# FACING THE RIVER

<u>Participatory proposal towards a</u> <u>Territorial Strategic Plan for the</u> <u>Matanza Riachuelo River Basin</u>

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This book was officially launched at the World Urban Forum 9, organized by UN-Habitat in Kuala Lumpur in February 2018.

Printed by ACUMAR in Buenos Aires, February 2018 The elements of this book can be reproduced, in whole or in part, by citing the source.

ISBN 978-987-46101-4-0

#### FORUM BANDAR SEDUNIA





### FACING THE RIVER

Participatory Proposal towards a Territorial Strategic Plan for the Matanza Riachuelo River Basin



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# foreword

This document is a reflection of the living process that is taking place in order to achieve the necessary consensus to promote a sustainable development model for the environmentally degraded territory of the Matanza Riachuelo River Basin, due to the fact that a high percentage of its population is living within high levels of socio-environmental vulnerability.

The Environmental Planning of the Territory is the spatial expression of the economic, social, cultural and ecological policies of the whole society, which are carried out through measures to guide the actions of private and public agents on the use of land.

A public policy of territorial environmental management is aimed at guiding the process of social production of space through the application of measures directed at improving life quality for its inhabitants, through a social integration through the territory, and by the democratic use of environmentally sustainable, natural and cultural resources.

A Strategic Plan as a planning tool is constituted as a systematized set of objectives and proposals that are expressed through programs of action and coordination, with goals established over time. The Strategic Plan contains decisions of a general nature that express the fundamental guidelines, the priorities derived from these formulations, the allocation of resources according to those priorities, action strategies and the instruments to achieve the proposed goals and objectives. A plan involves creating a tool that helps obtain results and clarify doubts about the work to be done. In summary, it is a guide that conducts objectives, activities and resources in a coherent and articulated way.

This participatory Proposal of the Territorial Strategic Plan for the Matanza Riachuelo River Basin, which incorporates it into the National strategic planning process, forms part of the Comprehensive Plan for Environmental Sanitation promoted by ACUMAR, and is framed within the New Urban Agenda 2030, proposed by UN-Habitat in Quito 2016, to which Argentina adheres. Its main objective is to implement a consensual territorial impact strategy among all the agents involved in the Basin, in order to achieve progress together and with a clear guide for the territory's development, having always as a main priority to improve the quality of life of its population.

The beginning of the process of formulating the following Proposal was divided into two interrelated moments: a diagnostic and a propositive one. During the first instance, a diagnosis was made of the current situation of all the of the territory's dimensions, thus achieving a clear definition of the state it is in. For its preparation, examples of international cases with problems were studied, as well as Municipal, Provincial and National plans and sectoral strategic plans and programs that were previously done for the region. Legal instruments that affect the use and organization of the territory were also contemplated, such as the laws related to land regulation and use in each Municipality and the creation of protected areas, amongst others. In addition, results after several instances of participatory processes were taken into account, the latest being the UN-Habitat Urban Thinkers Campus, organized by ACUMAR under the name "Facing the River," in May this year. The participants of this encounter were representatives of all the Basin's agents of interference: members of the National government and of the different Municipalities of the Basin, members of the Academia, of the business chambers, of the professional associations, of the civil society associations, inhabitants and members of the community in general.

In a second instance, after an analysis of the problems and objectives of each central axis studied, strategic guidelines were proposed to be incorporated by all of the Basin's actors of interference in order to move forward in the territory's recovery and development. In the subsequent stage, a participatory stage, all the Municipalities will be involved and consulted about their particular needs and ideas for the territory, making them also a central part of the Territorial Plan's conformation, so as to work together towards its validation, in order to enhance its results.

The Participatory Proposal for the approach of a Territorial Strategic Plan has four fundamental characteristics: it is integral. participative, flexible and prospective. It covers all the territorial dimensions (social, economic, environmental, physical and legal-administrative) in an integrated manner, since it is necessary to understand the link between them and how they work: it during its elaboration process it seeks to include the Basin's main interacting agents in order to build lasting synergies; it tries to be sufficiently flexible to adapt to the changes that take place in the territory, so that it can be reoriented according to new contexts and needs and to be part of a continuous planning process that tends to improve over time: it was thought with a short, medium and long-term vision, taking into account different possible scenarios and posing a desired future scenario, in order to channel the actions of the present, by taking proactive measures.

This Proposal is a participatory public process that has the potential to delineate a sustainable development model with territorial roots for the Basin, which represents Argentina's most complex environmental conflict.

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# INTRODUCTION

INTRODUCTION

### **Environmental Planification of the Territory**

#### 0.1 INTRODUCTION TO AN **ENVIRONMENTAL PLANIFICATION OF THE TERRITORY**

This document records a living work process, synergic among a multiplicity of actors, which aims to contribute to the understanding of the past, present and future situation of the Matanza **Biachuelo River Basin in matters of** public policy, in order to intervene in its territory in a rational, articulated and consensual manner, based on a model of environmental order of the territory.

Regarding its scope, in these lines we will share the consensus that we have addressed around the general guidelines of intervervention based on the recognition of specific problems and objectives. In the mentioned framework. this work has to be analyzed as a starting point for a planning process that seeks to specify, through particular public-private policy interventions, a development model for the Matanza Riachuelo River

Basin. In later stages, the generation of spaces for dialogue and consensus being a cross-section of the methodology. we will advance in the definition of local and regional programs and projects with the consequent definition of resources, deadlines and specific actors and responsibilities

Although the information and analysis shared here has a high degree of consolidation (based, on the one hand, on sources of official secondary plans and data and, on the other, in public meetings and interviews with key stakeholders. both from the public and private sector) this document should be taken as a work in process, for it is still in continuous development, aiming to generate the necessary framework to turn it into concrete territorial management actions. This shall follow the objective of proposing a viable development model for the Basin, with a consequent improvement in the life quality of its inhabitants and in consonance with the normative obligations of National and International agreements maintained by the Basin Authority and the Argentine State.

In this way, it will lay the foundations to define potential actions within the Basin's territory, within the framework of the responsibility given to ACUMAR by the Law for of its creation (Law n°26.168), the National Law 25.675 that leads all environmental matters, the Court's order for the Mendoza case and the consensuses and commitments embodied in the Integral Environmental Sanitation Plan (PISA 2010/2016). Likewise, it intends to integrate the management problems of the Matanza Riachuelo Basin into the global agenda based on the consideration of the guidelines of the New Urban Agenda 2030 and the UN Development Goals to which Argentina ascribes. In turn, those actors and organizations with competence and / or jurisdiction and / or representativeness will be identified. generating a common agenda to be developed, with the aim of achieving the best territorial, social, productive and environmental impact, to be sustained over time

The Environmental Planification of the Territory (EPT) is the spatial expression of the economic, social, cultural and ecological policies of the whole society, which are carried out through determinations that guide the actions of private and public agents on the use of land. The EPT is a public policy, aimed at guiding the process of social production of space through the application of measures aimed at improving the quality of life of the population, through its social integration in the territory and the environmentally sustainable and democratic use of natural and cultural resources.

In conceptual terms, the Proposals towards a Strategic Plan is constituted as a systematized set of objectives and proposals that express a specific model of intervention defining a program of action and coordination, with goals established over time and assigning areas with jurisdiction and competition, in a framework of action that involves the consideration of the network of legitimate and representative actors of the territorial reality on which the Plan will operate. It contains decisions of a general nature that express the fundamental political

guidelines, the priorities derived from these formulations, the allocation of resources according to those priorities, the strategies of action and the set of means and instruments to achieve the proposed goals and objectives, in base to the achievement of consensus.

Reaching the consensus of a Plan means creating a tool to obtain results and clarify doubts about the work to be done, facilitating the understanding between the different actors, both public and private, that are involved in the definition and implementation of actions based on a common vision.

The goal is to achieve a Plan that meets the following four main characteristics:

- Address all territorial dimensions (social, economic, environmental, physical and legal-administrative) in an integrated manner, since it is necessary to understand the link between them and how they work together.

 Consider direct and indirect impacts: the design and implementation of a Plan generates direct and indirect effects on various public and private actors of the territory on which it intervenes, the greater the knowledge they have about the planning actions, greater the possibility of agreeing on its validity, adjust its procedures and enhance its results.
 To be sufficiently flexible to adapt to the changes that take place in the territory, so that it can be reoriented according to new contexts and needs and so that it can be a part of a continuous planning process that tends to improve over time .

- Having a short, medium and long term vision, taking into account different possible scenarios and setting a desired future scenario, in order to channel the actions of the present by taking proactive measures.

#### **Components and conditions**

The process of formulating a Plan is divided into two interrelated moments: a diagnosis and proposals. A third instance should be added as well: monitoring, from which the first two stages are updated and adjusted, thus feeding the planning process.

The environmental planning of the territory must take into account, within the framework of the regulations that affect the enforcement authority, other Municipal, Provincial or National Plans, existing Strategic Plans or sector programs, and the articulation between them, as well as contemplating the articulation and integration with other legal instruments that affect uses and organization of the territory.

There are basic conditions for a territorial plan to become an instrument of government:

- Political support from the authorities involved, directly responsible for the implementation of the proposals.

- Legitimation and appropriation by



>> FIG. 0.1 VICTORINO DE LA PLAZA BRIDGE, MIDDLE BASIN

society, direct recipients of territorial development proposals.

- Solidity of the technical team, interpreters and drafters of the proposals

that are adapted to the territory's reality.

- Resources needed to make the proposed actions effective.
- The articulation between these factors is key to the success of a Plan, given the multiplicity of actors involved and the complexity of the problems that characterize all territorial dynamics. In the planning processes, the following actors participate:
- The political decision makers.

- A technical team, which is both internal and external to ACUMAR
- The different government agencies that have interference in the territory

- Society, Academia, business chambers, professional associations, civil society associations and the community in general.

In this line, the Participatory Proposal towards the Territorial Strategic Plan, promoted by ACUMAR together with the Undersecretariat of Territorial Planning of Public Investment, points out the

### The goal is to achieve a Plan that meets the following characteristics:

<u>» Address all territorial</u> dimensions (social, economic, <u>environmental, physical and</u> legal-administrative)

<u>» Consider direct and indirect impacts.</u>

<u>» To be sufficiently flexible to</u> adapt to the changes that take place in the territory

### <u>» Have a short, medium and long term vision</u>

importance of "strengthening urban planning as a tool for predictability and consensus building, with the aim of guaranteeing future sustainability ". And concludes: "awareness of the need for regulation of land use and the consequent orientation of public and private investment in the field of entrepreneurship and investments in infrastructure, is a fundamental element to ensure sustainable urban development. That is, that it addresses the mitigation of negative environmental impacts and socio-spatial segregation processes that arise in large cities, promoting the economic development of the territory and improving the quality of life of the inhabitants ".

For the case that brings us together, the Matanza Riachuelo River Basin, the Participatory Proposal for the approach of a Territorial Strategic Plan (TSP) responds to the need to define long-term actions for the Basin that advance with a sustainable plan in the time established by the Nation's Supreme Court of Justice. This definition becomes the final goal of this process.

Since the beginning of ACUMAR's administration, a Sanitation Plan was formulated that responds to judicial mandates with a closed planning logic (PISA 2010), and then a participatory definition was established of the desired basin model together with the routes and mechanisms needed to build it (PISA 2016).

In this framework, the TSP in current work in process, is a milestone in the process of implementing the PISA. It is a concrete tool that makes visible a model of socioenvironmental, economic and urban development, in already established territorial regions, that dialogues with the commitments assumed by ACUMAR.

The TSP seeks to establish in the territory the premises manifested in the Sanitation Plan's framework, based on public-private synergies around specific interventions, with a strong State presence as the authority for coordination and control. On the other hand, while the Sanitation Plan directs its guidelines and actions to comply with the objectives dictated by the Court (life-quality improvement, stopping pollution and preventing future damage), the TSP, on its basis, proposes a socio-environmental, economic and urban development model: to recover the basin and promote the generation of opportunities for environmental, social and productive activity, identifying Priority Intervention Nodes that reflect the integrality of the proposed development model.

The link that the TSP proposes between its objectives and the fulfillment of the Sustainable Development Goals (UN-Habitat), inscribes the Matanza Riachuelo case in an international agenda, and is another step in the process of defining State policies with territorial roots and a perspective of rights.

Above all, this Participatory Proposal seeks to define objectives and lines of action for the Basin in a manner that is transversal to the lines of action expressed in the PISA. The proposed objectives involve complex transformations in the territory, which require the coordinated action of various areas of ACUMAR, and the articulation with other public bodies and other actors involved.

The Proposals for the approach of a Territorial Strategic Plan contribute to

the fulfillment of the objectives set out in the PISA which unpin from the ruling of the Supreme Court of Justice, and also includes the intervention of several of its lines of action: an environmental ordering of the territory, the urbanization of shanty towns and slums, institutional strengthening, cleaning of margins, dealing with industrial pollution, expansion of the water network and sewerage system, and the Petrochemical station at Dock Sud.

Among other objectives assumed by the TSP, the Basin's recovery and reconfiguration as a New South Metropolitan Development Axis surrounded by new underlying centralities, can be highlighted, as well as the improvement in the quality of the public space related to the margins of the river and its valorization at metropolitan scale.

These complex objectives require joint action from different perspectives, knowledge and management resources corresponding to the different areas of ACUMAR. The TSP seeks to add new objectives to the tasks already set in motion through the PISA, but at the same time become an integrating space for its different lines of action at territorial level.

### Introduction to the Matanza Riachuelo River Basin

A watershed is an area in which water from rain drains through a specific land and meets in a same river, lake or sea. In the case of the Matanza Riachuelo Basin (CMR), this water forms streams that converge in a main course which is called Matanza in its origin and Riachuelo in its final stretch.

The Matanza Riachuelo River Basin occupies a total area of 2,200 km2. It has a SW-NE route, is approximately 60 km in length, an average width of 35 km, and 64 km of the water system extension. It includes a large area within the Autonomous City of Buenos Aires and 14 Municipalities of the province of Buenos Aires: Almirante Brown, Avellaneda, Cañuelas, Esteban Echeverría, Ezeiza, La Matanza, Lanús, Las Heras, Lomas de Zamora, Marcos Paz, Merlo, Morón, President Juan Domingo Perón and San Vicente.

The CMR suffers a historical degradation. Since the colonial era, pollution problems have become evident. The natural space that constituted the basin in its beginnings was transformed by the actions of the society to satisfy the housing needs and productive and commercial aspirations, 12 and an urban design and model of development that did not include the river in the daily life of inhabitants, and whose environmental quality was not preserved product of its use as 'backyard' of the surrounding city.

The CMR occupies only 0.6% of the national territory, yet it is a very complex territory being one of the most anthropized areas of the country, where 23% of the population of the Metropolitan Area of Buenos Aires lives and develops their activities, representing 9.16% of the National population. The data from the last census (2010) showed that more than 8 million people live in this particular region. It is the most urbanized and industrialized area of Argentina, with a high population density.

In analytical terms, the basin is divided into three regions with different characteristics, which are highlighted below:

#### Low Basin

- Extension: from the beginning of the rectification, up to the Río de la Plata. At La Noria Bridge, the Matanza River

changes its name to Riachuelo.

- Areas covered: includes highly urbanized areas in the parties of Lanús, Avellaneda, Almirante Brown, Lomas de Zamora and the Autonomous City of Buenos Aires.
- Environment: the main causes of pollution are discharges of industrial and residential origin. The sediments of the river are contaminated with a high level of heavy metals such as mercury, lead, copper, cobalt and zinc, and toxic organic compounds.

#### **Middle Basin**

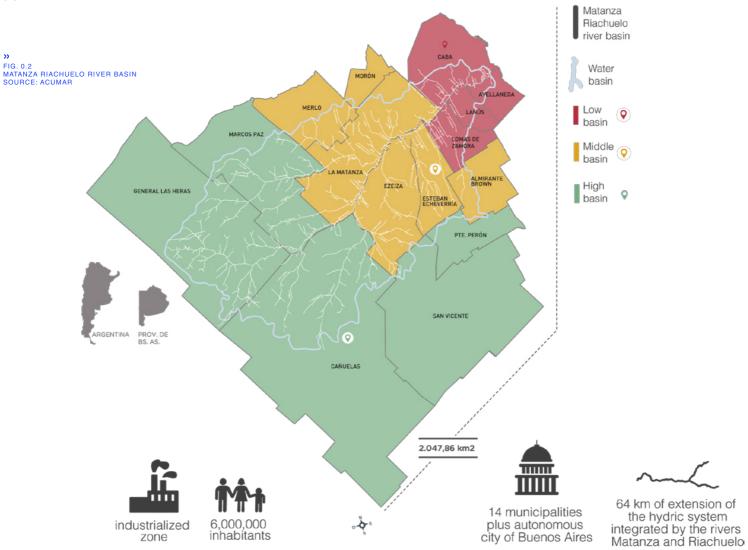
- Extension: covers the surface between the Chacón and Ing. Rossi streams (at the beginning of the rectification of the Matanza River).
- Areas covered: includes the parties of La Matanza, Ezeiza and Esteban Echeverría, and a small portion of the Municipalities of Morón, Merlo and Presidente Perón.
- Environment: high levels of pollution are recorded in the sediments and in the waters of rivers and streams as a result of effluent discharges (industrial and domiciliary) and the presence of a large

number of open-air garbage dumps; because of this, on the surface of the main river and affluents floating material can be observed: solid waste, oils and fats, as well as the presence of phosphorus, nitrogen and heavy metals.

#### **Upper Basin**

- Extension: from the springs of the Rodríguez or Los Pozos streams, Morales and Cañuelas streams to the beginning of the Chacón stream in the Matanza river.
- Areas covered: the Municipalities of Marcos Paz, Cañuelas, General Las Heras, San Vicente, Ezeiza and a small part of La Matanza.
- Environment: the rivers in this sector receive organic discharges, pesticides, fungicides, herbicides and sediments.

0.2



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FIG. 0.2

### 'Mendoza' court judgement

In 1801 the first salting-holes were installed on the banks of the river and began to throw leftover leather, meat, bones and animal fat into the Riachuelo. Ten years later, the river was already contaminated by the activity of tanneries, slaughterhouses and greaseries.

0.4

Many officials and politicians promised in different historical periods to undertake the tasks of cleaning the river. Although outright killing of animals was prohibited, so that no more organic waste would be added to the river, economic and social growth gave way to the industrial boom. Since then, industries began to dump acid waters and heavy metals to the river, causing enormous damage.

It is from the enactment of Law 26.168 of 2006, when ACUMAR (Matanza Riachuelo Basin Authority) is created, after being taken to Justice by a group of neighbors who filed a claim demanding the environment's recomposition and the creation of a fund to finance the sanitation. Here, the process of institutionalization began, striving to define a sustainable development model for the Basin. This process will be the first major breakthrough from the historic judgement of the National Supreme Court of Justice and the subsequent approval of the Integral Sanitation Plan, in a consensus manner in 2010. This is a medium and long term strategy to reverse the damage and reconvert the development model as a critical condition to improve the quality of the environment and life of those who inhabit the Basin's region.

This situation gave rise to the following case: "Mendoza, Beatriz Silvia and others, with the National State for damages arising from the environmental pollution of the Matanza Riachuelo River." This case made the National State, the Province of Buenos Aires, the Autonomous City of Buenos Aires and 44 private enterprises responsible for the damages. Subsequently, the demand was extended to the 14 Municipalities of the Province of Buenos Aires that are a part of the Matanza Riachuelo Basin.

On July 8 2008, the National Supreme Court of Justice issued a historic ruling in which the team responsible for carrying out the actions and work for the river's sanitation and the terms in which they must be executed was specified, facing fines in case of non-compliance. The ruling requires ACUMAR (Matanza Riachuelo Basin Authority) to carry out a program where objectives should be:

Life-quality improvement of the Basin's inhabitants.

The recomposition of all components of the environment (water, air and soil). Damage prevention with a sufficient and reasonable degree of prediction.

The Supreme Court entrusted the National Ombudsman and a series of NGOs, with the creation of a Collegiate Body to control the Sanitation Plan and the obligations that the Court established in this judgment. The NGOs involved are the following: Fundación Ambiente y Recursos Naturales (FARN), Greenpeace Argentina Foundation, Center for Legal and Social Studies (CELS), Neighborhood Association of La Boca, Citizen Association for the Human Rights (ACDH).

Subsequently, in its Resolution of December 19, 2012, the Supreme Court warned that "(...) the progress made in the sanitation of the Matanza Riachuelo Basin brings new and complex problems (...)" resulting in (...) a transitory division for the execution of the pronouncement (...) "dated July 8, 2008" (...) between two magistrates ", in substitution of the Federal Court of First Instance of Quilmes.

In this way, the National Criminal and Correctional Federal Court N ° 12 under the responsibility of Dr. Sergio Torres, was appointed"(...) the control of the contracts concluded or to be celebrated within the framework of the plan for the provision of drinking water, sewerage (by AySA, ABSA ENHOSA), waste treatment (by CEAMSE), and the budget's administration (...) ".

"All the remaining powers attributed in the judgment of July 2008 (...)" were in charge of the Federal Criminal and Correctional Court No. 2 of Morón, whose director is Dr. Jorge Rodríguez."

### The creation of ACUMAR and the definition of PISA 2010

Created by Law 26.168 of 2006, the Matanza Riachuelo Basin Authority initiates, as of the historic decision of the just described National Supreme Court of Justice, it being an accelerated process of institutionalization. This was defined in February 2010 when the interjurisdictional consensus was reached and the Court approved the Integral Environmental Sanitation Plan (PISA).

The PISA brought the first tools (in terms of financial, regulatory, structural and human resources) that enabled an autonomy and self-sufficiency giving ACUMAR an operational start. At the same time, it led to the involvement of territorial jurisdictions in the proper implementation of the Basin's Sanitation Plan.

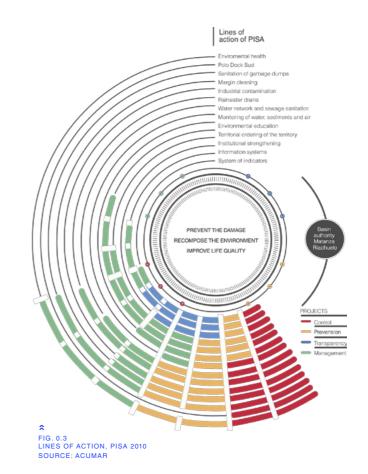
With the presentation and approval of the PISA in 2010, two parallel processes converged: on the one hand, the achievement of the institutional creation of ACUMAR as an authority for the Basin and, on the other, the establishment of the Integral Sanitation Plan as a State policy agreed by the jurisdictions and endorsed by the Court.

Eight years after the sentence, in 2016, an internal process of revision (within ACUMAR)

of the 2010 Plan was initiated as a particular request from the Court. This ended in a newer version of the PISA. In addition to the three historical objectives initially proposed by the Court , a fourth objective was defined: strengthening the role of ACUMAR as the Basin's Authority.

Based on these four main objectives, a short, medium and long-term action plan was structured, resuming the scheme of 14 strategic lines that were proposed in the PISA 2010 version. This plan contemplates the implementation of 79 projects and programs of action designed on a rights perspective, strongly based on the construction of a "shared vision" or consensual basin model, based on expanded participation and understood as a necessary condition for sustaining a long-term State policy.

On this basis, the Proposals for a Strategic Plan, are a concrete tool that makes it possible to visualize socio-environmental, economic and urban models, in the established territorial nodes. The PET is a technical-political and territorial consensus platform on which a development model for the basin is projected.



# THEORETICAL FRAMEWORK

### New Urban Agenda 2030, UN-Habitat

#### **1.1 COMMON DECLARATION**

The 2030 Urban Agenda for Sustainable Development is a plan of action in favor of people, the planet and prosperity. This plan will be implemented by all countries and stakeholders through a collaborative alliance. The 17 Sustainable Development Goals and the 169 goals, which are integrated and indivisible, demonstrate the magnitude and ambition of this new universal program. The objectives and goals balance the three dimensions of sustainable development: economic, social and environmental.

The new objectives and goals came into effect on January 1, 2016, and will guide the decisions to be taken during the next fifteen years. All countries will work to implement the Agenda at regional and global levels, taking into account the different national realities, capacities and levels of development, including the policies and priorities of each country.

UN-Habitat has developed a unique position to support sustainable development and to plan and build a better urban future for new generations. The key process supports economic and social development, in addition to the reduction of poverty and inequality.

The New Urban Agenda reaffirms our global commitment to sustainable urban development as a decisive step towards the achievement of sustainable development in an integrated and coordinated manner at the global, regional, national, subnational and local levels, with the participation of all relevant stakeholders.

The New Urban Agenda proposes to interfere in the processes of planning, design, investment and management of cities in order to contribute to the reduction of social inequalities and poverty, promoting the productive development of cities, so that it is sustainable and inclusive. The New Urban Agenda recognizes cultural diversity as a promoter of urban wealth and should be taken into account in the promotion and application of sustainable consumption and production modes that contribute to the responsible use of resources and counteract the adverse effects of climate change.

The adoption of the New Urban Agenda as a collective ideal and political commitment to promote sustainable urban development is based on the following key pillars: a legal and regulatory structure; urban planning and the sustainability of the economic and financial model for which it highlights the following fundamental factors: the elaboration and implementation of urban policies at the appropriate level; the strengthening of urban governance with solid institutions; support for effective, innovative and sustainable financing frameworks and instruments that strengthen Municipal finance and local tax systems; and the reactivation of integrated urban and territorial planning.

The implementation of the New Urban Agenda contributes to the implementation of the 2030 Agenda for Sustainable Development in an integrated manner and recognizes some axes as central to the achievement of the Sustainable Development Goals to achieve cities that are more inclusive, safe, resilient and sustainable:

#### Sustainable urban development for social inclusion and the eradication of poverty

» Promotion of urban and rural developments, protecting the planet and taking into account the age and gender of the people, in order to establish the respect of all human rights and fundamental freedoms, facilitating coexistence, ending all the forms of discrimination and violence and empowering all people and communities, while facilitating their full and meaningful participation. As well as the promotion of culture and respect for diversity and equality as key elements of the humanization of our cities and human settlements

### » Promotion of housing policies at the National, subnational and local levels

that support the progressive realization of the right to safe and accessible housing taking into account age and gender in all socioeconomic sectors. Guaranteeing tenure for all, recognizing the plurality of types of tenure, paying special attention to the security of land tenure in the case of women as a fundamental element for their empowerment, among other, through effective administrative systems.

» Respect for the human rights of refugees, internally displaced persons and migrants, regardless of their immigration status, will support the cities that welcome them in the spirit of international cooperation, taking into account national circumstances and recognizing that, while the movement of large populations in towns and cities poses several problems, it can also bring important social, economic and cultural contributions to urban life.

» Promotion of adequate services, accommodation and opportunities for decent and productive work for people affected by crisis in urban environments, and collaboration with local communities and local governments to find durable and dignified solutions, while ensuring that the assistance to affected people and host communities to avoid the regression of their development.

» Promotion of equitable access to basic physical and social sustainable infrastructure, including access to suitable land, housing, renewable energy, drinking water and sanitation, healthy, nutritious and sufficient food, treatment from waste, to sustainable mobility, health care and family planning, education, culture and information and communication technologies, and the removal of legal, institutional, socioeconomic and physical barriers.

#### » Recognition of diversity in cities and human settlements, strengthening social cohesion, intercultural dialogue and understanding, tolerance, mutual respect, gender equality, innovation, entrepreneurship, inclusion, identity and the safety and dignity of all people, as well as promoting livability and a vibrant urban economy. Adoption of measures that guarantee in local institutions the promotion of pluralism and peaceful coexistence in increasingly heterogeneous and multicultural societies.

» Promotion of adequate measures in cities and human settlements that facilitate the access of people with disabilities, on equal terms with others, to the physical environment of cities, in particular to public spaces, public transport, housing, education and health services, public information and communications (including information technologies and systems) and other services and facilities open to the public or for public use, both in urban and rural areas.

#### » Preservation of natural and cultural heritage, both tangible and intangible, in cities and human settlements. as

appropriate, through integrated urban and territorial policies and adequate investments at the national, Provincial and local levels, to safeguard and promote infrastructure and cultural sites, museums, indigenous cultures and languages, as well as knowledge and traditional arts, highlighting the role they play in the rehabilitation and revitalization of urban areas and in the strengthening of social participation and exercise of citizenship. **» Establishment of institutional, political, legal and financial mechanisms in cities and human settlements** in order to expand inclusive platforms, in line with national policies, that allow for meaningful participation in decision-making processes, planning and the universal follow-up processes, as well as the improvement of the participation of the civil society and the joint supply and production.

### Sustainable and inclusive urban prosperity and opportunities for all

### » Development of urban economies, dynamic, sustainable and inclusive,

taking advantage of endogenous possibilities, competitive advantages, cultural heritage and local resources, as well as resilient infrastructures that make efficient use of resources, promoting sustainable industrial development and inclusive and the modes of consumption and production, and fostering an environment conducive to commercial activity and innovation, as well as for the creation of means of subsistence, generating an adequate level of compactness and density, polycentrism and mixed uses.

» Social production of habitat and the role it plays in economic development and the contribution of the sector to stimulate

productivity in other economic sectors, recognizing that housing increases capital formation, income, employment generation and the conduction of savings and can contribute to sustainable and inclusive economic transformation at the national, Provincial and local levels. Spatial development will guide urban sprawl, prioritizing urban renewal through planning for the provision of accessible infrastructures and services, sustainable densification and the compact design and integration of new neighborhoods into the urban fabric, preventing urban sprawl and marginalization.

#### » Support for territorial systems that integrate urban and rural functions in city systems, thereby promoting

the sustainable management and use of natural resources and land, guaranteeing a reliable supply and the value chains that connect to the supply and demand in urban and rural areas to promote equitable regional development throughout the continuum of urban and rural areas and fill social, economic and territorial gaps. This requires improving the interaction and connectivity between urban and rural areas by strengthening sustainable mobility and transport, as well as technology and communication networks and infrastructure.

» Strengthening of national, subnational and local institutions with a view to supporting local economic development, promoting integration, cooperation, coordination and dialogue between different levels of government and functional areas and relevant stakeholders. As well as promoting effective participation and collaboration among all relevant stakeholders: local governments, the private sector and civil society, social actors that represent women, young people, people with disabilities, indigenous populations, professionals, academic institutions, trade unions, employers' organizations, migrant associations and cultural associations, in order to identify opportunities for urban economic development and identify current and new challenges, and take measures to address them.

» Generation and use of renewable and accessible energy and sustainable and efficient transport infrastructure and services, as far as possible, so as to take advantage of connectivity and reduce the financial, environmental and public health costs of the inefficiency of mobility, congestion, air pollution, the effects of urban heat island and noise. Special attention is needed to the energy and transport needs of the entire population, particularly people living in informal settlements.

#### » Promoting healthy societies through the promotion of access to public services with a clean environment,

taking into account guidelines on air quality, including those developed by the World Health Organization, and social facilities and infrastructures, such as health care services, including universal access to sexual and reproductive health services to reduce infant and maternal

#### mortality.

» Increase in economic productivity through the promotion of full and productive employment and decent work and livelihood opportunities in cities and human settlements, making it possible for the workforce to have access to opportunities to generate income, knowledge, skills and educational centers that contribute to an innovative and competitive urban economy. Special attention to the needs and possibilities of women, youth, people with disabilities, indigenous populations and local communities, refugees, internally displaced persons and migrants.

» Enabling, fair and responsible environment for business activity based on the principles of environmental sustainability and inclusive prosperity, through the promotion of investment, research and innovation, diversification, technological modernization, and entrepreneurship. Support to micro, small and medium-sized enterprises and cooperatives throughout the value chain, particularly businesses and social and solidarity economy companies operating in both the formal and informal sectors of the economy. particularly those women, unpaid domestic and migrant workers, valuing their contribution to urban economies.

» Take advantage of urban demographic dividends, where possible, and promote young people's access to education, skills development and employment to achieve increased



#### » FIG. 1.1 BUILDING HERITAGE OF THE BASIN

pollution, and promotes the reduction and disaster risk management, by supporting the preparation of disaster risk reduction strategies and periodic assessments of the risks of disasters caused by natural hazards and caused by humans

### » Preservation and promotion of the social and ecological function

of lands, including coastal areas that support cities and human settlements. Promote solutions based on ecosystems to guarantee sustainable consumption and production patterns, so that the regenerative capacity of ecosystems is not exceeded. As well as the conservation and sustainable use of water through the rehabilitation of water resources in urban, peri-urban and rural areas, the reduction and treatment of waste water, and water

productivity and shared prosperity in cities and human settlements. Girls and boys, girls and young people are fundamental to achieving change and creating a better future, and, when given the opportunity, they have great potential to speak for themselves and their communities. In this way, the social, economic and spatial consequences of the aging of the population will be addressed.

### Resilient and environmentally sustainable urban development

» Sustainable management of natural resources in cities and human settlements in a way that protects and improves urban ecosystems and environmental services, reduces greenhouse gas emissions and air losses, the promotion of its reuse and the increase of its storage, its retention and its recharge, taking into account the water cycle.

» Environmentally sound management of waste and reduction of waste generation by reducing, reusing and recycling waste, minimizing landfills and converting waste into energy when not it is possible to recycle them or when this option offers the best possible environmental results.

1.1

» Creation and maintenance of wellconnected and distributed networks of quality public spaces, open, safe, inclusive, accessible, green and destined for multiple purposes; increase the resilience of cities in the face of climate change and disasters, such as floods, drought risks and heat waves; improve food security and nutrition, physical and mental health and air quality in homes and the environment; reduce noise and promote cities, human settlements and urban landscapes that are attractive and habitable, and prioritize the conservation of endemic species.

#### » Adoption of materials and construction types in buildings of national, subnational and local

**governments**, leading to the realization of energy-efficient buildings and sustainable, renewable and accessible energy sources as they promote energy conservation and effectiveness in their use, which are fundamental to enable the reduction of greenhouse gas emissions and black carbon emissions, guaranteeing sustainable consumption and production patterns, generating new decent jobs, improving public health and reducing the costs of energy supply. Use of local, non-toxic and recycled materials and paints and coatings free of lead additives and adoption of innovative transport technologies, so that residents have more environmentally friendly options.

» Strengthening the resilience of cities, in particular through spatial planning and development of quality infrastructures, through the adoption and implementation of policies and integrated plans that take into account age and gender and approaches based on ecosystems, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, by incorporating a holistic and evidence-based perspective in disaster risk reduction and management at all levels to allow that families. communities and institutions prepare for the repercussions of hazards, react to them, adapt and recover guickly, including the dangers of sudden crises and those derived from dormant tensions. Promotion of the development of resilient and efficient infrastructures in the use of resources and reduction of the risks and effects of disasters, among other things through the rehabilitation and improvement of slums and informal settlements. Adoption of measures for the strengthening and adaptation of all housing at risk, particularly in slums

and informal settlements, to make them resilient to disasters in coordination with local authorities.

### Strengthening the urban governance structure

» Effective implementation of the New Urban Agenda on inclusive, applicable and participatory urban policies, as necessary, to incorporate sustainable urban and territorial development into strategies and integrated development plans, with support at the national, Provincial and local, as the case may be, of institutional and regulatory frameworks, ensuring that they maintain appropriate links with transparent and accountable financial mechanisms.

#### » Greater coordination and cooperation among national, subnational and local governments, in particular through multi-level consultation mechanisms and clearly defining the respective competencies, instruments and resources allocated to each level of government, ensuring consistency between the objectives and the sectoral policy measures.

» Adoption of measures to establish legal and regulatory frameworks based on the principles of equality and non-discrimination, in order to increase the capacity of governments to effectively implement national urban policies, as appropriate, and to empower them as responsible for formulating policies and making decisions, guaranteeing adequate decentralization at the fiscal, political and administrative levels based on the principle of subsidiarity.

#### » Strengthening the capacity of subnational and local governments

to apply effective local and metropolitan governance at different levels, crossing administrative boundaries and building on functional territories, ensuring the participation of subnational and local governments in the decision making process. decisions and working to give them the authority and resources necessary to manage crucial urban, metropolitan and territorial issues.

