

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

ARGENTINA

**NORTE GRANDE PROVINCES DEVELOPMENT PROGRAM:
WATER AND SANITATION INFRASTRUCTURE**

(AR-L1136)

LOAN PROPOSAL

This document was prepared by the project team consisting of Sergio Campos (WSA/CAR), Project Team Leader; Henry Moreno (INE/WSA), Alternate Team Leader; Kleber Machado (INE/WSA); Javier Garcia Larumbe (INE/WSA); Cynthia Nuques (INE/WSA); Omar Garzonio (WSA/CAR); Carolina Chantrill (WSA/CAR); Amalia Palacios (WSA/CAR); Martin Soulier (WSA/CAR); Camilo Garzón (WSA/consultant); Ricardo Vargas del Valle (RND/CAR); Serge-Henri Troch (VPS/ESG); Javier Cayo (LEG/SGO); Gumersindo Velázquez (PDP/CAR); and Ignacio Vinocur (PDP/CUR).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. The Board may or may not approve the document, or may approve it with modifications. If the document is subsequently updated, the updated document will be made publicly available in accordance with the Bank's Access to Information Policy.

CONTENTS

PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING	1
A.	The water and sanitation sector in Argentina	1
B.	Water and sanitation service delivery, coverage, and quality in the northern provinces	2
C.	Country and Bank strategy.....	3
D.	Evaluation of the status of program 1843/OC-AR.....	4
E.	Objective and components.....	6
F.	Key outcome indicators	7
II.	FINANCING STRUCTURE AND RISKS	8
A.	Financing instruments	8
B.	Fiduciary risks.....	8
C.	Social and environmental impact.....	9
D.	Special considerations and risks	9
III.	PROGRAM EXECUTION AND MANAGEMENT.....	12
A.	Execution plan.....	12
B.	Procurement	14
C.	Monitoring and evaluation.....	14

ANNEXES	
Annex I	Summary Development Effectiveness Matrix (DEM)
Annex II	Results matrix
Annex III	Fiduciary agreements and requirements

ELECTRONIC LINKS	
REQUIRED	
1.	Annual work plan (AWP) and Program execution plan (PEP) http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018692
2.	Monitoring and evaluation plan http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018700
3.	Procurement plan http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018695
4.	Environmental and Social Management Report (ESMR) http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018698
OPTIONAL	
1.	Technical analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37018685
2.	Socioeconomic analysis http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=36971625
3.	Executing agency institutional assessment and midterm evaluation of program 1843/OC-AR (AR-L1015) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37018679
4.	Financial analysis http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018687
5.	Operating Regulations http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018701
6.	Institutional strengthening plans http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018680
7.	Water and sanitation sector technical note http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018682
8.	Progress monitoring report (PMR) http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018688
9.	Indicators http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018683
10.	Presentation of SAT-SAPEM business administration http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018767
11.	Review of compliance with the Public Utilities Policy (OP-708) http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018690

12. Operational guidelines for implementation of the Public Utilities Policy in the Water and Sanitation Sector
<http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=3698888>
13. Environmental classification and safeguards
<http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37018691>

ABBREVIATIONS

EBITDA	Earnings before interest, taxes, depreciation, and amortization
EIA	Environmental impact assessment
ESMF	Environmental and Social Management Framework
ICB	International competitive bidding
MPFIPyS	Ministry for Federal Planning, Public Investment, and Services
O&M	Operation and maintenance
PORs	Program Operating Regulations
PEU	Program executing unit
ToR	Terms of Reference
UCPyPFE	Coordination Unit for Externally Financed Programs and Projects
UEPEX	Financial management system for executing units of external loans
W&S	Water and sanitation
WTP	Willingness to pay

PROJECT SUMMARY

ARGENTINA

NORTE GRANDE PROVINCES DEVELOPMENT PROGRAM: WATER AND SANITATION INFRASTRUCTURE (AR-L1136)

Financial Terms and Conditions				
Borrower: Argentine Republic			Flexible Financing Facility*	
			Amortization period:	24 years
Executing agency: Ministry for Federal Planning, Public Investment, and Services (MPFIPyS)			Original weighted average life (WAL):	15.25 years
			Disbursement period:	6 years
Source	Amount (US\$ million)	%	Grace period:	6.5 years
			Inspection and supervision fee:	**
IDB (Ordinary Capital)	500	90	Interest rate:	LIBOR
Local counterpart	55	10	Credit fee:	**
Total	555	100	Currency:	U.S. dollars from the Ordinary Capital
Project at a Glance				
Objective and description: The objective of the program is to improve water and sanitation sector service and efficiency in the provinces of the Norte Grande of Argentina by financing projects to: (i) increase coverage and improve potable water and sanitary and stormwater sewerage services in unserved or underserved areas; and (ii) strengthen sector entities in the provinces, and improve service provider operational and financial efficiency and management.				
Special contractual clauses:				
Conditions precedent to the first disbursement: (i) creation of the program executing unit (PEU) within the executing agency's internal structure and appointment of the basic staff needed for program execution (paragraph 3.1); and (ii) entry into effect of the program's Operating Regulations (paragraph 3.2).				
Conditions for execution: (i) signature by the executing agency and the provincial and/or municipal governments of a participation, transfer, and maintenance agreement, prior to the inclusion of a project in the program (paragraph 3.4); (ii) a monitoring and evaluation system will be maintained during program execution (paragraph 3.8); (iii) two midterm evaluations will be conducted the first 18 months after the contract effective date, the second after 36 months or when 50% of resources have been disbursed, and one final evaluation at the end of the program (paragraph 3.8); and (iv) before starting the bidding process for the Santiago del Estero works: (a) the environmental impact assessment (EIA) (including the baseline) will be updated to take into account any changes arising from the project review; and (b) an additional public hearing will be held, notwithstanding compliance with the Environmental and Social Management Framework (ESMF) and the specific Environmental and Social Management Plan during project execution (paragraph 2.4).				
Exceptions to Bank policies: None				
Project consistent with country strategy:				
	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]		
Project qualifies as:	SEQ [<input checked="" type="checkbox"/>]	PTI [<input checked="" type="checkbox"/>]	Sector [<input type="checkbox"/>]	Geographic [<input checked="" type="checkbox"/>]
	Headcount [<input type="checkbox"/>]			

* Under the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule as well as currency and interest rate conversions, in all cases subject to the final repayment date and the original weighted average life (WAL). In considering such requests, the Bank will take market conditions and operational and risk management considerations into account.

** 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 respective policies. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

I. DESCRIPTION AND RESULTS MONITORING

A. The water and sanitation sector in Argentina

- 1.1 Argentina has an area of 3,761,274 km², geographically divided into 23 provinces and the Autonomous City of Buenos Aires. It has a population of 40,117,096 (2010 Census) living principally in large urban centers (close to 90%). With respect to water and sanitation (W&S), 84% of households have access to potable water from the public network, only 54% are hooked up to the sanitary sewerage system, and only 10% of wastewater is estimated to undergo any kind of treatment.¹ However, these figures hide geographic inequalities: coverage figures are lower in the Norte Grande region (83.5% water and 43.5% sewerage) and in the outlying area of the City of Buenos Aires (*Conurbano Bonaerense*) (72.1% water and 41.3% sewerage) where the lower income population lives. Close to 25% of households in the northern provinces have unmet basic needs. Also, most collected wastewater is partially treated in some provincial capitals, such as Mendoza, Córdoba, Tucumán, and Neuquén, whereas in the two largest urban areas of the country, Buenos Aires and Rosario, and in the Norte Grande provinces, treatment falls below the country average.²
- 1.2 From 1912 to 1980, *Obras Sanitarias de la Nación* [National Public Works Administration] (OSN) was the public utility responsible for providing potable water and sewage services in the principal cities of Argentina. In smaller towns, the service was provided by provincial or municipal governments, or local cooperatives. The water and sewage service decentralization process began in 1980, when the OSN responsibilities were delegated to the provinces, except for the City of Buenos Aires and the *Conurbano Bonaerense*. The provinces chose their own service model: some transferred responsibility to their municipios or to cooperatives, whereas others chose to create public or semipublic companies. In the early 1990s, the government pushed a public utilities privatization and concession process. According to government analyses, the sector was unable to achieve the intended efficiency levels despite the entry of private operators. Moreover, the policies to strengthen service providers failed to achieve provider efficiency.
- 1.3 **Sector structure.** The central government and provincial governments are responsible for policy-making whereas service regulation and delivery are under the exclusive authority of provincial governments. The *Secretaría de Obras Públicas* [Public Works Secretariat], attached to the Ministry for Federal Planning, Public Investment, and Services (MPFIPyS), fulfills the national government functions relating to water and sanitation (W&S) policy-making. Delivery of W&S services is decentralized, having been transferred to regional jurisdictions, principally through service provider companies or municipal agencies. Economic and service quality regulation were delegated to entities with specific mandates for these duties. At the

¹ Nolasco y Asociados, and National Report on Water Management in Argentina, January 2000.

