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PROPOSAL FOR THE ESTABLISHMENT OF THE SPECIAL PROGRAM AND MULTIDONOR FUND FOR BIODIVERSITY AND ECOSYSTEM SERVICES

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Under the Access to Information Policy, this document is subject to Public Disclosure.

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- Biodiversity Conservation and Ecosystem Services: a Review of Experience and Strategic Directions for the IDB (Gonzalo Castro de la Mata, 2012)
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- 4. Biodiversity and Ecosystem Services Program: Regional Consultation Report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37230158
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Abbreviations

BES Biodiversity and ecosystem services

CCS Climate Change and Sustainability Division CGM Communications Management Division

ENE Energy Division

ESG Environmental Safeguards Unit EXR Office of External Relations

FAO Food and Agriculture Organization of the United Nations

FIN Finance Department

GCI-9 Ninth Capital Increase in the IDB

GCM Grants and Co-Financing Management Unit

GDI Gender and Diversity Unit GDP Gross Domestic Product GEF Global Environment Facility

GEO LAC 3 Environment Outlook for Latin America and the Caribbean

IADB Inter-American Development Bank

IAG Independent Advisory Group on Sustainability for the IDB

IDB Inter-American Development Bank
INE Infrastructure and Environment Sector

IUCN International Union for Conservation of Nature

KNL Knowledge and Learning Sector LAC Latin America and the Caribbean

LEG Legal Department

MIF Multilateral Investment Fund

OC Ordinary Capital

OMJ Opportunities for the Majority Sector ORP Office of Outreach and Partnerships

RFF Resources For the Future

RND Environment, Rural Development Disaster Risk Management Division

SCF Structured and Corporate Financing Department

SDV Strategy Development Division

SGO Sovereign Guaranteed Operations Division

SPD Office of Strategic Planning and Development Effectiveness

TC Technical Cooperation

TEEB The Economics of Ecosystems and Biodiversity

TS Technical Secretariat
TSP Transport Division

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNISDR United Nations International Strategy for Disaster Reduction

VPC Vice Presidency for Countries

VPP Vice Presidency for Private Sector and Non-Sovereign Guaranteed

Operations

VPS Vice Presidency for Sectors and Knowledge

WSA Water and Sanitation Division

EXECUTIVE SUMMARY

The Latin America and Caribbean (LAC) Region has been deemed the superpower of biodiversity because it is the Region with the most natural capital¹ in the world. It possesses a vast array of terrestrial, freshwater, coastal, and marine ecosystems representing many of the earth's biomes². This natural capital supports ecosystem services that serve as the base for livelihoods, economies, and civilizations.

Not only is LAC rich in natural capital, but the Region is also growing and increasingly competitive in many economic sectors³. As LAC continues to expand and modernize, pressure on biodiversity and ecosystem services is increasing. There are four main challenges within LAC that impede the sustainability of biodiversity and ecosystem services that support economic development: (i) overcoming market failures that affect biodiversity and ecosystem services; (ii) increasing threats to ecosystems; (iii) weak sector policies and governance structures; and (iv) unrealized business opportunities. In order to create an environment where both economies and biodiversity continue to thrive together, it is necessary to create opportunities and utilize the comparative advantage of the Region in biodiversity and ecosystems services for sustainable and inclusive development in LAC.

The Bank has a history of investments in biodiversity and ecosystem services. Its strengths and experience in biodiversity and ecosystem services create an excellent opportunity to expand and promote biodiversity conservation and maintenance of ecosystem services in its operations. In view of this, the Bank proposes to increase its efforts to create opportunities and utilize the comparative advantage of the Region in biodiversity and ecosystems services for sustainable and inclusive development in LAC with the specific objectives of: (i) assessing and integrating the economic value of biodiversity and ecosystem services within LAC into infrastructure and productive sectors; (ii) increasing awareness on and protecting critical and large-scale ecosystems of regional significance; (iii) supporting LAC countries in the implementation of directed and effective policies, laws, and investments that secure and enhance biodiversity conservation and the maintenance of ecosystem services; and (iv) creating new economic, financial, and business opportunities that contribute to sustainable development and include innovative techniques for the protection of biodiversity and ecosystem services in the Region.

The four components to this program are: (i) integrating the economic value and importance of biodiversity and ecosystem services into strategic economic sectors; (ii) priority ecosystems conservation investments; (iii) strengthening and fostering environmental governance; and (iv) promoting private sector investment opportunities

¹ Natural capital is the stock of biodiversity and natural ecosystems that yields a flow of valuable ecosystem goods or services in the present and into the future.

² A biome is considered a major community classified according to the predominant vegetation and characterized by adaptations of organisms to that particular environment (Campbell, 1996).

³ Moreno, 2011. The Decade of Latin America and the Caribbean: A Real Opportunity. IDB.

that foster innovation in environmental protection. This program responds directly to the two overarching objectives of the Bank under the GCI-9 for LAC: reducing poverty and inequality and sustainable growth (IDB, 2010). The activities proposed are consistent with GCI-9 and its institutional priority for *Protecting the environment, responding to climate change, promoting renewable energy and ensuring food security*. GCI-9 calls for the maintenance of key ecosystem services upon which the rural poor of the Region are overwhelmingly dependent and aims to secure the natural capital that will be needed to support future economic growth in productive sectors and infrastructure. Through these efforts, the Bank seeks to increase and expand its technical and financial assistance to member countries as well as enhance technical capacity internally for integration of biodiversity and ecosystem services in achieving the mandates of sustainable development, poverty alleviation, and private sector investment.

Two mechanisms will be created to finance the activities under this program: (i) a Special Program for Biodiversity and Ecosystem Services ("Special Program"), to be funded with resources in the amount of approximately US\$30 million from the Bank's Ordinary Capital (OC), an amount estimated on the basis of the output targets set in the Results Matrix for 2013-2016; and (ii) a Multidonor Fund for Biodiversity and Ecosystem Services ("Multidonor Fund"), as provided for in the New Framework for Technical Cooperation (document GN-2469-2).

The governance structure established for the Special Program and Multidonor Fund for Biodiversity and Ecosystem Services, as well as the operational elements set forth in the document, will follow the procedures set forth in the Framework for Technical Cooperation (document GN-2469-2), the Proposal for a New Bank Policy on Technical Cooperation (document GN-2470-2), the Operational Guidelines for Technical Cooperation Products (document GN-2629-1), and the Operational Guidelines for Nonreimbursable Investment Operations (OP-219-1). Given the cross-cutting nature of biodiversity and ecosystem services, the resources may finance proposals from different areas of the Bank.

In 2013, the Special Program will be financed from the resources allocated by the Board of Executive Directors in Resolution DE-242/12. The use of the US\$3 million allocated to the Special Program provided for in that Resolution was subject to the approval by the Board of Executive Directors in 2013 of a proposal for the use of such resources, which is formulated in this document. If this proposal is approved, the framework it presents will also apply to the use of any additional resources that may be allocated to this initiative by the Board of Executive Directors in future budgets, as part of the allocation under the heading of Ordinary Capital special programs.

In light of the foregoing, we are recommending the Board of Executive Directors to authorize the proposed Resolution included herein which will establish the Special Program and will authorize the Bank to enter into agreements for the MultiDonor Fund in the terms described in this document.

I. BACKGROUND: BIODIVERSITY AND ECOSYSTEM SERVICES IN LATIN AMERICA AND THE CARIBBEAN

A. Natural capital of the Region and importance to economic development

- 1.1 The Latin America and Caribbean (LAC) Region has been deemed the superpower of biodiversity because it is the Region with the most natural capital⁴ in the world. With only 16% of the planet's land, the Region holds 40% of the world's biological diversity⁵, including seven of the world's 25 biodiversity hotspots and six of the 17 "megadiverse" countries. The LAC Region possesses a vast array of terrestrial, freshwater, coastal, and marine ecosystems representing many of the earth's biomes. Forested biomes together cover nearly 900 million hectares, or half of LAC's land mass, and nearly 22% of the world's total forest cover. More than 30% of the earth's available freshwater and roughly 40% of its renewable water resources is found in Latin America⁶. The Region's tropical and subtropical coasts consist of over 30 distinct mangrove eco-regions along 37,000 square kilometers, representing one-quarter of the world's total mangroves⁷. Moreover, the Caribbean coasts of Mexico, Belize, Guatemala, and Honduras alone hold the second largest reef system worldwide.
- 1.2 Natural capital supports ecosystem services that serve as the base for livelihoods, economies, and civilizations. The multitude of ecosystems found in LAC provide beneficial provisioning, regulating, cultural, and supporting services. *Provisioning services* are material or energetic outputs from ecosystems, including food, water and other resources; *Regulating services* are mechanisms that regulate the biotic and abiotic environment, providing climate, natural hazard (flood, erosion, earthquake and volcanic eruptions) and disease control; *Cultural services* are nonmaterial benefits, such as spiritual, recreational, and cultural gains; and *Supporting services* maintain the conditions for life on Earth, such as nutrient cycling and primary productivity⁸.
- 1.3 Ecosystem services, such as soil fertility, pollination, pest control and scenic beauty, are the primary inputs for productive sectors key to LAC economies. These services directly support sectors such as agriculture, fisheries, forestry and

⁴ Natural capital is the stock of biodiversity and natural ecosystems that yields a flow of valuable ecosystem goods or services in the present and into the future.

