

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

URUGUAY

**ENVIRONMENTAL MANAGEMENT STRENGTHENING PROGRAM
FOR THE MINISTRY OF HOUSING, TERRITORIAL PLANNING, AND THE
ENVIRONMENT (MVOTMA)**

(UR-L1157)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Onil Banerjee (CSD/RND), Project Team Leader; Luis Hernando Hintze (RND/CUR), Alternate Project Team Leader; Maria Vizeu Pinheiro and Yolanda Valle (CSD/RND); Joseph Milewski (RND/CAR); Marcello Basani and Nicolás Rezzano (INE/WSA); Cristina Celeste Marzo (LEG/SGO); Adriana Inés Torres, Federico Bachino (CSC/CUR); Emilie Chapuis and Abel Cuba (VPC/FMP); and Rossemary Yurivilca (CSD/CCS).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. This document has not been approved by the Board. Should the Board approve the document with amendments, a revised version will be made available to the public, thus superseding and replacing the original version.

CONTENTS

PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING	1
	A. Background, problem addressed, and rationale.....	1
	B. Objectives, components, and cost	9
	C. Key results indicators	10
II.	FINANCING STRUCTURE AND MAIN RISKS	11
	A. Financing instruments	11
	B. Environmental and social risks	12
	C. Fiduciary risks	12
	D. Other key issues and risks.....	12
III.	IMPLEMENTATION AND MANAGEMENT PLAN	13
	A. Summary of implementation arrangements	13
	B. Summary of arrangements for monitoring results	14

APPENDIXES

Proposed resolution

ANNEXES

PRINTED ANNEXES

Annex I	Summary Development Effectiveness Matrix
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

LINKS

REQUIRED

1. [Multiyear execution plan/annual work plan](#)
2. [Monitoring and evaluation plan](#)
3. [Procurement plan](#)

OPTIONAL

1. [Economic analysis of the project](#)
2. [Program Operating Regulations \(draft\)](#)
3. [Bibliography](#)
4. [Datasheets on outputs for Component I](#)
5. [Datasheets on outputs for Component II](#)
6. [Draft status report from loan 3080/OC-UR](#)

ABBREVIATIONS

AGESIC	Agencia de Gobierno Electrónico y Sociedad de la Información y del Conocimiento [Electronic Government and Information and Knowledge Society Agency]
AIN	Auditoría Interna de la Nación [Internal Audit Office]
BCU	Banco Central del Uruguay [Central Bank of Uruguay]
CGN	Contaduría General de la Nación [General Accounting Office]
DINAGUA	Dirección Nacional de Aguas [National Water Office]
DINAMA	Dirección Nacional de Medio Ambiente [National Office of the Environment]
DINOT	Dirección Nacional de Ordenamiento Territorial [National Territorial Planning Office]
EIA	Environmental Impact Assessment
FONAMA	Fondo Nacional de Medio Ambiente [National Fund for the Environment]
GDP	Gross domestic product
ICAS	Institutional Capacity Assessment System
ICB	International competitive bidding
IEEM	Integrated economic-environmental modeling
INTOSAI	International Organisation of Supreme Audit Institutions
MVOTMA	Ministry of Housing, Territorial Planning, and the Environment
NCB	National competitive bidding
PANDS	Plan Ambiental Nacional para el Desarrollo Sostenible [National Environmental Plan for Sustainable Development]
PEU	Program execution unit
PNUD	United Nations Development Programme
SIIF	Sistema Integrado de Información Financiera [Integrated Financial Information System]
SPF	Safeguard Policy Filter Report
SSF	Safeguard Screening Form
TCR	Tribunal de Cuentas de la República [National Audit Office]
TOCAF	Texto Ordenado de Contabilidad y Administración Financiera [Consolidated Text on Accounting and Financial Management]

PROJECT SUMMARY

**URUGUAY
ENVIRONMENTAL MANAGEMENT STRENGTHENING PROGRAM
FOR THE MINISTRY OF HOUSING, TERRITORIAL PLANNING, AND THE ENVIRONMENT (MVOTMA)
(UR-L1157)**

Financial Terms and Conditions				
Borrower:			Flexible Financing Facility^(a)	
Eastern Republic of Uruguay			Amortization period:	25 years
Executing agency:			Disbursement period:	5 years
Eastern Republic of Uruguay, through the Ministry of Housing, Territorial Planning, and the Environment (MVOTMA)			Grace period:	5.5 years ^(b)
Source	Amount (US\$)	%	Interest rate:	LIBOR-based
IDB (Ordinary Capital):	6,000,000	72.4	Credit fee:	^(c)
Local:	2,286,082	27.6	Inspection and supervision fee:	^(c)
Total:	8,286,082	100	Weighted average life (WAL):	15.25 years ^(d)
			Approval currency:	U.S. dollars from the Ordinary Capital
Project at a Glance				
Project objective/description: The general objective of the program is to help improve management of environmental quality and sustainability through strengthening of the MVOTMA and through the framework of the National Environmental Plan for Sustainable Development (PANDES) and the watershed action plans. The program has two specific objectives: (i) to strengthen the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA; and (ii) to strengthen integrated management of priority watersheds, with emphasis on reducing pollutant load from agricultural sources.				
Special contractual conditions precedent to the first disbursement of the loan: (i) the MVOTMA will create a program execution unit (PEU) using the basic criteria established in the program implementation arrangements (paragraph 3.1); and (ii) will present evidence to the Bank's satisfaction that the program Operating Regulations have entered into effect (paragraph 3.1).				
Special contractual conditions of execution: Signing and entry into effect of the agreement between the MVOTMA and the United Nations Development Programme (UNDP), in accordance with the terms agreed upon with the Bank, prior to beginning execution of program activities (paragraph 3.2).				
Exceptions to Bank policies: None.				
Strategic Alignment				
Challenges:^(e)	SI	<input checked="" type="checkbox"/>	PI	<input checked="" type="checkbox"/>
			EI	<input type="checkbox"/>
Crosscutting themes:^(f)	GD	<input type="checkbox"/>	CC	<input checked="" type="checkbox"/>
			IC	<input checked="" type="checkbox"/>

^(a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

^(b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.

^(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the relevant policies.

^(d) The original weighted average life may be lower, according to the date of signature of the loan contract.

^(e) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(f) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING¹

A. Background, problem addressed, and rationale

- 1.1 Uruguay's gross domestic product (GDP) grew at an annual average of 4.3% between 2005 and 2018,² and agroindustrial activities accounted for an average of 13% of GDP between 2007 and 2013. The total land area used for agricultural activities in 2011 was 16,357,000 hectares. The most important activities are livestock ranching and dairy (62%), grain and industrial crops (8%), and forestry (15%). During the 2000-2011 period, a significant change occurred in the country's land use (Ministry of Livestock, Agriculture, and Fisheries (MGAP) and the Office of Agricultural Statistics (DIEA), 2015): non-livestock farming activities grew by 318%, while the land used for forestry activities increased by 158%. The greatest increase occurred with soybeans, which went from 461,900 hectares in 2007/2008 to 1,334,000 hectares in 2014/2015.³ However, the growth of agriculture and forestry did not entail a decrease in production for the livestock industry, as dairy and meat production intensified. Thus, between 2006/2007 and 2013/2014, the land used by the dairy sector decreased by 44%, while the area used to produce feed for the dairy industry grew by 136% and milk production grew by 45%.⁴
- 1.2 Although the growth of the agricultural sector has been positive in economic terms, it has also entailed practices that jeopardize the productive and environmental sustainability of production systems, as well as natural capital and the ecosystem services that it provides. With more land used for single-crop farming, in addition to the intensification of agriculture, there is increased pressure on natural capital and ecosystem services,⁵ as a result of more intensive use of fertilizers and pesticides, and the management of effluents in dairy farms and feedlots. Between 2005 and 2014, fertilizer use doubled, while the area of land used for production increased by less than 30% and pesticide use increased by a factor of ten between 1991 and 2011.⁶
- 1.3 The intensification of agriculture and nonpoint sources of pollution, along with the management of urban and industrial effluents, is reflected in the water quality of the country's most important watersheds.⁷ There are challenges related to water security⁸ and excess nutrients, algal blooms, and quality of drinking water, all of which are exacerbated by the impacts of climate change. This is especially true for the watersheds of the Santa Lucía River and the Laguna del Sauce,^{9,10} since these

¹ See the [list of references](#) presented in the document (optional link 3).

² Authors' calculations based on data from the Central Bank of Uruguay: <https://www.bcu.gub.uy/Estadisticas-e-Indicadores/Paginas/Presentacion%20Cuentas%20Nacionales.aspx>. The most recent year for which GDP data has been published by the Central Bank of Uruguay is 2019.

³ Authors' calculations based on MGAP and DIEA data, 2015.

⁴ Authors' calculations based on MGAP and DIEA data, 2015.

⁵ Ecosystem services refer to the benefits derived from ecosystems. See Daily, 1997; MA, 2005; United Nations et al., 2014.

⁶ World Bank, 2018.

⁷ JICA Expert Team (JET) and DINAMA, 2010.

⁸ The United Nations defines water security as the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining human well-being.

