

MARKET BASED APPROACHES TO
ENVIRONMENTAL PRESERVATION:
TO ENVIRONMENTAL MITIGATION
FEES AND BEYOND ♦

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Present environmental problems facing the world today clearly show that past techniques used for environmental protection have failed to mitigate environmental degradation. The decline of the environment, signified by rising air pollution, water pollution, and deforestation shows the inherent tension between economically profitable ventures and environmental protection. This is the tragedy: Environmental preservation tends to not be “profitable” while environmental degradation tends to be “cheaper.” In essence, it is cheaper for a private part to pollute rather than to protect environmental resources. This construct, however, which arises as a result of concern with the “bottom line,” exists separately from the social and natural features that society might wish to have considered. But, what if environmental conservation was profitable? Can we move towards regulatory paradigms where the profit motive works towards preservation?

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Adam Smith told us that “it is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their self-interest. We address ourselves not to their humanity, but to their self-love, and never talk to them of our necessities, but of their advantages.”¹ Let us now, today, address ourselves to the advantages of those that might find it in their own economic self-interest to protect, reserve or restore the environment.

When trying to consider alternative methods from those presently used, it is first necessary to realize that technology and progress are both a cause and a potential solution to the decline of the environment. Modern technology has produced many of the pollutants and wastes that today cause much of the environmental degradation plaguing the world’s ecosystems. But technology, and the accumulated knowledge that goes along with this technology, are helping to create alternative production techniques and systems that can better protect, preserve, and even enhance our environment. The implementation of alternative techniques employed to preserve our natural systems are clearly not costless, however. Additionally, protecting natural systems will have further costs – typically as foregone development opportunities. Passing regulations requiring the preservation has done little to protect natural systems, especially after it was learned that the penalties were minimal.

As new techniques used to protect the environment have obvious costs, the key in establishing a program to better preserve our environmental interests is to structure economic decision making so that the invisible hand guides resources toward protection of

¹ Adam Smith, *THE WEALTH OF NATIONS*, as quoted in R. Heilbroner, *THE WORLDLY PHILOSOPHERS*, Clarion, 1967, p.50.

the environment through economic incentives to protect the environment.² The purpose of this article is to examine this incentive based approach to environmental protection through the use of an environmental mitigation fee. The environmental mitigation fee combines some techniques being used in the United States and other countries to compensate society for the impact of pollution and land development. Part I of this article will explain and discuss one of these techniques, the development impact fee, and will discuss how the impact fee has evolved over the years to help mitigate the effects of new development. Part II will then discuss other market-based regulatory schemes and how they have been used to combat environmental degradation. This section will focus attention on tradeable emissions programs and, more importantly, wetland mitigation programs. Part III will then discuss how these different programs and techniques can be combined to create an environmental mitigation fee that is based on a market based approach so as to make it a profitable venture to protect the environment.

I. The Impact Fee

A. Development of the Impact Fee

In one form or another, impact fees now exist in all 50 states and are a common technique used to generate revenue for capital funding necessitated by new development.³

Impact fees are exactions that take the form of a predetermined monetary payment -- a

² See Robt. Freilich, *TIME, SPACE, AND VALUE IN INVERSE CONDEMNATION: A UNIFIED THEORY FOR PARTIAL TAKINGS ANALYSIS*, 24 U.Haw.L.R. 589, at 616.

³ See Julian C. Juergensmeyer & Thomas E. Roberts, *Land Use Planning and Control Law* 388 (1998); James C. Nicholas, Arthur C. Nelson and Julian C. Juergensmeyer, *A Practitioner's Guide to Development Impact Fees* 13 (1991).

fee – and are generally levied to fund capital expansion of large scale public facilities and services necessitated by new development.⁴ Such fees play an integral part in giving local governments the ability to cope with many burdens of rapid population growth such as the need for new parks, roads, schools, jails, public buildings, sewer and water treatment facilities, law enforcement protection, and fire protection.⁵

Historically, it has been a primary function of state and local governments to construct, operate, maintain, and improve the basic physical infrastructure of American communities. However, as a result of three significant events in American history, this traditional approach began to break down. The first of these events was the sharp rise in inflation in the 1970's⁶ and the decimation of fixed based taxes such as the motor fuels tax. The next was the federal fiscal retrenchment that began in 1982 and continued through the 1990's, thus reducing the funds made available to local jurisdictions. The third factor leading to the breakdown of the traditional approach was the general hostility to the taxation of real property, thus forcing local jurisdictions to look elsewhere to fund the ever-increasing demands to constituents.⁷ Because these factors were occurring at a time when the pace of urban development was increasing, both the demand for and the cost of investment in public infrastructure began to climb at a time when the available financial

⁴ See Susan M. Denbo, Development Exactions: A New Way to Fund State and Local Government Infrastructure Improvements and Affordable Housing?, 23 Real Est. L.J. 7, 11 (Summer 1994).

⁵ JUERGENSMEYER & ROBERTS, *supra* note 1, at 388.

⁶ For most of the county's history inflation averaged 2% or less, with the periods of war being significant exceptions. Beginning in the 1960's and continuing through the 1980's inflation existed at hitherto unprecedented, peaking at over 18% in the later 1970's. See www.bls.gov.

⁷ See Larry Suskind, _____

were falling. As a result, there arose an increasing need for investment concurrent with declining means.

Due to the lessening of federal and state funding for such infrastructure needs as water pollution control facilities and highway system expansion and repairs, most of the responsibility for these and other public investments fell directly on the local jurisdictions by default.⁸ In order to assume control of providing these infrastructure needs, local governments were forced to pay the associated costs, commonly by raising local property taxes. In turn, they were then hit by the 'taxpayer's revolt.' Increasingly, local elected officials faced a public demand to reduce taxes and maintain or even increase infrastructure service levels. After failing to remedy this dilemma through the taxation power, many jurisdictions looked to their police power as a means of addressing the problem.

In terms of the police power, most local governments have great discretion to regulate in order to protect the public's health, safety, and welfare. In contrast to this theory, local governments have almost no discretion in the exercise of their power to tax. It was almost natural, then, that local governments would turn to the police power in order to finance infrastructure needs.⁹ Negative aspects of urban growth, including congestion and loss of 'quality of life' that further growth and development would entail, provided the framework for invoking the police power to protect the public. Thus, in order to make up for public service funding lost as a result of the conditions mentioned above, local

⁸ Both state and the federal government abandoned funding programs for public investments because of a sharp rise in cost. Furthermore, there was more burden on the local governments responsible for handling these matters because of required improvements to many infrastructure facilities, such as water pollution control facilities. See, e.g., The Water Pollution Control Act, commonly known as the Clean Water Act, PL 92-500.

