



# Community-based approaches to foster urban biodiversity

**URBACT BIODIVERCITY**

**INTEGRATED ACTION PLAN OF CIEZA**

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1.

# INTRODUCTION

# 1. Introduction

## 1.1. The URBACT programme and the URBACT BiodiverCity project

Sustainable urban development seeks **to balance economic growth, social cohesion and environmental protection**. Fostering resilience, resource efficiency and inclusion are key to achieving this.

In this regard, the European URBACT programme promotes **innovative solutions to urban challenges through the exchange of experiences and cooperation among cities**. Its main tool is Action Planning Networks (APNs), which allow cities with common challenges to work together on action plans adapted to their local reality.

URBACT promotes a participatory and integrated methodology, involving all local actors – public administrations, the private sector, civil society and citizens - in the definition of more effective, legitimate, and sustainable policies.

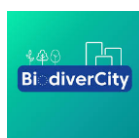
An example of this working model is the **BiodiverCity network**, launched in June 2023, involving 10 cities: Vratsa (Bulgaria), Veszprém (Hungary), Poljčane (Slovenia), Guimaraes through Laboratório da Paisagem (Portugal), Siena (Italy), Limerick (Ireland), 's-Hertogenbosch (Netherlands), Sarajevo (Bosnia and Herzegovina) and Cieza (Spain).

The common objective of this network is **to integrate biodiversity and ecosystem services into urban policies** by promoting urban greening strategies and nature-based solutions (NBS). Each city has created its URBACT Local Group (ULG) to advance this purpose, while promoting a citizenry more committed to the natural environment.

**Urban biodiversity** – the variety of flora, fauna, and ecosystems in urban environments – fulfils key functions: it regulates the climate, improves air and water quality, reduces risks such as flooding and contributes to people's well-being. Linked to it, ecosystem services are the benefits that nature offers in the city: from the provision of food and water to regulatory functions, ecological support and cultural and recreational value.

To improve these services, BiodiverCity is committed to nature-based solutions, such as:

1. Green roofs and facades.
2. Parks, green corridors and urban micro forests.
3. Rain gardens and permeable pavements.
4. Urban agriculture and community gardens.
5. Restoration of peri-urban riverbanks and wetlands.





These actions strengthen urban resilience, improve the quality of life, and prepare our cities for the challenges of climate change, building greener, healthier and more inclusive environments.

## 1.2. Cieza in the BiodiverCity Network

The incorporation of Cieza into the European BiodiverCity network responds to a **firm commitment of the municipality to move towards a more sustainable, resilient urban model focused on the well-being of people**. This participation is part of a consolidated trajectory in terms of environmental planning and transformation of urban space, which has been recognized with various awards and distinctions, and which is developed in greater detail in later sections of this document.

As part of the project, Cieza intends to strengthen the integration of biodiversity in the city, in line with the concept of a **'biophilic city'**. This approach is based on a simple but powerful idea: people need to be in contact with nature, including urban contexts. Thus, it seeks to protect, restore and expand the presence of nature in the city, recognizing its ecological, social, and emotional value.

The municipality conceives green spaces not only as recreational areas, but as essential ecological infrastructure to improve air quality, regulate the climate, prevent floods, promote biodiversity, and enhance the physical and mental health of the population. The improvement and renaturalization of these spaces are considered a strategic priority in the process of urban adaptation to climate change.

Cieza also proposes the project as an opportunity to **delve into the knowledge of its local biodiversity**, identifying the species present in the urban environment and the ecosystem services they generate. This information will be key to guiding future planning and conservation decisions.



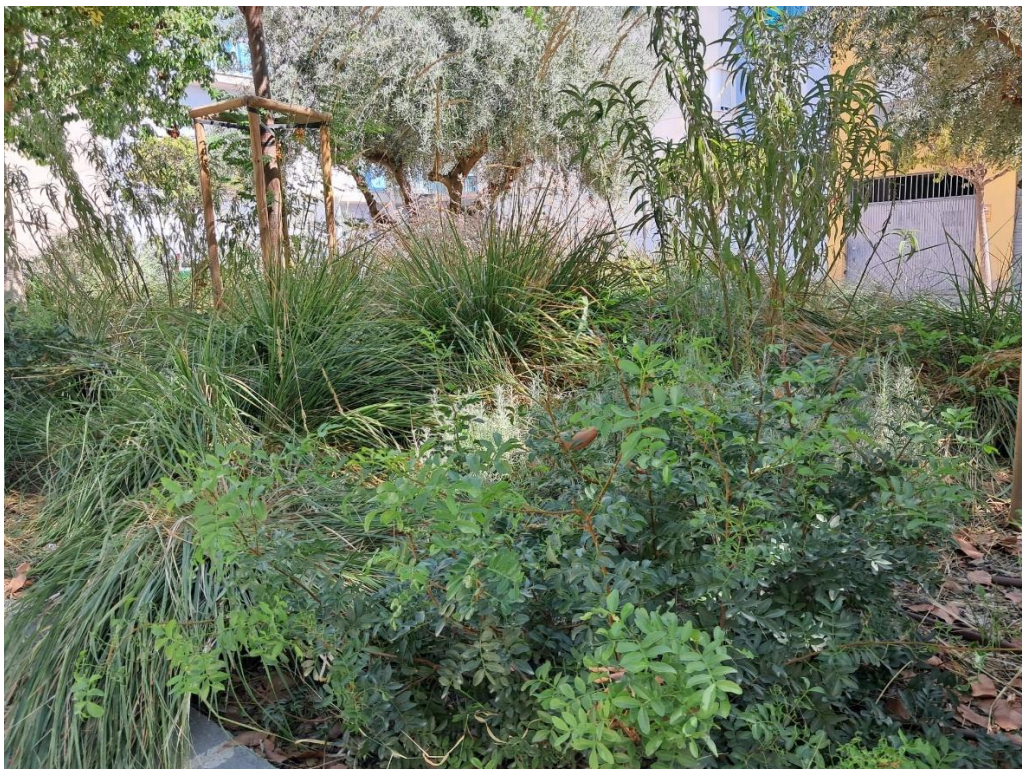
A central dimension of the approach taken by the municipality is the **active involvement of citizens**. Through participatory methodologies, it seeks to mobilize local knowledge, foster a sense of environmental co-responsibility and promote the co-creation of more inclusive and functional green spaces. At the same time, it aims to strengthen internal coordination between municipal departments and strengthen alliances with the associative and social fabric of the city.

The City Council also contemplates **the use of digital tools** to improve decision-making, facilitate planning and move towards a more efficient and adaptive management of the territory.

### 1.3. The Cieza Integrated Action Plan and the role of stakeholders in its design

The development of Cieza's Integrated Action Plan (IAP) has been built on a solid **foundation of citizens' participation**. Since the beginning of the project, the environmental volunteer groups and the table of the environmental education program of the Department of Environment have played a key role, active forums and committed to the improvement of local biodiversity and the promotion of a greener urban environment.

This dynamic has been joined, throughout the process, by the **URBACT Local Group (ULG)** promoted by the Department of Social Services within the framework of the project *Tejiendo Barrios*, which works for social inclusion and the improvement of living conditions in vulnerable neighborhoods. This collaboration has broadened the scope of the IAP, also integrating key social dimensions into sustainable urban planning.





Beyond these organized structures, the process has had the active involvement of numerous individual residents, whose ideas and experiences have enriched the content of the plan. The educational institutions of the municipality have also had a relevant participation, through teachers and students involved in environmental education and volunteering initiatives. Likewise, the design of the IAP has been fueled by the contributions of a wide variety of community actors, including youth associations, sports and third sector entities, who have contributed valuable knowledge about the use and perception of green spaces in Cieza.

This **collaborative approach** has been reinforced by the participation of various municipal departments and technical staff, whose experience has been key to ensure the viability of the proposals and their coherence with existing municipal strategies in terms of sustainability, social cohesion and urban planning.

Interested parties are listed in the table below:

Type of interested party	Stakeholders
<b>Schools</b>	CEIP San José Obrero, CEIP Cristo del Consuelo, IES Los Albares, CEIP José Marín
<b>Youth associations</b>	OJE - Spanish Youth Organization
<b>Sports organisations</b>	Indoor Football Club of Cieza
<b>Third sector</b>	Red Cross
<b>Companies/Mixed Companies</b>	<i>Entorno Urbano</i> <i>Aguas de Cieza</i>
<b>Municipal services and units</b>	Department of Environment and Circular Economy, Department of European Projects and Strategic Objectives, Social Services, Municipal Early Care Centre
<b>Other Local Councils</b>	Local Council for the Environment
<b>Citizenship</b>	Participation of citizens at a particular level





Figure 1. Photo taken at one of the ULG meetings.

During the preparation of the IAP, one of the main challenges identified has been the need **to increase the involvement of key actors in the implementation of future actions**. In particular, efforts are being made to incorporate scientific institutions, such as the University of Murcia, and representatives of the private sector.

Within the latter, the agricultural sector stands out, closely linked to the local identity. The Protected Geographical Indication (PGI) Peach of Cieza, jointly managed by the City Council and agricultural companies through the Regulatory Council, represents a strategic opportunity to align urban biodiversity with the socioeconomic fabric of the municipality.