⁹ Failde et al., 2015.

bodies of water are a source of drinking water for the metropolitan area (Montevideo, La Paz, Las Piedras, Ciudad de la Costa, etc.) and the main cities in Maldonado (Maldonado, San Carlos, Punta del Este, Pan de Azúcar, Piriápolis, etc.), respectively. Water quality has an effect on the Uruguay's tourism industry, as seen in 2019 when the beaches of Montevideo and Canelones were declared unsuitable for swimming due to the proliferation of cyanobacteria.

- 1.4 Additionally, Uruguay is particularly vulnerable to extreme events such as droughts, floods, cold snaps, heat waves, heavy rains, and severe storms. Over the past 30 years, temperatures and rainfall have increased in the country. Based on climate scenarios for the next 50 years, Uruguay will likely experience a temperature increase of approximately 0.5 degrees Celsius by 2020, and up to 2.5 degrees Celsius by 2050. Furthermore, increases in total annual precipitation are expected, as well as in the frequency and intensity of extreme climate events.¹¹ These challenges reduce the resilience of watershed ecosystems.
- 1.5 With support from the IDB, significant progress has been achieved in evaluation, regulation, and monitoring of businesses that produce industrial effluents (point sources) by modernizing instruments and more efficiently enforcing regulations for evaluation, authorization, and environmental oversight of licensed businesses. As of 2016, 100% of manufacturing activities producing effluents have been regulated and have treatment plants.¹² However, efforts are needed to strengthen industrial monitoring systems, monitoring by the National Office of the Environment (DINAMA), and self-monitoring, so as to ensure proper compliance and improve efficiency and effectiveness. The proposed program will help implement an automated system that will monitor effluent load in real time for industries that produce 80% of the discharge in Uruguay. This measure will help improve the efficiency and effectiveness of control functions, as DINAMA staff will be able to increase their productivity, optimize use of monitoring resources, and enforce sanctions and corrective measures in a timely fashion. This in turn will increase the likelihood of preventing environmental damage caused by noncompliance.
- 1.6 Furthermore, effluents from dairy farms and nonpoint source pollution from other agricultural activities are not included under industrial effluents, and are therefore not subject to the same authorization and environmental monitoring processes. In recent years, the main issue with water quality in Uruguay has been the high concentration of nutrients from nonpoint loads generated by agricultural activity. This high concentration of nutrients leads to eutrophication—an excessive proliferation of aquatic plants, microalgae, and potentially toxic cyanobacteria—which affects the quality of water for human use and ecosystems.
- 1.7 The Santa Lucía River watershed is generally eutrophic, but heterogeneous in terms of geography and weather patterns. At the sub-watershed level, nonpoint source pollutants combined with pollutants from dairy operations account for over 65% of total nitrogen loads and 81% of total phosphorus loads.¹³ In the Río Negro

¹⁰ South American Institute for Resilience and Sustainability Studies (SARAS), 2010.

¹¹ MVOTMA, 2017.

¹² Office of the President of the Eastern Republic of Uruguay, 2018.

¹³ MVOTMA, 2018.

- watershed, nutrient concentrations mainly come from nonpoint source pollutants from agriculture, accounting for about 97% of total pollutants in the watershed.¹⁴
- 1.8 In many aquatic systems, phosphorus is a limiting nutrient for primary production and plays an important role in trophic status. The total concentration of phosphorus is included in the monitoring system and used to calculate DINAMA's Water Quality Index and Trophic State Index.¹⁵ Of the nine parameters in the Water Quality Index, total phosphorus has the highest level of noncompliance in Uruguay's main watersheds. In 2018, phosphorus levels reported in priority watersheds were well above the national standard,¹⁶ with annual average concentrations of 0.433 mg/L in the Paso Severino reservoir in the Santa Lucía River watershed, and 0.098 mg/L in Baygorria dam on the Río Negro.¹⁷
- 1.9 Nonpoint source pollution requires different strategies from those used to address point source pollution. In order to mitigate these impacts, various tools are available, such as establishing buffer zones on land, sustainably managing dairy operations, and agroecological practices. These tools should be used with a watershed approach, and will be implemented with support from the proposed program. There is broad empirical evidence demonstrating that buffer zones and agroecological practices can mitigate pollution from nonpoint sources.¹⁸
- 1.10 Uruguay has been implementing integrated and participatory water resource management, which is an ongoing challenge. This management includes social, economic, and environmental considerations, with a view to ensuring sustainable water use. In order to address this challenge, the country has developed several instruments, including the National Water Plan (2017) and watershed action plans that include a set of measures for preventing, controlling, and reversing the deterioration of water quality, while taking into account the challenges of climate change and variability in the country. In December of 2018, approval was granted for the Plan of Action to Protect Environmental Quality in the Santa Lucía River Watershed – Second Generation Measures. This is the second phase of an intervention to improve water quality, the first phase of which began in 2013. For the Río Negro, approval was recently given to the Río Negro Initiative, which will be implemented prior to the possible establishment of a new cellulose plant. For Laguna del Sauce, in December of 2010 a Laguna del Sauce Watershed Commission was created, and in June of 2015 approval was granted for the Plan of Action to protect environmental quality and availability of drinking water in the Laguna del Sauce watershed.

¹⁴ MVOTMA, 2017.

¹⁵ The Water Quality Index used in Uruguay since 2014 uses a series of parameters on impact on water quality that can be affected by point and nonpoint sources of pollution.

¹⁶ The standard for total phosphorus concentration (less than or equal to 0.025 mg/L) was established in 1979 by Decree 253 and is based on international benchmarks. Advances in national and international research have made it possible to revise these figures and bring them in line with Uruguay's concentrations, resulting in guideline values of 0.070 mg/L for larger rivers and 0.050 mg/L for smaller rivers.

¹⁷ Data from the National Environmental Observatory: <https://www.dinama.gub.uy/oan/indicadores/>.

¹⁸ For examples, see: Neal et al., 1998; Bowling, Storck and Lettenmaier, 2000; Croke and Hairsine, 2006; Barreto et al., 2014; Piñeiro Rodríguez and Perdomo, 2014; Failde et al., 2015; Kamarinas et al., 2016; Lizarralde, Ciganda, Baethgen, 2016; Lescano, 2017.

- 1.11 In December 2018, the National Environmental Cabinet approved the National Environmental Plan for Sustainable Development (PANDES),¹⁹ a strategic instrument for improving environmental protection that covers three areas: (i) attaining a healthy environment for good quality of life; (ii) promotion of economically sustainable activities; and (iii) environmental management by citizens. The plan seeks to: (i) generate a framework of economic and planning instruments that help ensure that environmental considerations are included in sector and crosscutting policies; (ii) promote more sustainable agricultural models and practices, and patterns of consumption; and (iii) strengthen and support the work of the Ministry of Housing, Territorial Planning, and the Environment (MVOTMA).
- 1.12 Within Uruguay's national institutional framework, the MVOTMA is a key player responsible for making proposals to the executive branch on formulation, execution, and oversight of national environmental policy, as well as national water policy, national territorial planning policy, and national housing policy.²⁰ These responsibilities are carried out through the following structure: (i) DINAMA is in charge of monitoring public and private activities to ensure that they comply with environmental protection standards in general, and water quality standards in particular; (ii) the National Water Office (DINAGUA) is responsible for the administration, use, and monitoring of water resources, as well as development and promotion of national, regional, and local water resource plans; (iii) the National Territorial Planning Office (DINOT) is responsible for developing the government's territorial policy guidelines based on sector policies; coordinating public institutions that deal with planning, territorial planning, and sustainable development at every level; and providing ongoing comprehensive evaluation of the aforementioned areas; and (iv) the Climate Change Division is responsible for implementing the National Policy on Climate Change.²¹
- 1.13 The proposed program will help improve management of environmental quality and sustainability through strengthening of the MVOTMA and through the framework of the PANDES and watershed action plans. The program is a continuation of IDB support for environmental management in Uruguay, which began with the program Institutional Modernization for Environmental Management and Planning (loan 1866/OC-UR, approved in 2007 and concluded in December of 2013), which was followed by the Program to Strengthen DINAMA and the Country's Environmental Management (loan 3080/OC-UR, approved in 2013).
- 1.14 The first program improved DINAMA's capacity to respond to the modernization of Uruguay's economy at a time when the country was receiving the most foreign investment in its history. The final evaluation of this operation showed that the program improved DINAMA's management capacity.²² For example, between 2007 and 2011, the time frame for issuing environmental authorizations for projects with medium and high environmental impact was reduced from almost two years to ten months. Between 2010 and 2012, there was nearly a 70% reduction in the time it

¹⁹ The National Plan for Sustainable Development was developed through a consultation process with the Uruguayan people and with major institutions (Government of Uruguay, 2018).

²⁰ MVOTMA, 2019a.

²¹ MVOTMA, 2019a.

²² Ordoñez, R. 2013.

