

**CHILE**  
**PROJECT CONCEPT DOCUMENT (PCD)**  
**APRIL 9<sup>TH</sup>, 2007**

**Summary Information**

<b>Project title:</b>	Rural Sanitation Program		
<b>Project number:</b>	CH-L1025		
<b>Date of entry in pipeline:</b>	August 31 <sup>st</sup> , 2006		
<b>Division Chief:</b>	Asunción Aguilá (RE1/EN1)		
<b>Project team:</b>	Christopher Jennings (RE1/EN1); Kléber Machado (RE1/EN1); Manuel Pizarro (RE1/EN1); Coral Fernández (RE1/EN1), Jorge Venegas (COF/CCH); and Juan Cruz Vieyra (RE1/EN1).		
<b>Borrower:</b>	Government of Chile		
<b>Executing Agency:</b>	SUBDERE		
<b>Financing:</b>	IDB (Ordinary Capital):	US\$	50,000,000
	Counterpart contribution:	US\$	50,000,000
	TOTAL:	US\$	100,000,000
<b>Tentative dates:</b>	Analysis mission:	April 2007	
	Approval by IDB Board:	July 2007	
<b>PTI</b>	YES		
<b>SEQ</b>	YES		

**I. BACKGROUND**

**A. Water and Sanitation in Chile**

- 1.1 Since 1990, potable water coverage in urban areas has grown from 97.4% to 99.8%, and wastewater collection has grown from 81.8 to 94.9%. Only 10% of domestic wastewater was treated in 1990, a figure which had increased to 73.3% by 2005. The country is a good example of what can be achieved with a well thought out development plan for the sector, implemented gradually, with the political commitment to back it up. The Government left the responsibility for policy and planning with the Ministry of Public Works, but converted the regional directorates responsible for services in urban areas into water and sewerage companies under the ownership of the Chilean Corporation for the Development of Production (CORFO)<sup>1</sup>. Each company was subject to a concession to provide water and sewerage services in a defined urban area. After financial and operational consolidation, the regional companies were sold, or the concessions were transferred, to private operators, a process completed in 2004. The

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<sup>1</sup> The *Corporación de Fomento de la Producción*, created in 1939 to develop national production.

Superintendent of Sanitary Services (SISS)<sup>2</sup> was created as the sector regulator under law number 18.902 to oversee the compliance with technical and economic standards, with special responsibility to review consumer tariffs.

- 1.2 Tariffs charged to users are set for full cost recovery. Service levels are high compared with other countries and, consequently, so are tariffs. To ensure that the poor do not suffer from paying tariffs that reflect the true cost of providing these services, the government instituted a system of subsidies for low-income families defined in law number 18.778 of 1990. The Ministry of Planning (MIDEPLAN) manages the subsidy program, which allocated approximately US\$66 million from the 2006 budget to 630,000 urban households and 80,000 rural households. The beneficiary families themselves must apply for the subsidy, which cover from 20 to 100% of the monthly bill up to 15m<sup>3</sup> of consumption, and are means-tested.

## **B. Rural water in Chile**

- 1.3 Service coverage. Although there has been a steady increase in coverage over the years, 200,000 rural inhabitants still do not have potable water services.
- 1.4 Only 2,000,000 (13%) of the total population of 16,000,000 live in rural areas. Of those, the approximately 1,500,000 that live in so-called concentrated rural areas with a relatively high housing density, already enjoy the same coverage levels as urban dwellers. In contrast, only 60% of the population that lives in small or dispersed communities has a secure, piped water supply. A national survey carried out in 2005 showed that 85,000 rural households lacked a potable water supply, and 279,000 rural households lacked a sewerage connection. Where sewerage exists, a wastewater treatment plant has generally been constructed. A study of 242 wastewater treatment plants constructed with public financing outside the areas served by the urban concessionaires, concluded that effluent discharged by 25% of these plants does not comply with national standards defined by the National Environmental Commission (CONAMA)<sup>3</sup>, and a further 15% need repairs to electro-mechanical equipment.
- 1.5 The operators. Water services outside the areas of the urban concessions can be provided by municipalities or by community-based organizations, almost 1,500 of which administer and operate rural water systems. Ministry of Public Works data show that 76% of the systems provide services to communities with less than 250 households, and only 8% serve communities with more than 500 households. Approximately 70% of the systems meet the relevant technical standards, and the Ministry of Public Works estimates that 75% have the financial capacity to meet operating and maintenance costs and 17% generate enough income to provide genuinely sustainable services, including financing expansions.
- 1.6 Water Committees are the most common community-based organizations, operating 90% of the systems. These are regulated under Law 19.418, which