² Annual Benchmarking Report, Association of Water and Sanitation Regulatory Agencies; ADERASA, 2006.

national level, the environmental conservation policy is under the Office of the Cabinet of Ministers through the Secretariat for the Environment and Sustainable Development. At the provincial level, this task is complemented by the corresponding agencies.

- 1.4 **Investment financing.** National government financing in the W&S sector is essentially channeled through the *Ente Nacional de Obras Hídricas de Saneamiento* [national sanitation water works agency] (ENOHSA) and the Coordination Unit for Externally Financed Programs and Projects (UCPyPFE), both reporting to the MPFIPyS, the ministry with the authority to seek financing, administer funds, execute projects, and provide technical assistance to provinces, municipios, and providers. Investment feasibility is issued by the *Dirección Nacional de Inversión Pública* [National Public Investment Administration] (DNIP), attached to the Ministry of Economy and Production.

B. Water and sanitation service delivery, coverage, and quality in the northern provinces

- 1.5 The Norte Grande of Argentina is one of the four regions created through interprovincial treaties for regional integration, pursuant to the provisions of Article 124 of the National Constitution. The region encompasses nine provinces: Jujuy, Catamarca, Santiago del Estero, Tucumán, Chaco, Corrientes, Formosa, Misiones, and Salta. The region has a population of 8.3 million inhabitants (2010 Census), representing 20.6% of the national population. The region includes two of the most densely populated provinces, Tucumán and Misiones, with 64.3 and 36.8 inhabitants/km², respectively, and is characterized by high lag indicators for development, poverty, exclusion, and marginality. With a serious structural deficit compared with the rest of the country, over 6.8 million inhabitants (83.5%) are connected to water services but only 3.3 million (40.5%) have sewerage services connected to a public network (2010 Census). This situation is further aggravated by the fact that the region is home to the lowest income population in the country. As of June 2003, more than 65% of the region's population lived beneath the poverty line and 33% below the indigence line.
- 1.6 **Coverage and quality of water and sanitation services.** Despite efforts undertaken by the government in the past six years,³ sewerage service coverage in the region is barely 40.5% (compared with 54% on average for the rest of the country), with greater lags in the provinces of Misiones, Santiago del Estero, Chaco, and Formosa, where average coverage is 24%. A large proportion of wastewater (85%) discharges into receiving bodies totally untreated and, in general, the treatment capacity of the existing infrastructure is overwhelmed, with inadequate operation and maintenance (O&M).⁴ Water service coverage in the

³ Sector public expenditure of approximately US\$1.1 billion/year increased more than 18-fold.

⁴ Some contributing factors to low coverage levels include: no sector prioritization in the investment programs in the 1980s and 1990s; lack of planning to keep up with population growth, especially in urban areas; and insufficient resources for proper operation and maintenance.

region has caught up with coverage in the rest of the country (83.5%) although there are problems with the availability of raw water sources, quality, and continuity. Water rationing in the summer months is a frequent occurrence and even when there are no service interruptions, estimates indicate that the water pressure for more than 1.3 million users is below the standard level. Misiones, Santiago del Estero, Chaco, and Formosa are the most underserved provinces in terms of access to services, with a 75% average coverage.⁵

- 1.7 **Institutional framework and management.** At the provincial level, the ministries of economy or the public works departments determine W&S sector policies. Regulation and control in some provinces is entrusted to a specific regulator (such is the case in Santiago del Estero and Chaco). In others, such as Jujuy and Tucumán, one regulatory agency controls two or more utilities. In terms of management, the Norte Grande provinces provide W&S services essentially through companies set up as State-owned corporations, with the exception of Santiago del Estero and Corrientes. A study of the northern provinces of Argentina⁵ with in-situ surveys showed that collections for most providers fall below 80% so they must finance O&M through a combination of budget transfers, rates, and subsidies. On average, providers receive a provincial subsidy ranging from 10% to 20% of their O&M cost.⁶ The survey further showed that unaccounted-for water exceeds 50%. However, these figures should be viewed with caution given the low level of customer metering (22%), which makes it hard to reconcile the volume of water produced and water consumed with any degree of reliability (see [link](#)). The Jujuy state company has made big strides in customer metering having reached a level of 68%, and Tucumán is about to implement an extensive plan, for which it documented empirical evidence demonstrating that the installation of 5,000 meters generates up to 11cubic meters/month in water consumption savings and up to a 15% increase in collections per customer (see [link](#)).

C. Country and Bank strategy

- 1.8 **The government's strategy.** Since the beginning of the last decade, as part of the economic recovery policy, the government has been working on the Norte Grande Development and Integration Program aiming to promote the economic and productive growth of the region and reduce inequities in access to services. Accordingly, program resources are intended as a transfer from the national government to the provinces.
- 1.9 **Consistency with the country strategy and GCI-9.** This program is consistent with strategic areas (i) and (iii) of the Bank's country strategy (document

⁵ Survey of the water and sanitation situation in the Norte Grande provinces.

⁶ The companies in Santiago del Estero and Tucumán, which are part of this program's sample, have increased their rates over the last three years by 20% and 15% in real terms on average, respectively, which allows them to cover their operation and maintenance costs.

GN-2570), whose objective is to support sustainable and more equitable growth.⁷ It is consistent with the priority area of supporting Infrastructure for Competitiveness and Social Welfare, and contributes to the GCI-9 financing goals for “poverty reduction and social equityenhancement,” and “climate change, renewable energy, and environmental sustainability initiatives.” The program is included in the 2012 Operational Program Report (document GN-2661-4).

- 1.10 **The Bank’s participation.** This program ties in with the Water Infrastructure Development Program for the Norte Grande Provinces (1843/OC-AR). The Bank is also supporting the following three programs: Water and Sanitation for Smaller Communities (1895/OC-AR); Water and Sanitation Program for the Buenos Aires Metropolitan Area and Conurbation (2048/OC-AR); and Water and Sanitation Program for Urban and Suburban Centers (2343/OC-AR). In addition, the following two technical cooperation operations are in execution: Sewer Master Plan of the Northwest Region of Greater Buenos Aires (ATN/OC-12221-AR) and the Sustainable Urban and Environmental Management Program of the Reconquista River (ATN/OC-12571-AR).

D. Evaluation of the status of program 1843/OC-AR

- 1.11 The Board of Executive Directors approved the Water Infrastructure Project of the Norte Grande Provinces Development Program (1843/OC-AR) in January 2007, in the amount of US\$300 million. The loan contract (US\$240 million) was signed in March 2007 and declared eligible for disbursement in August of the same year. The executing agency is the UCPyPFE, attached to the MPFIPyS. It is responsible for managing a multilateral financing portfolio⁸ of approximately US\$5.4 billion chiefly intended to finance road, electrical, and W&S infrastructure projects. The objective of the program is to contribute to sustainable economic development and raise the standard of living of the population in the Norte Grande provinces by means of the environmentally sustainable use of water resources in the provinces of Tucumán, Jujuy, Santiago del Estero, and Chaco. The program has three components: hydraulic infrastructure for production (US\$178.3 million); water and sewer systems (US\$82.2 million); and institutional strengthening (US\$22 million).
- 1.12 A higher demand for hydraulic infrastructure was estimated during program preparation, hence the component accounted for 59.4% of the total financing (\$178.3 million). However, the program emphasis shifted during execution because the provinces assigned greater priority to W&S projects, so today this component accounts for 76.7% of the total financing. To date, the program has committed all the funds and disbursed 73.9% of same. Program resources are financing 10 infrastructure projects in the amount of US\$281.8 million in the provinces of Tucumán, Jujuy, Santiago del Estero, and Chaco. At present, two works in the

⁷ (i) A stronger institutional framework for better governance and fiscal sustainability. (ii) Poverty reduction, rebuilding of the human resource base, and promotion of sustainable, inclusive social development.

⁸ Includes 13 projects with external financing: IDB (5), IBRD (6), CAF (1), and FONPLATA (1).

amount of US\$12.7 million and seven studies costing US\$1.2 million have been finalized. Eight projects are under way for a total cost of US\$268.9 million, five of which are 80% executed, on average, with construction expected to be completed in late 2012. Execution of the three remaining projects has progressed to about 17% on average, with completion scheduled for late 2013. The water infrastructure projects (US\$51.5 million) should protect 45,000 people and 15,000 productive hectares from flooding, and provide better irrigation and drainage systems for 4,000 hectares dedicated to irrigated agriculture. The W&S projects (US\$230.3 million) will benefit 250,000 and 110,000 homes with water and sanitation, respectively, and treat the wastewater from approximately 450,000 inhabitants.