Collaboration with these actors would allow generating synergies between urban greening and sustainable agriculture, reinforcing the integrated approach of the plan and strengthening its connection with the productive and environmental realities of the territory.

In parallel, the **transnational dimension** of the project has been equally enriching. International meetings held within the framework of the BiodiverCity network have led to valuable exchanges with partner cities. Thematic workshops and interactive sessions have strengthened local capacities, offering new perspectives on the implementation of nature-based solutions (NBS) and urban biodiversity management.

Transnational meetings and informal dialogue spaces such as BiodiverCity Cafés have provided concrete ideas which Cieza has begun to explore and incorporate into its local strategy. Some particularly relevant examples include:

- **'s-Hertogenbosch (Netherlands):** innovative methods for blue infrastructure management in urban environments.
- **Dunaújváros and Veszprém (Hungary):** integration of green and blue infrastructure, ecological management of urban grasslands, and inspiring citizens' participation processes such as Budapest100, which have served as a reference for the creation of the first BiodiverCity Festival in Cieza in 2025.
- **Limerick (Ireland):** contributions on integrated planning of green and blue spaces, micro-interventions to improve biodiversity (green roofs, vertical gardens), hybrid financing (including public-private associations) and promotion of community use of urban natural spaces.
- **Guimarães (Portugal):** development of biodiversity and sustainability indicators, innovative environmental education actions led by Laboratório da Paisagem, dissemination campaigns with thermal images to demonstrate the cooling effect of urban trees and the creation of green brigades as a participatory environmental management tool.
- **Siena (Italy):** Community orchards and urban gardens managed by students, citizens and associations to foster social cohesion, conservation initiatives such as planting floral bands at the edges of forests to reduce landscape fragmentation and improve biodiversity, art and community through libraries and theaters in forests, and collective orchards.

In addition to all the above, there are the many ideas exchanged in the BiodiverCity Cafés, which have inspired actions related to the protection of pollinators, soil improvement, the renaturalisation of schools, the installation of vertical gardens and green roofs, and biodiversity compensation policies in new urban developments.

Together, these learnings are shaping an inclusive, realistic and action-oriented roadmap, combining Cieza's local priorities with the shared values of the BiodiverCity network.



# 2.

## Context, Needs and Vision



## 2. Context, Needs and Vision

### 2.1. Local diagnosis: urban biodiversity and ecosystem services

Urban growth represents one of the main challenges for environmental sustainability in Europe: more than 70% of the population already lives in urban areas, a proportion that will continue to increase in the coming decades. This concentration generates pressures such as air pollution and noise, the loss of green spaces, the fragmentation of the territory or the increase of extreme events, with direct effects on public health and biodiversity.

In this context, **urban green infrastructure** – a network of interconnected natural spaces in and around cities – is a **key tool for improving the quality of life and ensuring essential ecosystem services** such as climate regulation, water management or improving physical and mental well-being.

Cieza exemplifies the challenges many medium-sized Spanish cities face in meeting international standards for urban green spaces. Despite being surrounded by a natural environment rich in biodiversity, its urban core has a small green area. In addition, these spaces are fragmented and poorly connected with the peri-urban environment, which limits their ecological functionality.



The municipality is located in a **territory of high environmental value**, with a prominent presence of the Natura 2000 Network. The protected areas include the SPA 'Sierra del Molino, Embalse del Quípar y Llanos del Cagitán' and the SCI 'Sierras y Vega Alta del Segura y Ríos Alhárabe y Moratalla', habitat for species such as the golden eagle, the peregrine falcon or the royal owl. In addition, the



Segura River, which crosses the city, forms an important ecological corridor with high potential to support urban ecological connectivity.

**More than a decade ago, Cieza began to work actively on the assessment and improvement of its urban biodiversity,** making measurements on groundcover, floristic composition and ecological connectivity. This technical work allowed to identify a challenging starting situation, characterized by a limited and fragmented urban green infrastructure, with only 3.61 m<sup>2</sup> of green areas per inhabitant and a vegetation coverage of 9.4% in the urban nucleus, compared to 32.7% in the whole municipality. This disconnection between urban space and its natural environment restricted both the ecological functionality and the social benefits of green spaces.

The diagnosis also showed low plant diversity, with 53.6% of tree and shrub mass concentrated in only three species, in contrast to international urban biodiversity standards. Added to this there were unsustainable maintenance practices and a lack of technical coordination between departments, which made it difficult to develop an integrated green strategy.

However, these data served as a **basis for guiding local policies in recent years.** Thanks to various plans, municipal programs and community initiatives, Cieza has made significant progress in improving its green infrastructure, incorporating sustainability criteria, species diversification, more respectful pruning techniques and a more participatory approach. These lines of action, which will be developed in the following sections, mark a change of course towards a more balanced model between city and nature.



Despite progress, **the municipality continues to pursue relevant objectives:** increase green connectivity, strengthen urban resilience to climate change and

promote a closer link between citizens and nature. To achieve them, Cieza is committed to moving towards a biophilic city model, in which urbanism is conceived as a tool to regenerate the relationship between people and the natural environment.

In this sense, the City Council also begins to explore the approach of **consilient urban planning**, an emerging strategy that advocates the integration of diverse disciplines – ecology, public health, engineering, architecture, citizen participation, urban planning – with the aim of building cities that are more balanced, liveable and adapted to the challenges of the 21st century. This approach reinforces the vision of urban development that is not only greener, but also fairer, more resilient and deeply connected to the dynamics of the territory.

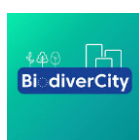
## 2.2. Linking the IAP with other public policies and strategies

Since 2016, Cieza has consolidated a **sustained trajectory in the elaboration and implementation of public policies aimed at urban sustainability**. The municipality has developed specific plans focused on trees, biodiversity, climate change and territorial planning, with a rigorous technical approach and growing citizen involvement.

Key instruments include:

1. The **Master Plan and Management of Urban Trees and Green Zones of the city of Cieza**, which marks a before and after in the technical management of urban trees, integrating criteria of plant health, safety, functionality and ecosystem value.
2. The **Strategic Plan for Urban Ecology and Biodiversity** (SPUEB, 2017–2032), which is committed to a long-term vision to increase urban green coverage, improve climate resilience and recognize trees as living infrastructure. Thanks to the advances derived from its implementation, Cieza has been included for five consecutive years (2021–2023) in the international network Tree Cities of the World (FAO and Arbor Day Foundation), being one of the few Spanish cities to achieve this.
3. The **Sustainable Energy and Climate Action Plan (SECAP)**, under the Covenant of Mayors, which incorporates climate change mitigation and adaptation measures.
4. The **Local Urban Agenda**, selected as a pilot experience by the Ministry of Transport, Mobility and Urban Agenda, which guides the transformation of the municipality through the axes of fair city, green city and productive city, in line with the Spanish Urban Agenda and the Sustainable Development Goals.

In addition, Cieza has promoted pioneering projects such as the 'School Forest 21 against climate change', which received a second prize at the CONAMA Awards 2008 and is still inspiring educational renaturalisation actions. The





municipality has also been awarded the Tree Award 2022 of the Cities Forum, the Sustainable Development Awards of the Region of Murcia in the categories of Eco-innovation (2008) and Environmental Education (2013 and 2017), and with the Good Practices for Climate Award 2022 for its commitment to solutions based on nature.

This set of plans and recognitions constitutes a solid foundation on which the Integrated Action Plan (IAP) of the BiodiverCity project is built. It is not a question of creating a new isolated strategy, but of connecting, strengthening and operationalizing urban biodiversity as a cross-cutting axis of local planning.

The **IAP provides an integration layer** that allows:

1. Expand the scope of SPUEB, connecting woodland management with improved ecological connectivity and habitat diversification.
2. Linking PACES with nature-based measures, such as green corridors, rain gardens or groundcovers, with both climate and social benefits.
3. Pursuing the objectives of the Urban Agenda, providing tools to renaturalize public spaces, integrate biodiversity in vulnerable neighborhoods and strengthen neighborhood participation.
4. Connect emblematic projects such as the renaturalization of the urban stretch of the Segura River (2.3 km) with green infrastructure strategies and improving resilience to climate change.



To ensure this articulation, the **IAP proposes:**

1. Balance objectives, deadlines and indicators between municipal strategic plans.
2. Establish mechanisms of shared governance, especially between areas of environment, urbanism, participation and public services.
3. Use existing monitoring structures, such as those linked to the SECAP or the Urban Agenda, to monitor the progress of the IAP.
4. Promote a shared technical culture, promoting common criteria for sustainability, biodiversity and adaptation to climate change throughout the municipality.

### 2.3. Challenges addressed by the IAP

Cieza's green infrastructure faces a number of **structural, cultural and organisational challenges** that **limit its ability** to generate ecosystem services, improve the quality of urban space and contribute to climate resilience. To deal with them it requires integrated responses, based on institutional cooperation, technical training and the active involvement of citizens.