### » Participatory approaches that take into account age and gender in all

phases of planning processes and urban and territorial policy making, from the formulation of concepts to their drafting, budget, execution, evaluation and examination, based on the foundations of new forms of direct association between all levels of government and civil society, inter alia through broad platforms and mechanisms and well-provided resources for cooperation and consultation that are open to all, using the technologies of the Information and communications and accessible data solutions.

### Planning and management of urban spatial development

» Integrated planning that proposes to reconcile the short-term needs

with the long-term desired results of a competitive economy, a high quality of life and the sustainability of the environment. Execution of flexible plans so that they can adapt to the evolution of the socioeconomic conditions. Application of these plans and evaluation in a systematic way, incorporating technological innovations and supporting ongoing training for urban planners at the national, Provincial and local levels.

#### » Application of urban and territorial planning policies, included in metropolitan and regional plans,

in order to encourage synergies and interactions between urban areas of all sizes and their peri-urban and rural environment, including those covering both sides of a border. Promotion of sustainable regional infrastructure projects that stimulate economic productivity and equitable growth of urban regions in the continuity between urban and rural environments.

#### » Integrated territorial and urban planning, including urban extensions planned on the basis of equity principles, the effective and sustainable use of land and natural resources, compactness, polycentrism, connectivity and adequate densities and the multiple uses of space, as well as mixed social and economic uses in built-up areas, in order to prevent uncontrolled urban growth. Formulation of urban strategies and initiatives aimed at preventing and combating stigmatization.

» Application of sustainable urban development programs with strategies focused on the needs of housing and

**people**, giving priority to well-located and distributed housing plans in order to avoid the removal of peripheral and isolated housing nuclei, disconnected from the systems urban areas, regardless of the socio-economic segment of the population for which they are built, and providing solutions to the housing needs of low-income groups.

» Access to urban mobility land and sea transport systems that are safe, accessible and sustainable and take into account issues of age and gender, which make possible meaningful participation in social and economic activities in cities and human settlements, through the integration of transport and mobility plans

in urban and territorial planning and the promotion of a wide range of transport and mobility options, in particular by supporting:

**a.** Significant growth in accessible, safe, efficient and sustainable public transport infrastructures, as well as non-motorized options such as pedestrian and bicycle traffic, which will be given priority over private motorized transport.

**b.** An equitable "transit-oriented development" that minimizes displacement, particularly of marginalized social sectors, and where accessible housing for mixed income groups and a combination of jobs and services prevails.

c. Better and coordinated planning of transport and land use, which will reduce travel and transport needs and improve connectivity between urban, peri-urban and rural areas, including watercourses. Transport and mobility planning, in particular for small island developing States and coastal cities;

**d.** Concepts of logistics and planning of urban transport that allow efficient access to products and services, minimize their effects on the environment and habitability of the city and maximize their contribution to an inclusive, sustained and sustainable economic growth.

#### **Means of implementation**

» Use of international public financing, including official development

**assistance** (amongst others), to catalyze the mobilization of additional resources from all available sources, both public and private, in areas of sustainable urban and territorial development. This can lead to risk mitigation for potential investors, in recognition of the fact that international public financing is a fundamental complement to the efforts made by countries to mobilize public resources at the domestic level, especially in developing countries. with limited internal resources.

#### » Approaches must be sensitive to

their context in relation to the financing of urbanization and the improvement of financial management capacity at all levels of government through the approval of specific instruments and mechanisms needed to achieve sustainable urban development, recognizing that each country has its own economic and social development as its main responsibility.

» Expanding opportunities for North-South, South-South and triangular regional and international cooperation and cooperation at the Provincial, decentralized and inter-city levels, as appropriate, in order to contribute to sustainable urban development, enhancing capacities and fostering exchange of urban solutions and mutual learning at all levels and for all relevant agents.

### » Development of vertical and horizontal models of distribution

of financial resources to reduce inequalities between subnational territories, within urban centers and between urban and rural areas, to promote integrated and balanced territorial development. In this regard, it is essential to improve the transparency of data on spending and the allocation of resources as an instrument to evaluate progress towards equity and spatial integration. Appropriate policies and capacities that allow Provincial and local governments to register and expand their potential revenue base, should be raised in line with national policies, while ensuring that women and girls, children and young people, Older people, people with disabilities, indigenous populations and local communities and poor households are not disproportionately affected.

» Support for science, research and innovation, paying special attention to social, technological, digital and nature-based innovation, including scientific-regulatory interfaces in relation to urban and territorial planning and the formulation of policies and institutionalized mechanisms for sharing and exchanging information, knowledge and experiences, including the collection, analysis,

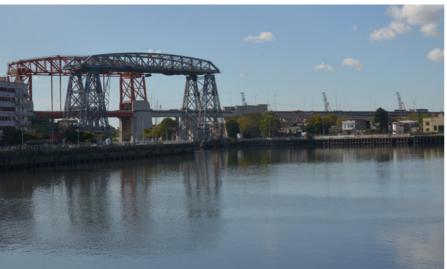
#### This proposal promotes compact, conected and inclusive cities

standardization and dissemination of geographic data, obtained in communities, of high quality, timely and reliable, disaggregated by income, sex, age, race, ethnicity, immigration status, disability, geographic location and other relevant characteristics in national, subnational and local contexts.

#### » Strengthening capacities in relation to data and statistics at the national, subnational and local levels

#### **»** FIG. 1.2

INDUSTRIAL HERITAGE OF THE BASIN



to effectively monitor progress in the implementation of sustainable urban development policies and strategies, and to inform decision-making and appropriate reviews. Procedures for data collection for the implementation of follow-up and review measures for the New Urban Agenda should be based primarily on official national, subnational and local sources and other sources, as appropriate, and be open, transparent and coherent.

#### **1.2 PRIORITIES UN-HÁBITAT**

The priorities of UN-Habitat are concentrated in seven areas:

- » Urban Legislation, Land and Governance
- » Urban planning and design
- » Urban economics
- » Urban basic services
- » Housing and settlement improvement
- » Risk reduction and rehabilitation of
- urban areas with low indicators
- » Urban research and development

### 1.3 PRINCIPLES AND COMMITMENTS

### The Principles that the text defends are found in the promotion of the following:

**Compact cities:** Promote sustainable urbanization with buildings at height (high and low densities, and incremental) and around transport nodes. Facilitating, in this way, social inclusion and the reduction of social inequalities. Leading the street in front of the road as the main urban structure.

**Connected cities:** Establishment of powerful connection networks privileging appropriate mobility systems and promoting the use of public transport. Through the promotion of mixed land uses, the aim is to achieve more sustainable cities that reduce the existing dependence on the automobile.

**Inclusive cities:** That promote space justice, social and cultural diversity.

#### 1.4 PILLARS

### 3 key pillars that are fundamental for a sustainable urbanization:

Legal and regulatory structure: If you want to attract financial investment at the local level, a coherent, transparent and applied regulatory framework without exceptions is essential. The rules of the game must be known and respected, otherwise the longterm investment opportunities will decrease and it will be difficult to attract capital.

*Urban Planning:* The vision of the city, its physical configuration, the definition of solutions and environmental considerations are determined through urban planning. A basic urban planning is necessary to conduct the growth process in an orderly manner, so that the virtuous circle of prosperity is nourished.

### Sustainable Development Goals

Sustainability of the economic and financial model: Local tax systems must become vectors of change. Instead of acting as mere instruments of income generation and expense management. In this way, one of the pillars on which the New Urban Agenda is based to promote sustainable urban development is the financing and management of local expenditures.

The General Assembly recognized that baseline data for several goals still do not exist and called for greater support to strengthen data collection and capacity building in member states, in order to establish national and global baselines when they do not yet exist . They undertook to fill in these gaps in data collection to better inform the measurement of progress, particularly for targets that do not include clear numerical objectives.

A set of global indicators is being developed to assist in the follow-up and examination work required by governments. Disaggregated data of quality, accessible, timely and reliable will be needed to help measure progress and ensure that no one is left behind. These data are fundamental for decision-making. Data and information provided by the existing reporting mechanisms should be used whenever possible.

The CPI provides the framework for analyzing the interrelations of SDG 11 and the strategic objectives through the SDGs that have an urban dimension. Its main objective is to make cities and human settlements inclusive, safe, resilient and sustainable.

### Sustainable Development Goals:

- **End poverty** in all its forms everywhere
- End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Bensure healthy lives and promote well-being for all at all ages
- Ensure inclusive and equitable quality education and promote lifelong learning

#### opportunities for all

- 05 Achieve gender equality and empower all women and girls
  - 6 Ensure availability and sustainable management of water and sanitation for all
  - 7 Ensure access to affordable, reliable, sustainable and modern energy for all

08

- Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Build resilient infrastructure**, promote inclusive and sustainable industrialization and foster innovation
  - Reduce inequality within and among countries
  - **1** Make cities and human settlements inclusive, safe, resilient and sustainable
  - 2 Ensure sustainable consumption and production patterns

- Take urgent action to combat climate change and its impacts\*
- 4 Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- 5 Protect, restore and romote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
  - Promote peaceful and inclusive societies for sustainable development, provide access to justice for

all and build effective, accountable and inclusive institutions at all levels

#### Strengthen the means of implementation and revitalize

the Global Partnership for Sustainable Development

#### To achieve this type of cities, three key pillars are fundamental for a sustainable urbanization:

» Legal and regulatory structure: If you want to attract financial investment at the local level, a coherent, transparent and applied regulatory framework without exceptions is essential. The rules of the game must be known and respected, otherwise long-term investment opportunities will decrease and it will be difficult to attract capital.

» Urban Planning (Planning and urban design): The vision of the city, its physical configuration, the definition of solutions and environmental considerations are determined through urban planning. A basic urban planning is necessary to conduct the growth process in an orderly manner, so that the virtuous circle of prosperity is nourished.

» Sustainability of the economic and financial model: Local tax systems must become vectors of change, instead of acting as mere instruments of income generation and expense management. In this way, one of the pillars on which the New Urban Agenda is based on to promote sustainable urban development is the financing and management of local expenditures.

In relation to Goal 11, the targets are the following:

- By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
- By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

Strengthen efforts to protect and safeguard the world's cultural and natural heritage

• By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

• By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and Municipal and other waste management

- By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
- Support positive economic, social and environmental links between urban, periurban and rural areas by strengthening national and regional development planning
- By 2020, substantially increase the number of cities and human settlements

### SUSTAINABLE GOALS



#### FIG. 1.3 SUSTAINABLE DEVELOPMENT GOALS UN-HABITAT

adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

• Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

### Argentina's position in reference to the New Urban Agenda 2030

The 2016 National Report exposes the achievements obtained in terms of urban development and argues that the urban habitat situation in Argentina has significant deficits, thus being a priority to address the existing fragmentation and generate an integrated city, to include informal settlements to the urban fabric and contemplate the provision of basic services such as water and sewage, accessibility, dominical regularization, to improve habitat and housing facilities. to improve public space, to build communities as well as educational. health and cultural facilities. In addition. to take measures to control flood risks by creating reservoirs and water parks. Another priority is to promote the productive development of the country to achieve greater autonomy and sustainability of subnational and local governments, ergo generating new jobs in turn.

The report proposes advances and challenges in the issue of urban habitat based on the following thematic units:

#### Urban demographic issues

The growth dynamics of Argentine cities responds to a pattern of low density expansion of their cities, necessarily implying an expansion of the urban form on productive or potentially productive soils. The high demand of urban land due to the mentioned low density spread, leads to increased land costs, the need for the extension of infrastructure and services networks and the continuous creation of urban equipment. At the same time, it generates an increasingly unbalanced and exclusive territory. In this sense, it is necessary to recover the role of the National State as a promoter of public policies oriented towards a more balanced and inclusive territorial configuration. Independently of the population density of each applomeration. the urban question must be understood in relational terms, that is, assuming the links that condition it in terms of inclusion or segregation, such as: access to connectivity networks, access to labour regional markets, and access to basic infrastructure aiming to improve the quality of life of all inhabitants.

#### Land and urban planning

The National State has decided to discourage the expansive patterns of urban growth because it constructs increasingly segregated and polarized urban territories, with larger distances of movement and generate increasingly high infrastructure costs. As mentioned, this type of expansion advances on land used for food production. For this reason, the following actions are suggested:

» Ensure sustainable urban planning and design

» Improve the management of urban land, also taking into account urban sprawl

- » Increase food production in urban and peri-urban areas
- » Challenges for urban mobility
- » Improve the technical capacity of planning and management of cities

» Urban governance and legislation: issues and challenges for a new urban program

#### **Environment and urbanization**

The model of productive development installed in large cities, makes them the main consumers of natural resources and large generators of waste by producing depletion of resources and environmental pollution.

In this context, it is essential to incorporate the concepts of urban sustainability, which seek to define, based on the limits and potentialities of nature and its complexity, new ways of approaching the relationship between society and environment. This new relationship implies, among other issues, reinterpreting the patterns of production and consumption and the relationship between society and environment, by proposing a balanced environmental rationality that reflects sustainable societies. An urban habitat that reflects these needs is proposed. It incorporates sustainability. which involves addressing not only environmental issues, but also those linked to unsatisfied basic needs, unemployment, efficient urban planning and the presence of minimal infrastructures. The key issues to work on are the following:

- » Climate Change
- » Disaster risk reduction
- » Air pollution
- » Urban Solid Waste

#### **Urban governance and legislation**

Given the organizational and administrative regulation of subnational and Municipal governments, it is a challenge for the National Government to coordinate the design, sanction and implementation of integral urban policies, focused on the improvement and modernization of local and Provincial urban governance, incorporating issues related to financial and nonfinancial resources, land management, improvement of urban security, among others.

- » Improvement of Urban Legislation
- » Decentralization and strengthening of authorities
- » Improvement of participation and inclusion of Human Rights in Urban Development
- » Improvement of Urban Safety
- » Improvement of Social Integration and Equity

#### **Urban economy**

The development of the urban economy is a very important component to be able to balance the territory, that is why it is fundamental to draw up policies and actions from the different levels of government to follow the following guidelines: 26

- » Improve Municipal and local financing
- » Strengthen and improve access to housing finance
- » Support local economic development
- » Create decent jobs and livelihoods

#### Housing and basic services

The current situation of Housing and Habitat in Argentina presents important challenges, including situations to improve in terms of urban integration and of neighborhoods and housing complexes with centralities and main urban dynamics. There is a need to revisit territorial planning with the idea of introducing greater elements of balance, integration, sustainability and social justice. The zones of marginality are characterized by the low quality or absence of public spaces and community equipment, the lack of basic infrastructure. the housing deficit and the irregular possession of the property.

- » Improve the most vulnerable neighborhoods
- » Improve access to adequate housing
- » Guarantee access to drinking water and to sanitation and drainage services.
- » Improve access to non-polluting energy sources for the home
- » Improve access to sustainable means of transport

#### Challenges for the future that could be faced through a new urban program

It is a challenge to plan the growth of Cities by promoting the rational use of land through a compact pattern. Compact models can improve accessibility, make infrastructure and urban services more profitable, reduce the erosion of natural resources, reduce commercial costs and promote social equality.

The aim is to generate an inclusive city, promoting public space as a place of union and meeting of society: men, women, young people, children, seniors and people with disabilities. The public space contributes to improving coexistence and increases security, guarantees accessibility to plots and circulation and is where the laying of water, sewer, stormwater and electricity networks is located.

In relation to climate change, the main challenges are linked to deepening the work in the design and implementation of national plans, both mitigation and adaptation, which contemplate nationally appropriate actions with interdisciplinary objectives, goals and indicators that reflect the country's progress in this area. In front of a new urban program, a fundamental challenge is to have systematized and reliable information at the local level, which allows, on the one hand, to identify potential opportunities for reducing greenhouse gases and, on the other hand, to identify and evaluate potential threats, vulnerabilities socioeconomic and institutional, quantify the impact of losses and damages, among other aspects, on which to build response plans to reduce disaster risk and increase resilience in urban centers. In the same sense, it is necessary to strengthen the monitoring and measurement systems and modeling of environmental, hydrological, air quality and meteorological variables, which is a key challenge for prevention.

#### Position

In order to achieve more compact, sustainable cities that promote equity and accessibility for all inhabitants, financing by the National State is aimed at consolidating and improving the existing city, limiting the extension of the city and avoiding the cost to provide services that are growing and that reduce mobility costs. It is taken as a central criterion for the prioritization of projects to execute their location within the urban area and within the so-called "water ring".

It is also a great challenge to expand and consolidate a legal corpus that promotes territorial planning practices. It is important to promote land-use laws at the Provincial level, which have specific powers to establish regulations that guide the development of their respective territories. The laws of Provincial territorial ordering are inscribed as part of the processes of democratic management of the territory, are important to guide the socio-spatial configuration both at the Provincial level and at the urban level, empowering governments as arbiters of the processes of differentiation, exclusion and fragmentation. In a concrete sense, for those Municipal governments that want to guide the growth of their cities by intervening, for example, in urban land markets, having a Provincial level law that protects them is essential.

# National objetives

Within the proposed national objectives, some are identified with particular impact on the urban habitat:

#### I. Macroeconomic Stability

#### **II. National Productive Agreement**

#### III. Infrastructure Development

- Development of Renewable Energy
- Energy Infrastructure Plan
- Water and Sanitation Plan
- National Road Plan
- Urban Transportation Infrastructure Plan for the AMBA (Metropolitan Area of Buenos Aires)
- Rail Freight Plan
- Watershed Restoration
- Flood prevention
- Promotion of Public-Private
  Participation Investments

#### IV. Sustainable Human Development

- School Infrastructure Plan
- · Access to housing
- Universal Health Coverage
- The State in your Neighborhood
- Social and Urban Integration
- Gender Policies
- Public Health System in the Metropolitan Area of Buenos Aires
- Higher and University Training
- Environmental Care
- Environmental Regulation of the Territory
- National Culture Agreement
- National Sports Plan
- Energy saving and efficiency
- Prevention of addictions
- National Disability Policy
- Federal Network of Sustainable Cities
- Human Rights

### V. Fight against drug trafficking and improvement of security

VI. Institutional strengthening

#### VII. State Modernization

#### VIII. Intelligent Insertion to the World

- » Consolidate the process of South American regional integration.
- » Continue with infrastructure, equipment and services planning, in order to achieve urban development with territorial equity.
- » Strengthen the incorporation of disaster

### Territorial planning guidelines

prevention and reduction in territorial planning.

- » Propender to the balance of development processes through the management of the natural and social resources of the territory.
- » Guarantee the right to both rooting and emigration in search of opportunities for progress.
- Intervene in urbanization processes that undermine the efficiency and sustainability of cities.
- » Guarantee the right to the city and to adequate housing.
- » Articulate interjurisdictional policies for the government of metropolitan areas.
- » Consolidate territorial planning at all levels of the State.
- » Evaluate and monitor the planning and territorial ordering policies.

### General urban planning guidelines

- » Encourage urban productivity
- » Guarantee the necessary service infrastructure for all inhabitants, giving special attention to the ones in most disadvantaged conditions
- » Promote equity and social inclusion
- » Proceed on matters of environmental sustainability, taking environmental effects as a fundamental pillar of urban decision making

» Implement favorable governance and legislation policies, in pursuit of urban growth

» Raise the standard of quality of life for the population

#### Guarantee the necessary service infrastructure for all the Basin's inhabitants, giving special attention to the ones in most disadvantaged conditions

### Thematic guidelines at the National and Regional levels

7.0

"Create profiles of economic, social, urban and community development for each region and its localities for the next 20 years through participation mechanisms at the local level and consolidating them at a regional level in documents and web pages for easy and agile consultation." (ODS 11.3 And 11.a)

- » Generate accessibility and connectivity conditions
- » Consolidate and strengthen the systems of cities by Province and Region. Search for productive complementarities, services, health, education and culture.

### "Ensure access to adequate basic services for all housing" (ODS 11.1)

» Develop plans and projects to ensure that all consolidated urban areas have potable water, sanitation and energy infrastructure. In particular, ensure 100% access to the potable water network and to the sewage system. As a central criterion for the definition of this type of projects, they should be defined within the current edge of the urban sprawl in order to avoid the higher cost of providing services outside of it. Outside the urban march, only projects that were accompanied by sustainable extensions of the urban sprawl could be included, that is, new areas that are part of a planned expansion.

» Plan and design the development of new housing and accessibility instruments with criteria of progressivity, taking into account the generation of an adequate habitat. Also in this case, the new dwellings must be located within the urban area. By failing to do so, housing can spread in border areas, needing to have an infrastructure and equipment provision project, as well as the estimation of charges on local accounts (increase of current expenses of the Municipal or Provincial state).

#### "Promote access to habitat" (ODS 11.1)

» Plan the development of social sustainability facilities (educational, health, cultural, recreational, security establishments) with proximity criteria, particularly in neighborhoods with social vulnerability and with considerations of gender and age.

» Guarantee proximity to public green spaces

» Urbanization of shanty towns and settlements with criteria of urban sustainability

» Develop provisional and participatory cadastres to delimit private plots and public space

» Identify the beneficiaries of the urbanization

» Define homes to relocate only in cases of environmental risk or that are required for the general urbanization process, for example, for the opening of streets and public space (sponging).

» Generate the public services

infrastructure with full access criteria » Build new homes and make improvements to existing homes based on a general plan, aimed at guaranteeing habitat conditions, based on public works, financing instruments, non-governmental organizations and citizen participation. » Generate public green spaces with proximity criteria, social sustainability equipment and areas of economic consolidation (commercial and productive), located in such a way as to facilitate urban integration with neighboring neighborhoods

#### "Create active mobility alternatives (taking into account the climate factor)" (ODS 11.2)

» Balance the location of services and employment with the residential offer to reduce costs and travel times.

 » Minimize the impact of urban barriers
 » Minimize the use of the particular automotive » Improve the coverage of public transport and sustainable mobility modalities, regulate indirect and hidden subsidy schemes for car use within the densest areas and discourage parking space in those areas

» Enhance the multimodal connectivity of the corridors that connect transport systems

### "Protect the natural and cultural heritage" (SDG 11.4)

 » Conduct environmental awareness campaigns
 » Protect and recover areas rich in biodiversity

"Carry out territorial planning based on risk and vulnerability conditions. Carry out environmental baselines for each region or subregion, defining the point of equilibrium to which it is desired to return in each case and establishing the steps to be followed to do so "(ODS 11.5)

» Ensure a sustainable relationship of public space in the city

» Soil permeability, reduction of water risk and improvement of urban climatic conditions

"Develop centers, sub-centers and compact neighborhoods, connected to the trunk networks of each region" (ODS 11.6) » Define the neighborhood unit as a basic urban cell to be reinforced and served by transportation, services, commerce and public space.

» Tender to the mixture of uses,

generating a balance between residential and non-residential uses

» Promote the completion of urban gaps and the densification of centers and subcenters along the corridors.

» Define the parameters of urban form, connectivity and public, green spaces and nature reserves that give identity and embody a common vocation

» Consolidate and strengthen the systems of cities by Province and Region. Search for productive complementarities, services, health, education and culture.

"Define objectives of urban, building, industrial and vehicular sustainability, through clear parameters that can be measured, demanded and fulfilled by all the actors. Establish goals and mechanisms to reduce the environmental footprint and develop renewable energy "(ODS 11.a and 11.b)

 » Take advantage of solar potential and protect the landscape heritage
 » Promote the intensive use of land with minimum heights in areas of high accessibility, presence of non-residential uses, proximity to green spaces and social sustainability equipment.
 » Respect the reserve areas identified at the national, Provincial and local levels, include modalities of protection and sustainable use in plans, regulations and local projects.

» Guarantee differentiated domiciliary collection throughout the consolidated urban area

» Develop waste separation plants, associate reuse and recycling processes

» Design modalities of final disposal according to parameters of environmental sustainability

» Decrease the effect of heat island in urban areas by means of an environmental regulation for building volume

"Strengthen leadership and urban governance through capacity building of local authorities in territorial management, and promote the development of urban regulations, urban and economic instruments and citizen participation" (ODS 11)

» Guarantee the existence, legitimacy and application of urban regulations that guide urban development

» Planning codes approved, transparent, accessible and duly disseminated.

 Incorporation of economic and urban instruments that improve the capacity of public leadership on urban development, the financing of public investments, the progressivity in tax burdens, and the improvement of sustainability conditions.
 Public investment decision processes and systems, work permits and massive public access controls.

» Associate initiatives with programs,

projects or works with clear parameters, and with budgets shared proportionally by Nation, Province and Cities. (ODS 11.3 and 11.a)

» Establish monitoring and feedback mechanisms of the parameters defined to measure the progress of urban development programs.

#### Incorporate economic and urban instruments to improve public leadership on urban development and the improvement of sustainability conditions

# BACKGROUND

## Actors map

The mapping of key actors, also known as social mapping, involves the use of schemes to represent social reality, understand it in its most complex extension and establish strategies to change it.

Those individuals, groups or institutions that are affected or affect the development of certain activities are considered actors; those who have information, resources, experience and some form of power to influence the action of others to generate intervention proposals. The objective is to recognize the main roles of the actors with respect to each project or program and identify the possible actions that could be developed by the social and institutional actors in it, outlining a network of inter-institutional alliances in relation to the intervention proposal.

The actors with interference and / or responsibility in the recovery tasks of the Matanza Riachuelo Riachuelo Basin are, among others:

#### 8.1 NATIONAL SCOPE:

» Ministry of the Interior, Public Works and Housing  » Undersecretariat of Territorial Planning of Public Investment
 » Undersecretary of Urban
 Development and Housing

(SSDUV) » Undersecretariat of Habitat and Human Development (SSHDH)

Provincial scope:

- » Ministry of Infrastructure and Public Services
- » Ministry of Social Development
- » Ministry of Production, Science
- and Technology
- » Ministry of Coordination and Public Management
- » Provincial Agency for Sustainable Development
- » Interministerial Commission for
- the Matanza Riachuelo River Basin » Housing Institute of the Province of Buenos Aires (IVBA)

#### 8.2 AUTONOMOUS CITY OF BUENOS AIRES:

- » Ministry of Urban Development and Transport
- » Undersecretariat of Urban Planning
- » Undersecretariat of Urban Project
- » Undersecretariat of Registries,

Interpretation and Cadastre » Institute of Housing of the City (IVC)

#### 8.3 LOCAL SCOPE:

- » Municipality of Lanús
- » Municipality of Avellaneda
- » Municipality of Lomas de Zamora» Municipality of Esteban
- Echeverría
- » Municipality of La Matanza
- » Municipality of Ezeiza
- » Municipality of Cañuelas
- » Municipality of Almirante Brown
- » Municipality of Morón
- » Municipality of Merlo
- » Municipality of Marcos Paz
- » Municipality of President Perón
- » Municipality of San Vicente
- » Municipality of General Las Heras

#### 8.4 ACADEMIC SCOPE:

» Academic Advisory Committee » National Universities, whether they are based in the Basin or have recognized experience in the issues related to the Matanza Riachuelo Basin, as established in art. 3 of Resolution No. 805/2013 ACUMAR.

#### 8.5 OTHERS:

» Authority of the Matanza Riachuelo River Basin - ACUMAR (See in Introduction 'The creation of ACUMAR')

» Interjurisdictional Coordination Table. Conformed by the highest authorities in matters of industrial control of the Nation, the Province of Buenos Aires, the Autonomous City of Buenos Aires, AySA (Argentina's state company that provides running water and sewage services) and ACUMAR.

» National Supreme Court of Justice, National Criminal and Correctional Federal Court No. 12, Federal Criminal and Correctional Court No. 2 of Morón, General Audit of the Nation.

» Collegial Body, Ombudsman of the Nation, Civil Society Organizations, Neighborhood discussion tables.

## International examples

### 9.1 INTERNATIONAL EXAMPLES

### 9.1.1 Comprehensive Sanitation Plan for the Bilbao Estuary (BR2000)

The Comprehensive Sanitation Plan of the Ría de Bilbao in 1979 proposed a system composed of a series of collectorsinterceptors to drive wastewater from the large conurbation to three Wastewater Treatment Plants (WWTP): Muskiz, Galindo and Lamiako.

The Hydrographic Confederations were conceived by the Water Law, approved by Royal Legislative Decree 1/2001 of July 20 (articles 19 and later), as the Organisms responsible for the Hydraulic Administration of the intercommunity basins. The Strategic Plan for the Revitalization of Metropolitan Bilbao establishes, among its most important goals, the regeneration of the Nervión River, the backbone of the metropolis, which due to the intensive industrialization process suffered in the past, experienced a strong degradation of its natural conditions. Article 21 of the Water Law establishes the following functions of the Hydrographic Confederation:

- » The elaboration of the Basin Hydrological Plan, as well as its monitoring and revision.
- » The administration and control of the hydraulic public domain.
- » The administration and control of the use of water of general interest or affecting more than one Autonomous Community.
- » The project, the construction and exploitation of the works carried out by the Agency's own funds, and those entrusted to it by the State.
- » Those that derive from agreements with Autonomous Communities, Local Corporations and other public or private entities, or those signed with individuals.

The following are also functions of the Confederation:

» Granting of authorizations and concessions relating to the public hydraulic domain, except those relating to

works and actions of general interest of the State, which will correspond to the Ministry of Agriculture and Fisheries, Food and Environment.

» Inspection and monitoring of compliance with the conditions of the concessions and authorizations related to the public hydraulic domain.

» Realization of gauging, hydrology studies, flood information and water quality control.

- » Study, project, execution, conservation, exploitation and improvement of the works included in their own plans, as well as those others that could be entrusted to them.
- » Definition of objectives and quality programs in accordance with hydrological planning.
- » Realization, within the scope of its competences, of plans, programs and actions that have as an objective an adequate management of the demands, in order to promote the saving and the economic and environmental efficiency of the different uses of water through the use global and integrated surface water

and groundwater, in accordance, where appropriate, with the forecasts of the corresponding sectoral planning.

» Provision of all kinds of technical services related to the fulfillment of their specific purposes and, when requested, advice to the General State Administration, Autonomous Communities, Local Corporations and other public or private entities.

For this reason, and since the 70s. the Bilbao Bizkaia Water Consortium approached the development of a Comprehensive Sanitation Plan for the Estuary, aware of the high level of contamination in rivers estuaries and the nearby coast, a consequence of the indiscriminate dumping of wastewater, both urban and industrial. This Plan began to materialize in concrete projects from 1981 with an initial investment of more than one billion euros. Likewise, initiatives for the urban and environmental regeneration of the areas closest to the Ría del Nervión were promoted as part of the revitalization of Metropolitan Bilbao.

RIVER

#### History of the Bilbao Ría 2000 (BR2000)

Until the mid-twentieth century, waste, both from mining and industrial activities as well as from regular urban activities, were thrown indiscriminately into the waters of the river contaminating them. In the 1980s the crisis hit heavy industrial activity, drastically decreasing it, and the anoxia of the Ria becomes practically total. In this context, thinking began about renovation and sanitation projects for the Ría de Bilbao, in addition to purifying the waters, tended to improve the landscape quality of its margins.

The BR2000 Plan was born in 1992 with its shareholding divided equally between the State and Basque institutions. The Ria then became the axis of urban development and tourism in the city in which there is a process of rearrangement of the abandoned areas after the industrial reconversion, in addition to the construction on its banks of new emblematic buildings for the city, the urbanization and creation of walks in its margins.

As an operating model, reduced initial economic capital (1.8 million euros) was established and there was a great recovery of land. This land was inherited from the deindustrialization process of the 1980s, most of it in disuse and with high levels of contamination. The BR2000 was commissioned to design sanitation and redevelopment projects for all that

heritage, and sold plots to companies to finance the works.

With the commitments acquired with hotels, universities, electricity companies, shopping centers and other private developers BR2000 obtained liquidity with which it paid the contractor companies that were responsible for the work. For years this model has worked successfully counting, in addition, with an unprecedented inter-institutional consensus in Euskadi. In these years, the public company has invested a total of 985 million euros in the different works in which it has participated. In its heyday, between 2006 and 2010, it employed 361.68 million. From that moment. it was possible to begin to trace the redevelopment plan of the area between the Guggenheim Museum and the Euskalduna Palace, a project designed by the architect Cesar Pelli that has become one of the most emblematic imprints of the reconversion from the city. This action was accompanied by the burial of the Renfe roads in the Ametzola area, which managed to unite the formerly isolated Rekalde neighborhood with the rest of the city.

In relation to the Metropolitan Area, the most important action focused on the redevelopment of the entire area of Urban Galindo, an industrial area of 50 hectares that now houses plazas, parks, sports facilities and homes, and is one of the new areas of extension urban areas of Bizkaia after Bilbao.



As of 2010, the number of projects that the administrations entrusted to BR2000 was considerably reduced. For 2014 only two projects were executed. This is the burial of Adif's merchandise line passing through Rekalde and Irala, an action resulting from an inter-institutional agreement signed by the Ministry of Development, the Provincial Council of Bizkaia, the Bilbao City Council, Adif and BILBAO Ria 2000, and the urbanization of Garellano. In the middle of the real estate bubble, BR2000 was able to finance itself thanks to the sale of public assets. With the crisis in the construction

industry, society has begun to accumulate debt to be able to meet its commitments. Since 2013, it had to settle obligations of 195.7 million euros with a pool of banks whose main agents are BBK and BBVA. The current situation of BR2000 is the logical consequence of the failure of an urban model based on speculation and the sale of public assets. The most important effect of the Comprehensive Sanitation Plan in the Estuary has been the recovery of normal oxygen levels. The sediments, in turn, are less polluted than 30 years ago, allowing the presence of

biological communities throughout the system, from the inner zone of Bilbao to the Abra, with more than 60 species of fish. In this sense, every year campaigns and samplings are carried out to evaluate the state of the estuary and its evolution, analyzing the quality of water, sediments, fauna and flora. Researchers at the AZTL Technology Center, in collaboration with the University of the Basque Country, are responsible for carrying out this environmental monitoring work.

#### 9.1.2 Sanitation of the Thames, United Kingdom

Thames took more than

out in two major phases:

first, the construction of

a sewage system and

of treatement plants

9.1

The Thames basin covers an area of 13.000 km2 (4%) of the United Kingdom area, but is home to more than 12 million people (20% of the population of the United Kingdom), generating 25% of the Gross National Product (PNB). Land use is rural and urban, dominated

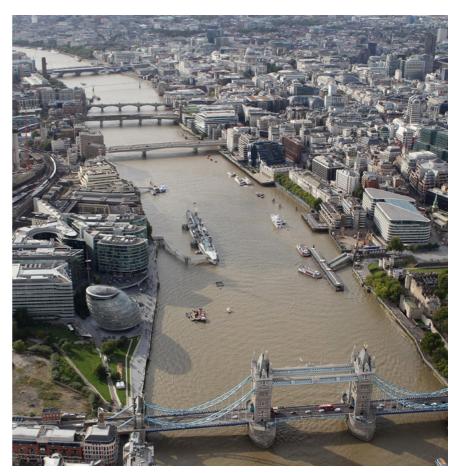
by the city of London in the East. The Thames is one of the driest areas in the United Kingdom, with an average annual rainfall of only 690 mm.

The main concern at the basin level is related to the future provision of water resources (particularly during drought events), flood risks and water quality. Drinking water is supplied to more than 8 million consumers in the London area and the Thames Valley, carrying out more than 100 water treatment works and more than 31,000 km of pipelines, as well as supplying an average of 2,600 ml of water drinking a day.

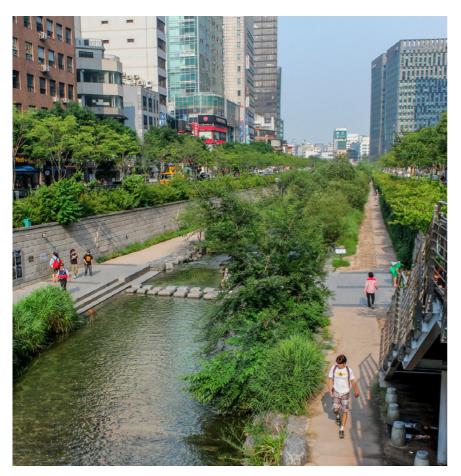
From the seventeenth century, the River Thames began to become contaminated. something that worsen as the city grew. It was a source of multiple diseases such as cholera, as well as an increasing bad smell of the city, making in 1858 to suspend parliamentary meetings. At this point, a plan for the river's sanitation and recovery began.