1.13 Thanks to its broad experience in the execution of programs with external financing, the executing agency was able to comply with the fiduciary commitments in a timely manner and implement the Bank's new monitoring and evaluation instruments (Procurement Plan Execution System – SEPA and Progress Monitoring Reports – PMR). The program executing unit (PEU) for loan 1843/OC-AR has skilled staff and is properly equipped, which facilitates coordination with contractors, supervising firms, and providers. Execution of the first program was considered acceptable⁹ and it is expected to achieve the anticipated outcomes (see [midterm evaluation report](#)). Two issues that arose during execution are worth mentioning: (i) several projects reported cost increases related to escalation and modifications to the works;¹⁰ and (ii) delays in institutional strengthening plans were justified by improvements to household and master metering. The following main lessons learned have been identified: (i) estimate inflation-related cost increases more accurately for better target projections; (ii) invest resources in project updates and to improve their design so as to avoid modifying the scope of projects; (iii) strengthen PEU capacities in a timely manner, recruiting specialists in project supervision and execution, and ensure that the entities that will receive the investments are involved starting with the project design phase, so as to improve works supervision; (iv) foster development of cost recovery and subsidy targeting systems to ensure that operators are able to properly operate and maintain the newly constructed infrastructure over the long term; and (v) when formulating productive water use projects, take into account adequate formulation of management plans from the outset.

1.14 **Program strategy.** The delivery of W&S services in Argentina has suffered from protracted transition processes in the past two decades as it has shifted back and forth between public and private management models. Service delivery has also been affected by insufficient allocations of resources to increase coverage, and from

⁹ The project performance index fell from 0.91 in 2010 to 0.15 in 2012 because 2011 year-end programming included water and sanitation coverage for 207,000 and 100,000 households, respectively, but as of December 2011, only 7,234 were reported due to delays in executing projects.

¹⁰ The construction cost index increased 194% from December 2008 to June 2012, and the private sector salary variance for the same period increased 2.41 times.

cost recovery schemes that in some cases did not cover funding needed to operate and maintain the existing infrastructure. In the Norte Grande region, 1.3 and 4.9 million inhabitants lack water and sanitation services, respectively, and service providers face significant challenges to improve their operating and financial efficiency, reduce the level of unaccounted-for water, and increase individual metering. To help address these issues, this project will support the government's efforts to increase coverage levels, enhance operating and commercial efficiency, and help operators achieve financial sustainability. The program proposes to concentrate resources in the following areas: increase coverage in the area by financing basic infrastructure projects in phases so as to benefit a greater number of provinces; rehabilitate and optimize existing infrastructure; support improvement of service providers' operating capacity; strengthen the oversight and control entities; and gradually and progressively implement cost recovery schemes. This strategy is consistent with the action areas proposed by the Bank in the Sector Technical Note (see [link](#)).

- 1.15 This program and the national objectives for the W&S sector are consistent and compatible with the objectives and basic conditions of the Public Utilities Policy (OP-708), and was structured using the gradual approach specified in the "Guidelines for application of the Public Utilities Policy to the W&S sector" (see [link](#)). The program complies with the separation of functions among the entities responsible for policy-making, regulation, and service delivery (see paragraph 1.7). With respect to financial sustainability, O&M costs are covered by companies with their own resources and/or transfers (see paragraphs 1.7 and 2.10); as an eligibility criterion, beneficiary entities must demonstrate the capacity to cover costs with their own resources or present a plan to cover them. Measures will be implemented under the project to help providers achieve this goal in the medium and long term. In terms of economic efficiency, cost recovery and subsidy targeting studies will be carried out, and actions will be implemented to achieve economically efficient service delivery. In addition, for a project to be financed it must be technically, environmentally, socioeconomically, financially, and institutionally viable, that is to say it must promote access while safeguarding quality. The program includes activities to strengthen the regulatory framework in participating provinces, to be implemented during the execution of the projects. Effective implementation of the program will enable the beneficiary service providers to become sustainable in the long term. An analysis of the sample projects is presented in [link 11](#).

E. Objective and components

- 1.16 **Objective.** Improve the W&S sector's service and efficiency in Argentina's Norte Grande provinces by financing projects to: (i) increase coverage and improve potable water and sanitary and stormwater sewerage services in unserved or underserved areas; and (ii) strengthen sector entities in the provinces, and improve service provider operational and financial efficiency and management.
- 1.17 **Component 1. Water and sanitation works (US\$305 million).** The objective is to expand potable water and sewerage service coverage through the rehabilitation,

optimization, and expansion of water intake, purification and distribution systems, as well as wastewater and stormwater collection, treatment, and disposal systems. It is estimated that these resources will be able to finance seven projects (see paragraph 3.5).

- 1.18 **Component 2. Improvement of operational management (US\$70 million).** The objective is to promote the sustainability of the service providers¹¹ and strengthen the oversight and control entities.
- 1.19 A line item will be included for engineering and administration expenditures (program administration, management, supervision and inspection of works, and project studies including feasibility and design), and one for cost escalation.

Table I-1. Cost and financing (US\$ thousand)

Category or component	IDB	Local contribution	Total	%
I. Engineering and administration	30,000	0	30,000	5.4
1. Program administration	5,000	0	5,000	0.9
2. Works inspection and supervision	15,000	0	15,000	2.7
3. Studies and projects	10,000	0	10,000	1.8
II. Direct costs	375,000	40,000	415,000	74.8
1. Potable water and sanitation systems	305,000	33,000	338,000	60.9
2. Improvement of operational management	70,000	7,000	77,000	13.9
III. Associated costs	95,000	10,000	105,000	19.0
1. Audit, evaluation, and monitoring	2,000	0	2,000	0.4
2. Cost escalation and contingencies	93,000	10,000	103,000	18.6
IV. Financial costs	0	5,000	5,000	0.8
1. Interest	0	4,300	4,300	0.7
2. Credit, inspection, and supervision fee	0	700	700	0.1
Total cost	500,000	55,000	555,000	100%

F. Key outcome indicators

- 1.20 Table I-2 includes key indicators for the water and sanitation projects and for improvement of operational management.

¹¹ Includes measuring equipment; energy efficiency; specialized software: operating efficiency plans; studies on cost recovery and subsidies; reengineering; reduction of unaccounted-for water; etc.

Table I-2: Key outcome indicators (baseline 2011)

Component / Outcome indicator	Baseline	Year 2	Year 4	Project end
Households with new or improved access to water	0	0	7,200	14,400
Households with new or improved access to sanitation	0	0	70,745	86,165
Inhabitants with treated wastewater	0	0	425,000	516,000
Monthly water consumption per user measured by the company <i>Servicios de Agua de Tucumán</i> (SAT) (cubic meters/month)	44.8	40.0	34.0	34.0
EBITDA operating margin for SAT	5.2%	22.9%	29.6%	31.2%

II. FINANCING STRUCTURE AND RISKS

A. Financing instruments

- 2.1 The borrower will be the Argentine Republic. The executing agency will be the MPFIPyS, acting through the UCPyPFE, via a program executing unit (PEU). The operation will be designed as a global multiple-works program in the amount of US\$555 million, including a Bank loan of up to US\$500 million from the Ordinary Capital, and a local contribution of US\$55 million from the borrower. The loan's amortization period will be 24 years, with a disbursement period of six years and a grace period of 6.5 years (see Table II-1). The period for the physical start of the works will be two years, counted from the entry into effect of the loan contract. The program will be governed by the Operating Regulations (see paragraph 3.1).

B. Fiduciary risks

- 2.2 The institutional capacity assessment and the risk analysis found that the principal risk to procurement relates to noncompliance with execution periods and delays in the bidding and contracting processes. To mitigate these risks, the executing agency will strengthen its team of professionals to expedite the execution and administration of procurement processes, and monitor the execution and supervision of the projects. The Operating Regulations will include a guide to procurement procedures, and the staff assigned to these tasks will be trained in operating policies and procedures. In the financial area, the lessons learned during execution of loan 1843/OC-AR were taken into account (see paragraph 1.13) and the principal risk identified concerns delays in justifying 80% of the funds advanced, because of delays in the execution of some projects, the timely financing of the local contribution, and cost escalation. The following measures will be adopted to mitigate these risks: (i) charge to the local contribution the financing provided by provinces for infrastructure works that complement the financed investments; (ii) plan on a 10% *pari passu*; (iii) encourage advance payment requests for periods of less than six months; (iv) include, as part of associated costs, significant provisions for cost escalation; and (v) monitor implementation of the

Table II-1. Disbursement schedule (million)

Year	IDB	Local	Total	%
1	36.0	3.0	39.0	7.0
2	80.0	10.0	90.0	16.2
3	110.0	12.0	122.0	22.0
4	166.0	18.0	184.0	33.2
5	73.0	8.0	81.0	14.6
6	35.0	4.0	39.0	7.0
Total	500.0	55.0	555.0	100.0

UEPEX financial system and an information system that covers information needs and provides effective records and controls.