⁵ Bovarnick, A., F. Alpízar, C. Schnell (eds.). 2010. Latin America and the Caribbean: A biodiversity superpower. United Nations Development Program (UNDP).

⁶ United Nations Environment Program (UNEP). 2010. Atlas of Our Changing Environment: Latin America and the Caribbean, UNEP.

⁷ Siikamäki, J., J. Sanchirico, S. Jardine, D. McLaughlin, and D. Morris. 2012. Blue Carbon: Global Options for Reducing Emissions from the Degradation and Development of Coastal Ecosystems,' RFF Report (forthcoming).

⁸ Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Synthesis. Island Press, Washington, DC.

tourism⁹ which together account for 15% of GDP for the Region on average, reaching beyond the 35% mark in the poorest countries, while employing 17% of its labor force and contributing an average of 50% of total exports¹⁰. In addition, these sectors are at the heart of economic development of rural areas in LAC, where two-thirds of its population lives in poverty and 36 million farmers depend on agriculture for subsistence. Estimates show that ecosystem services and other non-marketed goods account for more than 50% of the "GDP of the poor"¹¹. Biodiversity provides options and life supporting functions¹² such as food security, particularly for the poor. For example, most indigenous peoples and traditional populations inhabit areas of megadiversity¹³ and rely heavily on forests as a source of subsistence and income. Food security risks can be mitigated by harvesting of non-timber forest products that provide insurance against changes in agricultural yields particularly among the poorest communities¹⁴. majority of Caribbean countries, coastal tourism which depends heavily on coral reefs and beaches is the leading economic, cultural and socioeconomic activity, generating US\$15.1 billion in revenue per year and directly contributing 4.5% to GDP^{15} .

1.4 Regulating services such as storm mitigation, climate regulation and flood control provided by forests, mangroves and other ecosystems help reduce risks from natural disasters to which the Region is prone¹⁶. In fact, 14 countries in LAC have ranked among the top 35 countries in the world for high mortality risk from multiple hazards and 19 countries in LAC have ranked among the 70 countries in the world at high economic risk from multiple hazards¹⁷. Natural hazards and disasters impact the poor disproportionately¹⁸. Similarly, control of quantity and quality of water are ecosystem services that provide potable water and energy to a more urbanized Region. LAC population consumes annually close to 519 cubic meters per person of water¹⁹ and hydropower provides 53% of total energy supply in the Region²⁰. Mitigation of and adaptation to climate change impacts are also

⁹ Bovarnick, et al. 2010. ibid

Economic Commission for Latin America and the Caribbean. 2011. Statistical Yearbook for Latin America and the Caribbean.

¹¹ TEEB (2010) The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB.

¹² Millennium Ecosystem Assessment, 2005. ibid.

¹³ Posey, D. 1999. Cultural and Spiritual Values of Biodiversity. United Nations Environment Program.

Pattanayak, S.K., and Sills, E. 2001. Do tropical forests provide natural insurance? The microeconomics of non-timber forest products collection in the Brazilian Amazon'. Land Economics, 77: 595-612.

¹⁵ World Tourism Council. 2011.

¹⁶ Ramsar, 2010. Wetland Ecosystem Services: <u>Shoreline Stabilization and Storm Protection</u>.

¹⁷ World Bank, 2005. Natural Disaster Hotspots. Washington DC. World Bank.

¹⁸ United Nations International Strategy for Disaster Reduction (UNISDR). 2008. <u>Climate Change and Disaster Reduction Briefing note</u>. Geneva: United Nations; UNDP. 2004. <u>Reducing Disaster Risk: A Challenge for Development</u>. Geneva: Bureau for Crisis Prevention and Recovery.

¹⁹ United Nations World Water Development Report 4. Managing Water under Uncertainty and Risk 2012.

²⁰ FAO 2012, General summary Latin America and the Caribbean.

key regulating services of global importance provided by LAC ecosystems. Brazil contains more carbon in tropical forest trees than any other country in the world (approximately 47 billion tons in 3.3 million square km in the Amazon alone). The value of Amazon forest conservation in terms of carbon sequestration and protection of the rainfall system that supply much of the Brazilian grain belt and hydro-electric energy production of the industrial southwest of the country far exceeds the costs of protecting it²¹. In summary, LAC's natural capital and its ecosystem services provide critical and sustaining benefits to economies.

B. Future challenges to the sustainable use of natural capital in LAC

- As the Region grows both demographically and economically, new challenges arise to sustain the flow of benefits provided by biodiversity and ecosystem services. Between 1950 and 2010, LAC's population grew by more than 250%; its GDP increased 87% between 1990 and 2010, while its GDP per capita grew by 40%²². As regional GDP is expected to double by 2030 with poverty levels declining, a middle class is emerging and is expected to reach 500 million people by 2030. As a result, demand for energy and water could increase by 50% and 25% respectively while also driving demand for food, fibers, forest products, land and minerals. In addition, the infrastructure gap in LAC will expand, with more than US\$39 billion needed to achieve full coverage in water and sanitation and 6% of GDP in two decades required to close gaps in road improvements²³. The next decades offer LAC significant opportunities for ensuring that ecosystems are able to provide the services required to meet the demand associated with continued growth in a sustainable manner.
- 1.6 In order to create an environment where both economies and biodiversity continue to thrive together, the Region must face the challenge of fully utilizing the comparative advantage provided by its biodiversity and ecosystem services for sustainable and inclusive development. Improved management of ecosystems is critical to ensuring that the growth of the middle class continues and that it does not jeopardize the livelihoods of the poor. The major challenges confronting the Region are:
 - a. Market failures that affect biodiversity and ecosystem services. LAC's biodiversity generates a wide array of ecosystem services that are not normally bought and sold on markets²⁴. The vast majority of ecosystem services have direct, indirect-use, and non-use values that are not internalized by agents through prices. As a result, these services are neither fully mainstreamed into economic sectors (e.g., soil conservation in agriculture, sustainable harvesting in forestry or fisheries) nor protected

ECC

²¹ Nepstad, D. et al, 2007. The Costs and Benefits of Reducing Carbon Emissions from Deforestation and Forest Degradation in the Brazilian Amazon. The Woods Hole Research Center.

²² Economic Commission for Latin America and the Caribbean. 2011. ibid.

²³ Moreno. 2010. ibid.

²⁴ Blackman, A. et al. 2012. ibid.

from misuse (e.g., water pollution, deforestation from road expansion on marginal lands). Overcoming this market failure for biodiversity and its ecosystem services requires solutions that rely primarily on their identification, valuation and quantification, a challenging but necessary first step for assessing tradeoffs between alternative uses of ecosystems. Although decision-support tools, expanded economic valuation methods, and increased access to information on ecosystem status and trends are helping to overcome this issue in LAC (see Box 1)²⁵, much effort is still needed for this to be a practice consistently applied to economic sectors that depend on biodiversity and ecosystem services.

Box 1. Examples of ecosystem services valuation in LAC

Ricketts et al²⁶ demonstrated that pollination from bees in forest fragments contributed substantially to coffee productivity and profits on farms within a kilometer in Costa Rica, an uncompensated externality. A 2009 study by the World Resources Institute indicated that coral reefs and mangroves along the Belizean coast contribute US\$150–198 million per year to the country's thriving tourism industry, US\$14-16 million per year to fisheries, and US\$231-374 million per year to shoreline protection²⁷ In terms of basic services, an analysis of water-related impacts revealed that waterways with water fund investments such as restoration of vegetative cover and increased protection of national parks improved riparian and aquatic habitat quality as well as reduced erosion and sedimentation in downstream reservoirs²⁸. With respect to services provided to infrastructure, a modeling study of Costa Rica's Reventazon watershed concluded that soil conservation practices in upstream watersheds reduced erosion by 97% which translated into US\$1 million annual cost savings in sediment removal to the hydropower company ²⁹.

b. Increasing threats to regional biodiversity and ecosystem services. Threats such as habitat loss and degradation, invasive species, overexploitation, and climate change are contributing to biodiversity loss and inhibiting the provisioning of valuable ecosystem services in the Region³⁰. Natural hazards and disasters are also exacerbated due to loss of regulating ecosystem services (see Box 2). Such threats are being observed at the regional scale and are affecting the status of LAC's key ecosystems such as the Amazon, the Atlantic Forest, the Tropical Andes, the Mesoamerican Corridor and Reef and the Caribbean Islands³¹ with potentially significant economic implications. For example, the reduced

³⁰ International Union for the Conservation of Nature (IUCN). 2011. IUCN Red List of Threated Species. Version 2011. www.iucnredlist.org

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²⁵ Balvanera, P. et al. 2012. Ecosystem services research in Latin America: The state of the art. Ecosystem Services.

