PERPETUAL STEWARDSHIP CONSIDERATIONS FOR COMPENSATORY MITIGATION AND MITIGATION BANKS

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I. INTRODUCTION

Half of the world's wetlands were lost in the past century.[1] Twenty percent of the world's freshwater fish are extinct, threatened, or endangered.[2] In addition, dams and canals fragment almost sixty percent of the world's largest rivers.[3] The United States alone is losing natural land at an alarming rate, with over two million acres of land lost every year to development.[4] According to the United States Geological Survey, Louisiana has lost 1,900 square miles of wetlands in the past seven decades—an area larger than the state of Rhode Island.[5] Draining the wetlands to make way for roads, malls, beach communities, marinas, and condominiums has depleted the shoreline.[6]

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1. World Resources Inst., *New Report Reveals Widespread Decline in World's Ecosystems*, http://archive.wri.org/item_detail.cfm?id=77&section=newsroom&page=newsrelease_text&z (Apr. 17, 2000).

2. *Id.*

3. *Id.*

4. Land Trust Alliance, *Conserving Your Land Protects Communities*, http://www.landtrustalliance.org/conserve/have-land-to-save (accessed Apr. 24, 2009) [hereinafter *Conserving Land*].

5. David Usborne, *The Independent, New Orleans: Loss of Wetlands Opens Floodgates to Disaster*, http://www.independent.co.uk/news/world/americas/new-orleans-loss-of-wetlands-opens-floodgates-to-disaster-505039.html (Sept. 1, 2005).

6. *Id.*

Louisiana, in fact, loses twenty-five square miles of coast every year.[7]

General Robert Flowers, who led the United States Army Corps of Engineers until 2004, is concerned by the loss of the "natural storm protection" along the coast of Louisiana.[8] General Flowers noted the need to build hurricane protection due to the loss of wetlands—particularly, a long-term solution that will replenish Louisiana's wetlands to its fullest extent.[9]

According to the Land Trust Alliance, "current rates and patterns of land consumption, if left unchecked, will result in wide-scale loss and fragmentation" of natural areas within the next twenty years.[10] The "fragmentation of forest habitat into smaller patches separated by agricultural activities or developed land increases the 'edge effect' and promotes the interaction among pathogens, vectors, and hosts."[11] Certain land-use practices, such as overgrazing, land conversion, fertilization, and the use of agricultural chemicals, can accelerate or exacerbate the spread of invasive species by enhancing the growth of exotic and/or invasive plants and animals.[12] Moreover, introduction of invasive species on agricultural and urban lands can reduce water quality and water availability for native fish and wildlife.[13] Such plants and animals can also alter fish and wildlife habitat, contribute to decreases in biodiversity, and create health risks to both livestock and humans.[14]

Saving land from development, on the other hand, is often the best way to curb government spending and avoid increases in property taxes.[15] For example, it is cheaper to protect clean water at its source than to build expensive water treatment facilities.[16] New York City alone saved five billion dollars in construction

7. *Id.*
8. *Id.*
9. *Id.*
10. *Conserving Land*, *supra* n. 4.
11. U.S. Envtl. Protec. Agency, *EPA's 2008 Report on the Environment*, 4–14, http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=190806 (accessed Apr. 24, 2009) [hereinafter *EPA Report*].
12. *Id.* at 4-13.
13. *Id.* at 4-14.
14. *Id.*
15. Land Trust Alliance, *LTA Fact Sheet, Economic Benefits of Open Space Protection*, http://www.conservemc.org/Eco_Bens.pdf (accessed Apr. 24, 2009).
16. *Id.*

costs simply by purchasing conservation lands around its reservoirs in the Catskill Mountains.[17] Regardless, many jurisdictions believe that they will profit from the property taxes on new subdivisions, but this ignores the true cost of providing services to a typical subdivision.[18] The reality is that it costs between $1.04 and $2 for every dollar of tax revenue to provide schools, roads, police, water, and storm water management.[19] This does not include the loss of trails and natural areas that new homebuyers value above many other amenities.[20]

These are just some of the reasons why numerous agencies and individuals have responsibilities for managing and protecting land in the United States.[21] Between thirty and forty percent of land in the country is owned or managed by public agencies.[22] For instance, the Department of the Interior manages twenty percent of all land in the United States.[23] Yet, despite this tremendous stewardship charge, federal agency budgets for land management and conservation programs have decreased in recent years.[24]

The remaining sixty to seventy percent of the nation's land is managed by private owners under a variety of federal, state, and local laws.[25] Private land trusts have grown rapidly, both in number and in the amount of acreage they preserved.[26] The 2005 National Land Trust Census broke all previous records for the num-