- took to respond to environmental complaints. Between 2008 and 2011, the number of audits of large corporations tripled. Between 2011 and 2012, the notification time for environmental sanctions was reduced by 33%. Lastly, there was a shift from applying environmental regulations almost exclusively to the industrial sector to including the agriculture, forestry, and mining sectors as well.
- 1.15 The second operation (loan 3080/OC-UR) was planned in anticipation of continued growth in foreign investment, the start-up of major enterprises, and a strengthened territorial watershed approach.²³ That program focused on: (i) increasing the efficiency and effectiveness of authorization processes, monitoring, and controlling point source pollution; (ii) optimizing the use of human resources in the MVOTMA, integrating the functions of internal units, and beginning a decentralization process whereby department-level governments would take on environmental oversight duties; and (iii) improving the environmental quality of the Santa Lucía River watershed. The midterm evaluation of this operation identified significant achievements, such as the design and implementation of an environmental information system, the environmental observatory, the online system for company emissions reports, and an improvement in the analytical ability of DINAMA laboratories, in terms of the number of variables measured, as well as measurement times. The program also supported the Plan of Action for the Santa Lucía Watershed, which made progress in environmental management (e.g., the program target of reducing point source phosphorus and nitrogen loads was achieved), and a second generation plan was approved to provide continuity for the activities in that watershed.
- 1.16 **Pending challenges.** Despite the achievements made in improving environmental management, Uruguay is still facing challenges, especially with the intensified use of land for agriculture in the past decade, which exacerbates the aforementioned negative impacts. The MVOTMA's ability to perform its duties is mainly limited to tools and instruments for preventing and controlling point source pollution, including in the Santa Lucía River watershed, where there was an initial intervention phase. Thus, it is imperative to develop new tools to address nonpoint source pollution in terms of generating and processing quality information and implementing environmentally sustainable agricultural practices. At the same time, industry oversight systems will continue to be strengthened through the implementation of an automated system that monitors effluent load in real time.
- 1.17 **Intervention strategy.** The strategy of this operation is to consolidate the advances made in environmental management within the framework of the new PANDS, with a focus on: (i) improving the quality and rigor of environmental management processes by expanding coverage; increasing the frequency of information generated on pollutant discharge and water quality; incorporating technology and automated monitoring; and increasing the use of economic and policy instruments; and (ii) strengthening integrated management of priority watersheds and executing action plans, with emphasis on the development and implementation of tools to reduce nonpoint source pollution, including the management of buffer zones, and also promoting environmentally sustainable agricultural practices. While the previous operations mainly focused on DINAMA, the new program is expanding to other institutions and will include DINAMA,

²³ Valenzuela, J.L. 2018.

DINOT, DINAGUA, and the Climate Change Division, which will require intrainstitutional coordination efforts. The Uruguayan people will be the beneficiaries of this program and will have a healthier environment, which will contribute to a good quality of life. The participation of the Climate Change Division in the program, and its role in implementing the country's National Policy on Climate Change, will ensure that climate change mitigation and adaptation measures are mainstreamed into the strengthening of the MVOTMA.

- 1.18 **Theory of change.** The operation's theory of change addresses the problem identified in the diagnostic assessment, specifically the nonpoint pollution sources, in order to improve environmental quality in Uruguay in the long term. In that context, there is a connection between the intervention, which comprises the program's specific objectives (presented in detail in section B), its outcomes, and the impacts on water quality and ecosystem services that affect the well-being of the population.²⁴ The main concerns for water quality are the presence of nutrients, sediment, and pesticide residue. Several ecosystem services are affected by changes in water quality, such as drinking water and tourism, which is a highly important sector for Uruguay. Impacts on these ecosystem services lead to changes in the population's well-being that can be valued, which is necessary for demonstrating the program's economic viability. There is broad evidence that changes in water quality are linked to changes in the costs of water treatment,²⁵ as well as in the selection of tourist sites to visit and associated expenditures.²⁶
- 1.19 **Empirical evidence.** In order to improve Uruguay's environmental quality, the program will focus on governance by strengthening the MVOTMA's capacity for monitoring and control and improving the availability and quality of environmental information used for strategic decision-making. The Environment and Biodiversity Sector Framework Document (document GN-2827-8) and the lessons learned over the past two decades show that strong governance supported by robust information systems is fundamental for ensuring the effectiveness of policy and economic instruments that aim to improve environmental quality.²⁷ Empirical evidence confirms that countries with monitoring and control systems have strong environmental performance,²⁸ while participation and public access to information foster a sense of responsibility and environmental awareness.²⁹
- 1.20 Additionally, the program will finance specific activities in priority watersheds, including management and control of buffer zones in riparian areas and promotion of environmentally sustainably activities.³⁰ Uruguay has a long tradition of empirical soil studies that analyze the effects of natural cover, crop rotation, and fertilizer

²⁴ Keeler et al., 2012.

²⁵ Forster, Bardos, and Southgate, 1987; Holmes, 1988; Dearthmont, McCarl, and Tolman, 1998; Piper, 2003; Kraus, Kramer, and Jenkins, 2010; Montoya et al., 2011; Telles, Guimarães, and Dechen, 2011.

²⁶ Freeman, 1995; Egan et al., 2009; Vesterinen et al., 2010; Keeler et al., 2015; Breen, Curtis, and Hynes, 2018.

²⁷ Rojas-Suarez et al., 2018; Blackman et al., 2018; Caffera, 2010; UN Environment, 2019.

²⁸ OECD, 2009; Shimshack, 2014.

²⁹ Blackman, 2010; ECLAC, 2018; Sánchez-Triana et al., 2007.

³⁰ Neal et al., 1998; Bowling, Storck, and Lettenmaier, 2000; Croke and Hairsine, 2006; Barreto et al., 2014; Piñero Rodríguez and Perdomo, 2014; Failde et al., 2015; Kamarinas et al., 2016; Lizarralde, Ciganda, and Baethgen, 2016; Lescano, 2017.

application on nutrient and sediment export into waterways and bodies of water. There is broad evidence that buffer areas in riparian areas improve water quality³¹ and reduce the amount of nitrogen exported between 68% and 95%, and 30% in the case of phosphorus.³² Additionally, natural grasslands are more effective in reducing runoff than natural pastures, as they retain 55% of phosphate and 44% of nitrogen.³³ There are other strategies for reducing nutrient load and other pollutants, e.g. managing effluents from dairy farms that can also have positive impacts on the system productivity, as compared to traditional management.³⁴ Changes in fertilizer application practice, such as direct soil application, can also reduce pollutant loads.³⁵

- 1.21 **Lessons learned.** The program's design incorporates lessons learned from previous IDB operations to strengthen DINAMA and other similar operations in the region, in particular loan 2295/OC-BR. Table 1 presents the main lessons learned from previous operations with DINAMA and how they were incorporated into the design of the current operation.

³¹ Barreto, Dogliotti, and Perdomo, 2017; Bruijnzeel, 2004; Arcos Torres, 2005; Auquilla and Jiménez, 2005; Varanka and Luoto, 2012; Carlson et al., 2014.

³² Aubriot et al., 2018; Bizzozero et al., 2017; Jordan, 1993; Klapproth and Johnson, 2009; Lin et al., 2003; Lowrance et al., 1984; Miralles and Trier, 2018; Peterjohn and Correll, 1984; Udawatta, Garrett, and Kallenbach, 2010.

³³ Piñeiro Rodríguez and Perdomo, 2014; Lizarralde et al., 2016.

³⁴ Cabrera et al., 2009; Aguirre, Baraldo, and Durán, 2017.

³⁵ Barreto et al., 2014; Failde et al., 2015.

Table 1. Lessons learned and how they were incorporated into the current program

Lessons learned	Incorporation into program UR-L1157
It is necessary to transfer some costs to clients since the government's budget is limited and there is a growing demand for MVOTMA services.	The program establishes fees for environmental authorizations and permits and will develop a sustainability plan for DINAMA's human resources.
Greater participation by the productive sector in supporting environmental management tasks is important for improving performance.	The program incorporates various actions targeting the productive sector, such as developing guidelines for specific sectors, promoting agroecological land practices, and auditing and self-monitoring systems.
When progress was monitored during previous operations, it was difficult to evaluate actual progress towards achieving objectives and ownership of benefits in various parts of the institution. For institutional programs with multiple areas of activity, how communication and reporting take place is very important to avoid uncertainty, poor understanding, and undervalued program achievements.	The program execution unit (PEU) will have a dedicated monitoring and evaluation specialist, as well as a reporting system that tracks the program's cumulative progress, obstacles, risks, and successes.
The alignment and consistency between the country's strategic planning for sustainable development and the objectives of an environmental management program are fundamental in ensuring the program's success.	The program's design and specific objectives are fully aligned with the objectives and goals of the PANDS and the National Water Plan for 2017, which have an integrated vision for environmental management in the country.
The MVOTMA's mechanisms for working jointly with other government departments are crucial for implementing environmental quality control strategies more effectively at the local level. In order to have appropriate and efficient environmental management at the local level, all government entities should engage in integrated management.	The program will evaluate the challenges faced by departmental governments and will take up efforts to build local capacity to begin the process of sharing certain environmental control tasks.
Given the complexity of investments in environmental governance and institutional strengthening, it is especially critical for the intervention to have a clear rationale that links specific objectives to SMART outcomes and indicators.	The starting point for designing this operation was a participatory diagnostic assessment of the problem, which was crucial for developing the intervention's rationale and the theory of change. Emphasis is placed on the importance of this operation's theory of change.

