# Valuing Mitigation Real Estate

by Donald C. Wilson

***Mitigation***—*alleviation; abatement or diminution, as of anything painful, harsh, severe, afflictive or calamitous.*
—Webster's Twentieth Century Dictionary Unabridged

Rights of way, marinas, ports, shipyards, etc., sometimes need to locate, or expand, in protected environments. These developments may damage a protected environment partially or fully. When such damage occurs, regulatory agencies charged with maintaining protected environments may require developers of damaging uses to "mitigate" the environmental damage by purchasing realty at another location, where the damaged environment may be recreated, or simulated. Such mitigation is intended to maintain ecological integrity.

Realty purchased to mitigate damage to protected areas, called mitigation real estate, usually needs to be appraised for market value during the transaction process.

Methods of valuing mitigation real estate are developing, as this class of property emerges. The following method views mitigation real estate as a highest and best use with a market value that may be estimated within a traditional valuation framework articulated by government and professional standards of appraisal.

## *Basic Concepts*

Mitigation may be defined by a number of principles or concepts:

1. *Protected environment* contains any attribute, or group of attributes, of environment protected from harm by government regulation, or policy, on behalf of society. Species, habitats, ecosystems, land formations, watersheds, historic places, archaeological sites, and paleontological sites are examples of protected environments.
2. *Environmental damage* is any adverse impact prohibited by regulation, or policy, that is caused by a development, on- or off-site from where the environmental damage occurs. Environmental damage ranges from partial to total, in extent (partial filling of a wetland vs. total filling of a wetland), from reversible to irreversible, in kind (destruction of replaceable habitat for an endangered species vs. extinction of an endangered species) and from replaceable to irreplaceable, in practice (a wetland that may be recreated economically at a variety of locations vs. a deep-water habitat destroyed by fill for a port terminal that may be uneconomic to recreate elsewhere).
3. *Essential use* designates a development providing a public good that seeks to locate within a protected environment. Common examples of essential uses include infrastructure rights of way, ports, and marinas that seek to occupy, or expand within, protected wetlands, tidelands or estuaries.
4. *Mitigation* refers to the lessening of environmental damage to protected environments caused by essential uses. Regulatory agencies generally mitigate environmental damage according to the following hierarchical cascade of decision making: a. reconfigure the essential use on site to eliminate or minimize the damage; b. make the developer of the essential use mitigate damage by replacing damaged habitat elsewhere on site; c. mitigate the damage caused by the essential use by going to another location and recreating like habitat (sometimes called like-kind mitigation); and d. mitigate the damage caused by the essential use by going to another location and creating a different habitat (sometimes called unlike-kind mitigation).
5. *Mitigation credit* is a unit of measure assigned by regulatory agencies to designate how much environmental damage has been done to a protected environment by an essential use, and how much mitigation must be done to compensate. For example, filling an acre of wetland might require, say, two credits of mitigation. Where mitigation credits are used, the developer of the essential use causing two credits worth of damage might then be required by a regulatory agency to mitigate the damage by earning a like number of credits from the purchase and/or enhancement of another site. Enhancement refers to the physical improvement of a property's environment through habitat design and construction. The credits earned by purchasing and/or enhancing another site are

determined by the regulatory agency. Determination of credits incurred from damage and credits earned through mitigation of the damage is significantly discretionary, being a function of regulation, policy, environmental impact assessment findings, and regulatory staff interpretation of all these. Use of mitigation credits indicates a relatively sophisticated mitigation process.

6. *Mitigation ratios* are another means by which regulatory agencies articulate how much a developer of an essential use must do to mitigate damage to a protected environment. Thus, a mitigation ratio of 1:1 means for every acre damaged, an acre must be created. A ratio of 1:3 means three acres must be created. Mitigation ratios may vary from region to region, from protected environment to protected environment, and from essential use to essential use. In the California coastal zone, for example, mitigations ratios range from 1:1.06 for the Port of Los Angeles' damage to deep water marine fisheries, to as high as 1:3 or 1:4 for other essential uses damaging wetlands.

