

Republic of Chile

Chile's Water Transition Program (P179117)

Program for Results (PforR)

ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT (ESSA)

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CONTENTS

| Ex | ecutiv | e Sumi | mary | 1 |
|----------|--------------|----------|--|--------|
| 1. | Intr | oducti | on | 5 |
| | 1.1. | ESSA | Scope and Methodology | 5 |
| | 1.2. | Consu | ultations on the ESSA Report | 5 |
| 2. | Prog | gram D | Pescription | 6 |
| | 2.1. Progran | | am description | 6 |
| | 2.2. | Key P | rogram Results | 10 |
| | 2.3. | Descr | iption of the Program's civil works | 10 |
| 3. ac | | • | n of the expected environmental and social effects of the Program: benefits, and risks | 14 |
| | 3.1. | Progr | am benefits | 14 |
| | 3.2. | Risks | and Negative Impacts | 17 |
| | 3.2. | 1. [| Negative environmental risks and impacts | 17 |
| | 3.2. | 2. [| Negative social risks and impacts | 19 |
| 4. re | | | nt of the Borrower's environmental and social management systems that are Program | 20 |
| | 4.1. | | ng environmental and social management systems | |
| | 4.1. | | Environmental management systems | |
| | | 1.1.1.1 | | |
| | | 1.1.1.2 | | |
| | | 1.1.1.3 | | |
| | | 1.1.1.4. | , | |
| | E | Enviror | mental management systems of the Directorate General of Water | |
| | | | mental management systems of the General Directorate of Public Works | |
| | | | mental management systems of the Directorate of Hydraulic Works | |
| | | | mental management systems of the Sub-directorate of Rural Health Services | |
| | 9 | Supervi | sion and monitoring of environmental and social management in the MOP | 35 |
| | ۷ | 1.1.1.5 | Quality of environmental and social assessment and management instrumer | nts 36 |
| | ۷ | 1.1.1.6 | Specific permits or authorizations | 37 |
| | 2 | 1.1.1.7 | Environmental and social assessment of policies and plans | 37 |
| | 4 | 1.1.1.8 | Critical habitats, natural habitats and legally protected or internationally | |
| | r | ecogni | zed areas | 38 |
| | 4.1. | 2. 9 | Social management systems | 39 |
| | 2 | 1.1.2.1. | Stakeholder engagement and access to information | 39 |
| | 2 | 1.1.2.2. | Grievance mechanisms | 45 |

| | 4.1.2.3. | Physical cultural resources | 45 |
|----------|------------------------|---|-------|
| | 4.1.2.4. | Safety of the population and workers | 46 |
| | 4.1.2.5. | Land acquisition and loss of access to natural resources | 48 |
| | 4.1.2.6. marginaliz | Indigenous Peoples, Afro-Chileans or members of another minority and ed social groups | 50 |
| | 4.2. Evaluation i | n relation to the basic principles of the PfroR policy | 53 |
| | 4.2.1. Prin | ciple 1: Environmental and social sustainability in the design of the Program | 53 |
| | 4.2.2. Prin | ciple 2: Natural habitats and physical cultural resources | 54 |
| | 4.2.3. Prin | ciple 3: Community and worker health | 54 |
| | 4.2.4. Prin | ciple 4: Land acquisition and loss of access to natural resources | 55 |
| | 4.2.5. Prin | ciple 5: Indigenous peoples and vulnerable groups | 55 |
| | 4.2.6. Prin | ciple 6: Social conflict | 56 |
| 5. | . Recommenda | ations and actions | 56 |
| | 5.1. Actions of t | he Action Plan | 56 |
| | 5.1.1 Environ | mental and Social Performance Indicators | 58 |
| | 5.2. Actions t | o be incorporated into the Operational Manual of the Program | 58 |
| | 5.3. Recomm | endations | 59 |
| Α | NNEXES | | 60 |
| 1. | . Bibliography. | | 60 |
| 2. | . Organizationa 66 | al structure of the government agencies involved in the Program implement | atior |
| | 2.1 Organization | nal chart of the Ministry of the Environment | 66 |
| | 2.2 Organization | nal chart of the Ministry of Public Works | 67 |
| | 2.3 Organization | nal chart of the General Directorate of Public Works | 68 |
| | 2.4 Organization | nal chart of the Hydraulic Works Directorate | 69 |
| | 2.5 Organization | nal chart of the Sub directorate of Rural WWS Services | 70 |
| | 2.6 Organization | nal chart of the Directorate-General for Water | 71 |
| 3. | . Exclusion crit | eria for activities | 72 |
| 4. be | | r the evaluation of environmental and social compliance in case of civil wors payments based on prior results | |
| 5. | . Legal and reg | ulatory framework | 76 |
| | 5.1. General nat | ional legal framework | 76 |
| | 5.2. Environmer | ntal legal framework | 76 |
| | 5.3. Legal frame | work for stakeholder engagement and access to information | 76 |
| | 5.4. Legal frame | work on biodiversity and natural protected areas | 77 |
| | 5.5. Legal frame | work on physical cultural resources | 78 |
| | 5.6. Legal frame | work on the health and safety of the population and workers | 78 |
| | 5.7. Legal frame | work on land acquisition and loss of access to natural resources | 70 |

| 6 | 6. Consultation of the ESSA Report with stakeholders | 83 |
|---|--|----|
| | 5.13. Legal Framework on International Waterways | 82 |
| | 5.12. Legal framework on irrigation, stormwater management, alluvial control, and river chan management | |
| | 5.11. Legal framework on rural WWS | 81 |
| | 5.10. Legal framework on water quality of reference for the water quality analyses of the DGA | 80 |
| | 5.9. Sectoral legal framework linked to IWRM | 80 |
| | 5.8. Legal framework on Afro-Chilean, indigenous peoples or members of other minority and marginalized social groups | 80 |

ACRONYMS AND ABBREVIATIONS

APR Rural Drinking Water Committees (Comités de Agua Potable Rural) **CITHJ** Interministerial Committee on Equitable Water Transition (Comité Interministerial de Transición Hídrica Justa) CMN Natural Monuments Council (Consejo de Monumentos Naturales) COSOC Civil Society Council (Consejo de la Sociedad Civil) Water Use Rights (Derecho de Aprovechamiento de Agua) DAA DGA Directorate-General for Water (Dirección General de Aguas) **DGOP** General Directorate of Public Works (Dirección General de Obras Públicas) DIA Declaration of Environmental Impact (Declaración de Impacto Ambiental) **DIPRES** Directorate for Budgeting (*Dirección de Presupuestos*) DIS Sustainable Infrastructure Division (División de Infraestructura Sustentable) DLI Disbursement-linked indicator DOH Directorate of Hydraulic Works (Dirección de Obras Hidráulicas) E&S **Environmental and Social EAE** Special or Specific Environmental Specifications (Especificaciones Ambientales Especiales o Específicas) **ESHS** Environmental, social, health and safety EAA Environmental Analysis Study (Estudio de Análisis Ambiental) EAAT Environmental and Territorial Analysis Study (Estudio de Análisis Ambiental y Territorial) EAG General Environmental Specifications (Especificaciones Ambientales Generales) EAE Special or Specific Environmental Specifications (Especificaciones Ambientales Especiales o Específicas) **ECC** effects, characteristics or circumstances EΙΑ Environmental Impact Study (Estudio de Impacto Ambiental) **ESSA Environmental and Social Systems Assessment** GoC Government of Chile ILO **International Labour Organization IWRM** Integrated Water Resources Management Ministry of Social Development and Family (Ministerio de Desarrollo Social y Familia) **MDSF** MMA Ministry of Environment (Ministerio del Medio Ambiente) MOP Ministry of Public Works (Ministerio de Obras Públicas) **NBS Nature-Based Solutions** OAECA State Administration Agencies with Environmental Competence (Organismos la Administración del Estado con Competencia Ambiental) OIRS Information, Complaints and Suggestions Office (Oficina de Informaciones, Reclamos y Sugerencias) OTSJ Office of Just Socio-ecological Transition (Oficina de Transición Socioecológica Justa) OUA Water User Organizations (Organizaciones de Usuarios de Agua) PAC Citizen Engagement Processes (Procesos de Participación Ciudadana) PAP **Program Action Plan** PAS Sectoral Environmental Permit (Permiso Ambiental Sectorial) **PCPI** Indigenous Peoples Consultation Process (Proceso de Consulta a los Pueblos Indígenas) PDR Resettlement Plan (Plan de Reasentamiento) **PERHC** River Basin Strategic Plans (Plan Estratégico de Recursos Hídrico) **PforR** Program-for-Results PMCauces Flood Risk Management Plans (Planes de Manejo de Cauces) **PMALL** Stormwater Master Plans (Plane Maestros de Aguas Lluvias) **RCA** Environmental Qualification Resolution (Resolución de Calificación Ambiental) **PCRU**

Program Coordinating and Reporting Unit

RA Results Area

RSEIA Regulation of the Environmental Impact Assessment System (Reglamento del Sistema de

Evaluación de Impacto Ambiental)

SEA Environmental Assessment Service (Servicio de Evaluación Ambiental)

SEIA Environmental Impact Assessment System (Sistema de Evaluación de Impacto Ambiental)

SEREMI Regional Ministerial Secretariat (Secetaría Regional Ministerial)

SIAC Information and Citizen Service System (Sistema de Información y Atención Ciudadana)
SINIA National Environmental Information System (Sistema Nacional de Información Ambiental)

SMA Superintendency of the Environment (Superintendencia del Medio Ambiente)

SNI National Investment System (Sistema Nacional de Inversiones)

Snifa National Environmental Control Information System (Sistema Nacional de Información de

Fiscalización Ambiental)

SSR Sub directorate of Rural WWS Services (Subdirección de Servicios Sanitarios Rurales)

THJ Transición Hídrica Justa (Equitable Water Transition)

TOR Terms of Reference

UMA Environmental Unit (Unidad de Medio Ambiente)

UPAC-AI Citizen Engagement and Indigenous Affairs Unit (Unidad de Participación Ciudadana y

Asuntos Indígenas)

WRM Water Resources Management WSS Water Supply and Sanitation WTP Wastewater Treatment Plant

e.g. example no. Number w/d without date

p. page

Executive Summary

- 1. This document is the Final Report of the Environmental and Social Systems Assessment (ESSA) for the implementation of the Chile's Water Transition Results-Based Program (hereinafter the "Program"). This ESSA was developed by the World Bank (WB) to meet the requirements of its Operational Policy OP107 (OPS5.04-POL.107) and Directive D107 (OPS5.04-DIR.107) for the financing of Results-Based Programs (PforR) and following the World Bank's Guide to ESSA Preparation (OPS5.04-GUID.118). The ESSA was carried out based on the general principles of avoiding, minimizing, and/or mitigating potential adverse impacts and risks on people and the environment; promote environmental and social sustainability (E&S) in Program design; and promote informed decision-making regarding the E&S risks and impacts of the Program.
- 2. This ESSA aims to identify the principal E&S risks that may affect the achievement of Program results, evaluate the ability of the Borrower's systems to manage those risks in a manner consistent with the basic principles and key planning elements established in the WB Policy and Directive for PforR, and identify complementary actions and measures to strengthen the **E&S performance of the Program when necessary.** This was carried out through the analysis of: (i) government policies, laws, standards, procedures, requirements, and guides for the management of E&S risks and impacts applicable to the Program; (ii) relevant documents, particularly with regard to the identification and management of E&S risks of the activities included in the Program, including ESSA reports carried out in the context of similar operations in other countries and studies on the water and sanitation in Chile supported by the WB; (iii) analysis of the institutional capacity of the entities involved in the implementation of the Program activities, particularly the General Directorate of Water (DGA), the Directorate of Hydraulic Works (DOH), and the Subdirectorate of Rural Sanitary Services (SSR), all three dependent on the Ministry of Public Works (MOP), and the Office of Just Socioecological Transition (OTSJ), dependent on the Ministry of the Environment (MMA) (also called the Water Office in the Project Appraisal Document); and (iv) consultations and meetings with key actors related to the Program.
- 3. The process of preparing the ESSA Report was informed by ongoing consultations with the WB counterparts in the MOP and MMA Program, and consultations with a wide range of stakeholders. Working meetings were held with the MOP and MMA teams and consultations were carried out through two written questionnaires. The ESSA Report in its draft version was shared with counterparts in April and September 2023. The contributions and comments received in all these instances were incorporated into this final ESSA Report. The draft ESSA Report was consulted in early September 2023 with a broader range of stakeholders through four fully virtual focus group meetings to maximize the participation of actors distributed throughout different regions of Chile. The input and feedback received allowed us to complete and validate the information used to prepare the ESSA Report.
- 4. The Program's activities to support strengthening the capacity of the Government of Chile for integrated water resources management (IWRM) and improving water-related services are expected to lead to various E&S benefits. The main positive environmental impacts are related to more efficient use and management of water resources, including the reduction of water losses due to aging rural drinking water infrastructure. The Program is expected to have overall positive social impacts, mainly on the quality of life and health of rural communities through the expansion of safely managed water and sanitation services; the health, safety and economic

- activities of urban and rural populations by reducing the risks of urban floods and droughts; water resources governance, strengthening transparency and improving stakeholder participation; and reducing water conflicts by implementing a participatory water resources management approach in selected basins.
- 5. ESSA concluded that no significant adverse E&S impacts are expected as a result of the Program. All activities that are considered to have high negative impacts on the environment and/or affected people have been excluded from the Program (and will be excluded during its implementation). This exclusion list includes: (i) construction, expansion or rehabilitation of large dams/reservoirs as defined in OP 4.37 of the WB, or infrastructure associated with, and/or dependent on, large dams/reservoirs; (ii) construction or expansion of small dams/reservoirs as defined in OP 4.37; (iii) new sewage treatment plants or expansion or rehabilitation of existing plants that imply significant adverse impacts due to their size, location or associated processes; (iv) expansion of sewage treatment plants that are generating environmental liabilities during their operation; (v) new water treatment plants or expansion of existing plants that imply significant adverse impacts due to their size or associated processes; (vi) stormwater evacuation and drainage works that interconnect with wastewater sewer networks; (vii) location in, or affecting, areas with some type of protection (for example, protected wetlands); (viii) significant conversion or degradation of critical natural habitats; (ix) significant conversion or degradation of cultural heritage sites; (x) air, water or soil contamination that causes significant adverse impacts on the health or safety of people, communities or ecosystems; (xi) significant changes in water quality or availability; (xii) water transfer between basins; (xiii) working conditions that expose workers to significant risks to personal health and safety; (xiv) forced evictions, including forced evictions from public or private lands; (xv) land acquisition that may cause large-scale, temporary or permanent physical and/or economic displacement, including intensive involuntary resettlement; (xvi) large-scale changes in land use or access to land and/or natural resources; (xvii) adverse E&S impacts covering large geographic areas, including transboundary impacts or global impacts such as greenhouse gas emissions; (xviii) significant cumulative impacts, induced or indirect; (xix) use of forced or child labor; (xx) marginalization of, or discrimination against, or conflict within or between social groups (including ethnic and racial groups); (xxi) adverse impacts on lands and natural resources subject to traditional ownership or under customary use or occupation; (xxii) relocation of indigenous peoples from lands and natural resources that are subject to traditional ownership or under customary use or occupation; (xxiii) significant impacts on the cultural heritage materials for the identity and/or cultural, ceremonial or spiritual aspects of the affected indigenous communities...
- 6. The Program includes various civil works to be executed by the MOP. Civil works include new monitoring networks and maintenance of existing ones; new rural water supply systems, and rehabilitation, expansion and improvement of existing ones; limited-scale pilots to test rural wastewater treatment solutions; construction and rehabilitation of irrigation works in rural areas; construction of hydraulic infrastructure for evacuation and drainage of stormwater in urban areas; construction of hydraulic infrastructure for flood control and channel management in urban and rural areas.
- 7. The main risks and potential environmental impacts that may arise from the construction and operation phases of the aforementioned infrastructure include: (i) temporary impacts on water and air quality mainly during the construction phase; (ii) general inconvenience to communities due to the generation of dust, vibrations, noise, and odors during civil works; (iii) contamination risk associated with the generation and inadequate management and disposal of hazardous and non-hazardous solid waste (including the management of electronic waste), generation and discharge of wastewater from civil works, and generation and disposal of sludge

from construction works. water and sanitation; (iv) risks to the health and safety of workers and local communities, including exposure to hazardous materials/waste; (v) impacts on natural habitats, including modification of aquatic habitats and riparian zones; (vi) impacts on aquifer recharge from the construction of new groundwater extraction wells for rural water supply systems; (vii) risks and impacts that could arise from inadequate environmental management during the operation and maintenance of the infrastructures to be built or rehabilitated, such as community safety and occupational health and safety due to the low capacity of the operators (service providers) of rural water. These risks and impacts are expected to be primarily temporary and site-specific and will be mitigated by readily available measures required by national regulations and commonly applied by the MOP.

- 8. The main adverse social risks and impacts may include the following: (i) aspects related to labor management, considering the management of community impacts and risks associated with the influx of labor, including sexual exploitation and abuse, and the sexual harassment; (ii) temporary effects on local pedestrian and vehicular traffic during the construction phase of the works; (iii) temporary interruption of public services (electricity, water, etc.) that may require relocation for civil works; (iv) land acquisition that leads to temporary or permanent physical and/or economic displacement, or restrictions on the use of land or resources that have adverse impacts on local livelihoods; (v) impacts on economic activities due to civil works; (vi) inadequate management of cultural heritage protection measures and management of accidental finds; (vii) risks of social conflict due to changes in the management of water resources supported by the Program; (viii) risk of exclusion of vulnerable population in rural areas who, due to their low income, may not be able to pay the rates applied to the new drinking water provision services. These risks will be mitigated through the systematic detection of social risks and impacts, in accordance with what is mentioned in the following paragraphs, and the implementation of appropriate participatory and consultation processes with all actors.
- 9. The Program was classified by the Bank as having a Substantial A&S risk category. This classification responds to both the wide range of potential E&S risks and the negative impacts of the variety of civil works to be implemented under the Program, and the various activities supported by the Program that imply changes in the current management of water resources and could increase social conflict around this issue.
- 10. ESSA concluded that the existing environmental and social systems at the national and sectoral levels are adequate to effectively manage the E&S risks and impacts of the Program. The E&S systems applicable to the Program are reasonably aligned with the basic principles and key planning elements established in the WB Policy and Directive. Regarding the management of risks and expected impacts in civil works, Chile has a robust Environmental Impact Assessment System (SEIA), which is administered by the Environmental Evaluation Service (SEA) and includes the evaluation of risks and both environmental and social impacts. The periodic supervision of the E&S requirements and commitments included in the environmental licenses granted by the SEA is widely regulated and carried out by the Superintendence of the Environment (SMA). Both the SEA and the SMA have sufficient institutional capacity to effectively implement the aforementioned processes. Some small-scale projects/infrastructures considered in the Program do not require the development of E&S instruments under the SEIA. However, following MOP standard procedures, appropriate E&S instruments are also required and developed for these interventions, including E&S impact assessments for the pre-feasibility and/or feasibility stage of a project, E&S management plans developed by qualified independent consultants, etc. Additionally, the MOP includes the corresponding E&S specifications and requirements in the bidding documents for construction, and periodic monitoring of environmental and social requirements and commitments is carried out by designated

- specialists ("Fiscal Inspectors") from each implementing agency within the MOP. The MOP has sufficient institutional capacity to guarantee compliance with Chile's E&S regulatory framework, with E&S teams integrated into the agencies involved in the Program.
- 11. Existing national and sectoral E&S systems include stakeholder participation and dissemination of E&S instruments from early stages. The SEA and MOP implement stakeholder consultation and engagement processes as part of the E&S assessment, including consultation and consent of indigenous peoples. The Program includes the implementation of appropriate participatory and consultation processes with all actors considering not only civil works but also activities that involve the design of plans, policies, and new institutions for water management at the basin level.
- 12. The ESSA identifies specific actions and recommendations to support the effective management of E&S risks during the implementation of the Program. These include: (i) an exclusion list, with activities that cannot be financed by the Program due to their high negative impacts on the environment and/or affected people; (ii) criteria for the evaluation of compliance with E&S requirements in the case of activities that will be considered for payments based on previous results, in line with the basic principles and key planning elements established in the WB Policy and Directive; (iii) recommendations to strengthen the E&S capacity of the SSR and the OTSJ; etc. The actions included in the Program Action Plan (PAP) include: (i) the requirement to designate an environmental specialist (including experience in occupational health and safety) and a social specialist in each of the government areas that implement the activities of the Program, who will be responsible for the supervision and coordination of the E&S aspects of the Program; (ii) specific additional requirements regarding land acquisition, land use restrictions and involuntary resettlement that could involve civil works included in outcome areas 2 and 3 of the Program. The actions or processes to be incorporated into the Program Operational Manual have been identified, including: (i) procedure and guidelines for the evaluation of E&S compliance in the case of civil works that intend to be considered for payments based on previous results; (ii) checklist to identify activities that meet the exclusion criteria defined in the ESSA and that therefore cannot be financed by the Program; (iii) preparation of semiannual E&S monitoring reports that will be presented to the World Bank; (iv) procedure to report incidents and accidents to the WB, among others.

1. Introduction

1. This document presents the final Environmental and Social Systems Assessment (ESSA) for the implementation of *Chile's Water Transition* Program for Results (hereinafter the "Program") prepared by the World Bank (hereinafter the "Bank") team in accordance with the requirements of its Operational Policy OP107 and Directive D107 for Programs for Results (PforR) Financing.¹

1.1. ESSA Scope and Methodology

- 2. The scope of this ESSA is to identify the main environmental and social (E&S) risks that may affect the achievement of Program outcomes, assess the Borrower's capacity to manage those risks in a manner consistent with the Bank's Policy and Directive for PforR, and identify complementary actions and measures to strengthen the Program's E&S performance when necessary. Some of these measures have been incorporated into the Program Action Plan (PAP), and others will be incorporated into the Operations Manual as detailed in Section 5.
- 3. The methodology for the development of this ESSA is based on the provisions of the WB Guidance for the preparation of ESSAs (OPS5.04-GUID.118). The preparation of the ESSA Report included, among other tasks: (i) documentary review of policies, laws, standards², procedures, requirements and guidelines for the management of E&S risks and impacts that may be applicable to the Program, provided by the client and/or consulted on the official websites of the Government of Chile (GoC) agencies, as well as the official websites that publish the regulatory digests³; (ii) review of technical literature, including ESSA reports carried out in the context of similar operations in other countries and studies on the water and sanitation sector in Chile supported by the Bank⁴; (iii) working meetings with representatives of the government areas involved in the preparation and implementation of the Program, the Ministry of Public Works (Ministerio de Obras Públicas, MOP) and the Ministry of the Environment (Ministerio del Medio Ambiente, MMA) of Chile, including five missions to prepare the operation. The ESSA Report was published on the World Bank's website before appraisal and on the Borrowers website before Board and after negotiations.

1.2. Consultations on the ESSA Report

- 4. The preparation of the ESSA Report was informed by continual consultations with the Bank's counterparts for the Program in MOP and MMA. In addition to the working meetings mentioned above, consultations were held with the different counterparts in the MOP and MMA through two written questionnaires. The draft ESSA Report was shared with the counterparts in April and September 2023. It should be noted that the findings, conclusions, and opinions expressed in this report are those of the Bank.
- 5. The draft ESSA Report was consulted with a wide range of stakeholders. This consultation was conducted on September 6 and 7, 2023, through four focus groups. These focus groups were fully virtual to maximize the participation of stakeholders distributed in different regions of Chile. Each focus group was designed to elicit input on different topics from various stakeholders, including

¹ Available on: https://www.worldbank.org/en/programs/program-for-results-financing#3

² Annex 6 details the legal and regulatory framework.

³ Official Journal of the Republic of Chile: https://www.diariooficial.interior.gob.cl/. Chile Law, administered by the Department of Legislative and Documentary Services of the Congress's Library: https://www.bcn.cl/leychile/acerca-de-leychile

⁴ Annex 1 includes the list of the main documents consulted.

representatives of national (central and regional) and subnational public agencies, the private sector, academia, and civil society organizations. The comments and inputs received allowed to complete and validate the information used to prepare the ESSA Report. Details of this consultation are included in Annex 7.

2. Program Description

6. This section presents a brief description of the Program, including its scope, implementing agencies, details of the activities included and the expected key results.

2.1. Program description

- 7. Chile's current water agenda is defined in the national Equitable Water Transition (Transición Hídrica Justa, THJ) national strategy on water security recently launched by the Interministeral Committee on Equitable Water Transition (Comité Interministerial de Transición Hídrica Justa, CITHJ)⁵. The THJ program aims to address the multiple challenges in water resources management and water service provision through a water security approach. The thematic limits of the GoC's program include addressing water institutionality including at the river-basin level, promoting resilient human consumption, implementing adaptive infrastructure, and safeguarding ecosystems. It also includes investing in rural water access by building new systems and improving existing ones, while managing urban floods and runoff through green and gray solutions. It incorporates the use of Nature-based Solutions (NBS) and innovative hydraulic planning to move towards comprehensive and adaptive water management, improving resilience and sustainability. The THJ program also seeks to strengthen national institutional capacity for better water management.
- 8. **The GoC's program has a national geographical scope.** The Government's program has a national geographic scope with interventions in international waterways. The Bank-financed Program excludes the support to investments in any new rural water supply, sanitation, flood control, and irrigation infrastructure in international waterways, as well as to the expansion or modification of such schemes in a way that would adversely affect the quantity or quality of water flows to other riparian countries.
- 9. Activities to strengthen governance at the basin level are focused on selected basins. These basins were chosen by the CITHJ in conjunction with the Regional Governments based on the willingness of the stakeholders to start working on a basin-level governance approach. In this respect, the program aims to test integrated approaches at the basin scale and draw lessons to later expand its implementation to other basins in the country, and to provide feedback for the drafting of a bill that would institutionalize this governance. In this way, the Government's program seeks to move towards an integrated approach to managing water resources, which ultimately aims to benefit the entire country by improving water security, especially in areas most affected by service gaps and climate change.
- 10. The proposed Bank's Program will support the implementation of key activities of the THJ national program thought 3 results areas (RA). The Program will support activities focused on: (i)

⁵ This Committee was created in 2022 by Decree No. 58/2022. Its objective is to advise the President of the Republic on issues related to policy and institutional transformations to advance in the process of just water transition (Article 1). Is composed of the Ministers of the Environment, Public Works, Energy, Agriculture, Mining, Science, Technology, Knowledge and Innovation (Article 2).

strengthening institutional capacities for an integrated management of water resources, taking into account environmental, social and economic requirements, and including the implementation of a participatory water resources governance approach; (ii) improving safely managed drinking water and sanitation services in rural areas; and (iii) improving climate resilience through the development of integrated green and gray solutions for irrigation and flooding at basin level.

- 11. The Program, like the Government's program, has a national geographical scope; however, the creation of river basin working groups of RA1 will focus on the basins selected by the CITHJ. In addition, wherever possible, the Program will work to focus RA3 interventions so that they contribute to the implementation of river basin plans⁶.
- 12. The Proposed Program Development Objective (PDO) is to strengthen the capacity of the GoC for water resources management and improve water-related services.
- 13. The implementing institutions will be the MOP⁷ and the MMA⁸ The MOP will implement activities in the three RAs of the Program through the DGA⁹, DOH ¹⁰ under the General Directorate of Public Works (*Dirección General de Obras Públicas*, DGOP)¹¹, and the SSR under the DOH. The MMA will co-implement with the MOP various activities in the RAs 1 and 3 through the OTSJ.¹² The implementation will be carried out with the existing teams in each of the areas, having identified, among others, those responsible for E&S matters. Overall, the technical evaluation conducted by the Bank team concluded that the capacities within the MOP and MMA are sufficient for Program implementation. Annex 3 presents the organizational chart of each of these agencies and Section 4 details the relevant teams in each of the agencies.
- 14. A Program Coordination and Reporting Unit (PCRU) will be formed under the DGOP with guidance directly from the Minister's cabinet, to facilitate institutional coordination and consolidation of Program information. The DGOP traditionally has a supervisory role within the Ministry and will facilitate institutional coordination between the participating institutions under MOP and MMA, who will oversee the implementation of the Program. The key responsibilities of the PCRU include: (i) monitor progress towards meeting the Program objectives; (ii) prepare periodic monitoring reports on the progress of the different activities and contribution towards DLIs; (iii) inform both Ministries' Office, as well as the Committee of THJ on progress in Program implementation; (iv) ensure that the different institutions (DGA, DOH, SSR) under MOP and the OTSJ under MMA's Undersecretary of Environment, submit periodic follow-up and evaluation reports, ensuring consolidation of reports where relevant per Results Area; (v) specify the reasons for plan deviations, if any, and propose remedial actions; (vi) prepare periodic Program Reports for the Directorate for Budgeting (DIPRES)¹³ and for the Independent Verification Agent; (vii) prepare progress monitoring reports on compliance with the agreed actions in the PAP; (viii) consolidate financial statements of the Program; and (ix) prepare requests for disbursement of

⁶ This corresponds to the River Basin Strategic Plans (Plan Estratégico de Recursos Hídrico, PERHC), those found established in the Water Code, article 293 bis; and Law No. 21.455/2022 Framework Law on Climate Change, Article 13. The details of the PERHCs are presented in the description of the RA1.