1.22 Direct strengthening of environmental management through IDB-financed operations comes with a history of supporting sectors that have environmental impact, such as the agricultural sector. For instance, loan 4644/OC-UR, which is currently in execution, is contributing to sustainable production of family farms through the promotion and adoption of climate-smart technologies. Operation 2595/OC-UR had the objective of improving the productivity of small producers and financed the preparation of management plans for improving the productivity and sustainability of their operations, as well as institutional strengthening of the Office of Rural Development in the Ministry of Livestock, Agriculture, and Fisheries. Lastly, operation 2182/OC-UR strengthened agricultural health services and food safety, which have been key in helping the agricultural

sector significantly contribute to Uruguay's exports. Therefore, the proposed operation is built upon a solid foundation of environmental management interventions and is in synergy with support for the agricultural sector, which is a key aspect of the new program.

- 1.23 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is aligned with the development challenges of: (i) social inclusion and equality, with activities related to adaptation to climate change and water security, ensuring improved water quality for all; and (ii) productivity and innovation, through the development of quality human capital, especially in the fields of science, technology, and engineering. The program is also aligned with the crosscutting themes of: (i) climate change and environmental sustainability, as it increases the resilience of agricultural and aquatic ecosystems in addressing challenges that arise from climate variability, and also uses an approach that takes climate risks into account; and (ii) strengthening institutional capacity and the rule of law, by increasing efficiency, effectiveness, and transparency. The program contributes to the Corporate Results Framework (CRF) 2016-2019 (document GN-2727-6), through the indicator on improving management and use of natural capital, and by strengthening management tools and improving public services. The operation is aligned with the IDB Country Strategy with Uruguay 2016-2020 (document GN-2836), and contributes to its objective of strengthening public management by strengthening the MVOTMA. Additionally, the program is aligned with the Sector Strategy on Institutions for Growth and Social Welfare (document GN-2587-2).
- 1.24 The program is consistent with the Agriculture and Natural Resources Management Sector Framework Document (document GN-2709-5) and the development of environmentally sustainable agricultural practices; the Environment and Biodiversity Sector Framework Document (document GN-2827-8) by strengthening environmental governance and reducing pollution; the IDB Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (document GN-2609-1) and the Climate Change Sector Framework Document (document GN-2835-8); the Water and Sanitation Sector Framework Document (document GN-2781-8) by improving water security; and the Gender and Diversity Sector Framework Document (document GN-2800-8) by fostering training opportunities for women.
- 1.25 An estimated 100% of the operation's resources are invested in climate change mitigation and adaptation activities, according to the joint [methodology](#) of the multilateral development banks for tracking climate finance. These resources contribute to the IDB Group target of increasing financing for climate-related projects to 30% of approvals by the end of 2020.

B. Objectives, components, and cost

- 1.26 The general objective of the program is to help improve management of environmental quality and sustainability through strengthening of the MVOTMA and through the framework of the PANDS and watershed action plans. The program has two specific objectives: (i) to strengthen the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA; and (ii) to strengthen integrated management of priority watersheds, with emphasis on reducing pollutant load from agricultural sources.

- 1.27 **Component I. Strengthening the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA (IDB: US\$4,459,505; Local: US\$878,122).**³⁶ This component has four lines of action: (i) to strengthen strategic planning and territorial planning and to finance: (a) territorial planning programs for the Santa Lucía River watershed and the middle watershed of the Rio Negro, taking into account climate variability; (b) development of a monitoring plan for the PANDS; and (c) strategic plans to increase the sustainability of the MVOTMA, by deconcentrating its functions and incorporating financing mechanisms; (ii) to improve the capacity to analyze environmental conditions, including the impacts of climate change and variability, and to finance: (a) redesign and implementation of water quality evaluation programs; (b) development of new analytical capabilities within MVOTMA's laboratories to analyze cyanobacteria and pesticides; and (c) rehabilitation of the hydrometric network and establishment of predictive modeling systems for water and air quality in three watersheds; (iii) to finance the creation of an information system for emissions monitoring and control that is integrated into oversight and complaint systems; and (iv) to finance: (a) improvement in the quality of processes/procedures for environmental impact assessment (e.g. developing guides for participation, early consultation, and environmental monitoring in evaluations, as well as minimum quality requirements for carrying out and reviewing assessments); and (b) design and analysis of economic and policy instruments that promote environmentally sustainable productive practices.³⁷
- 1.28 **Component II. Strengthening integrated management of priority watersheds with emphasis on reducing pollutant load from agricultural activity (IDB: US\$1,445,495; Local: US\$308,405).** This component has two lines of action in three priority watersheds in the country, specifically the Santa Lucía River, Río Negro, and the Laguna del Sauce watersheds: (i) to finance the incorporation of remote sensors for environmental monitoring and control, management and control of buffer zones, and development and implementation of a strategy to control nonpoint pollution sources; and (ii) to finance the design and initial promotion of new agroecological technologies and practices, as well as the design and implementation of an audit system for dairy farms that can be expanded to other agricultural activities.
- 1.29 **Monitoring and administrative costs (IDB: US\$95,000; Local: US\$1,099,555).** The monitoring and administrative costs include costs for administration, monitoring, audits, and midterm and final evaluations.

C. Key results indicators

- 1.30 For the first objective of strengthening the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA, there are three expected outcomes: (i) improving the quality and availability of environmental information for strategic decision-making; (ii) improving the sustainability of environmental management services; and (iii) enhancing control and evaluation functions. The indicators for these outcomes by order of presentation are: (i) an

³⁶ See [optional link 4](#) and [optional link 5](#) with the datasheets on outputs for Components I and II, respectively.

³⁷ For example, a proposed adjustment to tax exemptions for fertilizers. Failde et al., 2015.

- increase in the number of environmental variables measured and the frequency of measurement; (ii) a decree approved by the executive branch that establishes the instrument for charging fees for environmental authorizations and permits, and implementation thereof; and (iii) the number of enterprises that are effectively controlling their point sources of pollution.
- 1.31 For the second objective of strengthening integrated management of priority watersheds with emphasis on reducing agricultural pollutant load, there are two outcomes: (i) reducing pollutant load in the three priority watersheds; and (ii) generating tools to promote environmentally sustainable practices in the agricultural sector. The indicators are: (i) the area of established buffer zones that reduce the load in receiving bodies of water; and (ii) the area of the watersheds that have comprehensive control of nonpoint source pollution.
- 1.32 **Economic viability.** In order to carry out the ex ante economic analysis of the program, the first integrated economic-environmental modeling platform (IEEM) was developed for Uruguay. The platform designed analytical scenarios that reflect the intervention's rationale in terms of the impacts on the program's specific objective indicators. Analysis with the IEEM platform reflects the impacts on well-being described in the program's theory of change. The results of the analysis show that the program is economically viable with a discount rate of 12%, a net present value of US\$5.5 million (2019 dollars), and an internal rate of return of 15.4%.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The program is designed as a specific investment loan with a disbursement period of five years. The total cost of the program is US\$8,286,082, financed with US\$6,000,000 (72.4%) from the Bank's Ordinary Capital. The remaining US\$2,286,082 (27.6%) will be financed from a local contribution (Table 2).

Table 2. Estimated program costs (U.S. dollars)

Component	Line of action	IDB	Local contribution	Total	%
Component I. Strengthening the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA.	Strengthening of strategic planning and territorial planning	826,866	173,110	999,976	12.0
	Improving capacities to analyze and evaluate environmental quality	1,571,999	282,471	1,854,470	22.4
	Improving pollution control capacities	1,013,898	214,257	1,228,155	14.8
	Improving quality of environmental control processes	687,976	129,355	817,331	9.9
	Strengthening the MVOTMA's capacities to develop and use environmental economic policy instruments	358,766	78,929	437,695	5.3
	Total Component I		4,459,505	878,122	5,337,627

Component II. Strengthening integrated management of priority watersheds with emphasis on reducing agricultural pollutant load	Support implementation of action plans for priority watersheds	953,985	203,276	1,157,261	14.0
	Promote environmentally sustainable practices	491,510	105,129	596,639	7.2
	Total Component II	1,445,495	308,405	1,753,900	21.2
Administration or other contingent charges			1,059,555	1,059,555	12.8
Midterm and final evaluations		95,000		95,000	1.1
Accounting audit			40,000	40,000	0.5
TOTAL		6,000,000	2,286,082	8,286,082	100

- 2.2 The program disbursement period will be five years, starting from the date that the loan contract enters into effect.

Table 3. Disbursement schedule (U.S. dollars)

Year	2020	2021	2022	2023	2024
Amount	1,160,903	1,450,865	1,319,112	1,162,912	906,208
%	19.3	24.2	21.0	19.4	15.1

B. Environmental and social risks

- 2.3 Based on available information and in accordance with the Environment and Safeguards Compliance Policy (Operational Policy OP-703), the project has been classified as a Category “C” operation, and thus does not require an environmental or social analysis.