The restoration of the river The city of London was built on the banks of the River 100 years and was carried Thames, which divides it into the northern and southern half. second, the construction so the river has always been an important source of drinking water for the inhabitants

> of its banks, that since the 19th century are a part of the great city of London. The Thames has also served to clear wastewater and industrial waste from the city. The wastewater problem tried to be solved with the system designed by Joseph Bazalgette, and built between 1859 and 1875, which diverted the domestic sewage and rainwater into a single sewer that took them away from



**FIG 22** THAMES RIVER WATERFRONT



>> FIG. 2.3 NEW LANDSCAPES OF THE CHEONGGYECHEON STREAM the city downstream. However, the tides prevented the waste from dispersing. This, together with the industrial pollution caused by the spills that were made directly into the river caused that in 1947 the river lacked oxygen completely. The river was highly polluted to the point that all the species that inhabited it disappeared.

The Thames River demonstrated the enormous capacity of the human being not only to deteriorate ecological systems but also to restore them. The River Thames, which runs through London with a length of 346 kilometers, is today an emblematic example of that kind of recovery achieved with the combined efforts of authorities and inhabitants.

The restoration of this river took more than 100 years and was carried out in two major phases: the first refers to the construction of the sewer system and the second is related to the construction of the treatment plants, which process wastewater to avoid its overturning in the river. There was a systematic procedure to control the polluting sources along the banks of the Thames and an intensive work to create a conservationist conscience.

Although the river has suffered ecological disasters due to the overflow of untreated sewage in times of storms, the Thames is one of the cleanest rivers flowing through large cities. In the 1960s, a special river cleaning policy was introduced and, since 1963, rigid measures were established on the purification of waste discharges, which

have made it possible to increase the quality of the waters and 115 types of fish have been recovered.

The cleanup, which cost the equivalent today of 200 million dollars, resulted in a total and surprising ecological change. Currently, thanks to the water treatment plants and the cleaning boats that daily cross the river, the Thames has ceased to be the dump of the city, but even so it is inevitable that there is dirt and debris of all kinds.

### 9.1.3 Recovery of the Cheonggyecheon River, Seoul

In the last thirty years the demographic evolution of Seoul has been significant and disparate. While the city reached a peak of 10.6 million in 1990 and stagnated from that figure, the metropolitan area has not stopped growing. The population went from 18.6 million in 1990, to 21.5 million in 2000 to reach 23.5 million in 2010. Currently, Seoul and its metropolitan area account for 25 million people, being the sixth most populated city of the world in 2015.

This growth shows the great pressure that the territory had to endure during the second half of the 20th century, especially in the center of the city, where thousands of people settled. A large number of immigrants did so on the banks of the Cheong Gye Cheon River, where a dense set of substandard housing was consolidated. The river deteriorated very quickly becoming a problem for public health. In parallel, the progress of more and more companies that generated greater activity in their environment led to the construction of the Cheonggye Expressway dual-level highway over the old channel. The river was thus buried and the historic center was dominated by heavy traffic.

In front of this panorama, a project of urban renewal arises from a negative diagnosis made to the main highway. Despite benefiting 160,000 cars daily, the highway was in absolute obsolescence since its maintenance had a very high cost, its structure no longer allowed the transit of large vehicles and was the cause of a poor quality of life in the area due to the contamination. As a result, the center was depopulated and devalued, becoming an increasingly less attractive place. With the turn of the millennium, to recover the river and gain value for its surroundings, the city of Seoul focused on three areas.

FACING THE RIVER

9.2

- » Ecology
- » Sustainability
- » Citizen use

In 2003, a new traffic model and a plan for the recovery of the city were set in motion, where the main project consisted of dismantling the highway and recovering the river.

Different sectors opposed the process but in 2005, thanks to citizen participation,

the work was inaugurated through the management of Lee Myung-bak, who would later become the president of Korea.

The river recovered its open form in the open air, the water was channeled by walks and walls (with twenty-two bridges, establishing new relationships between the two banks of the stream). The fluvial linear park offers a great variety of spatial situations within the channel: pathways, landscaped spaces, bleachers, crosses, fountains, etc. The space is the setting for numerous activities and festivals of the community. In addition to eliminating obsolete infrastructures, it has been possible to reduce pollution, strengthen the streets that surround it both by the increase in business in the area and by the influx of visitors to the environment, and at the same time generate a new green area in the city.

#### 9.2 NATIONAL PLANS<sup>1</sup>

### 9.2.1 Territorial Strategic Plan Argentina 2016

The Strategic Territorial Plan (PET) for Argentina, allows identifying investments in infrastructure and equipment necessary for the territorial development of the Nation and the Provinces, which will help to comply with the guidelines set out in the state policy defined by the government, so that each inhabitant of the Argentine soil achieve the following:

- » Develop their territorial and cultural identity, and their sense of belonging to the national territory.
- » Achieve economic progress and personal projects without leaving their region of origin.
- » Achieve environmental sustainability in their territory to guarantee the current and future availability of its resources.
- » Participate fully in the democratic management of the territory in all its scales, and have access to essential goods and services, enabling personal and collective development and a high quality of life in all corners of the country.

#### **General objectives**

The following are the PET's main objectives, with the respective specific strategies to carry them out:

- » Improve and sustain the growth of production in a balanced way through the construction of infrastructure and equipment.
- » Contribute to territorial development at local and regional level by providing infrastructure and socio-productive equipment.
- » Improve regional internal physical connectivity through the development of the transportation system.
- » Support the integral development of rural areas by creating the necessary conditions for the continuous improvement of their economy, the generation of new activities and the valorisation of all their resources.
- » Improve the supply and quality of

the hydrocarbon transport and energy infrastructure.

- » Guarantee the access of the population to basic goods and services, promoting the equitable development of the regions and the roots of their inhabitants.
- » Develop qualitative and quantitative improvements in the infrastructure and basic sanitation networks and the housing stock.
- » Promote a polycentric urban system, investing in the equipping endowments (health, education, culture, etc.) that point to its requalification.
- » Consolidate accessibility, connectivity and the service decentralization process.
- » Contribute to the valorization of our natural and cultural heritage through an integrated and responsible management.
- » Plan and manage in an integrated and sustainable way the natural resources and cultural assets of the territory.

» Build safer territories through the reduction of environmental and anthropic risks.

#### **Desired Model**

The prefiguration of the territory's Desired Model was based on the knowledge accumulated during the work process. The set of guidelines expressed were the product of a consensual work as a basis for the identification of initiatives carried out by the Provinces and regions, which involve both the use and reversal of existing trends.

The Desired Model is based on four

guiding ideas that have a close link with the integrating lines of action that are proposed to achieve it. These ideas point towards the concretion of the following organizational schemes:

# 1. National and International Integrated scheme

» The process of internationalization of the economy establishes a new relationship between the local and the global scopes, and its strategic use represents a new challenge for the national productive system. The greatest expression of this trend is the creation of MERCOSUR, which definitively integrates Argentina into a larger territory. This integration is made possible through the opening of new and better border crossings, and the creation and consolidation of integration corridors or geographical areas of variable dimensions that fulfill the role of articulating territories at an international level.

# 2. Strengthening and / or Productive Reconversion scheme

» To achieve the balance of the territory in its economic dynamics, new productive nuclei in the less developed areas are revalued through plans and programs of local and regional development, and the infrastructure deficits and the structural problems of the most important areas are consolidated.

# 3. Connectivity scheme

» For the consolidation of an internal connectivity that allows the efficient communication of flows of goods, people and services, it is necessary to design new axes of articulation and development, complementary to the historic radiocentric corridors and the incipient bioceanic corridors.

# 4. Polycentric City scheme

» The consolidation of new productive centers and the reformulation of transport corridors boost the

dynamization of local and regional service centers, a factor that favors the configuration of a polycentric system of cities of diverse hierarchy that offers opportunities for progress to the population, reversing the adverse effects of the migration process towards large cities.

# 9.3 PROVINCIAL PLANS

# 9.3.1 Buenos Aires Territorial Model 2010-2060 (2009)<sup>2</sup>

The completion of the Territorial Model fulfills the formal mandate of the Urban Environmental Plan<sup>3</sup> (CABA Law 2930/2009) and extends the norms that guide urban policies in Buenos Aires: the Constitution of the Autonomous City, the Urban Environmental Plan itself and the Strategic Plan, taking into account He says that the Constitution of Buenos Aires is not only the principle that governs all the laws and regulations that govern public policies, but also that its articles present several urban, environmental and territorial criteria and definitions.

In operational terms, it is also the Constitution itself that traces the path

> of planning and its instruments: orders the creation of the Council of the Urban Environmental Plan and the Council of the Strategic Plan, and establishes the need to prepare the Urban Environmental Plan and a Strategic Plan. In the Territorial Model the Constitution is considered as the first and most general

urban input to be used.

The Buenos Aires Territorial

Model summarizes different

quidelines and objectives

to be reached by the City

a will of consensus

social sectors.

of Buenos Airesin a certain

period of time. It expresses

between a large number of

The City of Buenos Aires has developed a tool for diagnosis, analysis and urban planning: the Territorial Model. This tool synthesizes spatially defined planning guidelines in a scientific manner, through a specific theoretical-methodological body. The Territorial Model is, at the same time, a vision of the present and a vision of the past, but above all it is a vision of the future trend, of the desired future, a vision of the future of the Sustainable City model.

The Territorial Model not only expresses visions and tendencies but, according to the city pattern that one wishes to construct, allows to establish aspects and attributes that need to be modified. In short, this desirable City is a contemporary vision based on the criteria accepted both internationally and based on local experience.

The Territorial Model for Buenos Aires 2060 is a planning instrument developed jointly by the State and the main social and economic actors of Buenos Aires. This plan systematizes and summarizes different guidelines and objectives to be reached by the City, in a certain period of time. That is why it is incorporated as a key element in the Territorial Model for the Basin, since it expresses a consensus horizon for a large number of social sectors.

The Urban Environmental Plan is constituted as the main technical support for public policies in urban planning and management in the City. In particular, the law of the Urban Environmental Plan establishes the existence of monitoring and control instruments, which have been adapted and used in this Territorial Model to measure, analyze and plan aspects concerning the quality and sustainability of the City in its multiple dimensions. In this sense, and following its guidelines, most of the chapters of the Model have been organized respecting the six specific territorial proposals

<sup>2</sup> Buenos Aires Territorial Model 2010-2060: https://www.mininterior.gov.ar/planificacion/pdf/planes-loc/CABA/Modelo-territorial-2010-2060.pdf

<sup>a</sup> Urban Environmental Plan: http://www.buenosaires.gob.ar/areas/planeamiento\_obras/copua/plan\_urbano\_ambiental.php

#### contemplated by this Law.

The internal structure that makes up the Model is organized logically and chronologically. This implies that it is constituted in the first place from the Produced City; that is, it addresses the historical development of Buenos Aires from the diagnosis of the Current City as it has been studied and thought through history.

Subsequently, the Model includes the Tendency City, that is, the treatment of the expected changes and continuities in the near future, of maintaining the current diagnoses and proposals already established.

The Desired City, in front of this, is a sample of the ideal character of the transformations sought. In this logical order, the Model has a last part that consists of the scientific study of the transformations required to achieve the objectives set, called the Sustainable City.

Thus, the Territorial Model is defined as a conceptual and methodological approach for a rational urban development with scientific support. The support of this development model, in order to achieve the proposed objectives, is constructed through an analysis matrix composed of more than 60 urban indicators. These result from an important technical effort, and synthesize the quality of life of the neighbors in concrete terms at a specific moment.

# 9.3.2 Strategic Plan for the Province of Buenos Aires (2011) $^4$

The Strategic Territorial Plan 1816-2016 Argentina del Bicentenario (PET) proposes framing public investment based on the definition of a portfolio of strategic works that allow expanding and diversifying the domestic, national and regional markets, achieving distributive equity as a response to social justice. "The spatial configuration of the territory is the result of the articulation of the economic, social, environmental and institutional phenomena that gravitate in its production." <sup>5</sup>

"The Plan was conceived as a process of federal construction of consensus, led by the National Government but supported by the participatory work of the Provincial Governments and their respective technical teams. That is to say, it does not constitute a product in itself, but a process of strategic thinking constantly updated. Two auidelines ao through the conception of the Plan: the right of all inhabitants of the Argentine soil to have guaranteed good conditions to live and develop their productive activities, regardless of their place of residence, and the need to build a solid State capable of anticipating the investment demands in the territory." 6

# **General objectives**

» Contribute to the promotion of the equitable development of each of the regions and the roots of its inhabitants in each of the localities.

The Strategic Plan for the Province of Buenos Aires was conceived as a process of federal construction of consensus led by the National Government, but supported by the participatory work of the Provincial Government and its teams.

 » Improve the quality of life and sustain the growth of production in a balanced way through the development of the various support infrastructures and the corresponding social equipment.
 » To value the natural and cultural heritage with an integrated and responsible management of resources.

# **Desired Model**

As it was mentioned, within the framework of the methodological structuring of the Plan, three main components were defined: a diagnosis that would account for the Current Model, a projection of the Desired Model and a Portfolio of Infrastructure Projects containing strategic works to concretize the passage between the Current Model and the Desired Model. These elements were applied in each provincial jurisdiction as well as in the national scale, considering environmental, economic, social and infrastructure aspects. The Desired Model proposes three axes, one of economic growth where it develops a comprehensive port management plan, the consolidation of the road and rail freight structure. and economic development from the promotion of corridors and productive and logistic nodes. The Desired Model proposes an axis of social development with a hierarchy of the urban system of cities, the expansion of health networks and socio-spatial integration through the urbanization of towns and settlements thus improving the quality of life of the deciles more vulnerable. Finally, it proposes a third Environmental Sustainability Axis for the preservation of soils, air and water, where the Integral Management of the Metropolitan Basins (ACUMAR and Reconquista Project) is of great importance. It also presents a plan for Integral Waste Management and the implementation of a Systematic Plan for the management of green spaces and public space.

## 9.3.3 Strategic Guidelines for the Metropolitan Region of Buenos Aires (2007)<sup>7</sup>

Its preparation is registered, institutionally, within the so-called Territorial Strategic Plan (PET), under the Ministry of Planning of the National State. This plan divides the national territory into 25 regions, raising the possibility of planning in order to achieve a desired territorial model. Within this framework, the Metropolitan Region of

<sup>6</sup> Plan Estratégico Territorial 1816-2016 Argentina del Bicentenario (PET)

Buenos Aires is one of the areas defined by the Plan. And it is characterized as one of the areas of the country that has a territory linked to the international market, with a high degree of consolidation and generation of wealth, the main purpose of planning being to ensure that the infrastructure and equipment match such conditions . Along with the idea of efficiency, the idea of sustainable growth is largely present within the general considerations of the national level plan, with socio-territorial segregation and environmental problems among its concerns.

As regards the preparation of the quidelines, these were under the responsibility of the Undersecretary of Urban Planning and Housing of the Province of Buenos Aires The first link of the work was constituted by the elaboration of diagnoses where the results of the debates and discussions of the members of the different involved areas are presented, defining a set of problems and priorities. The result of this stage gave rise to the definition of twelve problems, which, in turn, were grouped into three matrices of territorial problems. The next methodological stage is constituted by the identification of dilemmas. It is about raising the alternatives of action in front of a certain problem, defining between two possibilities to follow.

Considering the matrices of problems that are taken into account, one of them

deals with the issues of development. It establishes a series of problems to which alternatives of intervention are offered: deficiencies of the port facilities. restrictions imposed by the energy system, the future of the road structure and the conformation of the industrial fabric. The second territorial matrix refers to the issues of urban growth. The composition of this matrix is given by the distribution of the urbanization centers, the organization of the transport system, the question of the sanitary network and the forms that the agglomeration acquires, taking the latter to urbanization guidelines. The environmental problem is another of the sets of issues addressed from the analysis proposed by the quidelines.

The objective of this work is to propose an integrative analysis of the problems of the Metropolitan Area of Buenos Aires (AMBA), contributing elements to the discussion of the different social sectors (public and private) that intervene in the decision-making processes.

# **Desired Model**

It is considered that the process of internationalization of the economy replaces "the old center-periphery paradigm and establishes a new relationship between the local and the global, generating unavoidable changes in the productive structure", while pointing to MERCOSUR as an example of this new model.

In order to achieve territorial balance,

"the establishment of productive nuclei in less developed areas is promoted, but at the same time the competitiveness of the most consolidated areas is maintained by solving the infrastructure bottlenecks that obstruct the economic performance of the region". The Desired Model raises, therefore, the following integrating lines:

- » Areas to qualify, develop or enhance.
- » Connectivity corridors that articulate the territory.
- » Polycentric system of urban centers.
  » Intervention Lines and Territorial Programs.
- » Proposals for urban policies developed for different scenarios.

In a manner consistent with the methodological criteria that guide all this work, what is deployed are the possible interventions to be promoted from the areas that make up the system of spatial planning - environmental and public housing. The content of such interventions will maintain a complex but inescapable relationship with the set of decisions regarding the sectoral issues analyzed.

The products of the programs, in that line, acquire specific characteristics according to the scenario in which they are inserted.

In any circumstance, the policies, lines of intervention and territorial programs are consistent with the territorial model described in Chapter 7: they pursue the reconstitution of the matrices of development, growth and environmental sustainability, adopting different contours according to the scenario presented.

# 9.3.4 Buenos Aires 2030 Strategic Plan (2015)<sup>8</sup>

The Buenos Aires 2030 Strategic Plan was prepared in 2015 by the Undersecretariat of the Coordination Unit of the Strategic Plan of the Government of the City of Buenos Aires, in order to define a broad base of rights for civil society actors as a whole; and is based on three fundamental objectives: the search for consensus, the promotion of participation and a vision of the future based on the consolidation of rights.

The plan developed in this framework is based on twelve strategic axes with a long-term vision and a metropolitan perspective: Equitable and Inclusive City; Environmental City; Accessible City; Safe city; Health Promoting City; Productive City; Educating and Knowledge City; Project or Future City; City of Associated Management and Citizen Participation; Metropolitan City; Autonomous City and Federal Capital; and City of the World.

From that logic, formulates and promotes sustained policies to integrate its social and urban fabric, to tend to a dignified and healthy environment and to ensure a more participatory public space. Therefore, the contribution of increasingly inclusive strategies, differentiated by age segments, gender and territorial location, which contribute to equal opportunities in

<sup>7</sup> Strategic Guidelines for the Metropolitan Area of Buenos Aires:

<sup>8</sup> Towards a Strategic Plan for Buenos Aires 2030: http://www.buenosaires.gob.ar/sites/gcaba/files/libro\_hacia\_el\_plan\_estrategico\_buenos\_aires\_2030\_-\_oct\_\_30\_c.pdf

https://www.mininterior.gov.ar/planificacion/pdf/planes-reg/Lineamientos-Estrategicos-para-la-Region-Metropolitana-de-Buenos-Aires.pdf

access to land, housing, basic services, education, is a priority. , to employment, to credit.

#### Goals

» Equitable and sustainable development focuses on the close relationship between environmental problems and those of an economic and social nature, tending to equate the set of actions that affect the natural system and the environmental changes that involve the population. It is a systemic and multidimensional vision in which solidarity, equity and long-term considerations appear as unavoidable elements. For this, it is necessary to consider: institutional management, sustained growth, metropolitan articulation, urban consolidation and gender equity. Next, the strategies proposed regarding this:

» The social function of the city advocates an equitable use of cities by the whole population. This implies pointing to an economic model that does not generate exclusion, to a political model that guarantees participation and to a social model that protects cultural diversity. The city must then ensure an equitable and sustainable distribution of resources, wealth, services, goods and opportunities. For this, it will be essential to consider: equality of opportunities, environmental awareness, inclusive spaces and cultural heritage.

» With an inclusive access to housing - to

achieve equity and urban justice - it is possible to prioritize the social, cultural and environmental interest in the use of individual and collective spaces. This implies advancing social programs and initiatives aimed at developing solidarity and equity as well as promoting progressive fiscal systems that ensure redistribution and reduce inequality. This requires addressing access to housing, credit programs, social rent and service infrastructure.

# **Desired Model**

#### PART ONE: equitable and sustainable development

Equitable and sustainable development focuses on the close relationship between environmental problems and those of an economic and social nature, tending to equate the set of actions that affect the natural system and the environmental changes that involve the population. It is a systemic and multidimensional vision in which solidarity, equity and long-term considerations appear as unavoidable elements. For this it is necessary to consider: institutional management, sustained growth, metropolitan articulation, urban consolidation and gender equity.

# PART TWO:

# social function of the city

The social function of the city advocates an equitable use of cities by all of its

population. This implies that aiming at an economic model that does not generate exclusion, a political model that guarantees participation and a social model that protects cultural diversity. The city must then ensure an equitable and sustainable distribution of resources, wealth, services, goods and opportunities. For this, it will be essential to consider: equality of opportunities, environmental awareness, inclusive spaces and cultural heritage.

# **PART THREE**: Towards inclusive access to housing

With inclusive access to housing - to achieve equity and urban justice, it is possible to prioritize social, cultural and environmental interests in the use of individual and collective spaces. This implies advancing social programs and initiatives aimed at developing solidarity and equity as well as promoting progressive tax systems that ensure redistribution and reduce inequality. This requires addressing: access to housing, credit programs, social rent and service infrastructure.

# 9.4 MUNICIPAL PLANS

# 9.4.1 Strategic Plan for the Municipality of Lanús (2016) <sup>9</sup>

The Strategic Plan for Lanús was carried out within the framework of the Institutional Strengthening Program of the Undersecretariat of Territorial Planning of Public Investment. An effort was made to present all the actions that may be developed in the territory that includes the Municipality of Lanús, in a positive way and seeking to enhance the intrinsic characteristics of it in the search to improve the quality of life of its inhabitants. And identify, in turn, those actors with competence in this and other jurisdictions,

#### » FIG. 2.4 BUILDING HERITAGE OF THE BASIN



generating a common agenda to be developed with the objective of achieving the greatest territorial impact.

Different axes of action were proposed in the conformation of a Desired Model where the paradigm, still existing, of "center - periphery" gives rise to new relationships within the Municipality, and between the district and the other jurisdictions of the Metropolitan Area, in pursuit of the integration, the inclusion



and the ordering of the residential and productive structure characteristic of Lanús.

The map of the current situation, synthesis of the previous diagnosis, highlights the preponderant problems of the Municipality on which it would be key to focus the programs and projects. The Municipality of Lanús has a fragmented internal reality and great inequalities, which even makes the governance of the party itself difficult. Lanús is a city divided in two by what in some way shaped it, brought progress, opportunities and also the possibility of growth and communication, and that today is its nerve center almost in an ironic way: the railroad.

This same infrastructure, full of potential, is also a wound in the fabric of the city. It is a barrier that stands in the right to the free movement of citizens, generating a series of problems of difficult but not impossible resolution. With creativity and good will all these weaknesses can be strengths and opportunities for development and innovation.

Coinciding with the Lanús railway station Roca, the municipality erects its main centrality where this great node of goods and services is fed by two important structuring axes: the routes of the FFCC itself and the highest hierarchy of the Party, Av. Hipólito Yrigoyen (ex Pavón), parallel to each other, that cross the whole party and interconnect it with Avellaneda NE and Lomas de Zamora SW. But unlike this axis, the party lacks frank and clear connectivity in the other direction. Limiting towards the N-NO with the Riachuelo, this is a strong barrier with almost no connections except for a single bridge that connects the municipality with the Autonomous City of Buenos Aires (Puente Alsina) and the railways of the FFCC, and acts as a limit internal in the game: Lanús faces severe connectivity problems both with its interior and with the surrounding parties, and mainly with CABA.

On the other hand, we can observe several things to take into account when reading this image of the city. On the one hand, the strong presence of areas with a high percentage of households with NBI (Unsatisfied Basic Needs), where the villages and settlements in red often have ghettoized conformations, making their already difficult situation even more complex: the dispersed urban fabric, edges and strong limits, and a growing social exclusion.

From the diagnosis, a series of problems to be improved are presented, or areas to be strengthened, through their development, grouped according to different topics. Thus, axes of action that propose to identify the causes of the current situation arise, as problems or incompatibilities in the day to day of its inhabitants, in order to identify the necessary objectives for the programs and projects destined to achieve the desired city:

- » Structure and centralities
- » Transportation and mobility
- » Urban heritage
- » Production and employment
- » Public space and environment
- » Habitat and housing
- » Citizen participation and open government

The scope of the Municipal Plan for Urban

- Territorial Development of Lanús includes:
- » The determination of a single order for environmental, economic and urban and regional development policy.
- » The regionalization of the state based on the development capabilities of the territory and its resources.

» The homologation of criteria for ecological, urban and economic zoning.

# 9.4.2 Territorial Urban Development Plan of the Municipality of Lomas de Zamora (2009) $^{\rm 10}$

Lomas de Zamora is one of the key municipalities in the southern suburbs of Buenos Aires, because of its history, location, problems, and also because of its potential to influence the revitalization and reconversion of the metropolitan area it integrates.

This large urbanization is absolutely continuous in relation to neighboring parties, and requires an approach that incorporates extensive measures throughout the area. Lomas de Zamora has a superlative need for green areas, today almost nonexistent. In addition, it has very serious hydrological and hydraulic problems, with floods as a consequence of high water tables and flooding of surface water. The management of all these basins should be reviewed, and as far as possible a greater eco-hydrological balance should be reestablished, according to the most advanced lines in the world for the management of these issues.

This reconsideration may allow the recreation of some green areas, which also serve as recreational lungs and guide the growth of urbanization with other criteria. On the other hand, its close interrelation with the rest of the conurbano and with the Federal Capital, require a reformulation of its road system, mobility and transport in general, which will also produce urban innovations.

The issues described above also occur in a critical socio-economic context: large sectors are inhabited by a population with very low resources, high growth and with demands of all kinds that are currently unsatisfied; and there is a crisis of the traditional economic-productive sectors. both industrial and commercial, as well as their relationship with the environment.

The treatment and integral solution of the problems related to soil, water and resources, as well as those related to infrastructure services, have become a matter of the first order, since these have been increasing over time, along with the growth and demands of the population. 42

Therefore, if the aim is to achieve lasting development, it would be essential to proceed with the organization of the provincial territory. linking it intimately with economic. socio-cultural. environmental and institutional development. In this way, the elaboration and execution of a Territorial Ordinance Plan, together with an Economic and Social Development Plan, would guarantee the sustainability of economic growth, social equity. environmental protection and governability. With the territorial

ordering it would be possible to locate, select and regulate human activities, promoting agreement in its different dimensions: the institutional one: territorial, so that the activity is compatible with land uses: the social, in what refers to the needs and expectations of the population: and the ecological, depending on the relationship

between the natural ecosystem and productive activity.

From the above it is clear that the fundamental objectives of the order would be: to guarantee the reasonable use of natural resources and environmental protection in the long term, through the management of a balanced

socioeconomic development of the territory; and, at the same time, achieve an adequate quality of life for the population in all the space involved.

The base of the ordering would be the determination of the territorial capacities, beginning with a compilation of the physical and economic-social characteristics of the territory, as well as of its evolution. Next, the identification and analysis of predictable present and future

demands on natural resources and of the environmental impact produced by land use, as well as the identification and examination of natural risk factors would be carried out

The collection of available information, published and unpublished, and its analysis in the light of modern concepts, opens the possibility of giving a graphic expression through the preparation of maps or thematic

maps, which would be accompanied by recommendations as well as preventions with respect to the risk areas.

The information contained in the maps referring to the different topics would be superimposed on a single map. This map would show with certainty if the recommendations for different land uses overlap in some areas: that is, if there is

a conflict of interests. In these cases, the map would allow establishing an order of priority for such uses. In addition, aspects of resource management and future trends in local and regional development would be considered. The information provided by the territorial ordering would be useful for any planning that was done regarding the use of the followina:

» Groundwater: resources: quality: extraction; protection of groundwater areas; groundwater contamination; » Soils: resources; potential use of the land: erosion (and desertification): salinization and soil degradation: » Energy resources: resources; renewable resources:

» Other resources: deposits: exploitation and treatment processes compatible with the environment); waste disposal (environmentally acceptable methods).

On the other hand, the map would allow adopting preventions with respect to what is described below:

» Areas of risk: for example those prone to floods, in this case in particular those of the different streams that make up the Lomas de Zamora Party, the Riachuelo and its Basin. landslides and unsuitable areas for building.

» Waste disposal areas.

The expected product for this process is the proposal of a Municipal Plan for Territorial Urban Development. Said document will include the various studies carried out at a detailed level and will

<sup>11</sup> Strategic Plan for the Municipality of Esteban Echeverría: https://www.mininterior.gov.ar/planificacion/pdf/planes-loc/BUENOSAIRES/Plan-Estrategico-Desarrollo-Territorial-del-Partido-de-Esteban-Echeverria.pdf

The territorial ordering

base would be the

determination of the

territorial capacities,

beginning with

a compilation of

the physical and

evolution.

social-economical

characteristics of the

territory, as well as its

# FIG. 2.5 MARGIN CLEANING WORK TEAM

incorporate a synthesis of the topics developed, including:

» A synthetic diagnosis of the main urbanterritorial problems facing the municipality. including the quality and quantity of basic services provided by the municipality.

» The revision of the criteria of use and occupation of the soil that prevails in the municipality, and the proposed modifications that are required.

» The identification and guantification of necessary investments, and the development of an investment plan proposal prioritizing those with the greatest impact, including those that are in execution.

>> Draft profiles of projects to be developed later at pre-feasibility level.

# 9.4.3 Strategic Plan for the Territorial Development of the Municipality of Esteban Echeverría (2012) 11

Based on the diagnostic analysis of the Municipality of Esteban Echeverría and the definition of dilemmas and prospective scenarios, a series of priority action lines recommended for the territory of the district are structured below, organized around the three axes that structured the previous analyzes: environment, growth and development.

# **Strategic Guidelines**

In relation to the environment, the following: » Adopt a policy for the integral

management of watersheds.

- » Treat the streams as biodiversity corridors, generating linear public parks and materializing the towpath.
- » Control the dumping of industrial and residential effluents to water courses, in coordination with ACUMAR.
- » Protect the source of the streams and aquifer recharge areas by limiting the intensity.

» Reformulate the waste treatment criteria based on the requirements of 3R + R. » Strengthen the municipal government policy on waste, incorporating a reduction, reuse and recycling program, assuming a sustainable policy of final disposal. » Eradicate clandestine garbage dumps, recovering the environmental liability caused

» Create a system of local green areas in articulation with the metropolitan region » Create an area of protection of the Laguna de Rocha, delimiting its extension through the construction of a coastal avenue that conforms, at the same time, a new access to the party from the Autopista Ricchieri.

» Provide for management and maintenance alternatives in the form of a local agency that articulates with the provincial administration in which the district has a high degree of participation. » Promote the provision of public green spaces in the existing urban fabric, and ensure the cession, construction and maintenance of public green areas in the new developments.

» Protect the peri-urban edge as an ecological and productive reserve area. » Limit urban expansion by defining.



through territorial regulations, a restrictive residential occupation gradient that protects the source of the streams and the aquifer recharge area.

>> Strengthen agricultural production by defining an area for the promotion of rural activity.

# 9.4.4 Strategic Plan for the Municipality of Avellaneda (2006) 12

Within the framework of the general objective of this study -establishing a Strategic Plan for the Municipality of Avellaneda-, the objective is to make the recommendations that make it possible

to adapt the structures of the government of the Municipality of Avellaneda to the associated management procedures. within the framework of a future regional planning scheme, as well as promoting forms of association and, as far as possible, alliance procedures between the Municipality of Avellaneda and civil society. to improve governance and political representation structures.

# Goals

The specific objectives are the following: a) Characterize local government structures, as well as civil society

Plan Estratégico Avellaneda: https://www.mininterior.gov.ar/planificacion/pdf/planes-loc/BUENOSAIRES/Plan-Estrategico-de-Avellaneda.pdf
 PISA 2010: http://www.acumar.gov.ar/pdf/PLAN\_INTEGRAL\_DE\_SANEAMIENTO\_AMBIENTAL\_DE\_LA\_CUENCA\_MATANZA\_RIACHUELO\_MARZO\_2010.pdf

organizations and public-private partnership forms.

b) Identify the mechanisms for receiving the initiatives and points of view of civil society.

c) Propose a decision-making model with citizen participation, including publicprivate partnership mechanisms and establishing forms of articulation with civil society organizations.

# 9.5 SPECIFIC PLANS FOR THE BASIN

## 9.5.1 Comprehensive Environmental Sanitation Plan (PISA) of the Matanza Riachuelo Basin (2010) <sup>13</sup> - ACUMAR Since its creation. ACUMAR has

developed a process of inter-institutional articulation that brought together organizations from the different iurisdictions that comprise it and other external actors, reaching one of its most important results in December 2009 with the concretion of the Comprehensive Plan for Environmental Sanitation (PISA). where the main guidelines to comply with the three strategic objectives established in the decision of the Supreme Court of Justice of the Nation are established. With regard to its execution, the PISA contemplates the development of actions by the National State, the Province of Buenos Aires, the Autonomous City of Buenos Aires and the 14 Municipalities that make up the Matanza Riachuelo Basin. The actions of the different States are articulated and coordinated by ACUMAR, which exercises this function in a complementary manner to the execution 44

of other actions under the PISA, specific to its powers of "... regulation, control and promotion with respect to industrial activities, provision of public services and any other activity with environmental impact in the basin ... ", as established in the aforementioned article 5 of the law creating the body.

In March 2010 a new version of the Plan was presented, with the purpose of reflecting the degree of progress of the actions carried out in the Basin and introducing the necessary modifications according to the new realities, as well as the incorporation of different plans and plans. programs in execution, and to be executed by the Agency.

In order to plan and develop specific policies for the different problems of the Matanza Riachuelo Basin, the PISA is organized into 14 lines of action, each of which refers to an integrating project, and together they cover the total problem of the Basin. Likewise, these lines of action are associated with the mandates defined by the Supreme Court of National Justice in its ruling of July 8, 2008.

The Lines of Action to achieve the three objectives mentioned are:

- » System of indicators
- » Information system
- » Institutional strengthening of ACUMAR
- » Environmental regulation of the territory
- » Environmental education
- » Emergency health plan
- » Monitoring of water, soil and air quality
- » Urbanization of villas and informal

#### settlements

- » Expansion of the drinking water network and sewage sanitation
- » Storm drains
- » Cleaning of margins
- » Pollution of industrial origin
- » Sanitation of garbage dumps
- » Petrochemical Pole of Dock Sud The Comprehensive Sanitation Plan for the Matanza Riachuelo Basin results from a collective construction process that combines and systematizes, with integral criteria, the plans defined at the level of each of the 14 Lines of Action (which were developed based on networking of the interjurisdictional organisms with competence in the specific matters and ACUMAR).

The December 2009 version of the Comprehensive Sanitation Plan for the Matanza Riachuelo Basin establishes the starting point for the exhaustive closure of the linear programming that involves the implementation of each of the actions contained in the 14 specific lines.

## 9.5.2 Comprehensive Environmental Sanitation Plan (PISA) of the Matanza Riachuelo Basin (2016 Update) -ACUMAR<sup>14</sup>

In 2016, an update process to the PISA 2010 was initiated. This new document proposes: i) an updated PISA with short and medium term actions presented and implemented through projects and programs, ii) the construction of a Shared Vision of the Basin in the long term and iii) the preparation of a final document that will work as the guideline of a 20-year Strategic Sanitation Plan for the Basin.

The Shared Vision document will act as ordering guidelines and central text that structures the rest of the plans, programs and projects that make up the future Territorial Strategic Plan for the Basin. It establishes four strategic axes:

- » Stop pollution
- » Prevent damage
- » Improve the quality of life of the inhabitants
- » Empower the authority role of ACUMAR

During the reformulation process of the PISA, an evaluation of the works carried out to the date was made, and the objectives and lines of action to be implemented in the following years were detailed. These objectives are proposed through lines of action, programs and projects.

Among other lines of action, the following commitments and objectives defined by this new PISA can be mentioned:

» Submit an ACUMAR Indicator System, which measures the progress made in the objectives of the organization, to a progressive adaptation, according to the requirements of the Plan and taking care not to modify the conditions and parameters that allow estimating its evolution during the course of weather.