⁷ https://www.mop.gob.cl/. The competences of the MOP and the Different Areas involved in the implementation of the Program are developed in the Section 4.1.1.4.

⁸ https://mma.gob.cl/. The competences of the MBUT and the OTSJ is developed in Section 4.1.1.3.

⁹ https://dga.mop.gob.cl/

¹⁰ https://doh.mop.gob.cl/

¹¹ https://dgop.mop.gob.cl/

¹² https://mma.gob.cl/transicion-socioecologica-justa/

¹³ The Program founds will be disbursed to DIPRES, under the Ministry of Hacienda.

funds based on Independent Verification Agent reports. This unit will consist of a Coordinator, a monitoring and evaluation (M&E) Specialist, and a Fiduciary Specialist.

- 15. The Program includes three RAs with the scope detailed in the following paragraphs.
- 16. **RA1:** Strengthening institutional capacity for integrated water resources management at the national and basin levels. The RA1 will be implemented by the DGA and the OTSJ. This RA1 seeks to strengthen the institutional framework for integrated water resources management (IWRM) at the national and basin levels.
 - 16.1. At the national level, the Program includes the institutional strengthening, the development of water policies and the generations of water information through: (i) the development of an institutional analysis that will serve as a basis for the strengthening of the national water authority (through the strengthening of DGA or the creation of a higher-level water authority), informed by previous conducted World Bank studies; (ii) the development of a National Water Security Policy that will guide the GoC's vision and work program, this policy will describe the main water security issues and their socioeconomic impacts in the context of the Government's overall priorities and set out strategies to address them; (iii) the implementation of a digital strategy to strengthen the Public Water Registry. This includes software development, a water quality laboratory, and enhanced infrastructure for water monitoring, databases, models, and applications to bolster information availability, transparency, and support water solutions for flood and drought risks at the territorial level and informed climate-responsive management. Details of the civil works associated with this RA1 are presented in Table 2 of Section 2.3.
 - 16.2. At the basin level, the Program will support the design and implementation of IWRM key principles. The activities include the promotion of stakeholder involvement, integrated planning and sustainable water to improve quality and increase availability. Specifically, the Program will provide support for: i) formalizing a river basin governance structure for the management of water resources at basin level; ii) creating river basin working groups to advance in the improvement of basin water governance in selected basins; (iii) preparing¹⁴ River Basin Strategic Plans (PERHCs) in the same selected basins (including the development of basin planning guidelines to better include climate change impacts into planning; and (iv) compiling lessons learned on the process of strengthening water governance at the basin level and the planning exercise for scale up beyond the selected basins. Finally, this RA1 seeks to promote gender equity, partnerships, and community participation.
- 17. RA2: Enhancing the sustainability of rural WSS service providers through institutional strengthening, while continuing to close access gaps. The RA2 will be implemented by the SSR

(Water Code, article 293 bis; Law No. 21.455/2022, Article 13).

¹⁴ As foreseen in the Water Code, Article 293a; and Law No. 21.455/2022 Framework Law on Climate Change, Article 13, the preparation of these plans is the responsibility of the MOP in conjunction with the MMA, and the Ministries of Agriculture; of Science, Technology, Knowledge and Innovation; External Relations Ministry where it comprises transboundary basins, and the Regional Committee for Climate Change (Comité Regional para el Cambio Climático, CORECC) respective. These plans aim to promote water security in the context of constraints associated with climate change. They must include at least: (i)

aim to promote water security in the context of constraints associated with climate change. They must include at least: (i) hydrological and hydrogeological modeling of the basin; (ii) water balance that takes into account the rights constituted and uses susceptible to regularization; the availability of water resources for the constitution of new rights, and the flow that can be used for non-extractive purposes; (iii) plan for the recovery of aquifers whose sustainability, in terms of quantity and physical-chemical quality, is affected; (iv) Plan to deal with the Future needs of water resources with preference in human consumption and the conservation and preservation of nature; (v) five-year program for enlargement, installation, modernization and/or repair of fluviometric, meteorological, sedimentometric stations, and the maintenance and implementation of the water quality monitoring network, water levels Wells, reservoirs, lakes, glaciers and snow routes

and will include all efforts of the SSR to improve sustainable water services and sanitation access in rural areas including institutional strengthening activities and WSS investments.

- 16.1. To advance the institutional strengthening of SSR, this RA2 includes: (i) the development of the Rural WSS Strategic Plan to 2030 to guide investment priorities, including the development of sanitation diagnostic studies, and evaluation of management approaches for rural WSS services which consider climate change effects like droughts and floods, and (ii) the design and implementation of a SSR information system on rural WSS which includes data compiling and reporting, and rural service providers registration. As part of this RA, the Program will gather disaggregated data on women's involvement in Rural Drinking Water Committees (*Comités de Agua Potable Rural*, APRs) and take steps to boost their participation through activities like technical training, leadership workshops, and gender equity awareness campaigns in water services.
- 16.2. This RA2 seeks to close the access gap to drinking water and sanitation in rural contexts through design, installation, expansion and/or rehabilitation of drinking water services. In the sanitation domain, the Program will identify, design, and install three limited scale pilot projects to test rural wastewater treatment solutions adapted to different geographical contexts. These pilots will seek to validate low-cost wastewater treatment solutions for rural areas with sewer systems, manageable for APRs, with the goal of incorporating NBS. Details of the civil works associated with this RA2 are presented in Table 2 of Section 2.3. As part of this RA, training and technical assistance will be provided to water user committees to ensure that drinking water systems are well managed, operated and maintained.
- 18. RA3: Building climate resilience through the development of green and gray solutions. This RA3 will be implemented by DOH and MMA. This result area aims at supporting the GoC's effort for the development of irrigation and flood control. This RA will also promote the incorporation of NBS into the development of traditional infrastructure. The Program seeks to develop a new dimension to the traditional hydraulic infrastructure development to improve the resilience and positive impacts of hydraulic works.
 - 18.1 This RA3 includes: (i) the formulation of small and medium water storage plans to maintain water supply for different uses, reducing the vulnerability to drought impacts; (ii) the developing of basin-scale urban flooding master plans to identify flood-prone areas and design systems that are flexible enough to accommodate changing climate conditions; (iii) the construction and/or rehabilitation of primary irrigation canals, hydraulic infrastructure for the evacuation and drainage of stormwater, alluvial control and river channels management. Details of the civil works in this RA3 are presented in Table 2 of Section 2.3.
 - 18.2. As part of this result area, the Program will develop national NBS guidelines and will promote the incorporation of NBS in at least two PERHCs and/or Flood Risk Management Plans (*Planes de Manejo de Cauce*, PMCauces) and/or Stormwater Master Plans (*Planes Maestros de Agua Lluvia*, PMALL). Specifically, the Program will develop urban wetland management plans with a watershed approach in selected river basins.
- 19. In a cross-cutting manner, the Program promotes gender equity in the water sector. In addition to what has already been stated in each RA, gender gaps in employment within the male-dominated construction sector will be addressed. To this end, the MOP will implement various measures for the contractors, including: i) mandatory gender awareness training, (ii) sharing successful practices, (iii) providing unconscious bias training, and (iv) developing standard workplace and harassment protocols for contractor adoption.

20. In terms of capacity building, the Program includes technical assistance to MOP and MMA. This technical assistance will focus on: (i) support towards the MMA and DGA for the improvement of the institutionality at the river basin level; (ii) support towards the SSR throughout its implementation of Law No. 20.998/2017 for improved rural water supply and sanitation services; (iii) support towards the DOH as it introduces resilience by design approaches in irrigation works; and (iv) support towards the DOH as it incorporates NBS in flood control works, among others.

2.2. Key Program Results

- 21. The Program will have 5 result indicators to achieve its PDO:
 - PDO 1: Improve the GoC's WRM planning capacity at national level
 - PDO 2: Create participatory water governance institutions in selected basins
 - PDO 3: Improve the GoC's rural WSS planning capacity at national level
 - PDO 4: Increase access to safely managed rural drinking water services
 - PDO 5: Increase number of people at lower risk of climate change exacerbated floods

22. The World Bank proposes nine Disbursement Linked Indicators (DLIs) which will trigger disbursements under the Program:

Table 1. Disbursement Linked Indicators.

| RA1. Strengthening institutional capacity for integrated water resources | DLI1: Creation of river basin working groups in selected basins. |
|---|--|
| management at the national and basin levels | DLI2: Proposal and approval of a Water Security Policy. |
| | DLI3: Development of tools for improved knowledge on surface and groundwater quantity and quality. |
| RA2. Enhancing the sustainability of rural WWS service providers through | DLI4: Number of people in the rural sector with access to Safely Managed Drinking Water Services. |
| institutional strengthening, while continuing to close access gaps | DLI5: Approval of a Rural WSS Strategic Plan to 2030. |
| | DLI6: Implementation of pilots of Alternative Rural Wastewater Technologies. |
| RA3. Building climate resilience through the development of green ¹⁵ and gray | DLI7: Number of people at lower risks of flood due to new and/or rehabilitated works built by DOH. |
| solutions | DLI8: Inclusion of NBS in the design of selected DOH projects. |
| Cross DLI | DLI9: Percentage of the number of MOP's or other ministry's investment projects that are included in the PERHCs. |

2.3. Description of the Program's civil works

23. The three RAs will include civil works whose implementation will be in charge of the MOP agencies. The MOP has pre-identified a set of civil works projects that could be proposed for

¹⁵ Green solutions may include NBS.

financing under the Program, other works (of the same typology as those already pre-identified) have not yet been defined so their scope and location is not yet known. In all cases, interventions shall comply with the exclusion criteria detailed in paragraph 24 and Annex 4. The table below summarizes the type of interventions to be funded under the Program. It should be noted that these interventions will be studied and implemented from the central level of the MOP, including the management of E&S risks and impacts, with the regional dependencies of the MOP serving as support for implementation.

Table 2. List of types of interventions and works planned for the Program.

RA1. Strengthening institutional capacity for integrated water resources management at the national and basin levels.

Implementation of the digital strategy. It includes the development of software and hardware. It considers the installation of fiber optics to ensure the interconnection of technological infrastructure of environment, servers, and storage system with the current ministerial technological environment.

Expansion of water monitoring networks. It includes the installation of new stations, sensors and equipment to automate the capture, data storage and online transmission in the different monitoring networks. The new monitoring stations specifically include fluviometric, meteorological, snow metric, glaciological stations, and construction of piezometers (well levels), necessary to generate information to determine water supply, availability, management at the basin level, and identify adaptation and mitigation measures to climate change. In terms of physical interventions, these stations involve the execution of the well (estimating 90 new wells), as appropriate, and typically the assembly of a shed and a grid for the protection of equipment in an area of approximately 4 m². The land where these stations will be located is in the public domain (e.g. municipal or military), and eventually an investigation easement may be required in case it is located on a private property.

Construction of water quality analysis laboratory. It involves the construction of a new water quality analysis laboratory on public lands in the areas of La Araucanía, which will complement the current laboratory located in Santiago ¹⁶ de Chile. Its construction and installation of technical equipment aim to decentralize the activities carried out by the Santiago laboratory to improve their management and efficiency. Due to Chile's geography, it is unproductive to send samples to the central zone from the southern zone, particularly given the limited time available between sampling and analysis. The laboratory will have 8 employees who will perform tasks as chemical technicians, analysts, and chemical assistants.

RA2. Enhancing the sustainability of rural WWS service providers through institutional strengthening, while

Construction of rural drinking water systems. It involves the construction of new systems in semi-concentrated localities¹⁷, with an estimated reach of between 90 and 3,500 beneficiaries per system. This includes the collection of water by wells and distribution to homes by underground pipes, as well as semi-buried reinforced concrete regulation ponds or elevated metal of different capacities depending on the number of beneficiaries.

¹⁶ The DGA laboratory in Santiago has been in operation since the 70s and has among its functions the analysis of samples of the water quality network of the DGA. Annually, about 2.200 samples corresponding to stations distributed throughout Chile, including rivers, aquifers and lakes. The laboratory is accredited under ISO 17025 since 2012 and coordinates with the regions the operation of the network, providing supplies and equipment. In addition, it publishes the data in the National Water Bank, which is fundamental for the characterization of water resources, the development of secondary standards and control. The laboratory also performs water quality sampling.

¹⁷ For purposes of planning and investment in the rural water and sanitation subsector, rurality in Chile It is considered: Concentrated semi-Concentrated and dispersed. A rural locality semi-Concentrated is the one that has a minimum population of 80 inhabitants and a density of at least 8 dwellings per km of red Public of water (WB, 2021, p. 8).

continuing to close access gaps.

Rehabilitation of existing rural drinking water systems. It involves the improvement and/or expansion of existing rural drinking water systems in semi-concentrated localities, with an estimated reach of between 200 and 7,000 beneficiaries per system. It includes the following types of interventions:

- (i) Improvement, which involves the construction of infrastructure aimed at improving the quality of the service provided by the existing infrastructure in accordance with the provisions of the standards, in terms of continuity, quantity and quality. This includes the rehabilitation of fountains, regulation ponds or purification plants, reinforcement, and replacement of networks and all the infrastructure associated with the rural drinking water service.
- (ii) Expansion, understood as increasing the capacity of the system in terms of production and distribution. This includes new water sources, expansion of regulation capacity through storage tanks, and extension of the distribution network to new users.

Implementation of 3 limited scale pilots for rehabilitation, improvement and/or expansion of existing Wastewater Treatment Plants (WWTPs). Their designs will be defined during the Program implementation. The pilots will seek to validate low-cost wastewater treatment technologies for rural areas with sewer systems, manageable for APR. Innovative options will be developed that will differ from each other and include NBS, such as wetlands or vermi-composting filters, as well as seek to be energy efficient. The effluents produced by the pilot plants will be reused in a circular economy scheme. Among the treatment technologies to be evaluated could be construction by-products with water reuse in ornamental irrigation, physical-chemical process and flotation BlueCon technology, vermifilter, aerated lagoons and activated sludge plant.

RA3. Building climate resilience through green and gray solutions

Construction and rehabilitation of irrigation works in rural areas. It includes the following types of interventions:

- (i) Construction of new primary irrigation canals. It includes works/activities such as earthmoving, and civil works for the coated canals.
- (ii) Rehabilitation and modernization of existing primary irrigation canals to recover the original capacity of the canal and optimize water conduction systems to reduce water losses and ensure more reliable water availability. It includes works/activities such as the replacement and/or cleaning of masonry, the repair of distribution works and rehabilitation of gates.
- (iii) Rehabilitation of small storage reservoirs¹⁸ so that they can capture runoff and reduce peak river flows during the rainy season, making systems more adaptable to changing climatic conditions. According to the Chiles's regulatory framework, small reservoirs are understood as those that have a maximum wall height greater than 5m and less than 15m, or a capacity greater than 50,000m3 and less than 1,500,000 m3¹⁹. The reservoirs identified at the moment to be included as part of the Program, estimated 2, have walls of 4m height and a capacity of between 57,000 and 400.00m³. The works to be developed, which do not involve

¹⁸ Defined as artificial works located inside or outside a channel, for water collection, with or without wall above ground level (Decree No. 50/2015, article 1).

¹⁹ Decree No. 50/2015, Title II, Article 12. The height criterion coincides with the definition of small dams included in OP. 4.37.

the expansion of the reservoir but work on the existing vessel, seek to bring the reservoirs to their original state recovered their capacity for water accumulation. They typically include the excavation of dry material from the reservoir basin on its original surface, repair and waterproofing of the wall, replacement of valves.

Construction of hydraulic infrastructure for evacuation and drainage of stormwater in urban areas. It includes the following types of interventions:

- (i) Construction of primary collectors according to the PMALL of each city²⁰. This type of works includes the construction of underground pipes or open concrete channels, as well as construction of drains and design of flood areas in case of extreme floods.
- (ii) Flood warning system, involving the installation of hydrometeorological monitoring stations.

Construction of hydraulic infrastructure for alluvial control and river channel management in urban and rural areas. It includes the following types of interventions:

- (i) Construction of alluvial control works. This type of works includes the construction of upstream pools, retaining walls, meshes to trap coarse material, slope stabilization.
- (ii) Construction of river defenses and regulation and sedimentation works. This type of works includes the widening and recovery of channels, construction of sediment retaining walls and canalizations for conducting flood flows.
- 24. According to the geographical and thematic limits established for the Program described in section 2.1, the civil works will seek to have a territorial scope excluding the support to new investments in rural water supply, sanitation, flood control, and irrigation infrastructure on international waterways, as well as to the expansion or alterations of such schemes in a way that would adversely impact the quantity or quality of water flows to riparian countries (See paragraphs 8 and 10, and Annex 2). In relation to the latter, it should be noted that DLI9 seeks to encourage DOH works to be carried out in a strategic and coordinated manner, contributing to the implementation of the PERHCs to be developed in the selected basins. To this end, it is expected that at least 30% of the DOH's investment will be used to cover the investment needs identified in the basin plans.
- 25. All activities that are considered to have high²¹ negative impacts on the environment and/or affected people have been excluded from the Program (and will be excluded during implementation). Among others, the Program will not support the financing of: (i) new works, expansion or rehabilitation of large dams/reservoirs as defined in WB OP/BP 4.37 or infrastructure associated with or dependent on them²²; (ii) new works or expansion of small reservoirs as defined

²⁰ The existing PMALLs are published on the DOH website

⁽https://doh.mop.gob.cl/productosyservicios/Paginas/PlanesMaestros.aspx). According to Law No. 19.525/1997 the MOP, through the DOH, is in charge of developing the PMALLs (Article 2), which defines what constitutes the primary network (surface and underground pathways that conduct or control the city's primary runoff – MOP and MMA, 2017, p. 41). The rest of the networks by exclusion are considered secondary networks and are in charge of the Ministry of Housing and Urban Development. It should be noted that the master plans, must be approved by supreme decree signed by the Ministers of Public Works and Housing and Urban Planning (Article 2).

²¹ Refers to significant negative impacts that may affect people or environment (WB, 2020).

²² For example, the construction of the irrigations channels associated to the Embalse Empedrado Project.

in WB OP/BP 4. 37 of the WB; (iii) new sewage treatment plants or the expansion or rehabilitation of existing plants that involve significant impacts due to their size, location or associated processes; (iv) expansion of sewage treatment plants that are generating environmental liabilities during operation; (v) works requiring land acquisition that involve large-scale physical and/or economic displacement, or restrictions on land or resource use that have significant adverse impacts, that is, high impacts.

- 26. In addition, in accordance with the geographic and thematic boundaries established for the Program described in section 2.1, physical interventions will seek to be territorial in scope with limitations on transboundary waters. Support for investments in any new rural water supply, sanitation, flood control, and irrigation infrastructure in international waterways, as well as the expansion or modification of such schemes in a way that would adversely affect the quantity or quality of water flows to other riparian countries, will be excluded.
- 27. If payments for prior result are considered (prior results to the date of the legal agreement for the PfroR Financing), ²³ the activities must comply with the provisions of the existing E&S systems that are applicable to the Program as described in Section 4, the E&S criteria applicable to all PforR as defined in the Bank's Policy and Directive for PforR, and with the requirements and actions defined for this Program in Section 5. As a general criterion, no activity should have the potential to generate high negative E&S impacts. For this, in the case of activities involving civil works, the corresponding tender documents must contain E&S requirements aimed at mitigating the E&S risks and impacts expected as a result of these. During the Program implementation, the compliance of each of the works submitted to be considered for payments for previous results, and those that are deemed not to comply with the forecasts of the existing E&S systems that are applicable to the Program, the E&S criteria applicable to all PforR according to the Bank's Policy and Directive for PforR, must be evaluated, and with the requirements and actions defined for this Program, they may not be eligible for financing under the Program and accounting within the respective DIL. Annex 5 includes guidelines for E&S compliance assessment.

3. Description of the expected environmental and social effects of the Program: benefits, adverse impacts and risks

28. This section presents an analysis of the benefits, adverse impacts and E&S risks identified for the Program, considering the different result areas and the activities to be carried out in each of them.

3.1. Program benefits

29. **The Program is expected to yield a variety of environmental and social benefits.** In general terms, the following positive impacts have been identified:

(i) Positive impacts on water resources governance at national and basin levels through institutional strengthening and sector planning (RA1). This is sought through the strengthening of the national water authority and tools such as the Public Water Registry and monitoring networks to improve the management and quality of public information, as well as its availability by citizens. For its part, the development of a National Water Security

²³ This refers to payments on account of the DLIs met by the Borrower between the date of concept review and the date of the legal agreement for the PfroR Financing, in accordance with the provisions of paragraph 15 of the WB Directive for PforR.

- Policy, as well as the PERHC, will allow the establishment of strategies to address the main water security problems.
- (ii) Positive impacts on the governance of water resources in the selected basins, strengthening transparency and improving the participation of stakeholder groups, as well as conflict resolution through the implementation of a participatory model of water resources management in the selected basins (RA1). The creation of river basin working groups in selected basins will allow for representation of key stakeholders from the public and private sectors of the basins in the planning and management of water resources, including services and agencies of national and municipal government, civil society, private sector, and academia. Strengthening IWRM will enable more efficient, equitable and sustainable development and management of water resources in the long term. It will make it possible to reconcile environmental, economic, and social interests, to coordinate the multiple interventions on water.
- (i) Reduction of water loss due to ageing rural drinking water infrastructure (RA2). The rehabilitation works of the rural drinking water infrastructure will correct water losses in existing networks, of relevance in the scenario of water scarcity faced by Chile (WB, 2021; WRI, 2023).
- (ii) Reduction of gaps in access to rural drinking water (RA2). The Program is expected to benefit at least 30,000 people with access to new drinking water services or rehabilitated services managed in a safe manner (availability, quality, and access). This is significant considering that only 41% of the semi-concentrated localities of the country have rural drinking water supply coverage. Still 150,000 people in semi-concentrated rural localities lack adequate water services, being supplied with water through unsafe sources such as tankers, streams or bodies of water, or other sources, and it is estimated that another 700,000 people face inadequate access to drinking water (WB, 2021).
- (iii) Provision of low-cost alternatives to address wastewater treatment intended for implementation in isolated or sparsely populated rural locations. The implementation of limited-scale pilots for the rehabilitation, improvement and/or expansion of existing WWTP will allow the validation of treatment technologies adapted to different geographical contexts where it is difficult to build and/or operate conventional solutions. This will also allow lessons to be drawn so that the MOP has a better capacity to respond to these situations beyond the 3 pilots included as part of the Program.
- (iv) Positive impacts on the health of the rural population that will have access to new safely managed drinking water services and rehabilitation of existing services that will seek to improve the quality and continuity of the drinking water supply service (RA2). The beneficiary population, which largely includes the most vulnerable rural population with less access to basic services (including education and health), will be able to see their health conditions improved, through the reduction of water-borne diseases, in addition to the possibility of increasing hygiene practices.
- (v) Increased resilience of the rural population, especially the most vulnerable populations, to future crisis events (RA2), such as the COVID-19 pandemic, due to the expansion of safely managed water services.
- (vi) Indirect positive impact on increasing productivity and improving the quality of life of the rural population benefiting from new or rehabilitated drinking water services (RA2). The beneficiary rural population could see improved productivity and quality of life. This is associated with the reduction of the time spent fetching and storing water at home, being

able to use that time for work, study, leisure, and other activities. It could also result in savings in medical expenses for preventable hygiene-related diseases and in the purchase of water for domestic use and drinking.

- (vii) Reduction of the risks of urban flooding and drought with a positive impact on the health and safety of people and on economic activities (RA3). The Program foresees at least 1,100,000 people at lower risk of flooding due to the construction of hydraulic infrastructure for the evaluation and drainage of stormwater or alluvial control and channel management to deal with urban flooding and control floods and alluvial events that may put homes at risk, infrastructure or land. For its part, it is estimated that the construction or rehabilitation of irrigation works will improve or incorporate irrigation in approximately 44,000 ha, involving 1,300 beneficiaries, allowing an increase in productivity and improvement in competitiveness and integration into the market through access to irrigation systems.
- (viii) Increased resilience of water infrastructure due to the integration of NBS to cope with flood, drought, and water scarcity (RA3) risks. Numerous studies suggest that green infrastructure is more flexible and resilient to climate change than gray infrastructure (Brower et al, 2019, p. 16).
- (ix) Improvements in biodiversity conservation and the provision of ecosystem services due to the incorporation of NBS for flood and flood control. While the projects and solutions to be incorporated will be defined during implementation, as appropriate, they may provide new habitats for species of flora and fauna, or restore existing ones (e.g., through wetland restoration or incorporation of sustainable agricultural practices).
- (x) Benefits derived from water care in terms of positive impacts on the intangible heritage value of water (RA1, RA2, RA3). The IWRM approach promoted by the Program can help integrate different stakeholder values, including the diversity of meanings and values of water (UN, 2021).
- (xi) **Employment generation (RA1, RA2, RA3**). In particular, the direct generation of employment is expected mainly in relation to the labor required for the physical interventions of the Program in its three RAs, and indirectly through the improvements for productive activities derived from the works associated with RA3 as mentioned above.
- (xii) **Reduction of gender gaps**. In particular, the RA1 seeks to promote the more systematic participation of women in the river basin working groups, especially in decision-making. RA2 also seeks to adopt measures that promote increased participation of women in decision-making within APRs²⁴. As part of the physical interventions to be carried out under the Program, the MOP will apply a 15% female staff quota for contractors, with the aim of increasing female participation in traditionally male-dominated roles and creating better economic opportunities.
- (xiii) As an overall benefit of the Program in the long term, it is expected to increase water security in the face of climate change (RA1, RA2, RA3). This is mainly based on the PERHC to be prepared and implemented in the selected basins where the Basin Committees are formed, and considering that, in accordance with the provisions of the Framework Law on Climate Change, these plans must conclude in the definition of specific actions to face the adverse effects of climate change on water resources, to safeguard water security.

²⁴ Even though women play a fundamental role in water use, conservation and management often lack authority to make decisions in community water management.

3.2. Risks and Negative Impacts

30. Various risks and potential negative E&S impacts associated with the Program's activities have been identified and are detailed in the following sections.

3.2.1. Negative environmental risks and impacts

- (i) Temporary impact on water quality during the execution of civil works (construction/rehabilitation) and their operation or maintenance (RA1, RA2, RA3). Among these affectations have been identified in general terms those generated by the conditioning of the sectors to be intervened (including the removal of vegetation or materials, demolition or dismantling of existing infrastructure); the removal of dry bottom material from reservoirs or river channels (including the removal of vegetation or materials, demolition or dismantling of existing infrastructure); the temporary diversion of water courses for the execution of certain works. The risks of surface or groundwater contamination are discussed in the following points (e.g. associated with inadequate management of non-hazardous and hazardous materials/waste, environmental liabilities, etc.).
- (ii) Temporary impact on air quality during the execution of civil works (construction/rehabilitation) and their operation or maintenance (RA1, RA2, RA3). Among these affectations have been identified in general terms those generated by the movement of machinery; the movement of earth and construction materials; the conditioning of the sectors to be intervened (including the demolition or dismantling of existing infrastructure, such as buildings, pavements).
- (iii) Risk of environmental contamination during the execution of civil works (construction/rehabilitation) and their operation or maintenance (RA1, RA2, RA3). These impacts have generally identified risks associated with the improper generation, handling, storage, transport and disposal of non-hazardous materials/wastes and hazardous materials/wastes (including e-waste management in relation to RA1²⁵); generation and discharge of wastewater from civil works; generation and disposal of sludge from the operation of water supply and sanitation works.
- (iv) **Impacts** natural habitats²⁶ during the execution of civil works (construction/rehabilitation) and their operation or maintenance (RA3). Among these affectations have been identified the modification of aquatic habitats (courses and bodies of water) and the modification of riparian areas associated with the objectives of the works themselves, such as in the case of the rehabilitation of reservoirs, construction of hydraulic infrastructure for alluvial control and management of channels, construction of river defenses and works of regulation and sedimentation. Depending on the type of works and their location, processes of degradation or fragmentation of natural habitats could be generated or reinforced.

²⁵ It should be noted that Chile does not currently have a specific regulation in this area. It is under development within the framework of Law No. 20.920/2016 (Extended Producer Responsibility Law or REP Law) that establishes electrical and electronic equipment as priorities. At the moment there is a preliminary draft regulation approved in 2022: https://rechile.mma.gob.cl/pilas-y-aparatos-electricos-y-electronicos/

²⁶ It should be noted that, as detailed in the Annex 4, have been excluded from the Programme works that may be located in, or affect, protected areas (e.g., protected natural areas, priority sites for conservation, protected wetlands, glaciers).