1. **Institutional fragmentation:** Despite the efforts made, there is still a lack of shared vision among municipal departments around the design and management of green in the city. The Guide for the Development of Municipal Green Infrastructures (FEMP, 2019) underlines the importance of integrated approaches that coordinate areas such as environment, urban planning, works, mobility or services. This coordination, which in Cieza has already begun to be articulated through its strategic plans, needs to be consolidated through permanent mechanisms of joint work, common objectives and internal governance structures. In this way, it would be ensured, for example, that any action that may affect urban nature has the prior approval and supervision of the City Council's environmental team, avoiding unforeseen damage and promoting ecological coherence throughout the municipality. The IAP provides an opportunity to apply the principles of consilient urbanism, promoting interdisciplinary collaboration as a basis for balanced urban development. Although in the past limited technical capacity has been identified in municipal staff, at present, Cieza has a consolidated technical structure both in the City Council and in the joint venture. Despite the fact there is always room for continuous improvement, teams have already the right training and skills to address green infrastructure management. The current challenge is focused on advancing strategic planning, which will allow completing the management cycle and applying more advanced approaches in arboriculture and green infrastructure management.



2. **Weak ecological and functional connectivity and lack of vision in blue infrastructure management:** fragmentation between natural areas and urban areas, lack of functional green corridors and insufficient blue infrastructure limit the provision of ecosystem services and the ability to adapt to climate change. In addition, many green areas have degraded or poorly managed soils, which hinders their ecological restoration. There is a need to integrate a broader vision that addresses both green connectivity and improved water management, which is key to optimizing the use of water resources and strengthening green and blue infrastructure.
3. **Obsolete practices and low presence of diverse nature in the urban fabric.** Although improvements have been initiated, the presence of inherited trees managed with an inadequate pruning system and without the possibility of renaturalization forces the maintenance of obsolete, expensive and unprofitable management practices for the city. These types of trees, recognised by municipal staff as 'placebo trees', have small crowns, reduced heights (less than 8 meters), and are highly vulnerable to pests, diseases and breakage. In addition to offering few environmental and social benefits, its maintenance is expensive, and its useful life is usually less than 30-40 years. Likewise, the urban fabric of Cieza has a low proportion of green spaces and relatively little diverse vegetation, which, despite advances in recent years, is still partly dominated by few species little adapted to the local environment.
4. Limited social **perception of the value of trees:** there is still widespread public acceptance of traditional practices, such as intensive pruning, wrongly associated with safety or urban clean-up. Many people perceive certain natural features of trees (fallen leaves, superficial roots, presence of insects or shading on the facade) as nuisances, reflecting a low cultural appreciation of urban biodiversity and ecosystem services.

## 2.4. Vision and main objective of Cieza

### *Main objective*

**Renaturalise Cieza by promoting nature-based solutions that improve the quality of urban life, improve biodiversity, and foster a more inclusive and coordinated urban governance model.**

### *Vision*

Cieza foresees a **greener, more connected, and resilient city**, where nature is not a peripheral element, but a central component of urban life. The Integrated Action Plan aims to reverse the current fragmentation of green spaces, deal with outdated environmental management practices and respond to the lack of institutional coordination through a shared and cross-sectoral approach.



By integrating biodiversity into planning, monitoring and education, and by actively engaging citizens, schools, associations and the agricultural sector, the city seeks to build a renewed relationship between people and their environment. This transformation will contribute not only to climate adaptation and ecological health, but also to social well-being, equity in access to green spaces and a long-term culture of environmental stewardship.





3.

General logic  
and integrated  
approach

# 3. General logic and integrated approach

## 3.1. Strategic objectives

The Integrated Action Plan (IAP) for Cieza is structured around four strategic objectives that respond to the 4 challenges it addresses:

1. **Promote interdepartmental integration and institutional innovation** to efficiently manage urban biodiversity, applying a coordinated and data-driven approach.
2. **Improve the city's green and blue infrastructure**, broadening green coverage and establishing functional connections between urban and peri-urban natural spaces.
3. **Increase urban and peri-urban biodiversity** through restoration actions, adaptive management and diversification of species and habitats.
4. **Encourage the active involvement of citizens** in the management of urban biodiversity through environmental education, effective communication and participation in renaturalization projects.



## 3.2. Areas of intervention

Each strategic objective is implemented through a **specific area of intervention**. Together, these four thematic pillars define the operational framework of the Integrated Action Plan and guide the design of actions and pilot projects.

1. Consilient governance and institutional innovation.
2. Functional and connected green and blue infrastructure.
3. Ecological restoration and biological diversification.



#### 4. Green culture and citizen participation.

### 3.3. Actions by field of intervention

The connection between challenges, objectives and areas of intervention ensures coherence **and integration of all municipal priorities**, ensuring that there are concrete and well-defined actions to achieve each objective and overcome each challenge. This relationship is clearly reflected in the table below.

Challenges	Strategic objectives	Lines of intervention	Actions
<b><i>Institutional fragmentation</i></b>	Promote interdepartmental integration and institutional innovation to efficiently manage urban biodiversity, applying a coordinated and data-driven approach.	Consistent urbanism and institutional innovation	Regular interdepartmental coordination meetings Comprehensive analysis of traceability in the life cycle of the works, from their design to their execution Better regulations in the General Municipal Planning Plan (PGMO) Approval of the municipal biodiversity ordinance SMART CITY and biodiversity Strengthening participation in networks
<b><i>Weak ecological and functional connectivity and lack of vision in blue infrastructure management</i></b>	Improve the city's green and blue infrastructure, broadening green coverage and establishing functional connections between urban and peri-urban natural spaces.	Functional and connected green and blue infrastructure	Connection between the urban nucleus and the riverside promenade of the Segura River Improvement of the riparian ecosystem Creation of wetlands for amphibians Runoff water management
<b><i>Obsolete practices and low presence of diverse nature in the urban fabric</i></b>	Increase urban and peri-urban biodiversity through restoration actions, adaptive management and diversification of species and habitats.	Ecological restoration and biological diversification	Renaturalisation of schools and school areas Improvement of parks and gardens Increased tree cover on streets and creation of new green areas Conservation of unique trees Increase of biodiversity in fauna Soil improvement
<b><i>Limited social perception of the value of trees</i></b>	Encourage the active involvement of citizens in the management of urban biodiversity through environmental education, effective communication and participation in renaturalization projects.	Green culture and citizen participation	Annual communication strategy Community and educational participation Participation in scientific and technical dissemination forums and collaboration with universities Training workshop for politicians

### 3.4. The concept of integration

Integration is at the heart of Cieza's Integrated Action Plan (IAP). It is not enough to propose isolated actions to improve urban biodiversity; it is essential that these actions are connected to each other and to the policies, departments and citizens of the city. Only in this way will a real, deep and lasting change be achieved. Here are the most important aspects of integration for Cieza:

#### 1. Real and continuous participation

The IAP has succeeded in mobilizing many local actors in the planning and design of actions. But this involvement must go beyond the initial phases: participation should be maintained throughout implementation and consolidated as a long-term joint work.

#### 2. Sectoral and spatial integration

Urban biodiversity crosses many areas: urban planning, mobility, water, environment, education... Therefore, breaking the fragmentation between departments is essential. The IAP is committed to an interdepartmental group that coordinates actions and, in addition, to physically connect the green spaces through corridors that link neighborhoods with the Segura River and its riverside promenade.

#### 3. Multilevel coordination and coherence with other policies

Cieza has aligned the IAP with local, regional and European strategies, but collaboration with other levels of government and the scientific community is still limited. The IAP is an opportunity to strengthen these linkages and ensure shared monitoring and evaluation.

#### 4. Continuity and long-term vision

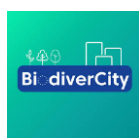
The IAP unites the immediate and the future: concrete pilot actions, such as renaturalising specific areas, are linked to broader objectives such as incorporating biodiversity into urban planning regulations. Flexible and adaptive planning will ensure that interventions last and adjust over time.

#### 5. Attention to cross-cutting issues

The plan focuses not only on nature, but also on social inclusion, climate change and digitalization. It combines investments in green infrastructure with education, training and citizen participation actions, seeking a balance between "hard" and "soft".

#### *Current level of integration and key aspects to improve*

Cieza starts from an average level of integration. There are participatory structures, experience in strategic planning and political will. However, integration remains inconsistent and often depends on individual departments or external project funding. To improve, the IAP will prioritize:



- Strengthen horizontal coordination by holding annual meetings.
  - Ensure that citizen participation is not only consultation, but an active collaboration in the different actions.
  - Use data and scientific evidence, making use of innovative tools of Smart City and the knowledge derived from the participation of the City Council in networks.
5. Extend territorial integration to neighbouring municipalities, especially around river management and peri-urban biodiversity.



### 3.5. Analysis of the cross-cutting themes of URBACT: challenges and learnings

The cross-cutting themes of URBACT – green transition, digital transition and inclusion – are present throughout the Cieza Integrated Action Plan (IAP). They are not just ideas, but they are translated into concrete actions to address local challenges.

#### *Green transition*

The IAP promotes urban renaturalisation to combat the fragmentation of green infrastructure and biodiversity loss. This includes creating green corridors that connect neighborhoods and the Segura River, improving parks and gardens with native species (and/or adapted to the expected climatic conditions), and achieving a total change in the design and management model of green areas. It also promotes the active participation of citizens to take care of and get to know these spaces, integrating nature into daily life.

#### *Digital transition*

Digital tools help to efficiently monitor and manage biodiversity. Therefore, the plan promotes Geographic Information Systems and Smart City tools. These

technologies facilitate data-driven decisions, optimize the work of the municipal team and improve transparency to citizens.