C. Fiduciary risks

- 2.4 As part of the program preparation activities, an analysis of the MVOTMA’s institutional capacity was performed, as it is the executing agency for this operation. The institutional capacity assessment reported a medium risk and identified opportunities for improvement in the area of planning. However, based on the executing agency’s experience and performance in previous Bank operations, the PEU is considered to have advanced knowledge of Bank policies and procedures, and its performance level is satisfactory. Using counterpart resources but without transferring fiduciary responsibility, the MVOTMA will continue to receive services from the UNDP as an external agency for managing procurement, contracting, and administration of payment for providers, contractors, and consultants, with dedicated support for the MVOTMA and in direct coordination with the PEU. Bank policies will be applied to all fiduciary activities.

D. Other key issues and risks

- 2.5 Other risks. The risk analysis carried out using the risk management methodology for sovereign-guaranteed projects identified the following medium risks: (i) two development risks: (a) the inability to attract and retain technical staff with the required level of training and experience, which will be mitigated by establishing matrices for competitive remuneration under the program and widely publishing

requests for proposals; and (b) the institution may not be able to consolidate the progress made under the operation once it has ended, which will be mitigated by incorporating line items into the five-year budget to ensure that the operation is sustainable (through an instrument for the collection of fees for environmental authorizations and permits); and (ii) one environmental and social sustainability risk: failure to achieve acceptance by agricultural sector stakeholders of the sector-related measures designed and implemented within the framework of the program, which will be mitigated through joint work with agricultural sector stakeholders to develop such measures, as well as through dissemination and training activities related to them.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 The borrower for the project is the Eastern Republic of Uruguay. The project will be executed by the MVOTMA, through the PEU, and a General Coordinator will be appointed at the central level of the Ministry. DINAMA will be responsible for technical matters, with collaboration from the offices of DINOT, DINAGUA, and the Climate Change Division. DINAMA will make technical decisions regarding the operation's implementation, following the project's legal and technical documents. The MVOTMA will act with support from the PEU and will be responsible for technical execution and management of the program, while the PEU will be in charge of fiduciary and administrative matters. The PEU will have a technical coordinator and specialists responsible for planning, monitoring, and control. The guidelines and procedures to be followed for program execution will be established in the program Operating Regulations. **As a special contractual condition precedent to the first loan disbursement, the Bank will receive evidence to its satisfaction that the [program Operating Regulations](#) have entered into effect.** The purpose is to establish the guidelines and procedures to be followed for successful execution of the program. This condition is necessary to ensure proper program execution, considering that the Bank's experience in the region indicates that approval of the program Operating Regulations prior to the first disbursement contributes to the internal organization of the executing agency for implementing the operation. Therefore, **another special contractual condition precedent to the first disbursement is that the MVOTMA will create a PEU using the basic criteria established in the program implementation arrangements.** This condition is considered essential for assuring the Bank that the executing agency has an appropriate execution unit to begin executing the operation.
- 3.2 A special contractual condition of execution will be the signing and entry into effect of the agreement between the MVOTMA and UNDP, using the terms agreed upon by the Bank, prior to beginning execution of program activities. This condition is fundamental for ensuring that the executing agency has support from the UNDP as an external agency for managing procurement and administering payment for providers, for purposes of administering and managing all program procurement and payments.
- 3.3 Positive experience with the UNDP in previous operations is reflected in: (i) strengthening the framework for collaboration between the IDB and the UNDP in Uruguay; (ii) concentrating the MVOTMA's efforts through DINAMA in execution

and technical monitoring of investment activities and their outputs, which is accompanied by effective administrative management; and (iii) the UNDP's knowledge and soundness in applying Bank policies for procurement and financial management, including timely reporting. Payment to the UNDP for services rendered to the project will be financed from local counterpart resources, and will be a percentage-based fee that will not exceed 5% of the loan amount.

- 3.4 Execution arrangements are detailed in Annex III. During execution of the loan, fiduciary supervision is expected to include strengthening activities that have been mutually agreed upon by the executing agency and the Bank.
- 3.5 **Procurement.** Procurement that is financed in whole or in part from Bank resources will be carried out in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9). The [procurement plan](#) contains details on procurement that will take place during execution, as well as the procedures applied by the Bank for procurement review.
- 3.6 **Direct contracting.** Direct contracting is expected to total US\$1,274,333.44, of which 81.97% will be financed from Bank resources, with the remainder coming from the local contribution. Direct contracting of consultants is covered under section 5.4(a) of the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9), which establishes the principle of continuity of service where such continuity is more efficient than a new competition, with the understanding that: (i) initial selection of consultants was done on a competitive basis and received the Bank's prior no objection; (ii) consultants whose contracts are to be renewed are subject to an annual performance evaluation; and (iii) in the event of unsatisfactory results, a consultant's contract will not be renewed and alternative human resources will be sought through a competitive process. Should there be changes to the terms of reference and/or fees for consultants, a competitive shortlist of three candidates will be compiled in order to select the talent required for execution of the program.
- 3.7 **Disbursement.** Disbursement will be in the form of advances based on actual liquidity needs. Preferably, these advances will be made on a semiannual basis, once at least 80% of the funds have been accounted for. The required documents are the accounting reports and the financial planning form. Documents will be subject to ex post review.
- 3.8 **Audits.** During execution, the executing agency, through the PEU, will submit audited financial statements for the program annually, based on the terms required by the Bank (document OP-273-6). The audited financial statements will be submitted within 120 days after the end of the fiscal year, and the final audited financial statements will be submitted within 120 days after the final disbursement.

B. Summary of arrangements for monitoring results

- 3.9 Throughout program execution, the MVOTMA, in coordination with the PEU, will prepare semiannual progress reports and submit them to the Bank within 60 days after the end of each six-month period. These reports will indicate the level of physical and financial progress towards the indicators and activities included in the results matrix, the [annual work plan](#), and the [procurement plan](#). The reports will

- analyze any problems encountered and describe the corrective measures taken to address them. The progress reports for the second half of each year will include the annual work plan for the following year and an updated procurement plan.
- 3.10 Additionally, in coordination with the PEU, the MVOTMA will submit two evaluation reports: (i) the midterm report, within 90 days after the date on which 50% of the loan proceeds have been disbursed, or after 50% of the execution period has elapsed, whichever occurs first; and (ii) the final report, within 90 days after the date on which 95% of loan proceeds have been disbursed. These reports will be prepared by independent external consulting firms contracted by the executing agency using loan resources and will include: (i) financial execution by component, subcomponent, and source of financing; (ii) progress towards attainment of the outputs, outcomes, and impacts contained in the results matrix; and (iii) a summary of financial accounts, procurement, disbursements, and internal control.
- 3.11 The monitoring and evaluation plan agreed with the MVOTMA and considered in the budget includes detailed information on indicators and means of verification; the critical path for activities and outputs; monitoring instruments; responsible parties; and the methodology and budget for implementation of the plan.
- 3.12 **Ex post program evaluation.** The ex post evaluation is a tool for evaluating the extent to which the investment's objectives were achieved, based on empirical evidence of what actually happened once the investment was made. The ex post economic evaluation will be carried out using the computable general equilibrium model, the IEEM platform, which was developed during the ex ante economic analysis of the program.³⁸ For the ex ante analysis, estimates were used for certain variables, e.g. the estimated reduction in the MVOTMA's costs, and buffer zone areas that will be established. Once the program ends, empirical data on these variables will be available. In the ex post evaluation, these data will be compiled and inserted into the analysis in order to re-estimate the program's economic benefits, their impact on well-being, and the net present value and ex post internal rate of return on the investment. This evaluation will be presented no later than 90 days after the end of the program disbursement period.

³⁸ Banerjee et al., 2016, 2019a, 2019b.

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Productivity and Innovation -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Beneficiaries of improved management and sustainable use of natural capital (#)* -Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2836	Strengthening State management by supporting the strengthening of MVOTMA
Country Program Results Matrix	GN-2948	The intervention is included in the 2019 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		
	Evaluable	
3. Evidence-based Assessment & Solution	8.8	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	3.6	
3.3 Results Matrix Quality	2.2	
4. Ex ante Economic Analysis	8.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	3.0	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	0.0	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	0.0	
5. Monitoring and Evaluation	8.5	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	6.0	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Low	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks		
Mitigation measures have indicators for tracking their implementation		
Environmental & social risk classification	C	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)		Procurement: Information System, Price Comparison, Contracting Individual Consultant.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The general objective of the program is to contribute to the improvement of environmental quality and sustainability, through the strengthening of the MVOTMA and within the framework of the PANDS and the basin action plans. The program has two specific objectives: (i) to strengthen the functions of strategic planning, evaluation, control and environmental monitoring of MVOTMA; and (ii) strengthen the integrated management of priority watersheds with emphasis on the reduction of polluting loads of agricultural origin.

The diagnosis identifies that MVOTMA's ability to perform its functions is limited to tools and instruments aimed at preventing and controlling point sources of contamination, and highlights the need to develop new tools to address non-point sources in terms of generating quality information and processing and the implementation of environmentally sustainable agricultural practices. The vertical logic of the program highlights the need to address the non point sources of pollution, to achieve an improvement in the long-term environmental quality of the country, and in particular in the water quality of priority basins. Some outcome indicators in the results matrix are more akin to product indicators.

The economic analysis uses simulations to derive the possible economic benefits of the program, however the assumptions regarding the possible expected changes are not fully justified.