- (v) Risks and impacts on species of flora and fauna, including protected species, during the execution of civil works (construction/rehabilitation) and their operation (RA2, RA3). Among these affectations have been identified in general terms those associated with the scaring away of fauna, the need to relocate species of flora and fauna, illegal hunting, the cutting of protected species, the elimination of riparian vegetation associated for example to the tasks necessary to execute hydraulic infrastructure of alluvial control and management of river channels²⁷, as well as indirect impacts due to habitat degradation and fragmentation.
- (vi) Risks of natural hazards during the construction or rehabilitation of planned civil works (RA2, RA3). Particularly considering the high seismicity²⁸ that Chile presents, as well as risks of volcanic eruptions and hydrometeorological events that can trigger floods, floods and mass removal processes.
- (vii) Potential contribution to the impact of aquifer recharge due to the execution of new groundwater extraction wells associated with the construction and rehabilitation of APRs (RA2). Although water extraction by APRs is very small-scale compared to other water uses and Water Use Rights (DAA)²⁹ permits are regulated, the over-granting of these water rights over aquifers is a problem present in some Chile's basins, including some of the basins to be intervened in the RA2 (e.g. Maipo), which may contribute, among other causes, to greater pressures on groundwater (OECD, 2018, p. 26-27). It should be noted that this is sought to be mitigated with the activities planned as part of the Program, through the strengthening of the Public Water Registry of the DGA and the expansion of water monitoring networks.
- (viii) Environmental risks and impacts that could result from inadequate management of environmental passives that could be associated to existing works (AR2 and AR3). This type of risks and impacts could be associated for example to the rehabilitation works of small reservoirs or primary irrigation channels. It is relevant to mention that wastewater treatments plants expansion has been excluded.
- (ix) Environmental risks and impacts that could arise from inadequate environmental management during the operation and maintenance of civil works (RA2, RA3) due to the limited capacity of operators. The RA2's WWS works are, after its construction, operated by committees or cooperatives of rural WWS³⁰. The irrigation works to be implemented as part of the RA3 will be transferred after their construction to the OUA³¹ for their operation. As indicated by MOP, depending on the case, these operators may not have the necessary

²⁷ It should be noted that no effects are expected on aquatic habitats as the interventions are projected on dry streams that are activated by specific events.

²⁸ According to the National Seismological Center of the University of Chile, during 2022 7.273 earthquakes were registered, of which 288 were warned by the populationandthat is, they had a magnitude equal to or greater than 3.7. https://www.csn.uchile.cl/durante-2022-se-registraron-7-273-sismos-a-lo-largo-del-pais/

²⁹ According to the provisions of the Water Code, Decree with Force of Law No. 1.122/1981.

³⁰ In accordance with the provisions of Law No. 20,998/1997, article 1. A WWS Committee is a functional community organization, constituted and organized under the respective laws, on Neighborhood Boards (*Juntas de Vecinos*) and other community organizations, which is granted a rural health service license (Article 2, subparagraph b). An WWS Cooperative is a person Legal Non-Profit constituted and governed by the General Law of Cooperatives, holder of a sanitary service license rural (Article 2, item e).

³¹ In accordance with the provisions of the Water Code, Title III, OUA are private, non-profit entities with legal status granted by the DGA. They are responsible for the collection, conduction and distribution of the water to which their owners are entitled. In natural channels, they are organized into Surveillance Boards (Juntas de Vigilancia), and in artificial channels (canals, reservoirs) they are organized into Associations of Canalists (Asociaciones de Canalistas) or Water Communities (Comunidades de Agua).

- capabilities for which specific training is foreseen as part of the Program on a periodic and permanent basis for operators.
- (x) Insufficient capacity to monitor and supervise the civil works associated with the RA2 implemented by the SSR Department, both during its construction and its operation. This considers, as developed in section 4.1.1, that the SSR is a recently created area, which does not have a specific area that addresses E&S issues, and is still in the process of forming its team, including the hiring of personnel for the monitoring and inspection of work contracts.

3.2.2. Negative social risks and impacts

- (i) Temporary effects on the health and safety of local communities during the execution of civil works (construction/rehabilitation) (RA1, RA2, RA3). Among these affectations have been identified in general terms: nuisances related to the generation of dust, vibrations, noise and odors; nuisance caused to pedestrian traffic and local traffic; risks of exposure to hazardous materials/wastes; community risks associated with the influx of labor for the execution of physical interventions, considering sexual exploitation and abuse, and sexual harassment.
- (ii) Effects on the health and safety of workers during the execution of civil works (construction/rehabilitation) and their operation (RA1, RA2, RA3). Among these, temporary effects related to the following have been identified: nuisances related to the generation of dust, vibrations, noise, and odors; risks of exposure to hazardous materials/waste; risk of exposure to infectious diseases. Labor accident risks that could result in physical impacts whether temporary or permanent for workers.
- (iii) Temporary affectation of public service infrastructure during the execution of civil works (construction/rehabilitation) (RA1, RA2, RA3). There could be temporary interruptions of roads and temporary cuts of public services (electricity, water, gas, etc.) that are crossed by the works; including the need to relocate service networks.
- (iv) Risk of inadequate management of cultural heritage protection measures and management of chance finds during the construction or rehabilitation of planned civil works (RA1, RA2, RA3). This is particularly considering the territorial dispersion of the planned works and their spatial scope.
- (v) Risk of exclusion of vulnerable population in rural areas, who, due to their low incomes, may not be able to pay the tariffs applied to the new drinking water supply services (RA2). This risk will be mitigated as necessary by the subsidy for the consumption of drinking water³², currently in application, in addition to having tariffs based on operational and administrative costs³³.
- (vi) Land acquisition leading to temporary or permanent physical and/or economic displacement, or restrictions on the use of land or resources that have adverse effects on local livelihoods (RA2, RA3). This is particularly considering that some of the works may require the acquisition of land for their implementation and to meet their own objectives such as minimizing the exposure of the population to alluvial risks. The social and economic

³² The social tariff ("tarifa social") is regulated by Law No. 18.778/1989 that establishes the subsidy to the payment of drinking water consumption.

³³ The WWS rates are established and supervised by the Superintendence of WWS (*Superintendencia de Servicios Sanitarios*) (see details in Section 4.1.1.6).

- impacts from land acquisition could affect both people who have legal rights to land or resource use and people who do not have such rights.
- (vii) Temporary or permanent impact on formal and informal economic activities during the works (RA2, RA3). This is if the works cause temporary displacement of economic activities (commercial premises, agricultural activities, etc.) for example by temporary affectation of access to them (RA2, RA3) or land acquisitions that result in permanent economic displacement (AR3).
- (viii) Risks of social conflict due to changes in the management of water resources supported by the Program (RA1 and RA2). If not properly managed, the Program could generate or exacerbate social conflicts, including conflicts associated with the representativeness of social groups, distributive equity of their benefits and cultural sensitivities. In particular, a specific subset of water users, predominantly the OUA (or "Juntas de Vigilancia"), have expressed reservations about the Chilean Government's new approach to basin management.
- (ix) Risk of exclusion of potential Program's beneficiaries, including Indigenous Peoples and other vulnerable population, due to the failure to implement adequate participatory processes and consultation with all stakeholders (RA1, RA2, RA3). This considers not only physical interventions but also activities that involve the design of water resources management plans, policies and river basin working groups, in an accessible, culturally appropriate and inclusive manner, ensuring adequate participation and consultation with Indigenous Peoples and members of other minority and marginalized social groups to avoid discrimination in all its forms, including nationality.
- 31. The identified E&S risks and impacts are expected to be mitigated through the E&S management systems that apply to the Program activities, that allow the implementation of measures required per national regulations and commonly applied by the MOP in civil works, the actions that are identified as a result of the ESSA, and with the activities and interventions to be executed as part of the Program. In relation to the latter, it is mentioned, for example, the mitigation of the potential impact on aquifer recharge due to the construction of new groundwater extraction wells associated with the construction and rehabilitation of rural drinking water systems (RA2) through the strengthening of the Public Water Registry and the DGA's water monitoring networks (RA1); the reduction of risks associated with floods, floods and mass removal processes, which is sought to be addressed with the hydraulic works to be implemented as part of the RA3. On the other hand, the strengthening of the river basin governance structure in selected basins (RA1) is expected to help prevent and minimize the risks of social conflict. Finally, the implementation of participatory and consultation processes with all actors that will be implemented not only in relation to civil works but also in terms of activities that involve the design of plans, policies, and new institutions for water management at the basin level, will also contribute to preventing and minimizing the risk of social conflict.

4. Assessment of the Borrower's environmental and social management systems that are relevant to the Program

32. This section presents the result of the evaluation of the Borrower's E&S management systems that are relevant to the Program. First, the main elements of the systems are described, considering the institutional, legal and regulatory framework for the management of risks and E&S impacts that may be applicable to the Program, as well as the associated practices and

performance history according to each of the institutions involved, this considering the basic principles and planning elements defined in Operational Policy OP107 and Directive D107 for PforR Financing. Second, the evaluation result for each principle is presented, considering its alignment with the basic principles, and planning elements relevant to the Program.

33. For the purposes of this evaluation, it is relevant to consider that Chile has a republican, democratic and representative political system, with a presidential government. The Political Constitution of the Republic of Chile³⁴ establishes that, being a unitary country, the State Administration is functionally and territorially deconcentrated³⁵, which is reflected in the organization of the different Ministries of Government or Services, which have a central level and a Regional Ministerial Secretariat (SEREMI) in each of the 16 regions into which the country is divided³⁶.

4.1. Existing environmental and social management systems

4.1.1. Environmental management systems

34. This section presents the analysis of environmental management systems. It should be noted that some aspects related to social management are strongly linked to environmental management and therefore are addressed comprehensively in the following sections, other specific aspects of social management are addressed in Section 4.1.2.

4.1.1.1. Chile's Environmental Impact Assessment System (SEIA)

35. Chile has an Environmental Impact Assessment System (Sistema de Evaluación de Impacto Ambiental, SEIA) that is administered by the Environmental Assessment Service (Servicio de Evaluación Ambiental, SEA)³⁷, whose main functions are the implementation of environmental impact assessment procedures and environmental licensing of investment projects. Although the SEIA was created in 1994 with the publication of Law No. 19,300 that established the environmental framework (general bases of the environment) of Chile, the current environmental institutionality has been in force since 2010 since the modification of this environmental framework law³⁸. This amendment created the MMA, in charge of environmental policy and regulation; the SEA in charge of the administration of the SEIA³⁹ through which the Environmental Qualification Resolutions (Resolución de Calificación Ambiental, RCA, environmental license) are

³⁴ Supreme Decree No. 100/2005, Article 3.

³⁵ The administration function is exercised at the national level by the President of the Republic and at the regional level by the Regional Governors who are elected by universal suffrage. Additionally, there are 56 provinces that are headed by a Provincial Presidential Delegate appointed by the President of the Republic, and locally there are 346 municipalities headed by a Mayor and a Municipal Council elected by universal suffrage.

³⁶ In general terms, each of the central level areas (e.g. the DGOP or the DOH) have their respective regional representation.
³⁷ https://www.sea.gob.cl/

³⁸ Through Law No. 20,417/2010. This regulatory reform is part of the efforts to incorporate Chile into the Organization for Cooperation and Development (OECD) that began in 2007 (MMA, 2016, p. 75). The environmental performance evaluation carried out by the OECD timely recommended addressing the deficiency in environmental institutions (MOP, 2016, p. 10). ³⁹ The SEA's function is not only to administer the SEIA, but also, among others: (i) to standardize criteria, requirements, technical demands and procedures of an environmental nature established by the ministries and other State agencies with environmental competence; (ii) promote and facilitate citizen participation in the evaluation of projects (Law No. 20,400, article 81).

granted⁴⁰; and the Superintendence of the Environment (SMA) in charge of environmental monitoring and control of RCAs and sanctions in case of infractions⁴¹.

- 36. Territorial deconcentration is reflected in the organization of the SEIA and in the environmental monitoring and control carried out by the SMA. In accordance with the provisions of Law No. 19,300, the SEA has 16 Regional Offices. The resolution on the RCA (environmental license) corresponds to the central level (Executive Director of the SEA) in the case of interregional projects or activities (in the sense that they may cause impacts in different regions) or is resolved at the regional level by an Evaluation Commission⁴² of the region where the project or activity will be executed in case the project is not interregional⁴³. In relation to the control of RCAs, those of an interregional nature are in charge of the Audit Division of the SMA, and those of a non-interregional nature are in charge of the Regional Offices of the SMA.
- 37. The SEIA is regulated by Law No. 19.300/1994 and the Regulation of the Environmental Impact Assessment System (RSEIA) ⁴⁴ that establishes in detail the provisions governing the SEIA. These standards set out in detail the E&S evaluation procedure, including, among other aspects, interagency roles and coordination, process timelines, E&S management instruments and their minimum contents, as well as access to information and stakeholder participation, including consultation and consent of indigenous peoples. The SEIA has a digital platform of direct and public access where the complete file of each project is published, as well as the file of participation of interested parties. ⁴⁵
- 38. The projects or activities that must be submitted to the SEIA and obtain a favorable RCA⁴⁶ prior to their execution are clearly identified in the regulatory framework. Law No. 19.300/1994 and the RSEIA specify, through an exhaustive list, the projects or activities that must be submitted to the SEIA⁴⁷ and obtain a favorable RCA prior to their implementation. This list covers practically all productive, infrastructure and service sectors, including those related to the management of water resources and water and sanitation services, although depending on their characteristics. Among others, some of the types of projects that require processing an RCA, according to article 10 of Law No. 19.300/1994 and article 3 of the RSEIA are:
 - Subsection a) Aqueducts, reservoirs or dams and siphons that must be subject to the
 authorization established in article 294 of the Water Code. Dams, drainage, desiccation,
 dredging, defence or alteration, significant, of bodies or natural courses of water (...). In
 particular, the following are cited: aqueducts that conduct more than 2m3 per second or
 0.5m3 per second if they will be located near urban areas; siphons that comply with the

⁴⁰ The RCA is the administrative act that contains the qualification of a project submitted to environmental evaluation, which may be favorable or unfavorable (Law No. 19,300/1994, article 24).

⁴¹ Both the SEA and the SMA are decentralized public services, with legal personality and own assets, subject to the supervision of the President of the Republic through the MMA (Law No. 20,417/2010, article 80, and article 1 of the Second Article). Additionally, by Law No. 20,600/2012, the Environmental Courts were created, as special jurisdictional bodies, subject to the directive, correctional and economic superintendence of the Supreme Court, whose function is to resolve environmental controversies within their jurisdiction and deal with other matters that arise. the law submits to your knowledge (Law No. 20,600, article 1).

⁴² Each Evaluation Commission is chaired by the Mayor of the Region, with the Regional Director of the SEA acting as secretary, and is made up of the SEREMIs of the Environment, Health, Economy, Development and Reconstruction, Energy, Public Works, of Agriculture, Housing and Urban Planning, Transportation and Telecommunications, Mining, and Planning (Law No. 19,300/1994, article 86).

⁴³ Law No. 19,300/1994, article 9.

⁴⁴ Promulgated by Supreme Decree No. 40/2013.

⁴⁵ https://seia.sea.gob.cl/busqueda/buscarProyecto.php

⁴⁶ The RCA is the administrative act that contains the qualification of a project submitted to environmental evaluation, which may be favorable or unfavorable (Law No. 19,300/1994, article 24).

 $^{^{47}}$ Law No. 19,300/1994, article 10, and Supreme Decree No. 40/2013, article 3.

above as long as they cross natural channels; reservoirs of capacity equal to or greater than 50,000m3 or with a wall equal to or greater than 5m; dredging of materials from inland water bodies involving an amount equal to or greater than 20,000 or 50,000 ^{m3} according to the region of the country; Defense or alteration of a watercourse that mobilizes an amount equal to or greater than 50,000m³ or 100,000m³ of materials depending on the region of the country. In this sense, some of the works of construction of ⁴⁸ irrigation canals, construction of alluvial control works, construction of river defenses and works of regulation and sedimentation that are part of the RA3 (as long as they are not excluded based on the Exclusion List included in Annex 4), according to their characteristics, may require an RCA.

- Subsection i) Projects or activities involving the extraction of aggregates or clay from a body or watercourse when the total volume of material to be removed is equal to or greater than 20,000 m³ or 50,000 m³ depending on the region of the country. In this sense, some of the works of alluvial control and management of channels of the RA3 (if they are not excluded based on the Exclusion List) could require the processing of an RCA.
- Sub-paragraph (o) Environmental sanitation projects: domestic water treatment plants. In that sense, pilots to be developed in existing WWTP (if they are not excluded activities based on the Exclusion List) could require the processing of an RCA.

The SEIA also provides for the possibility for project holders to carry out a consultation of submission relevance ("consulta de pertinencia de ingreso") so that the SEA can decide whether a project, or its modification, should be submitted to the SEIA. The MOP has indicated that, through the DGOP (legal representative of the MOP before the SEIA), the different areas of the agency channel these consultations as necessary. It should be noted that, according to the consultation carried out by the agency, the rehabilitation works of irrigation channels and existing reservoirs that retain their original surface, do not need to be evaluated before the SEIA.⁴⁹

As indicated by the MOP, some of the works pre-identified for financing by the Program have already obtained their favorable RCA.

39. It should be noted that some Program's civil works are not required to obtain an RCA, in such cases they apply the E&S management instruments established by MOP that are detailed in Section 4.1.14. Due to their typology, RA1 interventions are not expected to require an RCA⁵⁰. In the case of RA2 interventions, those associated with the construction of new rural drinking water systems or the rehabilitation of existing systems are not expected to require an RCA, this because each system seeks to serve a population of less than 10,000 inhabitants⁵¹. Finally, as for the interventions of the RA3 will depend on the characteristics of the works (for example, volumes of materials to be mobilized).

The table below summarizes paragraphs 36 and 37.

Table 3. Types of physical interventions planned for the Program and requirement of RCA

⁴⁸ Supreme Decree No. 40/2013, Article 3, paragraphs a.1, a.3 and a.4; and Water Code, article 294.

⁴⁹ Law No. 19,300/1994, article 26.

⁵⁰ This includes the construction of the water quality laboratory since it is expected to have an estimated surface area of 350 m2. According to the limit established in Supreme Decree No. 40/2013, article 3, subsection g, only buildings intended for scientific purposes with a constructed area of more than 5,000 m2 require processing an RCA.

⁵¹ According to the limit established in Supreme Decree No. 40/2013, article 3, subsection o, only drinking water supply projects that serve a population of more than 10,000 inhabitants require processing an RCA.

| Results Area | Type of civil works | RCA requirement ⁵² |
|---|---|-------------------------------|
| RA1. Strengthening institutional capacity for integrated water resources management at the national and basin levels. | Implementation of the digital strategy | No |
| | Expansion of water monitoring networks | No |
| | Construction of water quality analysis laboratory | No |
| A2. Enhancing the ustainability of rural VWS service providers through astitutional trengthening, while ontinuing to close ccess gaps | Construction of rural drinking water systems | No |
| | Rehabilitation of existing rural drinking water systems | No |
| | Rehabilitation, improvement and/or | According to the |
| | expansion of existing WWTP | characteristics of the |
| | | project |
| RA3. Building climate | Construction of new irrigation canals | According to the |
| resilience through green and gray solutions | | characteristics of the |
| | | project |
| | Rehabilitation of existing irrigation canals | No |
| | Rehabilitation of small reservoirs | No |
| | Construction of primary collectors for | According to the |
| | stormwater evacuation | characteristics of the |
| | | project |
| | Flood Warning System | No |
| | Construction of alluvial control works | According to the |
| | | characteristics of the |
| | | project |
| | Construction of river defenses and | According to the |
| | regulation and sedimentation works | characteristics of the |
| | | project |

40. It should be noted that the SEIA contemplates that significant modifications of a project or activity must also be submitted to the E&S evaluation procedure and obtain a new RCA on the modifications⁵³. The RSEIA understands significant modification when the parts, works or actions tending to intervene or complement the project or activity: (a) constitute a project or activity that must be submitted to the SEIA; (b) substantially modify the extent, magnitude or duration of the environmental impacts of the project or activity; or, (c) that the mitigation, remediation and compensation measures of an environmentally qualified project or activity are substantially

⁵² This has been identified based on the project typologies listed in Law No. 19,300 and Supreme Decree No. 40 and what is indicated by the MOP. During the implementation of the Program, the projects that require RCA will be identified case by case, based on the application procedures in MOP and the SEIA that allow determining the origin of entry to the SEIA and processing of a RCA.

⁵³ Law No. 19,300/1994, article 2, paragraph i; and article 11 ter.

- modified⁵⁴. This is analyzed by the areas of the MOP and, if necessary, a query of submission to the SEIA is carried out as detailed in paragraph 36.
- 41. The SEIA foresees two types of E&S evaluation instruments that project proponents must present to obtain the RCA, this based on the potential impacts of the project. These instruments are the Environmental Impact Study (Estudio de Impacto Ambiental, EIA) and the Declaration of Environmental Impact (Declaración de Impacto Ambiental, DIA). Projects that generate or present at least one of the effects, characteristics or circumstances (efectos, características, o circunstancias, ECC)⁵⁵ defined in article 11 of Law No. 19,300/1994 must submit an EIA: (i) risk to the health of the population, due to the quantity and quality of effluents, emissions or waste; (ii) significant adverse effects on the quantity and quality of renewable natural resources, including soil, water and air; (iii) resettlement of human communities, or significant alteration of the life systems and customs of human groups; (iv) location in or near populations⁵⁶, resources and protected areas, priority sites for conservation, protected wetlands, glaciers and areas with value for astronomical observation for scientific research purposes, likely to be affected, as well as the environmental value of the territory in which it is intended to be located; (v) significant alteration, in terms of magnitude or duration, of the landscape or tourist value of an area; and (vi) alteration of monuments, sites with anthropological, archaeological, historical value and, in general, belonging to cultural heritage. The rest of the projects that are obliged to obtain an RCA but do not include such ECC must submit a DIA. The SEIA has specific guidelines⁵⁷ to address each of the ECC, which include, among other aspects, the scope that should be given to the diagnosis and evaluation of impacts, including methodologies and criteria to evaluate the generation or presence of the effect, as well as criteria for mitigation, repair or compensation measures to be adopted. It should be noted that the MOP has prioritized the inclusion within the Program of works that do not generate the ECC previously indicated. Beyond this, it is estimated that some works to be included as part of the Program may require an EIA, for example, because, due to their own characteristics, such as minimizing the exposure of the population to alluvial risks, they imply the involuntary resettlement of the population. Based on the exclusion criteria detailed in Annex 4 and the prevention and mitigation measures typically applied by the MOP, these works are not expected to have high risks.
- 42. The standards define in detail the contents that both the EIA and the DIA⁵⁸ must have, addressing the aspects typically included in an E&S risk and impact assessment. It also includes a compliance plan for applicable regulations and measures to avoid, minimize, repair, restore or compensate for potential negative impacts of the project. It should be noted that, although the DIA is a simplified study, it must also demonstrate the absence of ECCs, propose the management measures to be adopted and detail the compliance plan with the applicable regulations.
- 43. The SEIA includes the participation of other agencies of the GoC and functions as a one-stop window system for permits or pronouncements of sectoral environmental (*Permisos Ambientales Sectoriales*, PAS). The agencies of the State Administration with Environmental Competence (*Organismos de la Administración del Estado con Competencia Ambiental*, OAECA) participate in the review process of the EIA or the DIA, and a report is also required from the respective Regional Government and Municipality, as appropriate, on the territorial compatibility

⁵⁴ Supreme Decree No. 40/2013, article 2, subsection g.

⁵⁵ Supreme Decree No. 40/2013 defines in detail, for each of the ECCs, a set of variables and criteria that specify their scope (Supreme Decree No. 40/2013, Title II, articles 5 to 11).

⁵⁶ The RSEIA specifies that the concept of protected population refers to indigenous peoples (human groups of indigenous peoples), regardless of their organization (article 8).

⁵⁷ https://sea.gob.cl/guias-relacionadas-al-articulo-11-de-la-ley-ndeg19300

⁵⁸ These contents are provided for at a more general level in Law No. 19,300/1994 and with detail in the RSEIA.

of the project presented. The permits or pronouncements that, in accordance with the regulations in force, must or may be issued by State agencies regarding projects or activities subject to the SEIA are granted through this system⁵⁹. The SEIA integrates 50 PAS, corresponding 20 of them to PAS of solely environmental content and 30 to PAS of mixed content (with environmental and sectoral or non-environmental content) ⁶⁰. The PAS of solely environmental content are processed entirely within the framework of the SEIA, so a favorable RCA provides for its granting by the corresponding OAECA, under the conditions or requirements expressed in the RCA. In the case of mixed PAS, only the environmental contents are analyzed within the SEIA. In the case of projects or activities that do not require the processing of an RCA, the PAS are processed before each corresponding body, this may be in charge of the MOP or the contractor.

- 44. The RCA sets out in detail the rules, permits, conditions and requirements that must be met during all stages of the project. This document also includes the technical considerations that underpin the resolution; the observations made by the community; the mitigation, compensation, or repair measures to be executed; the measurements, analyses and other data that must be presented as part of the monitoring and control of the permanent compliance with the rules, conditions and measures established.
- 45. Since 2012, the SEA has published numerous mandatory E&S assessment guides and instructions⁶¹. The objective of these tools is to standardize criteria or technical requirements⁶². The main recipients are the owners of projects or activities, consultants who carry out studies or implement participatory processes, the agencies that intervene in the SEIA, or the general public. The guides⁶³ and instructions⁶⁴ are published on the official website of the SEA. They address subjects such as: description of project or activity of different typologies, including guidelines on prediction and evaluation of its negative impacts; assessment of ECCs defining significant impacts; procedures and methodologies for describing, characterizing and analyzing areas of influence; application of rules or regulations of other bodies in the SEIA; contents and procedures established for each of the PAS; and stakeholder engagement. The instructions develop, among other topics, instructions for the application of specific articles of the RSEIA, for the implementation and documentation of stakeholder participation, and for the control of the adequacy of information.
- 46. In relation to the implementation and compliance capacity of the SEA, it should be noted that the agency publishes a detailed statistical report monthly on the management of projects entered the system. As a guideline of the activity of the SEIA and as indicated in the last published report, it is observed that in the last 12 months (May 2022 to June 2023) a total of 587 projects entered the SEIA, 252 of them having been approved (SEA, 2023, p. 39), during the month of June 2023 a total of 403 projects were in the process of evaluation, having entered during that month 39 projects for evaluation, and having approved 17 projects and rejected 2 (SEA, 2023, p. 5)⁶⁵. In relation to the deadlines for the issuance of RCAs, the report indicates that the average number of working days used for projects that process under a DIA EIA is 167, and 77 days for projects

⁵⁹ Law No. 19,300/1994, article 8; MMA, 2016, p. 85.

⁶⁰ Supreme Decree No. 40/2013, Title VII (see further details in Section 4.1.1.5, section on specific permits and authorizations.

⁶¹ Which is established by specific Exempt Resolutions of the Executive Director of the organization, which are published along with the guides.

⁶² In accordance with the provisions of Law No. 19,300/1994, article 81, subsection d.

⁶³ https://www.sea.gob.cl/documentacion/guias-evaluacion-impacto-ambiental

⁶⁴ https://www.sea.gob.cl/documentacion/instructivos-para-evaluacion-impacto-ambiental

⁶⁵ According to a study carried out by the MMA, the history of projects submitted to the SEIA between 1992 and 2015 amounts to 21,849 projects (95% corresponding to DIA) with a total approval rate of 67.7% (MMA, 2016, p. 95).

with DIA. It should be noted that the standard establishes the term in 120 days in the cases of an EIA and 60 days for an EIS, extendable to 60 and 30 additional days respectively.⁶⁶

4.1.1.2. Supervision of the Superintendence of the Environment

- 47. The supervision of investment projects is clearly identified and defined in the regulatory framework⁶⁷, with the Superintendence of the Environment (SMA) being responsible⁶⁸. The SMA is in charge of executing, organizing and coordinating the supervision and sanction of the E&A management instruments provided for by Law 19.300/1994, including the monitoring and supervision of the RCAs granted by the SEA, the Emission Standards, as well as the Quality Standards and Prevention and/or Environmental Decontamination Plans, among others. Regarding the decentralization of management, the control of interregional RCAs is carried out by the central level of the SMA (Division of Environmental Control and Compliance), and the control of non-interregional RCAs is carried out by the Regional Offices of the SMA. The rules establish the control mechanisms⁶⁹ as well as the applicable sanctions⁷⁰. The inspection can be carried out directly by the SMA, or through the contracting of certified third parties (accredited technical entities)⁷¹ or by the sectoral bodies competent in environmental control subject to the control criteria established by the SMA.⁷²
- 48. The norms that regulate the SEIA define in detail both the contents and procedures for the follow-up and monitoring that the projects or activities must carry out, as well as the supervision or follow-up carried out by the SMA. In the first case, Law No. 19.300/1994 and the RSEIA provide that the EIA must include a follow-up plan for the monitoring of the environmental variables that give rise to the ECCs⁷³. For DIA, the proponent of the project or activity is expected to include voluntary environmental commitments (not required by current standards), for which they must indicate how they are verified and define compliance indicators⁷⁴. Additionally, for both types of instruments, the presentation of a compliance plan with the applicable environmental regulations is foreseen. These commitments are reflected in the approving RCA, which includes, among other contents, the detail of the measurements, analysis or other data that the holders must provide for the monitoring and inspection of the licenses. The SMA regulates in detail the content and form of presentation of information (called Environmental Monitoring Reports) for monitoring and supervision.⁷⁵

⁶⁶ Law No. 19,300/1994; articles 15, 16, 18 and 19.