» Bring ACUMAR closer to the community by making public the management information, ensuring the entry of their demands so that it can be controlled by the citizens.

RIVER

ACING THE

» Optimize the functioning of the organization under the premises of efficiency and transparency. Among the objectives of the projects in this line of action are: decentralizing administrative activity in jurisdictional headquarters, optimizing and shortening administrative and management deadlines through the use of new technologies, and designing electronic document management processes.

» Contribute to improve the use and distribution of urban space.

» Promote educational projects for the construction of environmental knowledge in a community, revaluing local cultural practices to rescue, reconstruct and propose sustainable ways of interaction between the community and nature.

» Implement an Integral Model of Environmental Health for the Basin, necessarily articulated and coordinated with the National, Provincial and municipal jurisdictions, together with the definition of a policy regarding the evaluation of the environmental burden of the disease and its management precautionary

» Strengthen the database constructed at the request of the PISA 2010 that allows planning the expansion works of water and sewage services, and land uses, generating an alert system that triggers the mechanisms of the corresponding actions, making a monitoring of the quality of surface water and sediments in the basin, and carrying out studies on the recharge and exploitation zones of the Puelche and Pampeano aquifer.

» Give solution to the situation of precarious housing for families living in towns and settlements of the WRC. The achievement of this objective requires the articulated work of various governmental areas to improve the living conditions of the population involved.

» Universalize the water and sewer services for the Basin. The projects include the follow-up and monitoring of compliance with the Master Plans within the periods that they have foreseen, which include the works agreed upon with the Municipalities necessary to achieve sanitation within the regulatory frameworks that each Borrower possesses.

» Change the paradigm towards an intelligent exercise of police power based on tools such as the Industrial Reconversion Program (PRI) that regulates command and control instruments.

» Implement the necessary measures to prevent the continued dumping of waste in existing dumps and prevent the formation of new open dumps. Likewise, the formation and implementation of a Comprehensive Urban Solid Waste Management Plan is entrusted.

» Convert the Dock Sud Pole into an industrial area with sustainable environmental management, recovering and strengthening its importance as a port. To do this, it is necessary to minimize the environmental and safety risks in the area and reduce the existing socioenvironmental complexity.

# 9.5.3 AySA Masterplan 2007-2020 15

AySA is Argentina's state company that provides running water and sewage services to a part of the Nation's inhabitants. The AySA water Masterplan is an instrument of State policy that places water and sanitation services in a priority position. It contemplates an unprecedented scheme of works, tending to achieve the greatest coverage of the services in the shortest possible time, considering fundamental aspects such as the quality of the services and the care of the environment.

# **Riachuelo system**

The Riachuelo System has been conceived as an integral solution to respond to the limitations in the capacity and quality of the sewage service provision in a large part of the AySA S.A. concession area. It provides the necessary structural solution for the improvement of the system and allows the operational independence of the Berazategui System, making possible the expansion of the service in the southwest of the Buenos Aires Metropolitan area.

This will result in social benefits in terms of public health, favorable impact on the environment and social development in an effective manner, while allowing to respond to a large extent to what is required by the Supreme Court of Justice of the Nation in The territorial ordering base would be the determination of the territorial capacities, beginning with a compilation of the physical and social-economical characteristics of the territory, as well as its evolution.

the Mendoza Judgment.

Once in operation, the Riachuelo System will have a treatment capacity of some 2,100,000 m<sup>3</sup> / day, estimated to benefit some 4.3 million inhabitants. The works will have a minimum term of 5 years and will be able to generate in its maximum peaks of simultaneous execution more than 3,000 jobs of workers, technicians and professionals of different disciplines.

# Goals

 » Define a program of works, investments and incorporation of inhabitants.
 »Ensure the production, transport of water for the radio served and expansion.
 » Ensure the treatment, transportation and disposal of effluents for the radio served and expansion.

» Ensure the integral operation of the water

supply system and disposal of effluents. » Improve environmental conditions in general.

# 9.6 PROJECTS OF IDEAS FOR THE BASIN

## 9.6.1 Urban Environmental Project on the banks of the Matanza Riachuelo River (2013) 16

The towshed project (Lebrero-Mignagui) shows one of the main opportunities for river accessibility and control of the territory. A regional development criterion that integrates new dynamics in the area is adopted for the design This project incorporates proposals from the Municipalities, ACUMAR and the Sanitation of the AySA Basin. The project's strategy has been to

recognize the available road space in the Basin to achieve an integrated development of the landscape and urban activities. What would allow connecting areas that are currently relegated due to accessibility and contamination. The objective is to create an urban piece that synthesizes the development of the area.

The Way of Sirga integrates these sectors with a criterion of road-park that incorporates areas of restored nature with educational, social and recreational programs. This set of Camino de Sirga, the new sanitary infrastructure and the SEPA oxygenation plants with annexed public parks are the main triggers for urban reconversion and environmental restoration

The purpose is to promote an integrated

coastal management, in a complex and environmentally degraded urban territory, to channel a process of ecological restoration and urban reconversion. A double dynamic is proposed: on the one hand, it is proposed to achieve the selective conversion of land uses and. on the other, to promote metropolitan linkage based on better connectivity and accessibility.

The general objective is to provide tools and instruments for the implementation of the Way of Sirga avoiding current obstacles

#### **Specific objectives**

» Strengthen the State's management structure for a cooperative public management of the territory in all its

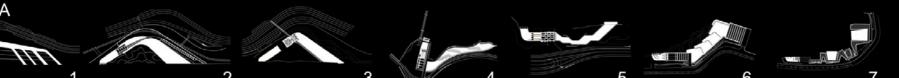
levels and divisions.

- » Strengthen the role of municipalities and agencies or secretariats.
- » Generate cooperation mechanisms and instruments for the implementation of the proposals for the Basin's towshed.
- » Propose a sequential model of strategic implementation of actions for the project's sustainability.

# 'SEPA' System: environmental parks with water aeration stations

The landscape rehabilitation proposal consists in the articulation of the action of the SEPAS with the regeneration of the biodiversity in margins and marshes; not only the image will be intervened, but

- A&ONIGGT HHE ER RAZER >> FIG 26 URBAN ENVIRONMENTAL **PROJECT MASTERPLAN** SOURCE: LEBRERO, MIGNAQUI ET AL



also the water recovery and the quality of the substrate. While considering the classic criteria of urban road design, the Camino de Sirga is developed with the fundamental premise of integration with a series related to transport: accessibility, communication, urban quality, environmental and landscape rescue.

The road incorporates areas of restored nature with educational, social and recreational programs that mainly include the SEPA in conjunction with the landscaped areas. The new road, the new sanitary infrastructure and the SEPA oxygenation stations, with annexed public parks, will constitute the main triggers for urban reconversion and environmental restoration.

The proposed system is articulated through a sequence of SEPAs that focus the intervention along the course of the river and are triggers for local development. They are designed as aeration stations that collaborate with local development and, associated with the road, enable control in order to develop environmental restoration.

The incorporated programs respond to the territorial and environmental logics of the locations, promoting the cultural and social strengthening processes that take place at all scales.

A series of comprehensive programs are proposed that deal with different aspects of the environmental logic from their actions: sustainable design; landscape design; incorporation of technology; site and urban integration; social integration and programs.

In relation to the coastal circulation infrastructure, it could not have an integral approach, due to the lack of competence of the authority with respect to the municipalities, and each district carried out projects in the riparian areas that do not respond to the integral plan contemplated in the preliminary draft.

# 9.6.2 DES-LIMITES Project (1997)

The DES-LÍMITES Project, emerged from a workshop led by Prof. Matthias Sauerbruch with the architects Cecilia Alvis, Susanne Hofmann, Juan Lucas Young, Sebastián Petit de Meurville and Javier Rivarola and the group of artists "el Future is in the Bauhaus wallpaper", in 1997 at the invitation of the Goethe Institute of Buenos Aires and the Torcuato Di Tella University.

The project has been declared of interest by the Legislature in the Autonomous City of Buenos Aires (2774 - D - 99), was published in local and foreign media, including public exhibitions of art and architecture and exposed to the Supreme Court of Justice of the Nation at the Hearing of July 7, 2007, within the framework of the case "Mendoza, Beatriz Silvia and others v. National State and others s / damages (damages arising from environmental pollution of the river Matanza Riachuelo)".

More than the recovery of a single district, **DES-LIMITES** proposes a significant reform for the whole conurbation Also the recovery of Riachuelo Matanza and its integration to the rest of the city. It identifies the river, its water tributaries and the adjacent lands as a single territory, which offers the ideal location to create a lineal - fluvial park that will link the Pampa with the Río de la Plata. Also, it proposes the development of the Riachuelo Basin linking it "to the reconversion of productive activities and to the modernization of transport axes" in the middle and lower basins. The DES-LÍMITES proposal supports the idea of trying to break with the inertia of the development of northsouth competition in the City, proposing a development in the east-west direction. from the Río de la Plata to the Pampas.

The Riachuelo is located in the physical center of the metropolis. Therefore, DES-LÍMITES proposes a new centrality of the City, organized and articulated by a large linear park in which new fabrics and patterns are distributed, and new equipment centers that link or try to link the infrastructure systems of the City of Buenos Aires and the province, which are strongly discontinued and, even, compete with each other.

The territory has a high level of conflict: shantytowns, degraded urban areas, pollution and garbage. The project proposes to unite these infrastructures to reconvert the area and end with these imbalances in infrastructure. The two large transfer centers that the sector has, in Puente Alsina and Puente La Noria, move to the south, because by having them near the edge of the Riachuelo they emphasize the edge process itself. This is accompanied by the extension of the H and F lines of the subway, to avoid a "bus-bus" transfer, converting it into "bussubway" one.

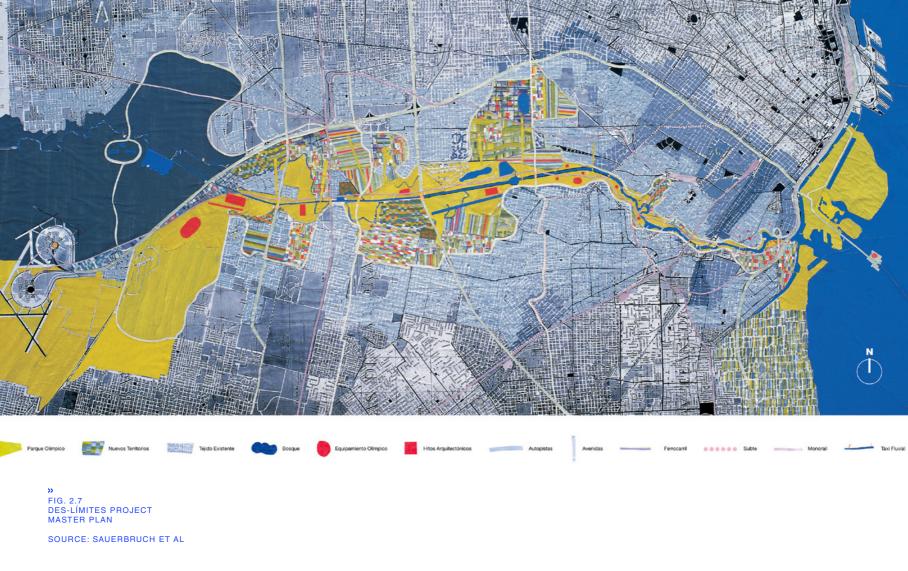
Finally, the fundamental strategy for preserving the Park is to transport and transport the most important traffic to the edges, consolidating the area as far as the existing fabric. Regarding the cargoes that enter the Port of Buenos Aires, it is vital to value the railways: the transfer beaches should be located outside the City, since they are currently affecting all of La Boca and the edge of the Riachuelo, being used this for the passage of trucks.

The proposal consists in identifying the river and the adjacent lands as a single territory with its own planning entity, to carry out a general plan that will finance and carry out, even in part, environmental sanitation and provide the catalyst element that initiates the reconversion process . Likewise, new development zones are proposed, delimiting the central corridor and consolidating the indeterminate edges of the existing fabric. A coherent planning of this territory, of privileged location, bordering the new park, would help to self-finance the ecological sanitation of the area.

Among the main objectives are the following:

BASIN

RIVER



» Total cleaning of the Creek.

» Integration of the river and its lands adjacent to the city.

» Historical recovery of the area.

» Allow neighbors to stay in the area and improve their living conditions.

# 9.7 PARTICIPATORY FORUMS

# 9.7.1 Forum for the Sustainable Development of the Matanza Riachuelo Basin (2002) <sup>17</sup>

The "Participatory Forums on the Metropolitan Basins of the River Plate", carried out by the City Foundation since 1995, aroused the need to deepen the knowledge of the Matanza Riachuelo Basin. They arise from the conviction about the importance of participatory action in the search for solutions and proposals for sustainable development.

The work guide resulting from these meetings forms a detailed report on the general situation of the Basin, addressing the themes of the environment, the economy, urban development and the legal-administrative situation. Likewise, it presents discussed options for the development of the area, and for its planning and management. Also, consider the particularities of each district that makes up the area.

As main ideas, the following is proposed:

# **Development options**

» Cleaning of the stream, control of water and soil contamination and gradual repair of the environmental quality of the river and its margins. The objective is to remove one of the main obstacles to the development of the area: the pollution of the river. The tasks envisaged include, in a first stage, the cessation of pollution through incentives, penalties and effective control; and in a second, the cleaning of the river, its bed and its margins.

» Realization of hydraulic works proposed by the Environmental Management Plan of the Basin, to remove another of the main obstacles to the development of the area: floods. The importance of these works increases if one considers that the inhabited areas are flooded with contaminated water.

» Take advantage of the productive tradition of the Basin to generate new ventures, to develop productive undertakings that do not pollute in depressed areas and to generate sources of work, promoting uses that are in accordance with the nature of each area. It also encourages the installation of other large infrastructures, the permanence of existing ports, and that of the major petrochemical centers, increasing controls and policies to mitigate their effects on the environment.

» Use of the river, the location of the Basin and the existence of large vacant areas to develop transport and navigation

infrastructure. The objective will be to optimize the accessibility and connectivity of the area, and to use it as a multimodal corridor and axis of the metropolitan transport system. The improvement and creation of new road and ferriovarias infrastructures, the creation of centers of transfer of passengers and loads, the recovery of navigation and fluvial transport, the materialization of the pair of riverside avenues, the transverse links with the urban plot are contemplated and the construction of new bridges over the Riachuelo. Also, urbanization of the village 21-24 is included to regularize the urban lavout and allow east-west connectivity.

»Take advantage of the existence of large vacant areas of the Basin as green spaces of that metropolitan area to develop recreational, cultural and tourist infrastructure. The objective will be to revalue the cultural and natural heritage of the Basin, promoting the historicalcultural repair of the south. Also, recover and protect the riverine areas, linking landmarks of the urban heritage of the Basin and creating tourist routes that favor economic and cultural activities.

# **Management options**

» Creation of a Basin Coordination that functions as a planning and coordination space between the different stakeholders of the Basin, with the aim of having integrated planning that avoids the fragmentation of the area, and of a broad participation of local governments , the universities of the region and the

#### community associations.

» Creation of a Basin Committee with broad planning, management and control attributions, with the objective of having an integrated planning and management that avoids the fragmentation of the area. The need for a plan for the Basin that considers the future of urban variables such as: productive nuclei, transport corridors, attraction centers, green spaces, banks of water courses and absorbent surfaces is recognized.

» Creation of a Metropolitan Environmental Authority that has powers over the most important environmental issues, with the aim of ensuring that the most

# The objective is to finish with the main obstacles for the area's development: the river's pollution

important environmental problems of the region, including the Basin, are planned, managed and controlled by a single authority. The Municipalities, the City and the Province would delegate some of their attributions in the environmental questions. BASIN

<sup>17</sup> Urban Development Forum: http://www.fundacionciudad.org.ar/foro\_matanza\_riachuelo.htm

# 9.7.2 'Facing the River', Urban Thinkers Campus by UN-Habitat and ACUMAR (2017)

'Facing the River' was the meeting organized in May 2017 by the Matanza Riachuelo Basin Authority, within the framework of the UN-Habitat Program of the United Nations, to take a further step in the process of building a shared vision about of the development of the Matanza Riachuelo Basin. The event is part of the 'Urban Thinkers Campus', an initiative of UN-Habitat dedicated to promoting sustainable urban spaces.

The event was attended by more than 1000 people, including members of non-governmental social organizations, public bodies, international organizations, residents of the basin, journalists, social referents, researchers, opinion leaders, urban planners, students, businessmen, members of the Justice and the general public.

The meeting was organized according to the three axes of sustainable development: the environment, the economy and the socio-spatial variable, inspired by the pillars of the New Urban Agenda, thus providing a favorable framework for the exchange of knowledge and focused experiences.

Under these parameters, 'Discussion Tables' were organized by theme, with appropriate local guests, who represented both public management at the National, Provincial and Municipal levels, as well as social organizations, business chambers, researchers and expert technicians. The objective of these was to gather proposals, ideas and recommendations related to the management of the Basin, to build a common view with the multiplicity of voices, and thus help to decide possible ways of action to develop in the future by ACUMAR.

The debates were complemented with the 'Urban Thinkers' Sessions' and 'Urban Lab Sessions', dedicated to share management experiences in other rivers of the world, by technicians and authorities of different public organisms from countries that have experienced problems related to the of the Matanza-Riachuelo Basin and its development. The experiences of the rivers Rhin (Germany), Duwamish (United States), Cheonggyecheon (South Korea), Tieté (Brazil), El Estero Salado (Ecuador), Río Medellín (Colombia) and Ría del Nervión (Spain), were presented. among others.

The conclusions obtained for each axis of discussion are detailed below:

# **Environmental axis**

In relation to the debate on the subject of urban solid waste, the need to incorporate the idea of 'circular economy' was discussed, as a paradigm shift that signifies the definitive passage from the traditional concept of waste to its valorization as a resource. For this, the following strategies were proposed:

» Promote education and awareness campaigns.

» Support and contribute to the strengthening of the municipalities, who are key actors due to their proximity to the population and its problems.

» To deepen public policies that incorporate the social dimension to waste management, supporting the work of the cooperative members and their tasks in cleaning the margins.

» Reactivate and rethink the EcoPuntos system as a way to favor separation at source and the revaluation of waste.

» Evaluate the economic viability of waste management projects, to ensure their sustainability over time.

» Encourage the appropriation of public spaces, such as the margins recovered from the river and the Camino de Sirga, by the residents of the Cuenca.

Regarding the Environmental Protection Areas of the Basin, it was reflected on the social and natural importance of the same for the territory, and also as a way to minimize the existing deficit in the metropolitan area regarding green spaces. Thus, the need to continue and expand actions for its conservation becomes important. In this sense, it was proposed:

» Give them a formal and institutional framework to grant different categories of protection to those that do not have it and have the potential to be.

» Create a Network of Protected Areas.

» Promote adequate regulations on their domain situation, since they currently have complex scenarios of intrusion, land occupation, clandestine overturning and unauthorized dumping of waste.

» Generate specific regulations to guarantee the protection of wetlands, as a way to conserve them and guarantee the use of the environmental benefits that they bring to the basin's ecosystem.

» Expand the articulation with local administrations and with interest groups through work groups.

» Redefine the land uses of the Basin.

Regarding the treatment of the contaminated sediments of the Matanza Riachuelo, within the framework of the current policy of "stop polluting" and on the basis of the physical-chemical characterization of the sediments of the rectified section of the main channel of the Basin, it was raised :

» Advance in a specific policy that contemplates the process of removal, treatment and final disposal of the sediments, being the first measure to evaluate the institutional position around the dredging of the channel.

» Analyze possible uses for the removed material and its different decontaminating treatments.

» Develop a specific regulation on dredging with the support of the Academic Advisory Committee, generating politicaladministrative consensus with the different

9.7

PARTICIPATORY FORUMS

competent public bodies, to guarantee the viability of the application of said regulations, on a scientific basis. Finally, regarding environmental health, the right to environmental health was postulated as a human right, given that the damage to the environment affects the health of people. The proposals were the following:

» Strengthen the role of the State as an actor that must ensure access to health, especially in the most vulnerable sectors.

» Guarantee principles of equity in public policies and the sustainability of them, and cross-sectorize their design and execution with the responsible bodies.

» Promote health corridor projects in the Matanza Riachuelo Basin.

» Promote the monitoring of environmental health over time, given that there are cumulative effects due to exposure to risk factors.

» Develop and expand strategies for addressing environmental health, such as the development of a toxicology network, the use of risk maps to prioritize the incorporation of the use of biomarkers as a measure of exposure and effect.

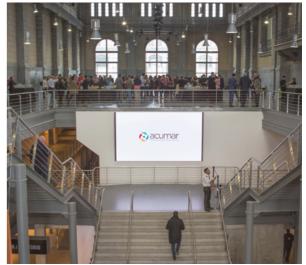
# Socio-spatial axis

In this axis, the following topics were addressed: social actors as agents of change in environmental conflicts;

>> FIG. 2.8 - 2.9 - 2.10 ACUMAR'S URBAN THINKERS CAMPUS, 'FACING THE RIVER'







environmental education and its actors as continuators of transforming environmental processes; the role of universities and the projection of the Basin from design, urban planning and landscaping; the role of neighborhood organizations in the processes of insertion into the urban fabric. As discussed about the social actors as agents of change in environmental conflicts, the following conclusions were obtained:

» Promote the inclusion of residents affected by the problems related to the Basin as legal subjects within the framework of the Mendoza judgement, specifically in the urbanization management actions of towns and settlements.

» Move forward in the process of institutionalization of new participation mechanisms that: are open and deliberative; set clear goals / objectives and rules; have access to information; contemplate the resolution of conflicts in order to "balance the conflict of interests" and resolve differences; generate agreements and commitments; incorporate the voices of the neighbors and social organizations of the Basin; they are of different formats: formal (public audience) and alternative (Participatory Forums, Participatory Planning and Associated Management, or others).

**»** Have the political will and agreements of all parties so that these spaces and participation mechanisms are effective.

» Generate transparent actions that do not cause divisions in neighborhoods,

encouraging collective work.

» Create an integrated vision within the New Urban Agenda that incorporates the proposals arising from the official meetings of UN-Habitat and the perspective developed in the parallel meetings of "Habitat Alternativo". To achieve this it is necessary to create a common space for dialogue.

» Understand, respect and strengthen the networks and organizational networks that exist in the territory, understanding and addressing their diversity during the planning processes.

» Rebuild the social fabric, supported by the collective and community, as a way to promote the resilience of local communities.

» Bridging the gap between the paradigm of rights linked to access to habitat and the lack of public response in this regard.

» Consider and respect the social production of the habitat, which has been developed on the basis of community organization.

» Achieve an approach between the judicial system and the territory since, in many cases, the judicial area is inaccessible for the inhabitants.

At the debate table on education and social actors as continuators of transforming environmental processes, the role of environmental education as a key tool for the training of environmental leaders to defend the right to a healthy environment was highlighted. The proposals that were agreed upon were:

# Promote decision making with citizen participation, involving nieghbors as part of the construction of ideas towards a solution, and nos as part of the problem

Develop a national strategy for environmental education in the hand of a national bill for all levels and as part of the mandatory curriculum.

**»** Take advantage of the Protected Areas system of the Basin for the development of educational strategies.

- » Promote environmental education of relevant actors in decision making (officials, entrepreneurs, etc.) as a prevention strategy.
- » Create the Riachuelo Educational Center, which includes a water remediation laboratory.

» Promote the interjurisdictional articulation to strengthen the programs and projects that take place in the territory of the Basin.

At the table where the role of universities and the projection of the Basin from design, urbanism and landscaping was discussed, the need to understand the Basin as a fundamentally governance problem, which presents an evident dimension, was exposed. '(the contamination) and another' No Evident '(the lack of political agreements to avoid contamination), which, in turn, is the cause of the' Obvious' problems. Within the framework of the presentations, the following proposals were made:

## » Incorporate public deliberation on socioterritorial problems.

» Promote a dialogue between the political, the technical and the academia where the latter actor functions in a key role at the decision-making table, from the beginning of the process and not only at the end.

» Project technically within the framework of a political pact that makes them viable.

The last table of the socio-spatial axis addressed the role of neighborhood organizations in the processes of insertion into the urban fabric. The proposals that emerged are presented below:

» Promote decision making with citizen participation, involving neighbors as part of the construction of ideas and the solution, and not as part of the problem.

» Promote the protagonism of the neighbors as subjects in the public decisions that directly involve them.

» Strengthen the bond between neighborhood residents and the authorities so that collective demands reach more effectively and be heard as they occur in the neighborhood. In this way, they can be translated better in the institutional work.

» Advancing in the definition of a medium and long-term public policy that solves the structural problems linked to the health of the territory, while considering the urgency of the short term and its strategies

and devices to address them, given the serious situation that they show health indicators in populations settled in highly contaminated territories. This issue is indicated as a priority.

- » Rethink the EcoPuntos system to guarantee the correct and efficient functioning of the Urban Solid Waste Management, allocating the necessary resources for this
- » Transparentar and streamline the processes related to the dominical regularization.
- » To specify an environmental and patrimonial survey of the whole territory of the Basin. in order to identify vacant lands for a possible relocation of the most affected neiahborhoods.
- » Address the health and environmental emergency present in several of the informal settlements in the territory of the Basin: the provision of drinking water and a sewage system are essential to combat this emergency.
- » Respect the rights of the neighbors, making them participants and granting them access to justice.
- » Guarantee good administration, so that the solutions are not slowed by legaladministrative issues
- » Generate transparent actions that do not cause divisions in neighborhoods, encouraging collective work.
- » Incorporate officials with decision-making power from both ACUMAR and AvSA in the neighborhood management tables.
- » To reconcile the institutional agendas with

the agendas built by the territorial actors.

» Establish a continuous process of broadening citizen participation taking as a baseline the public hearing of 2016. among other participation backgrounds promoted by ACUMAR.

# Economic axis

The last dimension discussed in the roundtables was the economic one. in which topics such as: connectivity and transport were treated, as an opportunity for local development; new tools to address environmental issues, indicators, the Housing Quality Index. the Public Private Participation Law and sustainable housing; the industrial areas and the environmental order in the Basin; and the circular and sustainable economy.

In the first table, on connectivity and transport as an opportunity for local development, the importance of generating an integrated vision of the territory was highlighted, and for this the following proposals emerged:

» Invest in a transport infrastructure (transshipment centers, rail connections, metrobuses, etc.) designed for the urban territory towards the Basin, in order to end the existing asymmetries between the north and south of the City of Buenos Aires, and between the two margins of the Basin

» Think of the river as an area of activity in itself: navigation as a possibility

of economic activity and well-paid employment. The navigability would convert to the Riachuelo in a tourist and ribereño corridor, happening to be a passive protagonist to an active one.

- » Take the models of 'Sustainable tourism in urban areas' as an example of development for the Basin. The second roundtable, on the other hand, dealt with new tools to address environmental issues, and indicators currently used for monitoring were exposed. The proposals and conclusions were:
- » Produce reliable and representative public data that make visible the environmental situation of the different localities
- » Revalue the Matanza Riachuelo Basin in social and economic terms to enable its integration into the rest of the city.
- » Adopt criteria of sustainability for the relocation projects of families of the Basin, that allow to break the barriers of inequality among residents and ensure integration with the rest of the city. These projects must be conceived in conjunction with the families that live in the neighborhoods, attending to the particularities of each of them
- The third roundtable was on industrial areas and the environmental management of the industries in the Basin. It was highlighted as a priority to rethink the function that is given to the Riachuelo and the Cuenca model that is sought, as a first step to carry out its sanitation. So far,

and for different reasons, it was always seen as the place to dispose of sewage and industrial waste (by omission or by accident). In this framework, the following proposals emerged:

» Consider with special attention the situation of the SMEs of the Basin. understanding the great challenges presented by the adequacy of the industry in social terms (for its people and sources

# **Revalue the Matanza Riachuelo river Basin in** social and economical terms, to enable its integration with the rest of the city

of work) and economic, and the resources that this implies.

» Tender and strengthen the ties between the control organisms and companies, as well as raise awareness and train them

- » Address short, medium and long-term challenges, which include both the need for infrastructure development and progress in territorial planning.
- » Develop effective control methods through monitoring that extends over time, in order to show and understand the

problem in all its dimensions (temporal and spatial).

Finally, the last table of this dimension dealt with circular and sustainable economy. Understanding the relevance of promoting public policies that consider waste management as a 'system', the following measures were proposed:

» Create a regulatory framework for the regularization and promotion of recycling, and to avoid socio-labor exclusion of the cooperative members.

» Strengthen the role of cooperatives based on the improvement of working conditions in the EcoPoints, and the training and education of their workers. This is a central element for the passage to a circular economy in the Basin.

9.7

» Search for coordination between the State, businessmen and other stakeholders involved so as not to lose sources of work while collaborating with the environment.

» Promote, through awareness and dissemination, the responsibilities of all the actors in the chain. To this end, we must: insist on the business sector on the manufacture of products that are recyclable under the eco-design paradigm; to make consumers aware so that they choose products that are recyclable or that have recyclable material; encourage municipalities and cooperatives to carry out the collection and classification of waste based on recycling; guarantee the good quality of the products on the part of the producers with recycled material; achieve the commitment on the part of the business sector to later use said products; guarantee the presence of the State throughout the process.

So far the conclusions emerged in each of the tables organized by axes. However, after analyzing everything discussed in each one of them, in addition to what was stated by the international actors, three common proposals were identified that have been mentioned in all instances of debate. We point here to these proposals identified as transversal to all the spaces, although, it is worth clarifying, their mention does not imply that they are necessarily established as priorities, but rather common to all the discussions. The transversal proposals were the following:

- » Strengthen citizen participation in the decision-making process.
- » Guarantee the sustainability of public policies.
- » To raise awareness about the environmental problems for the development of the Basin in all its dimensions.

# Particular recommendations by the exhibitors

For their part, the exhibitors also offered their opinions and recommendations about what was discussed, in order to move towards the enhancement of the Basin. Here are some of them:

# León Arturo Yepes Enríques -

# Manager of wastewater management, Colombia

The experience of Medellín, Colombia, highlights that solving the problem of urban rivers demands the integration of the different actors of the city: government, environmental entities, sewerage service operators, commerce, industry and inhabitants. Each of them must actively participate in an integrated plan that is consolidated for the development of the entire Matanza river basin. Said integrated plan should undoubtedly have the concept of sanitation of the river, on which they recommend adjusting the Plan with at least the following criteria:

 A complete diagnosis of the Basin, including the state of the networks and of all the current discharges in the river, so that with a detail at feasibility level, the works and investments necessary to collect and transport these discharges can be estimated. wastewater treatment plants (WWTP), which have or need to project.

- With the diagnosis, priority must be given to the order of the projects, beginning the design and construction process.
- As the Basin is of great extension, they could define the sanitation work by stages that are oriented by geographic zones. It is very important to align the works of the networks so that when the WWTPs are built, they are guaranteed a representative flow

that works well but also generates positive effects in sanitation.

- It is fundamental in this plan to clearly define the objectives and goals foreseen, so that all the works and projects defined are clearly related to them and justified as such.
- At the operational level, it is necessary to have a defined regulation for the control of discharges from customers, especially in industry and commerce, and the operator



has the necessary tools to demand compliance. For this, the sewerage operator must have specialized equipment to control and monitor the discharges of the Basin.

- Due to the immense investments that must be made for this sanitation, the financing mechanism must be available

#### » FIG. 2.11 WATER SURFACE CLEANING, MIDDLE BASIN



for them. In Colombia, the tariff scheme is managed for users with support in some cities by the government. Also, the creation of a great team with exclusive dedication to it is essential.

# **Gustaaf Borchardt -**Head of the ICPR (2014-2016)

Everything discussed in the framework of 'Facing the River' made it clear that change is possible, and that it is a wish of all participants. The implementation requires political will, vision, creativity and courage because the improvements will only be seen in the long term and as a result of good planning, with a clear timetable and objectives, good governance, full participation by all actors. the communication continues with the inhabitants and will for dialogue and commitment. The implementation of a guality program and a monitoring of the development to be carried out is central to improve the living conditions in the Basin. and to take advantage of the richness of said environment and its biodiversity.

# Prof. Dr. Cynthia Goytia -

Director of the Research Center for Urban and Housing Policies and the Master's Degree in Urban Economics (Universidad Torcuato Di Tella)

The urban-environmental recomposition of the Matanza Riachuelo River Basin defines a framework of opportunities

that constitute a strategic axis for the sustainable development of the region. 'Facing the River' is an important moment to raise the debate on how to make this task possible. We know that to reverse the difficulty of achieving integrated management in such diverse and complementary dimensions, from habitat, trade and production, tourism, sports and recreation, but also transport and supply, it will not be enough to define objectives and goals. On the other hand, the long-term commitment of the different levels of government, the community and representatives of civil society, together with the actors of the private sector, is a central input. If this is achieved, the basin and its fluvial axis can contribute to recover the full enjoyment of the metropolitan green areas for the inhabitants of the region, but also the development of habitat and housing to reverse the quantitative deficit, promote better access to housing of the new homes created each year, without neglecting the improvement of the quality and infrastructure services of existing homes.

We have the opportunity to recover navigation on the river and its river front, the connection with the port, while working to reverse socio-environmental impacts and mitigate its effects. The complexity of the problems requires multiple perspectives, adding proposals, reflections, wills and commitment without rest, to achieve these objectives.

# **Paulina Lopez -**Duwamish River Cleanup Coalition (Seattle, E.E.U.U.)

- There is still a lot to do in the Riachuelo to reflect what the community expects, so greater community participation is essential.
- Deepening control and quality programs will be the key to improving living conditions and being able to enjoy the beauty of the river, as well as to respect the human life of those affected and the restoration of wildlife.
- ACUMAR could use international support to develop policies that impact the community (also working with the community). In addition, it could develop an evaluation committee in conjunction with the community of the affected area that will serve as an accountability body for the transparency and development of the work.
- MATANZA RIACHUELO RIVER BASIN

- It will also be very important to work with the different municipalities of the Basin on the sources of pollution to avoid discharges of economic and human activities in general, and to stop the continuous pollution.

- Continue working with communities living in very poor conditions in the Riachuelo Basin facing serious environmental and health threats; that is, as one of the participants in the round tables said: "Work with them to find solutions, making them part of the solution, not the problem". - Work especially in public health to help solve health problems linked to pollution, lack of drinking water and sewage.

The time has come to collaborate nationally and internationally to improve the river and the people around it.

# ACUMAR's response to the proposals arising from 'Facing the River'

9.7

As a response and institutional analysis of what emerged in the conclusions from the event "Facing the river" and anticipating ACUMAR'S participation in the next World Urban Forum organised by the United Nations (World Urban Forum 9, Kuala Lumpur, 2018), where the application of the New Urban Agenda 2030 will be specifically addressed, an internal process of institutional consultation was initiated in the organism.

From the Board of Directors, the areas of General Environmental Management, Technical Direction, Health Directorate, Directorate of Territorial Planning and Commission of Social Participation were met in a series of internal work meetings, where they were informed of the results of the conclusions of the UN event and the need to have a state of institutional situation was raised.

The different areas of the organization took note of the proposals arising from the working groups and reported on the lines of work already underway, or in the process of formulation and implementation, related to these in the different areas of the organization:

# **Environmental axis**

- It is planned to generate specific regulations to guarantee the protection of the wetlands, as a way to conserve them and guarantee the use of the environmental benefits that they bring to the ecosystem of the Basin.
- It is proposed to develop a specific regulation on dredging with the support of the Academic Advisory Committee. generating a political-administrative consensus with the different public bodies that are responsible for ensuring the viability of the application of said regulations. This would be done in conjunction with OPDS. APRA, Naval Prefecture, Undersecretary of Ports and Waterways, Delegation Port Dock Sud and with the Academic Advisory Committee. - Work is being done to give a formal and institutional framework to natural heritage areas that do not yet have them, in order to grant them different categories of protection. In addition, work is being done to broaden the articulation with local administrations and with the most active interest groups through work groups. The following concrete actions are being carried out in Laguna de Rocha, Santa Catalina, Ciudad Evita, La Saladita Norte and Sur, Cavas: water quality control in wetlands, participation in work tables and Management Committee.

- Work is underway to promote adequate regulations on the status of wetland

management in conjunction with the Territorial Planning and Legal Affairs Directorates.

