



The Flawed Logic of Sales Substitution in the Appraisal of Land Suitable for Habitat Preservation or Mitigation

Blind Substitution

Probably no recent debate in the real estate appraisal profession has been as volcanic as the word explosion over how to value public and private acquisitions of land suitable for environmental habitat preservation or mitigation, much of it erupting onto the very pages of this publication. All of the pronouncements and articles, at least in this author's mind, have failed to frame the terms of the debate properly and have been issued from a position of ignorance of the law, public policy, governmental land appraisal standards, and the workings of the market itself.

One coalition to the debate includes the Federal Interagency Land Acquisition Conference (ILAC) and the Appraisal Institute (AI), which have generally aligned themselves on the side of the argument as being against the conclusion of environmental preservation use and the inclusion of public agency open space land sales comparables in a real estate appraisal. The grounds on which the ILAC and AI oppose the conclusion of a highest use for environmental preservation in an appraisal are that it is a "non-economic highest and best use." The use of this vague and self-contradicting term has only served to confuse the issues in the debate all the more. If anything, the ILAC and AI position papers, rather than having closed off the debate, have raised new alarming concerns that the effect of their separate pronouncements is to ignore the very core of the concept of market value.

On the other side of the debate is a loose coalition of environmental economists, independent appraisers,

property rights advocates, and environmental activists (called Environmental Value Proponents for discussion purposes) who argue, from somewhat differing viewpoints, for the inclusion of a highest use for environmental preservation in a real estate appraisal based on comparable market data evidence. Some of the Environmental Value Proponents argue for use of public agency comparable sales data, some for private sales data and some for both. Some even go so far as to argue for a biotic value component or a "public interest value" component as an increment of value above raw land value. Although the rationale behind the Environmental Value Proponents positions is varied, the faction which has received most prominence in these pages are those who argue for the indiscriminate use of public agency land sales market data in real estate appraisals of land suitable for habitat preservation or mitigation. This faction of the Environmental Value Proponents has conveniently ignored the legal definition of "market value," apparently in order to inject a subtle politically correct environmental agenda into the real estate appraisal process.

This author has in a previous issue of this periodical offered a middle ground position as a solution to the debate that does not advocate for the creation of new law, public policies, appraisal standards, valuation concepts or appraisal methods to resolve the debate¹. Although much of the debate on both sides of the issues has been going around in counterproductive circles, the most recent round of written articles has compelled the leading

By *Wayne C. Lusvardi*



spokespersons for the faction of the Environmental Value Proponents who argue for the use of public agency sales data to finally state the central core concept of their position which heretofore had not been articulated: *the economic principle of substitution*². This article is to offer a needed counterpoint to the mistaken notions of blind substitution of comparable sales advocated for in the appraisal of land suitable for habitat preservation or mitigation.

The Abolition of Market Value

We always need to be reminded of the obvious. The most obvious central definition to the appraisal profession is the term "fair market value." The notion of fair market value has apparently fallen out of fashion by the parties on both sides of the debate with regard to the proper valuation of land suitable for environmental preservation. This new thinking has apparently forgotten that "market value," as defined by most courts, reflects a voluntary sale between willing and knowledgeable parties who are not compelled to buy or sell by circumstance, and who have exposed the property on the market for a reasonable period to find a buyer.

The ILAC and the AI position papers apparently would exclude the use of any public or private party comparable land sale purchased for environmental mitigation in a real estate appraisal, whether the sale met the legally defined criteria of market value or not. The ILAC concept of market value is demand-side driven and requires that there be a "prospect of a demand" by a third party for environmental preservation before

one can conclude such a highest use in a real estate appraisal. The AI concept of market value precludes environmental preservation uses altogether regardless of whether there is a demand or supply of land suitable for such uses or the sales meet the market value criteria.

Likewise, the faction of the Environmental Value Proponents that argue for the use of public agency sales data in land appraisals ignore whether such sales meet the prerequisites of market value or not. Those who argue for the use of public agency sales comparables have a supply-side concept of market value for environmental preservation use, which excludes any notion of demand.