The monitoring plan complies with the requirements. The proposed evaluation is based on an ex-post economic analysis.

RESULTS MATRIX

Program objective:	The program objective is to help improve management of environmental quality and sustainability through strengthening of the Ministry of Housing, Territorial Planning, and the Environment (MVOTMA) and through the framework of the National Environmental Plan for Sustainable Development (PANDS) and the watershed action plans. The program has two specific objectives: (i) to strengthen the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA; and (ii) to strengthen integrated management of priority watersheds, with emphasis on reducing pollutant load from agricultural sources.
---------------------------	---

EXPECTED IMPACT

Indicators	Unit of measure	Baseline	Baseline year	Final target	Means of verification	Comments
Impact 1: Reduce nonpoint source pollution from agricultural activities in the Santa Lucía watershed, the Río Negro watershed, and the Laguna del Sauce.						
Percentage of samples with total phosphorus (Pt) < 0.070 mg/L	%	Zero (0)	2018	(2030)	Environmental Observatory	Total phosphorus (Pt) is the water quality parameter with the highest level of noncompliance, mainly due to nonpoint source pollution from agricultural activities.
Sta. Lucia watershed				40%		
Río Negro watershed				20%		
Laguna del Sauce				20%		

EXPECTED OUTCOMES

Outcome	Indicator	Unit of measure	Baseline and year	Final target	Means of verification	Comments
Objective I. To strengthen the functions of strategic planning, evaluation, control, and environmental monitoring within the MVOTMA.						
1. Increase the quality and reliability of environmental quality analysis for monitoring and evaluation of watershed action plans.	Increase water quality variables and frequency of monitoring for aquatic ecosystems	Number variables. Frequency of measuring chlorophyll	30 variables (2018) 4 times per year	50 variables Daily	Environmental Observatory	<p>Developing technologies for remote sensors and online monitoring, along with quality modeling tools, will improve capacity for carrying out evaluations of causes and effects. It will also improve the effectiveness of decision-making, help address causes, and use resources for pollution control more efficiently.</p> <p>This is a result of improved capacity for predictive modeling, remote sensors for chlorophyll, and automated systems that monitor environmental quality.</p>

Outcome	Indicator	Unit of measure	Baseline and year	Final target	Means of verification	Comments
2. The MVOTMA improves sustainability of environmental management services by charging fees for environmental authorizations and permits.	Decree and establishment of an instrument to charge fees for environmental authorizations and permits; fee mechanism implemented using the National Fund for the Environment (FONAMA).	Number of approved executive branch decrees. U.S. dollars entering FONAMA from charging fees for authorizations.	0; 2019 US\$0; 2019	1 decree US\$1,500,000	Executive branch decree published. FONAMA management reports.	Approval of decree establishing an instrument to charge fees for environmental authorizations and permits;
3. Increase the efficacy of monitoring and evaluation functions.	Indicator: % of discharge monitored online (in real time) compared to the total amount of discharge of control subjects	%	10% of total discharge per total control subjects (2019)	80% of total discharge per total control subjects	Report from the environmental information system	Discharge of point source pollution controlled using continuous monitoring and automated oversight, which allows for optimization of resources for inspections and timely application of sanctions.

Outcome	Indicator	Unit of measure	Baseline and year	Final target	Means of verification	Comments
Objective II. To strengthen integrated management of priority watersheds with emphasis on reducing agricultural pollutant load.						
1. Reduction in the pollutants discharged from nonpoint sources into priority watersheds.	Buffer zone area reduces load in the receiving body.	Hectares	10,000 ha (year 2019)	80,000	Administrative resolutions that establish new buffer zones and mapping; Monitoring reports.	Hectares of buffer zones with required environmental conditions, as a proxy for reducing nonpoint pollution load (coefficient model for pollutant reduction). Mapping of compliance by satellite image and monitoring of noncompliant areas. Compliance will be carried out through planned control tools: remote sensors, periodic monitoring, and working with producers to implement buffer zone management measures.
2. Producers in the agricultural sector incorporating management measures and environmentally sustainable practices.	Number of agricultural lands that implement measures to reduce pollutant loads, as well as sustainable practices, in the three watersheds.	Number of agricultural lands	0 (2019)	100	Annual progress reports on watershed plans	Lands where DINAMA provides integrated management of nonpoint pollution sources and/or that incorporate management measures and sustainable practices defined in plans to reduce pollutant load.

OUTPUTS AND INDICATORS

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Objective/Component I. Line of Action 1: Strengthening Strategic Planning and Territorial Planning										
Strengthened capacity for territorial planning for sustainable development at the department and watershed level	1. Territorial planning program for the Santa Lucía River watershed and the middle watershed of the Río Negro (central region) approved by presidential decree and in effect.	Territorial Planning Program	0 (2019)		1		1		2	Publication of decrees.
	2. Number of departments that implement territorial planning instruments that integrate results of the Strategic Environmental Evaluation	Number of departments	0; 2019		1	1	1	2	5	Report from the environmental information system.
Monitoring of environmental plans (National Environmental Plan and watershed action plans)	Monitoring of environmental plans (National Environmental Plan and watershed action plans) Implemented and validated through status reports available to the public. Milestone 1: monitoring indicators defined in year 1. Milestone 2: PANDS development plan agreed to by consensus in year 1.	Number of annual reports	0; 2019		4	3	4	3	3 watersheds/year starting in year 2; 1 PANDS/biannual.	Report from the environmental information system.

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Strategic environmental development plan of the MVOTMA, including sustainability and financing of human resources, as well as a strategy to deconcentrate responsibilities.	Strategic environmental development plan of the MVOTMA, including sustainability and financing of human resources and their financing, as well as a strategy to deconcentrate responsibilities, validated by the minister of the MVOTMA.	Plan	0; 2019		1				1	MVOTMA resolution.
Objective/Component I. Line of Action 2: Improvement of capacity to analyze and evaluate the state of the environment										
Redesign and establishment of program to evaluate the quality of water resources in order to improve the integrity of the ecosystem.	1. Program to evaluate the quality of water resources redesigned and implemented to generate information on biological indicators and soil matrices. Milestone 1: system incorporates functions and procedures to include information generated by third parties – year 2.	Number of programs	0; 2019		1				1	Report from the environmental information system.
	2. Environmental flows established in two priority watersheds.	Number of environmental flows	0; 2019		1		1		2	MVOTMA resolution. According to methodology approved by MVOTMA

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Analytical capacities of DINAMA for monitoring and evaluation of cyanobacteria and pesticides.	Improved analytical capacities of DINAMA for monitoring and evaluation of cyanobacteria and pesticides through expansion of the number of new parameters (pesticides and toxins) validated in environmental matrices.	Number of pesticides and number of toxins	39 pesticides 1 toxin; 2019		2 toxins	50 new pesticides			89 pesticides; 3 toxins	Report from the DINAMA laboratory.
Hydrometric network strengthened to improve quality of information.	Number of watersheds with rehabilitated and automated hydrometric stations to improve quality of information.	Number of watersheds	0; 2019		1		1	1	3	Report from the DINAMA laboratory.
Integrated predictive models for watersheds/air quality that generate scenarios to help with decision-making	Number of watersheds with integrated predicted models for watersheds/air quality that generate scenarios to help with decision-making	Number of watersheds	0; 2019		1		1	1	3	Semiannual report of the program execution unit (PEU).
Objective/Component I. Line of Action 3: Improvement of capacities to control pollution										
Information system for monitoring and continuous control of emissions (effluents and emissions) including operation of the separate discharge alert system	Information system for monitoring and continuous control of effluents and emissions, including operation of the separate discharge alert system, and generation of indicators for environmental quality and management. Milestone 1: Communication platform for monitoring companies established by DINAMA and operational – year 2.	Number of automated systems	0; 2019				1		1	Report from the Environmental Information System.

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Integration of monitoring processes using information generated from self-monitoring, continuous monitoring of discharge, and remote sensors.	Integrated monitoring system using information generated by self-monitoring, continuous monitoring of discharge, and remote sensors.	Number of systems	0; 2019				1		1	Report from the Environmental Information System.
Establishment of the National Registry of Environmental Laboratories.	Environmental laboratories registered under the National Registry of Environmental Laboratories according to requirements of ISO/EC 1725.	Number of laboratories	0; 2019		5	5	5	5	20	Directory of Environmental Laboratories (https://bit.ly/2q6KgyY)
Strengthening of the system for responding to environmental complaints regarding odors and pesticides.	System strengthened for responding to environmental complaints about odors and pesticides, with the percentage of total complaints about odors and pesticides that have been resolved. Milestone 1: two (2) operational action protocols approved by a DINAMA resolution in year 2.	Percentage	0% odors; 0% pesticides					Pesticides: 30% odors: 60%	Pesticides: 30% odors: 60%	Reports from the system to respond to complaints included in the Environmental Information System.