### *Equality and inclusion*

The plan seeks that all people, especially vulnerable groups, have access to green spaces and can participate in their design and care.

### **3.6. Integration and compliance of cross-cutting URBACT themes**

The actions proposed in the Integrated Action Plan are designed to be cross-sectoral, inclusive and aligned with the cross-cutting themes of URBACT: green transition, digital transition and gender equality and inclusion. The following table summarizes how each area of intervention complies with these principles.

Area of intervention	Integration	Green transition	Digital transition	Inclusion & Gender equality
1. Consilient governance and institutional innovation	It establishes interdepartmental mechanisms and multisectoral cooperation for integrated management.	It promotes regulations and coordination to integrate biodiversity and sustainability in urban management.	Use of GIS, databases and digital tools for planning and monitoring.	It encourages inclusive participation in processes and networks, ensuring diverse representation.
2. Functional and connected green and blue infrastructure	It promotes the physical and ecological connection between urban and natural spaces, integrating the territory.	Renaturalization, creation of green corridors and improvement of the riparian ecosystem to mitigate climate impacts.	Domotic irrigation control and efficient water management through intelligent technologies.	Accessible and equitable design of green spaces for the entire population.
3. Ecological restoration and biological diversification	It combines ecological, educational and social actions to restore ecosystems and strengthen communities.	It increases urban biodiversity through adapted plantations, soil improvement and species conservation.	Digital biodiversity monitoring and data-driven sustainable management.	Integration of educational and community programs that promote the participation of vulnerable groups.
4. Green culture and citizen participation	It facilitates collaboration between citizens, institutions and experts, consolidating an inclusive and participatory approach.	It promotes environmental awareness and the citizen's link with nature.	Use of digital platforms for campaigns, participation and citizen science.	Specific actions to include women, youth, older people and other groups in green governance.





4.

Detail of the  
planning of the  
actions



## 4. Detail of the planning of the actions

### 4.1. Area of intervention 1: Consilient urbanism and institutional innovation

#### ACTION 1.1. Regular interdepartmental coordination meetings

**Objective:** improve coordination between the key departments of Cieza City Council to address common problems related to the development of works and the management of trees.

##### APPLICATION STEPS

1. **Define key people within each department involved** (Departments of Environment and Circular Economy; Planning and Urban Management; Works, housing and infrastructure; and Aguas de Cieza) and convening of the first meeting.
2. **Preparation and organisation of the first meeting:** establishment of agenda, confirmation of attendance and holding of the meeting.
3. **Monitoring and evaluation during the rest of the year.** In the meetings specific tasks will be assigned with execution deadlines, which will be monitored quarterly to evaluate progress.
4. **Convening of the next annual meeting,** repeating the steps every year.

**CALENDAR** → 2026 – 2035

##### RESPONSIBILITIES

- Coordination: Department of Environment and Circular Economy.
- Participation: Departments of Planning and Urban Management; Works, housing and infrastructure; Aguas de Cieza.

**COSTS** → Own resources in the form of dedication of municipal staff.

**FUNDING** → Municipal funds

##### MONITORING INDICATORS

- Number of meetings held.
- % of actual assistance in relation to planned assistance
- % of assigned tasks that have been completed within the set deadline.

##### RISK MITIGATION

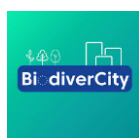
- **Low participation:** formalise commitments and delegate responsibilities.
- **Lack of follow-up:** permanent delegates and rigorous follow-up.

#### ACTION 1.2. Comprehensive analysis of traceability in the life cycle of the works, from their design to their execution

**Objective:** carry out a detailed analysis of the life cycle of public and private works in Cieza, from their design to their execution, in order to identify problems and propose solutions that improve the integration of green infrastructure and woodland management.

##### APPLICATION STEPS

1. **Define the team responsible for carrying out the analysis,** including technicians from the Departments of Environment and Circular Economy; Planning and Urban Management; Works, housing and infrastructure; and Aguas de Cieza. This team will be designed at the first interdepartmental coordination meeting (Action 1.1).
2. **Collect information from ongoing and future works,** including details of their design, execution and maintenance. Practical cases will be taken into account such as the work on the Camino de Murcia, the elimination of trees on public roads due to works, or the opening of garages and terraces with an impact on the trees.



3. **Carry out a detailed analysis of the traceability of the works**, identifying the phases of the life cycle where problems may arise related to the impact on trees and green infrastructure.
4. **Prepare a report with the findings, problems identified and proposed solutions** in order to optimise the integration of green infrastructure in the design and execution of works.
5. **Present the report to the departments involved and establish an action plan to implement the proposed solutions.** This report will be presented at the 2027 coordination meeting.

**CALENDAR** → 2026 -2027

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Departments of Planning and Urban Management; Works, housing and infrastructure; Aguas de Cieza

**COSTS** → Own resources in the form of dedication of municipal staff.

**FUNDING** → Municipal funds

#### MONITORING INDICATORS

- % implementation of the solutions proposed in the report

#### RISK MITIGATION

- **Lack of information or incomplete data:** Establish a clear structure of data collection and communication with those responsible for each work.
- **Resistance to implementing the proposed solutions:** Generate consensus among the departments involved and present the long-term benefits.
- **Delays in implementation:** Establish clear and accountable timelines for each phase of analysis and implementation.

### ACTION 1.3. Better regulations in the General Municipal Planning Plan (PGMO)

**Objective:** improve the regulations of the General Municipal Planning Plan (PGMO) of Cieza to include requirements that guarantee the review of green infrastructure actions and favor the sustainable management of trees in new urban developments. This could include the integration of larger sidewalks, larger trees and the application of international principles that ensure the non-reduction of global biodiversity in urban design. A regulatory framework for the protection and valuation of urban trees based on Norma Granada will also be developed.

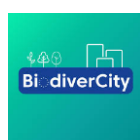
#### APPLICATION STEPS

1. **To make a diagnosis of the current regulations of the PGMO** to identify deficiencies related to the management of trees and green infrastructure in new urban developments.
2. **Propose amendments to the regulations**, such as the inclusion of larger sidewalks, the planting of larger trees and the implementation of urban spaces that favor biodiversity. The incorporation of international principles, such as those established in the Granada Standard, will be sought to guarantee the protection of trees and biodiversity in urban design.
3. **Submit the proposed modifications to the departments involved (especially the Planning and Urban Management Department)** for review and validation.
4. **Conduct a public consultation** to collect the views and suggestions of citizens and other key actors regarding the proposed amendments.
5. **Implement the specific modifications approved in the PGMO** and ensure their application in all new urban developments.

**CALENDAR** → 2027 – 2028

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.





<ul style="list-style-type: none"> <li>• <b>Participation:</b> Department of Planning and Urban Management.</li> </ul>
<b>COSTS</b> → 10,000 €
<b>FUNDING</b> → Municipal funds
<b>MONITORING INDICATORS</b> <ul style="list-style-type: none"> <li>• % of amendments to the PGMO adopted on the proposals.</li> <li>• % of new developments that comply with the regulations.</li> <li>• Number of public consultations conducted.</li> </ul>
<b>RISK MITIGATION</b> <ul style="list-style-type: none"> <li>• <b>Lack of political and/or interdepartmental priority:</b> sensitize politicians on the benefits of the action for the municipality, align the action with other municipal strategic plans and involve departments from the beginning.</li> <li>• <b>Lack of consensus:</b> ensure a participatory and transparent process through public consultation.</li> <li>• <b>No effective implementation of the new rules:</b> regularly monitor the implementation of the regulations.</li> </ul>

<b>ACTION 1.4. Approval of the municipal biodiversity ordinance</b>
<b>Objective:</b> develop and approve a municipal ordinance regulating the protection, conservation and improvement of urban biodiversity in Cieza. This regulation will promote the conservation of birdlife, the valuation of trees affected by new works or vandalism and promote the increase of biodiversity in urban and peri-urban spaces.
<b>APPLICATION STEPS</b> <ol style="list-style-type: none"> <li>1. <b>To make a diagnosis on the current situation of urban biodiversity in Cieza</b>, identifying critical areas that need protection and improvement measures, with special attention to birdlife and urban woodland.</li> <li>2. <b>Draft the ordinance</b>, which will include regulations for the protection of birdlife, the conservation of trees and the valuation of trees damaged by works or vandalism. Also include measures to promote biodiversity in urban spaces and establish sanctions for those who do not comply with the provisions of the regulations.</li> <li>3. <b>Conduct a public consultation</b> to collect the views and suggestions of citizens and other key actors on the proposed ordinance.</li> <li>4. <b>Incorporate the suggestions of the public consultation into the final draft of the ordinance.</b></li> <li>5. <b>Approve the ordinance in the plenary session of the City Council</b> and ensure its effective implementation throughout the city, including specific measures for the protection of birdlife, the restoration of trees affected by new works or vandalism, and the corresponding sanctions.</li> </ol>
<b>CALENDAR</b> → 2028 -2029
<b>RESPONSIBILITIES</b> <ul style="list-style-type: none"> <li>• <b>Coordination:</b> Department of Environment and Circular Economy.</li> <li>• <b>Participation:</b> associations, and the general public.</li> </ul>
<b>COSTS</b> → Own resources in the form of dedication of municipal staff.
<b>FUNDING</b> → Municipal funds.
<b>MONITORING INDICATORS</b> <ul style="list-style-type: none"> <li>• Number of sanctions or corrective actions resulting from the implementation of the ordinance</li> </ul>
<b>RISK MITIGATION</b> <ul style="list-style-type: none"> <li>• Lack of support from citizens or politicians: awareness-raising campaign explaining the benefits of the ordinance for the city, public health and the environment. Include all key actors in the public consultation process and the revision of the draft.</li> </ul>

- Lack of resources for its implementation: securing resources through budget planning, as well as seeking external funds or collaborations with local NGOs and businesses to support the implementation of the regulations.