²⁶ Ricketts, T.H. Daily, G.C. Ehrlich, P.R. Michener, C.C. 2004. 'Economic value of tropical forest to coffee production. Proceedings of the National Academy of Sciences 101(34):12579-12582.

²⁷ Cooper, E. L. Burke and N. Bood. 2009. Coastal Capital: Belize. The Economic Contribution of Belize's Coral Reefs and Mangroves. World Resources Institute Working Paper.

²⁸ Encalada, A. Ibarra, L.C. and de la Paz, M.C. 2011. *Diagnóstico de la integridad ecológica y la calidad del agua de los ríos en las zonas de manejo del FONAG. Informe Final. Laboratorio de Ecología Acuática de la Universidad San Francisco de Quito.* The Nature Conservancy. 2011.

²⁹ Bovarnik et al. 2010

³¹ Conservation International (CI), 2012, Biodiversity hotspots.

rainfall predicted to result from the massive loss of the Amazon forest could disrupt hydrological cycles and negatively impact agriculture³². This impact could be further exacerbated by climate change. Reducing these threats to the Region's biomes requires careful prioritization of conservation policies. Despite considerable improvements over the last decade or so, the lack of information on species, biodiversity, and ecosystem services represents a significant constraint to conservation planning and evaluation of these regional public goods. The necessary ecological information ranges from basic data on species presence and the threats they face to more complex information about how biodiversity and ecosystem services respond to specific environmental changes, and how conservation actions do and do not spur such changes. Economic information includes estimates of the costs of different conservation options, including opportunity costs, and information on the economic value of the relevant species, biodiversity, and ecosystem services. And while rigorous evaluation of economic development policies is becoming more and more widespread, this trend has only very recently begun in conservation policy in LAC³³.

Weak sector policies and governance structures for the conservation of c. biodiversity and ecosystem services. In order to mainstream biodiversity and ecosystem services in economic sectors and address the threats mentioned above, countries need policies that: (a) promote sustainable environmental practices in productive sectors and infrastructure; (b) foster an enabling environment for sustainable business opportunities; and Good governance is also needed to (c) eliminate perverse subsidies. develop and enforce regulatory approaches—both mandated and incentivebased ones—for environmental and natural resource management. Weaknesses in governance are major obstacles for effective ecosystem management and the application of the rule of law. Most LAC countries still need to develop institutional capacity to regulate the interactions between markets and ecosystems. More work is needed in the areas of allocating and enforcing property rights, national environmental accounting, sector policies improvement, and promoting stronger stakeholder involvement in decisionmaking processes, including engaging indigenous peoples more effectively in integrating traditional ecological knowledge for more sustained results³⁴. Limited financial and human resources; insufficient technical and personnel capacity to monitor environmental regulation compliance; jurisdictional, procedural, and interagency inefficiencies; and a preponderance of hard-to-

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³² Malhi, Y., J. Roberts, R. Betts, T. Killeen, W. Li and C. Nobre. 2008. Climate change, deforestation, and the fate of the Amazon. Science. 319: 160-172.

³³ Ferraro, P., and Pattanayak, S. 2006. Money for nothing? A call for empirical evaluation of biodiversity conservation investments. *PLoS Biology* 4(4): 482–88. Pullin, A., and Knight, T. 2009. Doing more good than harm: Building an evidence-base for conservation and environmental management. *Biological Conservation* 142:931-934.

³⁴ Sobrevila, C. 2008. The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but often forgotten partners. The World Bank.

monitor small-scale firms and farms make enforcement an especially difficult challenge in the Region³⁵.

Box 2. Current threats to ecosystems in LAC

Between 1990 and 2005 nearly 7% of the Region's forest cover was converted, primarily to agricultural land³⁶. Freshwater ecosystems are negatively impacted by pollution in the form of runoff from fertilized agricultural fields, mining, pesticides and other agrochemicals, soil erosion, untreated sewage, and industrial wastes³⁷. These sources of stress affect dependent economic activities such as fishing, agriculture, mining, transport, infrastructure, hydropower, and tourism. In addition, climate change, including changing temperature, precipitation and variability, is expected to have very significant adverse effects on LAC's terrestrial and freshwater biodiversity and ecosystems³⁸, with expected changes in species ranges, increases in disease and pest outbreaks, and unpredictable variability in populations and habitat conditions³⁹. Nearly half of LAC's population lives within 100 kilometers of the coast⁴⁰, which places direct and indirect demands on coastal and marine ecosystems, resulting in habitat loss and degradation as well as overexploitation of natural resources⁴¹. Catch fisheries in LAC have exhibited the same dynamic pattern over the past several decades - with the number and capacity of fishing vessels increasing, production has reached a plateau and is likely in decline⁴². Close to 80% of the 49 commercial fish stocks for which data are available have been classified from moderately to fully exploited⁴³. Natural hazard and disasters also negatively impact freshwater, terrestrial and coastal and marine ecosystems. The social and economic costs associated with natural disasters are often compounded by poor preparedness and ecosystem alteration related to development projects that do not include ecosystems services into decision making⁴⁴. Within LAC, sea level rise and ocean acidification are seen as the main climate change-related threats to coastal and marine biodiversity 45.

d. **Unrealized business opportunities.** There is a growing recognition that businesses depend directly and indirectly on ecosystem services to produce the goods and services they provide to the economy⁴⁶. According to a recent report by TEEB⁴⁷ in Brazil, the market for certified or "green" products is growing; organic agricultural products are gaining market share and have grown at an annual rate of 20% but still only represent less than 2% of the

³⁵ Blackman et al. 2012. ibid.

³⁶ United Nations Environment Program (UNEP). 2010b. Latin America and the Caribbean: Environment Outlook. GEO LAC 3. Panama City, Panama, UNEP.

³⁷ Blackman, A. et al. 2012. ibid.

³⁸ Strayer, D. and Dudgeon, D. 2010. Freshwater biodiversity conservation: Recent progress and future challenges. *Journal of the North American Benthological Society* 29:344-358.

Potsdam Institute for Climate Change Impact Research and Climate Change Analytics. 2012. Turn Down the Heat. World Bank.

⁴⁰ Chatwin, A. (ed.). 2007. Priorities for Coastal and Marine Conservation in South America.

⁴¹ Halpern, B.S. et al. 2008. A Global Map of Human Impact on Marine Ecosystems, *Science* 319, 948.

⁴² FAO and World Fish Center, 2008; Worm et al., 2009; FAO, 2010; Salas et al., 2011

⁴³ Bovarnick, A. et al. 2010. ibid.

⁴⁴ UNEP and Stockholm Resilience Center, 2008. "Ecosystems and Disaster Risk Reduction: Working Paper in Contribution to the Global Assessment Report".

⁴⁵ Miloslavich, P. et al. 2011. Marine Biodiversity in the Atlantic and Pacific coasts of South America: Knowledge and Gaps. *PLoSone* 6(1): e14631.

⁴⁶ TEEB. 2010. ibid.

⁴⁷ Blackman et al. 2012. ibid.

market. Multiple barriers exist to developing these new business opportunities that support biodiversity and ecosystem services. These include limited information on ecosystem services, lack of technical or managerial expertise, high transaction costs relative to upfront investments, and market failures. Failure to recognize the impacts of businesses on biodiversity and ecosystem services can ignore important opportunities for making a steady stream of profits⁴⁸. Businesses across the world are starting to pay attention and understand that biodiversity loss is not just an ecological concern. The challenge is thus to integrate the value of biodiversity and ecosystem services into business models in order to account for these hidden values.

C. Bank experience and areas of improvement

- 1.7 The Bank has a history of investments in biodiversity and ecosystem services. From 1995 through 2006, the Bank had a portfolio of 240 projects with components integrating biodiversity and ecosystem services⁴⁹. Bank financing for climate change, sustainable energy and environmental sustainability increased from US\$3.6 billion in 2009 to US\$4.6 billion in 2011⁵⁰. In addition, the Bank has mobilized additional resources from global funds and partners; there are currently US\$43 million in grants solely directed towards biodiversity from the Global Environment Facility (GEF) under implementation and US\$71.5 million for biodiversity under preparation⁵¹.
- 1.8 The Bank, from its past work in biodiversity and ecosystem services, has demonstrated a multitude of strengths⁵². The Bank has supported biodiversity and ecosystem services across development opportunities, from individual operations in protected areas to thematic operations where biodiversity is a component of the projects that support numerous sectors in both rural and urban landscapes. The majority of investments in biodiversity and ecosystem services are internalized within Bank loan operations. This demonstrates both internal Bank capacity to mainstream, as well as high potential for leveraging and scaling-up. Past experience has shown that there are a large number of sectors through which biodiversity and ecosystem services can be integrated, for example using biodiversity monitoring for energy development (e.g., PE0233: Institutional, Environmental, and Social Strengthening of the Camisea Project); analyzing ecosystem requirements in water resources planning (e.g., TC0108025: Jamaica Water Resources Master Plan); supporting protected areas for transport corridors

⁴⁹ Carrizosa, S. and Westphal, M.I. 2007. Biodiversity Investments in the Latin American and Caribbean Region. IDB.

