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Review of Conservation Payment Initiatives in Latin America: Conservation Concessions, Conservation Incentive Agreements and Permit Retirement Schemes

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ESSAY

REVIEW OF CONSERVATION PAYMENT INITIATIVES IN LATIN AMERICA: CONSERVATION CONCESSIONS, CONSERVATION INCENTIVE AGREEMENTS AND PERMIT RETIREMENT SCHEMES

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I. INTRODUCTION

Over the course of the past two decades, the issue of land conservation in Latin America has become increasingly important to environmentalists both within and outside of the region. Latin America accounts for forty percent of the world's plant and animal species[1] and twenty-five percent of the world's forest cover.[2] The region's forests are an indispensable means of combating climate change, with the tree cover acting as a vast sink that absorbs carbon from the atmosphere.[3] It is now generally accepted that the preservation of Latin America's natural landscapes is of vital importance to the future health of the planet.

While awareness of the environmental value of Latin American land preservation has certainly increased in recent years, that awareness has not necessarily translated into increased environmental preservation. On the contrary, the level of deforestation in the region has continued to be high as a result of considerable economic and demographic pressures.[4]

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[1] UNITED NATIONS ENV'T. PROGRAMME, GLOBAL ENVIRONMENT OUTLOOK 2000, ch. 2, *The State of the Environment-Latin American and the Carribean*, *available at* http://www1.unep.org/geo-text/0087.htm (last visited Apr. 7, 2004) [hereinafter GLOBAL ENVIRONMENT OUTLOOK 2000].

[2] UNITED NATIONS ENV'T PROGRAMME, GLOBAL ENVIRONMENT OUTLOOK 3, *Fact Sheet: Latin America and the Carribean*, *available at* http://www.unep.org/GEO/pdfs/GEO-3%20Fact%20Sheet%20Latin%20Amer.pdf (last visited Jan. 24, 2004). However, over forty percent of the world's forest loss over the past thirty years has been in Latin America. *Id.*

[3] GLOBAL ENVIRONMENT OUTLOOK 2000, *supra* note 1, *available at* http://www1.unep.org/geo-text/0083.htm.

[4] "A total of 5.8 million hectares a year [of Latin American forests] was lost during 1990-95,

In confronting the seemingly unstoppable trend of deforestation, environmental organizations have experimented with a number of market mechanisms to 'purchase' conservation. These range all the way from simple land purchases to more complex mechanisms such as conservation easements and subsidies for the development of ecologically friendly activities or eco-tourism. This Article specifically looks at three of the most recent developments that involve direct payments for the conservation of land: conservation concessions, conservation incentive agreements, and permit retirements.

Conservation concessions are similar to a logging or grazing concession in that they involve a private group paying a sum of money—often the market price—for the exclusive right to exploit public land in a particular manner for a period of time.[5] However, the concession holder does not then exploit the land, but rather preserves it in a natural state.[6] While "conservation concessions" are normally purchased from a governmental entity, they can also be purchased from current concession holders in the private sector.[7]

Conservation incentive agreements are contracts whereby a conservation organization will provide funding to a private landowner—oftentimes a land cooperative or indigenous group—in exchange for the landowner's commitment not to exploit that land in a particular manner for a period of time.[8] Evidently, the major difference between a conservation concession and a conservation incentive agreement is that conservation incentive agreements protect privately owned lands, while conservation concessions protect public lands.

Finally, permit retirements refer to the purchase—generally by conservation organizations—of permits or concessions to exploit public lands, followed by the permanent retirement of those permits or concessions by the government entity that issues the permits.[9] A permit retirement is similar to

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resulting in a 3 per cent [sic] total loss for the period." *Id.* For information on demographic and economic pressures leading to deforestation, see generally, K.S. Murali & R. Hegde, *Patterns of Tropical Deforestation*, 9 J. OF TROPICAL FOREST SCI. 465 (1997), *available at* http://www.teriin.org/division/regdiv/for/docs/abs07.htm.

[5] Jared Hardner & Richard Rice, *Rethinking Green Consumerism*, SCI. AM., May 2002, at 89.

[6] *Id.*

[7] *Id.*

[8] *Id.*

[9] *See* Mark Salvo & Andy Kerr, *Permits for Cash: A Fair and Equitable Resolution to the Public Land Range War*, RANGELANDS, Feb. 2001, at 22, 22, *available at* http://uvalde.

a conservation concession, except that it involves quasi-permanent land protection, a feature that necessarily implies governmental participation in the process.[10]

This Article is organized in the following manner. Part II provides a brief overview of the traditional methods of nature conservation in Latin America. Part III describes some of the innovative conservation payment ideas that preceded the introduction of conservation concessions, conservation incentive agreements, and permit retirements. Part IV summarizes the development of the conservation concession concept, both in the United States and Latin America. Part V analyzes the development of conservation incentive agreements, and Part VI the development of permit retirement projects.

II. TRADITIONAL CONSERVATION METHODS

Traditionally, Latin American public sector conservation strategies have been based on the twofold strategy of the establishment of national parks and general environmental regulation.[11] The oldest method has been the establishment of national parks or protected areas.[12] The early national parks in Latin

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tamu.edu/rangel/feb01/salvo.pdf.

[10] *Id.* The actual permanency of permit retirements is debatable, at least in the United States. According to a memorandum opinion by United States Solicitor William Meyers, "[a] decision to cease livestock grazing is not permanent. It is subject to reconsideration, modification and reversal in subsequent land use plan decisions . . . [t]o avoid confusion, the voluntary relinquishment of a grazing permit is best referred to as just that—'relinquishment,' not 'retirement.'" *See, e.g.*, Memorandum from William G. Myers III, Solicitor, United States Dep't of the Interior, to Secretary, United States Dep't of the Interior, n.2 (Oct. 4, 2002), *available at* http://www.rangebiome.org/genesis/myersmemo.html.

[11] Stephen Mack, *Conservación de Tierras Privadas: Las Servidumbres Ecológicas* [*Conservation of Private Lands: Ecological Servitudes*], *in* CONSERVACIÓN DE TIERRAS PRIVADAS EN AMÉRICA CENTRAL [CONSERVATION OF PRIVATE LANDS IN CENTRAL AMERICA] 1, 2 (Carlos M. Chacon & Rolando Castro eds., 1997), *available at* http://www.cedarena.org/landtrust/publicaciones/Libro-ca.doc.

[12] *Id.* The first national parks in Latin America date back to the early 1900s, although in some countries—such as Guyana—the development of a national park system has only occurred in very recent years. Some of the earliest examples of national parks are the El Chico forest reserve (established 1898, subsequently renamed Desierto de los Leones in 1917) in Mexico, Vicente Pérez Rosales National Park in Chile (established 1926), and Pico Cristal Park in Cuba (established 1930). *See* UNITED NATIONS ENV'T PROGRAMME, CEP TECH. RPT. NO. 36, STATUS OF PROTECTED AREA SYSTEMS IN THE WIDER CARIBBEAN REGION (1996), *available*

America "were seen . . . as means to preserve natural areas, to develop recreation and tourism areas, and to develop rural and [peripheral regions]."[13] These parks were therefore generally "located in isolated inaccessible areas, along beaches or in resort areas, and along frontiers or in newly colonized territories."[14] The lands within Latin American parks are often owned and managed to different degrees by private parties.[15]

A very impressive system of parks and protected areas has been created across Latin America. The Latin American and Caribbean region currently possess a total of two hundred and thirty million hectares (568 million acres) of nationally protected areas.[16] This represents eleven percent of the total land area for the region.[17] The strategy of acquiring land to establish national parks and wildlife refuges, however, has often proved expensive for governments.[18] Even where the land has remained in private hands, the cost of developing and carrying out a management plan has sometimes proved prohibitive.[19] In addition, the designation of lands as national parks or protected areas has sometimes been unpopular due to the local population's demand for land.[20]

The second main prong of Latin American conservation law has been the imposition of environmental land use regulations by local governments.[21]

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at http://www.cep.unep.org/pubs/techreports/tr36en/index.html.