17. *Id.*
18. *Id.*
19. *Id.*
20. *Id.*
21. *EPA Report*, *supra* n. 11, at 4-3.
22. *Id.*
23. Lynn Scarlett, Heritage Lecture, *Moving Beyond Conflict: Private Stewardship and Conservation Partnerships* (Sept. 27, 2002) (available at http://www.heritage.org/Research/EnergyandEnvironment/hl762.cfm).
24. U.S. Fish & Wildlife Serv., Div. of Budget, *FY 2009 FWS Budget Proposal* 58–63, http://www.fws.gov/budget/2009/2009%20GB/2009%20Budget%20Request%20consolidated.pdf, 58–63 (accessed Apr. 24, 2009). The budget includes $289.7 million for cooperative conservation programs funded in the FWS budget, a decrease of $2.9 million compared to 2008. *Id.* These partnership programs emphasize local input and cooperative decision making to achieve land management and resource goals. Consistent with 2008 congressional action, no funding is proposed for the Landowner Incentive or the Private Stewardship Grant programs in 2009. *Id.*
25. *EPA Report*, *supra* n. 11, at 4-3.
26. Land Trust Alliance, *Private Land Conservation in U.S. Soars* (Nov. 30, 2006) (available at http://www.landtrustalliance.org/about-us/land-trust-census/2005-census-press-release.doc).

ber of acres conserved.[27] Indeed, in just five years, the total acreage conserved by local, state, and national land trusts doubled to thirty-seven million acres—an area sixteen-and-a-half times the size of Yellowstone National Park.[28] The pace of conservation by local and state land trusts more than tripled over the past decade.[29] The number of land trusts increased thirty-two percent from 2000 to 2005.[30] The West is the fastest-growing area in acres conserved and land trusts created.[31] Further, professionalism of land trusts is also increasing by securing larger annual budgets and stewardship endowments, and through a voluntary national accreditation program, which implements more stringent rules of conduct.[32]

Merely setting the land aside, however, is not sufficient to protect native resources. Active long-term stewardship is needed. Otherwise, conservation values can be rapidly lost to invasive species, trespass, and other unauthorized or destructive uses, as well as urban encroachment, habitat conversion, and a myriad of other threats.[33] Unless a long-term management or perpetual stewardship program is put in place to ensure the active protection of natural resources, lands acquired for those resource values will not be fully protected.[34] In other words, "acquisition does not equal protection."[35]

Conservation and mitigation banking ("ecobanking," when combined) is an "innovative and creative tool to assist in global conservation efforts to protect threatened and endangered species and their habitats in perpetuity."[36] Banks, by their very nature,

27. Land Trust Alliance, *2005 National Land Trust Census*, http://www.landtrustalliance.org/about-us/land-trust-census (accessed Apr. 24, 2009).

28. Rob Aldrich & James Wyerman, Land Trust Alliance, *2005 National Land Trust Census Report* 3 (Nov. 30, 2006) (available at http://www.landtrustalliance.org/about-us/land-trust-census/2005-report.pdf).

29. *Id.*

30. *Id.* (totaling 1,667 land trusts).

31. *Id.*

32. *Id.*

33. Sherry Teresa, *Financial Considerations*, in *Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems* 127 (Nathaniel Carroll, Jessica Fox & Ricardo Bayon eds., Earthscan 2008).

34. Sherry Teresa, Lecture, *Lessons Learned from the Trenches: A California Habitat Manager's Perspective* (TRB Conference, Washington, D.C., Jan. 2008) (available at http://www.cnlm.org/cms/images/stories/cnlm_docs/ref_library/teresanmbc2008fin.pdf).

35. *Id.*

36. Teresa, *supra* n. 33, at 127.

are lands established for the permanent protection of native species and their habitats.[37] For conservation banks to compensate for loss of species and their habitats successfully and perpetually, the banker, the permitting agencies, and the long-term steward must reach an agreement.[38] This agreement should cover the credit release schedule, development issues, long-term management, financing, operation, and funding for the bank.[39] Yet current practices may jeopardize the long-term success of these programs.

So, how does one identify and develop a long-term stewardship program to protect those resources? And, how does one determine what an effective stewardship program will cost today and in future decades? This Article describes the evolution of the habitat stewardship process in relation to mitigation, and it discusses long-term stewardship elements in the context of the new Federal Rules for Compensatory Mitigation for Losses of Aquatic Resources (Mitigation Rules).

II. LONG-TERM STEWARDSHIP

Stewardship is the wise use, management, and protection of the human, physical, ecological, and financial resources needed to ensure the integrity of conservation lands for future generations.[40] Stewardship is a larger, more encompassing term than habitat management or ecosystem management. Ecosystem management strives to use the best available information and science

37. *Id.*

38. *Id.*

39. *Id.* Conducting a thorough due diligence is the first step for a banker and bank steward to ensure the maximum opportunity for success. Due diligence is the assembly of all relevant information that allows assessment of the feasibility of perpetual stewardship of a mitigation project and helps to ensure its long-term financial stability. The elements of due diligence include but are not limited to: (1) reviewing and researching title and all related title issues such as mineral rights, encroachments, easements, access, taxes, and other authorized uses of the property; (2) permit conditions; (3) adjoining land uses; (4) legal issues; (5) hazards; (6) reporting requirements; (7) habitat monitoring and management activities; (8) site conditions, for example biotic resources, cultural resources, and invasive species present; (9) divisions of responsibilities; and (10) past and future public uses. The time and resources needed to conduct due diligence can be exhaustive.

