Valuing Mitigation Real Estate

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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