areas and prohibits urban development outside the locally adopted urban growth boundaries. WCRER also reviewed the potential impacts of the Shoreline Management Act, the Clean Water Act and the State Environmental Protection Act as components of this research.

Very little statistical research has been previously published on this topic, although a large number of opinion pieces with selected anecdotes and isolated facts often presented as research, appear on the Internet and in general interest publications.

Of the published research, only three articles addressed the impact of environmental regulation on property values. A survey of real estate brokers in Texas suggested there was minimal overall impact of ESA on real estate values, but that prices in urban fringe areas might be depressed by as much as 30 percent. A study in Maryland found that the value of waterfront property increased, with the increase statistically attributed to cleanup of the Chesapeake Bay, but it did not address impacts on any other properties. The third study, in Oregon, found that encouraging waterfront property owners to plant buffers between their properties and the water reduced the value of the properties where buffers were planted, with the amount of value reduction depending on the width of the buffer. A 50 foot buffer reduced value, on average, by 11 percent.

The WCRER research began with the development of maps illustrating private land ownership, land use, political and growth management boundaries, watersheds, species-specific habitat and ultimately species richness, illustrating those parts of each county which were most affected by ESA regulation because they provided habitat to an above average number of species. Supplemental maps were also drawn illustrating precipitation and distances outside urban growth boundaries for use in some of the models.

Simultaneously, property transaction databases were assembled for each county. Those databases included all real property sales from 1985 through 2001 in Clallam and Snohomish counties, and sales between 1995 and 2000 in Clark County. These real estate databases included information on property characteristics (bedrooms, baths, building size, land size, view, condition, type of transfer, etc.). Transactions with incomplete information were excluded from the databases, as were transactions which

were less than arms-length transactions or transfers of partial interests, etc. Separate models were developed for key property types:

- ◆ single-family residential
- ◆ condominium
- ◆ commercial
- ◆ land.

Additional economic variables were added to the analysis. First, all prices were deflated by the consumer price index to eliminate the effects of aggregate inflation. The resulting prices are referred to as real prices. Several variables were constructed including the number of real estate transactions in the current year compared with a study period average, a measure of population growth, an index of local personal income compared to the study period average and an index of building permit activity relative to the study period average to capture price effects which are related to overall local market economics rather than the specifics of the individual property or the key policy analysis variable.

No two estimated models were identical, but each provided a statistically significant estimation of the price of real estate (or price per acre, as appropriate). While models which provided direct estimates of price, rather than logarithmic transformations, would have been preferable, as is often the case in this type of research, the explanatory power of the transformed equations was significantly better.

As the various pieces of the puzzle came together, it became apparent that there was consistency across the local markets, despite the difficulty of estimating similar models. While any generalization has exceptions, it is clear from the analyses that enforcement of the Endangered Species Act, despite its success at preserving the viability of some species, has reduced selected property values in the affected communities. No evaluation of the benefit to society of the preservation of the endangered species is explicitly stated, implied or should be inferred.

The accompanying table summarizes the impacts of ESA enforcement across the three counties and various property types. First, it is apparent that in virtually every case ESA enforcement exerted a **significant negative** influence on property values. Second, the consistency of the impacts across the models, despite their unique specifications is striking. It is also apparent that the impacts are most significant in percentage terms in the most natural resource-dependent jurisdiction studied – Clallam County.

Applying these price effects to the proportions of the assessed real property in each county which can be characterized as high-impact ESA, then applying the effective property tax rates for that county provides an estimate of how Federal enforcement of the Endangered Species Act has negatively impacted the financial capacity of the State of Washington and its counties and cities. While the state of Washington does not use differential tax rates for various classes of real estate, since the models demonstrated differential

County	Market Segment	Impact (%)
Clallam	Single-family homes	-11.9
	Unplatted land	2.6
	Improved commercial	-19.9
	Commercial land	-14.4
Clark	Single-family homes	-6.7
	Land	-4.0
Snohomish	Single-family homes	-4.2
	Unplatted land	-1.4
	Multifamily	-3.5
	Improved commercial	-10.8

impacts on price levels, separate impacts were estimated for various property types, then aggregated into county-wide impacts. Unfortunately, these impacts cannot be generalized to the remaining 36 counties of the state because each county has a different degree of ESA enforcement potential and, therefore, unequal impacts. Based on impacts by property type above, affected real estate in Clallam County has had value reduced by approximately 9.1 percent, the greatest impact among the analysis communities. In Clark County the average impact is about 6.0 percent, while in Snohomish the impact is estimated at 4.8 percent. It must be emphasized that these are the impacts on those properties in areas which are habitat for an above-average number of protected species. Other properties in each county would not have prices directly affected by ESA enforcement. The accompanying table calculates the tax revenue impact in each county.

The governments of the State of Washington, the three analysis counties, the incorporated cities within those counties, and the special taxing jurisdictions (hospitals, libraries, etc.) within those counties collectively received \$15.5 million less in property tax revenues from those properties each year than would otherwise be collected. Given the revenue structure of the state of Washington, this is not so much a reduction of revenue to the governmental units as it is a redistribution of tax burden away from the impacted properties to the properties which are subject to fewer ESA-oriented restrictions. Accordingly, all property owners are losers in this process – the owners of the high impact properties see a direct reduction in the value of their property. The remaining owners see their property taxes rise more rapidly than the taxes of those properties whose values are constrained.

County	Assessed Value (\$ Millions)	Tax Rate	Impacted Share	Value Reduction	Value Loss (\$ Millions)	Revenue Loss (\$ Millions)
Clallam	\$3,988.6	1.07%	13.8%	- 9.1%	\$50.1	\$0.5
Clark	\$23,211.9	1.27%	39.5%	- 6.0%	\$550.1	\$7.0
Snohomish	\$42,501.7	1.16%	33.9%	- 4.8%	\$691.6	\$8.0

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