⁹ See James C. Nicholas, Arthur C. Nelson, and Julian C. Juergensmeyer, *A Practitioner's Guide to Development Impact Fees* 13 (1991).

governments began to impose conditions on development that were consistent with the protection of the public's health, safety and welfare – this was accomplished through the implementation of the impact fee.

In order to see how the impact fee originated, however, it is first necessary to bring up the division of governmental services that had arisen in American public administration: governmental and proprietary services. Governmental services were those needed in order to promote the public health, safety, and welfare of the public, but not provided for by private entities. Examples of these types of services are police and fire protection, as well as the maintenance of public roads and parks. Proprietary services, on the other hand, are those services created for the same purpose, but can be and frequently are provided by the private sector and for which service charges are imposed by the party performing the service. Examples of this are trash collection and water service.

Local governments had long charged for proprietary services, and such charges were extremely common and were considered 'user charges.' These user charges were possible because the benefit of providing a service could be isolated to individual users, and if the individual user failed to pay the charge, service could be excluded from use or consumption. Governmental services, on the other hand, must be classified differently because the cost of performing a service cannot be identified with a single user. Under this framework, initial proponents of the impact fee had the objective of applying the principles of public finance that had hitherto been applied only to proprietary services to governmental services. This type of application would, in the end, have the effect of reducing, if not totally eliminating the distinction between proprietary and governmental services.

The legal implications of enacting a plan such as this were unknown at the time. Many, fearing that these fees would be seen as an unconstitutional tax, initially set impact fees to pay for governmental services very low. For example, the ‘land use fee’ used in Broward County, Florida,¹⁰ imposed for road improvement was \$100 per residence. Even so, this particular charge was struck down by the Florida Supreme Court as an unconstitutional tax.¹¹ The court based its holding on the theory that the fee exceeded the county’s “cost of regulation, which was supposed to justify their collection.”¹² This holding, like court holdings in many other states, demanded that fees or charges assessed under the police power for the impact of new development be no greater than the costs borne by the governmental entity in “regulating” new development – otherwise, such a fee would be considered a tax. Ultimately, both the definition of regulation and a detailed accounting of the “costs of regulating” development allowed local governments to base the imposition of impact fees on the police power, and avoid the tax label.¹³ Once at this stage, local governments were able to have their impact fee programs classified as regulatory by demonstrating that new development creates the need for new and expanded facilities, and then collecting from new development its proportionate share of the cost of expanding facility capacity. Even though local government labeled impact fees as regu-

¹⁰ Fort Lauderdale.

¹¹ See Broward County v. Janis Development Corp., 311 So. 2d 371 (Fla. 4th DCA 1975).

¹² Contractors and Builders Assn. of Pinellas County v. City of Dunedin, 329 So. 2d 314 (Fla. 1976).

¹³ The idea of regulation had to be expanded from the concept of simply imposing rules and standards to actually imposing fees not classified as taxes, for health, safety and welfare purposes.

latory, courts still required local governments to produce calculations and other data to support the reasonableness of their fees.¹⁴

The courts then devised a dual rational nexus test to assure a rational relationship between the demands of new development and assessments against it.¹⁵ The test is designed to ensure that impact fees imposed on a new development are proportionate to the facilities and services needed as a result of the new development. Thus, two prongs must be met before an impact fee will pass the rational nexus test: (1) Impact fees may be no more than the government's infrastructure costs which are reasonably attributable to the new development; and (2) the development derive some benefit from the use of the fees collected.¹⁶ If the two prongs of this test are not met, however, the impact fee in question has at times been deemed an unconstitutional taking, entitling the property owner to monetary damages.¹⁷ Whether impact fee failing to meet rational nexus criteria are un-

¹⁴ In Holmdel Builders Assn. v. Township of Holmdel, 583 A.2d 277, 293 (NJ 1990), the court distinguished taxation from regulatory fees. The court stated that if the primary purpose of the fee was to raise general revenue, it was a tax. However, if the primary purpose was to "reimburse the municipality for services reasonably related to development, it [was] a permissible regulatory exaction." Id.

¹⁵ This test was originally used in Jordan v. Village of Menomonee Falls, 137 N.W. 2d 442 (Wis. 1965). See J. Juergensmeyer and M. Blake, Impact Fees: An Answer to Local Governments' Capital Funding Dilemma, 9 Fla. St. U. L. Rev. 415 (1981).

¹⁶ See Jordan, supra note, at 447; JULIAN C. JUERGENSMEYER & THOMAS E. ROBERTS, LAND USE PLANNING AND DEVELOPMENT REGULATION LAW 362 (West 2003).

¹⁷ With impact fees, there are three theories under which courts have held that taking by regulation has occurred: (1) that a taking by invasion has occurred; (2) when a regulation significantly diminishes the value of the private property; and (3) when the requirements placed upon a landowner do not substantially advance the purpose of the regulation. In terms of impact fees, developers most often advance the third theory listed. If, however, an impact fee has fulfilled the nexus requirement of the dual rational nexus test, it will generally withstand this type of challenge. See generally JUERGENSMEYER & ROBERTS, supra note. See Home Builders Association of Greater Des Moines v City of West Des Moines, ___NW.2d ___ Iowa 2002.

constitutional takings of private property or illegal taxes is a matter of current debate with these authors aligned on the illegal tax side of the argument.¹⁸

B. Impact Fee Uses

Impact fees are currently being used for a wide variety of public services, and now represent a common tool used by local governments in funding public service infrastructure needs.¹⁹ Impact fees are assessed for the provision of water and sewer systems, roads, solid-waste facilities, libraries, parks, schools, police and fire facilities, emergency medical facilities, environmental and habitat preservation, public hospitals, and even public cemeteries.²⁰ The most common use for impact fees is in the funding of capital improvements for potable water and sanitary sewer facilities, with transportation services, including highways and roads, being the next most common type of impact fee.²¹ No matter what the fee is used for, courts assess the validity of impact fees in large part on how fairly and accurately it reflects a new development's proportional share of the neces-

¹⁸ "Impact Fees Should Not Be Subject to Takings Analysis," in TAKING SIDES ON TAKINGS ISSUES: PUBLIC AND PRIVATE PERSPECTIVES, Ed. By Thomas E. Roberts, Chicago: Am. Bar Assn, 2002.

¹⁹ In one form or another, impact fees exist in all states and have existed for a number of years. See Gus Bauman & William Ether, "Development Exactions and Impact Fees: A Survey of American Practices," LAW AND CONTEMPORARY PROBLEMS, 50:1, 1987, P51-69. The change has not been a shift toward impact fees but more and higher impact fees which grew from being minor "economic nuisances" in the neighborhood of \$1,000 to \$2,000 per home to substantial amounts commonly surpassing \$10,000. See Nicholas, Nelson & Jurergensmeyer, SUPRA, p ___ and Juergensmeyer & Roberts, SUPRA, p ___.