### ACTION 1.5. SMART CITY and biodiversity

**Objective:** integrate technological tools and Smart City systems to optimize the management of trees and green areas in Cieza, as well as to monitor compliance with the objectives set for increasing green coverage in the city. This includes the implementation of indicators, the use of Geographic Information Systems (GIS), intelligent irrigation control systems, and specialized applications for forest management and valuation of ecosystem services. It will seek to automate the control of water consumption in parks and gardens, improving resource efficiency and contributing to environmental sustainability.

#### APPLICATION STEPS

1. **Identification of needs and objectives:** identify forest management areas and green areas that will benefit from technological implementation, including irrigation systems and the valuation of ecosystem services. This is the first step in justifying their need to politicians, citizens and in case of funding opportunities.
2. **Selection of technological tools:** evaluate and select the most appropriate tools, such as the use of Geographic Information Systems (GIS) for tree mapping and monitoring, NDVI (Standard Difference Vegetation Index) for real-time plant coverage and health assessment, Greenhill and MyTreeRisk to assess tree health and ecosystem services, and intelligent irrigation control and automation systems to optimise water use in parks and gardens.
3. **Implementation of tools:** integrate the selected tools in the management system of the green areas of the municipality, with the collaboration of experts in technology and the environment. This implementation will be progressive and will be carried out according to the availability of budget and external financing that are presented.
4. **Training and training:** train municipal staff in the use and maintenance of technological tools, and provide training to those responsible for the management of trees and green areas.
5. **Monitoring and evaluation:** implement a monitoring system using the established indicators, monitoring the use of water resources, the health of the trees and the improvement of biodiversity.
6. **Adjustments and optimisation:** evaluate the results and make adjustments in the systems to optimize performance and improve the management of natural resources in the municipality.

**TIMETABLE** → 2026 – 2030

#### RESPONSIBILITIES

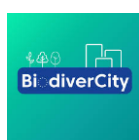
- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Smart City Office

**COSTS** → It will vary depending on the selected tools and their scope. It is estimated 50,000 euros, taking into account that it is an action that will be developed in the long-term depending on new developments.

**FUNDING** à European and national funding of Smart City and sustainability programs. Regional through Smart Region.

#### MONITORING INDICATORS

- Increased green coverage or indicator compliance 3-30-300.
- **% of green areas managed with SMART technologies:** measure the number of areas managed with digital tools, such as GIS and smart irrigation.
- **Reduction in water consumption:** measure the reduction in water consumption in parks and gardens after the implementation of smart irrigation.



- **Improvement in tree health:** assess the state of tree health and biodiversity with assessment tools such as **MyTreeRisk**.

#### RISK MITIGATION

- **Resistance to technology by municipal staff and/or companies responsible for the management of green areas:** implement a continuous training strategy and provide technical support during the transition phase.
- Technical or integration **failure:** collaboration with technology experts and pilot testing prior to full implementation to ensure the tools are functional.

### ACTION 1.6. Strengthening participation in networks

**Objective:** strengthen Cieza's participation in international and national biodiversity networks, such as Tree Cities of the World and the Spanish Network of Cities + Biodiversity, in order to exchange good practices and gain international visibility. In addition, participation in technical committees on infrastructure and biodiversity will be enhanced.

#### APPLICATION STEPS

1. **Identification of relevant networks:** research and select international and national biodiversity networks that Cieza can join, such as **Tree Cities of the World** and the **Spanish Network of Cities + Biodiversity**.
2. **Contact and registration.**
3. **Participation in events, conferences and forums organized** by the networks, such as international congresses on biodiversity, meetings between cities and workshops to exchange good practices. It will continue to participate in technical committees on green infrastructure and biodiversity, in line with the experiences already made for CONAMA and the Impulso network.
4. **Visibility and promotion:** promote Cieza's participation in these networks at local and international level, highlighting the most innovative and sustainable projects related to urban biodiversity.
5. **Strengthening local engagement:** use participation in these networks to raise awareness and motivate citizens, associations and productive sectors on the importance of urban biodiversity and environmental policies.

**CALENDAR** → 2025 – 2035, continuous task.

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** local and international associations.

**COSTS** → 2,000€ per year for registration in networks, participation in events and promotion of the visibility of Cieza.

**FUNDING** → Municipal funds and budget of European projects in which Cieza participates as a partner.

#### MONITORING INDICATORS

- Number of networks which Cieza joins
- Number of events and forums in which Cieza takes part
- Visibility and recognition of Cieza in networks

#### RISK MITIGATION

- **Low participation in networks due to lack of human or technical resources:** designate a dedicated team to coordinate participation and ensure effective communication with networks.
- **Non-full use of networks:** plan activities in advance, set clear goals and follow up to maximize the benefits of participation.



## 4.2. Area of intervention 2: Functional and connected green and blue infrastructure

### ACTION 2.1 Connection between the urban nucleus and the riverside promenade of the Segura River

**Objective:** improve access to the Segura River and riverside areas from the urban core of Cieza, encouraging the integration of green infrastructure with the river environment. In addition to improving ecological connectivity, this action seeks to create a recreational space around the river, accessible, sustainable, and that favors biodiversity and the well-being of citizens.

#### APPLICATION STEPS

1. **Analysis of the continuity between the urban green zone and the riverside peri-urban,** identifying connection points, physical barriers and areas that require improvement. This phase will be aligned with other actions of the plan focused on the mobilization and awareness of citizens. Through surveys, workshops and consultations, the needs and expectations of the community about access to the river and riverside areas will be collected.
2. **Access improvement design:** plan the integration of green corridors connecting the urban core with the riverside promenade. This will include the greening of the main access roads and urban mobility that converge in the river. The actions in the main axes will be prioritized, and then continue with the radials. The main axes would be the great avenues such as Azorín, Rambla del Realejo, Avenida de Abarán, Paseo de Ronda, Camino de Madrid and Cuesta del Molino. The creation of trails, bridges, ramps and other infrastructure around the river will be evaluated to improve accessibility for pedestrians and cyclists. The integration of green spaces in the design of the accesses will be promoted, such as rain gardens, rest areas, and shaded areas.
3. **Implementation of improvements:** initiate the necessary infrastructure works to improve access and connectivity, prioritizing those areas most in demand by the population. All actions to improve ecological connectivity between the river and the city will be closely linked to riverside restoration activities (Action 2.2).

**CALENDAR** → 2025-2035

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Departments of Planning and Urban Management; Works, housing and infrastructure; and Aguas de Cieza.

**COSTS** → 2,000,000 €

**FUNDING** → National and European funding.

#### MONITORING INDICATORS

- Number of new accesses created to the river
- Increase of tree cover in streets
- Impact on riparian biodiversity

#### RISK MITIGATION

- **Resistance of the citizens or sectors involved:** involve citizens in the design process from the outset through workshops and public consultations.
- **Delays in the execution of the works due to logistical or financial delays:** establish clear deadlines, sufficient resources and close monitoring of the progress of the works.

## ACTION 2.2. Improvement of the riparian ecosystem

**Objective:** restore and improve the riverside ecosystem of the Segura River, especially in the area of *Puente de Hierro-Argaz* and *Puente de la Presa-Puente de Hierro*. The action will focus on the elimination of invasive species, the restoration of natural habitats, and the promotion of river biodiversity.

### APPLICATION STEPS

1. **Identification of critical areas.** Some of them are clearly identified and have even been included in funding applications. This is the case of the section of the Segura River between *Puente de Hierro to Puente Argaz*, of 2,340 m in length. The renaturalisation of the 32,000m<sup>2</sup> of riparian space would improve the conservation of species and habitats linked to the river, and optimize the ecosystem services they offer to citizens and especially to the most vulnerable neighbourhoods (San José Obrero y la Era – La Asunción). In order of prioritization, the extension from *Puente de la Presa to Puente de Hierro* would follow.
2. **Elimination of invasive species.** This is, of the most abundant, the *Arundo donax* (common cane), but also others such as *Nicotiana glauca*, *Eucaliptus camadulensis*, *Robinia pseudoacacia*, *Opuntia ficus-indica* and *Acacia farnesiana*.
3. **Restoration of riparian habitats** by planting native vegetation such as *Populus alba*, *Salix alba*, *Tamarix africana*, *Celtis australis*, *Ulmus* sp. and *Fraxinus angustifolia* in riparian areas.
4. **Promotion of environmental volunteering** for the restoration of coastal beaches. Since 2017, there has been an environmental volunteer program in Cieza, which seeks to strengthen the riverside beaches near the urban center. Cieza will continue to promote the restoration of new areas and the consolidation of restored areas in recent years.

**CALENDAR** → 2025-2035

### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Aguas de Cieza.