40. Teresa, *supra* n. 34.

to recognize and support the connectedness of life through its parts (biotic and abiotic), patterns, and processes.[41]

Many view stewardship as having religious connotations, and it has long been the stepchild of conservation programs. At best, it has been an afterthought or an activity funded with leftover dollars in acquisition budgets. Even today, some of the largest conservation organizations in the United States raise millions of dollars specifically for acquisition programs and little (if any) money for the long-term maintenance and stewardship of those preserves.

Worse yet, acquired lands can be turned over to public agencies with no long-term stewardship funding. The frequency with which compensatory mitigation lands and mitigation or conservation banks are turned over to public agencies for long-term management without any funding is disturbing.[42] These new acquisitions strain already thinly stretched local and state government budgets.[43] In essence, the public is subsidizing private development projects.

Only recently has there been a national attempt to develop complete and credible mitigation plans that truly capture the long-term stewardship needs of a mitigation property and to assess its long-term funding requirements. Defining a long-term stewardship plan is half art and half science. A good stewardship plan should include the following elements: (1) an appropriate planning process that incorporates multiple stakeholders' interests; (2) the baseline conditions of the site; (3) clearly articulated, *measurable* and *realistic* goals, objectives, and strategies; (4) evidence of familiarity with the site; (5) a timeframe of at least

41. U.S. Dept. of Agric., Forest Serv., *A Framework for Ecosystem Management in the Interior Columbia Basin* 4 (Richard W. Haynes, Russell T. Graham & Thomas M. Quigley eds., 1996). Ecosystems are dynamic, evolutionary, and resilient. *Id.* They can be viewed spatially and temporally within organizational levels. *Id.* They have biophysical, economic, and social limits. *Id.* However, ecosystem patterns and processes are not completely predictable. *Id.*

42. U.S. Envtl. Protec. Agency, *Mitigation Banking Factsheet*, http://www.epa.gov/owow/wetlands/facts/fact16.html (accessed Apr. 24, 2009); U.S. Fish & Wildlife Serv., *Conservation Banking*, http://www.fws.gov/endangered/factsheets/conservation_banking.pdf (accessed Apr. 24, 2009). A mitigation bank is established for wetlands, while a conservation bank is established for endangered species.

43. Jennifer Steinhauer, *In California Budget Deal, A Savvier Schwarzenegger Emerges*, N.Y. Times A11 (Sept. 20, 2008) (available at 2008 WLNR 17890994). In 2008, the state of California alone was in a fiscal budget deficit of $14.5 billion. *Id.*

five years that includes mechanisms for updates; and (6) evidence of reviews and approvals.[44] Management components generally include landscape connectivity to reduce fragmentation, changing trajectories of habitat succession, reduction of invasive exotic species, species or habitat enhancement programs, addressing and managing for climate change and habitat succession, and strategies for allowing the public to use and enjoy these resources without harming them.

Much thought and research goes into defining and articulating management goals and desired outcomes. While engendering the confidence of resource agencies and the public, conservation programs typically strive to achieve no net loss of species or habitats and to foster sustainable, functioning ecosystems. But the overarching goal is to develop biologically and economically sustainable projects.[45] To that end, stewards must identify their management purposes. A stewardship program that has simple or trite objectives like "managing for the greatest biodiversity" is not a well thought-out stewardship program. Frequently, the greatest biodiversity can be found in the most unstable or transitional systems, and this may not be the best objective for a site.

A long-term stewardship plan should also incorporate adaptive management.[46] Adaptive management acknowledges that scientists and land managers do not know everything about how ecosystems function and therefore cannot be sure how best to manage them. One cannot take a snapshot in time and expect the natural system to be restored to that level or to remain at a fixed level over time. Thus scientists and land managers must remain flexible and open to changing course when necessary.[47]

The goal of adaptive management is to learn from ongoing activities in order to reduce the uncertainty about the impact of future actions.[48] "Adaptive" refers to learning about ecological and

44. 33 C.F.R. § 332 (2008); U.S. Envtl. Protec. Agency & U.S. Army Corps Engr., *Wetlands Compensatory Mitigation Rule*, http://www.epa.gov/owow/wetlands/pdf/MitigationRule.pdf (accessed Apr. 24, 2009).

45. Envtl. L. Inst., *ELI Research on Compensatory Mitigation*, http://www.eli.org/Program_Areas/WMB/index.cfm (accessed Apr. 24, 2009).

46. U.S. Dept. Int., *What Is Adaptive Management*, http://www.doi.gov/initiatives/AdaptiveManagement/whatis.html (accessed Apr. 24, 2009).

47. *Id.*

48. *See id.* (explaining that Adaptive Management helps "science managers maintain flexibility in their decisions").

social systems as they are managed and dealing with *changes* over time.[49] Learning is not simply a by-product of the management process; it is an integral objective and a process of testing and evaluating results. As Aldo Leopold wrote, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[50] The trick is finding what is right.