C. Social and environmental impact

2.3 The program is expected to have a net positive social and environmental effect as it will improve the living conditions of the population and the quality of the environment in the areas of intervention. However, there will be localized, short-term negative social and environmental impacts during construction, for which effective mitigation measures will be deployed. The impacts are those resulting from the construction of civil works, such as noise, dust, solid and liquid waste, disruptions to traffic and access by the population to homes, public buildings and services, in addition to the risk of occupational accidents. The potential risks during the operation are associated with mismanagement of wastewater treatment systems. In accordance with the Bank's Environment and Safeguards Compliance Policy (OP-703), the project team has classified this program as a Category "B" operation. The following specific policies and directives are applicable to the program: B.4 (Other Risk Factors); B.7 (Supervision and Compliance); B.10 (Hazardous Materials); and B.11 (Pollution Prevention and Abatement) of the Environment and Safeguards Compliance Policy (OP-703).

2.4 The Environmental and Social Management Report (ESMR) (see [link](#)) describes the program impacts, mitigation measures, and specific environmental and social conditions of the program. As specified in OP-703, the program's Environmental and Social Management Framework (ESMF) was prepared tapping into the lessons learned from loan 1843/OC-AR (with more emphasis on supervision and monitoring), and specific Social and Environmental Impact Assessments (EIAs) were prepared for the two projects in the program sample: construction of the sewerage system and treatment plant in the city of Santiago del Estero, and installation of individual and master meters in San Miguel de Tucumán. The Santiago del Estero EIA baseline will be completed with inclusion of a more detailed hydrological analysis and a flood risk analysis, to ensure that the impacts and risks will be sufficiently mitigated. As conditions precedent for program execution, before starting the bidding process for the Santiago del Estero works: (i) the EIA will be updated (including the baseline) to reflect any changes resulting from review of the project; and (ii) a new public hearing will be held, notwithstanding compliance with the specific ESMF and Environmental and Social Management Plan during project execution.

D. Special considerations and risks

2.5 **Analysis of engineering issues.** The program's two sample projects and the national standards governing the design of W&S systems were evaluated. The assessment of the Fray Mamerto Esquiú project performed in preparation for Norte Grande Water Program I was also reviewed. The analysis (see [link](#)) found that the proposed plans (developed during preparation for this operation) meet the cities' needs and priorities in terms of sizing of the wastewater collection and disposal

systems, and optimization of the water supply system, respectively. The principal technical considerations drawn from the analysis include: (i) the studies and designs were prepared in accordance with generally accepted engineering principles and standards; (ii) the proposed solutions are technically appropriate options, although some alternatives will be worked on in an effort to mitigate potential risks during construction and reduce the current cost estimates, in the case of Santiago del Estero; (iii) the project execution schedules were prepared bearing in mind the characteristics of the works and experience gained from similar works; and (iv) once constructed, the projects will be properly operated and maintained by the water supply and sewerage system operators. However, given the high levels of potable water consumption, the current provisioning standards must be reviewed and adjusted in accordance with the availability of local water sources and the rational use of water to reflect the challenges posed by climate change.

- 2.6 **Socioeconomic viability.** A cost-benefit analysis was run for the projects to provide and install individual and master meters in San Miguel de Tucumán, and the main sewer, liquid effluent treatment plant, and fine mesh filter in the city of Santiago del Estero. These projects include construction of water pipe and sanitary sewerage treatment networks, and works to improve management of the water supply. The benefits were quantified using willingness to pay (WTP) models calculated under earlier studies in the city of Tucumán (transfer of benefits). The models were updated to take into account monetary corrections in the average family income and/or income from the sale of the service and consumption savings (cubic meters), evaluated at long-term median costs (cost savings) (Arg\$118/family/month for sewerage networks, Arg\$36 family/month for treatment, and Arg\$0.582/cubic meters for water produced). In the case of the Santiago del Estero project, the results of a contingent valuation survey are being analyzed. Specific WTP values will be estimated for networks and treatment to reevaluate the project. The economic evaluation of the sanitation projects not included in the sample will use estimated WTP values drawn from specific surveys to be conducted for this purpose. In the case of the water projects, the surveys will help determine the water demand curve. The costs considered in the evaluation were incremental investment and O&M costs, excluding taxes and fees (social prices). The analysis and methodology are available in the Economic Analysis Annex (see [link](#)). The cost-benefit analysis for the sample projects yields internal rates of return greater than 12% p.a. and a cost-benefit ratio greater than 1.
- 2.7 **Risk analysis.** An analysis of the most operative variables of the socioeconomic viability of the projects was developed individually and as a whole (WTP, sewer connection fee, cubic meters of saved drinking water, investment costs and times). The findings show that the projects, with the exception of the sanitary sewerage project, have a low probability of not being viable (less than 10%). For the sanitary sewerage project, an effort will be made to ensure that the cost of the works does not surpass the cost that would render the project unviable, and that the connection fees are in fact paid.

- 2.8 **Ability to pay and social equity.** The W&S beneficiaries' ability to pay was calculated verifying that the monthly utility bill amounted to less than 5% of the household income for the program's beneficiary population. This operation qualifies as a social equity enhancing project (SEQ) and a poverty-targeted investment (PTI) based on geographic criteria, as described in the classification criteria in the Report on the Ninth General Increase – GCI-9 (document AB-2764). According to statistics from the National Institute of Statistics and Census (INDEC),¹² the percentage of inhabitants in the Norte Grande provinces below the poverty line and below the indigence line is higher than the national average.
- 2.9 **Institutional considerations.** The institutional viability was assessed through an analysis of the existing legal and institutional framework, and the results of the Institutional Capacity Assessment System (ICAS). The ICAS report (see [link](#)) concludes that the risks identified are low and the fiduciary capacity of the executing agency is adequate. It was agreed that the PEU's technical capacities would be strengthened by recruiting professionals and obtaining equipment to ensure sound monitoring of projects during their preparation and execution. It was further agreed to perform a diagnostic for each project based on the ICAS methodology, so as to draw up a strengthening plan. The ICAS assessment will be performed in the first phase of the project cycle. Next, terms of reference (ToR) will be prepared strengthening the service providers and for monitoring and control, for implementation during project execution. The technical assistance actions will essentially address: (i) development of information management systems including a cadastre of customers or users; (ii) adoption of a georeferenced information system; and (iii) organization systems and methods. During project preparation, a diagnostic of service providers in Tucumán, Santiago del Estero, and Chaco was prepared, as well as plans to strengthen their operations, that will be implemented during program execution (see [link](#)).
- 2.10 **Financial considerations.** The financial analysis of the projects in the sample was based on the audited financial statements at December 2011. The Tucumán and Santiago del Estero utilities cover their O&M costs and depreciation, and their net internal cash generation is sufficient to finance minor expansion and rehabilitation investments. A financial evaluation was also performed for the Chaco company, identifying actions needed to strengthen its financial management (see [link](#)). During program execution, cost recovery and subsidy studies will be carried out for purposes of promoting the financial sustainability of the companies. The studies will include a review of the billing, collections, accounting, budget, and treasury systems. The side agreements (see paragraph 3.4) will describe the financial indicators that will be used to monitor improvements to service delivery efficiency. A contractual condition in the side agreements will specify that the second phase works for each project will only be financed if operating revenues are sufficient to

¹² INDEC, Encuesta Permanente de Hogares Continua [Continuous Survey of Households]. Second half of 2011.

cover operating, maintenance, and depreciation costs and, if not, corrective measures are to be taken to ensure their financing in due course.