**COSTS** → 450,000 €

**FUNDING** → National and European funding.

### MONITORING INDICATORS

- Restored area
- Number of species planted
- Number of people involved in environmental volunteering activities

### RISK MITIGATION

- **Limited effectiveness in the elimination of invasive species:** use rigorous control and monitoring techniques and partner with experts in invasive species management.
- **Lack of participation or citizen interest:** organize educational campaigns and workshops that highlight the benefits of the project for the community.
- **Lack of funding:** look for additional sources of funding, such as grants or collaborations with NGOs and private companies.

### ACTION 2.3. Creation of wetlands for amphibians

**Objective:** create and maintain wetlands in strategic areas of the municipality of Cieza that favour local biodiversity, especially for amphibian species. These areas will not only contribute to the conservation of local wildlife but will also help improve water management and resilience to extreme weather events.

#### APPLICATION STEPS

1. **Identification of suitable areas**, taking into account factors such as proximity to water sources, accessibility and viability of the land. Some places pre-identified for their ease of maintenance are the Park Principe de Asturias or 'La Rambla del Realejo'. The possibility of using abandoned rafts or other areas conducive to the creation of small wetlands next to ramblas will be explored. Inspiration will be sought from the experiences presented by Guimarães during the project.
2. **Design of wetlands**, taking into account local biodiversity and the specific needs of amphibians.
3. **Preparing the land**.
4. **Creation of wetlands**, carrying out the necessary works to build ponds, planting native aquatic plant species and providing suitable shelters for amphibians.
5. **Control and maintenance**: periodic review of the areas to ensure that they are kept in optimal conditions for the local fauna (water, cleanliness, presence of invasive species...).

**CALENDAR** → 2027 - 2032

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Aguas de Cieza.

**COSTS** → 15,000 €

**FUNDING** → National and European funding.

#### MONITORING INDICATORS

- Number of wetlands created
- Number of amphibian species identified in ponds.
- Number of amphibian individuals detected in ponds.

#### RISK MITIGATION

- **Rapid deterioration:** establish a regular maintenance plan including the elimination of invasive species, vegetation management and water quality control. Allocate human and financial resources to ensure that adequate conditions are maintained in wetlands.
- **Negative impact due to vandalism or misuse:** implement protective measures, such as fences and clear signage on the importance of wetlands.
- **Non-colonisation by amphibians:** consider the characteristics of local amphibian species and their migratory habits in the design of areas.
- **Insufficient water quality:** install filtration systems and continuously monitor water quality to adjust interventions as needed.

### ACTION 2.4. Runoff water management

**Objective:** implement sustainable run-off water management systems in Cieza, in order to reduce flood risks, improve water quality and promote the sustainability of urban ecosystems. The action will focus on the application of Sustainable Urban Drainage Systems (SUDS), such as permeable pavements, rain gardens and other nature-based solutions for rainwater management.

#### APPLICATION STEPS

1. **Analysis of the solutions available on the market to improve permeability**, both in planting areas and in parking areas. Options such as structural floors for car parks will be studied, ensuring that water absorption and infiltration are maximized.



2. **Progressive incorporation of SUDS:** as new urban works are implemented, SUDS and other technologies will be gradually incorporated to improve soil permeability, ensuring its proper integration with existing urban infrastructure.
3. **Continuous monitoring and maintenance:** establish a monitoring system to evaluate the performance of the applied solutions, ensuring that the necessary maintenance tasks are performed to maintain their effectiveness and functionality over time.

**CALENDAR** → 2025 – 2035

**RESPONSIBILITIES**

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Department of Works, Housing and Infrastructure; and Aguas de Cieza.

**COSTS** → 3,000,000 €

**FUNDING** → National and European funding

**MONITORING INDICATORS**

- Number of areas treated with SUDS
- Number of floods detected in areas treated with SUDS.

**RISK MITIGATION**

- **Lack of funding:** seek additional grants at regional, national and European level, and explore collaborations with local businesses and NGOs to fund the project.
- **Resistance to change by the community or local actors:** conducting awareness-raising campaigns to explain the long-term benefits of sustainable drainage solutions and their positive impact on the community.

### 4.3. Area of intervention 3: Ecological and biological restoration

#### ACTION 3.1. Renaturalisation of schools and school areas

**Objective:** renaturalize the courtyards of Cieza schools and their outdoor areas to improve environmental quality, biodiversity and the well-being of students and the educational community.

##### APPLICATION STEPS

1. **Establishing the priority of renaturalization**, based on factors such as the quality of the current school environment, the lack of green spaces, the need to improve water infrastructure and the positive impact of renaturalization on the educational community. This analysis will be based on a previous study carried out in the schools of the municipality, which includes the preliminary project of renaturalization of six public schools, one of which (C.E.I.P. Santo Cristo) is already in execution. The objective is to increase green coverage and biodiversity in schoolyards, creating multifunctional spaces that favor diverse use and inclusion, thinking about children with different needs. Inclusive playgrounds, beyond traditional sports facilities such as football and basketball, will be promoted to make playgrounds more democratic and accessible to all children.
2. **Recruitment of a specialised company:** tendering of the renaturation works in each public school, in accordance with the needs and priorities established.
3. **Design and implementation of the renaturalization project** adapted to each space. This will include the planting of trees and vegetation to generate shade, the incorporation of permeable surfaces and Sustainable Urban Drainage Systems (SUDS) and the creation of free spaces adapted for outdoor learning.
4. **Involvement of the educational community:** both in the design and implementation process of the projects, participation and involvement activities will be organized with students, teachers and parents, such as co-creation and planting workshops.

**CALENDAR** → 2025-2030

##### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Department of Works, Housing and Infrastructure; Education Service; associations and the educational community.

**COSTS** → 900,000 €

**FUNDING** à National and European funding.

##### MONITORING INDICATORS:

- Number of schools renatured
- Area of green areas created in school areas.
- Number of students, teachers and families involved in renaturalization activities.

##### RISK MITIGATION

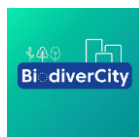
- **Lack of involvement or interest of the educational community:** foster collaboration from the beginning of the process, involving all key actors in the design and implementation.

#### ACTION 3.2. Improvement of parks and gardens

**Objective:** improve the quality and biodiversity of Cieza's public parks and gardens by increasing tree cover and introducing low-water-consumption species. The action will be aligned with what is established in the maintenance plan, which is different from the Green Infrastructure Management Plan of the municipality of Cieza.

##### APPLICATION STEPS

The interventions will not all be carried out at the same time, but in a staggered way, depending on the funding opportunities and the time available for each park or garden. In addition, it will follow what is marked in the Green Infrastructure Management Plan,



which establishes a differentiated maintenance plan (high, medium or low), depending on the park. This will influence the design, as the main objective of this approach is to make the maintenance of the city as a whole bearable with the available resources.

1. **Preparation of the improvement and design plan:** for each park or garden selected, an intervention plan adapted to the specific conditions of the space shall be designed. This design will include planting more resilient and larger trees, transforming grass into complex grasslands and installing solutions for efficient water management, such as rain gardens and permeable pavements.
2. **Recruitment of specialised companies :** prepare the procurement documents for the improvement of parks and gardens, setting out specific requirements such as the planting of native species or species adapted to the Mediterranean climate with low water consumption, the replacement of grassland by diverse grasslands and the installation of efficient irrigation systems. Specialized companies will be hired to implement the projects in a phased manner, according to the areas most in need.
3. **Implementation of improvements:** the contracted companies will carry out the improvement works in the parks and gardens. Some actions already pre-identified are:
  - Substitution of grass with high maintenance requirements and irrigation by naturalized grasslands with low-requirement species in the Príncipe de Asturias Park (20,200 m<sup>2</sup>) and other parks with grass. In this way, it will move from a single species to a space with wide plant diversity and less maintenance.
  - Increased biodiversity of shrub plants in the Park Medina Siyasa, 'El Jardín del Partido, the Park Julian Romea, 'El Jardín del Amparo', 'El Balcón del Muro' and the Park Saharaui. Where possible, depending on the space available, trees in those areas shall be replaced and increased.
4. **Maintenance:** establish a continuous maintenance plan to ensure that parks and gardens are kept in good condition. This will include monitoring water consumption, vegetation health and maintenance of new complex grasslands.

**CALENDAR** → 2027-2035

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** Departments of Works, housing and infrastructure; and associations.

**COSTS** → €100,000 per park or garden (depending on its size and complexity) for initial improvement and maintenance.

**FUNDING** → Municipal funds, regional or national grants, European funding.

#### MONITORING INDICATORS

- Number of parks and gardens improved
- Area of improved green areas
- Increased biodiversity of flora species

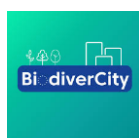
#### RISK MITIGATION

- **Lack of financial resources:** seek additional grants and explore associations with private companies and NGOs that can collaborate in project financing.
- **Rapid deterioration due to improper or insufficient maintenance:** establish a maintenance plan and assign local staff or volunteers to ensure continuous care of the improved spaces.

### ACTION 3.3. Increased tree cover on streets and creation of new green areas

**Objective:** create new green areas and renaturalise pedestrian streets and the urban area of Cieza, with a priority focus on increasing biodiversity and vegetation cover in disadvantaged neighbourhoods and streets that currently lack vegetation.