[13] KENTON R. MILLER, PEACE CORPS INFO., COLLECTION & EXCHANGE REPRINT R073, PLANNING NATIONAL PARKS FOR ECODEVELOPMENT: METHODS AND CASES FROM LATIN AMERICA, at ch. 2, para. 3 (1989), *available at* http://mng-unix1.marasconewton.com/peacecorps/Documents/R0073/r0073e/r0073e00.htm.

[14] *Id.*

[15] The percent of protected lands owned by private parties varies considerably by country. In Nicaragua, for example, only four out of the seventy-five protected areas are located on public lands, while in Chile and Costa Rica most of the protected land is under state ownership. *See* Nina Saalismaa, *Local People and Protection: A Case Study from the Protected Area of Miraflor in Nicaragua* 1 (2000), *at* http://www.helsinki.fi/hum/ibero/xaman/articulos/2000_01/saalismaa.html (citing J. Romero, *Áreas Protegidas y Desarrollo Sostenible*, paper presented at First Congress on the Planning and Management of Protected Areas (Havana, Cuba, 1999)).

[16] Kari Keipi, *Introduction*, *in* FOREST RESOURCE POLICY IN LATIN AMERICA 2, 5 (Kari Keipi ed., 1999) [hereinafter FOREST RESOURCE POLICY].

[17] *Id.*

[18] Jan G. Laarman, *Government Policies Affecting Forests*, *in* FOREST RESOURCE POLICY, *supra* note 16, at 13, 17.

[19] *Id.*

[20] Mack, *supra* note 11, at 8.

[21] *See generally* Lawrence J. Jensen, *Environmental Regulation in Latin America: A Rapidly*

This is a more recent development, with the first comprehensive regulations dating from the years following the Stockholm Conference on the Human Environment in 1972.[22] Early examples of environmental legislation include the 1974 Code on Renewable Natural Resources and Environmental Protection (Colombia);[23] the Law for the Prevention and Control of Environmental Pollution Decree (Ecuador, 1986);[24] and the Organic Law on the Environment (Venezuela, 1976).[25] Other countries have taken longer to pass environmental protection legislation. The strategy of environmental regulation, while of course appropriate to many situations, has also shown some distinct disadvantages, including high costs of enforcement and lack of flexibility.[26] As with the establishment of protected areas, environmental regulation is not solely capable of solving Latin America's land preservation problems.

In more recent years, private conservation organizations have played a greater role in preservation activities. While private conservation groups have existed in Latin America since at least the 1960s, they did not become a major force in Latin American land conservation issues until the 1980s and 1990s.[27] These organizations included both large Western groups such as the

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Changing Legal Framework, 8 NAT. RES. & ENV'T 23 (1993) (describing environmental changes in Latin America, and noting that many Latin American countries have responded by instituting comprehensive framework laws for environmental regulation, especially in the years since 1988).

[22] UNITED NATIONS ENV'T PROGRAMME, GLOBAL ENVIRONMENT OUTLOOK-1: GLOBAL STATE OF THE ENVIRONMENT REPORT, ch. 3, paras. 15-20 (1997), *available at* http://www.rrcap.unep.org/geo1/ch/ch3_20.htm [hereinafter GEO-1]; UNITED NATIONS ENV'T PROGRAMME, REPORT OF THE UNITED NATIONS CONFERENCE ON THE HUMAN ENVIRONMENT, U.N. Doc A/CONF.48/14/Rev.1, UN Sales No. E.73.II.A.14 (Stockholm 1972), *reprinted in* 11 I.L.M. 1416.

[23] *See* Codigo Nacional de los Recursos Renovables y Proteccion al Medio Ambiente [National Code on Renewable Natural Resources and Environmental Protection], Decree Law No. 2,811 (1974) (Colom.), summary *available at* http://www.cep.unep.org/pubs/techreports/tr36en/countries/colombia.html; *see also* GEO-1, *supra* note 22, at ch. 3, para. 15.

[24] *See* Ley de Prevención y Control de la Contaminación Ambiental [Ecuadorian Act on the Prevention and Control of Environmental Pollution] (1976) (Ecuador), *cited at* http://www.un.org/esa/agenda21/natlinfo/countr/ecuador/natur.htm; *see also* GEO-1, *supra* note 22, at ch. 3, para. 17.

[25] *See* GEO-1, *supra* note 22, at ch. 3, para. 15.

[26] *See* Mack, *supra* note 11, at 8.

[27] ANTHONY BEBBINGTON ET. AL., NON-GOVERNMENTAL ORGANIZATIONS AND THE STATE IN LATIN AMERICA: RETHINKING ROLES IN SUSTAINABLE AGRICULTURAL DEVELOPMENT 1

Nature Conservancy,[28] Conservation International,[29] and the World Wildlife Fund,[30] and smaller groups native to the region, such as Pro-Natura in Mexico,[31] Fundación Natura in Colombia,[32] the Centro de Derecho Ambiental y de los Recursos Naturales ("CEDARENA") in Costa Rica,[33] and the Comité Nacional Pro Defensa de Fauna y Flora ("CODEFF") in Chile.[34]

These private groups have utilized a variety of methods to conserve lands. The major conservation method for many private organizations, however, has been the purchase of environmentally valuable territory to protect under the form of private conservation reserves.[35] For example, the Nature Conservancy recently helped to purchase and set aside a portion of the Cuatro Ciénagas (Four Marshes) in north-central Mexico, a region of spring-fed desert pools and wetlands.[36] Conservation International recently acquired a large tract of the Pantanal, a vast Everglades-like wetland that straddles the border between Brazil, Paraguay, and Bolivia.[37] In Costa Rica, the Monteverde Conservation League has purchased 54,340 acres of forest lands, "including the Children's Eternal Rain Forest, which was bought with contributions from European school children and is now the largest private preserve in Costa Rica."[38]

(1993); JOHN CLARK, DEMOCRATIZING DEVELOPMENT: THE ROLE OF VOLUNTARY ORGANIZATIONS (1991); Carrie A. Meyer, *Environmental NGOs in Ecuador: An Economic Analysis of Institutional Change*, 27 J. DEV. AREAS 191, 191-92 (1993).

[28] *See* The Nature Conservancy homepage, *at* http://nature.org/ (last visited Sept. 10, 2003).

[29] *See* Conservation International homepage, *at* http://www.conservation.org/xp/CIWEB/home (last visited Sept. 10, 2003).

[30] *See* World Wildlife Fund homepage, *at* http://www.panda.org (last visited Sept. 10, 2003).

[31] *See* Pro-Natura homepage, *at* http://www.pronatura.org.br/en/home (last visited Sept. 9, 2003).

[32] *See* Fundación Natura Columbia homepage, *at* http://www.natura.org.co/ (last visited Sept. 10, 2003).

[33] *See* CEDARENA homepage, *at* http://www.cedarena.org/ (last visited Sept. 10, 2003).

[34] *See* CODEFF homepage, *at* http://www.sociedadcivil.cl/codeff/inicial.htm (last visited Oct. 6, 2003).

[35] *See* EDWARD O. WILSON, THE SOLUTION FROM THE FUTURE OF LIFE, at ch. 7 (2002); *see also* ENVTL. LAW INST., LEGAL TOOLS AND INCENTIVES FOR PRIVATE LANDS CONSERVATION IN LATIN AMERICA: BUILDING MODELS FOR SUCCESS 15 (2003), *available at* http://www.elistore.org/reports_detail.asp?ID=10914 [hereinafter LEGAL TOOLS AND INCENTIVES]. See *id.* at 16-21 for a thorough examination of the private reserve system in Latin America.