²⁰ This list is merely illustrative, not exhaustive. See generally NICHOLAS, NELSON, & JUERGENSMEYER, supra note 5, at 2.

²¹ Id.

sary infrastructure costs.²² Because accuracy is a major factor in determining the reasonableness of an impact fee, impact fee programs require very careful economic analysis and planning to determine what public facilities will be provided, the cost of providing the infrastructure, and the proportion of that cost attributable to the individual unit of development on the infrastructure facilities.²³ Therefore, the most widely upheld and implemented impact fees are those that are based on data which indicates the desired level-of-service standards for a particular facility and calculate the cost of maintaining those standards in light of the increased demands created by new development.²⁴ Today, impact fee formulae are the methods used to set impact fees, and are based on the fundamental theory of the police power.²⁵ Once the formulae are developed, the actual impact fee is then derived by entering the data into the formulae. Impact fees can then be offset with credits²⁶ given by the local government to account for past payment for existing capital facilities, future tax and other payments by the development, and infrastructure and improvements to the land provided directly by the developer.²⁷

²² Id. at 82.

²³ The forgiving language in *Dolan v Tigar*d, 114 S. Ct. 2309; 1994, that mathematical precision is not required, has not proven to be the case in impact fee challenges.

²⁴ Id.

²⁵ If the developer were required to pay for more impact than they actually cause, this would be a taking or a tax, and would therefore be unconstitutional. Therefore, the role of the formulae is to accurately determine the cost of the impact. See discussion Part I.A. infra.

²⁶ It is unfortunate that in impact fee methodology and literature “credit” has two meanings. This first refers to a reduction in the amount of an impact fee to reflect other funds devoted to that same facility or service. The second meaning refers to an ad hoc grant that allows an individual to pay impact fees from the grant, with the amount of the grant reflecting the reasonable value of a dedication.

²⁷ See NICHOLAS, NELSON, & JUERGENSMEYER, supra note 5, at 98-107.

One of the more common uses for impact fees is to fund the need for roads and highway systems brought on by new development. When visualizing how the formula may be set for an impact fee assessment, transportation network fees provide a useful example of how impact fees are calculated and assessed. One of the first steps in calculating this type of impact fee is to determine the level and quality of service that the local government wants to maintain or achieve – a desired level-of-service standard. Once this is established, formulae are then developed to determine the actual impact that a development will have on the particular facility – in this case the highway system. For example, a shopping center will have a very different impact on the highway system than a single family home will have. Differences such as this are then taken into consideration in determining the amount of the fee.

For roads specifically, the impact fee formulae begin by calculating the physical quantity of roads that must be built in order to protect public health, safety and welfare from deterioration in the quality of service on public roads. This quantity of roads is physical and is measured in lane miles or lane feet of roadways.²⁸ It is calculated by multiplying the trip generation rate,²⁹ divided by two, times the average trip length, times the percent new trips, all divided by the capacity of a lane mile (or foot) of roadway.³⁰ The

²⁸ A lane mile would be a single lane, one mile long. A four-lane roadway one mile long would be four lane miles.

²⁹ Many jurisdictions use trip generation rates provided by the Institute for Transportation Engineering (ITE), although jurisdictions may elect to conduct their own trip generation studies.

³⁰ The following is a general formula for roadway impact fee determination: $(\text{Trip rate}/2) \times \text{Trip length} \times \% \text{ New trips} = \text{Attributable travel}$. $(\text{Attributable travel} / \text{Road lane capacity}) = \text{New roads}$. $(\text{New roads (in lane miles)}) \times (\text{Construction Cost (in lane miles)}) = \text{Construction costs}$. $(\text{New roads (in lane miles)}) \times (\text{Right of way cost (in lane mile)}) = \text{Right of way costs}$. $(\text{Construction costs}) + (\text{Right of way costs}) = \text{Total cost}$. Following this computation, any credits the developer may possess will be subtracted from the total cost to obtain the impact fee.

attributable travel is also reduced to account for what are known as captured or diverted trips – that is, trips that were already on the road and are not attributable to new development. This results in a number of vehicular miles of travel, the impact that may be attributed to new development. The next step is to then calculate the cost of the road construction and then to include credits.³¹ The impact fee is then established based on the projected cost of new construction less any “credits” for dedications the developer may be entitled to.

C. Impact Fee Evaluation and Future Uses for the Framework

Impact fees are now commonplace means of infrastructure finance. This is not due to anything other than the fact that impact fees raise money for local governments and are a non-tax available means of raising revenue. Requiring new land development to bear a proportionate cost of providing the new or expanded infrastructure it will require, impact fees provide in part an answer to the dilemma faced by local governments when searching for sources of funding for capital expenditures. Now that impact fees have been widely accepted by the courts as regulatory measures, rather than unconstitutional taxes, they are widely seen as funding programs that reasonably allow local governments to maintain levels of capital services that can keep up with growth.

There are limitations, however, to the traditional use of impact fees. While they respond to the issues of location, availability, and provision of capital infrastructure with

³¹ Because roads are paid for in part by fuel taxes, new development should receive “credit” because it will generate and attract new attributable travel, thereby consuming fuel, the taxes on which will be used to pay for new roads. Because these taxes are paid annually and in perpetuity, it is necessary to consider future payments as well. “Credit” for the payment of past property taxes paid by the developer, which in part are used to fund the building of roads, should also be applied.

regard to new development, they are “largely unresponsive and even insensitive to the issue of the quantity and type of growth that should be allowed to occur.”³² Furthermore, the traditional impact fee fails to respond to other growth and development issues such as housing and employment needs.³³

Partly in response to these shortcomings associated with the traditional impact fee, and partly because of the success of impact fees in raising funds for many infrastructure items, many local governments have begun to explore the possibility of using the idea of the impact fee to fund “soft” or “social” infrastructure needs such as “child care facilities, low income or “affordable housing” housing, art in public places, and environmental mitigation programs.”³⁴ These types of funding requirements designed to raise funds for “soft,” “social” and now “green” infrastructure items are usually referred to as “linkage fees.”³⁵ When first implemented, “linkage” fees were thought to be something distinct from “impact” fees.³⁶ *Nollan v California Coastal Commission*³⁷ dealt the first blow to the perceived difference between linkage and impact fees by holding that a nexus was essential to any condition of development approval requiring a dedication. The Ninth Circuit further diminished any distinction in *Commercial Builders of Northern*

³² NICHOLAS, NELSON & JUERGENSMEYER, *supra* note 5, at 48.

³³ Christine Andrews & Dwight Merriam, “Defensible Linkage.” In Nelson, Ed., DEVELOPMENT IMPACT FEES, 1988. Also see Jerold Kayden & Robert Pollard “Linkage Ordinances and Traditional Exactions Analysis: The Connection Between Office Development and Housing,” LAW AND CONTEMPORARY PROBLEMS, 50:1, 1987.