Both sides in the debate have deconstructed the definition of market value in different ways. However, those who advocate for the use of public

agency sales comparables in an appraisal have apparently lost sight of the circumstances which surround most, although not all, public agency land acquisitions for environmental preservation or mitigation purposes. These circumstances often involve the use of eminent domain to bring about an involuntary sale of a property. Even where the exercise of eminent domain is not used by public agencies, the very choice of which properties will be selected for acquisition to mitigate environmental impacts of a public works project is made by environmental management agencies who often create a pool of qualified mitigation properties. Such mitigation properties are often selected based on their proximity as close as possible to the environmentally impacted property. Among this pool of eligible properties, the environmental management agency

The Eco-Logic Value Syllogism

Definition of Reasoning. Accessible to the infection of our own opinions. Hospitable to persuasion, dissuasion, and evasion.

Definition of Logic. The art of thinking and reasoning in strict accordance with the limitations and incapacities of the human misunderstanding. The basic logic is the syllogism, consisting of a major premise and a conclusion — thus:

Major Premise: A purchase of land for ecological preservation is three times as valuable as land for other land uses.

Minor Premise: A parcel of land is suitable for ecological preservation; therefore—

Conclusion: The parcel of land is three times the value of other lands.

Necessary Conditional: Omitted (i.e., there must be a third party demand for environmental preservation).

This may be called the syllogism arithmetical, in which, by combining logic and mathematics, we obtain a three-fold certainty and are thrice rewarded.

Adapted by author from Ambrose Bierce, *The Devil's Dictionary*.

having jurisdiction may mandate that a particular property be acquired for mitigation purposes. Thus, the demand and location for such properties is often forced by environmental regulatory agencies. This often leaves the property owner of such pre-selected parcels in a position to hold a public agency hostage to the price they demand. Moreover, public agencies are often hard pressed to justify the reasons for condemnation of land for environmental mitigation purposes. It should not need to be stated, except perhaps to those who advocate for the indiscriminate use of public agency sales to value land suitable for habitat preservation, that the circumstances surrounding most of such public land acquisitions do not meet any of the tests of fair market value.

The circumstances surrounding many private non-profit conservation agency land acquisitions also often do not meet the tests of fair market value. As this author has cited in a previous

paper, non-profit environmental conservation agencies often act as shill buyers for public agencies, use pyramid-like transactions to "puff-up" prices, sometimes gobble-up all the environmentally sensitive land in a given market area creating an "evidentiary blight" on the market, and/or place a public agency under severe political and public relations pressure to acquire land with sensitive environmental resources. It again goes without saying that sales consummated under such circumstances are unlikely to meet any of the tests of fair market value. Those who argue for the indiscriminate use of non-profit conservation agency sales in an appraisal do so because they serve the interests of environmental protection.

Even where public or private agency land sales for environmental preservation or mitigation purposes do meet all the tests of fair market value, this does not automatically lead to a conclusion



that an appraised property has the same or a similar highest and best use for environmental preservation or mitigation in all cases, even where the comparable and appraised properties are physically similar. The reason for the non-comparability of an appraised property to the market sales data of lands purchased for environmental preservation are complex and have to do with the central appraisal concept of substitution.

Substitution Fallacies

Substitution is defined as, "The appraisal principle that states when several or similar commensurate commodities, goods, or services are available, the one with the lowest price will attract the greatest demand and widest distribution." (*The Dictionary of Real Estate Appraisal*, 2nd Edition, American Institute of Real Estate Appraisers, 1989) According to this economic concept, property values tend to be set by the cost of acquiring an equally desirable substitute property, which depends on the supply and demand situation at any one point in time in the market.

Normally the availability of market sales data of properties similar to the appraised property as to legal, physical, and economic feasibility, is a good reflection of the highest and best use of an appraised property in the real estate marketplace. If a sold property can



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substitute for the appraised property in the market, there is conventionally believed to be a congruence in their highest and best uses given no other higher valued competing uses. However unlike other types of real estate, the congruence in use between comparable sales and an appraised property is a necessary but insufficient condition for concluding a highest use for environmental preservation. The reason for this is the concept of demand. According to the project influence rule governing public land acquisitions, the demand for a parcel of land cannot be created by the public entity acquiring the property. For example, a public entity acquiring a former gravel pit for a flood basin or ground water recharge basin does not have to pay for sand and gravel pit real estate prices unless there is a reasonable probability that there was a third party demand for that use prior to the public acquisition. The necessity of proving an effective third party demand for a property for the same use for which it is being publicly acquired has been incorporated into both federal and state case laws and federal land appraisal standards. This oversight of the factor of third-party demand is a major flaw in the thinking of the Environmental Value Proponents, especially with the faction that advocates that all comparable sales of environmentally sensitive land are equally substitutable for each other, even including public agency land sales. This notion of what might be called blind substitution is fallacious.