III. PROGRAM EXECUTION AND MANAGEMENT

A. Execution plan

- 3.1 **Project executing unit.** The executing agency will be responsible for administration of loan proceeds, timely financing of the local contribution, and achievement of the program objectives. The MPFIPyS will designate a coordinator who will be accountable to the Bank for effective execution of the program. The coordinator will be supported by a technical team responsible for the project cycle, including preparation and supervision of the works. The PEU team will consist, at a minimum, of two W&S engineers, an environmental management specialist, an economic and financial expert, and an institutional specialist. The PEU will be supported by the UCPyPFE operational areas and the technical staff that helped prepare the projects. **As a condition precedent to the first disbursement, the PEU will have been created within the executing agency's internal structure and the basic PEU staff needed for program execution will have been appointed.**
- 3.2 **Operating Regulations (POR).** The program will be governed by PORs specifying the criteria for eligibility of provinces, prioritization and selection of projects to be financed under the program, and the organization, operating procedures, and responsibilities of the PEU and other participating entities. The PORs include: (i) program description, purpose, objectives, components; (ii) PEU structure and organization (organizational chart, duties, procedures); (iii) description of the phases of the execution cycle; (iv) financial terms and conditions, rules governing bidding, contracting, and disbursement processes; and (v) monitoring and evaluation. The annexes to the PORs include profiles and ToR to contract the PEU staff, models of the agreements, and the environmental manual. The Operating Regulations were reviewed during program preparation (see [link](#)). **The loan contract will include entry into force of the PORs as a special contractual condition precedent to the first disbursement.**
- 3.3 **Prioritization and eligibility and selection criteria.** The projects will be prioritized based on the Index of Material Deprivation of Households and the deficit in coverage. The principal eligibility criteria for provinces include: (i) be a part of the Norte Grande region; (ii) sign the Program Accession Agreement; and (iii) assign and demonstrate the existence of budget resources and sufficient institutional capacity to operate and maintain the works financed under the program. The principal criteria for project selection include: (i) urban and suburban agglomerations with a total population of more than 15,000 inhabitants; (ii) existence of a legally incorporated service provider; (iii) the service provider's commitment to properly operate and maintain the infrastructure to be financed; (iv) commitment to prepare projects that are economically, technically,

- environmentally, and financially warranted; and (v) commitment to achieve coverage of service O&M costs in the medium term. The projects deemed technically, economically, environmentally, financially, and institutionally viable will be eligible for financing.
- 3.4 **Project cycle.** The project cycle is divided into four phases: (i) identification, description of needs, and eligibility: in this phase, the province/municipio will present the need for the project to the PEU, which will review its eligibility. This phase concludes with the signing of a participation, transfer, and maintenance agreement; (ii) preparation of projects and their inclusion in the program: in this phase, the PEU and the province/municipio, with the technical support designated/contracted by the latter, will design the project, agree on the execution phases, and set operating efficiency, financial, and institutional targets, and commit to properly operate and maintain the infrastructure to be financed. This phase concludes with the drafting of a project report and, if necessary, with the subsequent signing of a side agreement; (iii) execution: in this phase, the PEU will be responsible for procurement, execution, and payment against certificates of progress. It will also inspect or supervise construction of the works, as well as monitor implementation and development of the operational management component. This phase concludes with acceptance of the works and/or services contracted; and (iv) transfer and operation: in this phase, the MPFIPyS conveys the assets to the province/municipios, which in turn transfer them to the beneficiary for effective management (paragraph 3.10). This phase may conclude with the signing of a transfer and operation agreement. The Bank will participate in the following project cycle phases: (i) identification: after eligibility of a provincial agency, the PEU will send the Bank a project profile and the technical specifications for eligibility; and (ii) preparation: before signing the agreements, the PEU will send a project report to the Bank for its no objection, including the technical, economic, environmental, social, financial, and institutional viability documentation. As a condition precedent to execution, the executing agency and the provincial and/or municipal governments will sign a participation, transfer, and maintenance agreement prior to inclusion of a project in the program.
- 3.5 **Readiness and operation sample.** The PEU submitted nine eligible projects in six provinces, with an estimated cost of US\$500 million, of which two projects were selected for the sample: (i) a main sewer (trunk), liquid effluent treatment plant, and sewerage network in the city of Santiago del Estero; and (ii) provision and installation of individual and master meters in San Miguel de Tucumán. The designs for the sewerage projects in Fray M. Esquiú and Valle Viejo in the province of Catamarca are ready and being reviewed by the PEU technical team. As for the remainder of the projects, the provinces are working on the feasibility studies and designs in accordance with the POR technical guides. Should any of these projects require additional studies, the executing agency will support preparation of the ToR and will be able to finance them.

B. Procurement

- 3.6 Works, goods, and consulting services to be fully or partially financed with loan proceeds will be procured in accordance with the Bank’s policies contained in documents GN-2349-9 and GN-2350-9.

Table III-1 Threshold Amount for International Competitive Bidding

Works	Equal to or over	US\$5,000,000
Goods	Equal to or over	US\$500,000
Consulting	Equal to or over	US\$200,000

Consistent with the institutional capacity assessment of the executing agency, threshold amounts are recommended for international competitive bidding (ICB) processes, as shown in Table III-1. Program procurements will be reviewed ex post except in the case of international competitive bidding and direct contracting, if any. All procurement to be conducted during a specified period will be included in the procurement plan (PP) approved by the Bank using the procurement plan execution system (SEPA), and will be carried out in accordance with the methods and the ranges established in the SEPA. The PEU and the Bank will agree upon a procurement plan showing contracting for the first 18 months of execution (Annex III).

- 3.7 **Accounting, information systems, and disbursements.** The executing agency will use the UEPEX system as its financial management system. Accounting records will be cash-based and will observe International Financial Reporting Standards (IFRS), when applicable in accordance with established national criteria. The following financial reports will be required: (i) financial execution plan for up to 180 days after the request for an advance; (ii) the program’s annual audited financial statements; and (iii) other reports as required by the fiduciary specialists. Loan proceeds will be requested from the Bank as advances of funds. The executing agency will ensure strict and effective control over utilization of the advances through mechanisms to verify and reconcile balances in their records with those in the Bank’s records for the same items.

C. Monitoring and evaluation

- 3.8 **Monitoring and evaluation.** The Bank’s supervision instruments will be used for this purpose, including: a Program Execution Plan (PEP), the Procurement Plan (PP), the Results Matrix, and an Annual Work Plan (AWP). The PEU will send semiannual progress reports informing on progress achieved with respect to the AWP, the results achieved in executing activities, and an action plan for the following six-month period. A matrix of targets will be agreed upon for each project, focusing on service provider management outcomes in the first five years, including a data collection plan and budget. This matrix will be part of the agreements to be signed. The PEU will be responsible for monitoring and evaluating the projects financed under the program, for which it may contract independent consultants agreed upon with the Bank. As special conditions for program execution, the PEU will: (i) maintain a monitoring and evaluation system during program execution; and (ii) conduct two midterm evaluations, one 18 months after the effective date of the contract, the other after 36 months or once

- 50% of the resources have been disbursed, and a final evaluation of the program. In addition, a socioeconomic evaluation of the projects will be conducted ex post.
- 3.9 **Management work plan.** With the respective provincial and/or municipal government and the beneficiary service provider, the executing agency will work out the implementation of a management work plan financed with loan proceeds, for the purpose of ensuring that the revenue received by the beneficiary entities associated with water and sanitation services are sufficient to cover operating costs, including those related to administration and O&M.
- 3.10 **Auditing and oversight.** The PEU will annually submit the project's financial statements, audited by independent auditors acceptable to the Bank, in accordance with the Guidelines for Financial Reports and External Audits of IDB-financed Operations. The firm of auditors will be contracted in accordance with the procedures established for commissioning external audits (AF-200). Loan proceeds will be used to finance such audits.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	Lending for poverty reduction and equity enhancement.		
Regional Development Goals	Infrastructure for competitiveness and social welfare: Incidence of waterborne diseases -per 100,000 inhabitants.		
Bank Output Contribution (as defined in Results Framework of IDB-9)	Infrastructure for competitiveness and social welfare: (i) Households with new or upgraded water supply, and (ii) Households with new or upgraded sanitary connections.		
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2328-3, and GN-2570.	Reduce poverty and pursue sustainable development of Norte Grande region: Number of persons with access to safe drinking water in Norte Grande.	
Country Program Results Matrix	GN-2661-4	The intervention is included in the 2012 Country Program Document.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	8.5		10
3. Evidence-based Assessment & Solution	7.1	25%	10
4. Ex ante Economic Analysis	10.0	25%	10
5. Monitoring and Evaluation	7.1	25%	10
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10
Overall risks rate = magnitude of risks*likelihood	Medium		
Environmental & social risk classification	B		
III. IDB's Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)			
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment	Yes	Bank's support in local project preparation enhances environmental analysis.	
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	Yes	ATN/OC-13219-AR.	
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.			

The program's objective is to improve water and sanitation sector service and efficiency in the Norte Grande region in Argentina. The program will fund investments in projects that: i) increase water and sewage service and coverage in areas with no service or poor service, and ii) strengthen sector institutions at the provincial level by improving operational, management and financial capacities in local service providers.