⁶⁷ Law No. 19,300/1994; and Organic Law No. 20,417/2010.

⁶⁸ https://portal.sma.gob.cl/. It should be noted that the creation of the SMA responds to the need to correct deficiencies in the inspection and sanction system, such as dispersion or duplication in these functions, which generated excessive costs, absence of described and publicly known programs and methodologies, sanctioning emphasis. and not compliance in the actions of the services in charge of these actions and limited coordination in the context of the SEIA (MOP, 2016, p. 11).

⁶⁹ SMA Exempt Resolution No. 844/2012, SMA Exempt Resolution No. 223/2015.

⁷⁰ Law No. 20.417/2010.

⁷¹ According to Law No. 20.41 7, the SMA may hire third parties (duly accredited) to carry out inspection actions. To this end, the SMA manages a registry of accredited natural or legal persons who carry out evaluation and certification of conformity of the RCA to evaluate compliance with environmental regulations and authorization conditions. This is regulated by DS No. 39/2014 and SMA Exempt Resolution No. 1465/2019.

⁷² Law No. 20,417/2010, article 2 of the second article. These organizations make up the National Environmental Enforcement Network (RENFA), and include, among others: SMA, Council of National Monuments, National Indigenous Development Corporation, National Forestry Corporation, Directorate of Roads, General Directorate of Water, Agricultural and Livestock Service, Undersecretariat of Public Health, Superintendence of Electricity and Fuel, Superintendency of Health Services. https://renfa.sma.gob.cl/

⁷³ Law No. 19,300/1994, article 12, and paragraph 3 of Title VI.

⁷⁴ DS No. 40/2013, article 19, section d.

⁷⁵ SMA Exempt Resolution No. 223/2015.

- 49. The SMA manages a National Environmental Control Information System (Sistema Nacional de Información de Fiscalización Ambiental, Snifa)⁷⁶ of public access and geolocated where the environmental monitoring of the RCA is published. The Snifa publishes the reports presented by the holders, the control actions carried out and their results, as well as a public register of sanctions. Additionally, this system is linked to the files published by the SEA, so you can access all the information on the E&S evaluation procedure previously developed.
- 50. Regarding the implementation and compliance capacity of the SMA, Snifa publishes statistics on inspections and sanctioning processes. Based on these statistics, it should be noted that from 2013 to August 2023, 5,310 files associated with RCA control have been completed, of which 18.6% included sanctions⁷⁷. As previously mentioned, both Law No. 19.300/1994, as well as the RSEIA and Law No. 20.417/2010 regulate in detail the responsibilities, intervention and coordination of other agencies of the State Administration in the E&S evaluation procedures and in the audit, as well as the articulation between the SEIA and the audit carried out by the SMA.

4.1.1.3. Environmental management systems in the Ministry of Environment

- 51. The MMA is the agency responsible for designing and implementing environmental policies, plans and programs, as well as protecting and conserving biological diversity and renewable natural resources and water, promoting sustainable development.⁷⁸ The MMA chairs the CITHJ⁷⁹ and leads the implementation of the THJ program through the OTSJ. It also has an Environmental Education and Citizen Participation Division and the Environmental Assessment Office mentioned above, which support the implementation of citizen participation processes and the implementation of SEA (see organization chart in Annex 3).
- 52. The OTSJ, which intervenes in the implementation of the activities of the RA1 together with the DGA and the RA3 together with the DOH, was created in 2022 and has among its responsibilities the elaboration, coordination and monitoring of the design and implementation of the THJ program, supporting the different sectoral actions carried out under this strategy. ⁸⁰ Additionally, it has among its responsibilities to promote and facilitate access to public information on just socio-ecological transition, as well as to design dissemination actions, strengthening capacities and technical knowledge in the field and promote, promote and strengthen governance spaces that allow a balanced participation of the different actors involved in socio-environmental matters, representative of the community at the national level. regional and local⁸¹. The OTSJ has 5 professionals and a head of office, being that 2 of these professionals make up the Just Water Transition area that will coordinate the development of the activities of the Program, foreseeing the hiring of approximately 45 professionals and various consultancies to support the development of the activities of the Program.

4.1.1.4. Environmental management systems in the Ministry of Public Works

53. The MOP is responsible for the planning, study, projection, construction, expansion, repair, conservation and operation of public works⁸², along with the protection of water resources. In

⁷⁶ Law No. 20,417/2010, article 31 of the second article. https://snifa.sma.gob.cl/

⁷⁷ https://snifa.sma.gob.cl/Estadisticas/Resultado/1

⁷⁸ Law No. 19.300/1994, article 69.

⁷⁹ Decree No. 58/2022, article 3.

⁸⁰ MMA Exempt Resolution No. 665/2022.

⁸¹ MMA Exempt Resolution No. 665/2022, article 9.

⁸² Law No. 15,840/1964, Decree with Force of Law No. 206/1960, text consolidated, coordinated and systematized by Decree with Force of Law No. 850/1998. Annex 3 presents the general organizational chart of the MOP and the areas that will intervene in the implementation of the Program.

this sense, the MOP acts as the owner of projects before the SEIA, whose function is exercised by the DGOP as legal representative of the Ministry or by the work contractors as defined in the bidding rules (MOP, n.d., Ch. 6, p. 1.). It should be noted that, according to data to 2016, approximately 5% of MOP projects enter the SEIA, being the holder with the highest number of favorable RCAs (MOP, 2016, p. 14), which demonstrates the experience of the agency in negotiations before the SEIA.

- 54. Likewise, the MOP is an organism with environmental competence in the SEIA, intervening in the E&S evaluation of projects that are framed in the exercise of its competences. In particular, the DOH and the DGA have powers in matters of PAS⁸³, such as those related to the modification of channels and regularizations or defenses of natural channels. Additionally, the DGA is a body mandated by the SMA to participate in inspection programs (e.g. participate in the inspection of RCA and the inspection of Quality Standards and Emission Standards) ⁸⁴, being able to fulfill the role of supervisor of both MOP and third party projects.
- 55. The MOP has an Environmental Sustainability Policy established in 2016 based on its previous version of 2001 (MOP, 2016). This policy proposes guidelines and strategies so that the infrastructure works of the MOP are environmentally sustainable, seek to reduce territorial inequalities in terms of infrastructure and water coverage, allow efficient management of water resources, and are consistent with environmental policies, international agreements signed in related matters, and the country's environmental institutions and regulations (MOP, 2016, p. 5 and 16). It establishes among its objectives, to incorporate early in studies, policies, plans, programs, projects and works, the variables A & S, territorial and citizen and indigenous engagement, as well as to tend to minimize the risk associated with natural events and anthropic interventions in the territory (MOP, 2016, p. 25).
- 56. Regarding the institutional organization of the E&S management of the MOP, the functions are distributed in the different directions, and are coordinated by the Sustainable Infrastructure Division (División de Infraestructura Sustentable, DIS) of the DGOP. The DIS is responsible for promoting the development of infrastructure and sustainable building through the development of guidelines and standards for the MOP⁸⁵, as well as coordinating the different areas that address E&S management in the MOP which at a general level are distributed in:
 - (i) Units or Departments of Environment and Territory within the organizational structure of the general directorates (such as the DGA) and operational directorates (such as the DOH) at the central level, which additionally have in some regions an environmental manager. In general terms, these areas have as their main function to generate procedures, and guidelines to comply with E&S regulations and incorporate E&S management in all stages of projects. In terms of citizen participation, they are responsible for leading participatory processes and facilitating the exercise of rights, incorporating variables of indigenous participation, social inclusion and gender equity (MOP, 2016, p. 21).
 - (ii) Environmental and Territorial Management Units (Unidades de Gestión Ambiental y Territorial, UGAT) in each SEREMI of the MOP. These UGAT depend on the Undersecretary of Public Works and their main role is to coordinate and ensure the incorporation of environmental, territorial, citizen participation and indigenous affairs variables in ministerial management at the regional level (MOP, 2016, p. 20), including

⁸³ Law No. 19.300/1994.

⁸⁴ Law No. 20.417/2010, Title II, article 16.

⁸⁵ Exempt Resolution No. 24/2023.

providing technical support to SEREMI in relation to its participation in the SEA Evaluation Commission, this in coordination with the respective services of the MOP.

The specific organizational aspects of each area of the MOP that will intervene in the implementation of the Program's activities are indicated below.

- 57. The MOP has internal E&S management procedures and instruments so that E&S aspects are considered in the different stages of project development, both internally within the agency and by contractors and consultants. These include normative forecasts, guides, manuals of transversal application in the MOP and bidding bases that include all the E&S requirements that according to the regulatory framework must be met by contractors, which apply to projects that require an RCA as well as those that do not require it. Among others, a manual for environmental audits (MOP-SEMAT, 2003), a guide for the approach to indigenous peoples and for the implementation of consultation processes (MOP-SEMAT, 2016), and occupational risk prevention bases for construction contracts with a gender perspective (DGOP, 2022b) are mentioned.
- 58. As previously indicated, some physical interventions of the Program do not require obtaining an RCA⁸⁶, for these cases each agency of the MOP has different tools and E&S instruments. These include E&S studies, E&S management plans, E&S specifications that are included in the tender documents. The following paragraphs detail the practices of each area of the MOP and the instruments or E&S documents that apply to the typologies of physical interventions described in Section 2.3.

Environmental management systems of the Directorate General of Water

- 59. The DGA, which intervenes in the implementation of the activities of the RA1 together with the MMA, was created in 1969 and has among its responsibilities to plan the development of water resources in natural sources, to formulate recommendations for its use, and investigate, measure the resource, and monitor its quality and quantity. in attention to the conservation and protection of waters⁸⁷. This Directorate is responsible for maintaining and operating the national hydrometric service; to carry out the task of policing and monitoring the waters in natural channels for public use and to prevent the construction, modification or destruction of works in these areas without the authorization of the Directorate or the authority to which it corresponds to approve their construction or authorize their demolition or modification; it also supervises the operation of the OUA, in accordance with the provisions of the Water Code. The DGA has powers in environmental matters that are expressed through authorizations such as DDAs⁸⁸, PAS such as modifications of natural or artificial channels, and participation in the SEIA evaluating EIAs or DIAs, and in the control of RCA as mentioned above.
- 60. The DGA has different areas that address aspects of E&S management and that will participate in the implementation of the activities of the Program. These areas and their functions are:
 - (i) **Division of Studies and Planning**, created in 1992 and composed of 12 professionals (2 administrative) at the central level⁸⁹. It is responsible for analyzing, evaluating and being a technical counterpart in projects and / or studies of planning and management of surface and underground water resources at the national level. This area coordinates the preparation of the PERHC.

⁸⁶ Table 3 in Section 4.1.1.1 identifies situations that might require an RCA.

⁸⁷ Water Code, article 298 and Decree with Force of Law No. 1.115/1969.

⁸⁸ Established by the Water Code and DGA Resolution No. 186/1986.

⁸⁹ Within the team of professionals, 2 specialists address issues related to climate change and 2 specialists have competencies in mainstreaming the gender approach.

- (ii) Department of Conservation and Protection of Water Resources, created in 1992, and composed of 20 professionals (2 administrative), with environmental profiles. This department is responsible for the DGA's Water Quality Laboratory, responsible for taking and analyzing samples from the DGA's water quality network, as well as coordinating the operation of the network with the regions. It has 10 professionals at the central level who provide technical support in the conservation and protection of water resources, rational use of water and inclusion of the territorial component. They evaluate EIA and DIA within the framework of the SEIA, support the development of environmental standards and provide technical support to the Regional Directorates, among other functions.
- (iii) Department of User Organizations, created in 2018, and composed of 21 professionals at the central level, with competence in social issues. It comprises an OAU Registration, Promotion and Strengthening Unit and a Water Monitoring Unit. Among its functions is the analysis, execution and fulfillment of collective goals, inter-institutional agreements, and relevant issues in the framework of water management related to the OAU. In addition, it carries out activities related to social participation with a gender approach. This area will be the counterpart of the MMA in the activity related to the creation of river basin working groups to strengthening governance at the basin level.
- (iv) Department of Development and People Management, created in 2018, and composed of 10 professionals at central level, with profiles related to social and gender management. Specifically, it is responsible for planning, supporting and managing organizational performance. This area will be the focal point of the DGA for addressing gender issues in the RA1.

Additionally, the DGA has environmental managers in the SEREMIs, who will be able to support the activities of the RA1.

It should be noted that, given the need to implement participatory processes, these are implemented by the different areas of the DGA through specific consultancies and with the advice of the DGOP.

61. As mentioned above, the interventions to be implemented by the DGA as part of the RA1 would not require processing of an RCA. The bidding and contracting documents include the E&S specifications that refer to compliance with the applicable regulations on ESHS⁹⁰, which, as appropriate, must be completed with the requirements included in Section 5.

Environmental management systems of the General Directorate of Public Works

- 62. The DGOP, agency on which the DOH and the SSR that implement RA2 and RA3 depend, was created in 1998 and is responsible, among other functions, for the study, projection, construction and conservation of the works of defense of lands and populations against floods of water currents and regularization of the banks and channels of the rivers, lagoons, and estuaries⁹¹.
- 63. The DGOP has different areas that address the aspects of E&S management, which will support the areas that implement the activities of the Program. The objectives and functions of these

⁹⁰ Beyond the standards that are applicable in ASSS matters during the construction stage, including compliance with the Communal Regulatory Plans (planning instrument that guides and regulates urban development), it should be noted that the operation of the laboratories will be subject, among others, to Decree No. 148/2004 that establishes the health regulations on the management of hazardous waste. Likewise, Annex 6 details the reference standards regarding water quality that are considered by the DGA in its analyses.

⁹¹ Decree with Force of Law No. 850/1998, article 14, paragraph I.

areas have been updated in 2023⁹². It should be noted that these areas, the details of which are presented below, beyond fulfilling specific functions for the DGOP, have a role of coordination and general supervision over the actions of the areas that address the E&S aspects in the different services of the MOP both at the central level and in the regions, a function that will be maintained in terms of the activities of the Program:

- (i) DIS⁹³. It is composed of four Departments: Environmental Management; Territory and Indigenous Affairs; Climate Change and Circular Economy; and Regional Management and Coordination. In total, the DIS is composed of 15 professionals (10 women and 5 men) with profiles in environmental control, citizen participation, indigenous issues and archaeology, and 2 administrative assistants. This area is particularly concerned with supporting the DGOP in terms of control and compliance with environmental standards and citizen participation within the framework of E&S evaluation. At the general level, the MOP is responsible for coordinating and supporting the actions of the different areas in terms of environmental management and citizen participation and indigenous affairs so that they are efficient and effective.
- (ii) **Department of Control, Management, Citizen Attention and Transparency**. It is responsible, among other functions, for directing and managing the Integral System of Information and Citizen Attention of the DGOP, including those related to Active Transparency (*Transparencia Activa*) (see details in Section 4.1.2.1).
- (iii) Risk Prevention Department. It is particularly concerned with supervising and managing actions to evaluate and control occupational risks in the MOP, to maintain work areas free of risks of accidents and occupational diseases, reduce accidents and accidents and promote a preventive culture. Coordinates, supervises, and evaluates the implementation and compliance with the regulatory framework on the prevention of risks of occupational accidents and occupational health and safety in public works by the Departments and Risk Prevention Units of the different areas of the MOP.

It should be noted that some regional units of the DGOP also have an environmental officer who can support the implementation of the activities of the Program.

64. The DGOP carries out inspections of MOP projects, whether they are in the construction or operation stage, to verify compliance with the commitments established in the RCA and avoid infractions and sanctions by the SMA. This is done through field visits, according to an annual plan and are complemented by the inspection of contracts carried out by the areas that implement the projects, such as the DGA, DOH and SSR.

Environmental management systems of the Directorate of Hydraulic Works

65. The DOH, which will be implementing the activities of the RA3, was created in 1998⁹⁴ and is responsible for irrigation, stormwater management and alluvial control and management of MOP channels. Among other functions, the DOH is responsible for the study, design, construction, and repair of irrigation works, as well as the execution of sanitation and land recovery works⁹⁵. In relation to stormwater, the DOH is responsible for the planning, study, projection, construction, repair, maintenance, and improvement of the primary network of stormwater evacuation and

⁹² DGOP Resolution No. 24/2023, article 2.

⁹³ Former Executive Secretariat for Environment and Territory (SEMAT).

⁹⁴ Initially called Irrigation Directorate.

⁹⁵ Decree with Force of Law No. 850/1998, article 17.

drainage systems, as well as the development of the respective PMALL⁹⁶ and alluvial control and river channel management.

- 66. The DOH has different areas that address aspects of E&S management and that will participate in the implementation of the activities of the Program, these are:
 - Department of Environment and Territory (DEMAT), created in 2001⁹⁷. It has an (i) Environment Unit (Unidad de Medio Ambiente, UMA) 98 and a Citizen Participation and Indigenous Affairs Unit (Unidad de Participación Ciudadana y Asuntos Indígenas, UPAC-Al)⁹⁹. The UMA is composed of 7 professionals with profiles in tax inspection, and is responsible, among other functions, for coordinating and promoting actions that allow an adequate E&S management of the DOH, supervise the correct incorporation of the E&S variables in the life cycle of the projects, prepare the bidding bases and be a technical counterpart in the contracts to prepare EIA/DIA, review the EIA/DIA sent by the SEA, respond to the inspections of the SMA and articulate the work of the regional directorates where there are no full-time environmental managers. The UPAC-AI is composed of 4 professionals with profiles in tax analysis and inspection, and is responsible, among other functions, for promoting and coordinating institutional policies on citizen participation and indigenous affairs, providing support to the areas of the DOH, as well as developing Terms of Reference (ToR) for consulting contracts and preparing Specifications for Citizen Engagement for the execution stage of the projects. as well as to carry out its follow-up and supervision. It should be noted that all DOH regional units also have a citizen participation officer to support participation activities.
 - (ii) Citizen Management and Technical Archive Unit, created in 2020¹⁰⁰. This area deals in particular with, among other functions, coordinating the implementation of government and ministerial guidelines on citizen information and attention, including responding to requests for access to information and to queries and complaints (see details in Section 4.1.2).
- 67. **Projects undertaken by DOH include early-stage E&S evaluation.** The DOH project cycle has seven stages: idea-profile, pre-feasibility, feasibility, design, construction or execution, exploitation or operation, abandonment. The DOH has defined for each stage, through detailed sheets, the objectives, tasks and those responsible for E&S management as well as the contents of the E&S instruments, including detailed guidelines according to type of projects (MOP, n.d., Ch. 5, p. 8-25). According to each stage, the evaluation, and forecasts in terms of E&S for all the types of works included in the RA3 of the Program include:
 - (i) Idea-profile stage: the potential impacts on A&S are considered at a basic level.
 - (ii) Pre-feasibility stage (only in case of complex projects): an Environmental and Territorial Analysis Study (*Estudio de Análisis Ambiental y Territorial*, EAAT) is carried out to define the E&S considerations of each project alternative, this EAAT serves as a basis for ranking and choosing the best project alternative in terms of lower E&S impacts.
 - (iii) Feasibility stage, together with the deepening of the project design, an Environmental Analysis Study (*Estudio de Análisis Ambiental*, EAA) is prepared that includes an analysis of the relevance of entering the SEIA. In the event that relevance indicates that the project

⁹⁶ Law No. 19.525/1997, articles 1 and 2.

⁹⁷ DOH Exempt Resolution No. 5631/2001 and DOH No. 143/2017. Formerly called Department of Watersheds.

⁹⁸ Created in 1999 by DOH Exempt Resolution No. 3368/1999.

⁹⁹ Created in 2015 by DOH Exempt Resolution No. 4782/2015.

¹⁰⁰ DGOP Exempt Resolution No. 656/2020.

will require an environmental assessment, the ToRs are subsequently prepared for the tender of a consultancy to prepare the EIA/DIA. In the case of projects that do not require processing an RCA, the EAA is used to define the mitigation measures of the chosen alternative that are added to the General Environmental Specifications (*Especificaciones Ambientales Generales*, EAG) that are integrated into the bidding documents and work contracts.

- (iv) Design stage: once the Engineering Study has begun, if it is appropriate to enter the SEIA, the UMA tenders separately the preparation of the EIA/DIA, adapting the constructive aspects of the project that could generate negative impacts and incorporating the results of the RCA to the project. In the case of projects that do not require entering the SEIA, the mitigation measures prepared in the feasibility stage are incorporated into the project. Finally, for both cases, the Technical Specifications for the construction of the work are written. These specifications include:
 - EAG: they include the indications on the E&S instruments that must be implemented or developed, as well as indications or general measures for sectoral regulatory compliance on the installation and operation of activities associated with the normal operation of a work (installation of workshops and production plant of materials, transport, use and handling of hazardous materials, waste management and disposal, etc.), minimum measures to be adopted according to the component of the receiving environment (flora and fauna, use and protection of water, archaeological and cultural heritage), and aspects related to compliance with sectoral regulations. These EAGs provide for the figure of an Environmental Officer (environmental specialist) for the management and supervision of compliance with the EAG and EAE, detailing the professional profile required and the functions and responsibilities to be fulfilled.
 - Special or Specific Environmental Specifications (*Especificaciones Ambientales Especiales o Específicas*, EAE) include the technical specifications to comply with each of the RCA's environmental commitments.
- (v) Construction stages (including rehabilitation, repair, improvement or conservation works): the implementation of the E&S measures by the contractors is monitored, which are included in the tender basis that will correspond to the EAGs, if the project does not require an RCA, or the EAEs that include the environmental technical specifications from the environmental commitments or measures of the respective RCA (in paragraphs 71 and 72 presents aspects relating to project monitoring).
- (vi) Operation stage: a contract for the implementation and monitoring of the RCA's commitments for the operation phase is tendered, as appropriate.
- 68. The E&S instruments envisaged by the DOH address the contents typically considered for each of these types of instruments. E&S studies include analysis of alternatives; baseline and evaluation of impacts on components and processes of the physical, biotic, socioeconomic and cultural environment, as well as aspects related to territorial planning; mitigation, repair and compensation measures for E&S impacts. It also foresees the preparation and implementation of a participation plan from the idea-profile stage (see further details in Section 4.1.2). These studies consider the wide range of E&S impacts, including, but not limited to: impacts related to biodiversity; changes in land use; the impact on air, water and soil quality; the management of hazardous materials; risks and impacts on the health and safety of the population; and impacts

- associated with land acquisition; as well as the Risk analysis of disasters or human-induced emergencies for projects affecting human groups.
- 69. As mentioned above, there are interventions to be implemented by the DOH as part of the RA3 that will not require the processing of an RCA and therefore will apply the different E&S instruments provided by the DOH. These interventions will have an EAAT and/or EAA, an Environmental Management Plan, a Follow-up and Monitoring and Contingencies Plan defined in the referred EAA, and, as applicable, a Management Plan for Borrowing¹⁰¹, Dumps and Restoration of the areas of intervention to be prepared by the construction contractor.

Environmental management systems of the Sub-directorate of Rural Health Services

- 70. The SRH Sud-directorate, which depends on DOH and will be implementing the activities of the RA2, was created in 2017¹⁰² and is responsible for the sanitation and rural drinking water works within the MOP. Among other functions, the SSR is responsible for carrying out studies, community management, formulating drinking water and sanitation projects, contracting works and keeping the register of operators.¹⁰³
- 71. As a recently created area, the SSR has a small team of professionals¹⁰⁴, without its own area that deals with E&S management aspects, relying on the DEMAT of the DOH and the DGOP.
- 72. As mentioned above, rural drinking water projects that will be implemented by the SSR as part of the Program would not be required to process an RCA, but include E&S evaluation from early stages, as well as provisions for E&S management. The project cycle responds to that established by the National Investment System (Sistema Nacional de Inversiones, SIN) and has a preinvestment stage (pre-feasibility and/or feasibility), investment (design and execution) and operation, based on evaluation criteria established by the Ministry of Social Development and Family (Ministerio de Desarrollo Social y Familia, MDSF)¹⁰⁵. The development of the pre-feasibility stage includes a diagnosis of the current situation and a water supply analysis, including a hydrogeological study, project alternative analysis, and social evaluation that seeks to determine to what extent an investment project will have an effect on society in economic and well-being terms (MDS, 2015, p. 13). In the feasibility of alternatives stage, the preparation of an EAA is planned to accompany the Engineering Study. This EAA includes an Environmental Management Plan, and identification of studies to be developed subsequently, serving as a basis for preparing the EAEs. The aspects of the stages and associated E&S studies are detailed in the Rural Drinking Water Project Manual prepared by the DOH (DOH, 2023).

Supervision and monitoring of environmental and social management in the MOP

73. Beyond the monitoring and inspection carried out by the SMA in the case of projects that process an RCA (see section 4.1.1.2), each agency of the MOP supervises and follows up on the work contracts, including aspects related to E&S management. This task is carried out by the Fiscal Inspection, which is coordinated by a Fiscal Inspector¹⁰⁶ and in which technical officials in

¹⁰¹ The environmental specifications of the DOH provide that only loans may be used that have relevant authorizations from sectoral organizations and have favorable RCA if applicable as specified in the RSEIA.

¹⁰² Law No. 20.998/2017.

¹⁰³ Law No. 20.998/2017, articles 72 and 73.

¹⁰⁴The SSR has made progress with the hiring of 50 new professionals and plans to hire more personnel in 2023 and 2024.

¹⁰⁵In accordance with the provisions of Law No. 20,998/2017, articles 73 and 80. This methodology or criteria are published at http://sni.ministeriodesarrollosocial.gob.cl/download/metodologia-agua-potable-rural/?wpdmdl=859 (MDS, 2015). Currently the MDSF and the SSR are updating these criteria.

¹⁰⁶ As defined in Decree No. 75/2004 establishing the regulation of public works contracts, article 3.

E&S matters participate. The tax inspectors are officials dependent on each of the areas of the MOP, and are responsible for the management of work contracts. As indicated by the MOP, in the case of complex projects (such as major works), which merit support to the Fiscal Inspectorate, there is the possibility of hiring an Advisory to the Fiscal Inspectorate, who collaborate in the task of supervising environmental commitments. It should be noted that, according to the set of civil works projects pre-identified by the MOP for financing by the Program, at the moment the agency does not foresee as necessary the hiring of such advice.

- 74. The Fiscal Inspectorate, through the environmental inspector, ensures compliance with the obligations in terms of ESHS of the projects, such as those established in the EAG or EAE (DOH, 2022, p. 3). In accordance with the provisions of the regulatory framework¹⁰⁷, non-compliance by the contractor with the provisions contained in the current environmental legislation and regulations and the rules governing the effects on the environment is especially considered by the tax inspector when issuing his reports that serve as a basis for qualifying the contractor's management. In this context, the MOP requests reports on the adjustments that will be made to resolve the non-compliance, without foreseeing the need to establish fines or work stoppages for non-compliance.
- 75. In addition to the audit of each area, the DGOP, through the DIS, supervises certain MOP projects in E&S matters. The DIS defines the works to be inspected based on criteria that, in general terms, include: (i) projects with RCA in the construction or operation/exploitation phase; (ii) projects previously audited with a request for background information and/or sanctioned by the SMA and/or another agency with environmental competence; (iii) projects that have been audited by the DIS, without having closed their process (with unresolved observations and/or nonconformities; (iv) projects that are considered priority based on sensitive E&S aspects. As a result of the audit, a quarterly audit report is prepared with the unresolved findings, which is sent to the environmental area of the DGA, DOH, and SSR as appropriate.
- 76. In particular regarding WWS, the Superintendence of WWS Services¹⁰⁸ is responsible for APRs monitoring and compliance with WWS regulations.¹⁰⁹ Among other aspects, it monitors the efficiency of services, the collection of tariffs, discriminatory economic treatment of users, efficiency in dealing with user complaints, damage to networks or general works of services.¹¹⁰

4.1.1.5. Quality of environmental and social assessment and management instruments

77. In relation to the quality of the E&S evaluation instruments, both in the case of projects that must process an RCA and those that are not obligated, it should be noted that these studies are contracted by the MOP to registered external consultants. The MOP has a public registry of consultants and contractors¹¹¹, which is administered by the DGOP¹¹², which includes a qualification system based on the experience, professional and personal quality of the Consultants¹¹³. The consultancies hired by the MOP are carried out through public tenders based

¹⁰⁷ Decree No. 75/2004. Article 136.