³⁴ JUERGENSMEYER & ROBERTS, *supra* note 12, at 370.

³⁵ Andrews & Merriam, *supra*.

³⁶ See Donald Connors & Michael High, “The Expanding Circle of Exactions: From Dedications to Linkage,” LAW AND CONTEMPORARY PROBLEMS, 50:1, 1987, 51-69.

³⁷ 483 U.S. 825; 107 S. Ct. 3141, 1987.

California v. Sacramento³⁸ by applying what were essentially “impact fee” criteria to what was characterized as an affordable housing “linkage” requirement. Today the weight of opinion is that there are no fundamental differences between “linkage” and “impact” fees, but the convention of naming “soft,” “social” or “green” impact payments linkage and applying “impact” to “hard” infrastructure remains.

To the extent that any differences can be identified between “linkage” and “impact,” most linkage programs have a primary goal of problem mitigation or abatement rather than payment. Impact fees are almost the reverse, in that the expectation is that payment of the fee will be the primary means of compliance. A “linkage” program would identify a “concern” and require that the “concern” be abated or mitigated and, if not abated or mitigated, a payment would be made and the proceeds derived would be used to abate or mitigate the problem. An “impact” program would require the payment of a specified amount, the proceeds of which would be used to construct specified public facilities, unless the individual elects to sufficiently mitigate or abate the problem by dedication of those facilities.

II. A Market Based Approach to Environmental Regulation

Many local governments are now exploring the possibility of requiring developers to account for soft infrastructure needs through linkage programs. The use of such protocols to protect the environment would signify a shift from command and control regula-

³⁸ 941 F.2d 872, 1991.

tions that have employed to control environmental degradation in the past.³⁹ Command and control regulation, or traditional regulation of the environment has long been criticized as being too rigid, inefficient and ineffective⁴⁰. And, while this traditional regulatory method may have valid and useful applications, the drawbacks of the scheme have lead many to believe that a market-based regulatory framework is needed in order to better protect environmental resources.⁴¹ For the purposes of this article, the term “market based regulation” refers to the more recent environmental reforms that attempt to use market forces – Smith’s “invisible hand” – more extensively than in traditional regulations. This is done by making the desired end, in this case environmental protection, in somebody’s economic interest. One of the main goals of market based pollution control programs is to reduce the cost of complying with environmental regulations. One way that a market based regulatory framework allows for this is to allow the polluter,⁴² not regulators, to determine the most efficient means of reducing pollution.⁴³ The polluter is not given a choice with respect to the end, pollution abatement or environmental protec-

³⁹ The “command and control” form of environmental protection refers to mandated environmental controls instituted after the enactment of the National Environmental Policy Act (1969) and subsequent acts such as the Clean Air Act and the Clean Water Act in the 1970’s. See Robert W. Hahn and Robert N. Stavins, Incentive-Based Environmental Regulation: A New Era From an Old Idea?, 18 Ecology L.Q. 1, 5 (1991).

⁴⁰ See Bernard Frieden, The Environmental Protection Hustle, MIT, 19__ and Ralph Luken, Efficiency in Environmental Regulation, Kulway, 1990.

⁴¹ See Bruce A. Ackerman and Richard B. Stewart, Reforming Environmental Law, 37 Stan. L. Rev. 1333, 1335-38 (1985).

⁴² The term polluter is used here simply to identify the producer of the item that would represent environmental or social harm.

⁴³ See Matthew Polesetsky, Will a Market in Air Pollution Clean the Nation’s Dirty Air?: A Study of the South Coast Air Quality Management District’s Regional Clean Air Incentives Market, 22 Ecology L.Q. 359, 369.

tion, but is given a choice on how best to get to that end.⁴⁴ One of the choices is to hire another, the mitigator, to achieve the desired end on behalf of the polluter.

A. Tradable Emission Programs

One of the more prominent types of market-based environmental regulation is the tradeable emission. The goal of most tradeable emission programs, unlike impact fees, is to reduce the total amount of existing pollution rather than justly compensating society for new pollution sources. Another goal of this type of program is to improve the efficiency of meeting environmental regulations, thus allowing making more stringent pollution or environmental standards economically feasible than with a traditional regulatory format.⁴⁵

The typical tradeable emissions program begins with regulations setting a cap on the total amount of emissions for a particular region and for a type of air pollution. The regulator then allocates a number of tradeable emission credits to polluters not to exceed the cap for the region. Polluters are then allowed to sell the credits they possess to other polluters in the same program. The flexibility of the program is seen in the fact that the regulator does not specify the means by which the polluter attains the level of pollution set by the number of credits held. Instead, the polluter can reach this level by whatever

⁴⁴ Dwight Merriam, *The Takings Issue: Constitutional Limits on Land Use Control and Environmental Regulation*, Island Press, 1999, p. 517.

⁴⁵ In theory, the cost savings produced through more efficient measures of meeting environmental regulatory standards would allow for more stringent standards to be set, an important aspect of the program for those interested in reducing pollution, not reducing costs for industry. See Hahn and Stavins, *supra* note 27, at 33.

means they think is most efficient.⁴⁶ Thus, tradeable emission credits can increase efficiency by encouraging entrepreneurs to develop better pollution control devices and substitute pollution abatement for pollution by credit, while selling pollution credits, potentially for a profit.⁴⁷

1. Tradeable Emissions in Action: California's RECLAIM

California's Regional Clean Air Incentives Market (RECLAIM) is currently one of the largest trading programs operating in the world.⁴⁸ This program was first adopted in 1993 to reduce air pollution in the Los Angeles area – the region with the most air pollution in the United States.⁴⁹ In order to combat this problem, RECLAIM was implemented in 1993 in order to reduce existing pollution by targeting reductions in stationary sources of nitrogen oxide and sulfur dioxide. This was to be accomplished by creating a market in tradeable emission credits that would achieve the same level of pollution reduction as targeted by traditional regulations already in place.⁵⁰ Because of political pressures and economic forces at work in the area at the time, the goals of RECLAIM were

⁴⁶ See Robert W. McGee and Walter E. Block, Pollution Trading Permits as a Form of Market Socialism and the Search for a Real Market Solution to Environmental Pollution, 6 *Fordham Envtl. L. J.* 51, 53 (1994).

⁴⁷ See Polesetsky, *supra* note 29, at 369.

⁴⁸ See Pat Leyden, The Price of Change: The Market Incentive Revolution, 12-*WTR Nat. Resources & Env't* 160, 161 (1998).

⁴⁹ *Alliance of Small Emitters/Metals Industry et al. v. South Coast Air Quality Management District*, 60 Cal. App. 4th 55, 57 (Cal.App. 2d 1997).