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<sup>2</sup> *Superintendencia de Servicios Sanitarios.*

<sup>3</sup> *Comisión Nacional del Medio Ambiente.*

- governs neighborhood committees and other community organizations. Each Water Committee is created as a non-profit organization for the express purpose of providing water services, has articles of association, and is managed by a Board of Directors of five members elected by a general assembly. Water Committees derive legal recognition by being registered with the local municipality, but they do not have access to CORFO credit, and generally have insufficient financial standing to obtain credit from commercial banks.
- 1.7 Communities are increasingly creating Cooperatives to provide rural water services. Larger communities tend to favor Cooperatives; they operate only 10% of the rural systems, but account for 20% of connections. Cooperatives are regulated under the Law of Cooperatives and differ from Water Committees in being created as associations to promote the well-being of their members. Cooperatives are fully autonomous under the law and may be for-profit, or non-profit organizations. They have characteristics of commercial companies and are registered in the same way. Each member has an equal share in the net-wealth of a Cooperative, and in any profits distributed. Cooperatives have access to credit from CORFO.
  - 1.8 Institutional framework. The institutional framework governing rural water and sanitation is not as precisely defined as that for urban areas. The Ministry of Public Works is the most prominent organization in the rural water sector, but has diverse responsibilities. It is responsible for policy and planning; it finances capital projects to expand and improve services; and it has a budget, allocated by the Central Government, to provide technical assistance to Water Committees and Cooperatives in support of operation and maintenance. The Ministry of Public Works only has a mandate related to potable water supply. No single public body has a mandate to establish policy, plan, or regulate wastewater disposal in rural areas. Households that benefit from potable water projects supported by the Ministry of Public Works have individual wastewater disposal solutions such as latrines or septic tanks. The only role of the SISS is, on certain occasions, to certify that a community does not fall the area subject of a water concession, and is thus outside SISS jurisdiction.
  - 1.9 Apart from Public Works, the Health, Housing and Interior Ministries have financed rural water projects. The latter finances rural water projects through the National Fund for Regional Development (FNDR)<sup>4</sup>, managed by the Deputy Secretariat of Regional Development and Administration of the Ministry of the Interior (SUBDERE)<sup>5</sup>.

## **C. Strategy and Policy of Chilean Authorities**

### **1. Strategy of the Government of Chile in the Rural Water Sector**

- 1.10 The sector functions well, coverage is expanding, and operations are generally sustainable. The government, conscious of the need to consolidate the existing

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<sup>4</sup> *Fondo Nacional de Desarrollo Regional.*

<sup>5</sup> *Subsecretario de Desarrollo Regional y Administrativo.*

organizations and mechanisms, which have developed without a formal institutional framework, has charged the Ministry of Public Works with drafting legislation to govern rural water and sanitation services. The new law will: (i) promote Cooperatives; (ii) require sustainable tariffs; (iii) establish a framework for providing technical assistance to support operation and maintenance; (iv) cover wastewater collection, treatment and disposal, as well as potable water supply; (v) establish an advisory body made up of the Ministries involved in rural water services: the Ministries of Housing, Health, Public Works, SUBDERE and MIDEPLAN; and (vi) define a sources through which rural water projects will be financed. The Ministry of Public Works expects the national legislature to consider the new law during the first half of 2007.

## **2. SUBDERE Strategy**

- 1.11 The SUBDERE was created to contribute to Regional development; the capacity of Regional governments; and cohesion in the decentralization process. The FNDR was created to finance the construction of “social and economic” works in the Regions to ensure equity in territorial development.
- 1.12 Based on the deficit in potable water and sewerage connections indicated in paragraph 1.4, the SUBDERE has defined the number of households with a “sanitation deficit”, as those that do not have integrated potable water and wastewater removal services, that is the 279,000 households that do not have a sewerage connection. The SUBDERE proposes increasing coverage to 75% in those regions that do not already meet this figure. The new program described in this document will contribute to this goal. For the first part of the program, the SUBDERE has requested a loan of US\$50 million, which will be matched with equivalent financing from the central government, but they are considering making a request for a loan of up to US\$100 million.
- 1.13 SUBDERE will make rural services that are comparable with urban services an important principle of the new program, and the individual projects will provide connections to water and sewage services, as well as an internal “sanitary cubicle<sup>6</sup>” comprising a flushing water closet, shower, washbasin and cooking area, for each household. SUBDERE will use the same implementation arrangements as the ongoing Neighborhood Improvement Program (PMB)<sup>7</sup>, a social program, initiated in the early 1980s to improve the well-being of the poorest members of Chilean society, and which finances very similar projects.