III. FINANCIAL ASSURANCES

Financial management is just as critical as biological management is of ensuring perpetual stewardship of acquired lands. Stewardship plans must be cost-effective for the project proponent or governmental agency and must efficiently use the public's funds. However, estimating land management costs in perpetuity is extremely challenging. Nearly all costs and revenues associated with stewardship are dependent on the location of the lands being conserved.[51] There are no typical costs, rules of thumb, averages, or set rates.[52] Every input is driven by the marketplace, the requirements for that specific parcel of land, and the permit or agreement requirements.[53]

The Property Analysis Record (PAR), developed by the Center for Natural Lands Management (CNLM), is one tool that has been used widely to estimate tasks and costs associated with long-term stewardship of mitigation and conservation lands, to identify various bank costs, to plan for phased projects and banks, and to determine an endowment amount.[54] The PAR facilitates communication by translating biological and protection requirements

49. U.S. Dept. Int., *Message from the Secretary*, http://www.doi.gov/initiatives/AdaptiveManagement/TechGuide/secretarymsg.pdf (accessed Apr. 24, 2009).

50. Aldo Leopold, *The Land Ethic*, in *Sand County Almanac* (1948) (available at http://home.btconnect.com/tipiglen/landethic.html).

51. Leonard Shabman & Paul Scodari, *The Future of Wetlands Mitigation Banking*, Choices Mag. (1st Q. 2005) (available at http://www.choicesmagazine.org/2005-1/environment/2005-1-13.htm). Other causes of variation in stewardship requirements include: the types and location of habitats; creation, preservation, or manipulation of habitats; the legal entity involved; management constraints, styles, and budgets; agreements made between all parties to the bank; and the standards and mission of the steward.

52. *Id.*

53. *Id.*

54. Ctr. for Nat. Lands Mgt., *Property Analysis Record*, http://www.cnlm.org/cms; *select* PAR3 (accessed Apr. 24, 2009).

into the common language of currency.[55] It also assists in conducting due diligence by identifying all stewardship task categories, plan management tasks, and costs for individual projects.[56] In essence, the PAR becomes the justification for long-term funding.

Fortunately, the Mitigation Rules recognize the important need for stewardship of wetlands, such as compensatory mitigation, mitigation banks, and in-lieu fee programs.[57] These rules specifically require a maintenance plan, long-term management plan, and an adaptive management plan.[58] They also require ecological performance standards.[59]

IV. LONG-TERM STEWARDSHIP UNDER THE NEW RULES

A. Biological Monitoring Reports

The new Federal Rules for Compensatory Mitigation for Losses of Aquatic Resources state that biological monitoring reporting should not last fewer than five years and may be extended in certain aquatic resources with slow growth rates.[60] However, our knowledge of restoration and the ability to compensate for loss of ecological function are still in the infancy stages. The United States Fish and Wildlife Service found that there was a significant collapse of function for most wetland mitigation sites.[61] While this study was conducted more than ten years ago, little information exists that shows greater success today in wetland restoration.[62] We know that vernal pools and other arid region ephemeral wetlands may reach aquatic status only once during a five-year time period, but it is not known if that system might fail five, ten, or fifteen years after restoration attempts. Biological

55. *Id.*
56. *Id.*
57. 33 C.F.R. at § 332.
58. *Id.*
59. *Id.*
60. *Id.*
61. Sherry Teresa & Brenda C. Pace, Seminar, *Planning Sustainable Conservation Projects: Large and Small Scale Vernal Pool Preserves* (Sacramento, Cal., Feb. 1996), in *Ecology, Conservation, and Management of Vernal Pool Ecosystems—Proceedings from a 1996 Conference* 255 (Carol W. Witham, Ellen T. Bauder, Denton Belk, Wayne R. Ferren Jr. & Robert Ornduff eds., Cal. Native Plant Socy. 1998) (citing June DeWeese, U.S. Fish & Wildlife Serv., *Internal Report* (1994)).
62. Teresa, *supra* n. 34.

monitoring should require some appropriate benchmarks for the permitting agencies in perpetuity. With the advent of electronic files, document storage is no longer an issue; and this information would be available to measure success at restoring and preserving wetland systems and wetland functions quantitatively.

B. Long-Term Funding Mechanisms

Under the new Mitigation Rules, all compensatory mitigation projects and banks must have a long-term funding mechanism to ensure minimal compliance with the long-term protection instrument and an annual reporting of the financial assurances and account balances.[63] Whenever a long-term protection instrument for third-party mitigation is placed over a piece of real property as part of a compensatory mitigation program, the long-term management funds for monitoring compliance with the conditions of the protection instrument must be identified and approved but do not have to be in place at the time the instrument is recorded.[64] Yet, in the case of compensatory mitigation project sites owned by public entities, "it may not be necessary to include provisions for the financing of any required long-term management if, for example, a formal, documented commitment from a government agency is provided (i.e., a stewardship commitment)."[65]