⁴⁸ TEEB. 2010. ibid.

⁵⁰ IDB. 2011 Sustainability report.

⁵¹ IDB. 2012. <u>Leveraging Opportunities for Sustaining Growth: IDB Biodiversity Platform for Latin America</u> and the Caribbean.

⁵² Castro de la Mata, G. 2012. <u>Biodiversity Conservation and Ecosystem Services: A Review of Experience and Strategic Directions for the IDB.</u>

(e.g., CO-T1142: Conservation and Development in High Biodiversity Areas - Pasto Mocoa Project); incorporating ecosystem-based adaptation in coastal zone management (e.g., BA-L1014: Coastal Risk Assessment and Management Program); supporting protected areas for sustainable forestry (e.g., BR-L1289: The Acre Sustainable Development Program); promoting sustainable tourism (e.g., BO-L1039: National Community Tourism Program); and incorporating biodiversity indicators in agriculture (e.g., NI-L1067: Sustainable Agricultural Productivity Development Program).

- 1.9 The Bank has set an excellent precedent in the use of various economic instruments, including loans, technical cooperation funds, GEF grants (e.g., establishment of water funds), climate funds, and private sector windows. The ability to access a variety of economic instruments enables the Bank to serve the variety of its client countries, both large and small. For example, the Multilateral Investment Fund (MIF) of the Bank has invested US\$39 million, leveraged by an additional US\$31.8 million in counterpart contributions, in 36 technical assistance grant projects that improved biodiversity⁵³. Increasingly, the Bank's safeguard policies have been used to generate positive biodiversity outcomes (e.g., CR-L1056: Reventazon Hydroelectric Power Plant).
- 1.10 The Bank's strengths and experience in biodiversity and ecosystem services create an excellent opportunity to expand and promote biodiversity conservation and maintenance of ecosystem services in its operations. An analysis of the Bank's sustainability investments between 2006 and 2011⁵⁴ confirms that loans targeting biodiversity and conservation of protected areas, sustainable forest management, and coastal resources management remain consistently low relative to the overall portfolio.
- 1.11 Nevertheless, recent studies confirm several areas for improvement if the Bank is to increase its effectiveness for supporting member countries in tackling the challenges described above. Foremost among them, a 2011 review conducted by an Independent Advisory Group on Sustainability (IAG) found that, while the Bank had performed adequately with respect to the implementation of its environmental and social safeguard provisions, it needed to further mainstream sustainability considerations into its work and place equal weight on biodiversity and ecosystem services as on climate change⁵⁵. This review, as well as a study commissioned for the development of this program⁵⁶, recommended that the Bank address the following specific opportunities for improvement:

55 Independent Advisory Group on Sustainability (IAG). 2011. Final Report to the Inter-American Development Bank.

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⁵³ MIF. 2012. Biodiversity And Small Business: Lessons Learned from Two Decades of Biodiversity Projects at the Multilateral Investment Fund.

⁵⁴ Internal report provided by ESG. 2012

⁵⁶ Castro de la Mata, G. 2012. ibid.

- The assessment of biodiversity and ecosystem services has not been a. consistently internalized in the Bank's own project cycle. For example, there have been limited attempts in the preparation of Country Strategies to analyze the implications of infrastructure and productive sector priorities in terms of ecosystem services. Cross-sector and sector notes prepared as inputs to Country Strategies could be greatly improved if supported for example, by an understanding of how national water supply requirements depend on the provisioning services of watersheds. Similarly, with a few exceptions, the economic feasibility and environmental analyses of infrastructure and productive sector projects have not included the value of ecosystem services during their preparation⁵⁷ and the impacts on ecosystem services are not tracked during supervision, although losses in these services may add considerably to costs (e.g., for maintenance). Finally, there have been few impact evaluations conducted providing empirical evidence to support project results or delineate the direct impact on ecosystem services⁵⁸.
- b. For the most part, the Bank's projects lack consistent metrics or quantitative indicators for biodiversity and ecosystem services, making it difficult to evaluate the outcome of the Bank's work in sustainable development. With the exception of projects financed by the Global Environment Facility (GEF), quantitative indicators of the contribution or impacts of productive and infrastructure projects to biodiversity and ecosystem services have not been systematically incorporated into their design, making it difficult for example to track the amount of natural or critical habitat protected or degraded through Bank projects. Guidelines for standardized indicators and tools for monitoring and evaluating outcomes are needed to strengthen the Bank's sustainability reporting and for rigorous impact evaluation.
- c. Awareness of biodiversity and ecosystem services is limited both externally and within the Bank. With a few exceptions the Bank's stakeholders including policy makers, the private sector, and civil society as well as the Bank's own staff, have an incipient understanding of the value of the Region's natural capital as a competitive advantage for sustainable and climate-resilient development. There is a need to generate knowledge and build capacity on biodiversity and ecosystem services in LAC, their economic value, and challenges and opportunities for sustainable development.

D. Strategy for implementation

1.12 The program aims to support sustainable development through the integration of biodiversity and ecosystems services into economic sectors. This approach

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⁵⁷ Watkins, G. and Hawken, F. 2012. Incorporating Ecosystem Services Analysis in IDB Projects. Draft Technical Note.

⁵⁸ Blackman, A. et al. 2012. ibid.

balances: (i) a base in solid economic principles to demonstrate the program's relevance to decision makers both inside and outside of the Bank; (ii) the need to incorporate the intrinsic value of biodiversity and ecosystem services into economic analyses, particularly for infrastructure and productive sectors which represent the main drivers of biodiversity loss in LAC and are the most dependent on natural capital; and (iii) the need for rigorous evidence of the effectiveness of policies and investments in biodiversity conservation and maintenance of ecosystem services in public and private sectors. This approach recognizes the importance of a strong client focus aimed at building on the recent advances of member countries in managing their natural capital and their interest in sharing knowledge in this field. The program has cross cutting themes of climate resilience and traditional knowledge. Climate resilience is key to the success of this program, since healthy and well-managed ecosystems mitigate the effects and reduce the vulnerability of communities to the impacts of climate change and natural disasters⁵⁹. The inclusion of traditional knowledge builds on the recognition that indigenous peoples within critical ecosystems have much to offer in the understanding and management of these areas⁶⁰.

Within this context, the program will promote a phased strategy and scaling up 1.13 approach with four inter-related lines of action, each one targeting the challenges identified above and building on the Bank's strengths and lessons learned. First, knowledge, tools and guidelines will be provided to help integrate useful information on biodiversity, ecosystem services, their economic benefits and costs into the Bank's work in order to create a widespread understanding of the role and importance of natural capital in sustainable and climate-resilient economic development. Second, support will be provided and South-South cooperation will be promoted for regional efforts to standardize and expand information on priority transboundary ecosystems that serve as natural corridors for regional integration. Cooperation on these large-scale ecosystems will be promoted with a view towards developing innovative solutions to biodiversity conservation and maintenance of ecosystem services. Third, member countries will receive support to strengthen policies and government capacity for the integration of natural capital into their development agenda, improve environmental management and disaster risk reduction, and the creation of an enabling climate for fostering development through sustainable private sector investment through training and useful public sector evaluations. Fourth, innovative investments will be promoted in businesses and public management that successfully contribute to biodiversity and ecosystem services and best practice will be disseminated for assessing the dependence of businesses on natural capital. As part of the strategy, the Bank will work in close partnership with regional and international networks of academic, economic policy and research institutions, and other international organizations to promote innovation and the dissemination of state-of-the-art best practice and to

⁵⁹ UNEP. 2010. ibid.

⁶⁰ Blackman et al. 2012. ibid.

support member countries in meeting their commitments to international agreements, including the Convention on Biological Diversity⁶¹.