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<sup>6</sup> *Caseta sanitaria.*

<sup>7</sup> *Programa de Mejoramiento de Barrios.*

<b>Table 1. Rural Sanitation: increased coverage proposed by SUBDERE</b>					
<b>Region</b>	<b>Households</b>	<b>Households with sanitary deficit</b>	<b>Sanitation coverage</b>	<b>Proposed increase in coverage</b>	<b>Proposed sanitation coverage</b>
I	11,988	5,479	54%	2,482	75%
II	4,796	939	80%	0	80%
III	8,822	4,025	54%	1,820	75%
IV	48,702	13,690	72%	1,515	75%
V	43,521	13,185	70%	2,305	75%
VI	70,385	34,761	51%	17,165	75%
VII	97,125	42,269	56%	17,988	75%
VIII	106,770	60,167	44%	33,475	75%
IX	89,362	45,939	49%	23,599	75%
X	111,414	43,108	61%	15,255	75%
XI	8,418	1,648	80%	0	80%
XII	5,245	361	93%	0	93%
RM <sup>a</sup>	54,265	13,481	75%	0	75%
Total	660,813	279,052	58%	115,601	75%
<sup>a</sup> Santiago Metropolitan Region.					

- 1.14 The PMB is part of Chile's decentralization program and, since 2002, it has been jointly managed by the SUBDERE, the Regional and municipal governments, a strategy that will be continued with the new program. The municipalities design projects based on a diagnosis of a community's needs, promote the organization of the community and collect the beneficiaries' down payments. The municipalities forward details of projects to the Regional Secretariat for Planning and Coordination (SERPLAC)<sup>8</sup>, of MIDEPLAN for technical and socio-economic review. When the SERPLAC issues an unconditional technical recommendation, the Regional government assigns a priority to the project for financing with funds from the PMB. The municipalities implement the projects, contracting the necessary construction and supervision. Once a water and sanitation project is complete, operation and maintenance passes to the relevant authority. In urban areas, this is the urban water concessionaire. Otherwise the municipality would assume responsibility. If the community that has benefited from the project has created a Water Committee or Cooperative, the municipality sometimes provides technical assistance to support operation and maintenance.
- 1.15 In appraising each project, the SERPLAC employs the National Investment System (SNI)<sup>9</sup>, a methodology developed by MIDEPLAN, which is used to appraise all publicly financed investment projects. The methodology ranks the viability of projects in terms of socio-economic return, ensuring the most efficient economic allocation of resources. The appraisal involves a rigorous socio-economic evaluation similar to, and compatible with, that used by the Bank.

<sup>8</sup> *Secretaría Regional de Planificación y Coordinación.*

<sup>9</sup> *Sistema Nacional de Inversión.*

- 1.16 In December 2006, the Bank undertook a rapid evaluation of 40 potable water and sanitation projects recently executed as part of the PMB, and a similar program, *Chile Barrio*. The evaluation found that the great majority of the projects were successfully constructed. The urban water concessionaire for Valparaíso is responsible for the operation and maintenance of most of the projects. Users consider the projects to be worthwhile and stated that they paid tariffs, a fact confirmed by the concessionaire. Where beneficiaries claim their right to a water subsidy levels of collection are very high. To draw conclusions concerning the sustainability of projects operated by Water Committees and Cooperatives, the evaluation included the review of a report on 16 rural water and sanitation projects constructed in 2005 in the municipality of Curicó. The individual households have accepted the payment of tariffs, which cover the costs of salaries, electricity and chemicals. The greatest maintenance problem reported is obtaining an adequate response to breakdowns from the suppliers of electro-mechanical equipment.
- 1.17 For the proposed program, SUBDERE will define as “rural” projects that are not covered by one of the urban water and sewerage concessions, and whose communities are not included in a strategic urban development plan for the relevant municipality<sup>10</sup>.

## **D. IDB Strategy and Policy**

### **1. IDB Country Strategy**

- 1.18 The aim of the Bank’s 2006-2010 country strategy with Chile (GN-2431) is to help the country pursue growth while improving equality of opportunity and social inclusion. The Bank country strategy is closely aligned with the new administration’s priorities. The three main actions are: (a) lend support to reduce the opportunity gap, (b) reduce the competitiveness and income gaps with respect to developed economies, and (c) make government more efficient and bring it closer to the public. The proposed program is consistent with the first and third actions in the Bank’s strategy. It will reduce the potable water supply and wastewater disposal deficit in rural areas with cost efficient and sustainable solutions. It will increase the capacity of regional and municipal governments, and strengthen the communities’ roles in the preparation, execution and operation of water and sewerage projects.

### **2. Related IDB Projects**

- 1.19 Table 2 lists the four stages of a rural water program implemented by the Ministry of Public Works with Bank financing.