⁵⁰ See Leyden, *supra* note 33, at 160.

twofold: to attain high air quality goals while reducing the costs of pollution control.⁵¹ The basis of the tradeable emission program for RECLAIM was to give each existing polluting facility a mass allocation of pollution credits based on emissions during prior years.⁵² Each of the credits allocated represents one pound of emissions of one particular pollutant and has a term of one year.⁵³ New facilities, however, do not receive any emission credits and must purchase the credits from other facilities.⁵⁴ Pursuant to the number of emission credits given to a facility, the polluter's yearly pollution may not exceed the amount of tradeable emission credits that it holds.⁵⁵ The programs flexibility can be seen in the fact that the polluter is then given the choice of how that emissions cap will most efficiently be met. If the polluter is then able to reduce air pollution to levels below the individual cap set for it, it may then sell any excess credits it owns to another facility that has insufficient credits to meet its emission rate limits.⁵⁶ This option allows some facili-

⁵¹ Leading up to the implementation of RECLAIM, the agency in charge of air quality management in the area - the South Coast Air Quality Management District (SCAQMD) – was under pressure to find alternative to reduce air pollution. At the same time the Los Angeles area was experiencing a severe economic recession. See Scott Lee Johnson and David M. Pikelney, Economic Assessment of the Regional Clean Air Incentives Market: A New Emission Trading Program for Los Angeles, 72 Land Econ. 277, 279 (1996). Thus, businesses were seeking more cost effective means of meeting environmental regulations because of the high costs of meeting the requirements of traditional regulations. See Leyden, supra note 33, at 160.

⁵² See Daniel P. Selmi, Impacts of Air Quality Regulation on Economic Development, 13-Fall, Nat. Resources & Env't 386.

⁵³ SCRAQMD Rule 2007(c)(1).

⁵⁴ See Polesetsky, supra note 29, at 386.

⁵⁵ See Johnson and Pikelney, supra note 36, at 281.

⁵⁶ Alliance of Small Emitters/Metals Industry et al. v. South Coast Air Quality Management District, 60 Cal. App. 4th 55, 57 (Cal.App. 2d 1997).

ties to maintain pollution levels at their current rate despite reductions in the overall emissions cap for that facility by buying excess credits from another facility.

While it is apparent how this method potentially saves the polluter in cost, the SCAQMD must also reduce the emission cap on each facility every year in order to fulfill the second goal of the tradeable emission program – attaining high air quality goals.⁵⁷ Reports show that RECLAIM was initially successful in achieving many of its goals. By 1999, six years after the implementation of RECLAIM, results looked promising. RECLAIM had high compliance rates of over 90 percent, and over \$35 million in credits had been traded.⁵⁸ By this year, emissions of nitrogen oxide were expected to be reduced by 17 tons per day, and the projected costs of meeting these reductions was reduced by almost half in comparison to projected costs of meeting the same reduction under the traditional regulatory framework – from \$139 million to \$80 million annually.⁵⁹ Recently, however, the effectiveness of the program has been called into question.

In November of 2002, the Environmental Protection Agency for District Nine (including Southern California) issued a report evaluating the effectiveness of RECLAIM. The evaluation of the program was conducted after the EPA discovered that the price of tradeable emission credits had risen drastically during 2000 and 2001, while at the same time some facilities under RECLAIM had a very difficult time meeting emission stan-

⁵⁷ See Leyden, supra note 33, at 160.

⁵⁸ Id. at 164.

⁵⁹ Id.

dards.⁶⁰ In the EPA's final report, it found different factors that may have led to a decrease in the efficiency of the RECLAIM program. One of the largest problems found with the program is that it was unable to react to certain political and economic externalities that may have driven the price of credits to a point where it became difficult for polluters to afford to trade credits.⁶¹ Even so, the EPA did find that RECLAIM as a whole had been effective in reducing costs for polluters to comply with regulations in large part because "facilities were able to minimize costs by controlling emissions using the least costly methods."⁶²

2. Evaluation of Tradeable Emission Programs

Despite the advantages of tradeable emissions programs, it is clear that they are not a perfect solution to air pollution. Externalities, such as the political and economic climate on the local, state, and national level, can have unforeseen impacts on the effectiveness of such a program. These climates must support pollution reduction requirements and require stringent reductions in overall pollution for such a plan to work effectively.⁶³ A clear baseline of allowable pollution that protects the environment must be set, from

⁶⁰ See Region 9 Air Problems: EPA's Evaluation of the RECLAIM Program in the South Coast Air Quality Management District, U.S. Environmental Protection Agency (Nov. 2002), available at <http://www.epa.gov/Region9/air/reclaim/index.html>.

⁶¹ U.S. Environmental Protection Agency, An Evaluation of the South Coast Air Quality Management District's Regional Clean Air Incentive Market – Lessons in Environmental Markets and Innovation 44 (Nov. 2002), available at <http://www.epa.gov/Region9/air/reclaim/report.pdf>. The EPA's report found the energy demand in Southern California during 2000 had the unforeseen effect of causing a spike in the price of tradeable credits, which in turn put a strain on the market.

⁶² Id.

⁶³ See Leyden, supra note 33, at 161.

which credits can then be traded.⁶⁴ Some commentators consider this type of program to be a quick fix rather than a long term solution to environmental regulation because many tradeable emissions programs fail to provide an incentive for continuous pollution reduction.⁶⁵ In essence, once a polluter has met pollution requirements set by the regulating body, no incentive remains to further reduce pollution – as one commentator states, the “equilibrium point.”⁶⁶ Even when trading programs have succeeded in reducing air pollution by setting pollution caps at levels substantially lower than existing pollution levels, these programs will not encourage further reduction once the equilibrium point has been met.⁶⁷

Another criticism of the program is that they focus more on the concerns of reducing costs for industry while ignoring the health of people who live near polluting facilities. There is a concern that many pollution credits will be traded into poorer neighborhoods resulting in higher emissions in areas with less political power.⁶⁸

B. Mitigation: Programs for Prevention of Loss of Wetlands

⁶⁴ See Ann Powers, Reducing Nitrogen Pollution on Long Island Sound: Is There a Place for Pollutant Trading?, 23 Colum. J. Envtl. L. 137, 161 (1998).

⁶⁵ See David M. Dreisen, Is Emissions Trading an Economic Incentive Program?: Replacing the Command and Control Economic Incentive Dichotomy, 55 Wash & Lee L. Rev. 289, 323 (1998).

⁶⁶ Id.

⁶⁷ Id. at 317.

⁶⁸ See Nina Schuyler, Clean Air Inc.: Do Market-Based Emissions Controls Mean the Poor Breathe the Dirtiest Air?, 15 Cal. Law. 39, 39 (1995). But see Leyden, supra note 33, at 163 (arguing that RECLAIM has not resulted in increased pollution to any particular geographic area).