- 1.14 Consistency with GCI-9 and Bank strategies and policies. This program is consistent with GCI-9 and its institutional sector priority for Protecting the environment, responding to climate change, promoting renewable energy and ensuring food security, its corresponding regional development goals including the proportion of terrestrial and marine areas protected relative to total territorial area and their associated outputs including number of projects with components contributing to improved management of terrestrial and marine protected areas. Projects generated by the program will contribute to the following lending program priority targets: (i) support climate change initiatives, renewable energy and environmental sustainability, as it is aimed at creating opportunities and use of biodiversity and ecosystem services; and (ii) support regional cooperation and integration, through the protection of regional ecosystems with public goods characteristics. Likewise, the program complements existing efforts of the Bank towards sustainability. For instance, it contributes to the goals of the Integrated Strategy for Climate Change Adaptation and Mitigation and Sustainable and Renewable Energy (GN-2609-1) and its Action Plan (2012-2015)(GN-2609-3), particularly the strategic lines for: (a) strengthening the knowledge base since it will generate information for understanding climate change impacts on ecosystem services and the mitigating benefits of various ecosystems in LAC (e.g., forests and carbon sequestration); and (b) expanding lending and technical assistance in climate-sensitive sectors with a view towards reducing unsustainable land use change. It is also meant to complement the Sustainable Emerging Cities Initiative (GN-2652) with respect to: (a) climate change instruments, such as vulnerability studies and technical and economic feasibility of ecosystem-based measures to increase the resilience of cities; and (b) enhancing the overall environmental sustainability of emerging cities through ecosystem services, such as water provision, pollution control and recreation.
- 1.15 In response to the recommendations of the IAG Report, this endeavor will contribute to strengthening implementation mechanisms for mainstreaming directives of the Environment and Safeguard Compliance Policy (OP-703) and its policy directives that call for the Bank to mainstream environment by strengthening country focus via strategically addressing environmental issues and opportunities in the context of each country's development priorities. The program will support mainstreaming environment into country programming and strategies (Directive A.1), environmental and natural resources management operations (A.2), mainstreaming environment across sectors (A.3), regional initiatives and international agreements (A.4), tracking environmental and sustainability indicators (A.5), and assessing environmental risks and opportunities (A.6). Through this work, the activities described below will contribute to strengthening the Bank's capacity to integrate the value of biodiversity and ecosystem services into all phases of the project cycle, help

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⁶¹ See BES Initiative and the Convention on Biological Diversity

improve the monitoring and evaluation of the Bank's work in these areas through consistent indicators, and contribute to increased awareness and knowledge of the contribution of biodiversity and ecosystem services to sustainable development in LAC.

1.16 A cross-departmental technical Working Group was created in February 2012 to support the development of the proposed program⁶². Two studies were commissioned, one reviewing the Bank's experience in biodiversity conservation and the other reviewing the empirical evidence of the effectiveness of conservation policies. These documents were used by the Working Group as a basis for an analytical document⁶³ which was presented at the Rio+20 Conference on Sustainable Development. A webpage and online survey were launched at this event. The latter was maintained active for more than 6 months during which responses were gathered. The preparation process was completed by a series of four regional review meetings⁶⁴ held in Lima, Peru; São Paulo, Brazil; Antigua, Guatemala; and Kingston, Jamaica as well as a presentation at the XII IDB-Civil Society Meeting in San Salvador, El Salvador in October 2012, where technical opinions from government officials, civil society and private sector were obtained on proposed directions for incorporation into the design of the program.

II. BIODIVERSITY AND ECOSYSTEM SERVICES PROGRAM

A. Objectives

2.1 The general objective of the program is to create opportunities and utilize the comparative advantage of the Region in biodiversity and ecosystems services for sustainable and inclusive development in LAC by: (i) assessing and integrating the economic value of biodiversity and ecosystem services within LAC into infrastructure and productive sectors; (ii) increasing awareness on and protecting critical and large-scale ecosystems of regional significance; (iii) supporting LAC countries in the implementation of directed and effective policies, governance frameworks, and public investments that secure and enhance biodiversity conservation and the maintenance of ecosystem services; and (iv) creating new economic, financial, and business opportunities that contribute to sustainable development and include innovative techniques for the protection of biodiversity and maintenance of ecosystem services in the Region.

B. Components

2.2 Component 1: Assessing and integrating the economic value and importance of biodiversity and ecosystem services into strategic economic sectors. This

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⁶² The Working Group includes specialists from VPS (INE, ESG), VPC, VPP, SPD and LEG

⁶³ IDB. 2012. <u>Leveraging Opportunities for Sustaining Growth: IDB Biodiversity Platform for Latin America and the Caribbean.</u>

⁶⁴ Biodiversity and Ecosystem Services Initiative: Regional Consultation Report.

component is designed to systematically incorporate the economic value of biodiversity and ecosystem services of all ecosystems (terrestrial, marine, coastal, freshwater) in infrastructure and productive sectors for economic development and poverty alleviation. As a first step towards achieving this, this component will pilot demonstrations of mainstreaming of biodiversity and ecosystem services through the Bank's complete project cycle, including Country Strategy exercises, project preparation and supervision, and impact evaluation. To this end, technical assistance, directed investments, and training will be funded to cover targeted activities such as: (i) developing cross-sector notes, utilizing an ecosystem-based framework to assess the contribution of biodiversity and ecosystem services to national economies; (ii) incorporating economic valuations of biodiversity and ecosystem services into sector notes to highlight innovative investment opportunities for productive sectors and infrastructure at the national level, including for example green agriculture and infrastructure, sustainable fisheries, and ecosystem-based adaptation; (iii) including the impacts on biodiversity and ecosystem services in environmental analyses of investment projects in all sectors (e.g., agriculture, energy, mining, tourism, transport, water supply and sanitation and other infrastructure sectors); (iv) complementing and expanding economic feasibility analyses of investment projects with valuations of biodiversity and ecosystem services; (v) designing and implementing market-based mechanisms (e.g., payments for environmental service schemes) aimed at sustaining the ecosystem services utilized by productive sectors and infrastructure; (vi) developing impact evaluation guidelines that include standardized indicators for project results' frameworks in order to determine the economic impact of biodiversity and ecosystem services; and (vii) developing tools and guidelines for mainstreaming biodiversity and ecosystem services into productive sectors and infrastructure while providing training in their use and application, including tools for monitoring and reporting the Bank's impact and contribution.

2.3 Component 2: Investing in priority regional ecosystems conservation. This component is designed to increase regional cooperation for expanding conservation efforts of large-scale transboundary ecosystems and biological corridors of regional and international significance ('priority ecosystems') such as, the Amazon, the Atlantic Forest, the Pantanal, the Chaco, the Cerrado, the Tropical Andes, the Meso American Barrier Reef, the Guiana Shield, and the Caribbean Large Marine Ecosystem. This component will play a critical role in the improvement of information as well as improvement in the use of information on the status, threats, and benefits of priority ecosystems. To this end, direct project investment, technical assistance for regional cooperation including South-South exchanges, and training will be funded for activities such (i) development, data collection, and analysis of standardized indicators for the status, threats, risks(including natural disasters and climate change impacts) and benefits of priority ecosystems; (ii) design and implementation of ecosystem-level tools (e.g., spatial or financial) to provide information for planning and decision making processes in the management of priority ecosystems; (iii) creation of comanagement regimes for priority ecosystems, recognizing the role of indigenous people as land owners and managers; and (iv) support and promote strategic

alliances for the establishment of centers of excellence for the monitoring and evaluation of biodiversity and ecosystem services and their economic impact (see $\P2.2$).

- 2.4 Component 3: Strengthening and fostering environmental governance. The objective of this component is two-fold: (a) justify the mainstreaming of biodiversity and ecosystem services into the development agenda amongst member countries; and (b) help improve the performance of public institutions in executing clear and effective policies that protect and enhance biodiversity and ecosystem services within the Region. To this end, technical assistance and training will be funded to cover activities such as: (i) carrying out standardized performance assessments of environmental management and institutions within member countries governments and reviews of public expenditures and revenues to identify common gaps in mainstreaming biodiversity and ecosystem services into economic sectors (wealth accounting); (ii) supporting government efforts to eliminate policies detrimental to the conservation and sustainable use of biodiversity and ecosystem services; (iii) promoting innovation in public management through information sharing and capacity building of national and subnational governments and financial institutions on policies and tools for mainstreaming biodiversity and ecosystem services analyses into economic sectors⁶⁵; (iv) promoting innovative approaches for involving indigenous peoples in providing, maintaining and sharing the benefits of ecosystem services; (v) strengthening and enforcing accountability and transparency mechanisms for environmental management and protection with the support of indigenous peoples; and (vi) strengthening and establishing regional networks environmental economic professionals and centers of excellence that provide strategic support in the analysis of biodiversity and ecosystem services to the countries in the Region (see 92.2).
- 2.5 Component 4: Promoting private sector investment opportunities that foster innovation in environmental protection. The objectives of this component are to: (a) increase the amount of lending dedicated to private sector projects that possess innovative techniques for the protection of biodiversity and ecosystem services and (b) to incorporate ecosystem service analyses into the private sector portfolio of the Region. The component will fund technical assistance to enhance sustainable development through private sector investments financed by the Bank for activities such as: (i) market research for new opportunities in biodiversity and ecosystem services, including biotechnology; (ii) public/private partnerships that promote and develop forward-looking applied research and early-stage investments in biodiversity and ecosystem services; (iii) identifying the dependence of a company on biodiversity and ecosystem services and determining business risks and opportunities related to these linkages; (iv) application of existing approaches and tools that incorporate biodiversity and

⁶⁵ Some indicative examples of activities that are eligible under this component are: sharing of experiences by experts and peers on specific issues, learning trips for personnel, staff and expert working groups; and regional dialogues on issues of common interest (e.g., ecosystem services for disaster risk management).