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<sup>10</sup> *El Plan Regulador*.

<b>Table 2. IDB loans for Rural Water Supply Program 1964 to 1985</b>				
<b>Stage</b>	<b>Project no.</b>	<b>Approval</b>	<b>Program cost (US\$)</b>	<b>Loan amount (US\$)</b>
I	CH-0098	1964	2,500,000	2,500,000
II	CH-0052	1976	7,500,000	7,500,000
III	CH-0111	1980	19,900,000	19,900,000
IV	CH-0115	1985	17,000,000	17,000,000

- 1.20 The SUBDERE has implemented several programs with Bank loans, four of which were specifically for the PMB and are detailed in Table 3.

<b>Table 3. IDB loans for the PMB</b>					
<b>Loan no.</b>	<b>Approval</b>	<b>Completion</b>	<b>Loan (US\$)</b>	<b>Counterpart (US\$)</b>	<b>Total (US\$)</b>
115/IC-CH <sup>a</sup>	1982	1988	40,500,000	49,500,000	90,000,000
223/IC-CH	1986	1991	40,500,000	49,500,000	90,000,000
577/OC-CH	1989	1994	70,000,000	30,000,000	100,000,000
771/OC-CH <sup>a</sup>	1993	1999 <sup>b</sup>	16,500,000	33,500,000	50,000,000
<sup>a</sup> These loans partially financed various programs. The amounts given are those dedicated to the PMB.					
<sup>b</sup> Since 1999, the PMB has been financed exclusively by the national treasury without external sources.					

- 1.21 The PMB component of loan 771/OC-CH financed the construction of projects that served 15,276 households, 10% over the target. The Bank Project Completion Report 771/OC-CH notes that the capacity of SUBDERE as the executing agency, as with previous stages, had contributed to the success of the PMB. The Project Completion Report for the previous loan (577/OC-CH), which was entirely implemented by SUBDERE, classified the operation as totally satisfactory.
- 1.22 With financing from Technical Cooperation ATN/FC-9555-CH, approved in December 2005, the Bank is supporting MIDEPLAN in an initiative to improve the distribution of the water subsidy to very poor households. The Technical Cooperation comprises four components: (i) analyze the efficiency and effectiveness of subsidy distribution; (ii) develop a training program for managing subsidies for rural areas; (iii) develop a model for training households that benefit, or could benefit, from subsidies; and (iv) design a system to supervise the administration of the subsidy. The first results will be available during the second half of 2007. If the Technical Cooperation is successful in making subsidy distribution more efficient and effective, it will be an important complement to the proposed program, and make an important contribution to the sustainability of individual projects.
- 1.23 With Technical Cooperation ATN/WP-9223-CH, the Bank is helping the Ministry of Public Works to define an institutional model for water and sanitation services in rural communities. The Technical Cooperation financed consultants to prepare reports on various aspects of rural water and sanitation supply. At a workshop in November 2006, the consultants presented these reports to an audience of stakeholders, including politicians, government specialists from various ministries

and representatives of Water Committees and Cooperatives. The workshop concluded that an institutional framework should be defined with: (i) a clear assignment of responsibilities to public authorities, including the Ministry of Public Works and SUBDERE; (ii) clear policies relating to tariffs, the rights to a connection, infrastructure ownership, and water rights; (iii) incentives and sanctions associated with operating efficiency; (iv) a definition of responsibility for wastewater disposal and treatment; and (v) a policy of education and training for rural communities in the management and operation of water and wastewater systems. The Ministry of Public Works has taken these conclusions into account in drafting the draft law described in paragraph 1.10.

### **3. Program Strategy**

- 1.24 The new program has been conceived to tackle the problem of infrastructure deficit described in paragraph 1.4. Consequently the greater part of the Program is structured to finance investment to increase potable water and sewerage coverage, and to rehabilitate wastewater treatment plants. The program will also support the beneficiary communities so that they can organize themselves, participate in decision-making relating to the design and construction of individual projects, understand the importance of paying tariffs to ensure sustainability, and they are trained to operate and maintain the projects. The new program will be compatible with the existing legal framework, and is viable without the new legislation being prepared by the Ministry of Public Works. The provisions of the new program will also be compatible with the new legislation.
- 1.25 The Program will be financed by a loan that includes two of the New Financial Lending Instruments approved by the Bank in 2003: (i) financing will come from a Conditional Credit Line for Infrastructure Programs (CCLIP), and (ii) it will be a Performance Driven Loan (PDL).
- 1.26 In December 2006, the Bank approved a CCLIP for up to US\$400 million for the Program for the Support of Sub-national Development, to be executed by SUBDERE (CH-L1018). The CCLIP will finance: (i) individual investment programs in any area eligible for FNDR financing; (ii) institutional strengthening and capacity building; and (iii) studies. The CCLIP is designed as a multi-sector operation, and can finance infrastructure construction in any of the sectors covered by SUBDERE. The preparation of the CCLIP included an Assessment of the Institutional Capacity (SECI), which showed SUBDERE to be a competent executing agency in multiple sectors. The Project Completion Reports for IDB loans to support the PMB have commented on the adequate capacity of the SUBDERE to execute the Programs. For each previous loan to the PMB: (i) development objectives were met, (ii) the conditions of the loan contract were met, and (iii) all financial statements were prepared and submitted. For CH-L1018, the Bank approved an exception to the requirement that a program financed by the CCLIP have a minimum of 75% of its resources committed, and a minimum of 50% of its resources disbursed prior to the approval of a subsequent program. This allows approval of the loan proposed in this document, and its