While the issue of air quality remains a hot topic, rising to the forefront in the environmental community of late is the issue of preventing the loss of wetlands as a result of development. This issue came to the forefront in 1989 when President George Bush declared a “no net loss” of wetlands goal.⁶⁹ This goal was again reaffirmed in 1993 when President Bill Clinton expressed support for an “interim goal of no overall loss of the nation’s remaining wetlands, and the long-term goal of increasing the quality and quantity of the nation’s wetland resource base.”⁷⁰ A variety of federal, state, and local laws and regulations now affect development in wetland areas.⁷¹ The goal of these laws and regulations is similar to the goal of impact fees – the developer should compensate for the development’s burden on the environment. Unlike emission trading, however, wetland mitigation regulations apply principally to new developers as opposed to industrial polluters.

1. Federal Wetland Regulation

The main federal laws that regulate wetland development activities are the National Environmental Policy Act (NEPA) and sections 401 and 404 of the Clean Water Act.⁷² Following the passage of NEPA, which required federal agencies to consider the environmental impact of proposed development, Congress amended the Clean Water Act

⁶⁹ President’s message to the Congress Transmitting the Fiscal Year 1990 Budget, Building a Better America, 25 Weekly Comp. Pres. Doc. 184 (Feb. 9 1989).

⁷⁰ White House Office on Environmental Policy, Protecting America’s Wetlands: A Fair, Flexible, and Effective Approach (Aug. 24, 1993).

⁷¹ See MARK S. DENNISON, WETLAND MITIGATION 1-3 (1997).

⁷² See id. at 33.

(CWA).⁷³ The CWA Section 404 program now provides the primary federal authority for protecting the nation’s wetlands.⁷⁴ Section 404 is jointly implemented and enforced by the United States EPA and the United States Army Corps of Engineers (Army Corps), and requires that “wetland damage due to development should be avoided, lessened, or compensated in descending order of preference.”⁷⁵ Through Section 404, the Army Corps regulates the discharge of dredged or fill materials through a permitting process. Even if the dredge and fill permit is granted, however, the Army Corps’ role in the development process is not over. As mentioned earlier, it is a national goal – a goal adopted by the Army Corps – for a “no net loss of wetlands.”⁷⁶ Therefore, the Army Corps may require changes to the plans of a project and will usually require some wetlands mitigation measure to offset the negative impact of development on wetlands habitats.⁷⁷ Even with the restrictive nature of the regulations, federal agencies and private property owners have traded thousands of acres worth millions of dollars, with the result being preservation of substantial environmentally sensitive areas.⁷⁸ Often times, the Army Corps’ requirements of mitigation are a result of state wetlands mitigation.

⁷³ Id.

⁷⁴ See Dwight Merriam & Catherine Lin, WETLAND REGULATION, 367 PLI/Real 119, at 133-141 for a discussion of the various federal regulatory programs.

⁷⁵ See Joy Roth, Mitigation Banking and the Clean Water Act, Professional Geologist (Oct. 1998).

⁷⁶ See Memorandum of Agreement Between EPA and Dept. of Army Concerning the Determination of Mitigation Under the Clean Water Action Section 404(b)(1), Guidelines, 55 Fed. Reg. 9210, 9211 (Mar. 12, 1990).

⁷⁷ See JUERGENSMEYER & ROBERTS, *supra* note 1, at 539.

⁷⁸ D. Merriam, REENGINEERING REGULATION TO AVOID TAKINGS, 33 Urb. Law 1, at 16.

2. State Wetland Regulation

Before Section 404 dredge and fill permits are even considered by the Army Corps, all necessary state wetland approvals must be secured.⁷⁹ The degree of state wetland regulation by law ranges from minimal to stringent. A number of states have enacted enabling laws that grant the authority to enact wetland protection ordinances to local governments. “Thus, a landowner or developer may need to comply with three layers of regulation from federal, state, and local authorities.”⁸⁰ Even so, participation in state and local wetland mitigation programs will often satisfy the mitigation requirements on which a section 404 permit approval is conditioned.

3. Forms of Mitigation: Wetland Mitigation Banking

The Army Corps and many states have allowed a wide range of mitigation measures, including: (1) increased public access to the area; (2) acquisition of other wetlands to provide enhanced protection, or acquisition with a management commitment; (3) restoration or creation of wetlands, either as general compensation or as replacement for a specific habitat type; (4) indemnification or direct monetary payment for lost wetland

⁷⁹ See 33 CFR 320.4(j). Under the Clean Water Act section 404 program, individual states may adopt and administer their own wetland protection programs, which must be approved by the Army Corps. Once the program has been approved, the state, rather than the Army Corps, may issue section 404 permits directly. The EPA, however, retains veto power to withdraw the state’s section 404 permitting authority if regulatory and statutory requirements are not followed. See DENNISON, *supra* note 56, at 62.

⁸⁰ See Mark S. Dennison and _____ Berry, *Wetlands: Guide to Science, Law, and Technology* 268 (1993).

values; and (5) mitigation banking (compensatory off-site⁸¹ wetlands restoration or creation).⁸²

Approaches (1) and (2) are no longer permitted by states or the Army Corps “unless the goal of increased public access is compensation for lost public recreational opportunities, or the acquisition includes enhancement or assurance of proper management to compensate for lost wetland values.”⁸³ In contrast, the mitigation banking option (option (5)) is increasingly being implemented as the mitigation method of choice. Like air emissions trading, mitigation banking is a market-based regulation program designed to create an alternative means of environmental preservation by combining investment opportunities with environmental concerns.⁸⁴ In the United States today, there are over 100 mitigation banks either operating or proposed.

The basic premise behind mitigation banking is mitigation done outside the area in which the development is planned (off-site mitigation). This type of mitigation allows the developer or a polluter to pay another firm to take over the responsibility for mitigation. This allows a developer whose project is assessed as having a certain number of units of environmental impact to pay a private company, who has already purchased land identified for conservation in the comprehensive plan equal to the units of environmental

⁸¹ Off-site mitigation is mitigation that is outside the area in which the development is planned. See Merriam & Lin, SUPRA.

⁸² See DENNISON, supra note 56, at 291. Restoration and creation of wetlands are components of mitigation banking programs, with restoration of existing wetlands being the method preferred by most environmentalists over the creation of new wetlands. See Royal C. Gardner, Banking on Entrepreneurs: Wetlands, Mitigation Banking, and Takings, 81 Iowa L. Rev. 527, 552 (1996).

⁸³ See DENNISON, supra note 56, at 291.

⁸⁴ See JoAnne L. Dunec, Economic Incentives: Alternatives for the Next Millenium, 12 SPG Nat. Resources & Env't 292, 292 (1998).

impact assessed on the project. The incentive for such a program to the developer is that the private mitigation company may be able to offer this service at a price that is less than what it would cost the developer to pursue other means of mitigation.