Governmental agencies should not be treated differently than nongovernmental organizations and private land managers that must come up with the funds. In difficult economic times, funding for essential services of public health and safety such as police and fire departments will always trump funding for natural lands stewardship, and rightly so. The preamble to the Mitigation Rules acknowledges that identifying adequate financing at the time of permit issuance may be problematic since agency funding can vary depending on budget cycles.[66] But this recognition simply underscores the need for formal, documented commitments instead of empty promises and unfunded mandates. These double standards are unacceptable. What mechanism is proposed to en-

63. 40 C.F.R. §§ 230.93(n), 230.98(i)(3) (2008).
64. 73 Fed. Reg. 19594, 19649 (Apr. 10, 2008).
65. *Id.*
66. *Id.*

sure that a governmental agency that agrees to accept the real property interest in any compensatory mitigation program has the financial capability for long-term management? What control is provided to the agency's local resource manager to ensure that adequate annual funding is received? Public and government agencies need to be held to the same obligations and rules as any private entity, and they should be required to prove that they have a *permanent* funding source to manage these sites adequately in perpetuity.

C. Financial Assumptions

A major concern in the application of the new Rules regarding financial assurances is the level of discretion left to the district engineer. Flexibility is key to any successful program, but too many critical decisions with long-term ramifications may be left to the district engineer.[67] The Mitigation Rules suggest the following:

> where long-term financing for long-term management of compensatory mitigation projects is necessary, district engineers *should* consider the need to make inflationary adjustments and certain financial assumptions. For example, district engineers *may consider* total return assumptions and capitalization rates in the case of endowments, or Consumer Price Index adjustments in the case of annual payments.[68]

However, any additional long-term management obligations taken on at a later time (e.g., upon the sale of credits or upon the achievement of short-term performance standards) can be funded at the time the additional obligations are accepted. The funding mechanism must be established in an agency-approved funding agreement, and that agreement must include provisions that address inflationary adjustments and other contingencies.

Unfortunately, not many district engineers have the knowledge or access to financial managers to understand total return assumptions or capitalization rates. Considering that $350 today has the same buying power as $40 in 1950, the effects of inflation

67. 33 U.S.C. § 1344 (2000).
68. 73 Fed. Reg. at 19649 (emphasis added).

cannot be ignored.[69] Thus, adequately securing these funds for perpetual stewardship requires more formal guidance.

Endowments can provide long-term assurances and income for stewardship activities.[70] However, without sound financial assumptions, such as keeping the endowment current with inflation, they may become "wasting endowments" that are not a perpetual funding source.[71] To ensure proper use and reporting of the funds, endowments should be managed, invested, and accounted for using standard rules and accounting principles with annual independent audits and transparent reporting formats.

The endowment account should be fully funded within three to five years of the first credit sale and/or recording of the conservation easement. Endowment accounts for mitigation banks should be funded at a rate of 75–150 percent of the credit amount from the initial credit sales until the total target amount (including Consumer Protection Index (CPI) adjustments) of the endowment account is fully funded. Any unfunded endowment amounts are due at the target date, similar to a mortgage balloon payment. The initial and capital amount (I&C), or annual stewardship budget, should be paid in cash annually, adjusted by the CPI, until the endowment is fully funded. The endowment must be fully funded by the target date or bankers are in violation of the banking agreement and subject to penalties.

The I&C (up-front annual stewardship funding) should be paid up-front or, at a minimum, annually for the first three years. Allowing a banker a period of time longer than three to five years to fund an endowment fully is not recommended. In addition, funding should not be tied to a special district, homeowner association's fee, or other funding source whereby that entity may discontinue payments with a vote. A formal management and funding agreement between the project proponent, permitting agency,

69. In 2007, $350 would yield the same buying power, according to the Consumer Price Index (CPI), as $40.68 would in 1950. This calculation is based upon the annual average CPI in 1950 of 24.1, and that in 2007 of 207.342. *See* U.S. Dept. Lab., *Table Containing History of CPI-U U.S. All Items Indexes and Annual Percent Changes from 1913 to Present*, ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt (updated Apr. 15, 2009) (listing the CPI values for every year from 1913 through the present).

70. 33 C.F.R. at § 332.7(d)(3).

71. Teresa, *supra* n. 34.

and habitat manager should be a component of all mitigation permits.[72]

Realizing that a considerable outlay of capital is needed to establish a mitigation bank and that credit sales may be slow in the beginning, the CNLM has worked with bank sponsors to allow them to pay the endowment over a three to five-year period.[73] The bankers provide an I&C that allows funding habitat management until the endowment is fully funded. The I&C is adjusted by the CPI for that area annually.