¹⁰⁸ Functionally decentralized service, with legal personality and own assets, subject to the supervision of the President of the Republic through the MOP (Law 18.902/1990, article 1).

¹⁰⁹ Law 18,902/1990, article 2 and Law No. 20,998/2017 Chapter 5.

¹¹⁰ Law No. 20.998/2017, Chapter 5.

¹¹¹Decree No. 48/1994. The registry is available at:

https://dgop.mop.gob.cl/areasdgop/registrocontratistasyconsultores/Paginas/default.aspx

¹¹²In accordance with DGOP Resolution No. 24/2023, article 2; and through its Contractor and Consultant Registration Department.

¹¹³Decree No. 48/1994, article 12. The system includes categories 1a superior, 1a, 2a or 3a.

on the regulations that regulate the hiring of consultancies¹¹⁴. For the preparation of EIA/DIA that must be submitted to the SEIA, specialists with a higher first category are hired¹¹⁵. It should be noted that the SEIA also has a public registry of certified consultants to carry out EIA/DIA¹¹⁶, but it is merely informative and does not include background qualification, although it does regulate conflicts of interest, including the absolute conflict of interest regarding of the figure of environmental inspector or inspector for the SMA¹¹⁷.

4.1.1.6. Specific permits or authorizations

- 78. Depending on the particularities of each project that may be submitted for financing by the Program, specific permits or authorizations/approvals are required. These are clearly identified in normative terms and coordinated in terms of responsibilities of the different agencies, as well as identified in the bidding or contractual documents. These permits can be processed by the MOP itself or by the Contractors as the case may be.
- 79. Among these permits are the PAS that are processed through the SEIA for projects that require RCA or outside this system in case of projects that do not require an RCA¹¹⁸. PAS that could be linked to the types of works considered by the Program include, for example: (i) PAS 126 - Permit for the construction, repair, modification and expansion of any facility designed for the management of sewage sludge from wastewater treatment plants (as established by the Regulation of Supreme Decree No. 4/2009 on the management of sludge generated in wastewater treatment plants); (ii) PAS 138 - Permit for the construction, repair, modification and extension of any public or private work intended for the evacuation, treatment or final disposal of drains, sewage of any nature (as established by the Sanitary Code, Decree with Force of Law No. 725/1967 of the Ministry of Public Health, article 71, first part); (iii) PAS 155 - Permit for the construction of certain hydraulic works (as established by the Water Code, Decree with Force of Law No. 1.122/1981 of the Ministry of Justice, Article 294); (iv) PAS 156 - Permission to make channel modifications (as established by the Water Code); (v) PAS 157 - Permit to carry out works of regularization or defense of natural channels (as established in the Water Code, paragraphs 1 and 2 of article 171; (vi) PAS 158 - Permit to execute works for the artificial recharge of aquifers (as established by the Water Code, article 66); (vii) PAS 159 - Permit for extraction of gravel and sand in the channels of rivers and estuaries (as established by Law No. 11.402/1953, on works of defense and regularization of the banks and channels of rivers, lagoons and estuaries, article 11).
- 80. Other permits could include approvals of parallels or traversals of utilities, feasibility of supply and connection to the electric grid, storage of hazardous substances. In the case of wells for the extraction of drinking water, according to the MDSF methodology, an authorization from the landowner, a prefeasibility study is required for the approval of the project by the MDSF, the processing of the DAA.

4.1.1.7. Environmental and social assessment of policies and plans

81. The formulation of the National Water Security Policy to be developed as part of RA1, as well as the plans to be developed in the three result areas of the Program, foresee the evaluation of the E&S aspects involved. Regarding the PERHC (RA1) the Water Code itself establishes that each

¹¹⁴Decree No. 48/1994, article 2.

¹¹⁵This includes at least 1 university professional with 10 years of experience in the specialty being hired, and the rest of the staff with at least 5 years of practice in the profession (Decree No. 48/1994, articles 19 to 21).

¹¹⁶Decree No. 78/2015. The registry is available at: https://www.sea.gob.cl/registro-de-consultores

¹¹⁷Decree No. 78/2015, article 13.

¹¹⁸ The PAS are widely detailed in Title VII of Supreme Decree No. 40/2013.

plan must include the identification of the potential E&S impacts of the solutions considered for the use and reuse of water¹¹⁹. On the other hand, the PMALL (RA2), include an analysis of the solution alternatives considered for each primary system, including the corresponding E&S evaluations of these alternatives and a prioritization of the proposed solutions based on this analysis (MOP and MMA, 2017, p. 41). This will be complemented by the implementation of stakeholder consultations that will inform the E&S risk and impact assessment.

4.1.1.8. Critical habitats, natural habitats and legally protected or internationally recognized areas

- 82. According to the exclusion criteria detailed in Annex 4, the interventions to be financed under the Program may not involve the affectation of natural areas under any type of protection, nor the conversion or significant degradation of critical habitats¹²⁰. In this regard, it should be noted that both the RSEIA and the procedures established in MOP allow these situations to be identified early. For those projects that must process an RCA, the RSEIA provides for the identification and evaluation of the impact on critical habitats and natural areas legally protected or that are internationally recognized for their high biodiversity value¹²¹. Natural areas that have official protection by administrative act of the competent authority¹²², protected wetlands, including urban wetlands¹²³ and wetlands of international importance included in the Ramsar Wetlands¹²⁴, as well as other priority sites for conservation are considered¹²⁵. For projects that do not require an RCA, the potential impact on critical habitats is addressed early in the Project cycle as described in Section 4.1.1.4. This is included both in the analysis of alternatives and subsequently in the EAA at the level of feasibility that applies to the physical interventions of the RA2 and RA3 includes the consideration not only of the already protected areas and declared priority sites (DOH, 2021, p. 9).
- 83. The evaluation of the impact on biodiversity and natural habitats¹²⁶, as well as the measures to adopt to avoid, minimize, mitigate or compensate for potential negative impacts on these components and their processes, is part of the environmental evaluation that is carried out from the early stages of the project cycle. For those projects that must process an RCA, the SEA has published different guides for addressing biodiversity in the evaluation of projects, including a guide for the description of flora and fauna (SEA, 2015), a guide for compensation on the impact on biodiversity (SEA, 2022), and a guide for the prediction and evaluation of impacts on all types of wetlands (SEA, 2023b). The RSEIA provides for both its evaluation in the EIA and the EIA¹²⁷,

¹¹⁹ Water Code, article 293bis.

¹²⁰ Critical habitats understood as areas of high importance or value in terms of biodiversity, including: (a) habitats of significant importance for endangered or critically endangered species, as listed on the Union Red List of Threatened Species Conservation International (IUCN) or equivalent national approaches; (b) habitats of great importance for endemic or restricted-range species; (c) habitats that support globally or nationally significant concentrations of migratory or gregarious species; (d) highly threatened or unique ecosystems; (e) ecological functions or characteristics that are necessary to maintain the viability of the biodiversity values described above in subparagraphs (a) to (d). (WB, 2016, p. 70).

¹²¹ Law No. 19,300/1994, article 10, section p, article 11, section d, article 37; Supreme Decree No. 40/2013, articles 8 and 18.

¹²² The categories of areas to consider are clearly defined by SEA Ordinary Office No. 130844/2013, available at: https://www.sea.gob.cl/sites/default/files/migration_files/DOC052313-05232013134111.pdf.

¹²³ Law No. 19,300/1994, article 10, subsection s; modified based on Law No 21,202/2020 Urban Wetlands Law.

¹²⁴ Supreme Decree No. 40/2013, article 8.

¹²⁵ The priority sites to be considered are clearly defined in SEA Instruction No. 100143/2010 "Priority sites for conservation in the Environmental Impact Assessment System", available at: https://seia.sea.gob.cl/files/Instructivo_sitios_prioritarios_actualizado_20101115.pdf

¹²⁶Natural habitats understood as areas made up of viable assemblages of plants or animal species of largely native origin, or areas in which human activity has not essentially modified the primary ecological functions and species composition of an area (WB, 2016, p. 70).

¹²⁷Supreme Decree No. 40/2013, article 18, sections e.2 to e.4.

including the execution of field surveys, as well as the preparation of the mitigation, compensation, and repair measures plan, which must describe and justify the measures that will be adopted to eliminate, minimize, repair, restore or compensate for the adverse effects of the project ¹²⁸. In the case of projects that do not require processing an RCA, the potential impact on biodiversity and natural habitats is addressed from the early stages of the Project cycle as described in Section 4.1.1.6. This is considered both in the analyzes of alternatives and subsequently in the EAA at the feasibility level, including field information surveys. In all cases, mitigation measures are included in the Environmental Management/Management Plans and in the environmental specifications that accompany the bidding and works contracting documents.

84. It should be noted that some aspects related to the biodiversity management measures to be applied in relation to the physical interventions of the Program could involve obtaining permits and specific approvals by authorities with environmental competence. Among the PAS (see details in Section 4.1.1.6) that could apply to the physical interventions of the Program are, for example: (i) PAS 146 - Permit for the hunting or capture of specimens of animals of protected species to control the action of animals that cause serious damage to the ecosystem¹²⁹, which is granted by the Agricultural and Livestock Service¹³⁰ and has as a requirement that the hunting or capture project is suitable for the species and necessary, having to prove the seriousness of the damage caused by the specimens to be controlled; (ii) PAS 119 - Permit to conduct research fishing; (iii) 148 - Permit for cutting native forest. In some cases, projects may entail the need to prepare and implement Species Rescue and Relocation Plans as part of environmental management, which are evaluated and supervised by the MMA.

4.1.2. Social management systems

85. This section presents the analysis of social management systems. It should be noted that some aspects related to institutional responsibilities to implement social management, as well as social management instruments, are strongly linked to environmental management and were therefore comprehensively addressed in Sections 4.1.1.1 to 4.1.1.7.

4.1.2.1. Stakeholder engagement and access to information

- 86. Stakeholder participation and access to information are widely incorporated into the regulatory framework and consolidated in the practice of the different areas of government in Chile. As detailed in the following paragraphs, there are numerous tools and procedures that seek to ensure and strengthen stakeholder participation and access to information from the early stages of the activities included as part of the Program. It is expected that the participatory processes to be implemented as part of the Program will allow not only to improve the design of the Program's activities, but also to prevent and minimize the risk of social conflict, as well as to limit the risk of exclusion of potential beneficiaries, including indigenous peoples, Afro-Chileans or members of other minority and marginalized social groups. to obtain the equitable benefits of the Program.
- 87. Chile has regulations that regulate the participation of citizens in public management, as well as the right of access to public information. Law No. 20,500/2011¹³¹ establishes the framework for citizen participation in public management, recognizing the right of people to participate in policies, plans, programs and actions¹³², corresponding to each organ of the State Administration

¹²⁸Supreme Decree No. 40/2013, article 18, section i.

 $^{^{129}}$ Supreme Decree No. 40/2013, article 124.

¹³⁰ Law No. 19.473/1996, article 9.

¹³¹ Amends Law No. 18,575/1986, Constitutional Organic Law of General Bases of State Administration.

¹³² Law No. 20.500/2011, article 32. Law No. 18.575/2001, Article 69.

to establish the formal and specific modalities of participation within the scope of its competence, which must be kept updated and published in electronic or other media. Regardless of the modalities, it obliges each agency to make public relevant information about its policies, plans, programs, actions and budgets, ensuring that it is timely, complete and widely accessible ¹³³. Based on this norm, Presidential Instruction No. 007/2014 establishes guidelines to expand the levels of participation from the consultative to the deliberative. Within this framework, the MOP and MMA have regulated the participation of stakeholders as detailed in paragraphs 96 to 99.

- 88. Both MOP and MMA have Councils where civil society participates to accompany the highest authority of each Ministry in the decision-making processes in public policies. Law No. 20.500/2011 has established the figure of the Civil Society Council (*Consejo de la Sociedad Civil*, COSOC) that must be integrated into each Ministry. In the case of the MMA, there are Advisory Councils¹³⁴ that were established by Law No. 19,300/1994¹³⁵ and are comparable to the COSOC. These councils are a mechanism for citizen participation whose members represent civil society organizations related to the work of each entity. They are consultative (non-binding), autonomous and made up in a diverse, representative, and pluralistic manner¹³⁶. Applications to participate in each Council are public and are renewed periodically. The Councils are active bodies, whose minutes of sessions are published on the website of each ministry.
- 89. Law No. 20.285/2008 (known as the Transparency Law) regulates in general the principle of transparency of the public function, the right of access to information of the organs of the State Administration, as well as the procedures for the exercise of the right and for its protection, and the exceptions to the publication of information¹³⁷. This norm obliges the organs of the State Administration to maintain on their websites permanent and updated information (at least once a month) of background information such as their organizational structure, powers, personnel, budget, contracts, mechanisms of citizen participation, results of audits, among others (what is called active transparency)¹³⁸, while establishing the requirements to request and receive information from any person (which is called passive transparency) 139, providing for free and open access, upon submission of a written request, which must be resolved within a maximum period of 20 working days¹⁴⁰. Additionally, this law creates the Council for Transparency¹⁴¹, whose function is to promote transparency in the public service, monitor compliance with the rules on transparency and publicity of information, and guarantee the right of access to information. The Active Transparency Portal managed by the Council for Transparency centralizes a space to access public information from State agencies¹⁴². Each agency, including the SEA, SMA, MMA and MOP have an Office of Information, Complaints and Suggestions (Oficina de Informaciones, Reclamos y Sugerencias, OIRS) that seeks to assist citizens in their right to submit petitions, suggestions or complaints to the State¹⁴³ (see details in section 4.1.2.2).
- 90. Chile has a great development in terms of e-government and open government. Since 2001 it has promoted various measures and tools in favor of the modernization of the State. Among

¹³³ Law No. 20.500/2011, article 32. Law No. 18.575/2001, article 71.

¹³⁴ 1 national and 16 regional (one per region of the country).

¹³⁵ Its regulation is set out in the Supreme Decree No. 25/2011.

¹³⁶ Law No. 20,500/2011, Article 32. Law No. 18.575/2001, article 74.

¹³⁷ Law No. 20.285/2008.

¹³⁸ Law No. 20.285/2008, Title III.

¹³⁹ Law No. 20.285/2008, Title IV.

¹⁴⁰ Law No. 20.285/2008, article 14.

¹⁴¹ Law No. 20.285/2008, Title V. This Council is an autonomous corporation under public law, with legal personality and its own assets (Article 31). https://www.consejotransparencia.cl/

¹⁴² https://www.portaltransparencia.cl/PortalPdT/ingreso-sai-v2?idOrg=1071

¹⁴³ Supreme Decree No. 680/1990 (Article 1). By not: https://www.sea.gob.cl/atencion-ciudadana/oirs

these, Law No. 21,180/2019 on Digital Transformation is mentioned to incorporate electronic support and processing in administrative procedures and document management in all levels of the State, providing greater access to information from the official websites of each agency. Since 2011, Chile has been part of the Open Government Partnership and is implementing its 5th Open Government Action Plan.¹⁴⁴

- 91. Specifically, Law No. 19.300/1994 expressly provides for the duty of the State to facilitate citizen participation and access to environmental information¹⁴⁵. This norm establishes among the responsibilities of the MMA, the promotion and facilitation of citizen participation, among other matters, in the formulation of its policies and plans¹⁴⁶. Regarding access to environmental information in particular, among other considerations, Law No. 19.300/1994 creates the National Environmental Information System (*Sistema Nacional de Información Ambiental*, SINIA)¹⁴⁷ under the administration of the MMA. The SINIA publishes environmental rules and regulations, opinions of the Comptroller General of the Republic and Judgments of the Environmental Courts, environmental studies available in the MMA, as well as georeferenced information of interest for E&S management instruments. This system works as an integrator of different specific environmental information systems, including, among others, the SEIA and the SMA.
- 92. Chile also ratified¹⁴⁸ the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean, the Escazú Agreement. The MOP and MMA are currently reviewing the processes of citizen participation and access to information to assess whether adjustments should be made in accordance with the commitments arising from the Agreement. In particular, the MMA is developing a Participatory Implementation Plan for the Escazú Agreement (PIPE) at the national level through a broad process of participation with various actors from civil society, the public and private sectors, which is expected to be completed in the first quarter of 2024.¹⁴⁹
- 93. The E&S evaluation and RCA processing processes incorporate stakeholder participation (including indigenous consultation see Section 4.1.2.6) and disclosure of information associated with each evaluation dossier in SEIA. Law No. 19.300/1994 establishes that the SEA has among its functions to promote and facilitate citizen participation in the evaluation of projects that require processing an RCA¹⁵⁰ and that it is up to said agency to establish the mechanisms that ensure the informed participation of the community in the process of evaluation of EIAs or DIAs as appropriate¹⁵¹. Both Law No. 19.300/1994 and the RSEIA understand citizen participation as the right to access and know the evaluation file, make observations, and obtain a well-founded response on them¹⁵². The SEA has a specific portal for citizen participation and for each project under evaluation publishes the specific file that documents the process and results of the participation activities developed.¹⁵³
- 94. The participation that is implemented through the SEIA is mandatory for all cases of projects that must submit an EIA, and for some cases of projects that are processed through an EIS. In the latter case, the possibility of implementing instances of public participation is only foreseen

¹⁴⁴ https://www.ogp.gob.cl/5to-plan-de-accion/

¹⁴⁵ Law No. 19.300/1994, article 4.

¹⁴⁶ Law No. 19.300/1994, article 70, paragraph and.

¹⁴⁷ Law No. 19.300/1994/1994 (Article 31b.) https://sinia.mma.gob.cl/

¹⁴⁸ Decree No. 209/2022.

¹⁴⁹ https://mma.gob.cl/wp-content/uploads/2023/05/Presentacio%CC%81n-Proceso-participativo-Plan-de-

Implementacio%CC%81n-Participativa-de-Escazu%CC%81-PIPE-MMA-1.pdf

¹⁵⁰ Law No. 19.300/1994, Article 81, paragraph h.

¹⁵¹ Law No. 19.300/1994, paragraphs 3° y 3° bis.

¹⁵² Law No. 19.300/1994, article 30 bis; Supreme Decree No. 40/2013, article 82.

¹⁵³ https://www.sea.gob.cl/participacion-ciudadana-y-consulta-indigena

when the projects or activities present environmental burdens¹⁵⁴ and if it is requested by two citizen organizations with legal personality or at least ten people directly affected ¹⁵⁵. It should be noted that, beyond this consideration, the MOP implements participatory processes in all types of projects as detailed in Section 4.1.14 and paragraph 96. The participation processes that are implemented through the SEIA occur simultaneously and in parallel to the evaluation carried out by the authorities, are initiated immediately after the presentation of the EIA, or the DIA in case the need for a participatory process has been decreed, and a period is granted for the receipt of observations by the population (60 working days for EIAs and 20 working days for the DIA. Citizen observations can be submitted in writing or through the specific portal of Citizen Engagement of the SEA above mentioned. The SEA is obliged to integrate the observations of the community and pronounce on them in a well-founded way in the final evaluation report (ICE), which must be made public and bases the decision making on the issuance of the RCA. Considering that the consultation processes are simultaneous to the evaluation carried out by public bodies, the RSEIA foresees that, if there are significant changes in the evaluation instruments due to requests for clarification, rectification and / or extension that may be made by the bodies involved in the evaluation process, a new instance of participation must be opened. Finally, the 156157 rules establish the possibility of complaining in case the person considers that his observations were not duly considered. 158

- 95. The SEIA discloses all the projects that enter the system to process an RCA. This disclosure is always mandatory, regardless of whether it is an EIA or EIS. Law No. 19.300/1994 and the RSEIA provide that, after entering the system, the owner of the project must publicize it through an extract endorsed by the SEA. These rules clearly set out the time limits and means (including broadcasting, regional or national newspaper, Official Journal¹⁵⁹). The SEA also informs about the presentation of projects and the planned participation processes through its website and the application for mobile devices "SEA Móvil"¹⁶⁰. The RSEIA establishes that the information activities carried out must be adapted to the social, economic, cultural and geographical characteristics of the population in the area of influence of the project under evaluation, so that it knows the evaluation procedure, the rights they have, the type of project or activity under evaluation that generates participation and the main effects of said typology¹⁶¹. The rules also foresee that the SEA implements face-to-face activities, through different strategies¹⁶², to inform about the project and about the instance of public participation that occurs through the system. The MOP participates in these activities by informing about the project, its E&S risks and impacts and the planned measures, responding to the queries of the attendees.
- 96. The SEA has published specific guides to guide and strengthen citizen participation in the SEIA, as well as periodically offers training for citizens. The SEA has published two specific guides: (i) Methodological guide of face-to-face activities of the SEA with citizens (SEA, 2017)¹⁶³, which provides guidance on the roles of SEIA professionals, considerations for the development of face-to-face activities in their different stages and techniques for the planning and implementation of dynamics; (ii) Guide of good practices in the relations between the actors involved in projects that

¹⁵⁴ That is to say that they generate social benefits and that cause negative environmental externalities in nearby locations during their construction or operation (Supreme Decree No. 40/2013, article 94), the standard defines which type of project could produce environmental burdens.

 $^{^{155}}$ Law No. 13.900, Article 30a; and Supreme Decree No. 40/2013, Article 94.

¹⁵⁶ Ley No. 19.300/1994article 29, engraved 3; Supreme Decree No. 40/2013, article 83.

¹⁵⁷ Supreme Decree No. 40/2013, Articles 92 and 96.

¹⁵⁸ Law No. 19.300/1994, article 29 y 30 bis; Supreme Decree No. 40/2013article 78.

¹⁵⁹ Law No. 19.300/1994article 28

¹⁶⁰ https://www.sea.gob.cl/nueva-app-movil-del-sea

¹⁶¹ Supreme Decree No. 40/2013, Article 83.

¹⁶² Door-to-door notice, open houses, meetings between the proposer and the public (SEA, 2017).

¹⁶³ SEA Exempt Resolution No. 808/2017.

are presented to the SEIA¹⁶⁴, which includes principles and guidelines on the prevention and addressing of socio-environmental conflicts that may occur in these relationships; (ii) Guide for early community participation in projects submitted to SEIA (SEA, 2013b)¹⁶⁵, which provides guidance for project holders to engage in voluntary participation activities prior to submission to SEIA¹⁶⁶. These guides include guidelines for stakeholder identification, strategies for participation, as well as guidelines for planning and documenting processes. In addition, the SEA has several specific instructions for the implementation and documentation of citizen participation, mentioning, among others, a specific instruction for the process of consultation with indigenous peoples (PCPI) in the SEIA (in accordance with ILO Convention No. 169) ¹⁶⁷, and two instructions regarding the consideration of citizen observations in the processes implemented by the agency¹⁶⁸. The SEIA citizen participation portal provides online training, as well as videos and orientations that seek to strengthen the involvement and participation of the population.

- 97. Law No. 19.300/1994 also regulates the disclosure of information associated with environmental monitoring and the supervision of RCAs by the SMA. Within this framework, the SMA implements the Snifa (see details in Section 4.1.1.2)¹⁶⁹ where detailed information is published on the monitoring of RCAs and audits on compliance with the regulatory framework in environmental matters.
- 98. The MOP has regulations and tools that seek to strengthen and guarantee the participation of stakeholders (including indigenous consultation) and access to information from the early stages of the formulation of policies, plans and projects they develop. Exempt Resolution No. 315/2015, based on Law No. 20.500/2011 above mentioned, establishes the general rules of citizen participation in MOP initiatives. This norm defines citizen participation as a process of cooperation through which the MOP and citizens identify and deliberate jointly about the provision and management of infrastructure works and services, with methodologies and tools that encourage the creation of spaces for reflection and collective dialogues, aimed at the active incorporation of citizenship¹⁷⁰. As provided in the norm, participation must occur throughout the life cycle of the policies, plans, programs, and projects of the agency, with emphasis on the early stages of design and through modalities and tools appropriate to the purpose of participation, considering issues of gender, disability, age groups, and Indigenous People¹⁷¹. The MOP has established and regulated in the norm different mechanisms of citizen engagement¹⁷². Within this framework, different stakeholder consultation processes will be applied to the activities of the Program to be implemented by the MOP, both in relation to the preparation of plans (PERHC, PMALL, Strategic Plan for Rural Water Supply and Sanitation to 2030) and to the design and evaluation of civil works projects, whether they are subject to SEIA or not.

¹⁶⁴ SEA Exempt Resolution No. 1010/2015.

¹⁶⁵ SEA Exempt Resolution No. 1010/2015.

¹⁶⁶ Law No. 19.300/1994, Article 13a.

 $^{^{167}}$ Ordinary Office of the Chief Executive Officer of SEA No. 161116/2016.

https://www.sea.gob.cl/sites/default/files/migration files/instructivos/of. ord. ndeg 161116.pdf

 $^{^{\}rm 168}$ Ordinary Office of the Chief Executive Officer of SEA No. 130528/2013

https://www.sea.gob.cl/sites/default/files/migration_files/archivos/instructivos/inst130528_obs_ciudadana_evaluacion.p df and Ordinary Office of the Executive Director of SEA No. 100142/2010

https://seia.sea.gob.cl/informacion_seia/instructivos/InstPAC.pdf

¹⁶⁹ Law No. 20.417/2010 (Article 31 of the second article). https://snifa.sma.gob.cl/

¹⁷⁰ MOP Exempt Resolution No. 350/2015, Article 2.

¹⁷¹ MOP Exempt Resolution No. 350/2015, Article 3.

¹⁷² These mechanisms are: (i) citizen engagement processes in policies, plans, programs and projects; (ii) information access systems (relevant plans, policies, programs and projects); (iii) participatory public accounts; (iv) citizen consultations (including mechanisms such as participatory dialogues and virtual consultations); (v) COSOC.

- 99. The MOP has a specific guide that seeks to guide and strengthen citizen participation (MOP, 2018) that is applicable to all activities to be developed within the framework of the Program, including the design of plans and policies and the development of civil works. Among other aspects, this guide establishes a Participatory Management Model that defines structures, concepts and processes that guide ministerial work in terms of participatory management based on the lessons learned from the ministry itself (MOP, 2018, p. 27). It includes methodological standards with strategies to be used by type of participation and stage of the initiatives, as well as standards for the registration of activities and monitoring of compliance with the commitments assumed, and tools for coordination in the planning, execution, monitoring and evaluation of citizen participation. It should be noted that this guide addresses gender issues in citizen participation additionally, during the preparation of EIAs or DIAs, the MOP applies the citizen participation guide published by the SEA.
- 100. The MMA also has regulations and tools that seek to strengthen and guarantee stakeholder participation (including indigenous consultation see Section 4.1.2.6) and access to information from early stages of the formulation of its plans, policies, norms and actions. Exempt Resolution No. 601/2015, based on Law No. 20,500/2011 mentioned above, establishes the general rules of citizen participation in MMA initiatives. This norm defines citizen participation as a process of social co-responsibility between the MMA and citizens in order to strengthen and improve public management¹⁷³. The MMA has established and regulated in the aforementioned norm different mechanisms of citizen engagement¹⁷⁴. The norm establishes that these mechanisms must consider the difficulties of vulnerable groups in accessing information, establishing channels that allow their effective participation. Within this framework, the activities of the Program that will be implemented by the MMA, in particular the preparation of the National Water Security Policy, as well as the regulatory developments and other activities related to the creation of river basin working groups, will have different processes of consultation with interested parties.
- 101. The MMA has a specific guide to guide and strengthen citizen participation in (MMA, 2021) that is applicable to all activities to be developed within the framework of the Program, including the design of policies and regulatory developments. Among other aspects, this guide establishes criteria and procedures for the development of meaningful consultations. Among others, it defines stages of the consultation process and includes guidelines for stakeholder identification, feedback, process documentation and dissemination of results. It should be noted that this guide addresses gender issues in citizen participation, as well as the special consideration of vulnerable groups.
- 102. The communication and information dissemination strategies of the Program will be based on those provided for in the MOP and MMA standards. In addition to the stakeholder engagement processes, information will be disseminated through the channels provided for in the MOP¹⁷⁵ and MMA¹⁷⁶ norms, which include the websites and social networks of both ministries. Among others, a Stakeholder Communication Plan will be prepared to address the concerns of different water users and inform about the benefits of the IWRM approach in terms of participatory water management that allows to involve government levels, the private sector, civil society, including indigenous communities.