[36] LEGAL TOOLS AND INCENTIVES, *supra* note 37, at 16-21.

[37] *Id.*

[38] Agi Kiss, *Making Biodiversity Conservation a Land Use Priority*, *in* GETTING

While these purchases have been valuable, the use of land purchases as a conservation technique has limited potential. The conservation of large tracts of land typically requires government intervention because of high costs, the need for social legitimacy, and the need to employ the state's enforcement capacity.[39] Also, most conservation groups do not possess the resources to effectively manage very large areas of land.[40] This has led many conservation policy experts to explore alternative ways of funding land preservation.

The following section describes in greater depth two of the innovative ways in which conservation groups used payments as incentives for conservation without resorting to direct land purchases.

III. PAYMENTS FOR CONSERVATION

A. *Debt-for-Nature Swaps*

One of the first truly innovative approaches to conservation in Latin America was the debt-for-nature swap, which first appeared in the late 1980s.[41] Debt-for-nature swaps are mechanisms for financing conservation projects that essentially involve payments—through the purchase of sovereign debt—to countries in exchange for the provision of conservation services.[42] They are worthy of discussion in this context because they presented a number of issues that were of importance in the development of future conservation strategies, including those analyzed in this Article. In

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BIODIVERSITY PROJECTS TO WORK: TOWARDS MORE EFFECTIVE CONSERVATION AND DEVELOPMENT 7 (T. McShane & M. Wells eds., in press), *available at* http://epp.gsu.edu/pferraro/special/AgiBookChapter2002.pdf (last visited Mar. 23, 2004).

[39] *See* LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 6.

[40] Local political opposition has also been an occasional problem in some large scale land purchases for preservation purposes. *See, e.g.*, Jonathan Franklin & John Vidal, *Baron Lands*, THE GUARDIAN, Jan. 23, 2002, *available at* http://society.guardian.co.uk/societyguardian/story/0,7843,637467,00.html (describing opposition to Patagonia Clothing founder Douglas Tompkins' land purchases in Chile).

[41] *See* J.P. Resor, *Debt-for-Nature Swaps: A Decade for Experience and New Directions for the Future*, 48 UNASYLVA 15, 15 (1997), *available at* http://www.fao.org/forestry/site/8708/en (stating that in 1987 the Bolivian government and Conservation International signed the first debt-for-nature swap agreement).

[42] Paul J. Ferraro & R. David Simpson, *Cost-Effective Conservation: A Review of What Works to Preserve Biodiversity*, RESOURCES, Spring 2001, at 17, 20.

fact, the developers of conservation concessions have made a conscious effort to learn from some of the problems that arose in early debt-for-nature swaps.

Debt-for-nature swaps can be divided into two categories: private swaps and public swaps.[43] Private swaps normally involve a number of steps. They are initiated when "an international [conservation] organization . . . purchase[s] part of [a developing country's] international debt at a discounted price in the secondary market."[44] The conservation organization will then agree to cancel this debt in exchange for assurance from the developing country's government to conserve more biodiversity, increase funding for conservation projects, or set aside particular lands for preservation.[45]

Public debt-for-nature swaps are similar in structure to private swaps, except for the fact that creditor governments agree to cancel debt directly in return for environmental commitments, thus cutting out the role of international conservation organizations in buying debt on the secondary markets.[46] Debt-for-nature swaps ideally present benefits for both developing countries and environmental organizations. The developing country is able to "reduce[] its external debt servicing burdens while supporting [domestic] public interest programs."[47]

While debt-for-nature swaps have generally been a successful financing mechanism, it soon became clear that they possessed a number of potential drawbacks and limitations. For one thing, they are time consuming and expensive to arrange, and are therefore generally only viable on a fairly large scale.[48] They involve potential monitoring and enforcement problems for

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[43] *See* U.N. ECON. COMM'N FOR LATIN AMERICA & THE CARIBBEAN, DEBT FOR NATURE: A SWAP WHOSE TIME HAS GONE? (2001), *available at* http://www.eclac.cl/publicaciones/Mexico/7/LCMEXL497/l497.pdf.

[44] *Id.* The most active groups in this respect have been Conservation International, the World Wildlife Fund and the Nature Conservancy. Other private groups that have initiated swaps include the Smithsonian Institution, the Rainforest Alliance, and the Missouri Botanical Gardens. *Id.* at tbl. 2.

[45] *See* Ferraro & Simpson, *supra* note 42, at 20.

[46] *See* Amanda Lewis, Note, *The Evolving Process of Swapping Debt for Nature*, 10 COLO. J. INT'L ENVTL. L. & POL'Y 431, 441-43 (1999).

[47] Ruth Ann Flynn, *The Impact of U.S. Tax Laws on the Future of Debt-For-Nature Swaps*, 7 TEMP. INT'L & COMP. L.J. 319, 324 (1993).

[48] *See* World Wildlife Fund Center for Conservation Finance, *Commercial Debt-for-Nature Swaps Summary Table* (Dec. 17, 2003), *at* http://secure.worldwildlife.org/conservationfinance/pubs/commercial_swaps_summary.pdf (listing the purchase price for debt-for-nature transactions, which is usually at least several hundred thousand dollars).

Western conservation organizations that are not easily able to confront sovereign governments if they feel that the country's performance has been lacking.[49] For developing countries, on the other hand, there has historically been a fear of loss of sovereignty stemming from debt-for-nature swaps,[50] and some debt-for-nature swaps have provoked the opposition of indigenous groups who fear that they will lose rights to their lands.[51]

In developing more recent conservation techniques, such as conservation easements and conservation concessions, environmentalists have tried to learn from the problems of the early debt-for-nature swaps. One aspect of this is that increased attention has been paid to interactions with local inhabitants and indigenous groups. For example, in Conservation International's Guyanese conservation concession, a Social Impact Assessment was drawn up prior to the agreement to ensure that indigenous peoples were not adversely affected and the three nearest indigenous communities all participated in the concession's negotiation process.[52] In the Ejido Cebadillas conservation incentive agreement, the agreement was negotiated directly with a local land cooperative, without any government involvement, and included economic development incentives.[53]

B. *Conservation Easements*

Conservation easements are one of the most commonly used land protection methods in the United States.[54] Over the past decade, conservation

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[49] *See* Michael S. Sher, *Can Lawyers Save the Rainforest? Enforcing the Second Generation of Debt-for-Nature Swaps*, 17 HARV. ENVTL. L. REV. 151 (1993).

[50] *See, e.g.*, Priya Alagiri, Comment, *Give Us Sovereignty or Give Us Debt: Debtor Countries' Perspective on Debt-for-Nature Swaps*, 41 AM. U. L. REV. 485 (1992).

[51] This conflict has been evident as of the very first debt-for-nature swap, in Bolivia's Beni Reserve, when local Native Americans accused Conservation International of divesting them of their property rights. One of the main bones of contention was that the swap restricted the right of Native Americans to use trees for fuel. *See* Lewis, *supra* note 46, at 436.

[52] *See* Press Release, Conservation Int'l, Guyana Establishes its First Conservation Concession (July 18, 2002), *available at* http://www.conservation.org/xp/news/press_releases/2002/071802.xml [hereinafter Guyana Establishes].