But there are certain drawbacks to this program, including: a potential loss of income earned from the endowment between the time of the initial payment and it being fully funded; failure to meet payment schedules; lack of cooperation from permitting agencies when bankers fall behind on their payments; the steward's lack of knowledge of credit sales when tied to endowment contributions; and events of bankruptcy of the banker such as in the case of the Environmental Trust in San Diego.[74]

D. Tax Implications of Real Estate Instruments

The new Mitigation Rules state that their goal "is to ensure permanent protection of all compensatory mitigation project sites."[75] Specifically, they state that "compensatory mitigation project[s] must be provided long-term protection through real es-

72. Suggested language may read as follows:

> For the first three to five years, the Sponsor shall make deposits into a non-wasting endowment fund held by (entity X) in order to ensure long-term maintenance of the Bank property in perpetuity (Management Endowment Fund). The total amount of endowment to be funded is shown in Exhibit X. For any year the endowment is not fully funded, this total endowment shown in Exhibit X shall be adjusted annually, beginning on January 1, 20__, and upon each one-year anniversary thereafter (each such date, beginning January 1, 20__, is referred to hereinafter as an "Adjustment Date"), by a percentage equal to the percentage increase, if any, in the Consumer Price Index (CPI) for All Urban Consumers (Base Years 1982–1984 = 100) for (name state), calculated by the State Department of Finance using a formula developed by the State Department of Industrial Relations (DIR) that is published most immediately preceding the Adjustment Date, as compared to the CPI published most immediately preceding the date of this BEI (the "CPI Adjustment").

73. CNLM policy is currently three years.

74. Mike Lee, *Regional Open Space Left on Shaky Ground; Land Trust's Bankruptcy Raises Range of Questions*, San Diego Union-Trib. A1 (Sept. 20, 2005). CNLM currently has over $256,000 in one mitigation bank's payment receivables. This amount has been due for nearly eighteen months.

75. 73 Fed. Reg. at 19664.

tate instruments or other available mechanisms."[76] The district engineer is to review title documents for the property being used as the mitigation site.[77] Although district engineers are best equipped to understand the legal instrument options in each state, frequently the value or function of the mitigation of a property is later reduced when an easement holder or owner of water or mineral rights exercises those rights.[78] Therefore, the regulations should guide district managers to ensure that they utilize the most effective long-term protection instrument available. If certain mineral rights are exercised, they may actually negate a conservation easement or render it invalid.[79]

Securing fee title to conservation land with a recorded conservation easement to a government entity or qualified nonprofit is the most secure way to ensure legal protection for a site.[80] However, fee title exposes the property to a variety of taxes. Taxation is a complex subject that varies from state to state, but a few insights are important. Land and improvements tied to the land are subject to ad valorem taxes—property taxes based on value.[81] Most land trusts will hold conservation easements rather than fee title because many states do not have mechanisms to automatically relieve nonprofits from property taxes.[82] But even when qualified nonprofit entities organized for conservation pur-

76. 33 C.F.R. at § 332.7(a)(1).

77. *Id.*

78. *E.g. Dugan v. Rank*, 372 U.S. 609, 620 (1963) (holding that the government engaged in a constitutionally proper partial taking of water rights and properly exercised those rights by reducing the water flowing through plaintiff's lands, which resulted in a reduction in the value of the property). These easement holders might have easements related to access, utility, minerals, etc. *See Restatement (Third) of Property: Servitudes* § 1.2 (2000) (defining an easement and describing some forms of easements).

79. *See e.g.* U.S. Army Corps of Engrs., *Conservation Easement for Mitigation Banks-Template*, https://www.nwo.usace.army.mil/html/op-r/appendi1.pdf (Sept. 17, 2004) [hereinafter *Conservation Template*] (explaining that a conservation easement template provides that no mining or drilling shall be permitted in the property subject to the easement).

80. Royal C. Gardner, *Legal Considerations*, in *Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems* 75 (Nathaniel Carroll, Jessica Fox & Ricardo Bayon eds., Earthscan 2008).

81. 71 Am. Jur. 2d *State and Local Taxation* § 18 (2008).

82. Many states do not grant property tax exemptions simply because a property is owned by a nonprofit organization, but rather they require a showing that the property is actually used for nonprofit or charitable purposes. *Id.* at § 300.

poses are granted property tax exemptions by taxing authorities, the land may still be subject to other taxes or fees.

Assessments and special district taxes must be paid even if conservation land is deeded to a nonprofit or a governmental agency.[83] Assessments are frequently collected with the ad valorem tax, and they pay for improvements to or near land such as roads, drainage, and flood control.[84] Additionally, special districts or community service districts also collect taxes.[85] These districts provide myriad services such as landscape maintenance, street lights, police, fire, schools, parks, and recreation.[86] Accordingly, some provision must be made for their payment.

As with all creditors whose rights are secured by real property, the rights of taxing authorities can defeat an otherwise well-planned conservation program. Assessments can be paid off, typically by a banker prior to transfer of long-term management to a steward, but some special district taxes cannot be prepaid.[87] This means that the parties to a conservation bank must ensure that taxes and assessments are paid as they come due. Otherwise, the government can collect unpaid taxes by selling the property at a tax or foreclosure sale.[88] In some cases, that sale or foreclosure can eliminate the goals and protections of conservation banking agreements and conservation easements. The successful buyer at sale may own the land free and clear of such restrictions.[89] Thus, the conservation values may be jeopardized without a *recorded* conservation easement on the property. This is an exceedingly complex topic requiring that all parties seek counsel experienced in local land-use law and taxation, and it should not be overlooked in the mitigation process.