execution in parallel with the first program approved at the same time as the approval of the CCLIP.

- 1.27 A PDL is indicated to focus on the results required from the proposed operation. As an increase in the coverage of water and sanitation services is directly linked to improvements in health, and wastewater treatment is directly linked to improvements in the environment, infrastructure to provide these services is a suitable proxy for improved public well-being. Outcome indicators for intermediate disbursements will be related to putting into operation infrastructure constructed with financing from the proposed program. Outcome indicators for the final disbursement will include an indicator to demonstrate the sustainable operation of a certain number of projects over a twelve-month period. SUBDERE has the necessary performance systems in place to be able to handle a PDL. In addition, Chile has a stable legal framework to ensure the competition, economy, transparency, equity and due process in public sector procurement that the PDL requires.
- 1.28 During analysis, the IDB project team will analyze the demand for a program of the size that would be financed by a loan of US\$100 million and consider SUBDERE's capacity to implement such a program (see paragraph 1.12).

#### **4. Compliance with IDB policy.**

- 1.29 The institutional framework governing urban water and sewerage services, which cover 87% of the population, complies with the IDB Public Utilities Policy (OP-708). Each of the key functions of policy-making and planning (the responsibility of the Ministry of Public Works, and other line Ministries); regulation (the responsibility of SISS); and operation (the urban water concessionaires, municipalities and community-based organizations) are in the hands of separate organizations. The regulator, SISS, is stable and functions with a well-established set of regulations. The entry of private companies took place through an orderly competition.
- 1.30 The plans for the rural water sector mirror the urban model and are in line with Bank policy. The new law will separate the key functions, the Ministry of Works being the principal policy-maker, while other line ministries will develop standards, establish subsidies, as well as arrange and channel financing for projects. SISS will also regulate rural water and sanitation services. The Water Committees and Cooperatives will be independent private service providers. Sustainability will be ensured through tariffs set to recover all costs, and the water subsidy ensures access for the poor.

#### **5. IDB Water initiative**

- 1.31 The IDB is launching a Water Initiative to assist the countries of the Bank to achieve universal access to water and sanitation services. Among the programs that will be incorporated in the initiative is one aimed at providing technical assistance and financing to 3,000 rural communities. The new program proposed in this document will contribute to meeting this objective.

## II. THE RURAL SANITATION PROGRAM

### E. Program objective and scope

- 2.1 The goal of the Rural Sanitation Program is to improve quality of life in rural areas. The specific objective, or purpose, of the Program is: “Reduce the deficit in the coverage of potable water supply and sewerage with adequate wastewater treatment and disposal for rural areas with solutions that are cost efficient and sustainable”.
- 2.2 The Program will be divided into the following components:
  - 1) **Program administration: Support for project implementation (US\$8 million).** The SUBDERE and the municipalities will implement the Program and the individual projects using their own, installed, technical units. The Program will finance the contracting of staff, or consultants, to increase the capacity of these units. The costs eligible for financing under the Program will be: (i) to support the regional offices of SUBDERE in the administration of the Program, especially those in the 1st, 2nd, 3rd, 4th and 9th Regions, (ii) to strengthen the technical units within the municipalities that are responsible for project preparation and implementation, and (iii) the costs of monitoring and evaluation.
  - 2) **Potable water and sanitation projects (US\$62 million).** This component will include: (i) 15 water supply projects with a total of 4,500 household connections; and (ii) 75 sewerage projects with a total of 22,500 household connections. The component will finance water supply and sewerage projects. Eligible costs will include those related to detail design; construction; equipment supply and installation; and the operational start-up of: wells or surface water intakes; water and wastewater treatment plants; pumping stations; reservoirs; potable water distribution and wastewater collection networks; meters; and household connections. The cost of the installation of a sanitary cubicle will be eligible for households with no internal bathroom. Under this component, the costs of studies or evaluations to justify individual projects, or the Program as a whole, will be eligible for financing.
  - 3) **Rural wastewater treatment plant rehabilitation projects (US\$20 million).** This component will finance the rehabilitation, upgrading, or replacement of 60 existing wastewater treatment plants so that their discharges comply with prevailing environmental regulations. Eligible costs will include those related to detail design; construction; equipment supply and installation; as well as operational start-up.
  - 4) **Community support (US\$8 million).** This component is designed to ensure the communities’ involvement throughout the project cycle. The component will comprise two sub-components. The first sub-component will finance regional teams to work with each community to help them to organize, and form a Water Committee or Cooperative if one does not already exist. The teams will also work with the communities to: (i) maximize their participation in project design and implementation; (ii) make sure that they are conscious of the value of water and the cost of wastage, and understand the implications of the project, especially the