[53] *Endangered Mexican Parrots Safe from Logging*, ENV'T NEWS SERVICE, Feb. 15, 2000, *available at* http://forests.org/archive/samerica/endmxpre.htm. The Mexican organizations were Pro-Natura, Naturalia, Monterrey Tec, the Sierra Madre Alliance and Wildlife Preservation Trust International. *Id.*

[54] "Recent studies show that over 2.6 million acres of land are currently protected by

easements have been implemented in several Latin American nations.[55] In the United States, a conservation easement is commonly defined as a:

> nonpossessory interest of a holder in real property imposing limitations or affirmative obligations the purposes of which include retaining or protecting natural, scenic, or open-space values of real property, assuring its availability for agricultural, forest, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving historical, architectural, archaeological, or cultural aspects of the real property.[56]

A conservation easement is a deed restriction on all or part of a parcel of land, where specified development or land use rights are voluntarily given up by the landowner.[57] The recipient of these rights is generally either a governmental body or a non-profit entity.[58] All other traits of ownership, including

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conservation easements, up from two hundred and ninety thousand acres in 1988." Jeffrey Tapick, Note, *Threats to the Continued Existence of Conservation Easements*, 27 COLUM. J. ENVTL. L. 257, 259 (2002) (citing Katharine Q. Seelye, *More Families Adopting Lasting Limits to Preserve Land*, N.Y. TIMES, Sept. 12, 2001, at B1; Julie Ann Gustanski, *Protecting the Land: Conservation Easements, Voluntary Actions, and Private Lands*, *in* PROTECTING THE LAND: CONSERVATION EASEMENTS PAST, PRESENT, AND FUTURE 14 (Julie Ann Gustanski & Roderick H. Squires eds., 2000)).

[55] The first conservation easement was put into place in Latin America in 1992, to protect a tract of land from future development in San Ramón de Tres Rios, Costa Rica. However, conservation easements did not appear in other Latin American countries until 1998-2001. *See* Carlos M. Chacón & Andrea Meza, *Servidumbres Ecológicas para la Protección Ambiental en Tierras Privadas Costarricenses* [*Ecological Servitudes for Environmental Protection in Private Lands in Costa Rica*], AMBIENTICO, no. 90 (Mar. 2001), *available at* http://www.una.ac.cr/ambi/Ambien-Tico/90/cchacon.htm.

[56] UNIFORM CONSERVATION EASEMENT ACT § 1(1) (1981).

[57] *Id.* Therefore, while ownership of the tract does not change hands, conservation easements do involve the transfer of property rights to the purchasing party, as opposed to simply contract rights. *Id.* A "conservation easement [can] prohibit all ground disturbing activity on a piece of wild land or prohibit only activities that will interfere with particular things . . . ." Federico Cheever, *Public Good and Private Magic in the Law of Land Trusts and Conservation Easements: A Happy Present and a Troubled Future*, 73 DENV. U. L. REV. 1077, 1080 (1996).

[58] Julia D. Mahoney, *Perpetual Restrictions on Land and the Problem of the Future*, 88 VA. L. REV. 739, 742 (2002).

alienability, remain in the hands of the landowner.[59] Conservation easements generally, but not invariably, last into perpetuity, binding both current and future owners.[60]

Conservation easements contain a number of attractive features for environmental policy makers both in Latin America and elsewhere. They are voluntary agreements that do not require actions by the state.[61] They are also very flexible: conservation easements can be defined to protect a particular element of the natural landscape while still allowing for some development.[62] Conservation easements can be used to effectively preserve parcels of land that would be considered too small to be managed by the state in a natural park or protected area.[63] Finally, conservation easements tend to be cheaper than full land acquisitions, a feature that is evidently of great importance to governments and conservation organizations with very limited resources.[64]

Conservation easements have been an extremely welcome addition to the repertoire of conservation techniques in Latin America. As with debt-for-nature swaps, however, conservation easements have their limitations, which have prompted the development of other conservation methods, such as those discussed in the remainder of this paper. Most importantly, the civil law system in Latin America generally allows for conservation easements to be granted only in favor of a tract of land that would benefit from the easement (for example, a dominant tenement).[65] This obviously limits the possible scope of conservation easements absent legal reforms, which are occurring

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[59] Tapick, *supra* note 54, at 261.

[60] Cheever, *supra* note 57, at 1083 (noting that "[m]ost state conservation easement statutes provide that conservation easements are to be unlimited in duration unless otherwise stated in the instrument itself").

[61] Mack, *supra* note 11, at 10.

[62] *Id.* at 10-11; LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 15. There are few limitations on the type of conservation purpose a conservation easement must promote. *See supra* note 56 and accompanying text (describing the recognized purposes of conservation easements in several states in the United States).

[63] Mack, *supra* note 11, at 11.

[64] *Id.* at 10.

[65] Caroline Amillien et al., *Mecanismos Legales Para la Conservación de Tierras Privadas en América Central*, *in* CONSERVACIÓN DE TIERRAS PRIVADAS EN AMÉRICA CENTRAL 25, 31 (Carlos M. Chacón & Rolando Castro eds., 1998), *available at* http://www.cedarena.org/landtrust/publicaciones/Libro-ca.doc ("[E]n la mayoría de países, incluidos los de Centroamérica, las servidumbres solo pueden establecerse en beneficio de otra propiedad. . . .") ["In the majority of countries, including those in Central America, servitudes can only be established to the benefit of another property. . . ."].

in some countries.[66] Conservation incentive agreements, on the other hand, do not involve property rights, and therefore can be negotiated between a landowner and any other entity.[67] While conservation incentive agreements would lack the permanence of a conservation easement, they can fulfill much the same purpose otherwise while avoiding legal pitfalls.

C. *Other Instruments*

This Article has described in some depth the issues relating to debt-for-nature swaps and conservation easements, because these techniques have had particular influence on the development of conservation concessions, conservation incentive agreements, and permit retirements. There are other methods that conservation groups are using, however, to pay for land conservation.[68] These include subsidizing ecologically friendly development, such as eco-tourism, and paying for environmental services that generate land preservation "as a side benefit"—one example would be carbon sequestration.[69] Clearly the diversity of conservation strategies that have arisen over the past fifteen years is a beneficial development. There can be no one-size-fits-all approach to conservation, given the different demands of both land-owners and conservation organizations. The remainder of this Article describes the development of three of the newest payment incentives to be added to the arsenal of conservation techniques: conservation concessions, conservation incentive agreements, and permit retirements.

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[66] The Mexican states of Nueva Leon, Quintana Roo, and Veracruz have approved laws that authorize conservation easements and allow them to be held by third parties. *See* LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 22. In addition, the Argentinian province of Chubut passed a state law for protected areas in 2000 expressly authorizing the creation of conservation easements in favor of the provincial government. *Id.* at 43. "Proposed laws authorizing in-gross conservation easements have . . . been introduced in [other] countries such as Chile, Costa Rica, and Ecuador." *Id.* at 22.

[67] As noted previously, conservation easements convey rights in property, and therefore a dominant and sevient tenement is required under Latin American property laws.

[68] *See generally* N. LANDELL-MILLS & INA T. PORRAS, SILVER BULLETS OR FOOLS' GOLD?: A GLOBAL REVIEW OF MARKETS FOR FOREST ENVIRONMENTAL SERVICES AND THEIR IMPACTS ON THE POOR (Int'l Inst. for Env't & Dev. 2002) (reviewing 287 cases and asking six market-based questions of each to examine whether markets for forest environmental services solve problems or if they cause other, more harmful problems).

[69] *See* Paul J. Ferraro & Agnes Kiss, *Direct Payments to Conserve Biodiversity*, 298 SCIENCE 1718, 1719 (2002).

IV. CONSERVATION CONCESSIONS

According to Conservation International, a conservation concession is a "free-market mechanism that allows conservationists to compete directly with extractive industries for the rights to natural resources. Conservation concessions directly compensate resource owners for any revenue or employment that might have occurred as a result of exploiting a given area."[70] This section first describes the background of conservation concessions in the context of the United States, and then explains how conservation concessions are being implemented in Latin America.