83. 70C Am. Jur. 2d *Special or Local Assessments* § 69 (2008).

84. *Black's Law Dictionary* 125 (Bryan A. Garner ed., 8th ed., West 2004).

85. *Id.* at 509–510.

86. *See id.* at 510 (noting that the purpose of a "special district" is to provide a service within a designated area).

87. *See e.g.* City of Rocklin, Cal., *Frequently Asked Questions: Bill, Tax & Fee Payments*, http://www.rocklin.ca.us/faq/categoryqna.asp?id=3#486 (accessed Apr. 24, 2009) (noting that only special district taxes that are tied to the repayment of bonds may be prepaid).

88. 72 Am. Jur. 2d *State and Local Taxation* § 812 (2008).

89. 25 Am. Jur. 2d *Easements and Licenses* § 105 (2008).

V. RECOMMENDATIONS

Although the new Mitigation Rules recognize the importance of stewardship for compensatory mitigation and incorporate some stewardship principles, there is little doubt that regulatory agencies, mitigation providers, and bankers must do more to ensure that a perpetual stewardship program is in place to actively protect a site's resources throughout time. The following recommendations are offered for mitigation providers and bankers interested in stewardship—rather than mere long-term management—of conservation lands.

As a preliminary matter, it should be noted that the property owner is responsible for all the legal representations regarding his or her ability to control land under a proposed conservation protection. A limited liability corporation (LLC) is a legal vehicle that prospective mitigation bankers can use to develop projects or establish mitigation banks. LLCs afford the participants limited liability, can be dissolved fairly quickly, and give limited legal recourse to agencies or land stewards attempting to resolve contractual or performance obligations.[90]

Limited liability is important given that some mitigation banks inadvertently oversold credits because there was no efficient way to track credit sales.[91] The tracking of credit sales becomes especially complicated when banks can sell both wetland and endangered species credits. Additionally, financial assurances other than an outright cash contribution must be used prudently. It has been reported in the past that the California Fish and Game Department held bonds, letters of credit, or other securities that expired prior to redemption.[92] Florida uses bonds to secure long-term funding for its mitigation banks.[93] But because there is a time limit to most bonds (meaning they must either be renewed or they will lapse), tracking these can be difficult and time consuming. The credit rating and security of the bonding company also factors into the risk. Without an effective database in place to track payments and expiration dates, bonds should be

90. *Black's Law Dictionary* at 299.

91. *E.g.* Celia Lamb, *Conservation Bank Dispute Raises Concern*, 21 Sacramento Bus. J. 1 (Mar. 26, 2004) (describing overselling of credits by Conservation Resources LLC).

92. Teresa, *supra* n. 34.

93. Fla. Admin. Code. Ann. r. 62-342.700(5) (2008).

used with extreme caution. The Mitigation Rules should require that regulators be notified at least 120 days prior to canceling or allowing any surety bonds or other financial assurances to lapse, unless the agency has already concurred that performance standards were met for which the financial assurance was secured.

The use of a master escrow account held by a reputable title company for each district or jurisdiction is also recommended. Use of an escrow account would require that all credit sales be formally tracked, notice be provided to the agencies of the date and amount of the sale, and funds be appropriately distributed. Escrow fees would not cause an undue burden on the banker or buyer of credits because these fees are generally low. In fact, an escrow account would often be the best solution because all unused funds would be returned to the project proponent with interest.[94] The use of a master escrow account would, therefore, provide a significant increase in the ability to track credit sales and would allow land stewards to be paid in a timely manner according to the banking agreements.

Regulatory agencies should also be concerned about the fate of the credits in the event of bankruptcy. An informal legal review found that it is uncertain whether the credits would transfer with the property in the event of a tax sale or foreclosure.[95] The District Engineer has the discretion to use property liens or bank credits as collateral for long-term funding agreements in certain cases. The permits and banking instruments must include provisions that acknowledge these facts. Recorded conservation easements will help protect the mitigation banks in these cases. For this reason, it is strongly recommended that *every* parcel of land set aside for mitigation or conservation have a *recorded* conservation easement held by a third-party governmental agency or nonprofit organization qualified to hold conservation easements.

Conservation easements are also essential when the landowner is a public agency. There are several examples of public agencies that have attempted to develop or sell mitigation lands

94. *See e.g.* Fla. Stat. § 373.4137(3)(a) (2008) (providing that the Department of Transportation shall deposit money into an escrow account for its mitigation bank and that it shall retain all interest accruing in the escrow account).

95. *In re Lindsley*, 388 B.R. 661, 667 (Bankr. D. Md. 2008) (holding that, absent an express writing to the contrary, mitigation bank credits are transferred with the title to the subject property).

for development.[96] In the case of the Environmental Trust bankruptcy, many mitigation lands were not secured with conservation easements.[97] The bankruptcy court determined that the lands will first be offered back to agencies, then to local jurisdictions and nonprofits, but if the lands are refused, they could be offered back to the project proponent or sold.[98] Thus, it is unclear if these mitigation lands will continue to be protected.