7. *Mitigation banking* is an enterprise based on owning mitigation real estate, getting mitigation credits assigned to the mitigation real estate owned (by regulatory agencies which may grant such credits) and, subsequently, selling the credits to developers of essential uses in need of mitigation credits. Mitigation banking holds some promise as a viable enterprise, but it is not yet widely practiced.

8. *Mitigation land* is the natural resource crucial to mitigating environmental damage done by a developer of an essential use at another location. Typically, mitigation land may be altered in some fashion to recreate or simulate protected environment lost at another location. Regulatory agencies use various typologies to classify mitigation land, but three general types are common: unprotected land without significant environment that could be converted to a protected environment (upland near sea level that could be excavated and turned into a tidal marsh); completely destroyed environment that could be re-engineered to simulate its natural state (a tidal marsh cut off from tidal activity and denuded of all habitat characteristics defining a tidal marsh); and degraded environment that could be re-engineered to simulate its natural state (a tidal marsh partially cut off from tidal activity resulting in degradation of habitat, not total destruction). Agencies may view certain pristine environments not yet protected as suitable for mitigation, too.

9. *Mitigation real estate* is the bundle of property rights that delineate and contain the mitigation land, and which can be bought, sold, traded, donated, condemned and appraised.

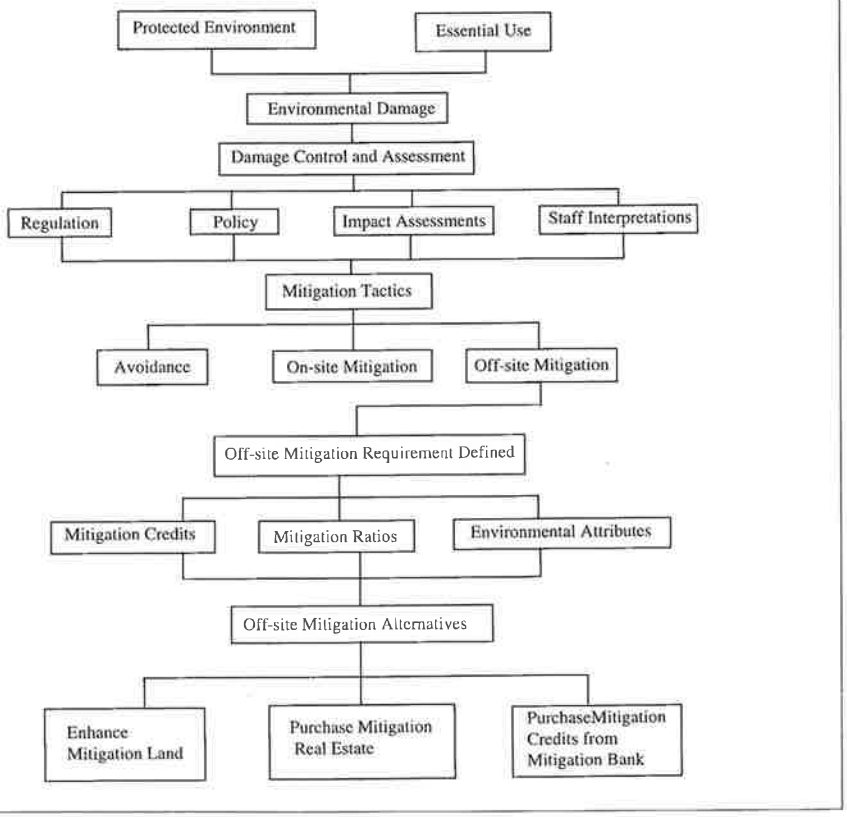
10. *Mitigation purchase* is the buying of mitigation real estate to mitigate environmental damage caused by development or expansion of an essential use in a protected environment.