- A survey of productive establishments was made, 99.5% of which were audited in order to identify those that, according to the applicable regulations, are considered polluting agents. When an industry is in these conditions, it is intimated to present and implement a reconversion plan that results in improvements in its performance and in a reduction of its environmental impacts. The set of actions promoted throughout the territory are the basis on which the Basin's sanitation is based.

- ACUMAR, together with organisms such as INA and ILPLA, systematically surveys physical-chemical parameters and biological indicators, which are analyzed for their use in the design and execution of sanitation tasks, as well as for making them available to the community in compliance with the citizen's right of access to public information.

# The time has come to collaborate nationally and internationally to improve the river and the life of people in its surroundings

- ACUMAR's Masteplan for Comprehensive Management of Urban Solid Waste (PMGIRSU), organizes the different lines of action in two main areas. On the one hand, the recomposition of environmental damage, through the cleaning of garbage dumps, the removal of residues present in the water mirror, and the cleaning of margins. On the other hand, the prevention of damage, promoting actions focused on the valuation of the waste of the basin, through the construction of EcoPoints and awareness actions tending to promote the critical and responsible participation of the citizens.

- The General Directorate of Environmental Health (DGSA) - within the framework of the Emergency Health Plan (PSE) works to identify vulnerable populations and the so-called "environmental risk". their assistance and follow-up; in the improvement of access to health systems through actions framed in the strategy of Primary Health Care and in the recognition of health as a right of all inhabitants. Among other actions, the DGSA reinforces the health networks and health promotion in the territory, in addition to monitoring the problems detected through the different devices it has, and making timely and effective interventions to reduce the impact of environmental risks.

We actively work in the creation of networks and in the strengthening of local health services, as well as in the training of interdisciplinary teams. According to the specificity of the task, actions are articulated and carried out with other institutions and programs of the State at the national, provincial and municipal levels.

- 12 Environmental Sanitary Units (USAM) have been built, equipped and put into operation in the jurisdiction of the CMR

with their respective observatories. There are still three Environmental Health Units to be built and the Hospital of Cuenca Alta Presidente Néstor Kirchner will be operational this year. 12 Mobile Health Units are also in operation, allowing health operations to be carried out, based on the principle of comprehensive health care for the WCR population and carrying out disease prevention and health promotion interventions.

# Socio-spatial axis

- The sanitary and environmental emergency present in several of the informal settlements of the Basin territory will be addressed - in coordination with AySA, National Undersecretariat of Habitat, National Undersecretariat of Housing. National Undersecretariat of Territorial Planning of Public Investment- to ensure the provision of potable water and the extension of the sewage system. This will be done through the Intradomiciliary Connections Program of UREM (Emerging Urbanizations) managed by the Agency. Accompanying this process, a UREM Social Risk Map is being prepared, and a prioritization and programming of the interventions to be carried out

Through Public Hearings, decision-making will be promoted with the inclusion of citizens, thus involving the neighbors in the design and implementation of the Comprehensive Environmental Sanitation PI an.

Work is being done on the environmental

education of the relevant actors in decision-making (officials, entrepreneurs, etc.) as a prevention strategy. Also, a practical quide on this subject for teachers is being designed. The programs and projects derived from this involve the General Directorate of Political and Social Management, the Directorate of Health and Environmental Education, and the Coordination of Heritage, Culture and Socio-environmental Education It will also be articulated with the following organizations: APRA and the Green Schools in the City Program. OPDS and the General Directorate of Culture and Education of the Province of Buenos Aires and the Ministry of Education and the Secretariat of Environment and Sustainable Development of the Nation. Likewise, teaching and pedagogical material is being generated to strengthen the institutions in relation to the theme of the Matanza Riachuelo Basin and the organism. The environmental education strategy, within the framework of the Interiurisdictional Roundtable convened by ACUMAR, is articulated with the Green Schools Program of the CABA, with the General Directorate of Culture and Education and with the Agency for the Sustainable Development of the Province of Buenos Aires Aires and with the Ministry of Education and the Secretariat of the Environment and Sustainable Development of the Nation. This contributes to developing a national environmental education strategy, which could result in a draft National Law.

- An approach will be sought between the judicial system and the territory, being

the first in many cases inaccessible for the inhabitants. The programs and projects that address this problem are the following: protocol for dealing with relocations and urbanizations in the Basin, social approach to relocations and urbanizations, implementation of work tables and carrying out collective diagnostics.

# Economic axis

- Through a project of systematization of the Work Tables, and a mapping of actors by the Coordination of Social Participation (CPS), the organizational networks and networks that exist in the territory will be strengthened. This is an activity in which several areas of the body participate and which generates material constantly, requiring in turn follow-up.

- The Basin is being addressed, aiming to be the new southern metropolitan axis of sustainable development. The issue of navigating the river is advanced, thus enabling a further possibility of economic activity and employment in the area, which could be both tourism and transport (see 'Navigability' below).

- The incorporation of more schemes of Public-Private Partnerships, under a clear agreement of shared objectives, is something that is being worked on. Work is being done to bring private investments closer to the area, in order to achieve an inclusive urban development and an improvement in the quality of life of the inhabitants of the Basin. Likewise, agreements with international associations are being encouraged to achieve project financing.

- The basin is being revalued in socioeconomic terms to achieve its integration into the surrounding city on a circular economy strategy, with the aim of safeguarding the flows of both economic and material resources. We work with margin cleaning cooperatives, promoting local development and incorporating neighbors into sanitation works. The economic viability of waste management projects is being evaluated, to ensure its sustainability over time.

- Controls are intensified to industries declared polluting agents, accompanying them to develop their reconversion plans, and non-polluting industrial activities are being promoted. In this sense, we work with the business chambers in training and the development of enumerations, in order to have up-to-date and reliable information about the environmental situation of the industries of the Basin.

- The internal work will continue as a follow-up and breakdown process under the responsibility of ACUMAR's Modernization Directorate, especially focusing on the Open Government process promoted at the National State level and, in parallel, generating the appropriate areas to provide treatment in terms of design, to the implementation of concrete plans, programs and projects, such as the within the scope of the Comprehensive Environmental Sanitation Plan.

# CURRENT SITUATION

# Normative framework

# 10.1 NATIONAL LEGAL REGULATIONS<sup>1</sup>

# 10.1.1 General Legislation Civil Code

» Art. 2618. Establishes civil liability for any activity that causes an inconvenience to the neighbors, in 'excess to normal tolerance'. This can be applied to cases of noise, odors, fumes and toxic fumes, etc.

## Laws

» Law 24,051 of Hazardous Waste. It established the objective civil liability set out in Art. 1113 of the Civil Code for cases of damage caused by hazardous waste. It also incorporated as a "federal crime" the contamination of the environment with hazardous waste.

» Law 24,583. Creation of the National Entity of Water Works of Sanitation (ENOH-SA).

» Law 24.588 of Guarantees of the Rights of the National Government in the City of Buenos Aires. This standard known as the 'Cafiero Law' contains the boundaries of competition between the national government and the Autonomous City of Buenos Aires for all those services and national presentations within the City.

#### **Decrees and Resolutions**

» Decree 482/95 (20-9-95). Creates in the scope of the Secretariat of Natural Resources and Human Environment (SRNyAH), the Executing Committee of the Environmental Management and Management Plan for the Matanza -Riachuelo Water Basin.

» Decree 145/98 (30-1-98). Loan agreement for the Environmental Management Program of the Matanza Biachuelo Basin

>> Decree 677/00 (9-8-00). Ministry of Social Development and Environment, approval of the organizational structure of the aforementioned Department of State.

» Resolution 37/02 of the Ministry of Public Works. Transfers the Environmental Management and Management Plan of the Matanza Riachuelo Water Basin to the Undersecretariat of Water Resources.

## 10.1.2 Marine Pollution

Argentina has signed several international treaties related to water protection. Their validity applies to the port districts and to the operations of the ships. The application authority is the Argentine Naval Preference (PNA) and can dictate rules called 'Maritime Ordinances'. Among other agreements with incidence in the basin, the following can be cited:

» Law 22.190. Prevention of Marine Pollution by Hydrocarbons

» Law 24.292 / 90. Approval of the cooperation agreement regarding incidents of pollution of the aquatic environment by hydrocarbons.

» Law 24,089. Ratification of the Convention of the International Maritime Organization to prevent pollution by ships, or MARPOL73 / 78. It has the reservation to delay its full entry into force until it has facilities in port to receive the waste from the ships.

» Decree 962/98. Creation of the National System for the fight against marine, fluvial and lacustrine coastal pollution by hydrocarbons and other harmful substances and potentially dangerous substances.

» Maritime Ordinance 1/93. This standard establishes the requirements for the operation of loading and unloading ships in port. The application authority is the Naval Prefecture Argentina.

# 10.1.3 Uses of water and control of navigation

» Law 20,094 of Navigation. It establishes the principle of abandonment in favor of the State of naval vessels and shipwrecks.

# 10.1.4 Water pollution and sanitation

» Decree 674/89. It establishes a regime of control of water pollution in the metropolitan region served by OSN (Obras Sanitarias de la Nación). The control is in charge of the then Secretariat of Water Resources.

» Decree 776/92. It confers to SRNyAH the power of police in the matter of control of water pollution established by Decree 674/89, modified by Decree 1.455 / 92 created by the Water Pollution Directorate.

» Decree 999/92. It establishes the regulatory framework for the privatization of OSN and the contract for the successful bidder.

» Decree 1.167 / 97. Modifications to the Aguas Argentinas Concession Contract, for its coordination with the Matanza Riachuelo Basin Management Plan.

» Resolution 315/94 of the SRNyAH. It establishes quality standards for liquid

BASIN

RIVER

discharges to water receiving bodies.

» Resolution 242/93 of the SRNyAH. It establishes norms for the spills of industrial or special establishments reached by decree 674/89.

» Resolution 1.103 / 98 of the Secretariat of Natural Resources and Sustainable Development (SRNyDS). Agreement between the SRNyDS and Aguas Argentinas S.A.

» Resolution 634/98 of the SRNyDS. It establishes environmental quality objectives for the coastal strip of the Río de la Plata and the Matanza Riachuelo River.

# 10.1.5 Air pollution

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» Law 20,284 of Preservation of the Air. It is the basis of Ordinance 39.025, still in force in the City of Buenos Aires.

» Law 24,449 National Transit. This accession law establishes emission requirements for mobile sources and a system for the periodic review of vehicles. It is regulated by Decrees 779/95 and 895/96.

# 10.1.6 Contamination by solid waste

» Law 23.922 Basel Convention. Regulates the transboundary movement of hazardous waste.

» Law 24,051 of Hazardous Waste. This standard includes hazardous solid waste,

liquid effluents and gaseous waste. Its validity is limited in some aspects depending on the current provincial regulations. It rules in the Autonomous City of Buenos Aires, until its own regulations are passed.

» Law 25.612 of Maritime Budgets for the Management of Industrial Residues. Modifies the scheme of Law 24,051.

» Decree 831/93. Regulation of the Law on Hazardous Waste.

# 10.2 PROVINCE OF BUENOS AIRES LEGAL REGULATIONS

# 10.2.1 General legislation

» Decree Law 8912/77 (Ordered Text Decree 3389/87). It regulates the territorial ordering in the whole province and establishes the guidelines to which the municipal activity in zoning matters must adhere.

» Law 10.907 of Reserves and Natural Parks. Authority of Application: Ministry of Agrarian Affairs, modified by Law 12.459.

» Law 11.459 of Industrial Radiation, regulated by Decree 1.741 / 96, later modified by Decree 1.712 / 97. It demands environmental protection to industrial settlements. It establishes categories of industries, Certificate of Environmental Aptitude, requirements for its obtaining and for the Evaluation of Environmental Impact.

» Law 11,723. Framework Law for the

protection, conservation, improvement and restoration of natural resources and the environment. This standard constitutes the general framework for the protection of the environment in the province.

» Law 11.737. Law on Ministries, amending Law 11,175. Create the Secretariat of Environmental Policy.

» Law 11,964 of Water Resources. It establishes the preparation of risk zone maps.

» Law 12,420. Organic Law of Municipalities.

» Law 12,461. Financing of the Environmental Management Program of the Matanza Riachuelo Basin.

» Law 12,462. Creation of the Municipal Development and Sanitation Fund.

» Law 12,475 on Access to information.

» Law 12,511. Create the Provincial Infrastructure Plan.

» Law 12,523. Agreement with the Riachuelo Foundation.

» Law 12,573. Regulates the authorization of large commercial areas and supermarkets. Requires the evaluation of environmental economic impact for the establishment of supermarkets within the provincial territory.

 » Resolution 223/96 of the SPA.
 Application, requirements and procedure for the Municipalities in the terms of art.
 28 of Decree 1741/96 can control second category industries. » Resolution 224/96 of the SPA. Approves the Instructions for categorization of industries established by Annex III of Decree 1741/96.

» Resolution 80/99 of the SPA. Establishments of second and third category.

» Resolution 1.200 / 00 of the SPA. It establishes the obligation to notify the SPA of any modification of a habitual operational activity that may lead to alteration, unrest or suspicion about the impact on safety, health or the environment.

# 10.2.2 Water pollution and sanitation

» Law 5.965. Protection Law for sources of supply, courses and bodies receiving water and the atmosphere. Prohibits any type of discharge of effluents. Delegate the power of the police of the Municipalities. Art. 8° is modified by Law 10,408. Its regulatory Decree 2009/60 regarding liquid effluents of industrial origin. establishes that the Application Authority may be the Directorate of Hydraulics of the Province of Buenos Aires or the General Administration of Sanitary Works of the Province of Buenos Aires (AGOSBA). depending on the receiving body is within the sanitation system administered by AGOSBA. or it is a water course under the jurisdiction of the Hydraulic Department. This decree was modified by Decree 3970/90.

» Law 8.065. Creates the autarchic entity

called "Sanitary Works of the Province of Buenos Aires".

» Law 9,078. It obliges to present chemical-bacteriological analysis of water in areas lacking running water services.

» Law 10-106. Establishes the provincial hydraulic system. The Ministry of Public Works is the enforcement agency.

» Law 11,820 / 96. Regulatory framework for the provision of Public Services for the Provision of Drinking Water and Sewage. It establishes the privatization of Obras Sanitarias de Buenos Aires (OSBA) and creates the regulatory body.

- » Law 12.257. Water Code.
- » Decree 4.318 / 98. Categorization of the laundry rooms regulated by Resolutions 84/99, 166/99 and 468/99 of the SPA.

» Decree 743/99, amended by Decree 2307/99. Establishes the functions of the Regulatory Body of Buenos Aires Water.

» Resolution 287/90 (AUGUST). It establishes quality standards for liquid waste discharges to the different receiving bodies of the province.

## 10.2.3 Air pollution

» Law 5.965. Protection Law for sources of supply, courses and bodies receiving water and the atmosphere. Prohibits any type of discharge of effluents. It allows the delegation of police power in the municipalities. It was regulated by Decree 3395/96, as regards gaseous emissions.

»Resolution 242/97 of the SPA. It establishes guidelines for the Affidavit of Gaseous Effluent Declaration of Decree 3395/96, expanded with Annex II. Instructions for the Application of Atmospheric Diffusion Models to gaseous effluents by Resolution 242. The adaptation periods are set in Decree 2.264 / 97 and for those who use incineration systems, by Resolution 374/98 of the SPA.

» Contamination by solid waste.

» Decree-Law 9.111 / 78. Regulates the method and site of final disposal of waste of any kind and origin of the parties that make up the metropolitan area.

» Decree-Law 9.314 / 79. Ratifies agreements for the realization of a urban reorganization and sanitation program known as the CEAMSE Program.

» Decree-Law 9.519 / 80. It empowers the CEAMSE to expropriate declared goods of public utility for the fulfillment of its social objective.

» Decree-Law 9,841 / 82. Approves agreement that institutionalizes the Additional Control Regime of CEAMSE.

» Law 10.699 / 88, regulated by Decree 499/91. Law of agrochemicals. Protection of human health and natural resources through the correct use of products that can contaminate the environment. The Enforcement Authority is the Ministry of Agrarian Affairs in coordination with the Ministry of Health. » Law 11,347 on pathogenic waste. Regulated by Decree 450/94, amended by Decree 403/97.

» Law 11.720 of Special Waste. Generation and handling regulated by Regulatory Decree 806/97. Annex I: waste categories. Annex II: dangerous categories. Annex III: disposal operations.

» Resolution 578/97 of the SPA. Provincial registry of generators, operators and transporters.

» Resolution 601/98 of the SPA. Establishes the list of toxic waste that can not enter the Province of Buenos Aires, according to Article 28 of the Provincial Constitution.

» General Ordinance 220/78. Prohibits the use of garbage incinerators.

# 10.3 LEGAL REGULATION OF THE AUTONOMOUS CITY OF BUENOS AIRES

# 10.3.1 General legislation

» Ordinance 39.025. Code of Prevention of Environmental Pollution. It includes the protection of the environment with specific chapters on noise, smoke and odors, vibrations, air quality, liquid effluents, etc.

» Law 71 of the Urban Environmental Plan.

» Law 119. Authorizes the City to make a financial commitment as a counterpart for the participation in the Matanza Riachuelo Program.

» Law 210. Creation of the Single Public Services Agency of the City

» Law 449. Urban Planning Code

» Law 123, modified by Law 452. Establishes the Environmental Impact Assessment regime for projects, programs and undertakings that could affect the environment.

» Decree 1120/01. Regulation of the Law of Environmental Impact Assessment.

» Regulatory Decree of Law 154 on Pathogenic Residues.

#### 10.3.2 Water pollution

» Ordinance 45,963. It establishes the validity of the discharge parameters established by Decrees 674/89 and 776/92 of the National Executive Power. The city has never exercised these powers in practice, despite the provisions of the Buenos Aires constitution.

## 10.3.3 Air pollution

» Ordinance 39.025. Establishes the validity of the air quality parameters established in Law 20,284.

» Law 797. Prohibits the incineration of pathogenic waste in the City of Buenos Aires.

#### 10.3.4 Contamination by solid waste

» The City of Buenos Aires was part of the

creation of CEAMSE in conjunction with the Province of Buenos Aires. Therefore, all the norms already mentioned referring to the Province of Buenos Aires in this subject are repeated in the legislation of the City. That said, only the most specific ones related to the treatment of pathogenic waste are transcribed here.

» Law 154. Regime applicable to pathogenic waste.

» Decree 1706/98. Establishes the systems of treatment of hospital waste in situ.

» Decree 1886/01. Decree regulating the pathogenic waste regime.

# **11. BASIC CHARACTERISTICS**

# 11.1.1 Demographic features

The population distribution is fairly equal in sex and age, with a predominance of inhabitants between the ages of 15 and 39 years. Also, the district with the largest population is the Autonomous City of Buenos Aires, following this La Matanza. (*fig.3.1*)

# 11.1.2 Migration

This indicator shows the net movement of people from or to the outside of the Matanza Riachuelo Basin (CMR), understanding it as the difference of existing people in a jurisdiction between two periods, when the vegetative growth is subtracted.

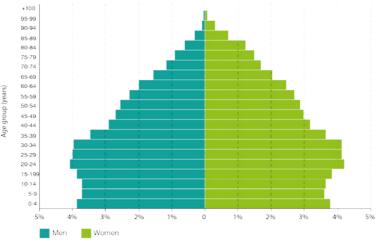
To ACUMAR, as the organization in charge of recomposing the environment and improving the quality of life of the people living in the WRC, the information provided by this indicator is very useful since it allows to visualize trends in land occupation and population density of the different jurisdictions. This information can be used to make strategic decisions that comply with the Agency's objectives.

#### Net migration by jurisdiction

This indicator reflects the net migration of the inhabitants of the jurisdictions that make up the CMR, calculated from data on births and deaths officialized by the National Ministry of Health, the Province of Buenos Aires' Ministry of Health and the General Directorate of Statistics and Census of the Autonomous City of Buenos Aires, as well as population data provided by the INDEC (National Statistics and Censuses Institute and the government's agency responsible for the collection and processing of statistical data).

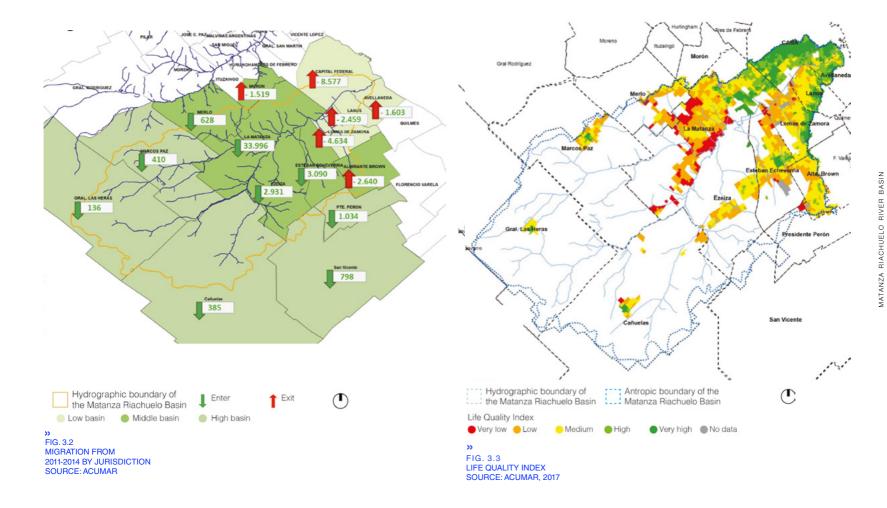
Based on the data obtained from net migration, an average of approximately 21 thousand people were estimated to enter the jurisdictions that make up the Basin between 2011-2014, most of them staying in the Municipality of La Matanza. If we observe the exit of the population from the area, the most representative jurisdictions are the Autonomous City of Buenos Aires followed by Lomas de Zamora and Almirante Brown.

Finally, although this indicator allows us to observe migratory flows from and to the jurisdictions that make up the Basin, the absence of a determination on the causes for these movements, the origin and / or trends within the sectors that make up the Basin can be mentioned as limiting factors in itself for each jurisdiction. (*fig 3.2*)



» FIG. 3.1 POPULATION DISTRIBUTION IN THE BASIN SOURCE: INDEC CENSUS, 2010

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#### 11.1.3 Quality of life

From the results obtained in this first calculation of the Quality of Life Index (ICV) it can be seen that, at the jurisdictional level, the Autonomous City of Buenos Aires is at the extremes, where a high quality of life prevails, and the La Matanza party, where the prevailing quality of life values are low and very low: while in the rest of the Basin the mean values are low and very low, except for some areas far from the main course of the Matanza Riachuelo River in the Lomas de Zamora Lanús and Avellaneda parties. In turn, it can be observed at the geographical level that the quality of life gradually decreases from the Lower Basin to the Middle Basin, and also from the outer limit of the Basin towards. the main channel of the river. As for the municipalities of Cañuelas, Gral. Las Heras and Marcos Paz (Upper Basin), with a lower population density, they have their own distribution patterns, decreasing their quality of life from the central areas to the periphery. (fig.3.3)

levels are visualized to a greater extent,

identifying specific areas that require

action of State at different levels.

According to the intervals defined for each level of quality of life, the population is identified as follows:

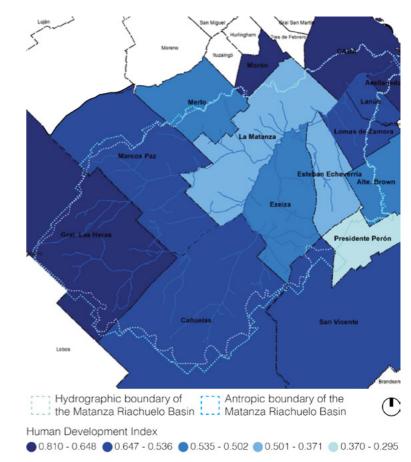
- » Very high: 299.977 hab. (7.4%)
- » High: 989.764 hab. (24.4%)
- » Medium: 1,388,759 hab. (34.3%)
- » Low: 1,200,706 hab. (29.6%)
- » Very Low: 147.976 hab. (3.7%)
- » No data \*: 22,594 hab. (0.6%)

ICV is calculated for the entire Matanza Riachuelo River Basin around the census level, except for those that have a population density of less than 10 inhabitants per hectare.

## 11.1.4 Human development

The Human Development Index (HDI) (*fig.3.4*) is a paradigm for observing the progress or regression of human development of a specific geographical area. It implies a way to examine the progress of a community and, therefore, to evaluate the results of the public policies implemented.

The Index is composed of three dimensions: health, education and economics. Traditionally, the health dimension is calculated based on life expectancy; the dimension of education based on the adult literacy rate and the gross rate of combined enrollment in primary, secondary and tertiary education;



>> FIG. 3.4 HUMAN DEVELOPMENT INDEX SOURCE: ACUMAR, 2017

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finally, the economical dimension uses the Gross Domestic Product (GDP) as an input.

The results of each dimension are integrated into the calculation of the Human Development Index at the Party level (IDHp) for the period 2007 to 2013. The results obtained in the IDHp express the difference between the Municipalities within the Basin and their evolution over time. In a first analysis, Municipalities are categorized according to their level in five intervals: low. medium-low. medium, medium-high and high. It can be seen that, in general, there are few Municipalities that are in the extreme categories, since most of them are concentrated in the middle levels. The interval of the last category (the lowest) of IDHp goes from 0 to 0.370, while the first category (the highest) goes from 0.648 to 0.1.

From this categorization, it can be observed that from 2007 to 2013 there are municipalities that rise in the IDHp category, and there are no municipalities that descend from the category. Although there are cases in which HDI declines from one period to another, these decreases are not significant and do not alter the HDI category.

# 11.1.5 Informal territoriality

The Index of Informal Territoriality (ITI) (*fig.3.5*) contains variables that make up the quality of life of the population

settled in a territory, based on a series of conditions related to housing conditions and the environment.

The condition of informality is determined by a series of requirements in terms of housing tenure, type of housing, availability of basic sanitation services, flooding vulnerability and overcrowding conditions, regarding the members of the household that inhabit it.

The ITI was developed in order to measure the degree of informality in the territory of the WRC, defining this concept based on a series of unfulfilled requirements linked to household conditions, the housing that is inhabited and the characteristics of the environment.

The five variables that have been taken into account to define whether an urban space meets the definition of informality are: a) the housing tenure regime; b) the quality of the home; c) the level of coverage of basic health services; d) the condition of overcrowding (more than two inhabitants per environment); and e) the risk of flooding.

The "very low" informality value is given by the range of 0 to 0.12; the "low" by the 0.13 to 0.25; the "average" for the one from 0.26 to 0.37; the "high" with values between 0.38 and 0.50 and the "very high" in the range of 0.51 to 1. It is important to note that these ranges were calculated exclusively for the Matanza Riachuelo River Basin, not being able to be extrapolated to another case.

Analyzing particularly the results obtained for the year 2010, the areas of very low and low informality are distributed mainly in the Autonomous City of Buenos Aires, the party of Avellaneda and the northeast area of La Matanza, also found in some sectors of Cañuelas, Las Heras, Marcos Paz and, less representative, in Lanús and Lomas de Zamora. The average level is found mostly in the games of Almirante Brown and Esteban Echeverría or some sectors of La Matanza and Ezeiza. High and very high levels can be found at the Municipalities of La Matanthe games of Almirante Brown and Esteban Echeverría or some sectors of La Matanza and Ezeiza. High and very high levels can be found at the Municipalities of La Matanza, Lomas de Zamora Lanús and Ezeiza

## 11.1.7 Illiteracy

*Fig.3.6* shows the illiteracy rate in the Basin. The most critical areas are in direct vicinity to the river, in the Municipality of La Matanza.

# 11.2 ENVIRONMENTAL QUALITY

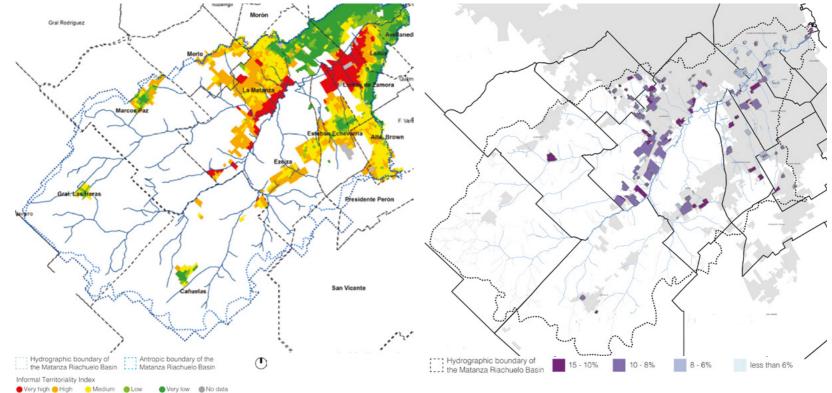
#### 11.2.1 Water resources

#### Matanza Riachuelo river

In the Metropolitan Area of Buenos Aires' south-central region, the drainage network is structured from a main basin, consisting of the Matanza River (called Riachuelo in its lower section) and a series of smaller basins that drain directly into the Río de la Plata.

The Matanza River Basin covers an area of about 2300km2, with a total length of 510km in 232 major and minor courses. The main course has a length of 81km and a meandriform with high sinuosity. The channel is "boxed", evidencing an important vertical incision for the upper Holocene (linked to a rapid decrease in the base level), which implies a low capacity of migration of the meanders and therefore little erosion current lateral.

The Matanza River in its lower section (Riachuelo) had a high sinuosity, due to the very low slope in this section and the interaction with the Río de la Plata. Numerous lagoons. bathed and abandoned meanders occupied the alluvial plain, being only as evidence the Soldati lagoon and the one located inside the Autodromo, partially modified. The alluvial plain, in this area has a maximum width of 6 km and it is inhabited by more than 500,000 people. The total unevenness is 35 meters between its springs and the mouth in Puerto Nuevo. The Matanza River has an average annual flow (at the Autopista station) of 7.02 m3 / sec and a maximum flow of 1325 m3 / sec, varying the water surface levels between 1.43 m and 6.16 m, this last value corresponding to a major flood but not an extreme one. Taking into account the characteristics of the course, the alluvial plain and the terrace level, this amplitude in the height of the water, implies flooding of large areas. It receives 18 main tributaries (18), including the Morales



>> FIG. 3.5 INFORMAL TERRITORIALY INDEX SOURCE: ACUMAR, 2017

» FIG. 3.6 ILITERACY SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010

11.2

streams (483 km2 and Q max.190 m3 / sec), Cañuelas (358 Km2 and Q max of 164 m3 / sec), Aguirre (100 Km2 and Q max.86.7 m3 / sec) and Ortega (95 Km2 and Q max 84.9 m3 / sec).

#### **Cildañez stream**

The main tributary that receives the Matanza River, in the territory of the City of Buenos Aires is the Cildañez stream, in the Mataderos-Lugano area. Its course is rectified and partially piped. Its basin covers an area of 3956m ha (825m in the province and 3131m in capital), which includes the extension of the network of drains and conducted flows from all the basins that drain their surpluses to the Riachuelo river.

The drainage network of the Cildañez stream in the Province of Buenos Aires has two main branches that cross to capital. Both conduits are located in low areas of the basin, where it dos not have the needed section. Therefore when the capacity of the ducts is exceeded by the magnitude of the storm, there is a significant accumulation of water in the collector (on the Province of Buenos Aires side) of Av. Gral. Paz. This phenomenon occurs for storms that happen every 2 years, in correspondence with the trace of the Segurola conduit.

# 11.2.2 Water quality

## Groundwater

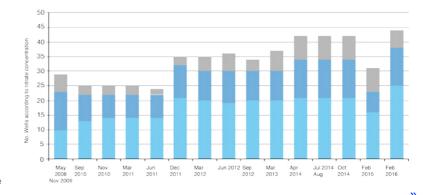
Nitrate is the most common contaminant

in groundwater. It is a mobile and persistent component; under natural conditions, it is present in the water by dissolving the nitrogen contained in the rainwater or by decomposing the organic matter contained in the soil. Under these conditions, it is

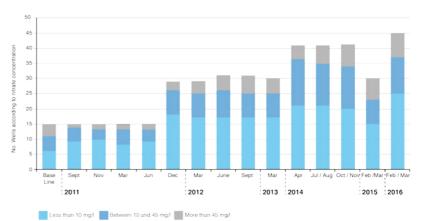
estimated that nitrate concentrations are lower than 10 mg / I (Baseline of the Matanza Riachuelo Basin Aquifer System - ACUMAR). Concentrations higher than 45 mg / I, indicate that if the water is going to be used as a source of drink it must be subjected to previous treatment (Argentine Food Code).

The indicator developed from this component (fig. 3.8 & 3.8) informs about the status and trends in groundwater guality, and helps analyze and visualize quality problems in space and time. For this, the indicator measures the number of wells in the ACUMAR monitoring network contained in the three nitrate concentration ranges (less than 10mg / l, between 10 mg /I and 45 mg /I, greater than 45 mg /I), compared with a baseline defined with the series of monthly concentration values from May 2008 - November 2009. The analysis differentiates the wells located in the upper aquifer (water table) from those of the Puelche aquifer.

An increase in the values of this indicator could indicate both the proximity of sources of point pollution (on-site sanitation systems, solid waste deposits, etc.) and diffuse, associated with agricultural or urban activities, as well as the presence of other pollutants in



#### FIG. 3.7 EVOLUTION OF THE CONCENTRATION OF NITRATES IN GROUNDWATER OF THE 'FREÁTICO' AQUIFER ENVIRONMENTAL QUALITY COORDINATION, ACUMAR 2017



Solution of the concentration of nitrates in groundwater of the 'Puelche' Aquifer
 ENVIRONMENTAL QUALITY COORDINATION, ACUMAR 2017

groundwater (volatile organic compounds VOC, metals and other inorganic contaminants). In addition, the use of this indicator will detect changes due to the actions implemented within the PISA framework. Thus, for example, the expansion of sewer coverage will lead to a decrease in the nitrate concentrations currently coming from blind wells.

# 11.2.3 Air quality

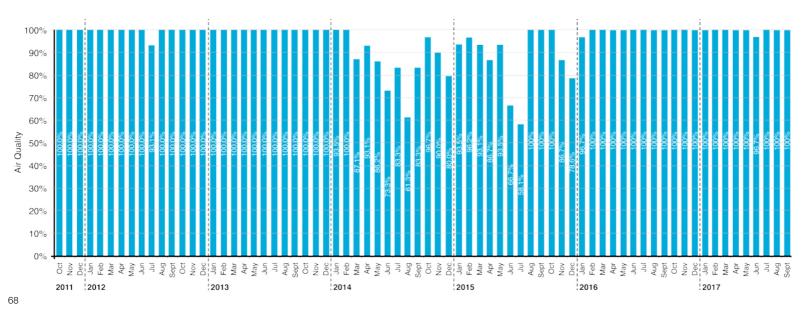
The atmospheric air we breathe, in addition to its natural components, has other compounds produced by the burning of fossil fuels, both from fixed sources, as is the case of industries, and from mobile sources, such as automotive transport (public and private). . In addition, its composition also depends on the presence of non-anthropogenic components, as happens with volcanic eruptions (ash and gases originating in the Andes Mountains can reach the Matanza Riachuelo Basin), the burning of biomass by natural fires, erosion of soil material, etc. In other words, the air quality of the Matanza Riachuelo Basin is influenced by meteorological factors and atmospheric circulation patterns.

Among the gases produced by the burning of fossil fuels are the so-called criteria pollutants, which are ozone (O3), sulfur dioxide (SO2), carbon monoxide (CO), nitrogen dioxide (NO2). , and particulate material less than ten microns (PM10). At a global level, it was determined, by medical scientific research, that these gases and the particulate matter, also depending on air concentrations and the physical and health conditions of people, can have effects on human health. As a result of this knowledge, air quality limits were determined, which are limits below which the risks of affecting human health are considered acceptable.