Although a deed restriction can act as a conservation easement, deed restrictions should never be used preferentially over conservation easements.[99] Using deed restrictions can be like putting the fox in charge of the hen house—no entity is going to enforce against itself, and no third party has the power to enforce or give notice of enforcement. This means that deed restrictions can be virtually worthless unless properly set up. In theory, deed restrictions may possibly give third-party beneficiary rights to governmental agencies if drafted correctly and could arguably be enforceable by a third party—but this idea has not been tested. For these reasons, deed restrictions should not be used except in extreme cases when an easement holder cannot be located.

Conservation easements are a much more enforceable and appropriate tool to use for any lands permanently set aside for habitat protection. While permits may be lost or forgotten, recorded easements are a perpetual land protection that provide notice and reside on the title. Conservation easements are also nationally recognized and an accepted tool for conserving land. Many fine agency-approved templates are available.[100] Most im-

96. Craig Pittman & Matthew Waite, *When Dry Is Wet*, St. Petersburg Times 1A (Dec. 17, 2006).

97. Lee, *supra* n. 74; *see also* Sherry Teresa, *The Demise of the Environmental Trust*, http://ecosystemmarketplace.com/pages/article.opinion.php?component_id=4227&component_version_id=6060&language_id=12 (Mar. 9, 2006) (arguing the reasons for the failure of The Environmental Trust).

98. Lee, *supra* n. 74.

99. Cal. Civ. Code Ann. § 815.1 (West 2007).

100. *Conservation Template*, *supra* n. 79; Wis. Dept. Nat. Resources, *DNR Standard Grant Easement*, http://www.dnr.state.wi.us/org/caer/cfa/Grants/StandardGrantEasement9-05.pdf (Mar. 9, 2006). Suggested conservation easement language may read as follows:

> The bank agreement or permit is deemed established only when the Bank Owner records a conservation easement to a government entity or qualified third party on the Property in the county where the Property is located that covers the Property or a portion of the Property that the Agency determines constitutes a biologically sustainable unit for conservation purposes contemplated by this Agreement, which

portantly, development rights in a conservation easement are relinquished to a third party, which allows oversight and beneficiary rights to resource agencies and give better control over prohibited uses.

However, caution must be urged. The CNLM has had extreme difficulty getting conservation easements recorded over its lands when these were dedicated to the California Department of Fish and Game.[101] Although the agency agreed to accept the easements, many of the easements were never officially recorded.[102] This has caused numerous problems, including increased taxation on the land.[103]

Finally, in-lieu fee programs are too valuable to eliminate entirely, particularly when impacts are numerous but small in acreage, and it is unreasonable and/or ecologically imprudent to create small isolated preserves. An in-lieu fee program within the same watershed as a mitigation bank can improve the value and function of the mitigation bank by reducing threats or enhancing functions outside the artificial real estate boundaries of the mitigation bank. In California, funds from in-lieu fee programs are frequently used to provide the initial funding for banks, and credits are purchased from banks when feasible.[104] Although it is only a short-term protection, an in-lieu fee program implemented by a third party can aid a mitigation bank by, for example, eradicating an invasive weed from areas upstream of the mitigation bank, thus eliminating a threat to the long-term viability of the wetland within the mitigation bank. The cost of credits on a for-profit mitigation bank can seriously impact the financial feasibility of a small project, such as a private single-family home; therefore a low-cost option for small impacts should be available. In-lieu fee programs are a valuable alternative for such projects.

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shall be in a form subject to the Agency's approval and attached hereto as an Exhibit, and which shall be held by a party approved to hold conservation easements.

101. Sherry Teresa & Brenda C. Pace, Seminar, *Planning Sustainable Conservation Projects: Large and Small Scale Vernal Pool Preserves* (Sacramento, Cal., Feb. 1996), in *Ecology, Conservation, and Management of Vernal Pool Ecosystems—Proceedings from a 1996 Conference* 255–262 (Carol W. Witham, Ellen T. Bauder, Denton Belk, Wayne R. Ferren Jr. & Robert Ornduff eds., Cal. Native Plant Socy. 1998).

102. *Id.*

103. *Id.*

104. Carroll, Fox & Bayon, *supra* n. 80, at 22–23.

VI. CONCLUSION

Aldo Leopold wisely wrote that "[w]e shall never achieve harmony with [the] land, any more than we shall achieve justice or liberty for people. In these higher aspirations, the important thing is not to achieve but to strive."[105] The new wetlands mitigation regulations are the result of much compromise and testing. And even though these new Mitigation Rules are not perfect, they are a significant step in the right direction. Those involved in mitigation banking are urged to adopt and implement the recommendations provided here so that the next iteration of these Mitigation Rules brings us closer to truly compensating, protecting, and enhancing our natural resources in perpetuity.

105. Aldo Leopold, *A Sand County Almanac: With Other Essays on Conservation from Round River* (Oxford U. Press 1966).