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Objective/Component I. Line of Action: 4. Improvement in the quality of Environmental Impact Assessment processes										
Improvement in the quality of the processes of the Environmental Impact Assessment (EIA).	Improvement in the quality of the processes that have been defined and implemented for evaluation and environmental monitoring of class "C" enterprises. This includes implementation of the predictive information verification tool. Milestone: Detailed procedures for participation, early consultation, and participatory environmental monitoring in the framework of the EIA: year 2 Milestone 2: Minimum quality requirements for carrying out and reviewing EIAs established for at least 10 typologies of activities - year 4.	Number of procedures established	0; 2019		1			3	4	DINAMA guidelines/procedures published online; framework procedure + 3 specific procedures. Class "C" enterprises have greater environmental impact and require a full EIA.
Objective/Component I. Line of Action 5: Strengthen the capacities of the MVOTMA to develop and implement economic instruments.										
Design and technical implementation of policy instruments (economic-environmental) to improve environmental quality.	1. Design and technical implementation of fiscal economic instruments (residue and agrochemicals) to improve environmental quality.	Number of documents	0; 2019	2	1	1			4	PEU semiannual reports; technical proposals and decree proposals

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
	Milestone 1. Methodology for cost-benefit analysis for watershed plans based on assessment of ecosystem services: year 3									
	2. Number of watershed action plans with economically evaluated measures (using an assessment of ecosystem services).	Number of economic analyses	0; 2019					1	1	Report from the Environmental Information System.
	3. (i) Methodological guide and procedures for analyzing implementation of insurance and guarantees; (ii) first phase of implementation.	Number of guidelines	0; 2019		1			1	2	PEU Semiannual reports; report from the Environmental Information System.
Objective/Component II. Line of Action 1: Support for implementation of action plans for priority watersheds										
Incorporation of remote sensors as a tool for environmental monitoring and control.	Remote sensors integrated into the monitoring and control system for compliance with buffer zones (related to outputs 2.2 and 1.4). Milestone 1: System for monitoring chlorophyll based on calibrated remote sensors in three watersheds: year 2 (Sta. Lucia); year 3 Río Negro.	Number of systems	0; 2019		1	1				Environmental Information System.
Buffer zones established and operational control for three watersheds.	Control system for buffer zones developed and functioning in the watersheds of Santa Lucia, Río Negro, and Laguna de Sauce.	% of lands with regular control of buffer zones	0; 2019		25%		40%	15%	80% of the total.	Reports from the Environmental Information System I; (*) Laguna del Sauce already has a resolution.

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
	Milestone 1. Resolutions that establish buffer zones: Santa Lucia watershed (expansion of the agreement on the second generation plan)- year 1; Rio Negro – year 2. (*).									The total area to be controlled via implementation of buffer zones will increase from 10,000 ha to over 100,000 ha.
Development of a strategic plan with guidelines for managing buffer zones and conservation of riparian areas near agricultural land in order to more effectively retain pollutants.	Approval of Strategic Plan with guidelines for managing buffer zones and conservation of riparian areas near agricultural land in order to more effectively retain pollutants.	Plan	0; 2019			1			1	Administrative MVOTMA resolution; reports from the Environmental Information System.
Integrated control of nonpoint sources implemented in the first phase for the Santa Lucía River watershed.	Percentage of land with integrated management of nonpoint sources in the first phase for the Santa Lucía River watershed (*) Milestone 1. Control strategy designed for all watersheds - year 2.	% of lands of the Santa Lucía River watershed	0%; 2019			20%	10%	10%	40%	Reports from the Environmental Information System; (*) Integrated control using data on rates of application of agrochemicals, water use, monitoring soil and water quality, cause-effect models for nonpoint discharge and water quality. Total universe: 20,000 productive units.
Strengthened Watershed Commissions.	Number of annual operational plans for Watershed Commissions of the three priority watersheds.	Number of plans	0; 2019		1	1	1	3	3 plans/year starting in year 4	Document on operational plans approved by the Watershed Commission.

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Objective/Component II. Line of Action 2: Promote environmentally sustainable practices.										
Design and start of implementation of a strategy to promote inclusion of technology and agroecological practices in productive lands.	<p>Strategy developed to promote technology and agroecological practices.</p> <p>Milestone 1: Survey of technologies and agroecological practices on agricultural lands in the priority watersheds (baselines, areas, practices, and percentage of participation of women – year 2.</p> <p>Milestone 2: Development of a strategy to implement agroecological technologies and practices.</p>	Number of strategies	0; 2019		1				1	Document Plan validated by the DINAMA (National Office of the Environment).
	<p>Level of progress in implementing a strategy to promote production based on agroecological technologies and practices.</p> <p>Milestone 3: initial phase of implementation in one priority watershed.</p>	% agro-ecological progress	0; 2019			5 %	10 %	25%	25%	Increase relative to baseline defined in year 2. Environmental Information System.
Auditing system applied to dairy farms and development of a strategy and procedures for other relevant agricultural sectors.	% of dairy farms of 300+ cows in the Santa Lucía River watershed that apply auditing systems.	Percentage of lands	0; 2019		5	10	10	20	45	Semiannual reports from the PEU and reports from the Environmental Information System. There are 132 dairy producers that have over 300 cows each.

Output	Indicator	Unit of measure	Baseline year	Year 1	Year 2	Year 3	Year 4	Final year	Total	Means of verification and comments
Training and awareness-raising for technical experts, professionals, and producers in order to promote adoption of sustainable productive practices.	Training and awareness-raising for technical experts, professionals, and producers in order to promote adoption of sustainable productive practices.	Number of producers	0; 2019		50	50	100	100	300	Semiannual reports from the PEU. This output is directly related to objective 2 and the following outcome: Producers in the agricultural sector that incorporate management measures and environmentally sustainable practices.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Uruguay
Project number:	UR-L1157
Name:	Environmental Management Strengthening Program for the Ministry of Housing, Territorial Planning, and the Environment (MVOTMA)
Executing agency:	Eastern Republic of Uruguay, through the MVOTMA
Prepared by:	Abel Cuba and Emilie Chapuis (FMP/CUR)

I. EXECUTIVE SUMMARY

- 1.1 This operation is a program with a total cost of US\$8,286,082, of which US\$6,000,000 will be financed with Bank resources and US\$2,286,082 with local counterpart funds. The operation's objective is to help improve management of environmental quality and sustainability through strengthening the MVOTMA and through the framework of the National Environmental Plan for Sustainable Development (PANDS) and the watershed action plans.
- 1.2 The borrower is the Eastern Republic of Uruguay and the executing agency will be MVOTMA, supported by the program execution unit (PEU). MVOTMA will be responsible for technical execution and management of the program, while the PEU will be in charge of fiduciary and administrative matters. The program is expected to be managed with the participation of an administrative support agency (United Nations Development Programme (UNDP)).
- 1.3 The fiduciary arrangements and requirements established for this program are based on an evaluation of MVOTMA institutional capacity and its experience as an executing agency for loans 1886/OC-UR and 3080/OC-UR, which are currently being executed.

II. THE EXECUTING AGENCY'S FIDUCIARY CONTEXT

- 2.1 The MVOTMA is a central government entity that consists of five offices, three of which are participating in this operation.¹ The PEU operates within the National Office of the Environment (DINAMA), which has considerable project management experience, and in accordance with applicable IDB policies and procedures.

¹ The National Office of the Environment (DINAMA), the National Territorial Planning Office (DINOT), and the National Water Office (DINAGUA).

- 2.2 In order to execute this program, the following country systems are expected to be used:
- a. **Budget.** The national budget system will be used. The operation's resources will be included in the new Five-Year Budget Act 2020-2025. The base budget is expected to be sufficient to cover the program's execution challenges, and includes financing and local counterpart resources.
 - b. **Treasury.** In order to administer the program's resources, a special account will be opened at the Central Bank of Uruguay (BCU), which will be part of the Treasury Single Account.
 - c. **Accounting and financial reports.** Management of public resources is channeled and recorded through the Integrated Financial Information System (SIIF), which in this instance will be supplemented by the program's parallel accounting system.²
 - d. **Internal control.** MVOTMA maintains an internal control system for managing its operations. The system's effectiveness in managing expenditures and payments is evaluated by the Tribunal de Cuentas de la República [National Audit Office] (TCR) and is subject to legal review by delegated auditors.
 - e. **External control.** In recent years, the TCR has been responsible for annual audits of Bank-financed programs. The work of the TCR is governed by international auditing standards established by the International Organisation of Supreme Audit Institutions (INTOSAI).

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The institutional capacity assessment was carried out following the methodology of the Institutional Capacity Assessment System (ICAS). It reported a medium risk and identified opportunities for improvement in the area of planning and formalizing standardized documents for fiduciary matters. In that regard, based on the executing agency's experience and performance in previous Bank operations, the PEU is considered to have advanced knowledge of Bank policies and procedures, and its level of performance is satisfactory, as indicated in the corresponding program monitoring report. Additionally, no observations are indicated in the annual project audits. Based on the foregoing, fiduciary risk is considered to be low. However, during execution of the loan, fiduciary supervision is expected to include strengthening activities that have been mutually agreed upon by the executing agency and the Bank.