In Resolution ACUMAR No. 2/2007, the air quality limits for these criteria pollutants are set and, to control compliance, since

2010 ACUMAR is executing an air quality monitoring program at the Basin in the Dock Sud area and the area known as the former Petrochemical Pole. The measurements taken to date indicate that the air quality meets the limits of Resolution No. 2/2007 (CO 1 and 8 h, NO2 1 h and 1 year, O3 1 and 8 h, PM10 24 h and SO2 3 h and 1 year). For the third quarter of 2017 (July, August and September) no exceedances were recorded for the parameters monitored by ACUMAR. (*fig.3.9*)

#### >> FIG. 3.9 AIR QUALITY LEVELS SOURCE: ACUMAR, 2017



FACING THE RIVER

# 11.2.4 Trash

In 2008, the National Court of Justice encouraged the eradication, cleaning and closing of all illegal dumpsites surveyed by ACUMAR. Based on this, a Landfill Baseline was drawn up, defined as the total of existing landfills in the first quarter of 2011. (*fig.3.10 & 3.11*)

ACUMAR assumed the responsibility of cleaning, for only one time, all the sites with the exception of the points of boldness (under the jurisdiction of the municipalities) and, once its task is finished, to deliver them in custody to each jurisdiction to avoid new rollovers.

In this context, of the 447 baseline sites, 178 were flash points, and of the remaining 269, whose cleanup was assumed by ACUMAR, as of March 2017, 248 microbasins, garbage dumps and macrobasins have been cleared. Regarding the 21 remnants, 14 are within the hydrographic basin.

The present indicator shows the progress towards the goal of the total elimination of landfills surveyed in 2011, that is, of the baseline. However, this does not reflect the dynamic nature of the waste -particularly the appearance of new sites with rolloverswhich constitute a complex environmental challenge that must be faced from the integral management.

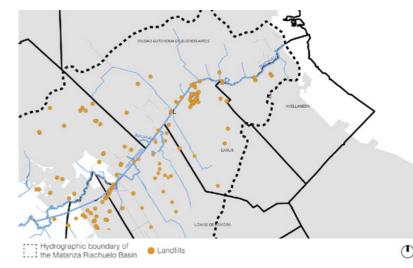
Therefore, from the first months of the current year and based on the inspections of the WRC carried out by ACUMAR, a process was developed to prepare a new baseline for 2017, which yielded the

following results: 162 points of boldness, 118 microbasins, 19 landfills and 2 macrobasins, totaling some 301 sites with waste within the hydrographic basin. The cleaning of these sites began to be addressed from June 2017, through an agreement between ACUMAR and CEAMSE, which will be executed in principle for a period of 12 months.

# 11.2.5 EcoPoints

ACUMAR, together with local and provincial governments, is building comprehensive waste management centers called EcoPoints. These are plants for the treatment and valuation of different types of waste (debris, pruning remains and household waste), and have modern technology for their reception, classification, conditioning, treatment and recovery. (*fig.3.12*)

To this end, ACUMAR envisaged the start-up of 16 EcoPoints. The works of 4 of them were entrusted to the Provincial Organism of Sustainable Development (OPDS), to manage household waste, debris and pruning in Cañuelas, Marcos Paz. General Las Heras and San Vicente. Another 5 were designed for the same waste streams with the municipalities of Ezeiza, Morón, Avellaneda, Almirante Brown and Presidente Perón. On the other hand. 5 were designed to manage debris and pruning with the municipalities of Merlo, Lomas de Zamora-Lanús (which will share the facilities), La Matanza (where two plants will be built) and Esteban Echeverría. At the same time, work



#### » FIG. 3.10

#### LOCATION OF LANDFILLS, LOW AND MIDDLE BASIN SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010



#### FIG. 3.11 EVOLUTION OF LANDFILLS IN THE BASIN SOURCE: ACUMAR, 2017

MATANZA

began on Lanús for the construction of 1 EcoPunto that will manage household waste. Finally, although the EcoPuntos were not initially considered in the PMGIRSU for the CABA, 1 has also been added for this current in the Barracas Green Center of the CABA.

This will make it possible to minimize the amount of waste that must be sent to final disposal, thus reducing the growing demand for land for burial in sanitary landfills and / or open-air dumps. Added to this, it will make it possible to reinsert materials into the productive chain. recovering them for later use in the manufacture of new products and saving scarce natural resources. All this will result in the reduction of negative impacts on the environment and in the maximization of human welfare, both objectives closely linked to the mission of ACUMAR.

# **11.3 BIOPHYSICAL DIMENSION**

# 11.3.1 Topography

The Matanza Riachuelo river basin is located in the region called "Ondulated Pampas". This southwestern area of the Pampas region of the Argentine Republic is so named because of a gentle undulation of the land due to the erosion of rivers and a slight elevation of the crystalline basement, that is why ravines. lows and river terraces can be distinguished in this area. The lows are below Río de la Plata's levels, especially in the riparian zones near the mouth of, for example, the Matanza Riachuelo river. which gets easily flooded, especially during the strong "Sudestada" storms. River terraces appear in riversides, in a gentle slope towards the water course. Great part of the "Ondulated Pampas" (fig. 3. 13) overlaps with the western



#### zone of the "Humid Pampas", that are characterized for being flat extensions of verv fertile pastures.

# 11.3.2 Hydrographic boundary

As of ACUMAR's resolution 1113/2013. the geopolitical criterion is replaced by the hydrographic one to define the Basin's limits. (fig. 3. 14)

#### 11.3.3 Common flooded areas

Figure 15 is based on the information provided by each particular Municipality in 2014, when the last flood registered in the Basin took place. The map shows the common flooded areas. Among the causes for this are problems based on insufficient infrastructure (i.e drainage system failure, etc.).

# **11.4 LAND USE AND VALUE**

## 11.4.1 Land use

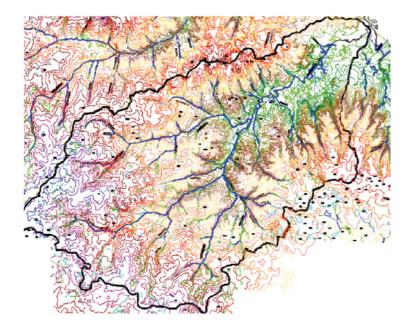
Regarding the Basin's zoning, there are marked differences between all the jurisdictions that make the Basin. Since each jurisdiction presents its own regulation of urban-territorial ordering. the way of consolidating the growth and territorial development models as well as the way to define the land uses varies depending on the Municipality in charge. This represents a complex technical limitation for the territory, since the regional perspective linked to the Basin Territory is not ensured.

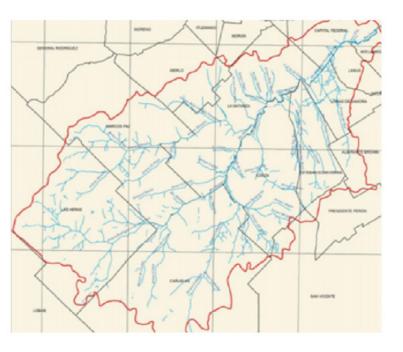
In this frame, being Decree-Law 8912/77

the one that governs in terms of territorial regulation and land use in the Province of Buenos Aires (which hosts most of the Basin's jurisdictions) and Municipalities have the faculty of legislating the uses of their particular territory's ground. The same happens in the case of the Autonomous City of Buenos Aires. Therefore, it is necessary to raise the need to contribute to an integration process with a common base to think of the Basin as one single planning unit, in which ACUMAR could have the role of articulating this (today ACUMAR's faculties are limited only to environmental ordering issues and does not have a direct way of say about land use).

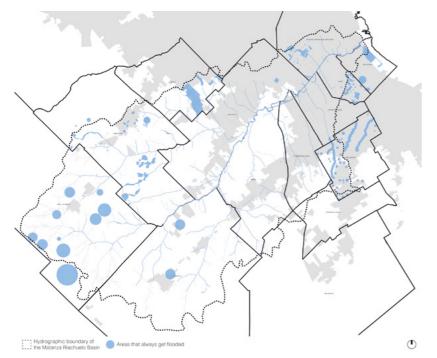
Based on its environmental competence and with the intention of advancing in the process of comprehensive and regional planning of the territory on which its Authority is printed, it is proposed as a line of work in the medium and long term to generate meeting and coordination spaces with the Province of Buenos Aires, Autonomous City of Buenos Aires and the other Municipalities in order to achieve a new urban scenario that provides the basis for rethinking a territorial development model for the Basin that maximizes opportunities and finds common solutions to the problems detected

RIVER



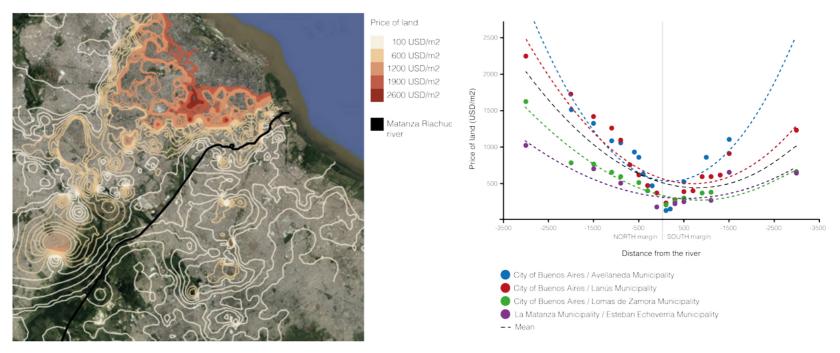


» FIG. 3.13 TOPOGRAPHY LEVELS SOURCE: ACUMAR, 2011 » FIG. 3.14 HYDROGRAPCHIC BOUNDARY SOURCE: ACUMAR, 2017



#### » FIG. 3.15 COMMONLY FLOODED AREAS SOURCE: ACUMAR, 2017

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>> FIG. 3.16 DISTRIBUTION OF LAND VALUE BY M2 SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT **>>** 

FIG. 3.17 LAND VALUE AND ITS RELATIONSHIP WITH THE RIVER SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT

#### 11.4.2 Land value

The relationship between the distance to the Matanza Riachuelo River and the value of the land is plotted below. It is notorious as in the Lower Basin the value is reduced with the proximity to the Riachuelo. (*fig.3.16 & 3.17*)

#### **11.5 URBAN EQUIPMENT**

#### 11.5.1 Housing

The line of action of Urbanization of Villas and Precarious Settlements, organizes a set of actions tending to improve the housing situation of the population residing in Villas and settlements in the territory of the Matanza Riachuelo Basin.

These actions are financed by the Undersecretary of Urban Development and Housing (SSDUV) and by the Subsecretariat of Habitat and Human Development (SSHDH), and are not restricted only to the construction of new housing but also include tasks such as the reordering of land, the opening of streets, the laying of water and sewage networks among others.

Within the Mendoza Judgment, the Supreme Court of Justice of the Nation, in its third mandate, paragraph 10, requests ACUMAR "the presentation in public form of the progress status and estimated deadlines of the initiatives provided for in the Framework Agreement Federal Subprogram of Urbanization of Villas and Precarious Settlements - Sanitation of the Riachuelo-Matanza Basin - First Stage, of November 21, 2006 ".

This agreement was modified and updated, and in September 2010 the "Framework Agreement for the implementation of the Urbanization Plan for Precarious Villages and Settlements in environmental risk of the Matanza-Riachuelo Basin 2010, second and last stage" was signed among the 14 municipalities that make up the Matanza Riachuelo Basin and the Autonomous City of Buenos Aires

For the same, the number of families that were at priority environmental risk within the Basin was determined, defining the universe of families to attend in 17,771. The achievement of this objective requires the articulated work of various governmental areas in order to improve the living conditions of the population involved.

This indicator proposes monitoring the evolution of the steps taken to comply with this agreement through the presentation of data in its various stages.

Originally, the indicator used 3 categories that were reformulated today in order to have a more detailed follow-up regarding the progress in the life cycle of each housing project.

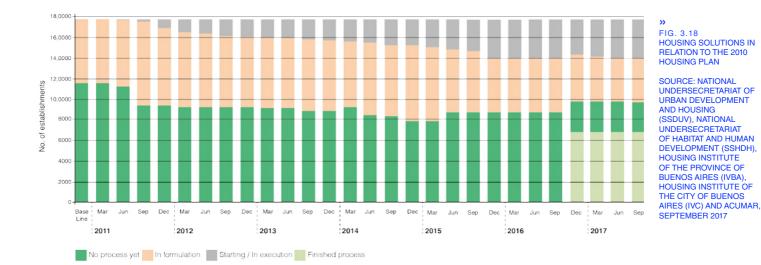
The universe of the projects that previously comprised the category "in formulation" was subdivided into "Without Management" and "In Formulation", to differentiate those projects for which the jurisdiction (acting as Executing Unit) already presented a project to evaluate, formulate and approve their financing, from those who have not yet done so. This differentiation will allow us to record the progress of those tasks that are not strictly execution of work but are vital to initiate commitments to fulfill the goal that today are 17771.

In this sense it is intended to work stronaly with the jurisdictions to reduce the universe of housing solutions that are still without a project or without land and to be able to complete a precise planning on the compromised universe. According to the data contained in the table, we observe that 3,752 "completed / delivered" housing solutions have been recorded to date; 4,264 housing solutions "to start / in execution" and 2.902 are in the "formulation" state and 6.853 housing solutions "without management". It is worth mentioning that in this last stage some projects were presented for study, thus becoming "in formulation", others obtained their no technical objection, going "to start / in execution" and others presented pending documentation (reception minutes)) to move to the "finished" state.

RIVER

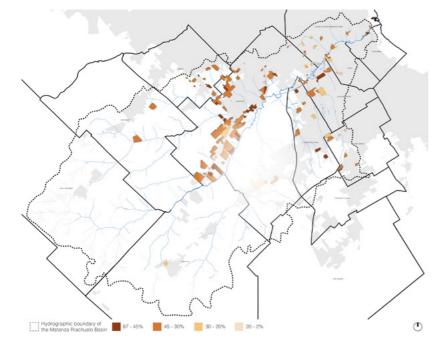
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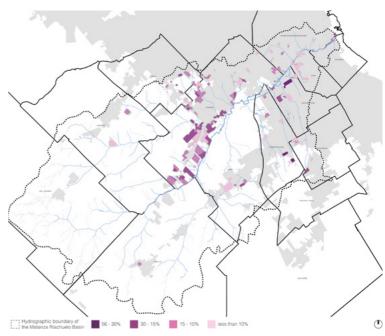
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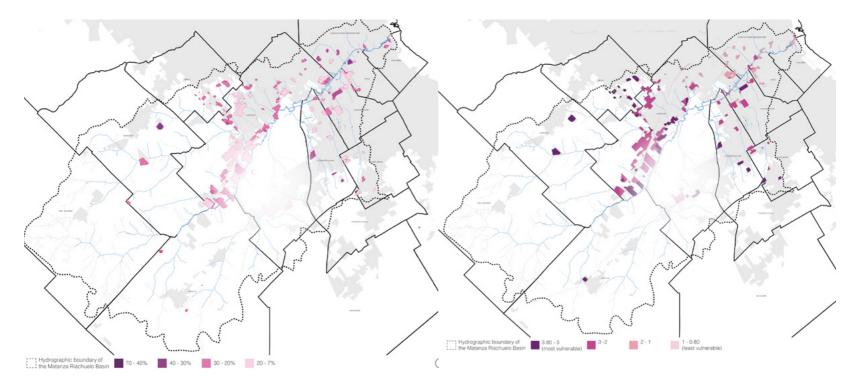
Note 2: "To initiate" corresponds to the total of solutions that are found with "No technical objection" (NOT) granted, or at the stage of "No financial objection" (NOF) or with a signed agreement and / or sent to pay the first disbursement.

MATANZA RIACHUELO RIVER BASIN



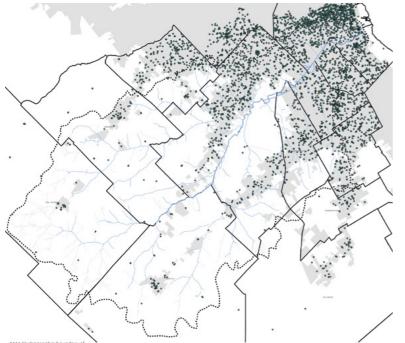


>> FIG. 3.19 HOUSEHOLDS IN INFORMAL SETTLEMENTS WITH DEFICIENT BUILDING MATERIALS SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010 >> FIG. 3.20 UNRECOVERABLE HOUSING IN INFORMAL SETTLEMENTS SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010



#### >>

FIG. 3.21 HOUSEHOLDS WITH IRREGULAR HOUSING TENURE SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010 >> FIG. 3.22 INFORMAL SETTLEMENTS ACCORDING TO THEIR VULNERABILITY SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010



Hydrographic boundary of Educational institutions

» FIG. 3.23 EDUCATIONAL INSTITUTIONS SOURCE: ACUMAR, 2017

#### 11.5.3 Educational Institutions

Educational institutions along the Basin are both Private and State-managed. The highest concentration can be found in the City of Buenos Aires in the lower basin, decreasing, along with the population density, towards the upper basin. Fig. 3.23 illustrates their distribution. ACUMAR's Education area works in projects of 'Formal education' and 'Non-formal education', with the aim of developing and promoting actions and projects aimed at the construction of a communal environmental knowledge, based on the revision and revaluation of the local cultural practices and the history itself, allowing to rescue, reconstruct and propose sustainable ways of interaction between society and nature, in the territory of the Matanza Riachuelo river Basin.

#### For it:

» Environmental education and awareness materials are planned and disseminated to meet different didactic needs.

» Teacher training spaces are created on environmental education and health issues. For the students, reflection spaces are offered through tours of points of interest within the Basin, which allow knowing the history of the region and the management of ACUMAR.

» Environmental educational talks, workshops and events are held.

» The development of environmental projects in educational institutions and civil society organizations, such as contests and Olympics, is encouraged.

» Actions of preservation, promotion, dissemination and dissemination of the culture and historical heritage of the Matanza Riachuelo Basin are developed.

ACUMAR understands environmental education as a tool that implies a transversal and multidisciplinary approach, allows the transformation of current environmental problems and offers the possibility of thinking about a sustainable future.

#### 11.5.4 Health

The General Directorate of Environmental Health (DGSA) - within the framework of the Emergency Health Plan (PSE) - works on the identification of vulnerable populations and the so-called "environmental risk", its assistance and follow-up; in the improvement of access to health systems through actions framed in the strategy of Primary Health Care and in the recognition of health as a right of all inhabitants.

Among other actions, the DGSA reinforces the health networks and health promotion in the territory, in addition to monitoring the problems detected through the different devices it has, and making timely and effective interventions to reduce the impact of environmental risks.

Likewise, he works actively in the creation of networks and in the strengthening of local health services, as well as in the training of interdisciplinary teams. According to the specificity of the task, actions are articulated and carried out with other institutions and programs of the State at the national, provincial and municipal levels.

12 Environmental Sanitary Units (USAM) have been built, equipped and put into operation in the jurisdiction of the CMR with their respective observatories. There are still three Environmental Health Units to be built and the Hospital of Cuenca Alta Presidente Néstor Kirchner will be operational this year. 12 Mobile Health Units are also in operation, allowing health operations to be carried out, based on the principle of comprehensive health care for the WCR population and carrying out disease prevention and health promotion interventions.

The group currently has 12 local structures in the municipalities of Almirante Brown, Avellaneda, City of Buenos Aires, Ezeiza, La Matanza, Lanús, Lomas de Zamora, Marcos Paz, Merlo, Morón, Presidente Perón, San Vicente and one of Central Level of ACUMAR.

In the operating Sanitary Environmental Units, the Toxicological, Nutritional, Child Development and Pediatric Clinical History model established in the Emergency Health Plan was used. Access to health care for people with environmental diseases

This indicator measures the percentage of cases detected and derived due to suspicion of environmental illness at the time of the surveys carried out by ACUMAR in a specific period and place of the WRC, and that have effectively accessed the attention of the health system.

It allows to account for the evolution of cases after an ACUMAR intervention, distinguishing successful and unsuccessful management modalities in the articulation with various health effectors located in the Matanza Riachuelo Basin, in accordance with the following categories:

» Case settled: when the person accessed all the programmed referrals and resolved the reason for referral to GC.

» In follow-up: contact is maintained with the person and at the time of the update the programmed referrals have not yet been resolved.

» Rejected: people refused the interventions offered by the case managers.

» Lost: when you can not contact the person.

It should be noted that the universe addressed by this strategy, a majority proportion of cases are resolved or monitored.

CATEGORY	DESCRIPTION
CULTURE HERITAGE	uses, representations, expressions, knowledge and techniques -togetherwith the instruments, objects, artifacts and cultural spaces that are inhered to them - that communities groups and in some cases, individuals recognize as an integral part of their cultural heritage.
EDILICIO HERITAGE	real estate that due to its artistic or historical architectural values deserve to be conserved.
BRIDGES AND OPEN SPACES	bridges and spaces bordering on them such as bridgeheeds, docks, passages under bridges in the towpath
MONUMENTS	uses, representations, expressions, knowledge and techniques -togetherwith the instruments, objects, artifacts and cubruid spaces that are interent to them - that communities groups and in some cases, inviduals recognize as an integral part of their cubruid heritage.
CLUBS	real estate with sport and recreational use of social character and of publico or private access indistinctly. Social headquarters, stadium, etc.
URBAN AREAS	neighborhoods or certain sectors of houses or buildings singular, that have architectural, urbanistic values environmental and cubural
PARKS	squares and parks with characteristics of special environmental and ecological quality

#### »

FIG. 3.24 THE BASIN'S CULTURAL AND PATRIMONIAL HERITAGE SOURCE: ACUMAR

#### 11.5.5 Cultural heritage

The preservation of the cultural heritage is one of the territorial objectives of the Integral Plan of Ordinance of the Matanza Riachuelo Basin. In a document on heritage assets, tangible goods produced in the field of architecture and other urban features in the area of the lower basin have been identified and cataloged.

LOCATION OF INDUSTRIES, LOW AND MIDDLE BASIN

PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC

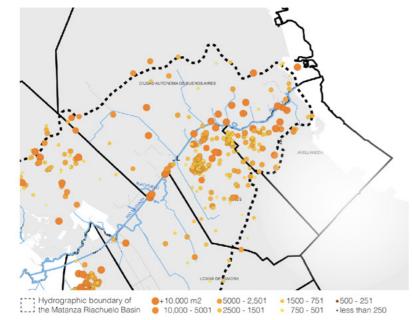
SOURCE: NATIONAL UNDERSECRETARIAT OF

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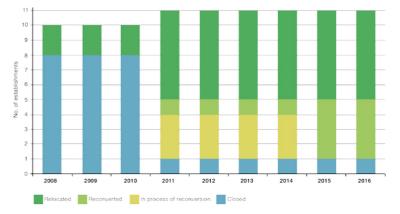
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FIG. 3.25

**CENSUS**, 2010



State of relocation and / or reconversion of chemical industries



>>

FIG. 3.26 STATE OF RELOCATION AND/OR RECONVERSION OF CHEMICAL INDUSTRIES SOURCE: ACUMAR, 2017

#### 11.5.6 Industrial

The indicator shows the number of registered establishments in the area of the Matanza Riachuelo Basin according to their magnitude and activity, according to the criteria described by the ISIC Code (International Standard Industrial Classification). It provides a standardized categorization of all registered establishments, based on the ISIC code, of international use and also extended nationally, combined with the size of each individual's payroll. Based on this information, it is possible to identify the composition of establishments in the Basin, anticipate their potential impacts and elements to be controlled by the agency. At the same time this information is key as an element when planning inspections and operations, as well as developing public policies within the Basin in the field of Industrial Control (fig.3.25 & 3.26)

#### 11.5.7 Transport networks

The Matanza Riachuelo River Basin forms an intersection between the south of the City of Buenos Aires and a large territory of the southern area of the Province of Buenos Aires. Hence, i importance for the connectivity between these two important areas of population and economic activity. At the mouth of the Riachuelo, on the Río de la Plata, the port terminals of Buenos Aires and Avellaneda are located. Throughout history there have been several projects to improve connectivity between both banks of the river, and also to take advantage of it to develop river transport. These plans generated advances in the connectivity of the territory but they were also interrupted at different moments in history.

At present, the Riachuelo constitutes the southern limit of the City of Buenos Aires and the Conurbano. The connection between both margins is made through various bridges built throughout the twentieth century.

The bridges for the crossing of vehicles over the Riachuelo are the New Avellaneda Bridge, the Pueyrredón Viejo Bridge and the Pueyrredón Nuevo Bridge that connect the neighborhoods of La Boca and Barracas with Avellaneda. And the Victorino Bridge of the Plaza, the Alsina Bridge and the La Noria Bridge that connect the neighborhoods of Barracas, Pompeya, Soldati and Villa Riachuelo with Lanús and Lomas de Zamora.

The lack of bridges for vehicles on the Riachuelo is a problem that has been pointed out many times in recent years. Currently, a new bridge is being built that will link the party of Lanús with Villa Soldati in the City, at the height of Lacarra Avenue.

In addition, the Basin is crossed by routes and highways that facilitate transportation and improve connectivity with the City. The Buenos Aires - La Plata highway crosses the Riachuelo at the height of La Boca and Avellaneda, and constitutes an important connection between Buenos Aires, La Plata and the intermediate municipalities.

The Ricchieri Highway and National Route 3 are fundamental access points to the city, and cross municipalities of the Basin such as La Matanza, Esteban Echeverria, Ezeiza, Marcos Paz and Cañuelas. Finally, 27 de Febrero Avenue is a way to enter the City from the Province. It runs along the margin of the Riachuelo in the City from the height of Puente la Noria to Pompeii.

There are also rail lines that connect various municipalities of the Basin with the City. The Roca Line links the Constitución de Buenos Aires station with the parties of the southern zone of the Conurbano and municipalities of the Province: Avellaneda, Lanús, Lomas de Zamora, Esteban Echeverría, Ezeiza and Cañuelas.

Another railway line is the Belgrano Sur, which connects the southern area of the City of Buenos Aires (the neighborhoods of Barracas and Parque Patricios) with the western and southwestern areas of the Conurbano, mainly the Matanza district. At present, the Belgrano Sur station is inefficient as an alternative for passenger transport due to the lack of connection to the city center. But at this moment a 5.6km viaduct is being built that will link it to the Constitución station and the underground network.

Another important element in the Cuenca's connectivity is the 35m space on each

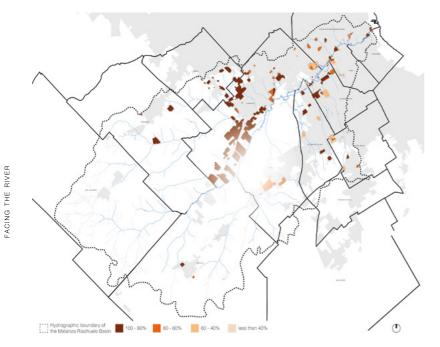
side of the river known as Camino de Sirga. This began to be recovered in recent years and is now mostly available for public use. On the City side, the relocations of certain stretches still interrupted by housing in the Barracas area remain. And the landscaping tasks advance to turn the Camino into a recreational and pedestrian space that will run along the river, from La Boca to Puente La Noria.

The Way of Sirga on the side of the Province is already completely liberated, and was equipped with a pedestrian and vehicle path that expanded the possibilities of access to the municipalities and the city.

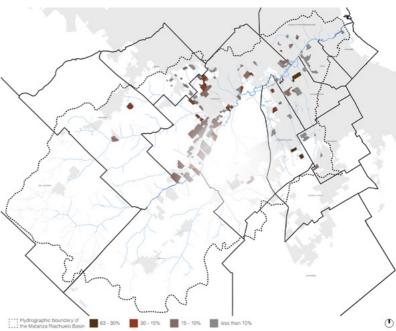
Finally, an important element in terms of connectivity in the Basin is the Ezeiza International Airport, the most important international flight arrival point in the metropolitan area of Buenos Aires.

#### 11.5.8 Energy networks

As from 2001, the country's main energy source is gas (54%) followed by petrol (35%) (Gobierno de la Ciudad, 2014). As mentioned, a large amount of the Basin's population lives in informal settlements, therefore, access to proper gas and electricity networks is not always granted. *Fig. 3.27 & 3.28* illustrate this situation.



>> FIG. 3.27 HOUSEHOLDS WITH NO ACCESS TO THE GAS NETWORK SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010



#### » FIG. 3.28

HOUSEHOLDS WITH NO ACCESS TO THE ELECTRICITY NETWORK SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010

#### 11.5.9 Basic sanitation networks

ACUMAR has taken the commitment to gradually, yet permanently, incorporate the resident population within the Matanza Riachuelo Basin to the potable water network and sewage collection services. To this end, both AySA and ABSA, in their capacity as concessionary companies for these services, carry out a very important set of maintenance and expansion works within their Master Plans.

#### Sewage system

The number of people that have been incorporated in the sewage service is very important to evaluate the progress made and is one of the main factors for the planned growth of the various activities within the Basin at the residential commercial and industrial levels. The incorporation of the population into the network is a process that requires a considerable effort in the planning of works that include not only the pipes, but also the construction of sewage treatment plants. For this reason, the set of investments in the medium and long term that should also consider the use of land and the growth of the population in each jurisdiction.

Table and graph 3.31 & 3.32 show the amount of population that the companies have planned to incorporate into the service, year by year from 2009 to 2014, and its comparison with the population incorporated in real terms. It can be seen that since 2011 there has been a large increase in the number of target population to be incorporated, compared to the years 2009 and 2010, this is because in that year ABSA took the concession of the water and sewage networks of the Cuenca Alta and Merlo (services that were previously supplied by different providers), thus becoming the only operating company and leading to the creation of a Master Plan for the Upper Basin and the Merlo Party (then Master Plan ABSA v1).

The graph also shows that the incorporated population is below the target population to be incorporated. This may be due to the fact that there are works that are either not yet finished, or are currently being implemented or planned, such as secondary and primary networks, which at the end will allow the population to connect to the network, increasing the incorporated population.

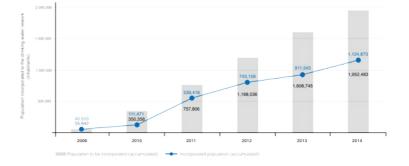
#### Drinking water network

This indicator shows the amount of population incorporated into the area with drinking water network service since the baseline year, and it is compared with the total target population to be incorporated per year in the Matanza Riachuelo Basin. (*fig.3.29 & 3.30*)

#### Rain water network

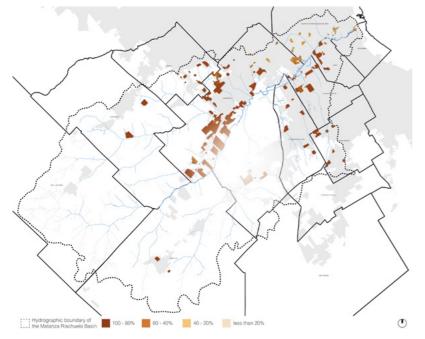
The Rainwater Drainage Plan of a water basin should be a short, medium and long term planning framework, aiming to achieve Integrated Water Resources Management (IWRM), through the integral management of the basin. Thus, the primary objective of the Master Plan must be the resolution of the main problems associated with water, from a social, environmental and economic perspective. The Plan distinguishes different action components and prioritizes projects to be addressed in the basin area, based on established lines of action.

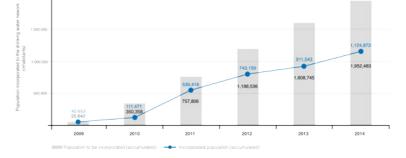
A Master Plan must propose an articulated and participatory institutional framework. with a regional or zonal organization and management structure, with the sole purpose of legalizing its existence and implementation. It is not logical to think that IWRM implies starting from the beginning with a basin application in its entirety and complexity, but with a partial implementation. However, this implementation must be carried out with an accurate view and a focus of the basin in terms of articulations, interrelationships and opportunities for the integration of actors and areas of the upper middle and lower reaches of the basin and of the administrations that intervene in them The proposed actions in relation to the pluvial network refer to proposed conceptual criteria for the integration, articulation and updating tending to the completion and development of the basic drainage plan for the drainage of the Matanza Riachuelo River Basin, taking as a central thematic axis the problem water associated with the amount of water.



>> FIG. 3.29 HOUSEHOLDS IN INFORMAL SETTLEMENTS WITHOUT ACCESS TO DRINKING WATER SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010







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FIG. 3.31 HOUSEHOLDS IN INFORMAL SETTLEMENTS WITHOUT ACCESS TO THE SEWAGE SYSTEM SOURCE: NATIONAL UNDERSECRETARIAT OF PLANIFICACTION AND PUBLIC INVESTMENT, AFTER INDEC CENSUS, 2010

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2.000.00

FIG. 3.32 POPULATION NOT INCORPORATED TO THE SEWAGE NETWORK SOURCE: INFRASTRUCTURE COORDINATION, ACUMAR, BASED ON THE INFORMATION SUBMITTED BY AYSA AND ABSA IN MARCH 2017

#### 11.5.10 Towpath

#### Clearance and paving of the towpath

'Towpath' is understood as the total length of the path by the river, consisting of a free strip of 35 free meters on both banks from the shoulder of the respective slope, between the mouth of the river and Provincial Route N ° 4

The indicator shown in figs. 34-37 measures the evolution of the Towpath according to two criteria: the first one measures the evolution in its clearance (free, partially obstructed and obstructed), while the second one measures the evolution of its paving (paved, in process of paving and to pave).

The baseline of the indicator reflects the situation of the Towpath in 2008, the date on which the negotiations for its liberation and the paving works began. At that time, there was 55% of free path and 40% of paved path. In the present update of the indicator, it maintains the progress of 89% of free path and 78% of paved path informed in the previous semester.

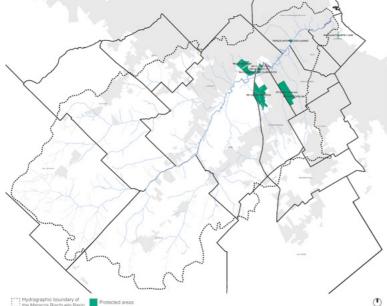
#### 1.5.11 Environmentally Protected Areas

The Matanza Riachuelo river Basin has a very important natural heritage. The environmental protection areas are identified zones within the Basin that are prioritized for taking concrete actions of conservation and management, due to the presence of biodiversity. The conservation of these areas is essential for sustainable development within the Basin. Biodiversity and ecosystems provide large environmental benefits for society, particularly wetlands which are a priority in ACUMAR's work.

ACUMAR provides support through management and assistance in the development of management plans, environmental education plans and monitoring. In addition, areas that do not yet have effective protection in the territory are detected, in order to start working on the same way on them in the near future

So far, 13 priority areas for biodiversity conservation have been identified. Of these, nine have a formal legal protection figure and eight are wetlands in their greatest extent

The protected areas are the following: La Saladita Municipal Reserve (Avellaneda), Santa Catalina Municipal Reserve (Lomas de Zamora). Santa Catalina Provincial Reserve (Lomas de Zamora). Bañados de Lomas de Zamora (Lomas de Zamora), Rocha Lagoon (Esteban Echeverría), Ezeiza forests (Ezeiza), Evita City Reserve Project (La Matanza), Morón Nature Reserve (Morón). El Durazno Stream Reserve (Marcos Paz), Juncal Guard Reserve (Cañuelas), San Vicente Reserve Lagunas (San Vicen Vicente Reserve Lagunas (San Vicente), Paleontological Reserve "Francisco P. Moreno" (Marcos Paz), and the Costanera Sur Ecological Reserve (Autonomous City of Buenos Aires). (fig.3.33)



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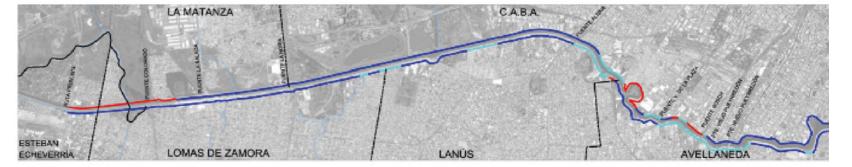
FIG. 3.34 - 3.35 ENVIRONMENTALLY PROTECTED AREAS ACUMAR (2017),

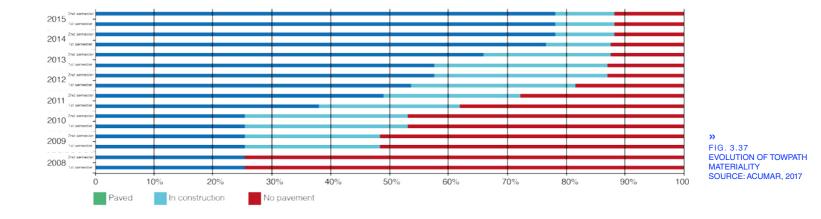
## Reserva Natural Laguna de Rocha Ley 14.488

PATH TO PAVE PATH IN WORK

PAVED PATH







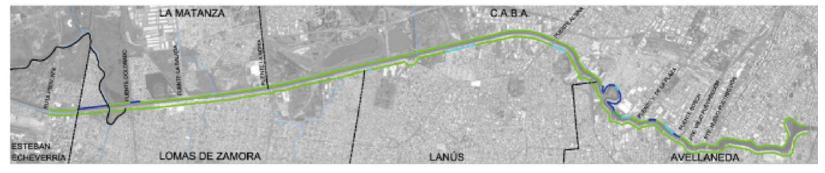
FACING THE RIVER

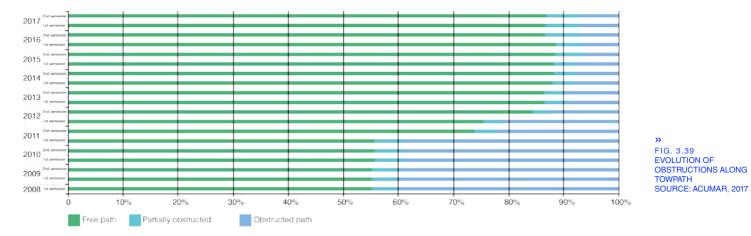
PATH WITH OBSTRUCTIONS

FREE PATH

PARTIALLY OBSTRUCTED PATH

#### » FIG. 3.38 STATE OF OBSTRUC-TIONS ALONG TOWPATH SOURCE: ACUMAR, 2017





# PROBLEMS AND GOALS

# Environmental axis

#### **Problems**

» Severe environmental vulnerability caused by the Basin's historical contamination: soil, subsoil and groundwater contamination; air pollution with unhealthy substances; surface water contamination due to the dumping of industrial and domestic effluents, as well as solid waste.