The typical mitigation bank involves the creation of wetlands from upland area; but banking has been expanded to include other compensatory activities such as restoration or enhancement of degraded wetlands or providing more stringent protection for wetlands threatened by human activities not subject to regulatory control. There are two key aspects that distinguish mitigation banking from other forms of mitigation programs. First, banking attempts to construct mitigation areas, or banked wetlands, far in advance of anticipated development impacts in an area. This is one of the key attractions to mitigation banking – fully functional bank wetlands will be attained by the time impacts are contemplated. Second, banks are generally large in area to provide this trading service for a number of different contemplated impacts, “as opposed to the typical impact-by-impact process” associated with traditional mitigation programs. Thus, banking consolidates many small fragmented mitigation projects into fewer, much larger contiguous sites.

The general process of mitigation banking is usually initiated when the need for a bank is identified by a governmental planning agency, developer, or other party anticipating future mitigation needs in a given area. A requirement for all banks is that a corporate, non-profit, or governmental “sponsor” acquires or possesses a long-term interest in a large piece of land. The land must then be suitable to support the anticipated functional needs of a wetland habitat.

There are typically four types of wetlands mitigation banks, which are classified on the basis of the nature of the sponsors and credit users or purchasers. The first type is

typically known as a single user wetland mitigation bank, where the bank is developed and exclusively used by “a single public or private entity to provide for its own mitigation needs.”⁸⁵ The next type of bank is known as a public/commercial, or public/private type bank. These are owned by the government and sell mitigation credits to the general public.⁸⁶ Another type of mitigation bank is known as a private/private, or private/commercial (entrepreneurial) bank. These banks sell mitigation credits to the general public, but are privately owned and operated.

Banks are designed to either replace anticipated functional losses within a specified trading area or replace identified historical functional losses with an area. The regulating agency then values the bank by quantifying the created or restored wetland functions in terms of “credits.” The calculation of these credits may be done simply by the amount of acreage and the wetland type, or by quantifying habitat, physical and biological functions, and social values.⁸⁷ The total credits allocated to a bank are based on the difference in the quality of the ecosystem before and after the bank is established. The regulating agency then undertakes a substantial permitting process, establishing the bank’s goals, ownership, location, size, wetland and/or other resource types included,

⁸⁵ See Shirley J. Whitsitt, Wetlands Mitigation Banking, 3 *Envtl. Law.* 441, 454 (Feb. 1997).

⁸⁶ Id. at 455. An offshoot of the public/private type bank can be seen in the state of Florida. In this variation, it is possible for the state to own the land that the bank is to be created on, but arises when the state lacks the funding or the impetus to administer the bank. In this situation, even though the state owns the land, a private company can put up bids for the credits, and then the state and the private administering company split the mitigation proceeds resulting from the sell of credits. Phone conversation on 3/25/03 with Sheri Lewin, employee of “Mitigation Marketing.” E-mail – sheri@mitigationmarketing.com; Phone - 407-481-0677.

⁸⁷ See Marjut H. Turner and Richard Gannon, Mitigation Banking, in *WATERSHEDS: Water, Soil, and Hydro-Environmental Decision Support System 1* (1999), available at <http://www.agiweb.org/legis105/tpgjoy.html>.

trading area, crediting methods and accounting procedures, performance and success criteria, monitoring and reporting protocol, contingency plans, financial assurances, long-term responsibility, and detailed construction plans.

The next step involves the projection of anticipated, unavoidable impacts of development, through which applicants can purchase credits from the mitigation bank to make up for the projected wetlands losses (or “debits”) that the development will create.⁸⁸

4. Evaluation of Existing Wetlands Mitigation Banking Programs

Depending on who you are speaking to, many believe that wetlands mitigation programs are helping to lay the framework for future market-based regulations, and have innumerable positive aspects. On the other hand, some believe that this type of mitigation bank is unsuccessful in mitigating the harms created by new development. However, it is clear that successful mitigation banks offer larger, ecologically superior wetland areas, an attractive alternative to “postage-sized” on-site mitigation projects, which often fail.⁸⁹ Other advantages to mitigation banking can be seen from the perspective of the developer. By purchasing or using existing mitigation credits, they are able to save the time and expense involved in designing, implementing, and maintaining specific mitiga-

⁸⁸ Id.

⁸⁹ See Whitsitt, supra note 69, at 459-60. Whitsitt describes four reasons for on-site mitigation failure: (1) the isolated and fragmented nature of replacement wetlands which makes them vulnerable to functional degradation; (2) the lack of a federal regulatory requirement that permitted developers must maintain successful mitigation sites; (3) the lack of sufficient technical expertise by regulatory agencies to evaluate a large number of diverse mitigation plans adequately; and (4) the lack of regulatory agencies to oversee and enforce mitigation construction and to conduct site monitoring. Id. Even so, many environmentalists continue to argue that off-site mitigation does not confront the importance of wetland functions to the particular site. To develop that site, they might argue, is to destroy the wetland’s relationship to other wetlands, sources of ground water and surface water, and adjacent uplands. See Dennison and Berry, supra note 64, at 301.

tion plans for each project.⁹⁰ On the regulatory side, mitigation banks are advantageous to state and local authorities because they allow for increased efficiency of review and compliance monitoring.⁹¹ Others see mitigation banks as superior to other types of mitigation because they generally include greater portions of viable ecosystems for fish and wildlife, they remove from the reach of developers the aquatic resources provided by wetlands, and, perhaps most importantly, “results in mitigation being performed in advance of, rather than subsequent to, wetland conversion projects.”⁹²

Advance mitigation has two principal benefits. First, advance mitigation eliminates concerns that once a permit is granted, mitigation may never take place. Perhaps more importantly, however, mitigation banking shows promise as a step towards moving past a “no net loss” attitude and actually realizing a gain in wetlands.⁹³

III. Joining Forces: Linkage and Environmental Mitigation Fees

Environmental linkage programs, which combine the principles of market-based regulation, such as those underlying tradeable emissions and wetlands mitigation banking, with the principles of impact fees, may provide economic incentives for developers to actually increase habitat conservation, as opposed to merely maintaining the ecological status quo. Such a program could be packaged in an environmental mitigation fee. Al-

⁹⁰ Id. at 301.

⁹¹ See Robert W. Brumbaugh, Wetland Mitigation Banking: Entering a New Era? at 4, available at <http://www.wes.army.mil/el/wrtc/wrp/bulletins/v5n3/brum.html>.

⁹² Id.

⁹³ See Whitsitt, supra note 69, at 477.

though some local governments have attempted to establish similar “linkage fees” in order to finance other “social” or “soft” infrastructure needs, a more overarching plan is needed in order to establish a program that is likely to harness market forces to make environmental protection possible while at the same time limiting available attacks on such a program. The purpose of this section of the article is to examine the use of an environmental mitigation fee using the implementation standards that have guided the use of impact fees while at the same time attempting to guide environmental regulation to a more market-based approach.