#### APPLICATION STEPS





**Cieza has a Master Plan and Management of Urban Trees and Green Zones**, which establishes the guidelines for the incorporation of new trees and the renewal of those that need to be replaced. The implementation of this plan will be carried out progressively, depending on the availability of resources and funding opportunities. Interventions shall be adapted to **innovative techniques**, always taking into account the principle of trees in natural or natural sizes. A flexible and **continuous learning** approach will be adopted to ensure maximum efficiency and achieve optimal results in **improving the city's biodiversity** and **environmental quality**. As the necessary resources and opportunities for intervention become available, the following steps will be taken:

1. **Review of the areas prioritized in the Master Plan** to identify the specific areas where to intervene, based on the priorities defined and the conditions of each space.
2. **Recruitment of specialised companies:** preparation and publication of tenders for the development of designs and implementation of works for each renaturation intervention.
3. **Implementation of the improvements**, which will include the planting of more resilient and larger trees, the installation of efficient irrigation systems and the creation of complex green areas and grasslands. Species selection shall be based on the adaptability of the species, the degree of coverage required and space available and on landscape, ornamental and cultural factors. Those resilient to climate change, with capacity to absorb pollutants, low need for maintenance and that favor the diversity of fauna will be selected. These will be species adapted to the climatic conditions of the city or native species such as *Celtis australis*, *Fraxinus angustifolia*, *Prunus dulcis* and *Ulmus minor*. In addition, those with low pruning requirements will be prioritized, so that in the future the trees of the municipality do not need systematic pruning. It will also seek the relocation of containers and reduction of parking spaces to expand pedestrian spaces. Cork trees will be expanded and biodiversity will be increased through the introduction of shrubs and a third layer of vegetation (herbaceous), whenever possible. This phase will be carried out progressively, adapting to the availability of funds and the defined deadlines.

It has been identified as a priority and requested funding for the replacement of existing specimens and increase in crown coverage in 20 streets and avenues, reaching a total length of 13,850.5 meters and 429 trees, according to the need, timing and pruning technique of the species. The performance is proposed on the streets Azorín, Escultor Salzillo, Calderón de la Barca, Fulgencio Serra, José Planes, Manuel García Carrillo, Hermanos José and Félix Templado, Félix Rodríguez de la Fuente, Santos Inocentes, Poeta Miguel Hernández, Ramón y Cajal, Camino Murcia, Avenida Juan XXII north and south, Gran Vía, Avenida de Abarán, Avenida Río Segura, Camino de Alicante, Street Pino Gómez and Diego Jiménez Castellanos. It is also contemplated the creation of pocket gardens in Plaza Mayor (640 m2) and in pedestrianized streets (17,000 m2) through the elimination of the concreted surface and plantations.

4. **Monitoring and maintenance:** Aguas de Cieza will ensure that renaturalized areas are kept in good condition, with continuous monitoring of plant health, irrigation management, and biodiversity conservation in each green space.

**TIME** → 2025 – 2030

#### RESPONSIBILITIES

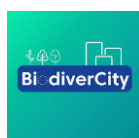
- **Coordination:** Department of Environment.
- **Participation:** Aguas de Cieza; Department of Works, Housing and Infrastructure; and associations.

**COSTS** → 2,000,000 €

**FUNDING** → Municipal funds, regional or national grants

#### MONITORING INDICATORS

- Number of renatured streets



- Number of trees and area planted in streets and old town

#### RISK MITIGATION

- **Lack of financial resources:** seek additional grants and explore associations with private companies and NGOs that can collaborate in project financing.
- **Rapid deterioration due to insufficient or inadequate management and maintenance:** establish a clear maintenance plan and assign local staff or volunteers to ensure continuous care of the improved spaces.

### ACTION 3.4. Conservation of unique trees

**Objective:** protect, conserve, and restore the monumental and unique trees and historical groves of Cieza, implementing specific conservation measures that guarantee their health, longevity, and historical value.

#### APPLICATION STEPS

1. **Assessment of its conservation status:** Hire companies or consultants specialized in the management and conservation of unique trees to make a complete diagnosis of the health of the trees, evaluating possible diseases, mechanical damage, and the impact of environmental factors. Risks that may compromise their survival will also be identified.
2. **Design of a conservation and restoration plan:** Develop a specific conservation plan for each tree or historical grove, including preventive measures, phytosanitary treatments, adequate pruning, restoration of the tree structure and improvement of the environment of the trees (soil, irrigation, etc.). The plan must be adapted to the particular needs of each specimen, respecting its cultural and ecological value.
3. **Implementation of conservation and restoration measures:** Implement the actions defined in the conservation and restoration plan, such as sanitary pruning, elimination of competing species, treatment against pests and diseases, and improvement of soil conditions and irrigation system. Interventions will be carried out carefully, prioritizing respect for the tree and its environment.
4. **Monitoring and follow-up:** Establish an annual monitoring program to assess the ongoing health of singular trees, making periodic visits and applying adjustments to the conservation plan if necessary. This monitoring should include the analysis of the evolution of the surrounding vegetation and the effectiveness of conservation interventions.

**TIME** → 2027-2030

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** specialized companies or consultants.

**COSTS** → €50,000 à for inventory, initial assessments, design and implementation of the conservation and restoration plan.

**FUNDING** → municipal funds or regional calls.

#### MONITORING INDICATORS

- Number of unique trees that have been subject to conservation measures.
- Health status of the trees evaluated.
- Level of community participation.

#### RISK MITIGATION

- **Risk of lack of resources or funding:** seek specific grants for natural heritage conservation and explore collaborations with NGOs and specialised companies that can support the project.
- **Risk of resistance to necessary interventions** by the community: ensure clear and transparent communication on the need for interventions and the long-term benefits for the conservation of unique trees.

### ACTION 3.5. Increase in wildlife biodiversity

**Objective:** promote the increase of faunal biodiversity in Cieza, through the creation and improvement of suitable habitats for different species, the implementation of measures for the protection of local fauna and the promotion of biodiversity in urban and peri-urban environments. This action will seek to integrate conservation strategies for birds, mammals, insects and other native species, contributing to a more balanced and healthier ecosystem.

#### APPLICATION STEPS

Within the framework of this action, collaboration with universities and conservation NGOs specializing in biodiversity and fauna will be promoted, as well as the inclusion of citizen science to involve the local community in the monitoring and conservation of species. This collaboration will make it possible to take advantage of expert knowledge and mobilize citizens in the protection and monitoring of local fauna, ensuring greater effectiveness in the measures implemented. The action will require the following steps:

1. **Diagnosis of local fauna:** the first step will be to carry out an inventory on the fauna of Cieza, identifying the species present, their natural habitats, and the areas where their conservation can be improved. Particular attention shall be paid to endangered species or species of community interest.
2. **Identification of suitable habitats:** Identify urban and peri-urban areas that can offer shelter or food to local species.
3. **Design of interventions for wildlife biodiversity:** develop an intervention plan including the creation of suitable habitats for local fauna, such as the installation of nest boxes for birds, the planting of species providing food for insects and mammals, the improvement of ecological corridors and the creation of ponds or wetlands for amphibians.
4. **Implementation of conservation measures:** installation of the proposed solutions, which will include the placement of wildlife refuges (such as nests and feeders), restoration of natural habitats, the planting of native species and the creation of water spaces for wildlife.

**TIME** → 2025 - 2035

#### RESPONSIBILITIES

- **Coordination:** Department of Environment and Circular Economy.
- **Participation:** associations and citizenry.

**COSTS** → 100,000 €

**FUNDING** → Municipal funds, grants for biodiversity conservation, and collaborations with local companies and NGOs.

#### MONITORING INDICATORS

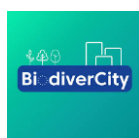
- Number of habitats created for fauna
- Number of fauna species present

#### RISK MITIGATION

- **Lack of colonisation of habitats by fauna:** carry out a prior analysis of local species and their needs to ensure that the habitats created are attractive and suitable for them. In addition, monitor and adjust the interventions according to the results obtained.
- **Lack of funding:** seek grants or associations with private entities, universities and NGOs to finance the project and ensure its implementation.

### ACTION 3.6. Soil improvement

**Objective:** Improve the quality of Cieza's urban soils to optimize their water retention capacity, promote biodiversity, and increase the productivity of green areas. This action will focus on the restoration of compacted soils, the improvement of their structure, and





the implementation of sustainable management techniques that guarantee a healthy soil suitable for the growth of plants, trees and native vegetation.

#### APPLICATION STEPS

1. **Analysis of the physical and biological quality** of the soil and its compaction levels. The objective will be to evaluate the quality of the soils as a support for tree and shrub-herbaceous vegetation. Soil biota is essential for healthy tree growth because, without it, vegetation development is compromised. This study will also include a strategy for measuring soil moisture levels, in order to verify, in the long term, whether the irrigation techniques and quantities used are adequate and to make adjustments if necessary. Advanced technologies such as hygrometers and penetrometers will be used. The results of these analyses will be complemented by the data obtained from the soil and water audit previously carried out in collaboration with a laboratory in Seville.
2. **Selection of suitable improvement techniques:** Based on the results of the previous study, the most appropriate breeding techniques will be selected, which may include the **use of Biochar** (bioengineered charcoal) and **soil-enhancing organisms** such as worms, fungi or bacteria. These techniques improve the structure of the soil, increase its water retention capacity and favor a healthy environment for plants.
3. **Partial soil replacement:** in cases where the soil is in poor condition and it is not possible to restore it, partial replacement shall be carried out using quality soil, compost and other organic materials that promote soil regeneration and plant growth. Following the results of the soil audit, a substrate composed of sand, worm humus and other similar compounds shall be applied. The objective is to establish this approach in a scalable way at the urban level, promoting its application in different areas of the city.
4. **Implementation of improvement solutions: the implementation of Biochar**, soil-enhancing organisms and, if necessary, soil replacement in the selected areas shall be carried out. Interventions shall be carried out on the basis **of funding opportunities** and the **availability of resources**.