¹⁷³ MMA Exempt Resolution No. 601/2015, article 7.

¹⁷⁴ These mechanisms are: (i) access to relevant environmental information (plans, policies, programs, standards, actions); (ii) Citizen consultation; (iii) COSOC; (iv) participatory public account; (v) public hearings; (vi) participatory dialogues; (vii) Citizen councils; (viii) public-private committees, groups or tables of an environmental nature.

¹⁷⁵ MOP Exempt Resolution No. 350/2015, Article 12.

¹⁷⁶ MMA Exempt Resolution No. 601/2015, Article 14.

4.1.2.2. Grievance mechanisms

- 103. As mentioned above, Law No. 20.285/2008 regulates transparency in public management establishes the framework for the presentation of consultations, complaints and claims before State agencies. Each agency has an Information and Citizen Service System (Sistema de Información y Atención Ciudadana, SIAC)/OIRS¹⁷⁷ that seeks to assist citizens in their right to submit petitions, suggestions or claims to the State. The SIAC/OIRS allow to channel the queries, complaints and claims of each of the government areas, including the SEA¹⁷⁸, SMA¹⁷⁹, MMA¹⁸⁰ and MOP¹⁸¹, through electronic means (web platform and email), postal mail, telephone, or face-to-face attention in the dependencies of each agency. The SIAC/OIRS of each agency is established by standard, according to the channels anonymous presentations are allowed, in all cases the presentations must be answered within 10 working days.
- 104. In addition, in the case of works projects that require processing an RCA, the RSEIA contemplates an appeal for a claim on the RCA. This appeal for the SEA to review its decision can be presented by the people who participated in the participatory process implemented for the project, and who understand that their observations were not properly addressed. The RSEIA regulates its processing, specifying the deadlines and authorities involved¹⁸², including the possibility for the authority to request reports from third parties to resolve the claim¹⁸³. In case of not agreeing with the decision that resolves the claim, the claimant can appeal in second instance to the competent Environmental Court¹⁸⁴, and subsequently to the Supreme Court of Justice.
- 105. For their part, MOP civil works contractors are obliged to implement a claims or recommendations management system. The MOP foresees that each facility must have a system that allows receiving and managing complaints or recommendations from citizens, clearly identified and that considers, in addition, a system of universal accessibility and inclusive language, always taking into consideration respect for the culture of indigenous peoples and migrants, in all those places where necessary, which must be documented (DGC, 2021, p. 19 and 81). All MOP projects have a book of suggestions and complaints on site available to the public.

4.1.2.3. Physical cultural resources

- 106. According to the exclusion criteria detailed in Annex 4, the interventions to be financed under the Program may not involve conversion or degradation of cultural heritage sites.
- 107. The assessment of the E&S risks and impacts of the works included in the RA2 and RA3 includes the consideration of physical cultural resources. In the case of projects that must process an RCA, the RSEIA foresees that it is appropriate to present an EIA (and implement an indigenous consultation process) when the project or activity may affect indigenous cultural heritage; the DIA

¹⁷⁷ Initially were constituted Offices of Information, Complaints and Suggestions (OIRS), established and regulated by Decree No. 680/1990. Las OIRS were integrated subsequently a los SIAC with the Sanction of the Law No. 19.880/2003 that establishes the Bases of the Administrative Procedures that govern the acts of the Organs of the Administration of the State. The SIAC of each agency coordinates all its care spaces through management with an established methodology, expedited referral procedures, registration systems, dissemination plan and systematization of information for feedback The actions of the organism (Ministry General Secretariat of Government, 2010).

¹⁷⁸ https://www.sea.gob.cl/oficina-de-informacion-reclamos-y-sugerencias

¹⁷⁹ https://portal.sma.gob.cl/index.php/contactenos/

¹⁸⁰ https://mma.gob.cl/atencion-ciudadana/

¹⁸¹ https://siac.mop.gob.cl/

¹⁸² The claim must be resolved by the Committee of Ministers (made up of the Ministers of the Environment; Health; Economy, Development and Tourism; Agriculture; Energy; and Mining) in the case of EIA, or the Executive Director of the SEA for the DIA (Law No. 19,300/1994, article 20; and Supreme Decree No. 40/2013, article 77).

¹⁸³ Supreme Decree No. 40/2013, Articles 77 and 78.

¹⁸⁴ Supreme Decree No. 40/2013, Article 81.

for its part must analyze and justify that the project will not affect indigenous cultural heritage. In both types of instruments, the impact on cultural resources must be identified and evaluated. In the case of RA2 and RA3 projects that do not have to process an RCA, the EAA addresses the consideration of cultural heritage, including monuments, sites with anthropological, archaeological, paleontological, historical or cultural heritage value that are within the area of influence of the project. For these cultural resources, the analysis of their state of conservation, preservation and the potential deterioration that may affect them as a result of the actions of the project is contemplated, based on a bibliographic review and complemented by a survey of surface land in all the sites to be intervened (DOH, 2021, p. 8). Additionally, the MOP has an instruction that establishes the procedures, coordination within the MOP and with other agencies, minimum contents for the evaluation of the archaeological component and professional profiles required (SEMAT, n.d.) both for the cases of projects that enter the SEIA and projects that are not obliged to process an RCA.

- 108. Law No. 17.288/1970 and Supreme Decree No. 484/1991 regulate permits for archaeological, anthropological, and paleontological excavations that must be processed before the Natural Monuments Council (Comisión de Monumentos Naturales, CMN). These permits integrate the SEIA as PAS 132. It should be noted that there is a joint working group between the MOP and the CMN to address aspects related to the procedures for obtaining permits.
- 109. The procedure to be implemented in case of fortuitous findings is regulated in Law No. 17,288.

 185 This procedure is reflected and specified in detail in the instructions mentioned in the previous paragraph, establishing the responsibilities and flows of the process, including the intervention of the CMN, the construction contractor and the tax inspection (SEMAT s/f, p. 20). This procedure is included as part of the EAGs for construction contractors.

4.1.2.4. Safety of the population and workers

- 110. In accordance with the exclusion criteria detailed in Annex 4, interventions to be financed under the Program may not involve air, water or land contamination leading to significant adverse impacts on the health or safety of individuals and communities, or working conditions that expose workers to significant risks to health and personal safety. The latter involves aspects relating to the health, safety and protection of the population and workers through the construction and safe operation of works; the proper management of hazardous materials and substances; measures to mitigate risks in the event of natural hazards.
- 111. The assessment of E&S risks and impacts includes addressing aspects related to the safety of the population and workers. For those projects that must process an RCA, the RSEIA foresees that the EIA and the EIS must include, among other relevant issues: (i) the estimation of the quantity and management of waste, chemicals and other substances that may affect the environment both during construction and operation; (ii) the risks to the health of the population due to the quantity and quality of effluents, emissions or waste generated; (iii) the mitigation and control measures to be adopted in particular and a Monitoring Plan for these measures, as well as a Contingency and Emergency Prevention Plan¹⁸⁶. With respect to the works included in the Program, both those that must process an RCA and those that must not process an RCA, the instruments developed by the different areas of the MOP (see section 4.1.1.4), including EAA, EIA, DIA, E&S management plans, as well as the specifications that are part of the bidding documents,

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¹⁸⁵ Law No. 17.288/1970, article 26.

¹⁸⁶ Supreme Decree No. 40/2013, articles 18 and 19, Title VI. Regarding contingencies and incidents, Exempt Resolution No. 885/2016 establishes the General Standards on Reporting Duties of Notices, Contingencies and Incidents through the Environmental Monitoring System.

include addressing risks and impacts on the health and safety of the population; hazardous materials management; as well as risk analysis of natural disasters or human-induced emergencies; and including the requirement for training and training of workers in matters of accident risk prevention and occupational health.

- 112. Chile has a regulatory framework that regulates aspects related to the design and safe operation of civil works. Among others, it is worth mentioning Decree No. 60/2011 that establishes the requirements regarding the seismic design of constructions. The National Institute of Standardization (INN) has established numerous technical standards that establish safety criteria for both aspects of design of civil works and safety measures for various tasks of the construction and operation stage. Among others, it is worth mentioning the technical standard NCh 433 that establishes criteria for the seismic design of buildings and the NCh 2369 standard that addresses the seismic design of industrial structures and facilities. As for the civil works of the RA2, Supreme Decree No. 90/2001 establishes the emission discharge standards, and the NCh 409/1 and NCh 1333 standards set the drinking water quality requirements, among others.
- 113. Aspects relating to health and safety for workers are regulated both at national and sectoral level in the MOP. The Labor Code¹⁸⁷ sets out general requirements for the protection of workers' health and safety. For its part, Supreme Decree No. 594/2020 regulates basic sanitary and environmental conditions in workplaces. In particular, the MOP has a document that establishes the bases of occupational risk prevention for construction and consulting contracts of the MOP with a gender perspective, which applies to consulting companies, contractors and subcontractors of work. This document (DGOP, 2022b), establishes in detail the requirements that companies must meet, including a Management System Plan for the Prevention of Occupational Health and Safety Risks, as well as the presentation of monthly reports to the MOP on preventive management and accidents. The MOP also has a Risk Prevention Manual for the civil works it implements (MOP, 2005), which develops the regulatory framework for application and procedures for occupational safety. Among other topics, it addresses the specific risks in the typologies of works or physical interventions carried out by the agency, including proposals for inclusion in RA1, RA2 and RA3, as well as the inclusion of risk prevention¹⁸⁸ and occupational¹⁸⁹ health aspects in work contracts. The responsibility for the prevention of risks of accidents and occupational diseases of the MOP is in charge of the DGOP, through its Risk Prevention Department (see Section 4.1.1.4). This directorate establishes annually the Action Plan and Framework Program for risk prevention of the MOP, based on the regulations for the application of safety and health at work, which is applied in coordination with the Risk Departments of the DGOP, the General Directorate of Contracting and the DGA. Among others, it provides for occupational health and safety inspection in at least 30% of MOP works and consultancy contracts (DGOP, 2023, p. 7).
- 114. Labor standards address sexual exploitation and abuse and sexual harassment, as well as prohibit child labor. Law No. 20.005/2005, amending the Labor Code, criminalizes and punishes sexual harassment, including complaint, investigation, and punishment. For their part, the bases for the prevention of occupational risks indicated above establish that contractors and subcontractors must prevent and address workplace and sexual harassment, through complaint protocols, and even domestic violence, implementing actions for the prevention and detection of behaviors and actions that may affect labor development and the safety of people (DGOP, 2022b,

¹⁸⁷ Decree with Force of Law No. 1/2003.

¹⁸⁸ Developing among other aspects: Traffic signs, work at height, driving vehicles, personal protection elements, sampling of water resources, etc.

¹⁸⁹ Developing among other aspects: programs medical surveillance for exposure to risk agents, occupational preventive health program, classification of health risks and effects.

- p. 10). Regarding child labor, the Labor Code prohibits the recruitment of children under 15 years of age and establishes requirements to protect the employment of adolescents of working age (between 15 and 18 years of age). ¹⁹⁰
- 115. Chile has a regulatory framework that addresses waste management in general¹⁹¹ and the handling, storage, transport and final disposal of hazardous materials and substances.¹⁹² Regarding the activities of the RA1 that involve the disposal of electronic equipment, it should be noted that, although Chile does not have a standard regulating electronic waste, the MOP has established procedures for its management. It is expected that the electronic equipment to be discarded will be disassembled for reuse of some of its parts by the agency itself and the surplus will be put to public auction.
- 116. Regarding addressing natural hazards, in addition to what has been mentioned in the preceding paragraphs, it is mentioned that construction contractors are required to have an Emergency and Evaluation Plan. This plan establishes the set of protection and prevention measures planned and necessary to face emergencies caused by, among others, natural disasters (earthquakes, floods, or others). These plans are reviewed periodically during the development of the works and updated, as appropriate, according to the progress of the contract and in accordance with the provisions of current legislation on the matter and as established by the National System for Disaster Prevention and Response (SINAPRED) and the National Disaster Prevention and Response Service (SENAPRED)¹⁹³.

4.1.2.5. Land acquisition and loss of access to natural resources

- 117. In accordance with the exclusion criteria detailed in Annex 4, interventions to be financed under the Program may not involve, inter alia, the acquisition of land that may cause large-scale¹⁹⁴ physical or economic, temporary or permanent, displacement or restrictions on the use of land or resources¹⁹⁵ that have significant adverse or high impacts on the livelihoods of affected people; as well as the relocation of Indigenous Peoples from lands and natural resources that are subject to traditional ownership or under customary use or occupation. RA1 interventions are expected to be located on public lands and do not require land acquisition or affect access to natural resources. Although the MOP seeks to minimize the need for land acquisition or restrictions on its use, some interventions of the RA2 and RA3 may require the execution of expropriations, the acquisition of easement rights, as well as involuntary resettlement, in some cases to fulfill the objective of the interventions, such as, for example, minimizing the exposure of the population to alluvial risks.
- 118. In terms of the provision of compensation, it is worth mentioning the rules governing expropriations and easements. Law No. 2,186/1978, which establishes the procedure to be implemented for expropriations for reasons of public utility or social or national interest on property with property rights, provides for compensation for patrimonial damage actually caused

¹⁹⁰ This includes, for example, the prohibition of hiring adolescents for dangerous tasks, the fact that the work does not impair their regular attendance at classes and/or their participation in vocational orientation or training programs (Decree with Force of Law No. 1 /2003, Chapter 2).

¹⁹¹ Decreto Supremo No 594/2020, Decreto Exento No. 37/2019, Ley No. 20.920/2016, Ley No. 18.695/1988 Decreto con Fuerza de Ley No. 725/1967.

¹⁹² Decree No. 148/2004, Exempt Resolution No. 714/2002, Decree No. 43/2015, Decree No. 298/1994, Decree with Force of Law No. 1/1990.

¹⁹³ Law No. 21.364/2021 https://senapred.cl/

¹⁹⁴ Considering as large scale the physical and/or economic displacement of more than 200 people.

¹⁹⁵This is according to the definitions of land acquisition, restrictions on land use, physical displacement, and economic displacement included in the Environmental and Social Standard (ESS) 5 of the World Bank's Environmental and Social Framework.

by the expropriation considering the commercial value of the property, while establishing that the provisional amount of compensation is determined by a commission of three members appointed by the expropriating entity based on a list of technical experts approved by the President of the Republic (Article 4). Final compensation may be fixed by mutual agreement or by the competent court (article 10), in this regard it states that the expropriator and the expropriated may agree on the amount of compensation, its form and term of payment, including the dation in payment of specific goods, and this agreement will prevail over any other procedure aimed at fixing definitive compensation (article 11). The norm also contemplates compensation for patrimonial damage caused to tenants, co-signers or other third parties whose rights are extinguished by the expropriation, which will be the exclusive responsibility of the expropriating entity (Article 20). On the other hand, easements are established in the Civil Code¹⁹⁶ as a lien imposed on a property in the benefit of another property of a different owner. The MOP itself fulfills the role of expropriating entity, and the enforcement authority in matters of easements is the Ministry of National Assets.

- 119. The Law regulating WSSs¹⁹⁷ establishes that the land where water catchments and ponds regulating rural drinking water systems (RA2) are located are considered to be of public interest. In this sense, the Ministry of Social Development and Family (MDSF), which grants the permit for the construction of the work, establishes¹⁹⁸ that, to start the works, the land must be regularized based on the expropriation law if applicable, in the name of the Committee or Cooperative of WSS or DOH as appropriate.
- 120. Because the projects or activities enter the SEIA by their typology, the system does not provide that the resettlement of population (physical and/or economic displacement) is a cause to process an RCA. Law No. 19.300/1994 and the RSEIA do consider that, if a project or activity (due to its typology) must process an RCA, it will be responsible for submitting an EIA in case the project involves the resettlement of human communities¹⁹⁹, or significant alteration of the systems of life and customs of human groups. The RSEIA provides that the mitigation, compensation, and remediation measures plan should describe and justify the measures to be taken to eliminate, minimize, repair, restore or compensate for the adverse effects of the project, including those related to population resettlement²⁰⁰. To this end, provision is made for the preparation of a Resettlement Plan (*Plan de Reasentamiento*, RDP) as detailed below, which is attached to the EIA.
- 121. The concept of resettlement within the framework of the SEIA is limited to the displacement and relocation of communities or human groups that live in the area of influence of the project or activity²⁰¹. This concept does not include isolated individuals who must be resettled, although in practice the MOP includes in the RDP all persons who must be resettled. The SEA has established a specific guide to address the evaluation and planning of resettlement (SEA, 2014b) of mandatory application to projects entering the SEIA and involving involuntary resettlement²⁰². This guide considers displacement as the removal of those who inhabit the place (transfer of property in exchange for compensation), and relocation as reintegration/rehabilitation of displaced people with the aim of restoring their patterns of social organization (SEA, 2014, p. 13). In particular, it points out that, while the regulatory framework of the SEIA establishes minimum criteria in this

¹⁹⁶ Civil Code, article 820.

¹⁹⁷ Law No. 20.998/2017, article 83.

¹⁹⁸ Based on the provisions of the Budget Law of each year.

¹⁹⁹ Law No. 19.300/1994, Article 11, engraved C; and Supreme Decree No. 40/2013article 7.

²⁰⁰ Supreme Decree No. 40/2013, article 18, paragraph i.

²⁰¹ Supreme Decree No. 40 define how communities or human groups to any group of persons sharing a territory, in which interact permanently, giving rise to a Life system formed by social, economic relations and cultural, which eventually tend to generate traditions, community interests and feelings of rooting (Article 7).

²⁰² SEA Exempt Resolution No. 1010/2015.

area, the Operational Policy on Involuntary Resettlement (OP 4.12, 2001) of the Bank²⁰³ and the Performance Standard (PS) 5 (2012) of the International Finance Corporation (IFC) act as references in this area (SEA, 2014, p. 15). In this framework, the guide establishes the requirement to prepare an RDP in line with OP 4.12 and PS5, with the limitations indicated above with respect to isolated persons, although including those who have legal rights or are informal occupants and foreseeing the need to establish compensation and assistance to those affected. If the project involves expropriations, the guide establishes that the EIA or the DIA must predict and evaluate the impacts derived from the expropriation to determine if there will be significant alteration of the systems of life and customs of human groups or resettlement in case the project generates the displacement and relocation of human groups (SEA, 2014, p. 20).

- 122. Regarding the loss of access to natural resources, in the case of projects that are obliged to process an RCA, the SEIA addresses it in the context of the evaluation of the alteration of the systems of life and customs of human groups. In particular, the RSEIA provides that the loss of access should be assessed considering the intervention, use or restriction of access to natural resources used as economic sustenance of the group or for any other traditional use, such as medicinal, spiritual, or cultural use²⁰⁴. It should be noted that, as indicated in the previous paragraph, only groups or communities are affected, not isolated people.
- 123. RDPs integrate measures to offset the impacts associated with physical and economic displacement and support the restoration of livelihoods. These include compensation for replacement costs, alternative housing solutions, assistance for moving processes, support for employability and productive development, psychosocial accompaniment, and the restoration of social networks.
- 124. For its part, in the cases of projects that do not require processing an RCA, the MOP only implements the compensations that correspond to the rules that regulate expropriations and easements. In that sense, an RDP is also not prepared and implemented. Section 5 includes specific actions to be implemented as part of the Program to address identified gaps in land acquisition and involuntary resettlement.
 - 4.1.2.6. Indigenous Peoples, Afro-Chileans or members of another minority and marginalized social groups
- 125. In accordance with the exclusion criteria detailed in Annex 4, the interventions to be financed under the Program may not involve, among others, negative impacts on lands and natural resources subject to traditional ownership or under customary use or occupation; relocation of indigenous peoples from lands and natural resources that are subject to traditional ownership or under customary use or occupation.
- 126. The assessment of the E&S risks and impacts of the works included in the Program includes the specific consideration of Indigenous Peoples. In the case of projects that must process an RCA, the RSEIA provides that, with respect to the potential impact on indigenous peoples, it is appropriate to present an EIA (and implement an indigenous consultation process) when the project or activity involves the location in or close²⁰⁵ to an indigenous population or may result in

²⁰³ Note that the guide was published in 2014, prior to the entry into force of the World Bank's Environmental and Social Framework.

²⁰⁴ Supreme Decree No. 40/2013, Article 7.

²⁰⁵ El RSEIA define a la proximidad como el área de influencia del proyecto o actividad (Decreto Supremo No. 40/2013, artículo 8). Cabe precisar que el SEIA cuenta con una guía específica que establece la metodología para determinar y justificar el alcance del área de influencia de los proyectos (SEA, 2017b), incluyendo la determinación del área de influencia en

a significative alteration of their livelihoods and cultural heritage. In the case of projects that are responsible for processing a DIA, the study must analyze and justify that such situations may not occur. For its part, as previously mentioned, the E&S instruments prepared by the MOP in cases where an RCA is not required (EAAT, EAA, as well as E&S management plans) include the identification and evaluation of social impacts, especially considering the identification of the condition to the indigenous population.

- 127. Chile has specific regulations governing the indigenous consultation process²⁰⁶ under the provisions of Convention 169 of the International Labour Organization (ILO) ²⁰⁷. These general regulations, as well as the sector-specific regulations based on them, provide that this consultation process be carried out in good faith, contemplating appropriate mechanisms according to the socio-cultural characteristics of each people and through their representative institutions, so that they can participate in an informed manner and have the possibility of influencing in a real and effective way to the extent that it is likely to affect them directly²⁰⁸. Considering the scope of the Program, two situations can be identified:
 - In the case of projects that must process an RCA, the indigenous consultation is (i) integrated into the procedure that is implemented through the SEIA, with the SEA being responsible for its implementation. The RSEIA establishes specific provisions for its implementation. In particular, the process of consultation with indigenous peoples is applied when the project or activity presents or generates any ECC linked to population resettlement or significant alteration of their livelihoods and cultural heritage, location in or near a protected population, or affectation of indigenous cultural heritage²⁰⁹. The SEA has specific instructions for the implementation of the Indigenous Peoples Consultation Process (Proceso de Consulta a los Pueblos Indígenas, PCPI) 210. This instruction clearly establishes the set of technical and regulatory background that must be considered in the process; the requirements for consultation; the roles of the actors (SEA and subject of the consultation); as well as the stages of the process and methodology of the consultation. In addition, the RSEIA provides for the implementation of instances of "meeting with human groups belonging to indigenous peoples" (reunión con grupos humanos pertenecientes a pueblos indígenas, RGHPI) in the cases of projects that present an ECC (outside the one indicated above) or processed through a DIA, and are located in indigenous lands, areas of indigenous development or in the vicinity of human groups belonging to indigenous peoples; the observations received in this RGHPI may serve as motivation for the decisions adopted.²¹¹

términos de afectación de sistemas de vida, costumbres, y patrimonio cultural indígena. Asimismo, cuenta con una guía para determinar el área de influencia respecto de la afectación de sistemas de vida y costumbres, incluidas aquellas de las poblaciones indígenas (SEA, 2020). Ambas guías son de aplicación obligatoria para proyectos que deben tramitar una RCA. ²⁰⁶ Supreme Decree No. 236/2008 and Supreme Decree No. 66/2014. This regulation considers indigenous peoples to be those defined in ILO Convention 169 in its article 1 (literal b) and who are recognized in Law No. 19,253/1993. Law No. 19,253/1993 considers both the generic level of ethnicity (Mapuche, Quechua, Rapa Nui, etc.) and the individual people of these ethnic groups (criteria to be considered indigenous, article 2); This law understands that an Indigenous Community is a group of people belonging to the same indigenous ethnic group and who are in one or more of the following situations: a) they come from the same family group; b) recognize a traditional chiefdom; c) they own or have owned indigenous lands in common, and d) they come from the same ancient town (article 9).

²⁰⁷ Promulgated by Supreme Decree No. 236/2008.

²⁰⁸ Supreme Decree No. 66/2014, Title II, and Supreme Decree No. 40/2013, Article 85.

²⁰⁹ Supreme Decree No. 40/2013, article 85.

²¹⁰ Office Ordinary of the Chief Executive Officer of SEA No. 161116/2016.

https://sea.gob.cl/sites/default/files/migration_files/instructivos/of._ord._ndeg_161116.pdf

²¹¹ Supreme Decree No. 40/2013, Article 86.

- (ii) In the case of projects that do not have to process an RCA, indigenous consultation is implemented by the different areas of the MOP. The MOP has a procedure to verify whether a project affects indigenous communities and therefore should proceed with an indigenous consultation. This procedure is coordinated by the Citizen Participation and Indigenous Affairs Unit of the DGOP's DIS. The application of this procedure is determined based on the analysis of the technical characteristics of the project, its location in the territory and the positive or negative effects they produce on the indigenous population existing in the area of influence of the project. The decision on the application of the consultation is taken at a Final Agreement Meeting and is reflected in a DGOP Resolution. The respective SEREMI, the Regional Director, the DIS, the Tax Inspector, the DGOP and the Ministerial Adviser on Indigenous and Afro-descendant Peoples and/or their respective representatives are participating in this meeting. It should be noted that, in case of justified doubt about the appropriateness of the indigenous consultation, the MOP may request a recommendation from the Indigenous Affairs Coordination Unit of the MDSF. The MOP has a specific guide for the planning and development of indigenous consultation processes (SEMAT, 2016) by the MOP teams. This guide includes, among other topics, recommendations, and practical guidance on how to apply consultation processes in a manner consistent with ILO Convention 169 and the national regulatory framework.²¹²
- 128. Indigenous consultation processes are implemented by specific citizen participation units within the different areas of the MOP and the MMA. In relation to physical interventions, the Citizen Participation and Indigenous Affairs Units of the DGA, DOH, and the SSR will support the preparation and implementation of the consultations.
- 129. Regarding vulnerable²¹³ or marginalized groups, in addition to what is mentioned in relation to the indigenous population, Chile has specific regulations on discrimination, persons with disabilities, gender-based violence, gender identity, protection of children, and protection of the indigenous population.²¹⁴ Although the regulatory framework that regulates the evaluation of E&S impacts, as well as the scope of the instruments implemented by the MOP for civil works that do not require RCA, do not expressly contemplate the approach of vulnerable groups, except for indigenous peoples, there are tools that seek to promote their approach. These include: (i) in the case of the SEIA, the "Instructions for the Description of the Area of Influence of the Human Environment with a Gender Approach"²¹⁵ and the "Guide for the anticipated participation of the

²¹² Updated in 2022 by DGOP Ordinance No. 232/2022. This procedure provides as analysis criteria: (i) existence of communities, associations or other indigenous organizations in the area of influence of the investment. (ii) the generation of changes in traditions, ancestral customs, religious, cultural or spiritual practices; (iii) the existence of indigenous lands in the area of influence, such as: cleared lands, domain titles in conflict, claims, grant titles, others; (iv) if the initiative will happen or is inserted in an indigenous development area; (v) if there are modifications to the conditions of use and access to natural resources; (vi) if there are resettlements or significant alteration of living systems and customs; (vii) if there is alteration of the cultural heritage, such as: centers of cultural significance, cemeteries, ceremonial sites, others; (viii) if transhumance exists; (ix) if there are water use rights established in the project area, whose owners are Indigenous Communities (DGOP, 2022, p. 4 and 5).

²¹³ Poor, disabled, women, children, elderly, minorities ethnic, racial groups, among others.

²¹⁴ Among them: Law No. 20,422/2010 that establishes standards on equal opportunities and social inclusion of people with disabilities, and Law No. 20,609/2012 that modifies it); Law No. 21,015/2017 that encourages the inclusion of people with disabilities in the world of work; Decree No. 201/2008 promulgating the United Nations Convention on the Rights of Persons with Disabilities and its Optional Protocol; Decree No. 99/2002 that promulgates the Inter-American Convention for the elimination of all forms of discrimination against people with disabilities; Law No. 21,212/2020 that modifies the Penal Code, the Criminal Procedure Code and Law No. 18,216 regarding the classification of femicide; Law No. 21,120/2018 that recognizes and protects the right to gender identity; Decree No. 830/1990 that promulgates the Convention on the Rights of the Child; and Law No. 19,253/1993 that establishes the rules on the protection, promotion and development of indigenous people.

²¹⁵ SEA Ordinary Office No. 171649/2017.

community in projects that are presented to the SEIA" (SEA, 2013b)²¹⁶ that raises the importance of identifying socially vulnerable groups and implementing participation mechanisms that are socially and culturally (SEA, 2013b, p. 23 and 24); (ii) in the case of the MOP, the "Guide for the Management of Citizen Participation" (MOP, 2017) contemplates that participatory processes that are applied from the early stages of the design of projects, plans and policies should pay particular attention to vulnerable groups, considering the approach of social inclusion and gender equity in these processes; (iii) in the case of the MMA, the "Guide for the implementation of citizen consultation processes in the MMA" (MMA, 2021) highlights the importance of considering vulnerable groups in the identification of stakeholders.