The program contributes to lending for poverty reduction and equity enhancement, is consistent with the regional goal in Infrastructure for competitiveness and social welfare (Incidence of waterborne diseases -per 100,000 inhabitants) and contributes to Infrastructure for competitiveness and social welfare (Households with new or upgraded water supply and Households with new or upgraded sanitary connections).

The program is structured into two components: (i) engineering and management and (ii) direct costs of new or improved potable water and sanitation projects. It is expected that the end of the project an additional 14,000 households will have water access and 86,165 new homes new sewage service. The document presents clearly and quantitatively the proposed intervention's logic, which connects outputs and outcomes. The program has a full cost-benefit study and the monitoring and evaluation plan includes an ex post cost benefit study and a before and after comparison.

The risks identified in the risk matrix are reasonable and they include mitigation measure and related metric to track their implementation.

RESULTS MATRIX

Purpose of the program	Improve the water and sanitation sector service and efficiency in the provinces of the Norte Grande in Argentina by financing projects to: (i) increase coverage and improve potable water and sanitary and stormwater sewerage services in unserved or underserved areas; and (ii) strengthen sector entities in the provinces, and improve service provider operational and financial efficiency and management.			
Overall outcome indicators (purpose)	Unit of measure	Baseline (2010)	End of project target ⁽¹⁾	Means of Verification
Potable water coverage in the Norte Grande region of Argentina	% households	83.7	95.3	Executing unit reports based on operator reports.
Sanitation coverage in the Norte Grande region of Argentina	% households	40.8	62.8	
EBITDA ⁽²⁾ average financial margin at project end	%	5%	15%	Financial statements
User satisfaction with the quality of service	% users	0%	80%	Perception surveys
Specific outcome indicators	Unit of measure	Baseline (2011)	End of project target	Means of Verification
1. The sanitation system in the city of Santiago del Estero is constructed				
Sewerage system coverage in the intervention area ⁽³⁾	% households	41	60	Executing unit reports based on operator reports.
Households with suitable wastewater treatment level ⁽³⁾	% households	0	60	
Volume of wastewater treated	(m ³ /sec.)	0	0.648	
2. The operational management of the water and sanitation service provider in the city of San Miguel de Tucumán is strengthened				
Monthly water consumption per user	(m ³ /month)	44.8	34.0	Executing unit reports based on operator reports.
Monthly volume of water saved	% volume	0.0	17.4	
Annual service provider collections	US\$000	17,679	26,568	
EBITDA operating margin	%	5.2	31.2	
3. New potable water services in the Fray Mamerto Esquiú and Valle Viejo municipios				
Sanitation service coverage in the intervention area ⁽³⁾	% households	0	90	Executing unit reports based on operator reports.
Households with suitable wastewater treatment level ⁽³⁾	% households	0	90	
Volume of wastewater treated	(m ³ /sec.)	0	0.170	
4. The operational management of the water and sanitation service provider in the city of Santiago del Estero is strengthened				
Annual service provider collections	US\$000	10,890	16,006	Executing unit reports based on operator reports.
EBITDA operating margin	%	3.9	37.9	
5. The operational management of the water and sanitation service provider in the city of Chaco is strengthened				
Annual service provider collections	US\$000	32,590	36,362	Executing unit reports based on operator reports.
EBITDA operating margin	%	-1.8	22.0	

Output indicators	Unit of measure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	End of project
Component: Water and sanitation								
1. The sanitation system in the city of Santiago del Estero is constructed								
Constructed water mains	km	2.1	4.2	6.3	8.5	0.0	0.0	21.2
Constructed sewerage mains	km	42.6	85.2	127.8	170.4	0.0	0.0	426.0
Rehabilitated mains	km	0.6	1.7	3.5	0.0	0.0	0.0	5.8
Pumping stations constructed or improved	Stations	0	2	2	2	0	0	6
Construction of an effluent treatment plant	Plants	0	0	0	1	0	0	1
Households newly connected to the sanitation system network ⁽⁴⁾	Households	0	0	0	0	15,100	0	15,100
Households with enhanced sanitation network service ⁽⁴⁾	Households	0	0	0	0	35,450	0	35,450
2. The sanitation systems in the Fray Mamerto Esquiú and Valle Viejo municipios are constructed								
Constructed water mains	km	0.0	10.0	17.8	0.0	0.0	0.0	27.8
Constructed sewerage mains	km	0.0	35.0	35.1	0.0	0.0	0.0	70.1
Effluent treatment plant expanded or constructed	Plants	0	0	1	0	0	0	1
Households newly connected to the sanitation system network ⁽⁴⁾	Households	0	0	0	5,000	0	0	5,000
3. Other water or sanitation systems constructed or improved								
Households connected to new or improved water system ⁽³⁾	Households	0	0	0	7,200	0	7,200	14,400
Households connected to new or improved sanitation network ⁽⁴⁾	Households	0	0	0	0	0	30,615	30,615
Component: Strengthening operational management								
4. The city of San Miguel de Tucumán's water service provider receives operational management support								
Master meters installed	Master meters	15	30	40	0	0	0	85
Individual meters installed	Individual meters	10,000	20,000	20,000	0	0	0	50,000
The plan to improve the provider's operational management is implemented	Plans	0	0	0	1	0	0	1
5. The sanitation service provider in the city of Santiago del Estero receives operational management support								
The plan to improve the provider's operational management is implemented	Plans	0	0	0	0	1	0	1
6. The water service provider in the city of Chaco receives operational management support								
The plan to improve the provider's operational management is implemented	Plans	0	0	0	0	1	0	1
7. Other water service and sanitation providers receive operational management support								
Plans to improve providers' operational management are implemented	Plans	0	0	0	0	0	2	2

⁽¹⁾ The end of project targets, defined in terms of overall and specific outcomes, are subject to review and possible adjustment once the currently ongoing program sample projects' review and update is completed.

⁽²⁾ EBITDA: earnings before interest, taxes, depreciation, and amortization.

⁽³⁾ Considers households with effective connection (in-house connection), i.e., the 80% with potential access to the system network at the end of the project.

⁽⁴⁾ Considers households with potential connection to the new or improved system.

A treatment level is considered adequate when it complies with acceptable parameter values for water discharged into receiving bodies according to current applicable standards.

A system or service is considered improved when there are increases measured against the baseline: for potable water, quantity of water (liters/person/day), quality of water (according to current applicable standards), continuity (hours/day) or pressure (minimum and maximum according to technical standards); for sanitation: quantity of wastewater collected and treated (volume); quality of the effluent discharged into receiving bodies (according to current applicable standards).

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Argentina
Project number:	AR-L1136
Name:	Norte Grande Provinces Development Program: Water and Sanitation Infrastructure
Executing agency:	Ministry for Federal Planning, Public Investment, and Services (MPFIPyS)
Fiduciary team:	Ignacio Vinocur (PDP/CAR) and Gumersindo Velázquez (PDP/CAR).

I. EXECUTIVE SUMMARY

- 1.1 The Risk Management for Sovereign-guaranteed Projects (GRP) methodology was used for the risk analysis, and the Institutional Capacity Assessment System (ICAS) for the institutional analysis. The executing agency will be the MPFIPyS through the Coordination Unit for Externally Financed Programs and Projects (UCPyPFE), via its program executing unit (PEU), which will administer the program.
- 1.2 Some fiduciary weaknesses and risks have been identified and included in the risk mitigation matrix (RMM). The fiduciary management systems of the executing agency were evaluated using the procedures described in paragraph 1.1, the conclusion being that they are adequate but should be strengthened.
- 1.3 The program does not include financing from other agencies nor does it have subexecuting agencies.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

- 2.1 The fiduciary systems of the executing agency are considered to be satisfactory although they will require some strengthening measures, which will be included in the risk mitigation matrix.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The fiduciary capacity analysis performed as part of the ICAS determined the risk of the executing agency to be low. The fiduciary risks identified at the risk management workshop on 25 June 2012 are described in the corresponding mitigation matrix. Based on the risks identified, the supervision model applicable for Financial Management and Procurement Management was determined. The

supervision modality established initially may vary during program execution on the basis of future evaluations.

- 3.2 In addition, during program preparation, risks (including fiduciary) were identified using the GRP methodology at a joint workshop attended by representatives of the executing agency and participating entities. The risks identified are indicated in the corresponding risk matrix. Mitigation actions were incorporated into the design of the operation, rooted in comprehensive strengthening and technical assistance mechanisms.

IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF CONTRACTS

- 4.1 Conditions precedent to the first disbursement: entry into effect of the program's Operating Regulations, approved by the participating entities in accordance with terms agreed upon with the Bank.
- 4.2 The executing agency will submit annual program financial statements, audited by an independent auditing firm acceptable to the Bank, based on the terms of reference previously agreed upon with the Bank.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

A. Execution of procurements

- 5.1 The Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (GN-2349-9) of March 2011, and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-9), of March 2011, will apply. In addition, it has been agreed with the executing agency that the Procurement Plan Execution System (SEPA) will be used for the administration and management of program procurement planning.
- 5.2 **Procurement of works, goods, and nonconsulting services:** The contracts for works, goods, and nonconsulting services¹ generated under the program and subject to international competitive bidding (ICB) will use the Bank's standard bidding documents (SBDs). Processes subject to national competitive bidding (NCB) will use national bidding documents agreed upon with the Bank. The program's sector specialist will be responsible for reviewing the technical specifications of procurements during the preparation of selection processes. Selection processes subject to direct contracting and those requiring prequalification of those submitting offers should be so identified in the procurement plan submitted by the executing agency.
- 5.3 On account of the lessons learned from the first operation of this program (loan 1843/OC-AR), the PEU was advised to make technical provisions, in the preparation of each project, for verifying the supporting documentation for bids—

¹ Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (document [GN-2349-9](#)), paragraph 1.1: Nonconsulting services will be treated similarly to goods.

- such as detailed project designs, studies, and prior evaluations—in order to have greater certainty about the feasibility of the designs, execution times, and contract amounts for works. The intent is to minimize changes during execution of the works.
- 5.4 **Selection and contracting of consultants:** Contracts for consulting services generated under the program will use the standard request for proposals (RFP) agreed upon with the Bank. Selection processes subject to direct contracting will be so identified in the procurement plan.
- 5.5 **Selection of individual consultants:** In the cases identified in the approved procurement plans, the contracting of individual consultants may be solicited through local or international notices, in order to form a short list of qualified individuals, in accordance with document GN-2350-9, section V, paragraphs 5.1 to 5.4. In the case of service contracts, consultants will submit any midterm or final reports to the executing agency, as requested. Because this operation is the second stage (loan 1843/OC-AR) and recognizing that personnel currently working for the executing unit have been performing duties related to program execution, the direct selection of the same personnel is anticipated. To this end and to renew the contracts, approval of the performance evaluation by the responsible authority, to at least the satisfactory level, will be sufficient. Evaluations will be performed once a year to facilitate approval by the corresponding authorities.
- 5.6 **Training:** The procurement plan lists the procurements that apply to the program components that include training activities contracted as consulting and nonconsulting services.
- 5.7 **Recurrent expenditures:** The recurrent expenditures or operation and maintenance expenditures required during the program are: fares, per diems, transportation, rentals and services, office maintenance, service charges, stationery and supplies, messenger and mail services, cleaning services, computer components, insurance, telephone service, and minor expenditures required for executing agency operation. These will be financed by the program and procured in accordance with the administrative procedures set out in the program's Operating Regulations, which have been reviewed and accepted by the Bank. Operating expenses do not include civil servant salaries.
- 5.8 **Advance procurement/retroactive financing:** No advance procurement or retroactive financing is anticipated.

Table of threshold amounts (US\$)

Works			Goods			Consulting services	
International competitive bidding	National competitive bidding	Shopping	International competitive Bidding	National competitive bidding	Shopping	International advertising	100% national short list
≥5,000,000	< 5,000,000 ≥350,000	< 350,000	≥500,000	< 500,000 ≥100,000	< 100,000	>200,000	<500,000

Thresholds for ex post review - Consulting services			
Works	Goods	Consulting services	Individual consultants
< 5,000,000	< 500,000	< 200,000	< 50,000

Note: The threshold amounts established for ex post review reflect the executing agency's fiduciary capacity for execution and may be modified by the Bank in the corresponding procurement plan should there be a change in that capacity.

B. Main procurements

Activity	Bidding method	Estimated date	Estimated amount US\$
Works			
Provision, installation, and training for individual and master meters in San Miguel de Tucumán	ICB	Mar-13	19,565,217
Main sewer, liquid effluent treatment plant, and fine mesh in the city of Santiago del Estero	ICB	Mar-13	31,521,739
Sewerage networks and mains in the city of Santiago del Estero	ICB	Mar-13	72,391,304
Sewerage system in Fray Mamerto Esquiú and Valle Viejo, Province of Catamarca	ICB	Apr-13	51,086,957
Expansion of water coverage and extension of water networks in the metropolitan area of the city of Formosa	ICB	May-13	32,608,696
Consulting firms			
Works inspection: Provision, installation, and training for individual and master meters in San Miguel de Tucumán	QCBS	Mar-13	1,173,913
Works inspection: Main sewer, liquid effluent treatment plant, and fine mesh in the city of Santiago del Estero	QCBS	Mar-13	1,891,304
Works inspection: Sewerage networks and mains in the city of Santiago del Estero	QCBS	Mar-13	4,343,478
Works inspection: Sewerage system in Fray Mamerto Esquiú and Valle Viejo, Province of Catamarca	QCBS	Apr-13	3,065,217
Works inspection: Expansion of water coverage and extension of water networks in the metropolitan area of the city of Formosa	QCBS	May-13	1,956,522
Consulting services for project preparation and/or review	QCBS	May-14	2,173,913

C. Procurement supervision

5.9 Procurements will be subject to ex post review with the exception of ICB and direct contracting, if any, which will be subject to ex ante review. Ex post review visits will be made to each jurisdiction at least once every 12 months. Ex post review reports will include at least one physical inspection² selected from among the procurement processes subject to ex post review. It is important to note that no less than 10% of the contracts reviewed will be inspected physically during the course of the program.

² The inspections will verify the existence of the procurements, and the sector specialist will be responsible for verifying quality and compliance with specifications.

D. Records and files

- 5.10 The executing agency will keep a standardized central filing system with the relevant procedures for original documents and, if applicable, in the program's beneficiary provinces. Program reports will be prepared and filed in accordance with agreed upon formats or procedures and described in the program's Operating Regulations. The originals will be filed by the PEU.

VI. FINANCIAL MANAGEMENT

A. Programming and budget

- 6.1 The Finance Branch is responsible for formulating and programming the annual budget. It requests that the Budget Office include items of expenditure for the following fiscal year, according to guidelines established by the Budget Office. The latter prepares the public sector's consolidated budget for approval by the provincial legislature. Should the need to increase or reallocate items arise during execution of the annual budget, the Finance Branch requests that the Budget Office make the necessary changes and obtain approval by means of an Executive Decree. The current budget does not include any items of expenditure for the operation in question. Should it become necessary, it may be added once all the relevant legal documentation is available, indicating the start of execution.

B. Accounting and information systems

- 6.2 The executing agency will use the UEPEX system for financial management. Accounting will be on a cash basis in accordance with International Financial Reporting Standards (IFRS), when applicable pursuant to national criteria. The required financial reports are: (i) financial execution plan for up to 180 days following a request for advance, (ii) audited annual financial statements, and (iii) other reports as requested by the fiduciary specialists.

C. Disbursements and cash flow

- 6.3 The Financial Management Policy for IDB-financed projects (document OP-273-1) and the Financial Management Operational Guidelines for IDB-financed projects (document OP-274-1) will apply.
- 6.4 The proceeds of the loan requested from the Bank in the form of advances of funds will be deposited in an account set up in dollars, converted to pesos as needed for the operations and deposited in a special account set up in pesos for the exclusive use of the program. This account will be used to pay program expenditures and investments, as planned. The executing agency will ensure strict and effective control over the use of advance funds by means of mechanisms that allow available balances shown in its records to be confirmed and reconciled with those for the same charges in the Bank's records (LMS1 report).
- 6.5 The e-disbursements modality will be used, which is the Bank's Web-based system that enables the executing agency to prepare and send disbursement requests to the

- Bank electronically, lowering transaction costs and enabling the Bank to review and process applications remotely.
- 6.6 Exchange rate agreed upon with the executing agency: The exchange rate will be determined as follows: (i) for reimbursement of expenditures: the exchange rate indicated in paragraph (b) (i) of Article 4.09 of the General Conditions; (ii) for rendering of accounts (advance of funds): the exchange rate indicated in paragraph (a) (i) of Article 4.09 of the General Conditions; (iii) for the counterpart: the exchange rate indicated in paragraph (b) (i) of Article 4.09 of the General Conditions; and (iv) for disbursements in currencies other than United States dollars and Argentine pesos: in the case of direct payments and reimbursement of letter of credit guarantees, the loan currency equivalent will be determined in accordance with the amount actually disbursed by the Bank.
- 6.7 Other specific requirements for the financial management of projects that must be specified in the contract or agreement to be signed with the Bank: Disbursements will be made in accordance with the provisions of Articles 4.03, 4.05, 4.06, and 4.07 of the General Conditions.