cost in terms of tariffs that they will have to pay; and (iii) make sure that households understand their rights to subsidies. The second sub-component will finance training in the financial, corporate and operational aspects of water and wastewater system management, as well as their environmental responsibilities, especially those related to protecting the water catchments.

### C. Program cost and financing

- 2.3 The SUBDERE has requested an IDB loan of US\$50 million, which will be supplemented by counterpart financing of US\$50 million to cover the estimated cost of the Program of US\$100 million. The summary breakdown of the Program cost is given in Table 4. If the loan is approved, the Bank will make the financing available as Ordinary Capital.

<b>Table 4: Cost Estimate for the Program</b> (costs in US\$ millions)				
	Eligible costs	IDB loan	Local	Total
1	Program administration.	4	4	8
2	Potable water and sanitation projects	31	31	62
3	Rural wastewater treatment plant rehabilitation projects	10	10	20
4	Community support	4	4	8
5	Interest and credit commission.	1	1	2
TOTAL:		50	50	100

- 2.4 The Program will be financed by the second loan made under the US\$400 million Conditional Credit Line approved in December 2006 (see paragraph 1.25). The credit will be a Performance Driven Loan (PDL). The Bank will release disbursements when outcome targets are achieved and the expenditures incurred in achieving the outcome targets are eligible. Five disbursements will be made, the first, corresponding to 20% of the loan amount, being a downpayment made once conditions precedent are met, the following four, each corresponding to 20% of the loan amount, made against the outcome targets achieved. The global outcome targets for the Program will be: 4,450 households connected to a sustainable potable water supply; 22,500 households connected to a system for the collection and treatment of wastewater; and 60 wastewater treatment plants, currently in a state of disrepair, replaced or rehabilitated, and discharging an effluent in accordance with the relevant standards. The second to final disbursements will be released as these outcome targets are achieved. The Bank will only release the final disbursement when an addition outcome target related to the sustainability of projects during the first twelve months of operation has been achieved. Annex I summarizes the tentative outcome targets, indicators and corresponding schedule of achievement. During Program preparation, the outcome targets will be confirmed and further detailed.

## III. IMPLEMENTATION

**A. The Borrower and Executing Agency**

- 3.1 The Government of Chile will be the Borrower. SUBDERE will be the Executing Agency.

**B. Management of the Program**

- 3.2 The management of Program will follow that of the PMB. The SUBDERE will be responsible for the global Program Management, and will draw up the overall plan for implementation, which will include: a timetable, budget and the Operating Regulations. Through its Regional offices, the SUBDERE will monitor and coordinate the activities of all actors involved.
- 3.3 The Regional Governments will be responsible for assigning priorities to projects based on the appraisal of the SERPLAC using the National Investment System (see paragraph 1.15). After putting the projects into operation, the Regional Governments will also be responsible for providing technical assistance to the Water Committees and Cooperatives that will operate the water and sewerage projects.
- 3.4 The technical units within the municipalities will be the organizations specifically charged with implementing the individual projects. They will be responsible for developing the projects to meet the demands of the communities, initiate the formal process of incorporating the project in the Program, and will submit the project for appraisal through the SERPLAC, and will let the contracts necessary for construction of the projects, and for design and supervision services. The municipal technical units will also be responsible for putting the projects into operation and handing them over to the relevant Water Committee or Cooperative.

**C. Project eligibility**

- 3.5 Individual projects that comply with the following criteria will be eligible for incorporation in the Program: (i) 90% of the population are officially classified as poor, (ii) the project is not incorporated in a strategic urban development plan, (iii) a Water Committee, or Cooperative, exists, or is being created within the community, (iv) the project is technically, financially, economically and environmentally viable, (v) the investment cost of the project, for each individual household, is less than 231UF<sup>11</sup>, (vi) a tariff that ensures the costs of operation, maintenance and replacement has been calculated and agreed with the community, and (vii) each household has contributed between 3 and 8UF, in cash, to the cost of the project, the amount depending on the household's benefit received from other government programs.