Webster's Dictionary defines the word fallacy as follows: *Fallacy: (a) A false or mistaken idea; (b) erroneous or fallacious character; (c) an often plausible argument using false or invalid inference.* (Webster's 9th New Collegiate Dictionary, Merriam-Webster Publishers, 1984). The flawed logic of the Environmental Value Proponents as to the highest use and market value of land for environmental preservation is typically observed in six major fallacies elaborated upon in the following.

Unless the comparable sales have the same or similar demand conditions as the appraised property, they can't be used as true comparable sales.

Fallacy One: Mistaking Market Evidence for Proof of Highest Use. One of the most prevalent misconceptions in the valuation of land suitable for environmental preservation or mitigation is that comparable sales somehow prove a similar or the same highest use of an appraised property. This fallacy reflects the backwards logic of drawing a line of reasoning from the sales data to the highest use of the appraised property without any consideration of demand. As stated above, both case law and government land

appraisal standards mandate that there be the "prospect of a demand" by third-parties for environmental preservation before an appraiser can conclude such a highest and best use in a real estate appraisal. For there to be a substitute use for environmental preservation, there has to be a prerequisite condition of demand.

The pre-condition that there be third-party demand is even more critical for land suitable for environmental preservation than for other commercial real estate market land uses for several good reasons. First, it is often said that one sale does not make a market. The public purchase of a parcel of land to preserve wetlands does prove the demand for another land parcel for wetlands. The reason for this is that the demand for environmental preservation/mitigation is for the most part a series of unrelated one-time events rather than a continuous phenomenon of demand as experienced in the



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commercial real estate market. Independent events in time, such as purchases of land for environmental preservation, do not create a market demand for the same use on other properties. If there are no other similar public or non-profit preservation projects in a given market area, and no public works or private development projects requiring mitigation of the

same environmental resources as exist on the appraised property, there is no prospect of a demand from which to conclude such a highest use. And if there is no third-party market demand, there is no market value for preservation use, period.

An exception to this fallacy is that in the state of California, the unit prices paid for environmental preser-

vation land by public agencies can be compelled on that agency for any subsequent similar acquisitions. However, the use of public agency open space sales comparables cannot be compelled on other public entities acquiring land for the same or similar purposes.

Fallacy Two: The Irreversible Order of Use Fallacy. This fallacy relates to the interpretation of buyer and seller motivations of acquisitions of land by public or private entities for environmental preservation. For example, a public entity may buy a parcel of land for environmental preservation based on a real estate appraisal with a highest and best use for speculative residential subdivision at a unit sales

As George Orwell described in his novel, 1984, in an authoritarian world where objective truth is denied, definitions become exceedingly double-sided and anything can mean its opposite.

price of \$30,000 per acre. The unit price of pure open space/preservation land is one tenth of the price, or \$3,000 per acre. However, because the property was purchased with a buyer motivation for environmental preservation does not necessarily lead to a conclusion that it is a proper comparable sale for open space land. The reason this is a fallacy is that it fails to distinguish whether the sale was based on the price paid for the use removed from the property (speculative residential subdivision use) or the use for which it was acquired (environmental preservation). Such comparable sale data can often be interpreted or misinterpreted by a real estate appraiser in either direction—much as a cup can be viewed as half full or half empty. This error is called the fallacy of irreversible order

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where the use and market demand for land parcel "A" can substitute use for land parcel "B," but not the other way around.