A. *Conservation Concessions in the United States.*

One of the pioneering groups that has used conservation concessions as a means to preserve public lands that had previously been used for grazing purposes is a New Mexico-based organization called the Forest Guardians.[71] Forest Guardians obtained their first conservation concession in 1995, when they won an uncontested bid for grazing rights to 1,438 acres on the Rio Embudo, halfway between Santa Fe and Taos, in New Mexico.[72]

Since that time, Forest Guardians has attempted to win a number of other conservation concessions. While it has had many successes, the organization has also encountered a large amount of political and legal opposition in its efforts to buy up grazing concessions.[73] One recent example of a successful conservation concession was the October 2002 acquisition by Forest Guardians of a 644 acre grazing lease along the Rio Puerco river in New Mexico.[74] The land had little native vegetation left on it due to years of

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[70] Press Release, Conservation Int'l, Building Global Alliances for Biodiversity Protection—Backgrounder (Dec. 9, 2001), *available at* http://www.conservation.org/xp/news/press_releases/2001/120901a.xml.

[71] *See* Forest Guardians homepage, *at* http://www.fguardians.org/ (last visited Mar. 23, 2004).

[72] Ollie Reed Jr., *Environment Group Secures Grazing Lease*, ALBUQUERQUE TRIBUNE, Oct. 5, 2002, *available at* http://www.abqtrib.com/archives/news02/100502_news_grazing.shtml.

[73] *See, e.g.*, Jeffries v. Hassell, 3 P.3d 1071 (Ariz. App. Div. I 1999) (vindicating the Forest Guardians' right to bid on grazing leases owned by the State of Arizona despite the fact that they did not intend to graze on those lands; previously, the Arizona Land Department had rejected such bids).

[74] Reed, *supra* note 72, at para. 1.

grazing, but Forest Guardians attempted to replant native plants on the tract.[75] According to John Horning, executive director of the Forest Guardians, "the group bid $2,600 per year for five years—seven times what the previous leaseholder paid."[76] New Mexico law allots most grazing lease money directly to state public schools, adding another socially beneficial component to the concession purchase.[77]

In the United States, advocates of conservation concessions have encountered significant barriers to their efforts to implement conservation concession schemes on federal lands.[78] For example, USFS, which manages 191 million acres of federal lands, only designates logging companies as "responsible bidders" for its logging concession auctions.[79] The Bureau of Land Management ("BLM") gives preference to landowners "engaged in the livestock business," but allows bids from other groups and individuals as long as they own cattle.[80] Permit holders on BLM lands have the ability to authorize nonuse of grazing lands by permit holders in special circumstances, but only for up to three years.[81] Unauthorized nonuse results in termination of the permit.[82]

It is also worth mentioning in passing the purchase of government-issued pollution emission permits by environmental organizations. This practice can be seen as analogous to the purchase of conservation conces-

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[75] *Id.* at para. 19-20.

[76] *Id.* at para. 4.

[77] *Id.*

[78] *See* Mark Muro, *Let Ecologist Buy Federal Timber*, N.Y. TIMES COMPANY, Mar. 29, 1997, at A19, *available at* www.forests.archive/america/ecobuyti.com.

[79] *Id.* This policy was unsuccessfully challenged in a joint petition by the Southwest Center for Biological Diversity, the Northwest Ecosystem Alliance of Washington state and the Oregon Natural Resources Council to allow conservation concessions. Jim Lyons, USDA undersecretary for resources and the environment at the time, "pronounced the plan [to legalize conservation concessions] 'interesting and novel' but not 'feasible.'" *Keeping the Forests Shut*, ARIZ. DAILY STAR, May 15, 1997, *available at* http://www.azstarnet.com/clips/keepshut.htm. In the United States, federal agencies are not generally authorized to grant conservation easements either. *See* Memorandum from Douglas R. Cox, Principal Deputy Assistant Attorney General, Office of Legal Counsel, to the General Counsel, Dep't of Comm. (Jan. 19, 1993), *available at* http://www.usdoj.gov/olc/conserv_19.htm.

[80] Steven C. Forrest, *Creating New Opportunities for Ecosystem Restoration on Public Lands: An Analysis of the Potential for Bureau of Land Management Lands*, 23 PUB. LAND & RES. L. REV. 21, 31 (2002).

[81] *Id.* at 43.

[82] *Id.*

sions, but with a goal of pollution reduction as opposed to land preservation.[83]

The United States manages a number of pollution trading programs, where permits to emit a certain amount of pollutant for a particular time period can be bought and sold on the open market.[84] Many environmental law societies and other environmental organizations have bought small numbers of emissions permits with no intention of using them.[85] This practice will probably become more common as tradeable permit schemes spread around the world—especially with reference to greenhouse gasses—and into different sectors, such as water pollution. One danger, however, is that governments will simply increase the number of emissions permits they issue for a particular time period in order to achieve the desired pollution levels, while compensating for the purchase of permits by non-polluters.

B. *Conservation Concessions in Latin America*

Over the last few years, conservation concessions have also emerged at the international level, particularly in Latin America.[86] Forest concessions are particularly common in Suriname, Guyana, Venezuela, Bolivia, and Nicaragua, but have also been established in a number of other Latin American countries.[87] The non-profit group Conservation International has been at the

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[83] *See supra* notes 9-10 and accompanying text.

[84] *See* ENVTL. PROT. AGENCY, THE UNITED STATES EXPERIENCE WITH ECONOMIC INCENTIVES FOR PROTECTING THE ENVIRONMENT 67 (2001), *available at* http://yosemite1.epa.gov/ee/epa/eerm.nsf/.

[85] For example, at the EPA's 2001 sulfur dioxide and nitrogen oxide allowance auction, the Acid Rain Retirement Fund purchased eleven credits for $1,980; the Maryland Environmental Law Society bought seven credits for $1,275; and the Bates College Planeteers bought one credit for $191. *See* Brian Wagner, *Environmentalists Steamed over Pollution Credits*, N.J. EXPRESS-TIMES, June 24, 2001.

[86] In addition to the Latin American schemes that are described in this Article, conservation concessions are currently being developed in Indonesia and Papua, New Guinea. ANDREAS MERKL ET AL., CONSERVATION & COMMUNITY INVESTMENT FORUM, A ROLE FOR EFFECTIVE, EFFICIENT, AND EQUITABLE CONSERVATION CONCESSIONS IN CONSERVING NATURAL RESOURCES IN INDONESIA 2-5 (2003), *available at* http://www.conservationfinance.org/WPC/WPC_documents/Apps_09_Merkl_Claussen_v2.pdf.

[87] *See* John A. Gray, Forest Concessions: Experience and Lesson from Countries Around the World, Presented to the IUFRA International Symposium on Integrated Management of Neotropical Rain Forests by Industries and Communities, at 3 (Dec. 4-7, 2000), *available*

forefront of this development.[88] International conservation concessions have, to date, been on a much larger scale than the domestic examples, and have been the result of difficult negotiations with host governments.[89] Nevertheless, conservation concessions hold great promise as a way for developing countries to protect their land while ensuring a flow of income.[90] As it is a very recent concept, conservation concessions have not been addressed in national legislation as of yet, with the notable exception of Peru's Forestry and Wildlife Law of 2001,[91] which explicitly and effectively authorizes conservation concessions, and to a lesser extent the laws of Chile, Brazil, and Bolivia, which address conservation concessions in a less comprehensive manner.[92]

Conservation concession payments in Latin America have been structured on a continual basis during the time period for which the concession is valid, unlike the up-front payments that generally accompany a

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at http://www.fs.fed.us/global/aboutus/policy/tt/reports/john_gray2.doc.