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ecosystem service values into private sector projects; and (v) integrating indigenous communities to jointly create value and share the benefits of ecosystem services.

C. Vision for a sustainable development framework and value added

- 2.6 This program will put the Bank on a long-term path towards the establishment of a strategic framework for sustainable development, where ecosystems will act as one of the primary pillars for the sustainable development agenda, as such addressing the other strategic recommendation of the IAG^[1]. The impact of this initiative is both immediate and enduring. The results will have a catalytic effect on the Region by demonstrating to other major investors in productive sectors and infrastructure in LAC, including regional and national development Banks and similar institutions, that investing in the management of natural capital makes economic sense. It will help shift policies for productive sectors and infrastructure and national development agendas with a view towards maintaining ecosystem services linked to higher productivity, social returns (poverty alleviation), and cultural values while simultaneously reducing regional rates of biodiversity loss. Over the medium to long-term, it will create a more inclusive growth model that optimizes the use and conservation of LAC's natural capital, sets countries on a path towards climate resilience, and activates the private sector to have a greener portfolio.
- 2.7 Through this program, the Bank seeks to increase and expand its technical and financial assistance to member countries as well as enhance technical capacity internally for integration of biodiversity and ecosystem services in achieving the mandates of sustainable development, poverty alleviation, and private sector investment that fosters development. This program will help to stimulate the generation, dissemination, and use of applied knowledge to improve the effectiveness of policies and programs informed by valuations of biodiversity and ecosystem services. It is expected to:
 - a. Strengthen regional integration through the collection and dissemination of information on the status, threats and benefits of priority transboundary ecosystems. Greater availability and quality of information on shared ecosystems will help improve diagnostics and analysis in the causes and consequences of threats to priority ecosystems in the Region. More systematic and rigorous monitoring is critical for the design and evaluation of policies that promote sustainable development. Integration of spatial and investment tools will assist planning and decision making processes in the development of priority ecosystems.
 - b. Increase capacity of professionals in the Region for systematic, rigorous and objective evaluation of environmental economic policies and their use in policy making. The need for professionals able to perform environmental economic analyses in the Region is great. The ability to increase capacity in

^[1] IAG. 2011. Ibid. (page 36).

green accounting, ecosystem service valuation, and environmentally focused impact evaluations will create a foundation for the long-lasting success of this initiative.

- c. Provide relevant information to member countries on the role of biodiversity and ecosystem services in their economies. Pilot projects will be used in order to demonstrate the importance of integrating biodiversity and ecosystem services into key economic sectors within the Region.
- d. Promote integration of biodiversity and ecosystem services within the development agenda and investment cycle of member countries and the Bank. Integrating biodiversity and ecosystem services into the Bank's project cycle through operational support and knowledge products focusing on the economics of biodiversity and ecosystem services business opportunities, supporting and enhancing the use of safeguards policy, amplifying strategic alliances, applying methodologies to specific sectors and providing evaluation guides are critical components of this program.
- e. Promote cooperation across the public and private sectors as well as across scales within the IDB. This cooperation is an important comparative advantage that distinguishes the IDB from other groups working on biodiversity and ecosystem services. This ability creates the space for coordinated actions to address infrastructure challenges e.g., building government capacity for effective planning of infrastructure while supporting private investments in the construction of the infrastructure and for scaling up from smaller operations.

2.8 The Bank is well positioned to fulfill this role given its capacity to:

- a. Promote policy dialogue. The Bank is able to promote the integration of biodiversity and ecosystem services into its portfolio because the Bank has experience in this field through a history of investments in biodiversity and ecosystem services. The Bank has a comparative advantage as a result of its direct relationship with ministries of finance and its strong role in the private sector to not only value, but also internalize biodiversity and ecosystem services within market economies.
- b. Leverage additional financial resources. The program will utilize the Bank's experience of creating funding packages to leverage resources to support the activities described in this document. The Bank has been very successful in leveraging resources (loans, TC, GEF, climate funds, private sector windows, etc.) in order to create funding packages. On the international level, there exist various financing mechanisms that are able to be utilized in order to conserve biodiversity and maintain ecosystem services from carbon markets to payment for ecosystem services that the Bank will be able to promote through the program.

- c. Utilize existing skills in impact evaluation. The Bank already possesses significant technical skills in designing and executing technically sound impact evaluations. The program will build on these by training more staff in the design and execution of impact evaluation. It will also highlight the need for inclusion of impact evaluation in projects in order to provide sound economic analyses that support the integration of biodiversity and ecosystem services.
- d. Create strategic partnerships. Development of strategic alliances with specialized institutions, foundations, the academic community, and the private sector will help to guarantee the sustainability of the activities proposed for this program. Partnerships with relevant institutions also provide the opportunity to support the work that the Bank has already done in biodiversity and ecosystem services and expand on it.
- e. Improve the quality and crosscutting nature of the Bank's work in sectors dependent on biodiversity and ecosystem services. One of the aims of the program is to provide input for and guide the preparation and execution of Bank operations and knowledge products. As such, the program will help build an economic argument for the inclusion of biodiversity and ecosystem services into projects on behalf of the countries. It will facilitate intersector work coordinated with the various initiatives and sectors related to biodiversity and ecosystem services (e.g., Climate Change and Sustainable Cities Initiative).

D. Financing of proposals and beneficiaries

- 2.9 The resources of the proposed program will finance non-reimbursable technical cooperation operations and grants related to its objectives. Under the New Policy on Technical Cooperation (document GN-2470-2), the beneficiaries of the resources may be: (i) borrowing member countries, including national and subnational institutions; and (ii) regional and subregional entities created by the countries themselves. Knowledge products will be shared with non-profit and private sector institutions. In accordance with the Bank's policies, private sector and non-profit institutions could only be beneficiaries of technical cooperation operations financed with the resources of the Multidonor Fund for Biodiversity and Ecosystem Services.
- 2.10 To be eligible, activities to be financed with the resources of this program must be aligned with: (i) the objectives and expected results described herein; (ii) the countries' strategic programming priorities with the Bank; and (iii) the relevant sector policies and strategies.
- 2.11 Given the cross-cutting nature of biodiversity and ecosystem services, the resources may finance proposals from various areas within the Bank, such as infrastructure and environment, social sector, safeguards, private sector, and integration.

- 2.12 The criteria for selecting activities to be financed by the resources to implement this program include: (i) the potential for having measurable impacts on the design, implementation, and evaluation of policies and investments related to productive sectors and infrastructure that support the conservation and sustainable use of biodiversity and ecosystem services; (ii) there is a high degree of innovation; (iii) the potential to generate applied knowledge and demand for the Bank's resources and technical assistance; and (iv) the potential for replication in other contexts or scaling-up. These criteria will be spelled out in the operational guidelines⁶⁶.
- 2.13 Communication and information dissemination is a cross cutting theme of this program. A strategy for communicating and publicizing it will be formulated for the purpose of: (i) promoting increased mainstreaming of the program's activities with the beneficiary countries and within the Bank; (ii) disseminating the results, lessons learned, best practices, and opportunities for scaling-up efforts from the activities financed; and (iii) stimulating demand in the Region for the program's resources as well as tools and services provided. Examples of activities could include: a flagship study on the economics of biodiversity and ecosystem services, research to increase the body of knowledge on biodiversity and ecosystem services in priority ecosystems, and reports on cutting edge methods for including biodiversity and ecosystem services into business strategies.

E. Monitoring and evaluation plan

- 2.14 A monitoring and evaluation plan will be used as a basis for assessing the performance of the program and the degree to which it achieves its objectives. The plan will be formulated in accordance with the Bank's oversight and evaluation structures. The tools that will be taken into account for purposes of evaluation will be the Results Matrix and a flagship study to be undertaken in cooperation with RES.
- 2.15 The Grants and Co-Financing Management Unit (ORP/GCM) will prepare annual reports on the activities, preliminary results, and Resources with input from the responsible Technical Secretariat to be submitted to the Bank and to donors for their information during the first half of each year.

III. GOVERNANCE, FINANCIAL RESOURCES, AND ADMINISTRATIVE MANAGEMENT

3.1 Two mechanisms will be created to support the implementation of the program:
(i) a Special Program financed from the resources of the Ordinary Capital; and
(ii) a Multidonor Fund. Regardless of the source of financing, the two
mechanisms will be governed by Bank policies and procedures, including the

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⁶⁶ The processing of operations funded by the resources from this program will begin once operational guidelines are in place.

Framework for Technical Cooperation (GN-2469-2); the proposal for a new Bank policy on technical cooperation (GN-2470-2); and the Operational Guidelines for Technical Cooperation Products (GN-2629-1). The Multidonor Fund will also be subject to the agreements signed with each donor, pursuant to the guidelines set out in this document and to the Bank's standard terms and conditions for this type of agreement. The Bank's fiduciary policies will be observed when the contribution comes from a non-member country.