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<sup>11</sup> *Unidad de Fomento*, a unit of value that is stable with inflation. Approximately, 1UF = US\$ 35.

#### **D. Monitoring and Evaluation**

- 3.6 The SUBDERE will track performance, and achievement of the outcome targets. The SUBDERE, in accordance with Terms of Reference agreed with the Bank, will contract a firm of independent performance assessment consultants. This firm will be recognized as a technical specialist in rural water and sanitation, and will assess the accuracy, reliability, relevance and validity of the data generated by the systems SUBDERE uses to track performance and monitor achievements.

#### **E. Timetable**

- 3.7 The Program will be implemented within five years of approval.

### **IV. DEVELOPMENT IMPACT**

#### **F. Beneficiaries**

- 4.1 The potable water projects will benefit 18,000 rural dwellers and the sanitation projects will benefit 90,000 rural dwellers. These people will have household connections to both potable water supply and wastewater disposal. The benefits will accrue principally in the form of health benefits and time saved by not having to fetch water from a more remote source. The rehabilitation of the treatment plants under Component 2 will benefit 36,000 who will enjoy improved environmental conditions.
- 4.2 The communities, their Water Committees and Cooperatives, will benefit from an increased understanding of the implications of owning and operating a water and sanitation system as a result of the community support activities. Individual families will also benefit financially if, as a result of these activities, they apply for the subsidies available. All will benefit from the higher levels of service that will be offered as a result of operator training.
- 4.3 The SUBDERE teams and the municipal technical units to be strengthened, as well as the regional teams to be created for the community support, will increase the management capacity of regional administrations.

#### **G. Social and environmental impact**

- 4.4 The individual projects in the Program will have a net positive social impact. The Program will be designed to make sure that the communities are fully informed about the implications of the projects, and that they are involved in decision-making during the design and implementation of the project. The poor are protected from the relatively high tariffs associated with full cost recovery by the water subsidy. The community support component of the Program will ensure that low-income families have access to help in applying for the subsidies. None of the projects is likely to require relocation of population groups. If during Program preparation or execution, the need for resettlement became evident, this would be done according to the Bank's OP-710.
- 4.5 From an environmental point of view, the projects will have a net positive impact. All new concentrations of wastewater that result from the water and sanitation

- projects will be treated to meet Chilean environmental standards. The rehabilitation of existing wastewater treatment plants is specifically to improve environmental conditions. Given the nature of small water and wastewater projects, construction will be marked by small and temporary impacts related to: construction noise, dust and odor; construction waste; traffic interference and accident risk.
- 4.6 The National Investment System requires that all projects have an Environmental Qualifying Resolution<sup>12</sup> issued in terms of the Environmental Impact Evaluation System (SEIA)<sup>13</sup>. In terms of law number 19.3000 of 1994, all projects require an Environmental Impact Declaration and an Environmental Impact Evaluation issued by a Regional Environmental Commissions. The SEIA establishes the methods by which the environmental impact of projects will be evaluated, and the mitigation necessary.
  - 4.7 As the Program will have local short-term environmental impacts, the Bank project team considers it to be a Category B operation in accordance with the IDB's Environment and Social Safeguards Policy and the IDB's Project Classification Toolkit. As part of the preparation of the Program, the SUBDERE will carry out an Environmental Analysis to terms of reference agreed with the Bank, which will identify the environmental and social impacts, the necessary mitigation and management measures for the projects to be financed by the Program, and define the environmental eligibility procedures to be part of the Operating Regulations, all in accordance with national legislation and IDB policies.
  - 4.8 This PCD was reviewed at the CESI meeting held on March 17<sup>th</sup>, 2007.

## V. SPECIAL ASPECTS AND RISKS

- 5.1 Degree of community involvement. It has become accepted by most experts that community involvement in decision-making is a key to successful rural water and sanitation projects. The SUBDERE is accustomed to working on municipal projects rather than projects for small communities and their capacity to involve the community in all aspects of program development must be strengthened. Mitigation: For the Infrastructure Program for Territorial Development, which includes financing for rural water and sanitation projects, the SUBDERE has incorporated community support activities. These activities will be evaluated and incorporated in the implementation of the Program if appropriate.
- 5.2 Sustainability of sewerage services. There is evidence that users pay tariffs for both water and wastewater services when the urban water concessionaires operate the projects. Water bill payment levels reach almost 100% in communities where the beneficiaries receive the water subsidy. The Ministry of Public Works has demonstrated that the majority of Water Committees and Cooperatives collect tariffs that are sufficient to cover operating and maintenance costs, for water supply only projects. There is less evidence to demonstrate the sustainability of