[88] Conservation International has been supported in its conservation payment schemes in Latin America in large part by a December 2001 grant from the Gordon and Betty Moore Foundation, totaling up to $261.2 million over a ten year span. This grant is part of "the single largest set of philantropic investments made in tropical biodiversity conservation." *See* Gordon & Betty Moore Found., *Conservation International* (Oct. 2001), *at* http://www.moore.org/grantees/grant_summaries_content.asp?Grantee=ci (last visited Mar. 23, 2004). Other organizations that are experimenting with conservation concessions include WWF and Birdlife International. MERKL ET AL., *supra* note 86, at 2.

[89] *See* Eric Johnson, *Environmentalists Compete for Logging Concessions*, 9 PANAMA NEWS 10 (May 25-June 7, 2003), *available at* http://www.panamanews.com/pn/v_09/issue_10/business_02.html.

[90] *See* MERKL ET AL., *supra* note 86, at 6 ("Conservation concessions enable host countries to capitalize on their ample supply of biodiversity-rich habitats and stimulate economic development by mimicking the payment structure of other business transactions and offer immediate, transparent protection for resources in question.").

[91] Ley Forestal y de Fauna Silvestre [Forestry and Wildlife Law], Numero 27308 (2001) (Peru), *available* at www.elaw.org/resources/printable.asp?id=556?; *see also* LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 26, 172, 196 n.17, 205 n.17 (citing Decreto Supreme 014-2001-AG (2001) (Peru); Resolutión Ministerial 0566-2001-AG (2001) (Peru) (adding complementary dispositions)).

[92] Ley Forestal y de Fauna Silvestre [Forestry and Wildlife Law], Numero 27308, Artícula 10(2)(b) (2001) (Peru). While Chile, Brazil, and Bolivia all "have laws authorizing conservation concessions on public lands," these laws have not been effectively implemented. LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 26. More comprehensive conservation concession legislation is currently being considered in Chile and Bolivia. *Id.* at 9.

conservation easement that is not donated.[93] Unlike conservation easements or protected areas that have been established through debt-for-nature swaps or other projects, the restriction and ecological benefit in a conservation concession are generally not perpetual.[94] This can be considered a disadvantage, but can also present opportunities. According to one analyst:

> [The conservation concession] can bridge a gap to a skeptical government that may be saying, "We don't really want to make this into a permanent park, because we just don't know what we may want in the future; we're just not ready to do that." We can say, "If you're ready to let these areas out in a timber concession, why can't we just compete for those timber concessions? Why do you have to be a logging company to apply to hold a timber concession? Why not allow us to hold a conservation concession, where we'll pay the same amount of royalty but we won't log the land? Why shouldn't any logical land management system allow for that?"[95]

The periodic nature of conservation concession payments could also improve the prospects for compliance with the concession by the public land owner—for example, the avoidance of logging on the lands. A possible response to concession violations by the land owner is for the concession holder to simply stop paying. This can be contrasted with the much less satisfactory enforcement mechanisms for violations of conservation easements. Often, the only recourse available is through the courts; this can be unsatisfactory from the conservationist's point of view for a number of reasons.[96]

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[93] Richard Rice, *Conservation Concessions: Concept Description*, *in* UNDERSTANDING AND CAPTURING THE MULTIPLE VALUES OF TROPICAL FORESTS: PROCEEDINGS OF THE INTERNATIONAL SEMINAR ON VALUATION AND INNOVATIVE FINANCING MECHANISMS IN SUPPORT OF CONSERVATION AND SUSTAINABLE MANAGEMENT OF TROPICAL FOREST 83, 83-84 (P.A. Verweij ed., 2001), *available at* http://www.tropenbos.nl/files/Verweij/016Rice.pdf ("A conservation concession typically involves periodic payments in return for the conservation of a specified area.").

[94] James Leavitt & Dana Sevoy, *Face-to-Face with Ian Bowles*, REP. ON CONSERVATION INNOVATION (The Internet & Conservation Project, Harvard Univ.), Winter 2003, at 8, *available at* http://harvardforest.fas.harvard.edu/research/pci/RCI_Winter_2003.pdf.fc.

[95] *Id.* at 4.

[96] *See* LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 6.

One final advantage with conservation concessions is that they can be a relatively simple contracting mechanism, as they need not be any more complex than a standard logging concession or grazing lease.[97]

One danger with conservation concessions and permit retirement schemes is that a government may react to the purchase of a forest concession by a conservation group by deciding to simply reduce its own conservation projects elsewhere. In doing so, the government achieves the original balance of development and land preservation that had been planned prior to the conservation concession. While this is a somewhat cynical view of political decision-making, in some circumstances this type of behavior could present a danger. It is possible to obtain promises not to engage in such behavior—for example, in the Noel Kempff Project in Bolivia,[98] logging rights were bought "only on the condition that companies could not reinvest funds into unsustainable logging elsewhere."[99] However, it would be difficult, if not impossible, to monitor or enforce such a clause given the economic constraints on NGO environmental activists. On the other hand, environmentally valuable land, at least in theory, are not exactly interchangeable in the way that emissions permits are, which should make compensatory development on other lands less likely.

The first conservation concessions in Latin America were granted during the early nineties in Chile, where three foundations took advantage of a law which provided that the Ministry of Bienes Nacionales could grant conservation concessions to NGOs under very favorable terms—no fees were required for the concession, and the duration of the concession could be indefinite.[100] However, these concessions were short-lived, as none of the foundations were able to maintain their concessions, thus leaving control of the areas to revert back to the State.[101] Since that time, some small conces-

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[97] For example, the Los Amigos conservation concession in Peru took only three months to negotiate from start to finish. *See* Richard Rice, Presentation at the Annual Meetings of the Society for Conservation Biology, Conservation Concessions: Our Experience to Date (July 15, 2002), *available at* http://epp.gsu.edu/pferraro/special/RicePresentation.pdf.

[98] *See infra* notes 146-50 and accompanying text.

[99] Ted Gullison et al., *Logging Off: Mechanisms to Stop or Prevent Industrial Logging in Forests of High Conservation Value*, UNION OF CONCERNED SCIENTISTS 46 (2001), *available at* http://www.ucsusa.org/publication.cfm?publicationID=69.

[100] *See* LEGAL TOOLS AND INCENTIVES, *supra* note 35, at 26, 196 n.15 (citing Article 57° *et seq.*, Decreto Ley N° 1,939 (1977), modified by art. 10°, number 3 of Ley N°, 19,606 (1999)).

[101] *Id.* at 26.

sions have been granted in Chile, mainly for eco-tourism purposes.[102] More recently, major conservation concessions have been negotiated with governments in Peru and Guyana.[103]

The first Peruvian conservation concession was granted July of 2001 to the conservation group Asociación para la Conservación de la Cuenca Amazónica ("ACCA").[104] The renewable forty-year concession involves an area of one hundred and thirty thousand hectacres in the Los Amigos River watershed where ACCA was in the process of establishing an ecological research station.[105] Rich in plant and bird life, "[t]his land forms part of an ecological corridor that links Manu and Bahuaja-Sonene national parks in Peru."[106] This concession was finalized shortly after the passage of a new Peruvian Forestry Law which explicitly legitimized conservation concessions.[107]

A year later, in July 2002, Conservation International established the Upper Essequibo Conservation Concession, an agreement to manage two hundred thousand acres in southern Guyana for conservation purposes.[108] Conservation International paid the Guyana Forestry Commission an application fee of twenty thousand dollars and an initial rate of fifteen cents an acre annually for the concession.[109] This rate is comparable to an active timber concession.[110] The project was concluded after stakeholder consultations had been conducted at a local and national level. Also included in the project was a side agreement with three local indigenous communities—the Apoteri, Rewa and Crashwater—to establish a Voluntary Community Investment Fund to facilitate community development programs.[111]

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[102] *Id.*

[103] *See* Rice, *supra* note 93, at 84.