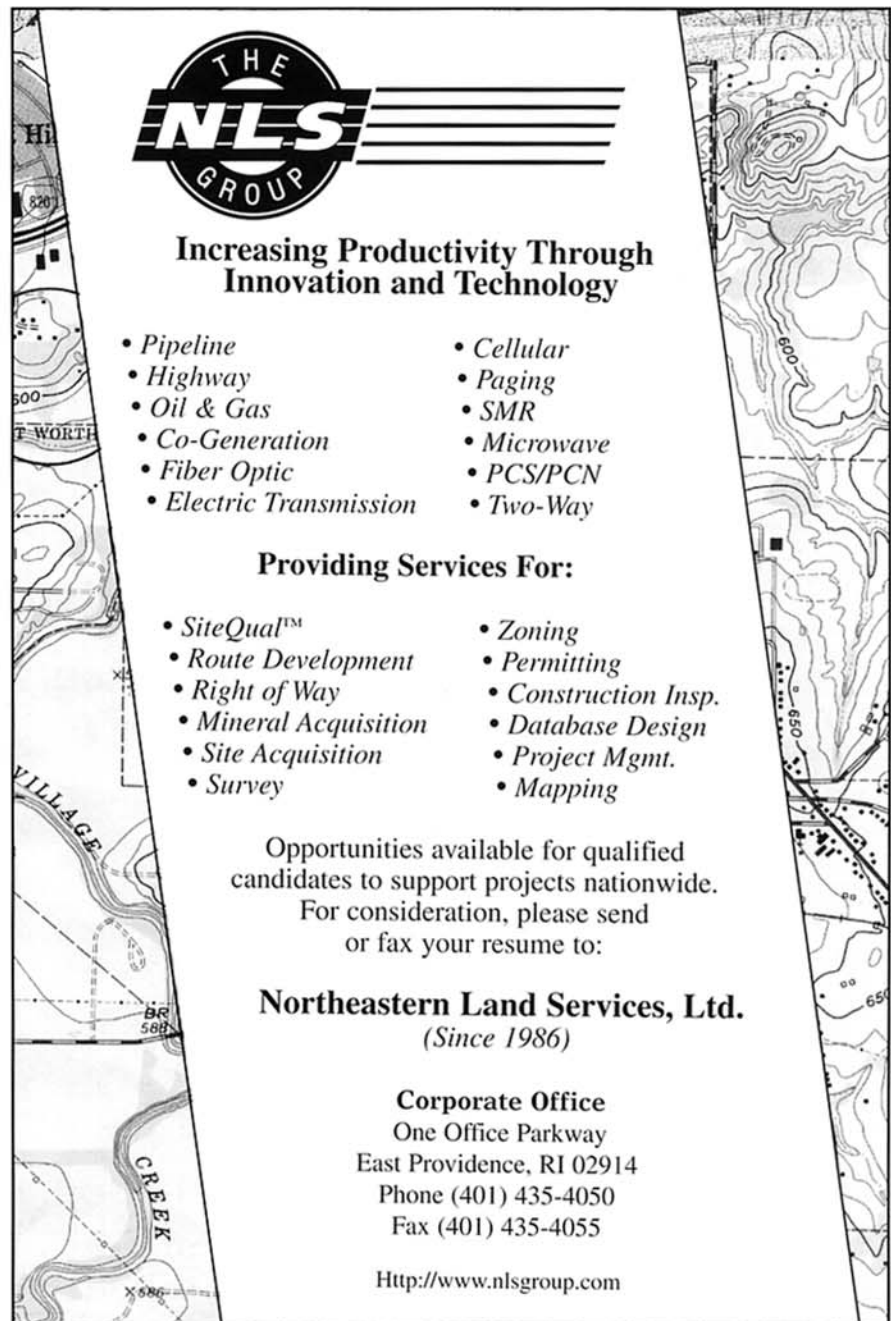
The deliberate, incompetent, or negligent substitution of land sales market data in an appraisal report reflecting a higher and better economic use (e.g., speculative residential subdivision use) for a property with a lower economic use (e.g., pure open space) can be a flagrant violation of the proscription contained within professional appraisal standards to avoid a misleading valuation. This substitution process can be analogized to a pea-shell con game, a sleight of hand card game of three-card Monty or a bait and switch scheme. Review appraisers for public acquisitions of environmental resource properties need to be alert for such flaws in appraisals.