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<sup>12</sup> *Resolución de Calificación Ambiental.*

<sup>13</sup> *Sistema de Evaluación de Impacto Ambiental.*

systems that incorporate sewage collection and treatment when operated by Water Committees and Cooperatives. Mitigation: SERPLAC takes into account the economic situation of the community when appraising an individual project, so each project is designed to be compatible with a community's financial capacity. The Community Support component will ensure that communities are aware of the financial implications, and that they are committed to paying a sustainable tariff, prior to project construction. In addition, the Community Support component will show the communities how they can benefit from the water subsidy.

## **VI. STATE OF PREPARATION**

- 6.1 The budget for the preparation and implementation of projects under the Program has already been approved for the 2007 fiscal year. SUBDERE has a list of projects selected by MIDEPLAN to be financed in the 2007 fiscal year, which the SUBDERE and the Bank will use as a sample to analyze and justify the Program.
- 6.2 The Bank already has the results of the rapid evaluation of the PMB described in paragraph 1.16, the results of which have been used in compiling this Project Concept Document, and will be used as a guide in analyzing the Program.
- 6.3 The project team will base the appraisal of the technical viability of the Program on the review of the individual projects already planned for implementation in 2007. These projects will be analyzed to ensure that they are representative of all projects to be implemented under the Program. The costs of these projects will be analyzed by comparing them with historic costs, duly adjusted for inflation, of PMB projects. The institutional viability of the Program will be based on previous institutional analysis and risk assessment, specifically those used to demonstrate the institutional capacity of SUBDERE as part of the justification of the Program for the Support of Sub-national Development (see paragraph 1.25). These will be supplemented by an analysis specific to the execution of water and sanitation projects. The socio-economic justification of each project will be based on MIDEPLAN's National Investment System's methodology, which is used by the SERPLAC and is compatible with Bank policy.
- 6.4 The SUBDERE, using their own staff, and consultants will prepare the following information for the justification of the Program: (i) the Environmental Analysis, (ii) a Technical report which analyzes the solutions proposed, and the costs, (iii) a report on the institutional capacity of SUBDERE, (iv) a Socio-economic analysis of the projects selected by MIDEPLAN for implementation in 2007, and (v) a draft of the Operating Regulations.
- 6.5 Tentative dates for the preparation of the loan are: Analysis mission: April 9<sup>th</sup> to 20<sup>th</sup>, 2007; Project report considered by Loan Committee: May 17<sup>th</sup>, 2007; Presentation of Loan Proposal to Committee of the Whole: June 27<sup>th</sup>, 2007.

**CHILE**  
**Rural Sanitation Program SUBDERE**

**CH-L1025**

Matrix of Outcome Indicators

Objective	Outcome indicator	Objective 2 <sup>nd</sup> dis-bursement <sup>a</sup>	Objective 3 <sup>rd</sup> dis-bursement	Objective 4 <sup>th</sup> dis-bursement	Objective 5 <sup>th</sup> dis-bursement
Sustainable operation of rural water and wastewater services	Water supply projects operating sustainably for a minimum of twelve months.	-	-	-	10
	Sewerage projects operating sustainably for a minimum of twelve months.	-	-	-	50
Reduce deficit in coverage of potable water in rural areas	New household potable water connections operating	1125	1125	1125	1125
Reduce deficit in coverage of sewerage in rural areas	New household sewerage connections operating	5625	5625	5625	5625
Improve wastewater treatment and disposal	Wastewater treatment plants rehabilitated or replaced operating in compliance with wastewater discharge regulations	15	15	15	15
<sup>a</sup> The first disbursement will be a downpayment made once conditions precedent have been met.					



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Estimated Costs of Preparation

	<b>Administra- tive Budget IDB (US\$)</b>	<b>Counterpart US\$</b>	<b>Total US\$</b>
<b>1. Missions</b>			
1.1 Identification Mission.	19,980	0	19,980
1.2 Analysis Mission.	26,640	0	26,640
1.3 Negotiation Mission.	11,160	0	11,160
			<b>57,780</b>
<b>2. Consultants</b>			
2.1 Financial and Institutional Evaluation.	6,000	0	6,000
2.2 Evaluation of former Programs.	6,300	0	6,300
2.3 Environmental Evaluation.	10,240	0	10,240
			<b>22,540</b>
<b>TOTAL</b>	<b>80,320</b>	<b>0</b>	<b>80,320</b>