[104] *Id.*; Hardner & Rice, *supra* note 5, at 95. The Peruvian government and its people supported the two conservation groups in their pursuit to create the Los Amigos conservation concession through the "legal advice from the Peruvian Environmental Law Society (SPDA), assistance from independent environmental consultant Enrique Toledo, and the enthusiastic support of Peru's Minister of Agriculture, Carlos Amat y Leon." *Id.*

[105] *Id.*

[106] *Id.*

[107] *See* sources cited *supra* note 91.

[108] *See* Guyana Establishes, *supra* note 52.

[109] Kiss, *supra* note 38, at 13.

[110] Guyana Establishes, *supra* note 52.

[111] *Id.*

Conservation International is also in the process of negotiating a conservation concession of seventy-five thousand hectares with two local communities in the Maya Biosphere Reserve in Guatemala, an area of pristine forest that also contains important Mayan ruins.[112] The concessions would pay the salaries of conservation managers, invest in eco-tourism projects and expand services such as education and health care in exchange for logging restrictions.[113]

V. CONSERVATION INCENTIVE AGREEMENTS

While the concept of conservation concessions initially developed with regards to concessions to log on public lands, there is no reason why similarly styled agreements cannot be undertaken between two private actors regarding exploitation rights on entirely private lands. This logical extension to conservation concessions is in fact taking place throughout Latin America. These agreements are sometimes called conservation incentive agreements. Conservation incentive agreements are similar to conservation easements in many ways, with the main differences being that conservation incentive agreements involve the transfer of contract rights as opposed to property rights. This means that conservation incentive agreements are temporary and can be conducted between any two or more parties without the requirements of a dominant and servient tenement. As with conservation concessions, payments for conservation incentive agreements are generally made on a periodic basis.[114]

As with conservation concessions, conservation incentive agreements also exist in the United States.

> The Prairie Wetlands Chapter [of the Kansas Wetlands and Riparian Areas Alliance], for example, recently received funding from the Playa Lakes Joint Venture to support the

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[112] *See* Hardner & Rice, *supra* note 5, at 95; Rice, *supra* note 93, at 86.

[113] *See* Rice, *supra* note 93, at 86; *see also* Hardner & Rice, *supra* note 5, at 95.

[114] Richard Rice et. al, Conservation Incentive Agreements: An Approach to Linking Conservation and Economic Development on Indigenous Lands in Ecuador, Presented to the International Conference on Rural Livelihoods, Forests, and Biodiversity, at 5 (May 19-23, 2003) (on file with the author) ("[Conservation incentive agreements] offer a *natural* context within which to implement cost-effect monitoring, since payments are made on an annual basis and are made *contingent* upon a set of carefully defined performance metrics.").

> acquisition of conservation leases on playas in the western third of the State. This project will pay landowners not to farm in playas and to establish permanent buffers around these seasonal wetlands.[115]

One example of a conservation incentive agreement in Latin America is the agreement between the Ejido Cebadillas and six conservation groups (five of which were Mexico-based,[116] with the sixth being the Tucson-based Wildlands Project) to protect a forty thousand acre land parcel in the Sierra Madre Occidental mountains in northern Chihuahua, Mexico.[117] The parcel includes the nesting sites of half the world's western thick-billed parrots.[118] There was no governmental involvement in this project. Rather, the agreement was drawn up directly between the conservation organizations and the seventy-four members of the ejido, or land cooperative,[119] designating "ejido members 50 percent of the net value of the uncut timber within the protected area over the next fifteen years. The Wildlands Project will fund a forestry study for the remainder of the cooperative's land, which will result in a sustainable logging plan."[120] If the sustainable management plan is certified by the International Forest Stewardship Council, timber will command superior prices than before the plan's certification.[121] In addition, the conservation organizations will also encourage eco-tourism development through the construction of three cabins for birdwatchers and other visitors interested in the natural beauty of the area.[122]

While the funding for the project will come largely from the Wildlands Project, the Mexican NGOs "will take a lead role in community development projects" and "assist in implementing and monitoring the agreement . . . ."[123]

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[115] Tim Christian, Kan. Wetlands & Riparian Lands Alliance, *A New Image for Kansas*, *available at* http://library.fws.gov/Birdscapes/sprsum02/Howto.html (last visited Jan. 24, 2004).

[116] The Mexican organizations were Pro-Natura, Naturalia, Monterrey Tec, the Sierra Madre Alliance and Wildlife Preservation Trust International. *Endangered Mexican Parrots Safe from Logging*, *supra* note 53, at para. 2.

[117] *Id.*

[118] *Id.* at para. 1.

[119] *Id.* at para. 4.

[120] *Id.* at para. 9.

[121] *Id.* at para. 16.

[122] *Endangered Mexican Parrots Safe from Logging*, *supra* note 52, at para. 11.

[123] *Id.* at para. 16.

This agreement typifies the new generation of conservation activism that combines the best attributes of measures such as conservation concessions, eco-labeling, and eco-tourism into an integrated agreement that encourages environmental preservation while providing for the developmental needs of the local population.

Another conservation incentive agreement that has recently been implemented is a project involving the Worldwide Fund for Nature and the Mexican government to purchase logging rights from local inhabitants in areas of Monarch butterfly habitat.[124] The Worldwide Fund for Nature has used a five million dollar grant from the Packard Foundation to set up the Monarch Butterfly Conservation Fund, which now purchases logging permits from permit holders within the Monarch Butterfly Biosphere Reserve for eighteen dollars per cubic meter of timber not harvested, and provides payments to landowners to conserve their lands (totaling "[twelve dollars] per hectare for those without logging permits and US [eight dollars] per hectare with logging permits").[125] The project will also support "sustainable economic projects in the buffer zone of the reserve and to fund law enforcement activities" when the project is fully funded.[126]

Several other conservation incentive agreements have been either implemented in recent years or are currently in the negotiations stage. In Kenya, the Wildlife Foundation has purchased conservation leases on private lands to secure a wildlife corridor for four dollars per acre for each year.[127] Conservation International has completed a conservation incentive agreement with a copper company to protect a rare forest type in Peru, and is negotiating other possibilities in Mexico, Ecuador, Bolivia, Brazil, Sierra Leone and elsewhere with a number of partners, including the Nature Conservancy, Birdlife International, and Deutsche Gesellschaft für Technische Zusammenarbeit ("GTZ"), the German government-owned international development corporation.[128]

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[124] *See* World Wildlife Fund (Mexico), *Conservation Efforts for the Monarch Butterfly*, *at* http://www.wwf.org.mx/monarch_conservation.php (last visited Jan. 24, 2004).

[125] *Id.*

[126] *Id.*

[127] Ferraro & Kiss, *supra* note 69, at 1719.

[128] *See* Richard Rice et al., Conservation Incentive Agreements: An Approach to Linking Conservation and Economic Development on Indigenous Lands in Ecuador, Presented to the International Conference on Rural Livelihoods, Forests, and Biodiversity, at 2-3 (May 19-23, 2003) (on file with author).