- 3.2 Pursuant to the Operational Guidelines for Technical Cooperation Products (document GN-2629-1), the operational governance structure of the Special Program and Multidonor Fund for Biodiversity and Ecosystem Services will have an Eligibility and Strategic Committee, which will review and provide its non-objection to the annual outputs selected for a given year, within the strategic concentration of the program. The Eligibility and Strategic Committee will be chaired by the Infrastructure and Environment Department (INE/INE) and will consist of INE/RND, INE/CCS, VPS/ESG, VPP/SCF, a representative of ORP/GCM and a representative of ORP/ORP.
- 3.3 The Bank's Finance Department (FIN) will be responsible with ORP/GCM for overseeing administration of the Special Program and Multidonor Fund for Biodiversity and Ecosystem Services. FIN will have the responsibility for the financial aspects of the Special Program and Multidonor Fund while OPR/GCM will have the responsibility for administering the funds. Technical responsibility for the activities financed by the program will be assumed by the division or department presenting the proposal with support and technical advice from the Funds's technical coordination unit in INE.
- 3.4 INE/RND will act as the Technical Secretariat (TS) for the Special Program and Multidonor Fund for Biodiversity and Ecosystem Services. The latter will, among other things, be responsible for providing comprehensive support for the work of the Eligibility and Strategic Committee, issuing an opinion on the eligibility of the proposals submitted to the Committee for consideration, promoting the Fund, coordinating its work, supporting the monitoring and evaluation of the activities financed under the program, preparing technical reports to communicate results achieved, and coordinating their strategic dissemination.
- In accordance with the Criteria for Appraising Bank Programs' Eligibility for Funding from the Special Programs/Grants of OC Resources (paragraph 2.5 of document GA-220-12), no more than 20% of the OC resources allocated annually to this Fund may be used for the aforementioned activities.
- 3.6 The establishment of the Special Program will be governed by the criteria established by the Board of Executive Directors in document GA-220-12 and will be implemented during the 2013-2016 period. For this period, the funding of technical cooperation operations under the Special Program with resources from the Bank's OC (as defined in paragraph 2.7 of document GA-220-12) could total an estimated US\$30 million. The Special Program will expire at the end of 2016,

unless the Board of Executive Directors decides to allocate resources for later years.

- 3.7 By approving the Bank's 2013 Program and Budget Proposal (GA-252-1) through Resolution DE-242/12, the Board of Executive Directors provided for the allocation of US\$3 million from the Bank's OC for the Special Program on Biodiversity and Ecosystem Services. The use of these resources in 2013 is contingent on approval of this proposal for the establishment of the Special Program by the Board of Executive Directors. Accordingly, should the Special Program presented herein be approved, the resources allocated to the Special Program for fiscal year 2013 could begin to be used. Each year additional resources would be allocated in the context of the Bank's budget cycle. OC resources not used in a given year may be transferred to subsequent years until the corresponding projects are completed.
- 3.8 With regard to the Multidonor Fund, by virtue of Resolution DE-44/08, the Board of Executive Directors delegated to Management the authority to enter into agreements with donors for the creation of multidonor trust funds focused on providing technical assistance. Nevertheless, the establishment of a Multidonor Fund that can receive contributions for small investments requires approval by the Board of Executive Directors. Accordingly, the Board of Executive Directors' authorization is requested for this purpose, as provided for in the attached proposed resolution.
- 3.9 The mainstreaming of biodiversity and ecosystem services into economic development is a high-priority concern on the agendas of the cooperating agencies. The Special Program is therefore expected to have a catalytic effect, encouraging greater participation from the donor community in financing the Multidonor Fund to complement and increase the available OC financing. In addition, efforts will be made to achieve synergies with other fiduciary funds and initiatives of the Bank, as well as with the Bank's public- and private-sector financing activities related to sustainability.

IV. MOBILIZATION OF RESOURCES

- 4.1 ORP, in collaboration with INE, will develop an appropriate strategy and will spearhead activities to mobilize resources from donors in both the public and private sectors. This strategy will include mapping potential partners for the program, as well mapping potential contributors to the Multidonor Fund. ORP and INE have already been in communication with several donors regarding the Special Program and Multidonor Fund.
- 4.2 Pursuant to the Bank's Framework for Technical Cooperation (GN-2469-2), contributions to the Multidonor Fund from the Bank's member or nonmember countries as well as from other national or international organizations, including

private firms and institutions, will not be tied up. The contributions and OC resources allocated to the Special Program will be administered separately.

V. EXPECTED RESULTS

- 5.1 The program's main expected impact is to increase the contribution of biodiversity and ecosystem services to the sustainable and inclusive development of Latin America and the Caribbean by promoting awareness and understanding of the value of the Region's natural capital, effective policies with measurable economic impacts, and opening new business opportunities.
- 5.2 As described in the Results Matrix, the expected results are: (i) improved quality and availability of information for beneficiary countries on the economic value of biodiversity and ecosystem services, including how to mainstream in policy and investments in infrastructure and productive sectors; (ii) improved measurement and evaluation of the Bank's contribution to the protection, management and restoration of natural ecosystems in LAC, including priority transboundary ecosystems of regional and international significance; (iii) increased capacity of beneficiary countries to implement and evaluate policies and investments that mainstream biodiversity and ecosystem services and to cooperate regionally for that purpose; and (iv) demonstration of the opportunities for innovative private sector investments that contribute to sustainable development and include innovative techniques for the protection of biodiversity and ecosystem services in the Region.

VI. RECOMMENDATIONS

- 6.1 Management recommends that the Board of Executive Directors approve the attached proposed resolution, which:
 - a. Establishes the Special Program for Biodiversity and Ecosystem Services with resources from the Bank's Ordinary Capital, in accordance with the definition contained in paragraph 2.7 of document GA-220-12.
 - b. Establishes that the Special Program will be subject to the terms and conditions set out in this document.
 - c. Establishes that the allocation of Ordinary Capital resources will be considered and, when appropriate, approved by the Board of Executive Directors during the Bank's corresponding budget cycle.
 - d. Establishes that US\$3 million from the Bank's Ordinary Capital approved by the Board of Executive Directors for this Special Program in Resolution DE-242/12, approving the allocation from the Bank's Ordinary Capital for special programs in fiscal year 2013, may be used beginning in 2013.

- e. Authorizes the President of the Bank, or the representative appointed by him, to sign the contract or contracts and to adopt the other measures deemed necessary for (a) administering and implementing the Special Program, in accordance with the criteria set out in this document; and (b) executing and implementing individual operations financed with program resources and approved in accordance with the content of this document.
- f. Authorizes the President of the Bank, or the representative appointed by him, in the name and on behalf of the Bank, to sign agreements and adopt the measures necessary to accept contributions for non-reimbursable operations financed with resources from the Multidonor Fund for Biodiversity and Ecosystem Services, and to approve such operations in the amount of up to US\$1.5 million.

Results Matrix

Goal	Create opportunities and use the comparative advantage of the Region in biodiversity and ecosystems services for sustainable and inclusive development in Latin America and the Caribbean			
Objectives	(i) assessing and integrating the economic value of biodiversity and ecosystem services within Latin America and the Caribbean into the IDB's portfolio; (ii) increasing awareness of and protecting critical and large-scale ecosystems of regional significance; (iii) supporting Latin American and Caribbean countries in the implementation of directed and effective policies, laws, and investments that secure and enhance biodiversity conservation and the maintenance of ecosystem services; and (iv) creating new economic, financial, and business opportunities that contribute to sustainable development and include innovative techniques for the protection of biodiversity and ecosystem services in the Region			
Final Impacts	Baseline (2011)	Target (2016)	Comments/assumptions	
The change in the number of hectares brought under enhanced biodiversity protection ⁱ through IDB-financed projects.	14,075 hectares	28,000 hectares	Does not include GEF projects. The baseline was calculated using a 2009-2011 average based on a recommendation by ESG because 2011 was judged not representative. 2016 target is an annual figure. This indicator is aligned with Aichi Targets, particularly Target 11, which has the goal of protecting 17% of terrestrial landscapes and 10% of coastal and marine areas by 2020. Impact evaluation guidelines developed in 2013 will include methodology for the measurement of this indicator.	
The change in the number of hectares of productive landscape brought under biodiversity-friendly management ⁱⁱⁱ through IDB-financed projects.	405,646 hectares	800,000 hectares	Does not include GEF projects. The baseline was calculated using a 2009-2011 average based on a recommendation by ESG because 2011 was judged not representative. 2016 target is an annual figure. Impact evaluation guidelines developed in 2013 will include methodology for the measurement of this indicator.	