Fallacy Three: Comparing Apples to Apples Fallacy. Comparing sales of open space land to an appraised property that is being purchased for environmental preservation may be inappropriate if, as stated above, there is no third party market demand for the appraised property. This third-party market demand must be for the same category of environmental resources that exist on the appraised property. Unless the comparable sales have the same or similar demand conditions as the appraised property, they can't be used as true comparable sales. In short, you can't compare a ripe apple, for which there is a demand, to a rotten apple, for which there is no demand.

Fallacy Four: Comparing Apples to Oranges Fallacy. Another fallacy is to compare restored or pristine environmental habitats with degraded habitat. The cost of producing a restored environmental habitat may include costs for land purchase, physical restoration, permits, putting a habitat conservation plan in place, and setting up a "wasting endowment" for continued monitoring and preservation of the habitat. Costs of producing restored habitats are not equivalent to the value of degraded habitat land. Moreover, there is no market-derived price or demand for

fully restored environmental land as there is for finished subdivision development land in the commercial real estate market. Without an open and competitive market price for restored environmental resource land beyond mere production costs, there can be no market comparison made for appraisal purposes. Obviously, already pristine environmental habitat land may command

more of a price because it does not need to be restored and restoration costs and delays can be avoided. But public agencies and private land developers may not get the required number of mitigation credits from buying restored or pristine habitat in contrast with buying degraded habitat. In short, you can't properly compare an apple (restored or pristine habitat) with an orange (degraded habitat).



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FLAWED LOGIC

Fallacy Five: The Market Inactivity Fallacy. The illogical reasoning contained in this fallacy typically takes the form of the following syllogism: If the land market is inactive, then the highest use must be for preservation. Just because the land market is inactive, except for public or private purchases for environmental preservation and mitigation, is not sufficient to lead to a conclusion that the highest use of a specific property is also for environmental preservation. Even an active environmental preservation/mitigation market, in an otherwise dead commercial real estate market, may not be sufficient to prove demand unless there is an interested buyer for the specific environmental resource on the appraised property.

Fallacy Six: The Fallacy of Substitute Price Neutrality. There are those in the



Environmental Value Proponent camp who argue that professional appraisal associations and government agencies should not inject their biases and pre-judge what price levels are too high or too low to pay for land suitable for habitat preservation. They advocate for a so-called neutral stance on this issue. Following this line of reasoning, all vacant land is equally vacant and all land prices are equivalent for environmental preservation use. This false pretense of neutrality can serve as a smoke screen for the use of non-market value sales comparables in an appraisal.

This fallacy is connected with Fallacy No. 2 whereby the price paid to remove a higher and better use from a property in order to put the property to a lower use for conservation is somehow magically transformed into the market value of "environmentally significant real estate." Real estate markets are not neutral as to prices paid for land and neither should real estate appraisers be neutral about the issue.

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where objective truth is denied, definitions become exceedingly double-sided and anything can mean its opposite. It is important in educating oneself about the murky issues which frame the debate of how to value land acquisitions for environmental preservation or mitigation to understand the underlying logic and reasoning, or the lack thereof, in the arguments.

On one side of the debate, the issuance of vaguely crafted position statements, without adequate professional and public agency review and comment, has not been productive and do not have the force of law. The use of double-think terms and group think position statements have confused the public, government agencies, and professionals alike. The position statements issued by the ILAC and the AI have failed to address more important issues, such as whether the requirement for a third party market demand for environmental preservation use contained in public land appraisal standards applies to appraisals for non-profit and private land acquisitions as well. The position statements issued by the public agencies and professional associations could be more helpful in clarifying whether there is one or two standards for real estate appraisals of land suitable for habitat preservation.

On the other side of the debate, the minority of the Environmental Value Proponents who resort to such confusing tactics as straw-man arguments, the substitution of red herring issues for substance, virtuous appeals to environmental protection, shifting to the presumed viewpoint of someone else in lieu of supporting one's own assertions with evidence or logic, the projection of one's own fallacious reasoning onto those who disagree with one's positions, and *ad hominem* personal attacks on another's impartiality, fail to produce a convincing argument. When discussion descends to such levels, the real issues are lost.

Perhaps, this article will prevent

one from being confused by the misinformation, self-contradicting and vague definitions, and illogical arguments used in some of the written positions on how to value land suitable for habitat preservation; as well as in detecting the faulty logic and reasoning which may be contained in real estate appraisals of such properties. ■

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Notes

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