The goal of an environmental mitigation fee should be to move away from the on-site regulatory framework, towards a more broad-based and long-range approach to environmental protection. Historically, mitigation of the impact of development and pollution has been addressed on a case-by-case basis.⁹⁴ Each individual development or polluting facility has been required to minimize its own impact on site, or mitigate its impact through some regulatory approved means. As we have seen from earlier, this can result in fragmented scraps of habitat that may not assure an adequate critical mass, and it may not be the best place for the habitat in the long term.⁹⁵ Through the use of an environmental mitigation fee, solutions to many of these problems could be more readily available. To do this, however, requires a long range planning of environmental goals. For instance, in the context of habitat preservation, critical and intact habitat must be identified early on. Identified land perhaps furthest away from being developed can be purchased, thus preventing fragmentation of habitats. We have seen this to some extent with wetlands miti-

⁹⁴ See Arthur C. Nelson, James C. Nicholas, and Lindell L. Marsh, Environmental Linkage Fees are Coming, 58 Planning 1, 2 (1992).

⁹⁵ Id. See also Infra n. 72 and accompanying text.

gation banking, but an environmental mitigation fee program would need to be more far-sighted than those banking operations in effect now. Just as long range plans play an important role in terms of habitat mitigation, in the pollution control context, long range pollution prevention and clean up plans help establish the validity and success of an environmental mitigation fee program.

As we have seen with impact fees, however, environmental mitigation fees would need very careful impact analysis in order to make the plan feasible. The comprehensive plan guides the assessment of impact of any development or polluting activity. Government regulators would then determine the units of environmental impact associated with a new or existing project and multiply the number of units by a price per unit. Again, however, it is instructive to look at the framework for the impact fee as a guide. For instance, polluters would probably object to paying a fee for pollution that is below the regulatory limit already established for their facility, just as the citizens of Broward County, Florida attacked the land use fee, claiming that the fee was an unconstitutional tax.⁹⁶ Assuming that the mitigation fee imposed does not exceed the cost of regulation, however, the above formula would then determine the environmental mitigation fee for that project. At this point, the developer would have three choices. First, the polluter or developer can simply pay the environmental mitigation fee and proceed with the project. The funds derived from these fees would be used to purchase habitat that has been identified in the comprehensive plan or for pollution prevention and clean up projects also identified in a pollution control comprehensive plan. Second, the developer can reduce

⁹⁶ See *infra* p. 6. The courts, as stated earlier, struck down this impact fee basing its decision on the fact that the fee exceeded the county's cost of regulation, "which was supposed to justify their collection."

the environmental impact of the project to a point where the activity is still profitable, and thus reduce the amount of payment required by the mitigation fee. Third, the polluter can pay another firm to mitigate the impact elsewhere. The last option is very similar to tradeable emissions programs and wetlands mitigation programs we have seen earlier. However, there are significant differences between these existing regulatory programs and an environmental mitigation fee.

One of the main differences between an environmental mitigation fee program and programs that are already in place is that existing programs do not incorporate a fee for the impact of existing pollution or development. Whereas a tradeable emissions program might set a cap based on what is considered an acceptable level of pollution, and wetlands mitigation fees do not take into account already decimated wetlands, an environmental mitigation fee would set the baseline at zero. That is, all pollution and development, whether or not legal under the current regulatory framework, is assessed based on the societal impact to the environment. This would force polluters or developers to consider the environmental impact when designing a project.

Market forces would take over, however, because the polluter or developer is then allowed to pay another firm to take over the responsibility for mitigation and for complying with the comprehensive plan. The incentive for this is that a private mitigation company may be able to offer this service at a price that is less than the environmental mitigation fee.

A. Legal Ramifications of Environmental Mitigation Fees as an Option

While this type of program doesn't at first glance appear to be anything other than an exercise of the police power, it is important to understand that mitigation fee program must be able to avoid the label of an unconstitutional tax. To avoid this label, it is necessary to apply the same type of analysis as seen in the derivation of impact fees. Therefore, it will be necessary for an environmental impact fee program to meet certain standards, of which one of the more important is the dual rational nexus test. In terms of environmental mitigation fees, the idea is in essence the same as with the impact fee – development can be charged a proportionate share of the impact cost of the development on the environment, just as they are now legally charged under impact fee programs for impacts that development has on roads, parks, schools, and other hard infrastructure items. They cannot be charge any more than their proportionate share, however. The next step is to ensure that a regulatory program is established so as to accomplish the goals for which it is collected.

For the limited number of jurisdictions that have adopted an environmental fee mitigation program, the second prong of the dual rational nexus test is the one in which planning is lacking. In order for a mitigation fee program to function as it should, long range plans and goals should be established. The dilemmas encountered when such a plan is not in place can be seen in the Connecticut Supreme Court case of *Branhaven Plaza v. Inland Wetlands Comm'n of Branford*.⁹⁷

In *Branhaven*, a developer wanted to build a convenience store on a parcel of land with some very minor and very small wetland areas. Initially, the developer offered to build a bigger wetland offsite. The local government agreed, but then changed their

⁹⁷ 251 Conn. 269, 740 A.2d 847 (1999).

minds over fears that there were flood control problems with the proposal. In response to this, the developer offered to spend \$25,000 to construct an off-site wetland and to donate to the local government \$25,000 worth of engineering services. The local government agreed, but many people in the community objected to the building of the convenience store on the grounds that only paying money to be able to destroy the on-site wetlands was an inadequate and unacceptable way of satisfying the mitigation requirements. The court ended up striking down the fee, but not because they did not want to allow for off-site mitigation or the imposition of a mitigation fee. The court struck down the fee on the basis that there were no comprehensive plans and goals for how the money was to be spent. Neither the developer, the planning commission, nor the local government authority had devised a proposal for the creation of new wetlands or the enhancement of existing wetlands. Thus explains the importance of creating a comprehensive plan and long range goals for spending fees collected for environmental mitigation.

B. Implementing the Program

The first and perhaps most important step in the implementation of an environmental mitigation fee program is the establishment of a comprehensive environmental or pollution control plan as part of the localities comprehensive plan. All implementing actions would then be in accordance with a comprehensive plan. In preparing such a plan, local governments should conduct extensive studies to accurately reflect the impact that proposed development might have on the environment.⁹⁸ After conducting the study,

⁹⁸ See Thomas W. Ledman, Local Government Environmental Mitigation Fees: Development Exactions, the Next Generation, 45 Fla. L. Rev. 835, 865 (1993).

local governments should develop “a set of standards that reflect the need for, the nature of, and the extent of the mitigation fee. Standards should take existing and desired environmental levels of service into account . . . by quantify[ing] the status of an environmental characteristic.”⁹⁹

⁹⁹

Id.