D. Internal control and internal audit

- 6.8 Internal control is carried out by the Argentine General Accounting Office (lead agency for the internal control system), which performs periodic internal audits of public agencies through Internal Audit Units.

E. External control and reports

- 6.9 External control is carried out by the Office of the Auditor General of the Nation (lead agency for external control), which performs external audits of all national public agencies. For purposes of the program, preference is given to employing the services of a firm of independent auditors.

F. Financial supervision plan

- 6.10 The initial financial supervision plan was based on the risk and fiduciary capacity assessments carried out in accordance with the on-site and “desk” reviews planned for the program. It includes the scope of operational, financial, and accounting actions, compliance and legality, frequency, and responsible parties.

G. Execution mechanism

- 6.11 **Program executing unit (PEU).** The PEU will be responsible for loan proceeds administration, the timely financing of the local contribution, and fulfillment of program objectives. MPFIPyS will appoint a coordinator who will be accountable to the Bank for effective program execution. The coordinator will be supported by a technical team responsible for the project cycle, including the preparation and supervision of works. The team will consist of two engineers specializing in water and sanitation, an environmental management specialist, an economic and financial expert, and an institutional specialist. The PEU will be supported by the UCPyPFE operational areas and the technical staff that participated in preparing the projects. The establishment of the PEU within the executing agency’s internal structure and

- appointment of the basic staff needed for program execution will be a condition precedent to the first disbursement.
- 6.12 **Operating Regulations.** The program will be governed by the Operating Regulations (PORs) specifying the program eligibility and selection criteria, and the organization, operating procedures, and responsibilities of the PEU and other participating entities. The PORs include: (i) program description, purpose, objectives, components; (ii) PEU structure and organization, including the organizational chart, duties, responsibilities, procedures; (iii) description of the phases of the execution cycle, with the corresponding flow charts; (iv) loan terms and conditions, rules governing bidding, contracting, and disbursements; and (v) monitoring and evaluation. The annexes to the PORs include profiles and terms of reference for contracting PEU staff, models of the framework, side, and transfer agreements, and the environmental manual. The PORs were developed during preparation of the first loan and agreed upon with the project team. The loan contract will include as a contractual condition precedent to the first disbursement that the program's Operating Regulations have entered into force.
- 6.13 **Prioritization and eligibility criteria.** The projects will be prioritized based on the Index of material deprivation of households and the deficit in coverage. The eligibility criteria for project preparation include: (i) urban and suburban agglomerations with a total population of more than 30,000 inhabitants; (ii) existence of a legally incorporated service provider; (iii) the service provider's commitment to properly operate and maintain the infrastructure to be financed; (iv) commitment to prepare projects that are economically, technically, environmentally, and financially warranted; and (v) commitment to conduct a diagnostic and develop a plan to improve the company's operational management. The projects deemed technically, economically, environmentally, financially, and institutionally viable will be eligible for financing.
- 6.14 **Project cycle.** The project cycle is divided into four phases: (i) identification, description of needs, and eligibility: in this phase, the province and/or municipio present the need for the project to the PEU, which reviews its eligibility. This phase concludes with the signing of a participation, transfer, and maintenance agreement; (ii) preparation of projects and their inclusion in the program: in this phase, the PEU, province or municipio, with the technical support of their choice, agree on project execution phases, setting targets for operational, financial, and institutional efficiency, and commit to properly operate and maintain the infrastructure to be financed. This phase concludes with the drafting of a project report and, if necessary, with the subsequent signing of a side agreement; (iii) execution: in this phase, the PEU will be responsible for procurement, execution, and payment against certificates of progress. It will also inspect or supervise construction of the works, while monitoring implementation and development of the operational management component. This phase concludes with acceptance of the works and/or services contracted; and (iv) transfer and operation: in this phase, the MPFIPyS conveys the assets to the province and/or municipios, which then transfer them to

- the beneficiary for effective operation and maintenance. This phase may conclude with the signing of a transfer and operation agreement.
- 6.15 The Bank will participate in the following project cycle phases: (i) identification phase: after determining the eligibility of a provincial agency, the PEU will send the Bank a project profile and the technical specifications for eligibility; and (ii) preparation phase: before signing the agreements, the PEU will send a project report to the Bank for its no objection, including the technical, economic, environmental, social, financial, and institutional viability documentation. In addition, it was agreed that two midterm evaluations would be performed, one 18 months after the effective date of the contract, the other after 36 months or once 50% of the resources have been disbursed, and a final evaluation.
- 6.16 **Accounting and information systems.** The executing agency will use the UEPEX system as its financial management system. Accounting records will be cash-based and will observe International Financial Reporting Standards, when applicable in accordance with established national criteria. The following financial reports will be required: (i) financial execution plan for up to 180 days after the request for an advance; (ii) the project's annual audited financial statements for the program; and (iii) other reports as required by the fiduciary specialists.
- 6.17 **Disbursements and cash flow.** The loan proceeds solicited from the Bank via the advance of funds modality will be deposited in a special account in United States dollars opened by the UCPyPFE of the MPFIPyS. After converting the dollars to pesos, the UCPyPFE will deposit the proceeds in a special account set up in pesos for the exclusive use of the program. This account will be used to pay for the program's expenditures and investments, as planned. The executing agency will ensure strict and effective control over the use of advance funds by means of mechanisms that allow available balances shown in its records to be confirmed and reconciled with those for the same charges in the Bank's records (LMS1 report).
- 6.18 Advances will be disbursed when 80% of the advance has been spent, or when there is a special need for funds according to the financial plan covering no more than 180 days submitted with each request for an advance. Disbursement requests will include: the disbursement request form, status report, and financial plan for the following 180 days. The financial management specialist may require additional information, including: (i) breakdown of commitments; and (ii) reports on estimated physical and financial progress of the program. The frequency and time span covered by the advance will not exceed 180 days. To account for the advance of funds, the following information will be provided to the Bank: (i) disbursement request form; (ii) program status report; (iii) reconciliation of Bank resources; (iv) itemized payments; and (v) other reports demonstrating the progress of the program. Such accounting need not be accompanied by supporting documentation for expenditures or payments made, which should not be construed as Bank approval of such outlays. The original supporting documentation for expenditures must be available for the Bank's review upon request.

VII. MONITORING AND EVALUATION

- 7.1 Program monitoring and evaluation will be performed using the Bank's supervision instruments based on preparation of a program execution plan, the procurement plan, and the results matrix. Each year, the PEU and the Bank will agree upon an annual work plan (AWP). The PEU will send semiannual progress reports informing on progress achieved with respect to the AWP, the results achieved in executing activities, and an action plan for the following six-month period. The PEU will be responsible for monitoring and evaluating the projects financed under the program, for which it may contract independent consultants previously agreed upon with the Bank. The matrix indicators will focus on the service providers' operational and financial outcomes and the benefits of the physical works.
- 7.2 **Operation and maintenance.** The works constructed under the program and transferred to the provinces and/or municipios will be operated and maintained by the service providers that benefit from the infrastructure financed with program resources. During preparation of the eligible projects, the executing agency will verify that the firms have the necessary technical personnel and means to assure efficient operation and adequate maintenance of the works, so as to guarantee that all the equipment and structures will work properly and that their operational staff is properly trained.
- 7.3 **Audit and control.** The PEU will submit the program's audited financial statements annually. The external audit will be conducted by a firm of independent auditors acceptable to the Bank, based on policies and requirements specified in the Guidelines for Financial Reports and External Audits for Operations Financed by the Inter-American Development Bank. The firm of auditors will be contracted in accordance with the bidding procedures for external auditors contained set out in document AF-200. Loan proceeds will be used to finance the program audit costs.
- 7.4 **Ex post evaluation.** The borrower will compile the data needed to evaluate achievement of the program targets. This will make it possible to evaluate the program's efficiency and effectiveness in attaining its objectives and to benefit from lessons learned. The baseline to measure effectiveness was compiled during program preparation.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/12

Argentina. Loan ___/OC-AR to the Argentine Republic
Norte Grande Provinces Development Program:
Water and Sanitation Infrastructure

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 Argentine Republic, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a Norte Grande Provinces Development Program: Water and Sanitation Infrastructure. Such financing will be for an amount of up to US\$500,000,000 from the Ordinary Capital resources of the Bank, 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 __ _____ 2012)

LEG/SGO/CSC/IDBDOCS:#37039264
Pipeline No. AR-L1136