11. *Mitigation enhancement* is the spending of money to engineer the creation of new habitat, or improvement of existing, degraded habitat, on mitigation real estate. Enhancement may take place on land purchased for mitigation by the developer of the essential use, or it may occur on land already owned by a government agency.

The terminology of these concepts is generic. Actual terminology may vary from region to region and from regulatory agency to regulatory agency. Still, the concepts behind the terminology should be familiar to most professionals involved with mitigation.

Having clarified the character and context of mitigation real estate by

**Overview of Mitigation Real Estate Process**



defining these basic concepts, valuation of mitigation real estate within a traditional valuation framework may now be discussed.

### *Traditional Framework*

The traditional valuation framework alluded to is that articulated by various government and professional standards. The framework includes, among other things, a definition of market value, an assumption that market value is premised on a property's highest and best use, and an articulation of three basic approaches to value—sales comparison approach, income approach and cost approach. In this framework, all three approaches should be considered and those found applicable should be grounded in market data and used.

### *Market Value*

For mitigation real estate to have a market value in a traditional valuation framework, there must be a market. To wit, there should be evidence of buyers and sellers transacting mitigation real estate in the past and reasonable probability they will transact it in the present. Further, buyers and sellers should reasonably be assumed to have some awareness of what others have paid for other mitigation real estate. This awareness reflects a basic characteristic of market behavior (price paid is not solely a function of value to one buyer and one seller, but is also influenced by what the marketplace will bear). Finally, for mitigation real estate to have a market value, it should meet the basic requirements of the traditional market value definition cited in FIRREA, and endorsed by professional appraisal organizations.

Because of the relative newness of mitigation and the relative infrequency of mitigation real estate transactions, there may be circumstances where the conditions of market value cannot be met. However, as time passes, mitigation purchases will tend to accumulate, transaction frequency will probably increase and transactor awareness of past transactions and present alternatives probably will increase. As these things occur, the existence of a market will probably become more and more demonstrable.

Regardless of these factors, one may also legitimately ask if transactors required by regulators to buy mitigation real estate can be acting "without undue stimulus," that is, "can they be acting in a competitive and open market, under all conditions requisite to a fair sale?" The answer will probably be debated in courts and among professionals for some time.

One answer is that they cannot. The government requirement to purchase prevents them from negotiating freely. This reasoning might be more persuasive, if essential users typically had only one purchase alternative of mitigation real estate to consider and had not chosen to develop within the protected area in the first place. Such is not typical, however. Essential users tend to have more than one purchase alternative to consider, and they tend to choose to develop within specific protected areas. After all, many essential users could choose not to develop at all, or in some cases, choose to develop in another protected area.

Another, more persuasive answer is that they are operating without undue stimulus, and in a competitive and open market. Government's requirement of a transaction does not preclude a competitive and open market. For example, when the government requires a motorist to buy car insurance, or a motorcyclist to buy a helmet, or a developer of an essential use on a wetland to buy an environmental impact assessment study, who would argue that these goods and services purchased lack a market value? Significantly, the government requirement to purchase mitigation real estate may be argued to have triggered a competitive and open market. And if the mitigation real estate market is influenced by government regulations, well, what real estate market today can claim to be

free of regulatory influence?

Some appraisers assume the market exists, while others assume it does not. Predicting with certainty a long-term resolution to this debate is impossible, presently. However, a best guess is for appraisers to increasingly recognize mitigation real estate, as having a market in some cases, as being a highest and best use in some cases, and as a result, having a market value. The accumulation of mitigation real estate purchases and the tendency for transactors to act like market transactors (basing price not solely on their own requirements but on what the market will bear, as well) will be increasingly hard to ignore over time. Finally, assuming mitigation real estate is a highest and best use with a market value lends analytic coherence to the valuation of mitigation real estate that is probably not possible otherwise. Valuing property to be purchased for mitigation based on sales of properties purchased for other uses is comparing apples with oranges, after all.