One variety on the conservation incentive theme is the negotiation of agreements between conservation organizations and logging companies to undertake environmentally sustainable logging on particular concessions. This has the benefit of still providing for jobs and some economic benefit in the affected area, while maintaining the environment in an acceptable state. An example of this type of project that took place on a small scale is Sabah, Malaysia, in 1992, with an American utility company paying a Malaysian logging company to implement reduced-impact logging guidelines.[129]

VI. PERMIT RETIREMENT

Within the United States, and more recently in Latin America, there have been a number of instances where logging or grazing permits have been purchased by conservation groups and then permanently retired by the state authority that issued the permits. This is essentially analogous to a conservation concession, with the difference being that the logging or grazing on the relevant public land will be stopped permanently, and not just for a period of years. Of course, it is within the power of the government to reissue a logging or grazing concession on a particular parcel of land, despite the fact that the concession has been formally "retired."[130] However, there presumably would be considerable political opposition to acting in such a fashion, and research has not uncovered any instances of permits being issued after retirement.[131]

One of the first permit retirement schemes was created in 1996, in Nevada's Great Basin National Park.[132] At the behest of Nevada's congressional delegation, "Congress amended the law [establishing] Great Basin National Park [in order] to allow . . . grazing" concession holders to voluntarily donate their grazing permits "back to the Park Service."[133] In 1999, three permit holders donated their grazing permits back to the park service in return for payments of approximately $2.20 per acre from a variety of conservation organizations.[134]

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[129] *See* Michelle A. Pinard & Francis E. Putz, *Retaining Forest Biomass by Reducing Logging Damage*, 28 BIOTROPICA 278 (1996).
[130] *See* Memorandum from William G. Myers III, *supra* note 10.
[131] Based on author's research as of April 12, 2004.
[132] *See* Salvo & Kerr, *supra* note 9, at 22-23.
[133] *Id.* at 22.
[134] *Id.* at 22-23.

Another interesting permit retirement scheme was implemented in 1998-99 at the Grand Staircase-Escalante National Monument in Utah.[135] Here, the Grand Canyon Trust negotiated deals to pay eleven grazing permit holders to fully or partially end their concessions.[136] The permit holders relinquished their permits to the Bureau of Land Management, which then administratively retired the permits through an amendment in the Escalante Management Framework Plan.[137] Grazing concessions were in this way removed from nearly one hundred thousand acres of ecologically valuable lands.[138]

Permit retirements can be seen as analytically similar to the establishment of a protected area on public lands. In fact, this was explicitly the result when "the Northwest Ecosystem Alliance ("NWEA") raised $16.5 million to buy the timber rights on the 11,363 [hectare] Loomis State Forest in northeastern Washington [in 1999]."[139] In exchange for a payment of $16.5 million—the market value of the timber in the forest—the Washington Department of Natural Resources transferred the land from trust status to a permanent Natural Resource Conservation Area.[140]

While the preceding permit retirement schemes have been implemented on an ad hoc basis, two bills have recently been introduced which would provide for voluntary permit retirement for ranchers on federal lands.[141] If passed, the federal bill would appropriate one hundred million dollars to pay willing federal grazing permit holders to permanently retire their grazing permits.[142] While the bills have garnered some support among individual ranchers, there has been opposition from ranching organizations and certain Western politicians.[143]

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[135] *Id.* at 23.

[136] *Id.*

[137] *Id.*

[138] *See* Salvo & Kerr, *supra* note 9, at 23.

[139] Gullison et al., *supra* note 100, at 44. A $3.4 million contribution from Microsoft co-founder Paul Allen saved the deal at the last minute. *See* Northwest Ecosystem Alliance, *Projects: Loomis Forest Fund: Victory for the Loomis Forest, at* http://www.ecosystem.org/projects_loomis.html (last visited Apr. 1, 2004).

[140] *Id.*

[141] *See* Arizona Voluntary Grazing Permit Buyout Act of 2003, H.R. 3337, 108th Cong. (1st sess. 2003); Voluntary Grazing Permit Buyout Act of 2003, H.R. 3324, 108th Cong. (1st sess. 2003). Both bills were introduced by Representative Christopher Shays (R-CT) and Representative Raul Grijalva (D-AZ). The only difference between the bills is scope: the Arizona bill would only apply in that state, while the other would apply in all states.

[142] *See* H.R. 3324.

[143] *See, e.g.*, N.S. Nokkentred, *Ranchers Worry Proposed Bills Could End Grazing*, DAILY

The first example of a permit retirement scheme to be implemented in Latin America was the 1996 Noel Kempff Project, where logging rights for 2.47 million acres in Bolivia were purchased from a private timber company for $9.6 million in a collaborative project by the Fundación Amigos de la Naturaleza, The Nature Conservancy, the Bolivian government and three American utility companies.[144] Once the logging rights had been purchased by the conservation groups, the Bolivian government then added those areas to an adjacent national park so as to permanently preserve the land.[145] An additional $1.5 million was provided to the Bolivian government in the form of a trust fund for the administration of the park.[146]

The Noel Kempff concession purchase was part of a thirty year Climate Action Project, whose goal was to gain seven to ten million metric tons of carbon benefits—forty-nine percent of which were to go to the Bolivian government and the remainder to the American utilities.[147] As another part of the agreement, the private timber company that sold its concessions signed a contract agreeing to adopt sustainable management practices on its remaining concessions and to avoid using money from the concession it had sold to acquire logging concessions in different areas.[148]

A year later, Conservation International completed a similar transaction that added one hundred and twelve thousand acres to Bolivia's Madidi National Park.[149] This transaction involved the purchase of a logging concession from a logging company (Fatima, Ltd.) immediately prior to the planned commencement of logging.[150] The purchase price for the concession was one

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HERALD (Provo, UT), Nov. 29, 2003, at A1; Letter from Rep. Scott McInnis, to Congressional Colleagues, End All Grazing on Public Lands?—"Voluntary" Buyouts are First Step by Radical Environmental Groups Supporting Effort (Sept. 25, 2003), *available at* http://www.libertymatters.org/newsservice/2003/faxback/10-1-03_2569_Grazing.htm.

[144] Gullison et al., *supra* note 100, at 46.

[145] *Id.* at 46.

[146] *Id.* at 46.

[147] *Id.*

[148] Jonathan Rotter & Kyle Danish, *Forest Carbon and the Kyoto Protocol's Clean Development Mechanism*, 98 J. OF FORESTRY 38, 46 (2000), *available at* http://www.vnf.com/content/Articles/Articles/Forestcarbon.htm.

[149] Hardner & Rice, *supra* note 5, at 93.

[150] Press Release, Conservation International, Rapid Response Rescues Valuable Andean Rain Forest (Sept. 30, 1999), *available at* http://www.conservation.org/xp/news/press_releases/1999/093099.xml.

hundred thousand dollars.[151] After the concession was purchased by Conservation International, it was then permanently retired by the Bolivian government, and the land added to the adjacent national park.[152]

As the preceding descriptions show, permit retirement schemes differ from conservation concession in that they will almost always require explicit reforms in concessions policy at either the administrative or political level. They will involve the permanent loss of a future income stream for governments and an economic development option for local communities. Therefore, permit retirement will generally require more in depth negotiations with conservation-minded government officials, perhaps accompanied by the provision of compensation for the State, as in the Noel Kempff project. These factors would make the cost of a permit retirement scheme generally greater for a conservation organization than the costs of implementing conservation concessions or conservation incentive agreements. On the other hand, the potential payoff for the conservation organization would also be greater, as the land in question will receive permanent protection.

VII. CONCLUSION

Over the past fifteen years, there has been a growing recognition of the need for more effective land preservation in Latin America. With this recognition has come the development of a range of new conservation techniques. These include conservation concessions, conservation incentive agreements, and permit retirements—three recent variations on the basic theme of payment for conservation. These conservation mechanisms can provide an effective market incentive for land preservation. While there can be no single conservation technique that presents a silver bullet to the environmental problems facing Latin America, the mechanisms discussed in this paper represents relatively straightforward and interesting advances to preserve ecologically important lands—both publicly and privately owned—that are currently being exploited or threatened with exploitation.

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[151] *Id.*
[152] *Id.*