130. In particular, the activities of the Program seek to provide attention to vulnerable groups through equitable access to the benefits of the Program. Among other aspects, the 3 RA include specific measures to reduce gender gaps, considering actions to increase their participation in employment associated with the realization of civil works that the MOP will implement; as well as measures to increase the participation of women in decision-making associated with water resources management. The participatory water management approach to be implemented as part of RA1 also seeks to ensure the participation of the most vulnerable groups, including women and indigenous peoples. For its part, RA2 seeks to provide access to safely managed drinking water services to the most vulnerable rural population, including women and indigenous populations. A subsidy will be applied to the consumption of drinking water to mitigate the risk of exclusion of those who cannot afford the new tariffs.

4.2. Evaluation in relation to the basic principles of the PfroR policy

131. The E&S management systems applicable to the Program are reasonably aligned with the basic principles of the PforR policy and the planning elements of the PforR directive. In the previous section, the result of the evaluation of existing E&S systems based on planning principles and elements was presented. The evaluation outcome for each principle is presented below, considering its alignment with the basic principles and planning elements relevant to the Program.

4.2.1. Principle 1: Environmental and social sustainability in the design of the Program

132. The E&S management systems applicable to the Program seek to promote E&S sustainability in the design of the Program; avoid, minimize, or mitigate negative impacts; and promote informed decision-making regarding the E&S impacts of the Program. In general terms, there is a well-developed general and sectoral legal and regulatory framework, as well as an institutional framework with clear, delimited functions and resources to effectively manage the E&S risks and impacts of the Program. In particular, the E&S risks and impacts of civil works may be properly managed by applying the E&S instruments required by the SEIA of Chile and those provided for in the MOP procedures. The evaluation and management of the E&S risks and impacts of the Program's activities incorporates recognized elements of good practices considering, among other aspects: the evaluation of technical and location alternatives; the evaluation of potential induced or indirect, cumulative and transboundary impacts; the identification of measures to avoid, mitigate, repair or compensate for negative E&S risks and impacts; the consultation and early stakeholders engagement (including consultation and consent of indigenous peoples as appropriate). Both the RCA and the E&S management instruments that apply to the Program's activities (EAA, EIA, DIA, E&S management plans, as well as the specifications that are part of the

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²¹⁶ SEA Exempt Resolution No. 1010/2015.

- bidding documents) include measures, requirements and/or commitments that are generally adequate and sufficient to mitigate E&S risks and impacts. The MOP has sufficient institutional capacity to ensure compliance with Chile's E&S regulatory framework.
- 133. Finally, the Program has Grievance Mechanisms that include addressing claims related to E&S management. These mechanisms have established procedures that are accessible to the various stakeholders.
- 134. As noted above and discussed in detail in Section 4.1, no differences have been identified with respect to this principle and the planning elements associated with it²¹⁷.

4.2.2. Principle 2: Natural habitats and physical cultural resources

- 135. The E&S management systems applicable to the Program seek to avoid, minimize and mitigate potential negative impacts on natural habitats and physical cultural resources as a result of the Program's activities. It should be noted that, as detailed in Annex 4, activities that involve: (i) location in, or affectation of, areas with some type of protection (for example, protected natural areas, priority sites for conservation, protected wetlands, glaciers) are excluded from the Program; (ii) conversion or significant degradation of critical habitats, understood as areas of great importance or value in terms of biodiversity; (iii) conversion or degradation of cultural heritage sites; (iv) air, water or land pollution that causes significant adverse impacts on ecosystems. In general terms, the assessment and management of risks and impacts E&S incorporates from early stages of the project cycle, among other aspects: the identification and evaluation of adverse effects on biodiversity and potentially important cultural resources, as well as the development of appropriate measures to avoid, minimize or mitigate adverse effects; conservation, maintenance and rehabilitation of natural habitats and protected species of flora and fauna, as long as it is relevant and viable according to the type of activities of the Program.
- 136. As noted above and discussed in detail in Sections 4.1.1.8 and 4.1.2.3, no differences have been identified with respect to this principle and the planning elements associated with it.

4.2.3. Principle 3: Community and worker health

137. The E&S management systems applicable to the Program seek to protect the health of the community and workers against potential risks associated with: (i) construction and/or operation of facilities or other actions; (ii) exposure to toxic chemicals, hazardous waste and other hazardous materials; (iii) reconstruction or rehabilitation of infrastructure in areas prone to natural hazards. It should be noted that, as detailed in Annex 4, activities that involve: (i) air, water or land pollution that causes significant adverse impacts on the health or safety of people, communities or ecosystems are excluded from the Program; (ii) working conditions that expose workers to significant risks to personal safety and health. In general terms, the assessment and management of risks and impacts E&S seeks, from early stages of the project cycle, among other aspects: provide adequate health, safety and protection of the community, individuals and workers through the safe design, construction, operation and maintenance of Program activities; promote the use of recognized good production practices, handling, storage, transport and disposal of hazardous materials and substances considering the civil works of the Program (including worker training); include appropriate measures to avoid, minimize or mitigate community, individual and worker risks in the event of natural hazards.

54

²¹⁷ This is except for the specific gaps identified in relation to Principle 4, which are developed in Section 4.2.4.

- 138. As noted above and discussed in detail in Section 4.1.2.4, no differences have been identified with respect to this principle and the planning elements associated with it.
- 4.2.4. Principle 4: Land acquisition and loss of access to natural resources
- 139. The E&S management systems applicable to the Program seek to manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and helps affected people improve, or at least restore, their livelihoods and quality of life. It should be noted that, as detailed in Annex 4, activities that involve the following are excluded from the Program: (i) forced evictions; (iii) land acquisition that may cause large-scale²¹⁸ physical or economic displacement, temporary or permanent, or restrictions on land or resource use that have significant adverse or high impacts on the livelihoods of affected people; (ii) large-scale changes in land use or access to land and/or natural resources; (iii) relocation of indigenous peoples from lands and natural resources that are subject to traditional ownership or under customary use or occupation.
- 140. In general terms, the activities of the Program seek to avoid land acquisition, loss of access to natural resources, and resettlement. Beyond this, some RA2 and RA3 interventions may also require the execution of expropriations, the acquisition of easement rights, as well as involuntary resettlement, in some cases to comply with the objective of the interventions, such as, for example, minimizing the exposure of the population to alluvial risks.
- 141. In relation to land acquisition, loss of access to natural resources, and resettlement, some gaps have been identified. These gaps are associated with the fact that addressing the economic or social impacts caused by land acquisition or loss of access to natural resources is limited to cases of projects that require entering the SEIA and obtaining an RCA. Additionally, in the cases of projects that require an RCA, the norm only provides that the effects on communities or human groups are contemplated, not including the consideration of isolated people. Specific actions have been included to address these gaps.
- 142. Based on the identified gaps, the Program foresees specific measures to address them that are included as PAP actions (see Section 5.1). Compliance with these measures will be verified through the procedures provided for incorporation into the Operations Manual (see Section 5.2).
- 4.2.5. Principle 5: Indigenous peoples and vulnerable groups
- 143. The E&S management systems applicable to the Program seek to give due consideration to the cultural adequacy of, and equitable access to, the benefits of the Program, with special attention to the rights and interests of indigenous peoples and the needs or concerns of vulnerable groups. In particular, the Program actively promotes gender equity in the water sector and has identified indicators to close gender gaps in the traditionally male-dominated construction sector. The development of the different activities of the Program foresees implementing meaningful consultations in cases where indigenous peoples are potentially affected, as well as including strategies to guarantee the participation of vulnerable groups.
- 144. As noted above and discussed in detail in Section 4.1.2.6, no differences have been identified with respect to this principle and the planning elements associated with it.

²¹⁸ Considering as large scale the physical and/or economic displacement of more than 200 people.

4.2.6. Principle 6: Social conflict

- 145. The E&S management systems applicable to the Program seek to avoid exacerbating social conflict, especially seeking to address conflict risks, including distributive equity and racial, ethnic, and cultural sensitivities. Among others, the Program promotes participatory governance of water management and includes the implementation of appropriate participatory and consultation processes with all stakeholders, considering not only civil works but also activities involving the design of plans, policies and new institutions for water management at the basin level. Some DLIs even involve stakeholder consultation milestones, as in the case of the development of the National Water Security Policy and the development of the Rural Water and Sanitation Strategic Plan to 2030. To assess the effectiveness of RA1, a satisfaction survey of beneficiaries of river basin working groups at different intervals of Program implementation will be conducted to assess whether participants are comfortable with participatory decision-making processes.
- 146. As noted above, no differences have been identified with respect to this principle and the planning elements associated with it.

5. Recommendations and actions

147. This section presents the actions and recommendations obtained as a result of the evaluation of the existing E&S management systems that are applicable to the Program. Several actions were identified that are required for the Program to manage E&S risks and impacts in a manner that is consistent with the basic principles of the PforR Policy and the planning elements of the PforR Directive, which were agreed with the MMA and MOP, and are included in the PAP, or are intended for incorporation into the Operations Manual. Additionally, a series of recommendations were identified that could improve the sustainability and benefits of the Program, but that are not considered mandatory under the Program.

5.1. Actions of the Action Plan

- 148. Actions identified for incorporation into the PAP include:
- 149. Action 1: The designation of Environmental Specialists (with expertise in occupational health and safety) and Social Specialists as focal points to manage and supervise the environmental and social aspects of the activities of the three Results Areas, in coordination with the PCRU, and to specifically carry out the following functions:
 - (i) Supervise the performance of the E&S management of the Program, including compliance with the E&S strengthening measures agreed in the PAP;
 - (ii) Support in the preparation of Operations Manual and monitor its compliance;
 - (iii) Supervise the performance of the Grievance Redress Mechanisms and the Program's response capacity to complaints received.
 - (iv) Identify changes in the E&S risks and impacts assessed and documented in the ESSA report, as well as changes in the E&S systems of application to the Program that may require further action to be adopted;
 - (v) Monitor the application of the activity exclusion criteria defined in Annex 4;

- (vi) Supervise the evaluation of compliance with the criteria and requirements E&S for civil works that intend to be considered for payment for previous results;
- (vii) Support the development of institutional capacities in E&S matters for the implementation of the Program;
- (viii) Coordinate and lead the preparation of periodic monitoring reports demonstrating compliance with the E&S systems applicable to the Program and the measures agreed in the PAP, as well as other reports that are agreed, to be submitted to the Bank.
- 150. These specialists will be appointed no later than the establishment of the PCRU, within the areas that the MOP and MMA deem most appropriate to be able to fulfill the responsibilities detailed above in an adequate manner. The role of these specialists should be maintained throughout the implementation of the Program. Such designation and functions will be reflected and detailed in the Operational Manual.
- 151. Since the specialists will be appointed from the existing teams in the MOP and MMA, the associated budget is foreseen as part of the annual budget of both agencies. It is not necessary to make additional contracts that imply an additional budget to the current and regularly contemplated by the institutions involved. Those responsible for the implementation of this action will be the MOP and MMA, respectively.
- 152. Action 2: In the cases of civil works²¹⁹ that involve land acquisition, restrictions on land use and involuntary resettlement²²⁰, provided that these activities are not excluded in accordance with the provisions of paragraph 24 and Annex 4, and regardless of whether such interventions require an RCA or not, in all cases the MOP shall ensure that the following are covered as appropriate:
 - (i) Identify and address economic or social impacts caused by land acquisition or loss of access to natural resources, including those affecting people who may lack full legal rights over the resources they use or occupy, considering not only communities or human groups but also isolated people.
 - (ii) Provide all persons affected by the project with sufficient compensation to replace the affected property and to cover transaction costs related to the replacement of goods (replacement cost), paid before acquiring the land or restricting access.
 - (iii) If land acquisition causes a loss of income-generating opportunities, complementary support measures should be provided for the improvement or restoration of livelihoods.

The budget associated with this action is part of the budget of each corresponding project, as well as part of the budget of those agencies of the Government of Chile that may participate in the implementation of specific measures associated with land acquisition and involuntary resettlement (e.g. through housing access programs or support for the restoration of livelihoods). The institution responsible for the implementation of this action will be the MOP through the SSR and the DOH depending on whether it is civil works of AR2 or AR3.

²¹⁹This will also apply to RA1 interventions if the need to acquire land or impose restrictions on use is eventually identified. ²²⁰This is in accordance with the definitions of land acquisition, land use restrictions, and involuntary resettlement included in Environmental and Social Standard (ESS) 5 of the World Bank's Environmental and Social Framework.

5.1.1 Environmental and Social Performance Indicators

- 153. The actions identified to be incorporated into the PAP will be evaluated through the following performance indicators:
- 154. For action 1 (detailed in paragraph 147):
 - (i) Formal communication of the designation of each environmental and social specialist, and details of their functions performed during each semester as part of the semiannual environmental and social monitoring reports.
- 155. For action 2 (detailed in paragraph 148), according to civil works to be executed:
 - (i) Identification of the number of people affected by the acquisition of land or loss of access to natural resources.
 - (ii) Percentage of people affected by land acquisition or loss of access to natural resources who received compensation at replacement cost and/or benefited from other measures to replace lost assets.
 - (iii) Percentage of people affected by economic displacement who received complementary support measures to improve or restore their livelihoods.
- 156. The World Bank should be reported periodically on these performance indicators through the semiannual environmental and social monitoring reports described in section 5.2.
- 5.2. Actions to be incorporated into the Operational Manual of the Program
- 157. Actions identified for incorporation into the Operations Manual include:
- works that intend to be considered for payments based on prior results (prior results to the date of the legal agreement for the PfroR Financing). As set forth in Section 2.3, if payments based on prior results are considered, activities shall comply with: (i) the forecasts of existing E&S systems that apply to the Program as described in Section 4; (ii) the E&S criteria applicable to all PforR as defined in the Bank's PforR Policy and Directive; and (iii) with the requirements and actions specifically defined for this Program in this Section 5. The Operations Manual shall detail, based on the guidelines for the evaluation of E&S compliance included in Annex 5, the evaluation process that must be carried out during the implementation stage of the Program for each of the works submitted to be considered for payments based on prior results. As already indicated, those that are deemed not to comply with the provisions of the existing E&S systems that are applicable to the Program, the E&S criteria applicable to all PforR according to the Bank's Policy and Directive for PforR, and with the requirements and actions defined for this Program, may not be eligible for financing by the Program and accounting within the respective DLI.
- 159. Incorporation of a checklist to identify activities that meet the exclusion criteria and therefore cannot be funded by the Program. This checklist shall correspond to that included in Annex 4.
- 160. **Definition of procedures to include E&S requirements in tenders.** This may correspond to the type of activity of the Program and considering that these procedures should ensure not only compliance with the E&S systems applicable to each activity of the Program but also the agreed actions and, as relevant to the MOP and/or the MMA, the recommendations included in Section 5.3.

- 161. Forecasts on the preparation of the semi-annual E&S monitoring reports to be submitted to the Bank. This should include, at least, the minimum contents that the E&S reports will have as well as the responsibilities and/or process flows for their preparation. Among others, report on the indicators described in the previous section and complaints and claims received reported through the established mechanisms that will be used to receive and manage complaints and claims about the Program.
- 162. **Definition of the process of reporting incidents and accidents to the Bank.** This should include, at least, the deadlines, process flow, relevant information to be included in the report, such as: details of the incident (date, time, responsible for the report), type and description of the incident, actions developed to address the incident, support provided to the affected person.
- 163. **Detail of the human resources to address the E&S aspects (including health and safety issues) of the Program.** The following should be indicated, among other aspects: (i) the E&S units or departments that will participate in the implementation of the Program in both MOP and MMA; (ii) the roles and functions of the E&S specialists in such areas in relation to the Program, including the roles and functions of the environmental specialist and the social specialist in each area (OTSJ, DGA, DOH, SSR) who will be responsible for the supervision and coordination of the E&S aspects of the Program in coordination with the PCRU; (iii) implementation arrangements, including coordination channels.

5.3. Recommendations

- 164. As part of the results of the ESSA, a set of recommendations have been identified that seek to improve the sustainability and benefits of the Program, these include:
- 165. Strengthening of the institutional capacity of the OTSJ of the MMA, which will be responsible for the implementation of the activities to be executed by the MMA. The OTSJ, created in 2022, is in the process of staffing, currently having 5 professionals, 2 of whom address the specific topics of the THJ program. In this regard, it should be noted that the design of the activities of the Program has incorporated specific actions to strengthen the capacity of the OTSJ.
- 166. Strengthening the institutional capacity of the SSR of the MOP, which will be responsible for the implementation of RA2 activities. This office, created in 2017, although its number of professionals has increased, still has few professionals who address E&S management issues and does not have specific areas that deal with these aspects, relying on the areas of environment and citizen participation of the DOH and/or the DGOP on which it depends. Considering that it will be implementing many works and that these works do not require entering the SEIA, it is recommended to evaluate the formation of its own E&S unit or department with profiles appropriate to the challenges represented by the functions held by the area that facilitates the management of E&S risks and impacts.
- 167. Reinforce the explicit approach to vulnerable or disadvantaged groups and individuals in the E&S evaluation and management instruments. Although the social dimension is incorporated in the E&S evaluation instruments, and there are specific regulations on discrimination, people with disabilities, gender violence, gender identity, child protection, and protection of indigenous population, it is recommended to explicitly include the approach of vulnerable or disadvantaged groups and individuals in the E&S evaluation and management instruments, beyond the consideration of indigenous peoples.

ANNEXES

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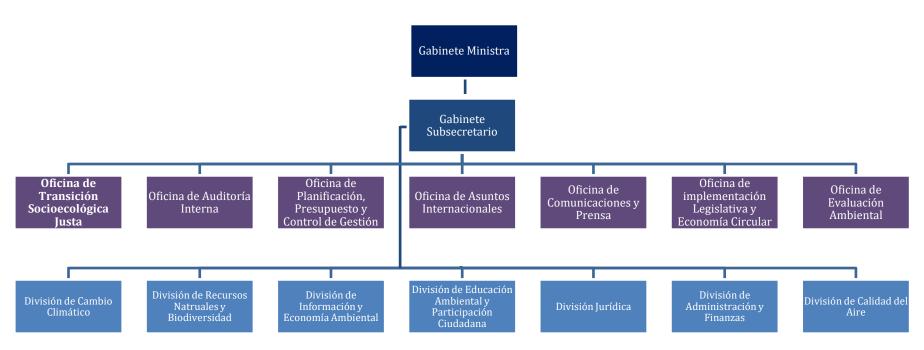
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2. Organizational structure of the government agencies involved in the Program implementation

2.1 Organizational chart of the Ministry of the Environment



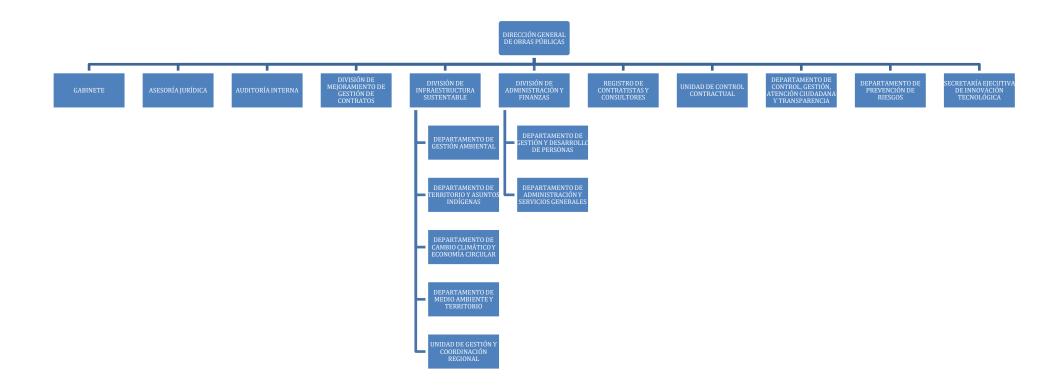
Source: MMA (https://mma.gob.cl/estructura-organizacional/). Retrieved 21 August 2023

2.2 Organizational chart of the Ministry of Public Works



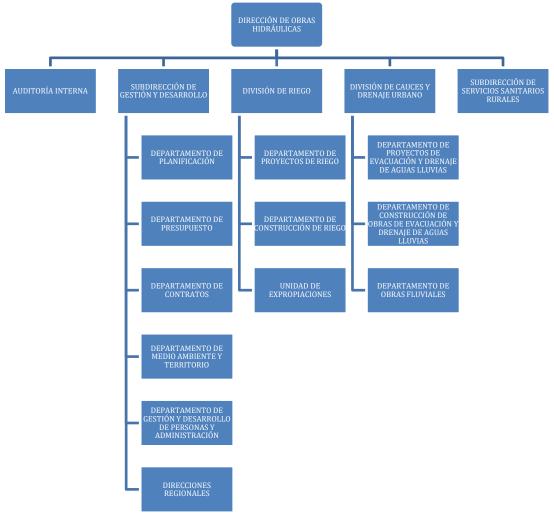
Source: MOP (https://www.mop.gob.cl/acerca/#organigrama). Retrieved 21 August 2023.

2.3 Organizational chart of the General Directorate of Public Works



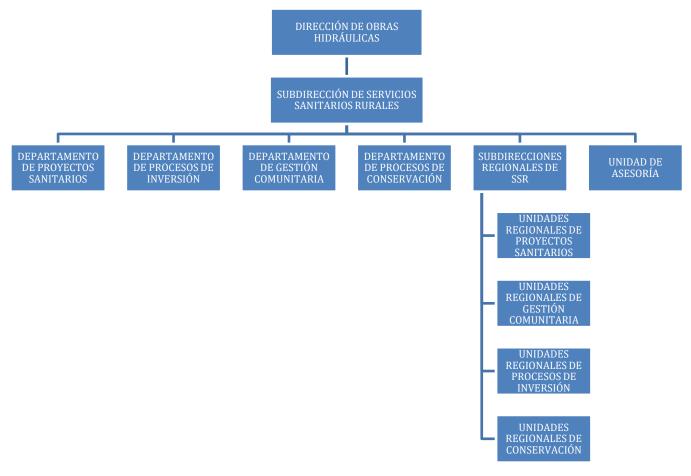
Source: own elaboration according to Exempt Resolution No. 24/2023.

2.4 Organizational chart of the Hydraulic Works Directorate



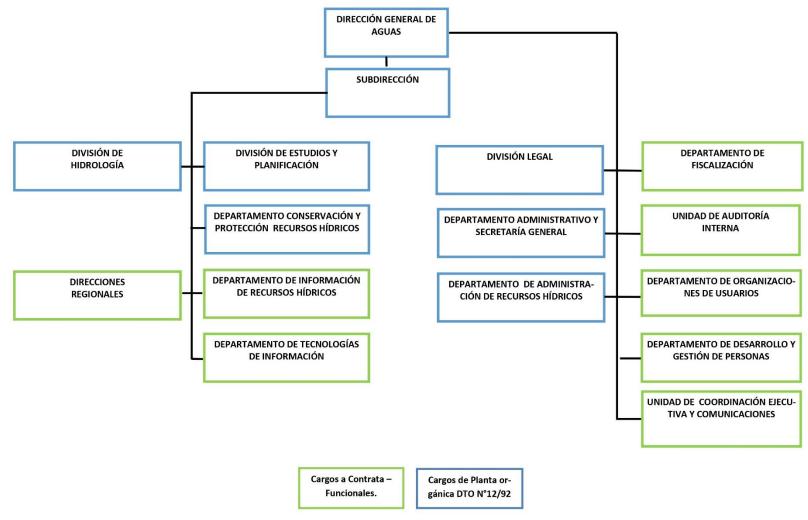
Source: MOP (http://transparencia.doh.gov.cl/organigrama/Organigrama DOH.html). Retrieved 21 August 2023.

2.5 Organizational chart of the Sub directorate of Rural WWS Services



Source: SSR

2.6 Organizational chart of the Directorate-General for Water



Source: DGA (https://dga.mop.gob.cl/Documents/OrganigramaDGA2020.pdf). Retrieved 21 August 2023.

3. Exclusion criteria for activities

As stated in paragraph 24, the Program shall not fund activities that are considered likely to have high²²¹ negative impacts on the environment and/or affected persons. Also, support to new investments in rural water supply, sanitation, flood control, and irrigation infrastructure on international waterways is excluded, as well as to the expansion or alterations of such schemes in a way that would adversely impact the quantity or quality of water flows to riparian countries.

The exclusion criteria defined for this Program are presented below, which include both types of physical interventions and characteristics of the potential negative impacts that may be associated.

A) Type of physical interventions excluded:

- The construction and/or rehabilitation of dams considered to be "large" per the OP 4.37 definition²²², as well as the construction and/or rehabilitation of infrastructure that rely on the performance of existing large dams.
- The construction of dams considered to be "small" per the OP 4.37²²³.
- The establishment, expansion or rehabilitation of wastewater treatment plants that could have significant adverse impacts due to their size, location, or associated processes.
- The expansion of wastewater treatment plants that are generating environmental liabilities during operation.
- The establishment or expansion of water purification plants that could have significant adverse impacts due to their size or associated processes.
- Infrastructure for the evacuation and drainage of stormwater that is interconnected with wastewater sewage networks.

B) Characteristics of the potential negative impacts of the activities (beyond the physical interventions listed in A):

Civil works that may involve the following aspects or potential environmental or social impacts are excluded:

- Location in, or affectation of, protected areas (e.g. protected natural areas, priority sites for conservation, protected wetlands, glaciers).
- Significant conversion or degradation of critical natural habitats, understood as areas of great importance or value in terms of biodiversity that include:
 - Habitats of significant importance to endangered or critically endangered species, as listed on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species or equivalent national approaches.
 - Habitats of great importance for endemic species or restricted range.

²²¹ Refers to significant negative impacts that may affect people or environment (WB, 2020).

²²² Large dams are defined as those that are 15 meters long. or more than height. Dams between 10 and 15 meters high are treated as large dams if present special design complexities, for example, a requirement of Floods unusually large, location in an area of high seismicity, foundations that are complex and difficult to prepare, or retention of toxic materials. Dams less than 10 meters high are treated as large dams if they are expected to become large dams during the operation of the facility. ²²³ Small dams are defined as those that are less than 15 meters high, considering the exceptions noted in the footnote above.

- Habitats that support significant global or national concentrations of migratory or gregarious species.
- Highly threatened or unique ecosystems.
- Ecological functions or characteristics that are necessary to maintain the viability of the biodiversity values described in the previous points.
- Significant conversion or degradation of cultural heritage sites.
- Air, water or soil contamination leading to significant adverse impacts on the health or safety of individuals, communities, or ecosystems.
- Significant changes in the quality or availability of water
- Transfer of water between basins.
- Working conditions that expose workers to significant risks to health and personal safety
- Forced evictions, including forced evictions from public or private land.
- Land acquisition that may cause large-scale²²⁴ physical or economic, temporary or permanent, displacement or restrictions on land or resource use that has significant adverse or high impacts on the livelihoods of affected people.²²⁵
- Large-scale changes in land use or access to land and/or natural resources.
- Adverse environmental and social impacts covering large geographical areas, including transboundary impacts or global impacts such as greenhouse gas emissions.
- Significant cumulative, induced, or indirect impacts.
- Use of forced or child labor.
- Marginalization of, discrimination against, or conflict within or among, social (including ethnic and racial) groups
- Adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation.
- Relocation of indigenous peoples from land and natural resources that are subject to traditional ownership or under customary use or occupation.
- Significant impacts on the cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected indigenous communities

²²⁴ Considering as large scale the physical and/or economic displacement of more than 200 people.

²²⁵ This according to definitions land acquisition, restrictions on land use, physical and economic displacement included in the Environmental and Social Standard (ESS) 5 of the WB Environmental and Social Framework.