If a market for mitigation real estate can be assumed, mitigation real estate must next be determined the highest and best use of a property before a property can be valued as mitigation real estate.

### *Highest and Best Use*

Traditional highest and best use constraints of physical possibility, legal permissibility, financial feasibility, and greatest net return to the owner should be evaluated.

The *test of physical possibility* mostly concerns what exists on the property, and whether it could be adapted to mitigate typical kinds of damage to protected environments in the local vicinity (or a broader area if regulatory agencies permit). The test of physical possibility is crucial, because mitigation requirements in a local area may be rather specific.

The *test of legal permissibility* examines not only the traditional considerations of zoning and planning constraints, but also examines regulatory requirements pertaining to mitigation use of the subject site, as well as to mitigation requirements of protected environments in the vicinity. In essence, the subject site probably should legally be able to be converted to the kind of environment that would probably mitigate expected damage to protected environments in the local vicinity. Relevant mitigation regulation, policy and agency interpretations, as well as zoning and planning factors, may be studied to arrive at a conclusion.

The *test of financial feasibility* evaluates first,whether or not a market exists for the subject property, as mitigation real estate; and, second, whether or not a net benefit would accrue to the seller if he made use of the property in this fashion. Typically, if a market exists, a net financial benefit can be assumed for vacant land simply because of proceeds from sale. Evaluation of improved properties is more complicated, but basically comes down to evaluating whether the value of mitigation real estate, less the cost to convert it to that use, exceeds the value of the existing use. If it does, a net financial benefit may be inferred. If not, mitigation real estate is probably not the highest and best use.

The *test of greatest net return* to the owner is a comparison of the net returns afforded an owner by the different alternative uses considered. If mitigation real estate use results in the greatest net return, then it is probably the highest and best use.

### *Three Approaches*

All three basic approaches should be used to estimate the market value of mitigation real estate. However, the *sales comparison approach* is probably the most persuasive approach, given the youthful phase of most mitigation real estate markets. To participants unfamiliar with mitigation real estate, a body of comparable sales of properties purchased for mitigation may be the most persuasive empirical evidence of the existence of a mitigation real estate market *and* of market value.

In the author's experience, income and cost approaches have not yet been

used by appraisers to value property assumed to have a highest and best use of mitigation real estate. Probably, appraisal professionals have achieved satisfactory precision via the sales comparison approach alone, and have yet to find sufficient, relevant market data on which to base the income and cost approaches. Of course, this absence of application does not necessarily mean that these approaches lack technical feasibility for use in the estimation process.

For example, if comparable sales analysis is not particularly conclusive, and if developers of essential uses could be shown to purchase mitigation real estate based on some functional relationship to the enterprise revenues generated by the essential use, then an income approach estimating the land residual from the essential use allocable to the parcel to be purchased for mitigation might add significant insight into what buyers might pay for the subject. An analogous appraisal situation might occur when an appraiser must value not only an office building site, but the land required for a non-revenue generating parking structure. If sufficient, recent comparable land sales of parking structure sites do not exist, a land residual analysis for the parking structure as a part of the office building development might be undertaken. Back to mitigation real estate: the market value to a mitigator of a site, where sufficient recent comparable sales of mitigation real estate do not exist, might prove informative as a default, or complement to a sales comparison approach.

The cost approach might be useful in certain situations, too. One example might be the valuation of a mitigation real estate parcel of pristine wetland, where few recent sales of pristine parcels exist (perhaps because of the scarcity of such parcels), but many recent sales of degraded or destroyed wetlands do exist. In this case, the appraiser might supplement a sales comparison approach with a cost approach based on comparable sales of degraded or destroyed wetlands, plus the construction cost (hard and soft) of returning the subject property to near pristine status. The appraiser should, of course, do this only if he has significant reason to infer pristine environment is probably priced higher than properties with damaged or destroyed habitat.