² Until entry into effect of the new project accounting module that will be developed in the Integrated Financial Information System (SIIF) II.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

- 4.1 **Exchange rate.** For financial reporting in dollars, the exchange rate will be conversion into pesos will be used: outlays will be converted into the loan contract currency considering the date when Bank disbursements were converted into Uruguay's local currency, using the conversion method set forth in Art. 4.10(b)(i) of the General Conditions of the loan contract.
- 4.2 **Audited financial statements.** These will be submitted within 120 days after the close of each year. The terms of reference will be agreed upon with the Bank, and the audit firm will be acceptable to the bank; the deadline for submission is set forth in Art. 7.03 of the General Conditions of the loan contract. The final auditing report will be submitted no later than 120 days after the date of the final disbursement.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 The Policies for the procurement of goods and works financed by the Inter-American Development Bank (document GN-2349-9) and Policies for the selection and contracting of consultants financed by the Inter-American Development Bank (document GN-2350-9) will apply to all anticipated procurement activities in this operation. These activities will be included in the procurement plan, which will cover an initial period of 24 months, at a minimum, and will then be updated annually. The procurement plan will also be registered, approved, and published in the Procurement Plan Execution System (SEPA – www.iniciativasepa.org) before beginning procurement. Once the plan is registered, it will be updated annually, or whenever significant changes are made to the original plan.
- 5.2 The relevance of each expenditure (i.e. the terms of reference, technical specifications, and budget) is the responsibility of the project's sector specialist and always requires a no objection before the procurement process may begin, based on the operational criteria of the Project Team Leader.

A. Procurement execution

- 5.3 Subject to the existence of appropriate national regulations on procedures for making bidding documents public for bidders and allowing bidders to access bidding documents, and subject to regulations on this practice (Texto Ordenado de Contabilidad y Administración Financiera [Consolidated Text on Accounting and Financial Administration] (TOCAF) Arts. 65 and 67, as well as Law 18.381) that have been evaluated by the Bank for operations in execution, the Electronic Government and Information Society Agency [Agencia de Gobierno Electrónico y Sociedad de la Información y del Conocimiento] (AGESIC) may apply this regulation to this operation and modify it, where appropriate, in the bidding documents that will be used and that will receive the Bank's prior no objection.³

³ The procedure described herein is based on a national practice that promotes transparency in procurement and is not counter to application of Bank policies. In order to ensure that in practice, the procedure is executed within Bank policy parameters, the bidding documents will receive the Bank's no objection.

- 5.4 Before carrying out any procurement process, the executing agency will submit the procurement plan to the Bank for approval and will include the following information: (i) the contracts for goods and services required for program execution; (ii) the methods proposed for procurement of goods and selection of consultants; and (iii) the procedures applied by the Bank for procurement supervision. The borrower will update the procurement plan every twelve months, at a minimum, and according to the program's needs. Any proposal to amend the procurement plan must be submitted to the Bank for approval.
- 5.5 **Procurement of works, goods, and nonconsulting services.**⁴ Contracts generated and subject to international competitive bidding (ICB) will be carried out using standard bidding documents issued by the Bank. Contracts subject to national competitive bidding (NCB) will be carried out using bidding documents satisfactory to the Bank.

Works			Goods and services			Consulting services	
International competitive bidding	National competitive bidding	Shopping	International competitive bidding	National competitive bidding	Shopping	International advertising for consultants	Shortlist 100% national
≥3,000,000	≤3,000,000 ≥250,000	≤100,000	≥250,000	≤250,000 ≥50,000	≤50,000	≥200,000	≤200,000

5.6 **Procurement, selection, and contracting of consultants**

- a. Selection of individual consultants: due to the need to maintain technical continuity during program execution, the agreed procurement plan allows for rehiring of individual consultants who were previously hired with resources from loan 3080/OC-UR and who will continue to provide services for this operation, for a total of US\$1,274,333.44. It should be noted that all consultants have been selected through a competitive process, and that renewal of their contracts is evaluated annually by DINAMA based on consultant performance and results. It should also be mentioned that the terms of reference and contractual conditions for these consultants will remain the same, meaning that they meet the requirements of paragraph 5.4(a), Section V, of document GN-2350-9, which provides for direct hiring for continuity of service. Additionally, contracting of consulting and nonconsulting services through UNDP services is provided for, in accordance with DINAMA agreements that will be sent to the Bank prior to any contracting taking place under the aforementioned agreement. It should be noted that the agreement will indicate that contracting will be carried out according to Bank policies and procedures, but does not constitute a transfer of fiduciary responsibility, which will remain with the executing agency.
- b. No exceptions to Bank procurement policies will be requested.

⁴ [Document GN-2349-9](#) see paragraph 1.1: Nonconsulting services will be treated similarly to goods.

- 5.7 **Advance procurement/Retroactive financing.** No retroactive financing charged to the loan proceeds is planned.
- 5.8 **Main procurement items.** The procurement planned for this operation is included in the initial [procurement plan](#), which covers a period of 18 months.
- 5.9 **Procurement supervision:** In principle, it has been determined that procurement activities will be subject to ex post supervision, except for: (i) direct contracting; (ii) contracting for which the estimated amount is higher than the ICB threshold, as indicated in paragraph 5.9 of this document; (iii) activities for which the executing agency and the Bank mutually agree that the method of supervision will be ex ante. Furthermore, the initial review will be ex post, subject to the conditions indicated and to be amended according to the agreement contained in the procurement plan. ICBs and consulting services greater than US\$200,000 will be subject to ex ante review.
- 5.10 **Records and files:** In order to prepare and file program reports, agreed formats and procedures will be used. These are set out in the program Operating Regulations and comply with the requirements of Bank policies.

VI. FINANCIAL MANAGEMENT

A. Programming and budget

- 6.1 As an entity of the central government, the MVOTMA sends its budget proposal to the Ministry of Economy and Finance, which includes it in the Consolidated National Budget Proposal and submits it for consideration to the executive branch. The executive branch sends it to the legislative branch for analysis and legal approval, and this approval governs management of the ministry. Within the ministry, the necessary budget is allocated in order to execute the program based on the requirements identified.
- 6.2 The executing agency, through the PEU, will program and draft the budget based on the agreed annual work plan, which is based upon the program execution plan.

B. Accounting and information systems

- 6.3 Budget allocations are allocated and executed through the SIIF of the Contaduría General de la Nación [General Accounting Office] (CGN), and program-related commitments and payments will follow procedures established by the CGN. The program will also have its own accounting system, parallel to the SIIF, until the development of the corresponding module in SIIF II is completed.
- 6.4 Program financial statements will be issued periodically, according to accepted accounting standards. The following financial statements will be submitted: (i) statement of cash received and disbursements made; and (ii) statement of cumulative investment, accompanied by the corresponding explanatory notes.

C. Disbursements and cash flow

- 6.5 In order to execute program funds, a special account will be set up at the Central Bank of Uruguay (BCU) through the Tesorería General de la Nación [General Treasury Office], and will be a nominal account. Resources will be transferred from this account to the administrative support agency of the PEU, based on financial

planning, among other factors, and in accordance with the conditions previously established in the corresponding service contract between the PEU and MVOTMA.

- 6.6 Disbursements will be made in the form of advances of funds, based on actual liquidity needs and supported by adequate financial projections. These advances will preferably be made every six months, once reporting has been filed for at least 80% of the amount advanced. Each disbursement request will be accompanied by financial planning spreadsheets and fund reconciliation. All disbursements will be processed electronically using *e-Disbursement*. The agreed exchange rate for converting payments made in local currency or other currencies to the loan contract currency will be the rate used to convert the amounts into pesos.

D. Internal control

- 6.7 In accordance with the TOCAF, the TCR will exercise preventive intervention in all expenditures related to program execution. In a complementary manner, and according to current legal regulations, the MVOTMA is an entity that is monitored by the Auditoría Interna de la Nación [Internal Audit Office] (AIN). Throughout program execution, efforts will be made to coordinate with the AIN should the program be subject to review.
- 6.8 The relationship between the MVOTMA and the administrative support agency, as well as other conditions relating to planning responsibilities, use of resources, application of regulations, and account records and reporting, will be set forth in the program Operating Regulations.

E. External control and reports

- 6.9 In order to comply with the Bank's contractual requirement, annual program audits may be performed by the TCR, or by an independent audit firm acceptable to the Bank. The relationship between the TCR and the MVOTMA will be set forth in a service agreement letter, which will include the terms of reference agreed upon with the Bank.
- 6.10 Financial audit reports will be submitted annually during the disbursement period by 30 April of each year and 120 days after the date of the final disbursement. Audits will be managed according to the guidelines set forth in document OP-273-6.

F. Financial supervision plan

- 6.11 The financial supervision plan will cover the following:
- a. Participation in the launch workshop organized by the project team.
 - b. Regular review of the annual work plan and financial plan prepared by the executing agency, through the PEU, as support for the requested advances.
 - c. Based on the portfolio risk evaluation, on-site financial visits may be carried out during program execution in order to evaluate the main financial aspects of the program, as well as control and management of program records. Disbursements will be subject to ex post review.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/19

Uruguay. Loan ___/OC-UR to the Eastern Republic of Uruguay. Environmental Management Strengthening Program for the MVOTMA

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Eastern Republic of Uruguay, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the Environmental Management Strengthening Program for the MVOTMA. Such financing will be in the amount of up to US\$6,000,000 from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ _____ 2019)