4. Guidelines for the evaluation of environmental and social compliance in case of civil wors to be considered for payments based on prior results

- 1. As indicated in paragraph 25, if payments based on prior result are considered (prior results to the date of the legal agreement for the PfroR Financing)²²⁶, the activities must comply with the forecasts of the existing E&S systems that are applicable to the Program as described in Section 4, the E&S criteria applicable to all PforR as defined in the Policy and Directive for PforR, and with the requirements and actions specifically defined for this Program in Section 5. During the implementation of the Program, the compliance of each of the works submitted to be considered for payments for previous results, and those that are deemed not to comply with the forecasts of the existing E&S systems that are applicable to the Program, the E&S criteria applicable to all PforR according to the Policy and Directive for PforR, must be evaluated, and with the requirements and actions defined for this Program, they may not be eligible for financing by the Program and accounting within the respective disbursement indicator. In this framework, this Annex presents guidelines to be considered in the preparation of the procedure for the evaluation of E&S compliance for civil works that intend to be considered for payment for previous results. These guidelines will be the basis for the formulation of the procedure as part of the Operations Manual.
- 2. The procedure should include: (i) the specific roles of the areas to be involved (Program Implementation Areas, Program Coordination and Reporting Unit, other areas of the MOP that support Program implementation); (ii) the detailed process flowchart; (iii) the required documents (e.g. offices, notes, etc.) and evaluation/compliance reports to be prepared; (iv) the E&S criteria and requirements to be considered in the compliance assessment.
- 3. The guidelines to be considered for the evaluation of E&S compliance of each work proposed to be considered for payments based on previous results should include at least:

3.1. At a general level:

- That the activity is not included within the exclusion criteria defined for the Program and included in Annex 4.
- That the E&S risks and impacts of the work in its different stages (construction, operation
 and maintenance) have been evaluated and the measures identified for their prevention,
 mitigation or compensation are being executed in a timely manner in accordance with the
 provisions of the bidding documents and the applicable regulatory framework.
- In the case of projects with RCA, that the Environmental Monitoring reports are being submitted in a timely manner to the SMA and the results of the audit carried out do not report breaches that have not been addressed.
- In the case of projects that do not have to obtain an RCA, that the reports on the E&S management are being presented in a timely manner to the Fiscal Inspection and the results of the audit developed do not report non-compliances have not been addressed.
- That the E&S risk and impact assessment is consistent with the principles and elements of the Policy and Directive for PforR, this includes, for example, the following criteria and requirements:

²²⁶ This refers to payments on account of the DLIs met by the Borrower between the date of concept review and the date of the legal agreement for the PfroR Financing, in accordance with the provisions of paragraph 15 of the WB Directive for PforR.

- Consider the full range of risks and E&S impacts associated with the project, including: impacts in relation to biodiversity; cultural resources, land-use change; the impact on air, water and soil quality; hazardous materials management; risks and impacts on the health and safety of the population; and impacts associated with land acquisition.
- Consider induced or indirect, cumulative and transboundary impacts, if applicable.
- Propose measures to avoid, mitigate, repair or compensate for the risks and negative impacts identified.
- Consider the analysis of technical and siting alternatives to avoid or minimize E&S risks and impacts.
- Engage stakeholders in relation to the identification of E&S risks and impacts, including consultation and consent of the indigenous peoples where applicable.
- Promote the proper health, safety, and protection of the community, people, and workers through the safe design, construction, operation, and maintenance of project activities.
- Promote the use of recognized good practices in the production, handling, storage, transport and disposal of hazardous materials and substances (including worker training).
- Include appropriate measures to avoid, minimize or mitigate community, individual and worker risks in the event of natural hazards.
- 3.2. In the case of activities that include land acquisition, restrictions on land use and involuntary resettlement²²⁷, provided that these do not involve high impacts according to the exclusion criteria included in Annex 4, they must comply with the actions described in paragraph 148 of Section 5.1 and included in the PAP.
- 4. This report shall identify, for each work proposed for payment for previous results, the significant E&S issues of each work and evaluate the current status, specifically in terms of compliance with the E&S criteria and requirements applicable to the Program and to the particular work.

75

²²⁷ This according to definitions of land acquisition, Restrictions on land use, and involuntary resettlement included in Environmental and Social Standard (ESS) 5 of the WB's Environmental and Social Framework.

5. Legal and regulatory framework

The main standards surveyed considering the basic principles of PforR and the Program's RAs are detailed below.

5.1. General national legal framework

• Supreme Decree No. 100/2005: Political Constitution of the Republic of Chile. It recognizes the right of inhabitants to live in an environment free of pollution, as well as the duty of the State to ensure this right and preserve nature. Specific restrictions may be placed on the exercise of certain rights or freedoms to protect the environment (Article 19(8)).

5.2. Environmental legal framework

- Law No. 19.300/1994. General Bases of the Environment. https://www.bcn.cl/leychile/navegar?idNorma=30667
- Supreme Decree No. 40/2013. Regulation of the Environmental Impact Assessment System (RSEIA). https://www.bcn.cl/leychile/navegar?idNorma=1053563&idParte=9369919
- Law No. 20.417/2010. Creates the Ministry, the Environmental Assessment Service and the Superintendence of the Environment https://www.bcn.cl/leychile/navegar?idNorma=1010459&idParte=8848126&idVersion=
- Law No. 21.455/2022. Framework Law on Climate Change https://www.bcn.cl/leychile/navegar?idNorma=1177286
- Decree No. 48/1994. New regulation for contracting consulting work https://www.bcn.cl/leychile/navegar?idNorma=8226&idVersion=2009-
- Decree No. 78/2015. Regulation of the public registry of certified consultants for the realization of declarations and studies of environmental impact https://www.bcn.cl/leychile/navegar?i=1076437&f=2015-10-01
- Exempt Resolution MMA No. 665/2022. Structure and organization of the MMA Offices.

5.3. Legal framework for stakeholder engagement and access to information

- Law No. 20.285/2008 Law on Access to Public Information (Transparency Law) https://www.bcn.cl/leychile/navegar?idNorma=276363
- Supreme Decree No. 680/1990 Approves the instructions for the establishment of information offices for the user public in the State Administration https://www.bcn.cl/leychile/navegar?idNorma=15058
- Law No. 19.880/2003 Establishes and regulates the bases of the administrative procedure of the acts of the State Administration https://www.bcn.cl/leychile/navegar?idNorma=210676&idParte=8512586&idVersion=Diferido
- Law No. 20.500/2011 on Associations and Citizen Participation in Public Management https://www.bcn.cl/leychile/navegar?idNorma=1023143

- Presidential Instruction No. 007/2014 on Citizen Participation https://transparenciaactiva.presidencia.cl/Otros%20Antecedentes/007.pdf
- Decree No. 209/2022 promulgates the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean https://www.bcn.cl/leychile/navegar?idNorma=1183363&tipoVersion=0
- Exempt Resolution No. 601/2015 of the MMA General Standard of Citizen Participation in the MMA. https://mma.gob.cl/wp-content/uploads/2017/12/Norma-PAC-MMA_Res-0601.pdf
- Exempt Resolution No. 315/2015 of the MOP General Standard of Citizen Participation. https://www.mop.gob.cl/Carpeta/uploads/2021/04/Resolucion_MOP_315-2015_Norma_General_Participacion_Ciudadana.pdf
- Supreme Decree No. 25/2011. Approves the regulations of the Advisory Council of the Ministry of the Environment and the Regional Advisory Councils of the Environment https://www.bcn.cl/leychile/navegar?idNorma=1031470
- Supreme Decree No. 66/2014 Approves the regulation that regulates the procedure of Indigenous Consultation under Article 6 No. 1 letter a) and No. 2 of Convention No. 169 of the International Labor Organization (Affectation of Indigenous Peoples) https://www.bcn.cl/leychile/navegar?idNorma=1059961
 - 5.4. Legal framework on biodiversity and natural protected areas
- Law No. 17.288/1970 National Monuments https://www.bcn.cl/leychile/navegar?idNorma=28892
- Law No. 18.362/1984. National System of Protected Wild Areas https://www.bcn.cl/leychile/navegar?idNorma=29777
- Law No. 19.473/1996 Replaces text of Law No. 4.601 Hunting Law. https://www.bcn.cl/leychile/navegar?idNorma=30840
- Law No. 21.202/2020 Modifies several legal bodies with the aim of protecting urban wetlands https://www.bcn.cl/leychile/navegar?idNorma=1141461
- Supreme Decree No. 4.363/1931 Law on Forests https://www.bcn.cl/leychile/navegar?idNorma=19422
- Supreme Decree No. 531/1967 Convention for the Protection of Flora, Fauna and Natural Scenic Beauties of https://www.bcn.cl/leychile/navegar?idNorma=125338 America
- Supreme Decree No. 771/1981 promulgates the Convention on Wetlands of International Importance https://www.bcn.cl/leychile/navegar?idNorma=15511
- Supreme Decree No. 827/1995 Protocol on the Conservation of Marine and Coastal Protected Areas https://www.bcn.cl/leychile/navegar?idNorma=15815
- Supreme Decree No. 82/2011 Regulation of Soils, Water and Wetlands https://www.bcn.cl/leychile/navegar?idNorma=1022943
- Supreme Decree No. 30/2016 Establishes the Procedure for the Declaration of Areas of Tourist Interest https://www.bcn.cl/leychile/navegar?idNorma=1097480

5.5. Legal framework on physical cultural resources

- Law No. 17.288/1970 National Monuments https://www.bcn.cl/leychile/navegar?idNorma=28892
- Supreme Decree No. 484/1991 Regulation of Law No. 17,288 on archaeological, anthropological and paleontological excavations and/or prospections
 https://www.bcn.cl/leychile/navegar?idNorma=13706&idVersion=1991-04-02&idParte=

5.6. Legal framework on the health and safety of the population and workers

- Decree with Force of Law No. 1/2003 Establishes the consolidated, coordinated and systematized text of the Labor Code https://www.bcn.cl/leychile/navegar?idNorma=207436
- Decree with Force of Law No. 725/1967 Establishes the Sanitary Code https://www.bcn.cl/leychile/navegar?idNorma=5595
- Supreme Decree No. 594/2020 Approves the Regulation on Basic Sanitary and Environmental Conditions in the Workplaces https://www.bcn.cl/leychile/navegar?idNorma=167766
- Supreme Decree No. 1/2013 Approves the Regulation of the Register of Emissions and Transfers of Pollutants (PRTR) https://www.bcn.cl/leychile/navegar?idNorma=1050536
- Law No. 20.920/2016 Establishes framework for waste management, extended producer responsibility and promotion of recycling https://www.bcn.cl/leychile/navegar?idNorma=1090894&idParte=9705129&idVersion=2016-06-01
- Decreto Exento No. 37/2019 Aprueba y declara oficial de la República de Chile la Norma Técnica Nch 3562/2019 Gestión de Residuos de Construcción y Demolición (RCD) https://www.bcn.cl/leychile/navegar?idNorma=1136693
- Ley No. 18.695/1988 Ley Orgánica Constitucional de las Municipalidades, regula la recolección de residuos https://www.bcn.cl/leychile/navegar?i=30077&t=0
- Decree No. 148/2004 Approves sanitary regulations on hazardous waste management https://www.bcn.cl/leychile/navegar?idNorma=226458
- Exempt Resolution No. 714/2002 Establishes the list of substances dangerous to health https://www.bcn.cl/leychile/navegar?idNorma=201185&idVersion=2016-06-10
- Decree No. 43/2015 Approves the regulation of storage of hazardous substances https://www.bcn.cl/leychile/navegar?idNorma=1088802
- Supreme Decree No. 75/1987 Establishes Conditions for the Transport of https://www.bcn.cl/leychile/navegar/imprimir?idNorma=76048&idParte=0
- Decree No. 298/1994 Regulates the transport of dangerous loads on streets and roads https://www.bcn.cl/leychile/navegar?idNorma=12087
- Supreme Decree No. 138/2005 establishes the obligation to declare emissions indicated https://www.bcn.cl/leychile/navegar?idNorma=244118
- Supreme Decree No. 4/1994 Establishes pollutant emission standards applicable to motor vehicles and establishes the procedures for their control https://www.bcn.cl/leychile/navegar?idNorma=7307&idVersion=2004-

- Supreme Decree No. 54/1994 Establishes emission standards applicable to medium motor vehicles https://www.bcn.cl/leychile/navegar?i=8349&f=2020-09-30
- Supreme Decree No. 55/1994 Establishes emission standards applicable to heavy motor vehicles https://www.bcn.cl/leychile/navegar?idNorma=8364
- Supreme Decree No. 31/2017 Establishes Atmospheric Prevention and Decontamination Plan for the Metropolitan Region of Santiago https://www.bcn.cl/leychile/navegar?idNorma=1111283&idParte=
- Supreme Decree No. 149/2003 Establishes NO, HC and Co Emission Standard for NOx https://www.bcn.cl/leychile/navegar?idNorma=260350 control
- Supreme Decree No. 38/2012 Establishes standard for emission of noise generated by sources that indicates https://www.bcn.cl/leychile/navegar?idNorma=1040928
- Decree No. 146/1997 establishes a standard for the emission of nuisance noise generated by fixed sources https://www.bcn.cl/leychile/navegar?i=98096&f=2014-06-13
- Decree No. 144/1961 Establishes rules to avoid atmospheric emissions or pollutants of any nature https://www.bcn.cl/leychile/navegar?idNorma=9981
- Supreme Decree No. 90/2001. Establishes emission standards for the regulation of pollutants associated with discharges of liquid waste to marine and inland surface waters. https://www.bcn.cl/leychile/navegar?idNorma=182637
- Supreme Decree No. 46/2003. Establishes a standard for the emission of liquid waste to groundwater. https://www.bcn.cl/leychile/navegar?idNorma=206883
- Exempt Resolution No. 885/2016 Establishes the general rules on reporting duties of notices, contingencies and incidents through the Environmental Monitoring System https://www.bcn.cl/leychile/navegar?idNorma=1095073
- Law No. 21.364/2021 Establishes the National Disaster Prevention and Response System and creates the National Disaster Prevention and Response Service
 https://www.bcn.cl/leychile/navegar?idNorma=1163423&idParte=&idVersion=2021-08-07&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:%2Bbcn%2Fulp%2B(BCN %2B%3E%2B%C3%9Altimas%2Bleyes%2Bpublished)
- Decree No. 61/2011 Approves Regulation that fixes the seismic design of buildings and repeals
 Decree No. 117, of 2010 https://www.bcn.cl/leychile/navegar?idNorma=1034101

5.7. Legal framework on land acquisition and loss of access to natural resources

- Civil Code, Title XI "of the goods, and of their domain, possession and enjoyment".
- Law No. 2.186/1978 Approves the Organic Law of the Expropriation Procedure https://www.bcn.cl/leychile/navegar?idNorma=6848.

5.8. Legal framework on Afro-Chilean, indigenous peoples or members of other minority and marginalized social groups

- Law No. 19.253/1993 establishes rules on the Protection, Promotion and Development of Indigenous Peoples, and creates the National Indigenous Development Corporation (CONADI) https://www.bcn.cl/leychile/navegar?idNorma=30620
- Decree No. 236/2008 promulgating ILO Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries https://www.bcn.cl/leychile/navegar?idNorma=279441
- Supreme Decree No. 66/2014 regulates the indigenous consultation procedure under Article 6
 No. 1 letter a) and No. 2 of ILO Convention No. 169.
 https://www.bcn.cl/leychile/navegar?idNorma=1059961
- DGOP Ordinance No. 539/2018 that defines the Origin of Indigenous Consultation in MOP Investments.

5.9. Sectoral legal framework linked to IWRM

 Decree No. 58/2022 creates the Interministerial Committee for Just Water Transition https://www.bcn.cl/leychile/navegar?i=1184382v

5.10. Legal framework on water quality of reference for the water quality analyses of the DGA

The reference standards for water quality analyses carried out by the DGA include:

- NCh 409/1. Official Chilean Standard that sets the quality requirements for drinking water throughout the territory. https://ciperchile.cl/pdfs/11-2013/norovirus/NCh409.pdf
- NCh 1333. Official Chilean Standard that sets water quality requirements for different uses, including irrigation. https://ciperchile.cl/pdfs/11-2013/norovirus/NCh1333-1978_Mod-1987.pdf
- Supreme Decree No. 90/2001. Establishes emission standards for the regulation of pollutants associated with discharges of liquid waste to marine and inland surface waters. https://www.bcn.cl/leychile/navegar?idNorma=182637
- Supreme Decree No. 46/2003. Establishes a standard for the emission of liquid waste to groundwater. https://www.bcn.cl/leychile/navegar?idNorma=206883
- Supreme Decree No. 143/2009. It establishes primary quality standards for surface inland waters suitable for recreation activities with direct contact. https://www.bcn.cl/leychile/navegar?idNorma=288386

Additionally, the following environmental preservation standards apply:

| Regulated Zone | Supreme Decree | Water Environmental Quality Measurement and Control Programs | N° Control stations |
|-----------------|------------------------------------|---|------------------------|
| Lake Llanquihue | Supreme Decree MMA No. 122/2009 | DGA Resolution No. 3307/2011 DGA Resolution No. 277/2012 SMA Resolution No. 296 of February 12, 2021 | 8 |

| Serrano River Basin | Supreme Decree MMA No. 75/2009 | DGA Resolution No. 1207/2012 | 15 |
|-----------------------|-----------------------------------|--|----|
| Villarrica Lake | Supreme Decree MMA No. 13/2013 | SMA Resolution No. 671/2016 | 6 |
| Maipo River Basin | Supreme Decree MMA No. 53/2014 | SMA Resolution No. 1799 of September 11, 2020 | 11 |
| Biobío River Basin | Supreme Decree MMA No. 09/2015 | In progress | 16 |
| Aconcagua River Basin | Supreme Decree MMA No. 41/2023 | In progress | 16 |

5.11. Legal framework on rural WWS

- Law No. 20.998/2017 Regulates Rural Health Services https://www.bcn.cl/leychile/navegar?idNorma=1100197
- **Decree No. 50/2020 Regulation of Law No. 20.998/2017** regulating Rural Health Services https://www.bcn.cl/leychile/navegar?idNorma=1150724
- Decree No. 735/1969 Regulation of water services intended for human consumption https://www.bcn.cl/leychile/navegar?idNorma=197226
- Decree No. 1/2006 Establishes consolidated, coordinated and systematized text of Decree Law No. 2.763/1979 and Laws No. 18.933 and No. 18.469. Determines the matters that require sanitary authorization.
- Decree No. 4/2009 Regulation for the management of sludge generated in wastewater treatment plants https://www.bcn.cl/leychile/navegar?idNorma=1007456&idParte=
- Supreme Decree No. 203/2014 Rules for the exploration and exploitation of groundwater https://www.bcn.cl/leychile/navegar?idNorma=1060095
- Decree with Force of Law No. 1/1990 Determines matters that require express sanitary authorization https://www.bcn.cl/leychile/navegar?idNorma=3439
- Law No. 18.778/1989. Establishes subsidy for the payment of drinking water consumption and sewage service https://www.bcn.cl/leychile/navegar?idNorma=30157&idParte=

5.12. Legal framework on irrigation, stormwater management, alluvial control, and river channel management

- Decree with Force of Law No. 1122/1981 Water Code https://www.bcn.cl/leychile/navegar?idNorma=5605&idVersion=2022-04-06
- Decree No. 50/2015 Approves the Regulation of article 295 paragraph 2, of the Water Code. https://www.bcn.cl/leychile/navegar?idNorma=1085618
- Law No. 21.435/2022. Reform of the Water Code https://www.bcn.cl/leychile/navegar?idNorma=1174443
- Law No. 11.402/1953 On works of defense and regularization of the banks and channels https://www.bcn.cl/leychile/navegar?idNorma=26654

- Law No. 19.525/1997. Regulates stormwater evacuation and drainage systems https://www.bcn.cl/leychile/navegar?idNorma=76725&idVersion=1997-11-10&idParte=
- Decree with Force of Law No. 850/1998. Organizational structure. Establishes the consolidated, coordinated and systematized text of Law No. 15.840/1964 Organic of the MOP and Decree with Force of Law No. 206/1960 https://www.bcn.cl/leychile/navegar?idNorma=97993

5.13. Legal Framework on International Waterways

Chile has shared watercourses with Argentina, Bolivia, and Peru, all of which are international waterways according to Paragraph 1 of the World Bank Policy OP7.50. Chile has been working actively on transboundary watercourses. Chile and Argentina have concluded several agreements. The 1971 Act of Santiago provides for equitable and reasonable utilization, prevention of pollution and conservation of ecosystems of their shared watercourses. The 1991 Treaty on the Environment calls among other for coordination on the protection and rational use of water resources. The 1991 Treaty and its 1991 Additional Specific Protocol on the Water Resources Shared between Argentina and Chile establish a bilateral coordination mechanism for the exchange of information and consultation for the development of new planned measures.

In the 1929 Treaty for the Settlement of the Dispute regarding Tacna and Arica, Chile grants Peru the right to utilize certain waters except those flowing into the Lluta river and those which are used in the Tacora sulphur mines.

6. Consultation of the ESSA Report with stakeholders

- The ESSA Report was consulted with a wide range of stakeholders on 6-7 September 2023. This
 annex presents the details of the consultation and a synthesis of the inputs and comments
 received, which allowed to complete and validate the information used to prepare the ESSA
 Report.
- 2. The consultation was implemented through focus groups, a technique that was evaluated as more timely given the diversity of activities included as part of the Program. The meetings were totally virtual to facilitate the participation of actors distributed in different regions of Chile. In each case, a formal and personal invitation note was sent through the Bank's Office in Chile and, prior to the event, the ESSA Report was shared with the actors who confirmed their participation.
- 3. Four focus groups were designed to better capture input from different stakeholders. Stakeholder identification was done in conjunction with the MOP and MMA. Representatives of national (central and regional) and subnational public bodies, the private sector, academia and civil society organizations were invited to participate, and the groups were formed as follows:
 - (i) Focus group of actors of the promoter group of the Maullín Basin, which is already established and with which it interacted within the framework of the preparation of the Program. This group includes representatives of: national government at its central and regional levels, including areas addressing water management, agricultural development, and indigenous development; of regional and municipal governments, including areas addressing spatial planning and E&S management; company providing health services; representatives of APR systems; non-governmental organizations and research centers that work in the basin and address issues of water, environmental protection and biodiversity conservation; private sector partnerships. Due to the large number of actors in this group, a representative group was selected to participate in the meeting, finally obtaining the participation of 13 actors.
 - (ii) Focus group of actors from academia and civil society organizations. Research groups addressing water issues from the point of view of law, conversation, climate resilience, infrastructure development; non-governmental organizations working with vulnerable groups (including women and disability) were invited to participate. 12 stakeholders were invited to participate in the meeting, having finally participated 5 stakeholders.
 - (iii) Focus group of actors from central government agencies at the national level. Areas involved in the management and supervision of civil works such as those included in the Program (including the SEA, the SMA, and authorities of control of specific standards such as the Undersecretariat of Public Health, the Superintendence of Sanitary Services, Directorate of Roads, the National Forestry Corporation) were invited to participate; as well as areas with some interest in the activities included in the Program (including the MDSF, areas of the MMA, the Office of Agrarian Studies and Policies and the National Irrigation Commission of the Ministry of Agriculture, the National Corporation for Indigenous Development, and the National Sub-directorate of Indigenous Peoples of the Ministry of Culture, Arts and Heritage). 14 stakeholders were invited to participate in the meeting, having finally participated 5 actors.
 - (iv) Focus group of SEREMIs of the MOP. The Environmental and Territorial Management Units (UGAT) of each of the 16 SEREMIs of the MOP were invited to participate, and a group of 5 SEREMIs finally participated.

Each event was moderated by the Bank's E&S team and had the participation and support of Program managers, the communication area of the Bank's Office in Chile, and MOP and MMA focal points for the Program.

- 4. In each event the Program was presented, including the RAs and their proposed activities; as well as ESSA's content, preparation process and findings. The dynamics of work for the group and the objectives of the event were also presented, along with the next steps of preparation and publication of the ESSA report.
- 5. In each focus group was discussed based on a series of trigger questions prepared for each particular group. The questions included, among other topics: addressing the benefits and E&S risks and impacts identified as part of the ESSA; the E&S management of works carried out by the MOP, including addressing specific aspects such as land acquisition and involuntary resettlement; the implementation of participatory processes by the MOP and MMA and aspects that should be reinforced so that these processes allow improving the development of the Program and limit the risk of exclusion of beneficiaries; potential conflicts around the activities of the Program and measures to avoid them.
- 6. The table below systematizes the main inputs received as part of the focus groups, which were considered for the finalization of the ESSA Report and the design of the Program according to its relevance. Once the ESSA Final Report is finalized, it will be shared with each focus group participant so that they can follow up on their contributions.

Table 1. Systematization of the main contributions received as part of the focus groups

| Theme | Feedback received ²²⁸ | Considerations on its |
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| | | approach in the ESSA Report |
| | | and in the design of the |
| | | Program |
| Program Benefits | It has been recommended to consider the benefits associated with water care in terms of intangible cultural heritage value (e.g. its spiritual and scenic value-cultural landscapes of water), as well as water-related ecosystem services. | According to their relevance, these aspects have been incorporated into the identification of benefits of the Program and may be considered in the development of activities, such as the elaboration of the National Water Security Policy, |
| | | the preparation of the PERHC, and in the design and testing of IWRM practices such as those included in the RA1. |
| | The importance of the joint work between the MOP and the MMA promoted by the Program has been highlighted. | |
| | The relevance of the activities included as part of the Program has been highlighted, and the importance of advancing in particular in the implementation of IWRM. | |

²²⁸ Only contributions that are relevant to the Program and ESSA are included in this table..

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| Program E&S Risks and Impacts | It has been recommended to consider the impact of aquifer salinization on the functioning of APR systems. Regarding wastewater treatment pilots, the importance of evaluating the E&S impacts associated not only with the execution but also with its operation has been pointed out. It has been recommended to address the impacts associated with chemical pollution of aquatic systems. The importance of weighing the social | These aspects shall be considered for each particular project at the time of its design and evaluation. These aspects will be |
|---|---|--|
| | benefits and environmental impacts that could arise from the Program's activities has been highlighted. | considered in particular when developing the different activities of the Program. |
| Addressing involuntary resettlement | It has been confirmed that the compensation associated with involuntary resettlement applied by the MOP in cases of projects that do not require processing an RCA is limited to what is stipulated in the rules governing expropriations and easements. | This has been considered in the evaluation of the MOP's E&S management system and addressed in the actions that are required for the Program to manage the risks and impacts associated with land acquisition in a manner that is consistent with the basic principles and planning elements of the Bank's Policy and Directive for PforR. |
| Implementation of participatory processes | It has been recommended to consider in the design of the activities the time required for the involvement of indigenous communities. | These aspects are considered in the normative framework that regulates the indigenous consultation procedure that applies to the activities of the Program. It is also addressed in the good practice guides of the MOP and MMA that seek to guide the teams of both ministries in the implementation of the consultation processes. |
| | The importance of ensuring the participation of all stakeholders early and giving them the opportunity to inform the design of construction projects has been indicated. | These aspects are considered in the regulatory framework that regulates the participation of stakeholders in both SEIA and the MOP and MMA, and will be especially considered in the design and execution of the different activities of the Program. |
| | The importance of ensuring that participatory processes are transparent and timely has been indicated. | |

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| | In particular, the importance of considering meaningful stakeholder consultation has been noted not only in the pre-feasibility stages of APR projects, but also during the feasibility stage. | |
| Potential conflicts surrounding the Program's activities | The importance of paying special attention to potential conflicts surrounding the Government of Chile's new approach to watershed management has been highlighted. In this regard, it has been recommended to develop an adequate process of dissemination and communication of the activities to be carried out in order to minimize conflicts due to lack of knowledge of some key actors (such as the OAU). | These aspects have been considered in the preparation of the ESSA and in the design of ESSA activities. In particular through the incorporation of stakeholder engagement processes and communication and dissemination strategies including, inter alia, the preparation of a Stakeholder Communication Plan to address the concerns of different water users and report on the benefits of the IWRM approach. |
| Strengthening the national water authority | The current difficulty in coordinating the multiple public services that are linked to water management and the importance of adequate coordination between these actors have been highlighted. | The Program includes as part of RA1 the development or strengthening of the national water authority (through the strengthening of DGAs or the creation of a higher-level water authority). |
| IWRM | The importance of moving towards IWRM has been highlighted along with the consideration of the necessary coordination and synergy between actors, considering the principles of good governance for IWRM. This includes the necessary coordination between public bodies involved in water resources. | IWRM is promoted by the THJ Government program and included in the Program. |
| Strengthening water information | The importance of strengthening the Public Water Registry has been highlighted, including its digitization for availability of information to users and other authorities, as well as expanding the monitoring network, which would result in better information available to minimize conflicts around water use. The improvements that this would imply in the DGA's audit tasks were also highlighted. | The Program includes these activities as part of RA1. |
| River basin governance structure | Feedback has been received on the importance of having a legal framework to regulate the river basin governance structure, including aspects related to decision-making and consensus. | The Program includes as part of the RA1 the improving of the river basin governance structure through a bill |

| | | proposing to modify existing legislation or to issue a new law. |
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| | The importance of ensuring the participation of all stakeholders has been indicated, considering in particular the role of OAUs. | These aspects are considered as part of the preparatory work for the creation of river basin working groups in selected basins, as well as will be considered in the design of participatory processes to be implemented in particular as part of RA1. |
| Territorial planning instruments | Feedback has been received on the importance of integrated planning at the basin level and that this allows for dialogue and coordination between different spatial planning instruments. | The Program includes as part of the RA1 the development of PERHC that involve intersectoral participation, as well as participatory processes that will integrate different visions on the territory and water use. |
| | The importance of intervention by subnational governments in defining intervention priorities in the territory has been indicated. | |