» Absence of standards for the protection and enhancement of existing environmental heritage.

» Degradation of the natural landscape and important decrease of the autochthonous biodiversity.

#### Goals

- » Recover biodiversity in the Basin
- » Improve water and air quality to ensure good living conditions for the inhabitants
- » Value the coastal edge projecting strategic works to achieve its incorporation into the daily urban circuit, providing more good-quality green spaces for the neighbourhoods and incorporating the needed services for public use.
- » Raise awareness about the care of the Basin's environmental quality.

#### 14. SOCIO-SPATIAL AXIS

#### **Problems**

» Overcrowding: informal settlements in degraded areas, lack of infrastructure and deficit in the provision of public services, including areas with water risk

- » Predominance of land uses for urban equipment for production and industries, as well as a spontaneous and unplanned industrial fabric.
- » Steady advance and consolidation of informal dynamics of urbanization and devaluation of real estate prices when approaching the edge of the river.
- » Deficit of public space and of green areas of Metropolitan scale
- » Lack of a proper public transport network and adequate access roads to the area
- » Little commercial activity and services

#### Goals

» Improve habitat conditions, service infrastructure, as well as housing and health.

» Improve longitudinal and transversal connectivity, promoting multiple types of transport (green transport, bus rapid system, tramway, bike paths, pedestrian paths), incorporating both margins of the basin in the same common territory in importance.

- » Strengthen the center and the subcenters, projecting an efficient connectivity and consolidating the identity of each of the neighborhoods.
- » Promote a greater densification of the territory, according to the offer of sanitation services available, in order to optimize the costs of urbanization and expand the supply of public green spaces (parks, pedestrian paths, plazas).

#### **15. ECONOMIC AXIS**

#### Problems

» Area of little economic development given the level of accumulated degradation and the non-incorporation of the Basin into the collective thinking of the inhabitants of the AMBA (Metropolitan Area of Buenos Aires). The territory and its urban potential have been ignored and not given the corresponding importance, in spite of having a great population.

» Important land devaluation as approaching the river.

#### Goals

» Encourage public-private partnerships to create a larger investment capital with alternative management and implementation tools, achieving a better identification of needs with an optimal use of resources, thus adding value for the inhabitants, as well as protecting the public interest.

» Develop vertical and horizontal models of distribution of financial resources to reduce inequalities between territories within urban centers and between urban and rural areas, to promote an integrated and balanced territorial development.

» Make use of international public financing, including official development assistance (among others), to catalyze the mobilization of additional resources from all available sources, both public and private, in areas of sustainable urban and territorial development. This can lead to risk mitigation for potential investors, in recognition of the fact that international public financing is a fundamental complement to the efforts made by countries to mobilize public resources at the domestic level, especially in developing countries with limited internal resources, such as Argentina.

#### 16. TRANSVERSAL AXIS: LEGAL-ADMINISTRATIVE AXIS

#### **Problems**

» Different temporalities: on the one hand, the short and medium terms of urban processes and on the other, the long term that environmental processes imply.

FACING THE

RIVER

» ACUMAR competences: the Authority cannot operate on the territorial ordering of jurisdictions because of the acquired ordinance norms which are prior to the creation of the Basin's Authority.

» Lack of Regulation of Law 25,675 (general Law of the Environment) in some jurisdictions.

» Local governments do not have a binding participation in the interjurisdictional institutional space, which reduces their capacity for action and commitment to a comprehensive view of the Basin's common problems.

» Absence of local and regional urban planning in an inter-institutional and interjurisdictional way, concluding in disparity of criteria of intervention on the Basin (variations in quality and quantity of projects by the 15 jurisdictions)

#### Goals

 Interjurisdictional compatibility of land use, urban planning and environmental standards throughout the Basin and of occupation and densification criteria.
 Selective conversion of land uses according to the recommended development scenario.
 Promotion of greater densification of the territory according to the offer of sanitation services available, in order to optimize the costs of urbanization and expand the supply of public green spaces (parks, pedestrian paths, squares).

#### 17. OBJECTIVES ACCORDING TO SCALE

#### Local Scale

» Cover current needs without compromising the future of other generations.

Metropolitan Scale

- » Strengthen the basin by improving the public transport network and access roads to it, thus consolidating a new centrality and point of cultural, social and economic interest of the AMBA.
- » Achieve that the Urban Nodes proposal becomes a methodological typology of territorial intervention for similar scenarios.

#### **Country Scale**

» Ensure that the initiatives and programs proposed serve as an influence for other areas with a similar problematic.

#### **Regional Scale**

» Make the Matanza Riachuelo River Basin an exemplary model for regional watershed management.



# MANAGEMENT INSTRUMENTS AND PARTICIPATORY ACTIONS

# Participatory processes

In relation to the framework that establishes public participation in the management of policies within the scope of ACUMAR, we must refer, in the first instance, to the process that, starting with the 'Mendoza' Judgment of 2008 establishes the conformation of a Collegiate Body, with participation of the Nation's Ombudsman, Environment and Natural Resources Foundation (FARN). Greenpeace Argentina Foundation. Center for Legal and Social Studies (CELS). Neighborhood Association of La Boca. Citizen Association for Human Rights (ACDH), being its mission institutional control of the judgments and obligations that the Court establishes in this iudaement.

From the participatory point of view in the design and implementation of ACUMAR's public policy, Resolution No. 5/2017 must be mentioned, for it establishes the organism's internal regulations, missions and uses, as well as the two areas within ACUMAR established as instances of social articulation. This is, on the one hand, the area dedicated to the Basin's Municipalities, the Municipal Council (Articles 19 to 24, ACUMAR Resolution No. 5/2017); and, on the other hand, the Commission of Social Participation (CPS, Article 16 to 18 Resolution ACUMAR No. 5/2017); that

addresses both the communication with the entities prepared for the control of public policy (the Collegiate Body), and the search of consensus with the Basin's representative actors on the general management guidelines, as well as on specific interventions (programs, projects, events and actions) that involve a sector determined by its territorial impact. An example of this are management tables that accompany the integral processes of urban improvement and relocations. In both cases of the Municipal Council and the CPS, the type of participation channelled is non-binding and is aimed at the integration of these legitimate and representative stakeholders of the Basin in the Comprehensive Environmental Sanitation Plan (PISA).

The Strategic Territorial Plan (PET) is being developed within the PISA's framework and in line with the National Territorial Strategic

Plan<sup>1</sup>, thus incorporating the PISA of the Matanza Riachuelo Basin into a National strategic policy. It will potentially lead to direct territorial impact and improvement. It will use ACUMAR's institutional participatory channels to establish the participatory instances involved in its design and implementation at the Basin's scale. In addition, by being included in the National<sup>2</sup> scheme and by subscribing to the New Urban Agenda, the platform of relevant actors will expand as a need to think about the Basin's territory as a potential for defining a model of its own, yet considering it is a part of a larger ecosystem, such as the Metropolitan region, the National territory and the management of river basins in general, at the global scale.

It is clear that the type of participation that is promoted differentiates local actors with direct interference in the Basin's management process, thus allowing to establish a scheme that ranges from the control of participation in public policy to non-binding participation in the design and implementation of policies with territorial impact. This is possible due to the fulfillment of the obligation to have access information in a clear and direct manner, as stated in the PISA, in line with the court decisions and Law 27,275.

At a global level, the exchange of virtuous experiences respecting development solutions implemented by other countries or regions contributes to a territorial approach and broadens the possibilities of viability management based on knowledge about new technologies and ways of managing resources in order to achieve a sustainable development. In concrete terms, the process involved in the consolidation of the PET as a management tool for the Matanza Riachuelo Basin proposes a permanent dialogue with the jurisdictionally involved Municipalities, to achieve the implementation of its specific strategic guidelines on the territory, as well as inviting other relevant actors to participate.

To the date, general Strategic Guidelines have been defined, consulted through meetings and discussion tables with the specific internal areas of ACUMAR, as well as Municipal participation in the scope of the Municipal Council. In addition, the returns of the two significant citizen consultation processes that have taken place in the year 2017, the UN-Habitat Urban Thinkers Campus 'Facing the River' and the Public Hearing of November 3rd. 2017, have been incorporated to the Guidelines, Also, ACUMAR is currently working on the presentation of the Territorial Strategic Plan of the Matanza Riachuelo Basin in the World Urban Forum (WUF9) organized by UN-Habitat, which will take place during the month of February 2018 in Kuala Lumpur, Malaysia. With this action, ACUMAR seeks to position the Basin on the world agenda, thus being able to discuss its problems and experiences with the world leaders in urban development and enrich the work to be carried out.

<sup>1</sup> https://www.mininterior.gov.ar/planificacion/plan-estrategico.php <sup>2</sup>Process developed by the Ministry of the Interior, 2016

#### FIG. 5.1 EDUCATIONAL ACTIVITY BY THE RIVER

Brief participatory Background report Acumar

#### **18.1 PUBLIC HEARINGS**

The Public Hearings about the Matanza Riachuelo River Basin unpin from the mentioned 'Mendoza' Judgment of 2008, where their scope is specified based on the rulings of the enforcement courts in the framework of one the PISA's main strategies, making all information about the work being carried out in the Basin's territory accessible and transparent, in compliance with law 27,275.

#### 18.1.1 Public Hearing, 2017

The latest Public Hearing was convened by the Matanza Riachuelo Basin Authority (ACUMAR) by Resolution of the Presidency of ACUMAR No. 305-E / 2017, published on October 3, 2017 in Argentina's Official Gazette. The hearing was held on November 3. 2017 at the INCAA building, located at Eugenio Burzaco Nro. 74, Municipality of Almirante Brown. Province of Buenos Aires. This was done in order to promote an effective citizen participation and consultation on the "Protocol for dealing with processes of relocation and redevelopment of shanty towns and slums in the Matanza Riachuelo Basin" prepared by the Territorial Management of ACUMAR.



The registration for the Public Hearing was carried out online, from Thursday, October 19 until Tuesday, October 31. A total of 41 (forty-one) valid registrations were received, where 33 were registered as interested individuals and 8 as representative of the Legal Entity. Those who did it as representatives of Legal Entities did so on behalf of: General Defender of the Nation; Public Ministry of Defense of the Autonomous City of Buenos Aires: Ombudsman of the Autonomous City of Buenos Aires: Ombudsman of Lanús: Housing Institute of the Autonomous City of Buenos Aires (IVC); Environment and Natural Resources Foundation (FARN); Civil Association Center for Legal and Social Studies (CELS): Civil Association for Equality and Justice (ACIJ). On the day of the Public Hearing, 29 people spoke and were summoned in accordance with the Order of the day published on the ACUMAR website as well

as provided at the time of the reiteration of the call. Of the total number of registrants, 14 were not present at the time of their call, according to the Agenda, or at the end of the exhibitions when the call was repeated. The exhibitors present belonged to different neighborhoods of the following Basin's Municipalities: Avellaneda, Autonomous City of Buenos Aires, Esteban Echeverría, La Matanza, Lanús and Lomas de Zamora. It is estimated that about 200 people from the different parties of the Matanza Riachuelo Basin participated as listeners.

The Public Hearing was chaired by the President of ACUMAR, Ms. Dorina Soledad Bonetti, who appointed other ACUMAR officials who, in succession, exercised the Presidency of the same: Ms. María Fernanda Reyes, representative of the Council Director of ACUMAR of the CABA, Arq. Álvaro Argüello, Coordinator of Habitat and Urban Planning of ACUMAR and Lic. Regina Ruete, Director of Territorial Organization of ACUMAR.

The Mayor of the Municipality of Almirante Brown, Dr. Mariano Cascallares, the Minister of Environment and Sustainable Development of the Nation, Mr. Rabino Sergio Alejandro Bergman and the President of ACUMAR, Ms. Dorina Soledad Bonetti, participated in the opening of the Public Hearing.

The Director of Land Management of ACUMAR, Lic. Regina Ruete; the Coordinator of Social Intervention, Prof. Inés López Olaciregui, and the Coordinator of Habitat and Urban Planning of ACUMAR, Arq. Álvaro Argüello, presented the objective, scope, construction process and the main guidelines of the Protocol put to consultation in this Public <sup>3</sup>.

#### Executive Summary of the Protocol

The "Protocol for dealing with the relocation and redevelopment processes of shanty towns and settlements in the Matanza Riachuelo Basin" constitutes a methodological framework for the development of housing programs for redevelopment and / or relocation in towns, settlements and housing complexes. The objective is to guarantee that these processes safeguard the social, cultural and economic rights of the affected population, and that in this way the housing interventions in each territory achieve the effective improvement in the quality of life of the neighbors.

Based on the objective of improving the urban-housing situation and reducing the environmental risk of the vulnerable population living in towns and settlements, the protocol addresses both relocation processes and urbanhousing improvement (redevelopment) processes. In both cases, it recognizes the need to safeguard the right to access information, effective participation and the involvement of affected neighbors in the implementation of housing programs.

This document is an instrument for order, that proposes to harmonize the different protocols in the matter, establishing a common methodological framework of application in all the Basin's districts. It establishes general guidelines for the planning and development of programs, as well as the stages of the processes and minimum standards for housing projects.

The guidelines for redevelopment and relocation in towns and settlements recognize the socio-environmental risk as the main criterion for the prioritization of housing interventions, from which comprehensive action plans are drawn up contemplating housing and urban dimensions that guarantee the quality of life. These proposals should consider a range of housing alternatives that allow addressing the diversity of existing situations, and consider the economic sustainability in terms of financing and productive activities of the population.

The participation of people directly affected constitutes a central axis of the protocol. It establishes dialogue instances and consensus building in each stage of the process (diagnosis, planning, execution, post-intervention approach, monitoring and evaluation) through work tables and other participatory methods.

The document recognizes the importance of providing a comprehensive planning based on the preparation of the Strategic Plan, the Contingency Plan and the Relocation and / or Redevelopment Program for each neighborhood. This means that, from the first stage of the process, the definition of the proposed housing solutions, neighborhood sectors affected by consolidation or relocation, contingency actions aimed at guaranteeing minimum conditions of habitability and access to public services until the realization of the definitive solutions and the specific planning for each stage of the redevelopment works or for each stage of relocation in the case of relocations. It also introduces the need to generate instances of evaluation and monitoring of processes.

On the other hand, the protocol includes specific actions over time throughout the process, since relocations and redevelopments are social processes, and as such, are developed during all stages (before, during and after) of the consolidation works of sectors. Each of these stages requires the execution of specific activities in both the social and urban dimensions. In addition, the quality of the developed housing is considered by setting minimum standards in the provision of adequate housing and public infrastructure.

The protocol recognizes that the approach and implementation of relocation or redevelopment programs are the responsibility of local jurisdictions and require institutional structures commensurate with the scope of the processes. The Matanza Riachuelo Basin Authority complements this approach by collaborating in the quality of the processes through training, participation in the work tables, supervision and permanent control. In addition, it coordinating actions with areas of the Provincial and National State and with the Government of the Autonomous City of Buenos Aires (GCABA).

ACUMAR presents this protocol as a consultation document to be submitted to Public Hearings. For it formulation, preliminary consultations were made with suitable actors. In this sense, the Public Hearing constitutes one more instance of the process of the protocol's elaboration and consultation, and an opportunity to open participation to the neighbors affected by these processes and to all the Basin's inhabitants.

The protocol deals with the modality of Territorial Management Tables as a participatory management scheme at the project implementation scale, for access to specific public services and housing.

The Collegiate Body is, by order of the National Supreme Court of Justice, in charge of monitoring the Mendoza Judgement. Its mission is to control the obligations that the Court established.

The objective is to guarantee that these processes safeguard the social, cultural and economic rights of the affected population, and that in this way the housing interventions in each territory achieve the effective improvement in the quality of life of the neighbors.



» FIG. 5.2 EDUCATIONAL ACTIVITY

### 18.1.2 Other Public Hearings: years 2012 and 2016. Brief review.

On May 29, 2012, a Public Hearing was held in the town of Cañuelas. The "CALL FOR PUBLIC HEARING MASTER PLAN OF INTEGRAL MANAGEMENT OF SOLID URBAN WASTE-ACUMAR" (EXP-ACR 2029/2012) was carried out by 65 registered people, 36 exhibitors and 15 special guests.

The Plan was divided into two parts: 1. General Guidelines and Diagnosis (introduction, general and specific objectives, scope, legal and institutional framework, diagnosis).

2. Strategic axes (strategy, action plan, schedule and costs, annexes)

According to the file (EXP-ACR 2029/2012), this Public Hearing did not comply with the requirements established by Decree No. 1172/2003. This file does not include the preparation of the Final Report that the implementation area should develop, nor the Final Resolution of the Hearing, responding to the concerns of the participants<sup>4</sup>.

Regarding the Hearing held on September 16 2016 in the City of Buenos Aires, an "UPDATE OF THE INTEGRAL PLAN OF ENVIRONMENTAL SANITATION AND START OF THE PROCESS OF CONSTRUCTION OF A SHARED VISION OF THE CMR" was discussed (EXP-ACR 770/2016). The objective was to present the recent update of the Comprehensive Plan for Environmental Sanitation (PISA) and to begin the process of building a shared vision for the Matanza Riachuelo River Basin. An estimated of 250

people attended this Hearing.

#### **18.2 MUNICIPAL COUNCIL**

During the months of April, May and June of 2017, the first round of meetings was held with the Basin's Municipal governor, to discuss the programs and projects being carried out by each on in particular on the Basin's territory.

The main objective of these meetings was to exchange ideas and visions that each Municipality has for its riverfront, to be included in the PET formulation of the Basin.

This set of meetings is added to the meetings held in this area of Municipal participation that include calls that contemplate the following themes:

» 05/07/2014 Vulnerability map, relocations of families and monitoring of the state of surrender presentation. » 08/12/2014. Environmental Contingency Plan - low sub-basin. » 08/20/2017 Environmental Contingency Plan - medium sub-basin. » 04/09/2014. Environmental Contingency Plan - high sub-basin. » 01/12/2015. IBRD Loan No. 7706. » 01/30/2015 Requests for reports from the Federal Courts of CABA and Morón. Surrender of the margin cleaning program. » Monitoring of the state of Ecopoints. » 03/12/2015. Cleaning of CAVAS. » 04/09/2015. Work held by

<sup>4</sup> The record of what happened at the hearing is recorded in the shorthand version of it available online at http://www.acumar.gov.ar/pdf/audiencia\_taquigrafica.pdf

the Cañuelas Hospital. Municipal Qualifications on Industrial Control. 07/29/2015 Accountability of the Margins Cleaning Program. Situation status of the Contingency Plan.

»10/15/2015 Industrial Control 2016 Environmental Education Plan. Purchase of trucks, recycling stations, retro shovels and compactors. Relocations and actions of territorial approach; 11/16/2015: Update of the Comprehensive Environmental Sanitation

#### Plan (PISA).

» 05/17/2016 Situation of dumps and ecopoints . Accompaniment Program to the Municipal GIRSU (Integral Management of Urban Solid Waste). Renditions of the Municipalities. Operatives of the Environmental Health Units.

» 06/15/2016 Presentation of the Draft of the Comprehensive Environmental Sanitation Plan.

» 07/20/2016 Contingency plan for floods.

» 07/27/2016. Bonding, control and proper operation of disconnected from water and sewers. Informal settlements and emergency neighborhoods.

»9/19/2016 Presentation of projects of the Culture and Education Heritage Coordination; 12/06/2016: Prevention policies against Dengue, Sika, Chikungunya.

05/12/2017 Works for the provision of water, sewage and waste treatment of each Municipality.

» 08/30/2017 Presentation of the work program on the Municipal Girsu Plan.

» 11/24/2017 Work plan for the Integral Management of Urban Solid Waste (GIRSU). Zoonoses and rat extermination plans. In the Basin's management agenda prior to 2014, the following problems are highlighted: industrial control system in the different

municipalities and closures carried out together with the Municipalities; industrial reconversion plans; detection of throwing points and cleaning of garbage dumps; presentation of the GIRSU Program (Integral Management of Urban Solid Waste Program); report on the status of debts and surrenders; cleaning of margins and corridors: needs and obligations assumed by ACUMAR and the Municipalities: presentation of water and sewer programs; presentation of public works in the Municipalities; presentation of education campaigns; presentation of the Health Program; presentation of the Meteorological Station Program: dealing with anonymous complaints.

In 2018, the meetings with all Municipalities will be retained by subbasin (High-Medium-Low) to discuss and articulate the projects defined within the framework of the development model involved by the PET.

## 18.3 Academic Advisory Committee (Universities)

As a coordinating agency, ACUMAR guides the execution of the environmental policy to be executed in the Basin's territory. This environmental policy, derived from the PISA, involves in the approach of the problems and in the execution of the solutions, the participation of a multiplicity of public and private organisms, including the Academia.



that created the Basin Authority, and in accordance with the provisions of Art. 2 and 5, the ACADEMIC ADVISORY COMMITTEE is created by Resolution N ° 805/2013.

Therefore, the Universities detailed in Art. 3 of Resolution No. 805/2013, were invited to participate in the design and implementation of the strategic lines developed in the PISA, thus allowing the generation of a virtuous relationship between political decisions, technical expertise and scientific knowledge.

Likewise, the COMMITTEE may promote the development of joint activities of research, dissemination, participation, exchange and the development of executive projects that promote compliance with the general and specific objectives defined in the PISA, and may instruct in the call for competitions, granting of scholarships, mentions and awards.

In this manner, the creation of the

#### FIG. 5.3 SURVEY IN AN INFORMAL SETTLEMENT

Academic Advisory Committee is valued as a field of coordination and articulation between the different actors, ACUMAR's Authorities and technicians and specialists designated by the National Universities, in the case they are based within the Basin or have recognized experience in the topics related to the Matanza Riachuelo River Basin, as established in Art. 3 of Resolution 805/2013.

The Committee is incorporated as one more element in the organization's Institutional Strengthening Strategy, providing the management of ACUMAR's Environmental Policy, extended scientific support in thus initiating a more extensive and methodologically designed construction process to generate "productive alliances" between the work teams, both of ACUMAR and those developing within the Universities.

# STRATEGIC GUIDELINES

# Strategic vision

#### **20. STRATEGIC VISION**

Taking the Basin as an ecological unit due to its particular conditions, the approach to its planning will be based on the Territorial Environmental Ordinance, a figure that incorporates the General Law of the Environment N° 25676/02 in its articles 9 and 10, which contemplates "The political, physical, social, technological, cultural, economic, legal and ecological aspects of the local, regional and national reality". However, the lack of regulation by some local governments prevents its full application in each jurisdiction.

This approach allows to articulate both the particularities of the territory and the environment that its composed by. These particularities arise because of their interjurisdictional nature and in turn constitute an obstacle to implement policies and actions within the framework of an Environmental Management Plan for the basin. This is due to the autonomy acquired by the City of Buenos Aires and the competences that the Province of Buenos Aires and the Municipalities have in matters of territorial organization, since they are prior to the creation of ACUMAR. At the same time, as local governments do not have a binding participation in the interjurisdictional institutional space, the

capacity for action and commitment to the integral view of the Basin's common problems is reduced.

This particular context that makes up the Matanza Riachuelo River Basin is due to the coexistence of different temporalities: on the one hand the short and medium term that involve urban processes and, on the other hand, environmental processes that take much longer periods which exceeds its, as well as political management periods. For these reasons it becomes a new difficulty for achieving compatibility.

Due to the above mentioned, the approach can not be limited to the territorial ordering, as it is supposed by certain Provincial and Municipal regulations, but the environmental logic must be articulated with the Metropolitan scale, treating it from a territorial perspective. In addition. the New Urban Agenda 2030 proposed by UN-Habitat, will be a key input in the formulation of a State policy aimed at the Matanza Riachuelo Basin, incorporating its recommendations to achieve the improvement of environmental quality and life in the area. , in accordance with the international agenda.

#### 21. SCENARIOS

An evaluation of the future actions on the Basin based on three possible scenarios is proposed, in order to analyze the impact that these imply in a productive, social and environmental dimension:

1. A first scenario arises in which, following the limitations that the authority and local governments expose, only continues with the actions of the Municipalities and the needed response to the Judicial mandates. Therefore, the changes and actions in the Basin will continue to be segmented and fragmented, with limited articulation and integrality capacity, focused on responding to specific, emergency and extreme local needs depending on the available resources of each particular jurisdiction, specific need or social or judicial demand that both the Authority and the Municipalities establish.

2. A second scenario is proposed, in which a policy of gradual and progressive industrial reconversion is implemented with the binding participation of local governments and social actors, aspiring to a greater coexistence with residential and recreational use, with a strong preservation and reconversion of the existing building stock and public spaces. This last measure is proposed in order to emphasize in particular the riparian heritage of both margins, reverting the role that the river takes today in the territory's fragmentation. This would imply operating both in the competence of the Authority and in the binding participation of each Municipality, so that they are not consultative agencies but participants of the proposed Urban Planning Proposal.

**3.** As third scenario, the total reconversion of the land use is proposed, making the Basin a green corridor, eradicating the polluting industry, thus generating a strong negative impact on taxation and employment.

Depending on the effects identified in each case, we consider the second scenario would be the most beneficial. The missions and functions of each iurisdictional unit are reconfigured, including the competencies of the Basin's Authority, and integrally reconverts both coasts of the river (in particular through the lower basin). This will involve taking short, medium and long-term actions delimiting the extension of the lower basin into integral management units that favor the articulation of the different governmental, social and economic actors. In this way, common actions would be generated in both margins that tend towards an economical development of the whole area. hence favoring the specialization of the activities and generating very rich synergies for both the public and private sectors.



FIG. 6.1 SPECIAL ROWING ACTIVITY ALONG THE RIVER

#### 22.3 STRATEGIC GUIDELINES

With the aim of configuring responses to the different conceptualizations conformed in the diagnostic stage, the strategic guidelines proposed below will define the previously described structuring axes to frame programs and projects in order to reverse the problems posed.

Planning policies are suggested in order to transform the territorial reality and express the political will to articulate the actions and links required to carry them out. These policies aim to overcome conflicts and take advantage of local opportunities for the improvement of development conditions following the objectives of sustainable development. When defining the local Strategic Guidelines, the guidelines of a National scale published by the Federal Planning Council, as well as those of the corresponding Provincial scale and those that derive from Territorial Plans at a regional or micro-regional level that include the Basin, must always be followed

#### 22.1 Socio-Ecological Model and Central axes

ACUMAR's socio-ecological model responds to a systemic approach to reality and represents the set of elements analyzed.

These elements are organized into four subsystems that are also interrelated:

» Institutional
 » Economical
 » Social
 » Environmental

The Institutional subsystem includes organisms, structures and regulations. The Economical subsystem, considers all the aspects related to production. consumption and the anthropic environment. The Social subsystem refers mainly to the dynamics linked to demography, population distribution, health and education. The Environmental subsystem includes issues related to the natural environment, biological processes and ecological relationships. The dynamics that are established within the subsystems, and between two or more of them, are measured by indicators.

From here arise three central Strategic Axes, which structure the actions:

- » Environmental axis
- » Socio-spatial axis
- » Economical axis

Legal-administrative actions which organise the territory are essential for the success of all the rest of the actions. For this reason, it will be taken as a Transversal Strategic Axis, for it affects and structures the central Strategic Axes, with the objective of facilitating the management of the projects necessary for the fulfillment of the desired results.

#### 22.2 Axes of action

ACUMAR works, within the framework of the Comprehensive Plan for Environmental Sanitation (PISA), with specific short, medium and long-term objectives, to cover all the variables of the existing problem in the Matanza Riachuelo River Basin. The lines of action are organized as follows:

- » Control and monitoring
- » Institutional strengthening
- » Waste management
- » Construction works and infrastructure
- » Territorial planning
- » Health

ACUMAR articulates and coordinates with the jurisdictions and public bodies actions and concrete works for the benefit of the inhabitants and the environment.

With regard to prevention, it promotes activities to promote values related to a participatory and responsible citizenship, and addresses health related problems.

As for control, it focuses on industrial and solid waste management, applies preventive measures and evaluates the changes that occur in the environment.

In this way, all the lines of action form a systemic and integral way of addressing the Basin's problems, thus achieving three fundamental objectives: improving the quality of life of the population, recomposing the environment and preventing future damage. In ACUMAR, management, prevention and control are the effective ways to guarantee the recovery of the Matanza Riachuelo River Basin.

#### 22.3 Strategic Guidelines

Next, a proposal of Strategic Guidelines is proposed, that will guide the future creation of programs and projects within the framework of a Territorial Strategic Plan for the Basin.

#### 22.3.1 Environmental Quality

» To recover the environmental quality, generating an environment conducive to the habitat and for the regeneration of nature

The recovery of the environmental quality of the Matanza Riachuelo River Basin is the largest effort required in the area. It is crucial in order for the development of any intended strategies for the area. As already mentioned, the Basin is an area of serious environmental vulnerability. caused by its historical contamination: contamination of soil, subsoil and groundwater; air pollution with unhealthy substances: surface water contamination due to the dumping of industrial and domestic effluents as well as solid waste. In addition to the verv serious implications of poor environmental quality in health, it also has many effects on the quality of life since, for example, it makes it impossible to create useful public space, urban life, etc



"FIG. 6.2 NATIVE PLANTS ON THE EDGE OF THE RIVER

#### Guidelines

» Ensure a healthy life and promote well-being for all, at all ages.

» Guarantee the availability of water and its sustainable management and sanitation for all.

» Adopt urgent measures to fight climate change and its effects.

» Significantly reduce the number of people affected by environmental health problems caused by the historical pollution and degradation of the area, with special emphasis on the protection of the poor and people in vulnerable situations.

» Reduce the area's negative environmental impact per capita, paying special attention to air quality and waste management.

» Promote healthy societies by encouraging access to adequate, inclusive and good-quality public services as well as to a clean environment, taking into account guidelines about air quality, including those developed by the World Health Organization.

» Support the rational management of waste and reduction of waste generation, from an environmental point of view, through the reduction, reuse and recycling of waste, the minimization of landfills and the conversion of waste in energy when it is not possible to recycle or when this option offers the best possible environmental results.

#### 22.3.2 Structure and centralities

### » Foster the Basin as a linear centrality and a set of adjacent subcentralities

The urban space is the result of the combination of localized human activities that require concentration for their development. As a product of economic, political, social and ideological processes, various urban centers of different size and complexity emerge, which are linked to each other and to the physical environment through a specific urban structure. The concepts of structure and centrality refer to those aspects of the City that constitute the different types of networks and nodes that exist in it and facilitate the different flows between urban centers, especially transport networks and commercial nodes.



FIG. 6.3 ROWING ACTIVITY ALONG THE RIVER

» Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening National and

regional development planning.

» Promote a spatial development that orients urban extension prioritizing urban renewal through planning for the provision of accessible infrastructures and services, sustainable densification and the compact design and integration of new neighborhoods in the urban fabric, preventing urban expansion and marginalization.

» Encourage territorial and integrated urban planning, including urban extensions planned on the basis of equity principles, the effective and sustainable use of land and natural resources, compactness, polycentrism, connectivity and adequate densities and multiples uses of space, as well as mixed social and economic uses in built-up areas, in order to prevent uncontrolled urban growth.

Formulation of urban strategies and initiatives aimed at preventing and combating stigmatization and marginalization.

» Promote a "transit-oriented urban development" that is equitable and

minimizes displacements, particularly those of marginalized social sectors, and where accessible housing for mixed income groups prevails.

» Improve the planning of transport rou tes, to and from the Basin, and the use of land, which will reduce travel and transportation needs and improve connectivity between urban, peri-urban and rural areas, facilitating access to the watercourse.

» Encourage concepts of logistics and planning of urban freight transport that allow efficient access to products and services, minimize their effects on the environment and habitability of the city and maximize their contribution to inclusive economic growth, sustained and sustainable.

» Promote the creation of new centralities by incorporating Fluvial Stations along the river that will help the development along the Matanza Riachuelo riverbed. In this way the distances will be shortened and the zonal connectivity of passengers will be improved, adding possibilities for economic and urban development in the surrounding areas. The creation of Fluvial Stations could generate a scenario similar to the effect railway stations had: job generators.

Guidelines

#### 22.3.3 Habitat and housing

#### » Provide a suitable habitat for decent housing for all of the Basin's inhabitants

The concept of habitat and housing refers to the environmental and social conditions suitable for hosting human activities in a given space. These Proposals towards a Strategic Plan reaffirm the conception of the Urban Environmental Plan1 and incorporates criteria of sustainability into its territorial implication. Achieving the attainment of habitability conditions and their conservation over time, requires the use of varied resources and the integration of various thematic areas, such as existing and planned green spaces, public space, different building typologies, the urban layout and its blocks, the proportion of the built form, compactness, pre-existing urban configurations and the accessibility to transport services and infrastructure of the entire population.

A controlled expansion of the built form and always accompanied by the development of service infrastructures, is encouraged for this area, as well as a stimulation for a mixture of land use and the creation of new green spaces that will guarantee sustainable urban growth. As a manner to improve the conditions of habitability and human development. social sustainability infrastructure, spaces for the development of social and administrative activities and service (mainly health and education) should be included, in order to satisfy the demands generated from the growth and consolidation of the Basin's districts.



FIG. 6.4 NATURAL HERITAGE

#### Guidelines

» Guarantee water availability, sewage and energy services and their sustainable management for all the Basin's inhabitants.

» Achieve inclusive, safe, resilient and sustainable urbanizations.

» Promote urban and rural development, protecting the planet and taking into account the age and gender of the people, in order to respect all human rights, facilitating coexistence, putting an end to all forms of discrimination and violence and empowering all people and communities, while facilitating their full and meaningful participation.

» Increase inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable planning and management of human settlements.

» Ensure accessibility to decent housing and adequate and safe basic services.

» Promote the idea of urban development as a source of prosperity, as an investment and not as an expense.

#### 22.3.4 Public space

22.3

### » Increase the quality of public space and its valorisation at a metropolitan scale

Public space is conceptualized as an area of social, environmental, economic and landscape value, which makes possible the area's social and urban integration. For this reason, it is a very important tool for urban transformation, since it is where interventions can be generated that will orient other aspects of the urban form. From this perspective, public space has an ordering role for the territory and a generator of environmental services, integrating diversity of uses and urban needs. The incorporation of new public spaces, which are accessible, properly dimensioned and of quality (based on innovative criteria that will respond to environmental indicators) and that follows growth trends, is central to the Basin.