The change in the number of hectares restored ^{iv} through IDB-financed projects.	2,171 hectares	4,000 hectares	Does not include GEF projects. The baseline was calculated using a 2009-2011 average based on a recommendation by ESG because 2011 was judged not representative. 2016 target is an annual figure.
The change in the number of hectares of natural habitat (as defined in the Bank's	10,187 hectares	5,000 hectares	Impact evaluation guidelines developed in 2013 will include methodology for the measurement of this indicator. The baseline for this indicator was calculated using a 2009-2011 average based on a recommendation by ESG because 2011 was judged not representative.
Safeguard Policy – OP-703) directly degraded or converted by IDB-financed, category A projects in infrastructure and productive sectors.			Impact evaluation guidelines developed in 2013 will include methodology for the measurement of this indicator.
Tons of carbon dioxide (or equivalent) emitted as a result of land use change in IDB-financed agriculture projects.	TBD	TBD	VPS/ESG has begun to develop a carbon calculator, which could aid in estimating values for this indicator. This tool may contribute to calculating a baseline when it comes online in 2013. The program will continue to work with ESG and CCS to advance the measurement of ecosystem-based greenhouse gas emissions in IDB projects. As the carbon calculator is further developed and lessons are learned from applications in pilot projects, measurement of GHG emissions will be expanded to other sectors.
			This will require a more precise outline of areas of impact.

Tons of carbon dioxide (or equivalent) sequestered as a result of enhancing carbon stocks (through afforestation or reforestation) or improved land-use practices (such as no-till agriculture or reduced fertilizer inputs) in IDB-financed forestry and agriculture projects.	TBD	TBD	VPS/ESG has begun to develop a carbon calculator, which could aid in estimating values and tracking this indicator. This tool may contribute to calculating a baseline when it comes online in 2013. In addition, information on afforestation and reforestation in IDB project areas would be required. The program will continue to work with ESG and CCS to advance the measurement of ecosystem-based greenhouse gas emissions in IDB projects. As the carbon calculator is further developed and lessons are learned from applications in pilot projects, measurement of GHG emissions will be expanded to other sectors.
Total projected loss avoided from natural disasters in IDB-financed projects that incorporate ecosystem-services planning and climate change adaptation.	\$716 M	\$1,400 M	
Environmental Performance Index score for countries that have had IDB environmental governance projects 2013- 2016.	TBD	2012 score plus 3	See: http://epi.yale.edu/ Compilation of this baseline will start in 2013 with the approval of environmental governance projects.
Average Ocean Health Index score for countries that have had IDB environmental governance projects with marine or coastal components 2013- 2016.	TBD	2012 score plus 3	See: http://www.oceanhealthindex.org/countries Compilation of this baseline will start in 2013 with the approval of environmental governance projects.

Total amount (in US\$ millions) of annual sustainable IDB-supported investment (in execution) in infrastructure and productive sectors to biodiversity positive outcomes that includes quantitative ecosystem services indicators.	\$1,200 M	\$2,400 M	The target for the financing indicator has doubled 2011 financing in order to reflect an agreement made at COP 11 to double biodiversity funding. Amount does not reflect IDB-financing, but an estimated total cost of investment operations that the Bank may support. The average leverage ratio is 30% based on Castro de la Mata (2012)
Total amount (in US\$ millions) of IDB-supported investment in priority ecosystems.	\$30.3 M	\$60.6 M	As priority ecosystems have yet to be selected, the baseline for 2011 was estimated by using IDB GEF projects (and co-financing) as a proxy. Financing target for 2016 is doubled to align with COP 11 commitments. Amount does not reflect IDB-financing, but an estimated total cost of investment operations that the Bank may support. The average leverage ratio is 30% based on Castro de la Mata (2012)
Total amount of annual IDB- supported investment with environmental governance component.	\$500 M	\$1,000 M	Amount does not reflect IDB-financing, but an estimated total cost of investment operations that the Bank may support. The average leverage ratio is 30% based on Castro de la Mata (2012)
Total financing (in US\$ millions) made by banks that participate in planetBanking by 2016.	0	\$12 M	
Total (in US\$ millions) SCF/OMJ-supported financing in infrastructure and productive sectors that incorporate the value of biodiversity and ecosystem services into planning by 2016.	\$200 M	\$1,600 M	Amount does not reflect IDB-financing, but an estimated total cost of investment operations that the Bank may support. The average leverage ratio is 300% based on information provided by SCF.

Component I: Integrating the value and importance of biodiversity and ecosystem services into programming, sector work and investments

Outcome Indicators	Baseline (2011)	Target (2016)	Comments/assumptions
Increase in IDB supported operations that mainstream biodiversity and ecosystem services in productive and infrastructure sectors. • % of loans in infrastructure and productive sectors that measure impact on biodiversity and ecosystem services in terms of area, quality of the intervention, and richness of the existing biodiversity and ecosystem services.	0%	30%	This indicator reflects the number of projects in execution that track impact on ecosystem services in their results frameworks.

Component II: Priority ecosystems conservation investments

Outcome Indicators	Baseline (2011)	Target (2016)	Comments/assumptions
 IDB-supported projects in priority ecosystems increased. Number of hectares with improved management or protection in priority ecosystems as a result of IDB-financed projects. 	NA	NA	4 priority ecosystems to be selected. The baseline for this indicator will be calculated once the priority ecosystems have been identified.
 Strengthened regional cooperation Number of co-management regimes implemented in priority ecosystems. 	0	5	

 Number of proposals received for regional centers of excellence. Total number of loans with biodiversity indicators targeted at regional priority ecosystems in execution. Component III: Strengthening as	0	12	
Outcome Indicators	Baseline (2011)	Target (2016)	Comments/assumptions
Improve the performance of public institutions in executing policies that manage biodiversity and ecosystem services.			Coastal risk and coastal zone management projects will consider the projected impacts of climate change on ecosystem services.
 Number of hectares of land where land tenure has been clarified (annual). Number of policy reforms that 	1,484,655	3,000,000	
remove disincentives to biodiversity and ecosystem services conservation.	0	5	
 Number of master plans, national development plans, or investment plans that use IDB spatial or scenario tools. Number of countries that 	0	5	
incorporate natural disaster regulating ecosystem services into coastal planning or coastal zone management using IDB assistance.	0	4	

Component IV: Development of private sector investment opportunities			
Outcome Indicators ^v	Baseline (2011)	Target (2016)	Comments/assumptions
Increase in IDB's private sector operations that mainstream biodiversity and ecosystem services. • Annual number of MIF projects that invest in biodiversity and ecosystem services. • Number of public/private partnerships that promote research and investment in biodiversity and ecosystem services.	1	8 5	Assessments of biodiversity and ecosystem services in private sector projects will consider the possible impacts of climate change on these services.

See Detailed Matrix

¹ Hectares of new protected areas or existing protected areas whose management is improved through the project directly supporting one or more of the following activities: ensuring legal security (e.g., through legal protection, regulations, reducing land disputes, or demarcation of boundaries), improving planning (e.g., through management or work plans, enhancing research, or monitoring and evaluation), improving resource availability (e.g., through increasing enforcement capacity, number of staff, facilities/infrastructure, budget management, long term financing, new management information, or establishing payment mechanisms), or ensuring inclusive management (e.g., through including local or indigenous communities in decision making or providing economic benefits to local communities).

In addition to this indicator, many other indicators are aligned with the Aichi Targets. For a full assessment of the linkages between the Aichi Targets and the Biodiversity and Ecosystem Services program, see the Annex on Aichi Target alignment.

Hectares of newly managed productive landscapes must demonstrate one of the two following practices: 1) signing of a sustainable Natural Resource Management (NRM) agreement or 2) implementation of a credible and independently verified certification program.

Landscape restoration must assist the recovery of an ecosystem that has been degraded, damaged, or destroyed through activities such as: isolation of a landscape from threats, removal of invasive species, active regeneration, increase of habitat connectivity, and others.

^v Outcome and output indicators for Component IV are indicative.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/12

Biodiversity and Ecosystem Services Special Program and delegation of authority for the Multidonor Fund for Biodiversity and Ecosystem Services

The Board of Executive Directors

RESOLVES:

- 1. To establish the Biodiversity and Ecosystem Services Special Program (hereinafter referred to as the "Special Program") with resources from the Ordinary Capital of Bank, as defined in Paragraph 2.7 of GA-220-12.
- 2. Resource allocation for the Special Program will be considered by the Board of Executive Directors during the respective budgetary cycle of the Bank. The resources allocated to the Special Program for fiscal year 2013, pursuant to Resolution DE-242/12, as well as any future budgetary allocations, will be used in accordance with the provisions of document GN_____. Unused funds will be carried over for implementation in future years.
- 3. To authorize the President of the Bank, or the representative he designates, to conclude the contract or contracts and take any other measures necessary for the administration and execution of the Special Program and individual operations financed with its resources, in accordance with the criteria set out in document GN-____.
- 4. To authorize the President of the Bank, or the representative he designates, in the name and on behalf of the Bank to enter into agreements with donors and take other actions as needed to accept contributions for the Multidonor Fund for Biodiversity and Ecosystem Services; and to approve investment grant operations financed with the resources of the Multidonor Fund for Biodiversity and Ecosystem Services or other contributions administered by the Bank up to the amount of US\$1,500,000.

(Adopted on		2012)
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