Each of the three approaches may be applicable in certain situations, but in the current, youthful phase of many mitigation real estate markets, the sales comparison approach should tend to provide the most informative, persuasive and reliable benchmark of market value.

### *Selection of Comparable Sales*

A highest and best use assumption of

mitigation real estate and an election to rely on the sales comparison approach determines that sales of mitigation real estate probably constitute the most comparable and informative set of transactions on which to base an estimate of market value.

Sales of mitigation real estate may be analysed by traditional procedures including determining the arm's length nature of the transaction and adjusting for significant factors influencing value.

Usual criteria for determining whether a sale is an arm's length transaction should be applied. A key question is whether or not purchases by condemning authorities are arm's length transactions. This issue is crucial, because many mitigation real estate purchases involve condemning authorities. Precise regulations regarding use of purchases by condemning authorities may vary by jurisdiction and circumstance, and implications of specific case law may be open to further legal interpretation, but basically, voluntary, negotiated purchases by condemning authorities should probably be considered as arm's length transactions.[1] [2] [3] Use of other types of acquisitions by condemning authorities is a subject all its own that lay beyond the scope of this article.

### *Comparable Sales Adjustment*

Arm's length transactions may be adjusted for significant variances thought to account for price differences between the subject property and the comparable sales. Traditional factors like financing terms, date of sale, size and location are some examples.

Mitigation factors that might be considered for adjustment of comparable sales include, but are not limited to: enhancement potential of the mitigation real estate (some parcels may have unique potential for creating rare habitats that may make them highly desirable); proximity of mitigation real estate to the damaging essential use (closeness to the damaging essential use may be desirable); threat of development (mitigation parcels having, or potentially having building entitlements, and being sought for development, as a result, may be subject to greater demand and upward pressure on price); surrounding land uses (property values tend to be influenced by surrounding land value gradients, as well as by use); and access (certain potential mitigation parcels lacking access may be viewed in the mitigation process as having little development threat and, hence, as being less desirable to adapt).

Of course, such adjustments probably should be made only if the market is efficient enough to significantly vary price for the attribute considered. The relative inefficiency of youthful mitigation real estate markets may prevent much refinement in adjustments, however.

Where markets are efficient enough to permit adjustments, traditional adjustment grids may be used. Where market inefficiency prevents reliable, quantitative adjustments, the appraiser may default to qualitative assessments of which comparables are considered most similar. These comparables may be considered to indicate a probable range of market value. The appraiser may make a point estimate based on the most appropriate rationale.

### *Conclusions*

Right-of-way professionals need to become responsive to the valuation dynamics of the emerging class of property referred to here as mitigation real estate. The continued expansion of protected environments means more essential uses, like rights of way, will be exposed to the mitigation process and more right-of-way professionals will probably become involved in the valuation of property purchased to mitigate damage to protected environments. Part of becoming responsive to these valuation dynamics is familiarization with some of the basic concepts of mitigation, as well as with some of the basic issues related to applying the traditional valuation framework to mitigation real estate. ❑

## References


[1] For a detailed discussion of this issue see: Wilson, Donald C. and Craig D. Hungerford, "Purchases by Condemning Authorities as Comparable Sales: Interpreting the New Federal Appraisal Regulations for Environmental Real Estate," *Right of Way*, (International Right of Way Association: Gardena, CA, June/July, 1994), 33-36.

[2] For a look at a recent Federal Government interpretation of this issue see: Hartman, Barry, Chrmn., Interagency Land Conference 1992, *Uniform Appraisal Standards for Federal Land Acquisitions*, (U.S. Government Printing Office: Washington, D.C., 1992), A-18, 51.

[3] For a look at a recent court decision in which purchases by a condemning authority (although not mitigation real estate parcels) were permitted as comparables sales in a condemnation proceeding see: City and County of San Francisco v. Golden Gate Heights Investments; 14 Cal. App. 4th 1203; — Cal. Rptr.2d — [Mar. 1993].



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