Green areas are essential to achieve a balance between the natural and urban environment. The urban and natural ecosystems must be integrated to achieve the environmental quality lost during all the years of deterioration. The structure, conformation and consolidation of the

urban area of the Matanza Riachuelo River Basin and its adequate development as an integral ecosystem, will be defined according to the distribution and dimensions of the buildings, the relationship between free spaces and built spaces, green areas, road network, and so on. In this context, the quantity, variety and size of the areas destined for public space have a fundamental role, as they provide support for the incorporation of the necessary vegetation for biodiversity recovery, necessary oxygen production, pollution reduction, carbon dioxide fixation and temperature regulation, favoring the urban ecosystem's natural metabolism. The problem becomes more evident when urban space that was originally occupied by pedestrian transit or uses is replaced by vehicular traffic, thus reducing resting and meeting areas or inhabitants.

The main points this Plan Proposal will address in relation to public space will seek to reconstruct the lost link between the citizen, the public space and the natural environment in the Basin. Two elements are fundamental to achieve this objective: the delimitation of areas of sustainable mobility and vehicular mobility, and the continuity between the urban, metropolitan and peri-urban green areas.



W FIG. 6.5 MURAL PAINTING BY THE RIVER

#### Guidelines

» Encourage the creation of safe, inclusive, accessible, green and goodquality public spaces, including streets, sidewalks and cycling lanes, squares, promenades, gardens and parks, acting as multifunctional areas for social interaction and inclusion, human health and well-being, economic exchange and cultural expression and dialogue among a wide diversity of people and cultures. Likewise, they must be designed and managed in such a way that peaceful, inclusive and participatory human development is guaranteed, promoting coexistence, connectivity and social inclusion. They should provide safe environments that allow everyone to live, work and participate in urban life without fear of violence and intimidation.

» Preservation of the social and ecological use of lands, including coastal areas that support cities and human settlements. Promotion of solutions based on ecosystems to guarantee sustainable consumption and production patterns, so that the regenerative capacity of ecosystems is not exceeded. Conservation and sustainable use of water through the rehabilitation of water resources in urban, peri-urban and rural areas, the reduction and treatment of waste water, and water losses, the promotion of its reuse and the increase of its storage, its retention and its recharge, taking into account the water cycle.

#### 22.3.5 Production and employment

» Foster the Basin as a linear centrality and a set of adjacent subcentralities

The Proposal for a Strategic Plan of the Matanza Riachuelo Basin proposes an economic development distributed equitably in the territory, guaranteeing the social and territorial inclusion of all its population, in a relationship of permanent feedback with urban development. The economic sustainability of a city is associated with the diversification of its activities and its economic centers. the greater the diversity, the greater the capacity to adapt to changes in the social, political and economical context. A polycentric city has several economic centers interrelated by an adequate transport network. The territorial decentralization of the economy, favors the economic development in diverse urban sectors, increasing the jobs and reducing the difference in the levels of unemployment between the different neiahborhoods.

The agglomeration of economic activities in different parts of the Basin

causes synergistic effects derived from the complementarity of productive processes, products and services, technological innovation, increase of distribution networks and increase of the different flows of people and goods. Likewise, the economic expansion of an area, accompanied by investment in infrastructure and adequate public space for its development, implies a direct improvement in its urban guality.

Trying to achieve a mixture of uses that facilitate daily life and approximate the basic needs of food, health, recreation, work and

education as an objective for a more sustainable city, which simultaneously meets environmental and social objectives, is central The monofunctional areas generate greater transfers of the population between the places where they carry out their activities. Each movement implies energy consumption and therefore greater environmental pollution, reduction of the time allocated to leisure and recreation, increased levels of stress and reduction of accessibility to the main economic centers by the population with fewer resources.



FIG. 6.6 MARGIN CLEANING WORK

#### Guidelines

» Promote an inclusive and sustainable economic growth, as well as decent work for all.

» Build resilient infrastructures, promote inclusive and sustainable industrialization and encourage innovation.

» Guarantee sustainable consumption and production modalities.

» Development of dynamic, sustainable and inclusive urban economies, taking advantage of endogenous possibilities, competitive advantages, cultural heritage and local resources, as well as resilient infrastructures that make efficient use of resources, promoting sustainable industrial development, fostering an environment that encourages commercial activity and innovation, as well as the creation of means of subsistence, generating an adequate level of compactness and density, polycentrism and mixed uses.

» Enable fair and responsible environments for business activity based on the principles of environmental sustainability and inclusive prosperity, through the promotion of investment, research and innovation, diversification, technological modernization, and entrepreneurship.

» Support micro, small and medium enterprises and cooperatives (in all scales of production), particularly businesses and social economy companies that operate in both the formal and informal sectors of the economy.

» Encourage the creation of 'green jobs

»Promote the connectivity of the Basin with the surrounding urbanization and within its own territory

Mobility allows people to access goods and services and is dependent on the structural factors that determine displacement demands, such as the location of residential areas, economically productive centralities, consumption patterns, or social needs such as education, health and recreation.

RIVER ACING THE

The strategy proposed for this Proposal towards a Strategic Plan, promotes the necessary change towards a more efficient model, which responds with sustainability guidelines to the economic and social need to increase territorial linkage with new modes of circulation. incorporating route alternatives through a mesh that reinforces the plurimodal

and transversal connection. The general strategic guidelines for different areas of action whose implementation in a short, medium and long term will make it possible to move towards the achievement of a sustainable mobility model for Buenos Aires 2060, specifically refer to the mobility infrastructure, which should not fail to be linked with other sectors, such as energy and urban development.

On the other hand, mobility strategies for the next 50 years are one of the main challenges of urban sustainability, as it will evolve towards mobility models with low fossil energy consumption. In this context, sustainable mobility means ensuring that future transport systems respond to economic, social and environmental needs, minimizing negative impacts, urban congestion, greenhouse gas production, noise pollution and air pollution, that affects public space conditions and life-quality in general.

#### Guidelines

» Provide access to safe, accessible and sustainable transport systems for all and improve road safety, in particular by expanding public transport and paying special attention to the needs of people in vulnerable situations.

» Improve interaction and connectivity between urban and rural areas by strengthening sustainable mobility and transport, as well as technology and communication and infrastructure networks. This is proposed in order to support the territorial system of the Basin, which integrates urban and rural functions in the city system, to promote its ordering and sustainable use of natural resources and land, guaranteeing a supply reliable and value chains that connect supply and demand in urban and rural areas to promote equitable regional development and bridge social, economic and territorial gaps.

» Encourage and have a significant growth in the use of sustainable and efficient transport infrastructures, so as to take advantage of connectivity and reduce the financial, environmental and public health costs the inefficiency of mobility brings, as well as



#### FIG. 6.7 **ROWING ACTIVITY** ALONG THE RIVER. LOWER BASIN

congestion, air pollution, the urban heat island effect and noise pollution.

» Encourage the use of non-motorized options such as pedestrian traffic and bicycle, which will be given priority over private

motorized transport.

» Provide greater flexibility, adaptability and response to current and future mobility patterns, reversing the current prevalence of the use of private vehicles for the benefit of public transport and non-motorized vehicles, trying to balance the interaction between the different means of transport and the different urban uses.

» Promote N-S and E-W connectivity, with efficient public transport that connects the new linear centrality (and its sub-centralities) with the neighboring and main centralities, to increase road access towards and from the coastal edge.

» Encourage an integral transport system that includes the river, promoting the creation of fluvial connective stations for the zonal passenger transport, improving their mobility.

# 22.3.7 Urban heritage

» Recover the natural and cultural urban heritage as necessary starting actions for the area's development

The recovery of the Basin's cultural heritage is one of the territorial objectives of the Comprehensive Environmental Management Plan of the Matanza Riachuelo Basin (PISA), which is found in the judicial requirements of the Judge in realtion to the 'Mendoza' Case, expressed in different resolutions (especially in the Resolution of 28 of March 2011).

The recognition and identification of the existing (natural and cultural) heritage of the Matanza Riachuelo Basin aims to rescue and recognize the legacy, history, social and unique features that refers to values, beliefs, symbols and representations of the area. The environmental and patrimonial recovery of the Basin, aims to promote the attachment of its inhabitants to collective property, to the awareness of the meaning and value of the places they inhabit, allowing the passing of these values to future generations.

UNESCO considers that heritage is not limited to monuments and objects, which undoubtedly have their significance, but also includes oral traditions, expressions and experiences inherited by our ancestors, social customs, family habits, customs, rituals, knowledge, techniques, and so on. These are the values that builds community identity and belonging and

make up the intangible heritage. In the context of the Matanza Riachuelo River Basin, heritage is shaped, mainly, by the river itself, whose channel, wetlands and biodiversity are part of the natural heritage at a Metropolitan scale. In addition, this is accompanied by a cultural heritage of buildings with great value for the area's urban development, consisting of buildings of high heritage value, which in turn make up the historical-cultural-urban identity of the Basin's different neighborhoods (especially of the Lower Basin). Its protection and enhancement implies its integration with the adjacent city in a context of mixed use. Although the area will undergo transformations over time. the strategies for the Basin will increase its spatial coherence with future growth, incorporating the public space as a fundamental connective element, where future densification and heritage protection are defined with morphological criteria and urban-environmental sustainability.

# Guidelines

» Protect and safeguard the Basin's cultural and natural heritage, through integrated urban and territorial policies and adequate investments at National, Provincial and local levels, to safeguard and promote infrastructures and cultural sites, museums, cultures and dialects, as well as knowledge and traditional arts, highlighting the role they play in the rehabilitation and revitalization of urban areas and in the strengthening of social participation. » Promote cooperation between the public and private sectors in order to preserve the historical-cultural heritage.

# 23. URBAN DEVELOPMENT NODES (UDN)

The strategic guidelines proposed are parameters to be followed for the entire Matanza Riachuelo Basin, considering the river and its riverbank as an inclusive urban piece, spatially and in terms of use, articulating activities and experiences.

To achieve a next level of definition and develop programs and projects to be carried out that consider the particular characteristics of each specific area on the Basin, it is proposed to study the territory from 5 Urban Development Nodes (UDN):

**UDN 1:** neighborhoods of La Boca, Barracas and the Municipality of Avellaneda

**UDN 2:** neighborhoods of Barracas and the Municipality of Lanús

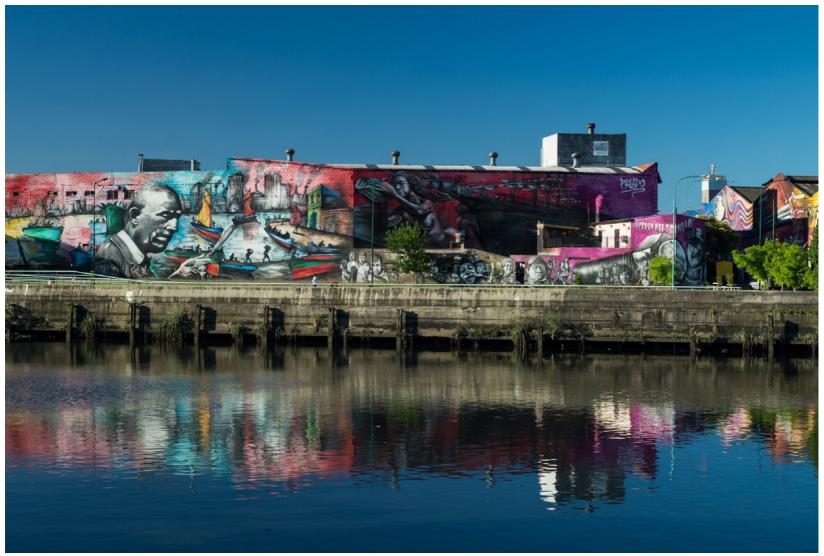
UDN 3: neighborhoods of Nueva Pompeya and the Municipality of Lomas de Zamora UDN 4: neighborhoods of Villa Soldati, Villa Lugano and the municipalities of Lomas de Zamora and La Matanza UDN 5: Municipalities of La Matanza, Esteban Echeverría and Ezeiza

Having such a wide Basin extension, the implementation of the Urban Development Nodes proposes small working groups, among the relevant agents and Municipalities corresponding to each specific module, to develop the interests and address particular issues of each geographical region. The objective of this modulation will then be to



specify the proposals of plans, programs and projects without losing the integral and interjurisdictional perspective, yet incorporating the active participation of the specific actors and addressing the local problems of each UDN. At the same time, it would contribute to having a greater control and monitoring of the actions during study, proposal and implementation phases, thus favoring the multidimensional integrality that an ecological unit of the complexity of the Matanza Riachuelo watershed requires.

FIG. 6.8 URBAN DEVELOPMENT NODES SOURCE: ACUMAR, 2017



# SUMMARY AND CONCLUSIONS

# STRATEGIC VISION

# 24. SUMMARY

This section details the priority guidelines by action axis that have been developed throughout this publication in the chapters referring to problems (Chapter IV), objectives and strategic guidelines (Chapter VI).

Likewise, the conclusions of the UN-Habitat event "Facing the River" have been also analyzed by at the request of ACUMAR's Board of Directors and taken into account.

# 24.1 Environmental Axis

The recovery of the Basin's environmental quality is essential for its development, in all axes. The main conclusions and lines of action to follow are detailed below

» Promote environmental education as a prevention strategy.

» Depeen public policies that incorporate the Social dimension to waste management, supporting the work of cooperatives and their tasks in cleaning the margins.

» Evaluate the economic viability of waste management projects, to ensure their sustainability over time.

» Encourage the appropriation of

public spaces, such as the recovered river margins as well as the Towpath, by the Basin's residents.

» Value the Environmental Protection Areas of the Basin, due to its social and natural importance as a way to minimize the existing deficit of green spaces through the Metropolitan area.

» Promote the protection of wetlands as a way to conserve them and guarantee the use of the environmental benefits they offer to the Basin's ecosystem.

» Strengthen the role of the State as an actor that must ensure access to environmental health, especially in the most vulnerable sectors.

» Promote the monitoring of environmental health over time and develop and expand strategies for its approach.

» Rethink the Basin's land use, taking it as a unique territory.

# 24.2 Socio-spatial axis

Encouraging the participation of all agents involved in the decision-making for the Basin's future, especially of the local community, is of great importance. In addition, the following conclusions:

» Address the health and environmental emergency present in several of the

informal settlements in the territory of the Basin: the provision of drinking water and a sewage system are essential in order to reach an optimum quality of life for all residents.

» Understand, respect and strengthen the organizational networks that exist in the territory, understanding and addressing their diversity during the planning processes.

» Rebuild the social fabric, supported by the community, as a way to promote the resilience of local communities.

» Consider and respect the social production of the habitat, which has been developed on the basis of community organization.

» Encourage participatory processes of all kinds (formal and informal), including all stakeholders in the Basin (inhabitants, governments, businesses, neighborhood organizations, etc.), and have the political will to ensure that these spaces and mechanisms participation are effective. Establish a continuous process of broadening citizen participation.

» Generate transparent actions, encouraging collective work.

» Promote the interjurisdictional articulation to strengthen the programs and projects that will take place in the Basin.

### 24.3 Economic Axis

Infrastructure investment, and the redistribution and re-rationalization of the industry, are the most critical points within the economic axis. A circular economy should be created for the Basin, and employment in "clean" industries (waste management, etc.) should be encouraged.

» Invest in transport infrastructure (transfer centers, railway connections, metrobuses, etc.) designed towards the Basin, in order to end with the existing asymmetries between the north and south of the city of Ciudad of Buenos Aires, and between the two margins of the Basin, thus generating an integrated vision of the territory.

» Think of the river as an area of activity in itself: navigation as a possibility of economic activity and well-paid employment. Navigation would convert the Riachuelo into an active protagonist, instead of a passive one.

» Revalue the Matanza Riachuelo Basin in social and economic terms to enable its integration with the rest of the city.

» Give special attention to the Basin's SMEs situation, understanding the great

challenges presented by the adequacy of the industry in social terms (for its people and sources of work) as well as the economical resources that this implies.

» Tender and strengthen ties between control organizations and businesses, as well as raising awareness and training them on environmental matters.

» Address short, medium and longterm challenges, which include both the need for infrastructure development and progress in territorial planning.

» Strengthen the role of the cooperatives as well as improving the working conditions and the training and education of their workers. This is central for shifting to a circular economy in the Basin.

» Promote, through awareness and dissemination, the responsibilities of all actors of the production chain.

# **25. CONCLUSIONS**

The Participatory Proposal for the approach of a Territorial Strategic Plan for the Matanza Riachuelo Basin reveals a series of key guidelines for the development of the potentialities and opportunities within its own territory and its link with the Metropolitan scale. The New Urban Agenda 2030 proposed by UN-Habitat is taken as a starting point and as a fundamental guide for this Plan, and its ideas will accompany each of the projects that are proposed for this territory.

An agreement to respect and promote a shared strategic vision for the Basin

between the 14 Municipalities and CABA is imminent to be able to move forward towards its effective recovery. Of course, it is necessary to do so respecting the interests of each actor, and adding ideas according to the needs and potential of each particular area, always thinking of the entire Basin extension as a single territory, with common rules and a shared vision agreed by all. During this process, it is important to

support and contribute to the strengthening of the Municipalities, given that they are key actors due to their proximity to the population and its problems.

Likewise, ACUMAR is currently working on participation schemes for citizens, social organizations and the rest of the affected actors in the process of preparing projects for the area. The participatory processes will be a fundamental part of the effective development of the Basin in pursuit of the common good of its inhabitants and the improvement in their quality of life. In addition, this Proposal focuses on the development of a favorable framework for access to basic goods and services where the habitat plays a fundamental role in reversing the current situation of the territory, with a large proportion of housing with low living conditions and informal settlements. A future must be built based on equal and equitable conditions seeking to satisfy basic needs in all those sectors and disadvantaged social groups.

The recovery of the environmental quality continues to be a priority issue

for the development of the Basin under parameters of good habitability, for the recovery of public space and native biodiversity. Stopping pollution and continuing to accompany the work of sanitation that has been done from ACUMAR, is also unavoidable. Awareness about this problem through environmental education to all the influence actors in the Basin will work as a preventive strategy.

To achieve the progress and strong development of the Basin, a long-term commitment of the different levels of government (guaranteeing the sustainability of public policies), of the community and of representatives of civil society, along with stakeholders of the private sector is needed. If this is achieved, the Basin and its fluvial axis can contribute to recover the full enjoyment of the Metropolitan green areas for the inhabitants of the region, as well as the development of adequate habitat and housing conditions, reversing the socioenvironmental negative impacts. To propitiate the spaces and the tools that favor the achievement of the consensus. among all the actors involved in the viability of the public policy to be executed on the Basin, is not only a commitment of the PET but the inescapable starting point for the sustainability of a development model that seeks territorial empowerment life-quality improvement for its inhabitants, in a framework of respect and care for the environment

# **26. FOLLOWING STEPS**

Together with the Proposal towards the approach of a Territorial Strategic Plan, generated through the three jurisdictions (City of Buenos Aires, Province of Buenos Aires and Nation) and ACUMAR, the observations and conclusions that are developed in the Socio-spatial workshops with members of the local community and neighborhood organizations, arising from meetings and agreements with representatives of the 14 Municipalities that make up the Matanza Riachuelo Basin, will also be included.

In this way, the plan will be a collective construction process, which includes all the stakeholders of the Basin, in order to agree on a shared vision for the improvement of the quality of life of its inhabitants and the recovery of the native natural heritage.

The invitation is to begin a medium and longterm process that requires the commitment of all the municipalities involved. The same will be developed in each "Urban Development Node" previously described, where the UDN1 will act as a model for the construction of the new axis of urban development that will promote the integration of the Matanza Riachuelo River Basin.

This scheme will allow, in addition to the participation of the State, to involve different private entities.

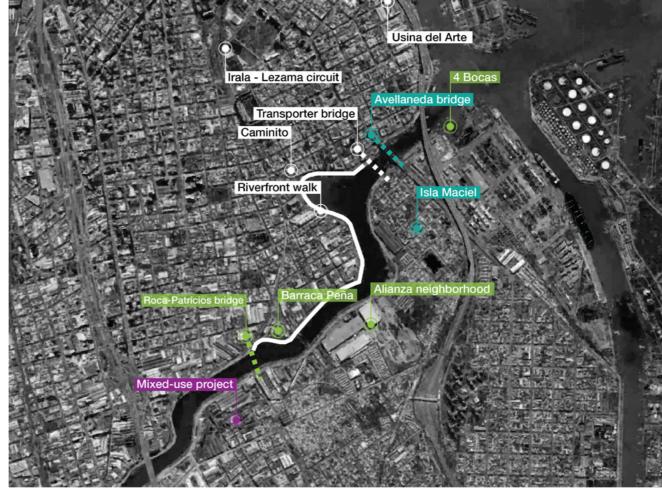
RIVER

# 26.1 PARTICIPATORY MANAGEMENT INITIATIVES

ACUMAR will manage the development of a series of model projects, for their integrality and intervention methodology, within the urban part corresponding to the Urban Development Node 1 that goes from the Nicolás Avellaneda Bridge to the Pueyrredón Bridge. They will be guided by strategies of sustainable and inclusive urban development, and will bring a greater movement of people to the Basin, as a motor for new income generation for the inhabitants, based on an improvement of services and infrastructure. In this way, ACUMAR will seek to change the way of appreciating the river, understanding that it is a natural space with a great potential for public use and contribute to its environmental recovery, through the development and improvement of its housing areas and its production matrixes.

These projects will be, in turn, examples of the implementation of the New Urban Agenda of UN-Habitat in the territory and will be characterized by being inclusive and sustainable. The same, added to an existing network of urban milestones, will consolidate the UDN 1.

Following are some of the project proposals being developed, and open to discussion and development together with the actors involved and the community.



Existing & consolidated projects
 A New project proposals
 Refurbishment project proposals
 Private projects

### >> FIG. 7.1 URBAN DEVELOPMENT NODE 1, NETWORK OF HISTORICALLY CONSOLIDATED AND NEW PROJECTS



### » FIG. 7.2 CONTROL BOATS, LOWER BASIN

# Navigation

The lack of connectivity is a problem to be solved within the layout of the entire Basin, where there is a great lack of efficient means of transport. To address this point, a discussion with solvent technical arguments that define the convenience or not of developing river transport, which has great potential, is pending. Historically, the Matanza Riachuelo Basin has been a navigable waterway, being installed until the mid-70s in the Vuelta de Rocha, the port of Buenos Aires. Therefore there is a memory linked to nautical activity in the neighborhoods of the Lower Basin.

Through detailed studies it is proposed to analyze the feasibility of recovery of river navigability. Given the high population density of the area, its main use would be passenger transport. If this activity could be developed, it would contribute to building a broader connectivity both along the river and between the Province of Buenos Aires and the City.

The creation of local fluvial stations and their management would also serve as a source of local work, transforming the river into an economic axis, integrating and respecting the Basin's environmental resources by proposing clean and efficient means of transport. Once the passenger transport is consolidated, new uses will arise such as tourism and recreation, as well as the potential to use the river as a logistics hub to transport goods to and from the Central Market (located by the river in the mid-basin region), amongst others. This will help to decongest the area's circulation routes and access to the adjacent centralities, as well as to improve the quality of life of the inhabitants of the area, giving the river movement and life that are a fundamental part of its recovery.

Navigability is a critical and conflictive point, since the federal court of Quilmes, in charge of the case, issued a ban on navigating the river in a preventive manner, and only for those who had commercial purposes. But a serious debate that includes the actors involved is essential to move forward firmly in the process of river sanitation (which also implies to debate and decide definitively on the issue regarding the contaminated mud), and the consolidation of a model of development for the entire Basin.

### **Roca-Patricios Bridge**

The Roca-Patricios Bridge will connect Gral. Roca Avenue (Avellaneda) with Irala Street (in the City Buenos Aires with connection to Regimiento de Patricios Avenue), thus achieving a new connection point between the Province and the City of Buenos Aires, and strengthening the North-South connection of the Metropolitan Area of Buenos Aires. Its design will contemplate the necessary gauge to allow navigation, and also facilitate access to a number of marginalized neighborhoods that are in that on the Province side, encouraging their inclusion to the adjacent urban layout.

The construction of the bridge will bring more activity to its surrounding areas, allowing the reconditioning and enhancement of heritage buildings.

### » FIG. 7.3 BRIDGE LOCATION SOURCE: ACUMAR, 2017



# ACUMAR in Barraca Peña

The relocation of the offices of the ACUMAR headquarters to the edge of the Matanza Riachuelo river will bring a lot of movement to its surroundings, generating a new subcentrality, as it happened with the building of the Government of the City of Buenos Aires, in Parque Patricios neighborhood.

The renovation of the old Barraca Peña, the building to which ACUMAR will move that is part of the Basin's industrial heritage, will serve as a precedent and add value to the area. Likewise, it will mark the stable presence of the State in the Basin's own territory and its presence will bring state services of daily use for the neighbor, such as payment services. All this will contribute to the enhancement of the area, and it is expected to stimulate commercial activity.

» FIGS. 7.4 , 7.5

ACUMAR HEADQUARTERS

SOURCE: MINISTRY OF URBAN DEVELOPMENT AND TRANSPORT AND ACUMAR, 2017





FIGS. 7.6 - 7.7

ALIANZA NEIGHBORHOOD

SOURCE: NATIONAL DIRECTION OF URBAN DEVELOPMENT, ACUMAR, 2017

# Alianza Neighborhood

The new 'Alianza Neighborhood' is a project proposal to recover a deteriorated area of industrial use, to turn it into a neighborhood of collective housing and local development. The project will be made up of 'Procrear' type homes (accessible through a National credit for mid-income population) - 25% of the total of the houses - as well as housing for the relocation of families (75%) that currently live in the informal settlements of Villa Inflamable and Villa Tranquila, thus promoting the mixture and inclusion of different sectors of society.

In addition, the project will propose new roads for a commercial boulevard, freeing the coastal front as a space for leisure and activity for neighbors, where public space and green areas will prevail, occupying 35% of the neighborhood's total surface. The buildings will house some 4000 families and will consolidate 700 m of the coastal front.



» FIG. 7.8 ISLA MACIEL NEIGHBORHOOD

SOURCE: GENERAL ARCHIVE OF THE NATION, 2017

# Recovery of 'Isla Maciel"s historic center

The neighborhood of Isla Maciel conserves to the date a very traditional architecture of Buenos Aires, similar to the one present in the neighborhood of La Boca, known for its metallic buildings, built in the late nineteenth century. The difference with traditional La Boca is that Isla Maciel did not suffer any modifications on its architecture for it is not a tourist attraction pole like La Boca neighborhood. The recovery of this relegated area, revitalizing its historic center and adding specific proposals regarding public space and infrastructure, will aim to improve the quality of life of its inhabitants and its integration with the surrounding City by incentivizing local and social tourism.

The local community network of neighbors and institutions has been developing in an incipient project linked to heritage tourism for foreigners and locals, becoming an opportunity for ACUMAR to accompany a local development model. FIG. 7.9 RECOVERY OF ISLA MACIEL'S HISTORIC CENTER

SOURCE: NATIONAL DIRECTION OF URBAN DEVELOPMENT AND ACUMAR, 2017

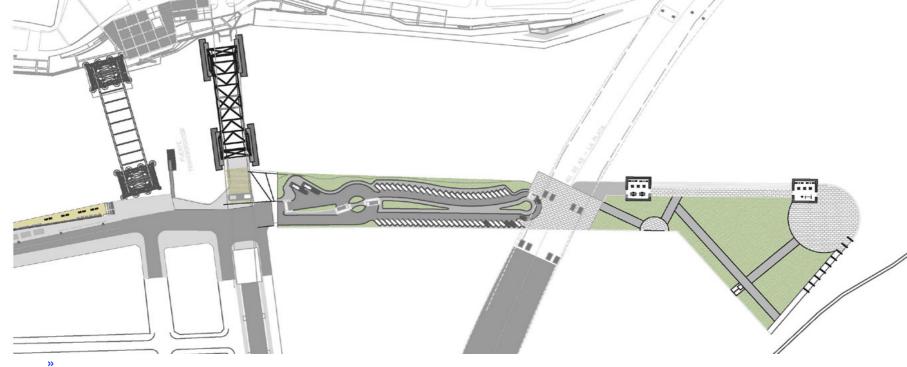


FIG. 7.10 AVELLANEDA BRIDGE RECONDITIONING

SOURCE: ACUMAR, 2016

# Avellaneda Bridge reconditioning

The reconditioning of the Avellaneda Bridge will provide greater pedestrian and bicycle connectivity between the Municipality of Avellaneda and the City of Buenos Aires. In this way, it will improve the daily life of the residents who use it, as well as making it more accessible for visitors, integrating the coastal edge of the 'Isla Maciel' neighborhood, with the daily flow of people that La Boca neighborhood receives.

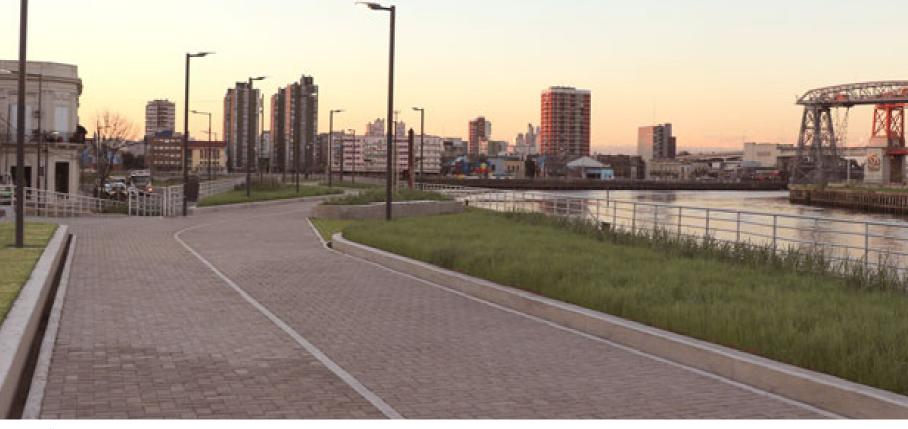


" FIG. 7.11 4 BOCAS' PUBLIC PARK PROJECT

SOURCE: ACUMAR, 2017

# '4 Bocas'

The end of Towpath where the Matanza Riachuelo River joins with the Río de la Plata, is located in the Municipality of Avellaneda. It is an area with potential for recreation of the residents of Avellaneda and for their approach to the river. The '4 Bocas' project proposes a public park at the end of the Towpath, thus revealing a new and unknown perspective and view of the City of Buenos Aires, with viewpoints and cycling paths for daily use



» FIGS. 7.12 COASTAL PATH

SOURCE: BUENOS AIRES CITY GOVERNMENT

# Stage II of the Coastal Path

When the towpath is liberated completely, it will be considered as a means of circulation along the Matanza Riachuelo river. Hence, the path between the Nicolás Avellaneda and Pueyrredón bridges will be recovered, and new public spaces will be generated by the incorporation of 'plazas' and local afforestation along the entire margin. In addition, work will be done on the construction of a new descent from the Bs.As.-La Plata highway, to end the transit of heavy-load trucks along the towpath, that today transits it on its way the country's main Petrochemical Pole and port, which prevents pedestrian traffic.

This will allow more space for circulation in relation to the green spaces projected on the edge of the river, giving the neighbor more areas for recreation and improving daily life quality.



**»** 

FIG. 7.13 SPECIAL OPENING OF THE TRANSPORTER BRIDGE FOR THE NEIGHBORS OF ISLA MACIEL

# Nicolás Avellaneda Transporter Bridge

After 60 years of inactivity, the Nicolás Avellaneda Transporter Bridge that connects the neighborhoods of La Boca and Isla Maciel was put into operation in mid 2017. It is one of the eight remaining transporter bridges of the world and was reopened after being put through a process of restoration and enhancement that respected its design, appearance and original materials. This action will recover this national monument and local identity icon, it will add a new tourist attraction for both mentioned neighborhoods and will

### » FIG. 7.14 VIEW OF THE TRANSPORTER BRIDGE FROM ISLA MACIEL

improve the City's connection with the relegated Isla Maciel neighborhood.



FIG. 7.15 - 7.16 INDUSTRIAL HERITAGE

# Valorization of the built industrial heritage

The Lower Basin has a very important industrial building heritage, with buildings dating from the late nineteenth century. The proposal is to encourage their refurbishment in order to recover their value, the symbolism and identity that they bring to the neighborhood. This is a fundamental and necessary step in the integral task of achieving a sustainable development model for the Basin.

The project proposals described are the preliminary instance of the first management framework for the development of UDN 1, and are concrete, territorial examples of the guidelines established in accordance to

the New Urban Agenda: they constitute a sequential advance of interventions promoting specific points within a desired urban model for the development of the local and regional scale, interrelating and empowering each other.

Acting on the territory in spatial terms will mean, at the same time, generating impacts on the local social, economic, environmental and cultural schemes. This allows us to conclude by saying that ACUMAR, within the framework of a public policy tool such as the Territorial Strategic Plan, proposes a scope for dialogue and a proactive collective actions, in order to turn potentialities into development, improving the lives of current inhabitants and of future generations in a sustainable way.

# Overcoming contexts

The mentioned projects together with the existing network of consolidated urban nodes, work towards the consolidation of the Urban Development Node 1.(*fig. 7.17*)

Least favoured areas, such as informal settlements, will be positively affected by the impact of the new urban developments and blended into the urban form, due to their following characteristics:

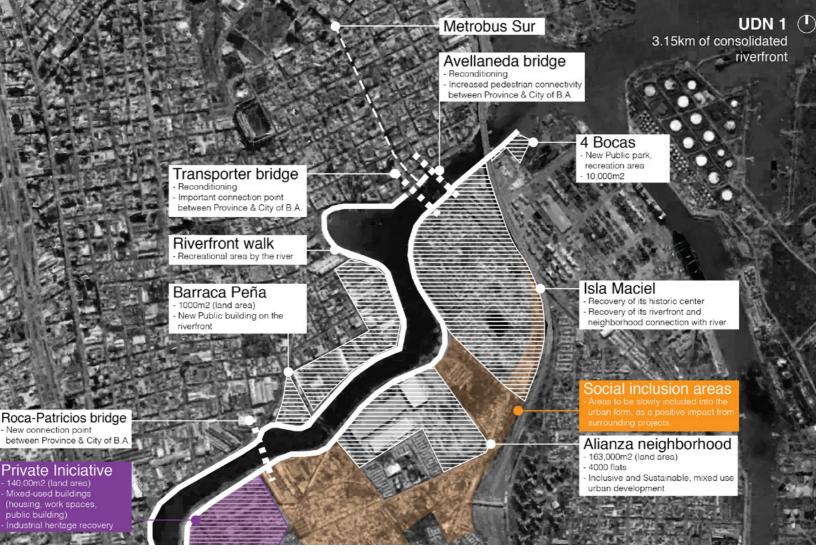
- » Respect for the human value
- » Enhancement of public space

» Greater social mix through housing improvement and diversification actions

» They are Inclusive and sustainable urban developments, with participatory and inclusive management actions.

» Territorial reunification through the integration of neighborhoods, avoiding marginalization.

We believe in the replicability of this management model in order to restore environmental health and to improve life quality throughout the Basin.



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Facing the River is a 'living process' of multisectoral participation that promotes a dialogue around the definition and commitment of an urban-environmental development model that seeks an improvement of the quality of life of its inhabitants, in a framework of respect for social rights and care for the environment, for the Matanza Riachuelo River Basin, a deeply environmentally degraded area of the City and Province of Buenos Aires, Argentina.

This Participatory Proposal for the approach of a Strategic Territorial Plan for the Matanza Riachuelo River Basin reveals a series of key guidelines for the development of potential and opportunities within its own territory and its link with the greater Metropolitan Area of Buenos Aires.

The New Urban Agenda 2030 proposed by UN-Habitat is taken as a fundamental guide for its formulation and its goals will command each project proposed for the Basin's territory.

An agreement to respect and promote a shared strategic vision for the Basin between the 15 Municipalities involved is imminent in order to move towards the Basin's effective recovery.

Likewise, citizen participation and the involvement of the Basin's social organizations and the rest of the affected actors in the Plan's formulation process is a priority.

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