**TIME** → 2028-2032

#### RESPONSIBILITIES

- Coordination: Department of Environment and Circular Economy.
- Participation: Aguas de Cieza, universities or specialized companies.

**COSTS** → €50,000 à for the realization of the study, the implementation of improvement techniques and the partial replacement of the soil.

**FUNDING** → Municipal funds, grants for environmental restoration and sustainable soil management, and collaborations with private entities and NGOs.

#### MONITORING INDICATORS

- Improved floor area.

#### RISK MITIGATION

- **Lack of funding:** seek additional grants, explore associations with private companies and NGOs, and ensure that interventions are staggered according to the availability of funds.
- **Risk of inefficiency in soil improvement:** ensure that contracted companies follow best practices in soil restoration and continuously monitor to adjust interventions according to the results achieved.

## 4.4. Intervention area 4: Green culture and citizen participation

### ACTION 4.1. Annual communication strategy

**Objective:** Develop an annual communication campaign strategy that informs and raises awareness about urban biodiversity, tree benefits and city renaturalization strategies. Actions will be designed for each of the different objective groups: older people, adults, young people and childhood. A practical and provocative approach will be adopted, using "**naturalistic vandalism**" as a tool to capture attention and encourage reflection. In addition, it will include activities such as urban night plantations, naturalistic marketing and guided tours for groups and citizens, promoting a greater understanding of the actions that underpin the management of green spaces.

#### APPLICATION STEPS

1. **Activity planning:** organise key activities such as plantations, guided tours and educational visits, as well as an **annual biodiversity festival**, aligning them with the city's tourism strategy. This planning will be established at the annual coordination meetings (Action 1.1) and updated during the year if new opportunities or ideas are identified. The campaign will start in 2026. The **biodiversity festival** will be an annual multi-day event, which could last between one and two weeks, focused on raising awareness about changes in the city's green infrastructure and fostering community engagement. It would be integrated into the city's flowering programme, under the 'Cieza en Flor' proposal, seeking to align with similar initiatives in other regions, such as Andalusia. Activities could include the Tree Day, the City Nature Challenge (CNC), guided tours, audiovisual screenings, workshops, talks and urban beautification contests, such as those on pedestrian streets Cañate de las Torres or Allariz. Actions such as the Bioblitz (as part of the CNC and making use of the iNaturalist app) would also be included, to promote greater connection with local biodiversity and active community participation.
2. **Design of communication materials** such as infographics, posters and publications on social networks. These will be closely linked to:
3. Development of a **practical guide on communication strategies related to urban green infrastructure**, to improve communication with citizens on urban renaturalisation initiatives.
  - **Implementation of the communication campaign** on urban biodiversity on digital platforms, in local media and through face-to-face activities in public spaces, involving citizens in planting and caring for green spaces.
  - **Conducting annual surveys** to assess the impact of the campaign on raising awareness among the population of Cieza.

**TIME** → 2026-2036

#### RESPONSIBILITIES

- Coordination: Department of Environment.
- Participation: responsible people for Communication of the Cieza City Council

**COSTS** → 3,000 € per year

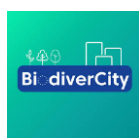
**FUNDING** → Own funding and from national and European funding.

#### MONITORING INDICATORS

- Number of participants in communication activities.
- Number of editions of the festival
- Impact on awareness-raising through surveys on biodiversity and the use of green spaces.

#### RISK MITIGATION

- **Risk of low participation in the activities and in the festival:** promotion campaigns in social networks, local associations and schools to ensure high participation.



Encourage participation through prizes, sweepstakes and recognition. Program of the Festival attractive and accompanied by leisure activities.

- **Misunderstood message risk:** ensure that messages are clear, balanced between provocation and education, and tailored to different audiences to ensure that the benefits of renaturalisation initiatives are understood.
- **Risk of lack of resources for the organisation of the festival:** external funding through local sponsors, collaborations with NGOs and support from educational institutions. Organize side events throughout the year to raise funds.

#### ACTION 4.2. Community and educational participation

**Objective:** Involve the educational community of Cieza through specific programs, activities and guided tours, promoting the commitment to sustainability and renaturalization actions that are carried out in schools and in the city.

##### APPLICATION STEPS

1. **Design of awareness programmes for schools and integration into the annual education programme.** Annually, an educational program will be developed and workshops, planting activities and renaturalization projects will be organized in the school environment.
2. **Development of educational activities:** practical activities and guided visits to renaturalised green areas will be created, in collaboration with teachers, so that students understand the importance of biodiversity and environmental management.

**TIME** → 2025 - 2035

##### RESPONSIBILITIES

- Coordination: Department of Environment and Circular Economy.
- Participation: Education Service, associations and educational community.

**COSTS** → 2,000 euros per year.

**FUNDING** → Own, national and European funding.

##### MONITORING INDICATORS

- Number of students involved

##### RISK MITIGATION

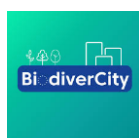
- **Risk of low participation of schools or support by families:** establish associations with schools from the beginning, involving teachers in the design of activities and aligning them with existing educational programs. Offer attractive and suitable teaching materials for students.

#### ACTION 4.3. Participation in scientific and technical dissemination forums and collaboration with universities

**Objective:** Establish collaborations with universities and research centers, participating in conferences and outreach events on biodiversity and sustainability, and exposing the experience of the City Council.

##### APPLICATION STEPS

1. **Identification of relevant forums and events:** annually, conferences, symposia and seminars on biodiversity and sustainability will be selected in which Cieza can participate as a speaker or exhibitor. By 2026, the opportunity to attend Deltaland has already been pre-identified, in addition to the presentation of Cieza's experiences at an event organized by the Provincial Government of Málaga.





2. <b>Active participation in the forums:</b> present the projects and experiences of the City Council in the events of scientific dissemination, contributing with research, case studies and good practices in the management of green spaces and biodiversity.
3. <b>Establish collaborations with universities and research centres:</b> participation in events will be used to foster collaboration with local and international universities to develop research and outreach projects on urban biodiversity. A potential collaboration already identified, aligned with the objectives of section 4.1, is with the University of Murcia. This will explore new tools of communication and persuasion, investigating concepts such as the "critical mass theory" or the "threshold of social adoption". The objective is to identify effective strategies to involve between 3,500 and 5,000 people in Cieza, promoting a sustainable social change towards the preservation of biodiversity.
4. <b>Distribution of communication materials:</b> share reports, studies and educational materials on Cieza's actions. Specific materials will be designed for this purpose if deemed necessary.
<b>TIME</b> → 2025-2035
<b>RESPONSIBILITIES</b> <ul style="list-style-type: none"> <li>• Coordination: Department of Environment and Circular Economy.</li> <li>• Participation: responsible for Communication of the City of Cieza. Collaboration with Universities, NGOs, companies and / or communication centers.</li> </ul>
<b>COSTS</b> → 2,000 euros per year.
<b>FUNDING</b> → Own funding and from national and European funding.
<b>MONITORING INDICATORS</b> <ul style="list-style-type: none"> <li>• Number of forums and events participated.</li> <li>• Number of new collaborations established in events.</li> </ul>
<b>RISK MITIGATION</b> <ul style="list-style-type: none"> <li>• <b>Risk of low visibility in the forums:</b> prepare clear and concise presentations on Cieza's actions in biodiversity and sustainability and carry out previous work of contact with the organizers to ensure a prominent position in the events.</li> <li>• <b>Risk of lack of effective connection with universities or research centres:</b> start the process with clear meetings of mutual objectives and benefits, ensuring that both sides have a strong commitment. Establish formal collaboration and monitoring agreements to assess progress.</li> </ul>

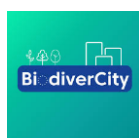
#### ACTION 4.4. Training workshop for politicians

**Objective:** Develop a training workshop aimed at local politicians to provide them with key information on environmental management and the importance of green infrastructure, ensuring that political decision-making aligns with environmental interests.

##### APPLICATION STEPS

1. **Preparation of the workshop and call for local politicians:** The agenda will be organized, focusing on the benefits of nature in the city and the argument to transmit it to the population. Following the preparation of the content, a date will be set and local councillors and policy makers will be invited to participate. The workshop will be repeated in the event of a change in the local corporation.
2. **Implementation of the workshop,** providing politicians with tools and knowledge to incorporate sustainability in decision-making and have the capacity to justify the need for green in the city to citizens.

**TIME** → 2026 – 2035.



#### RESPONSIBILITIES

- Coordination: Department of Environment and Circular Economy.
- Participation: political representatives of all Councillorships and the Mayor.

**COSTS** → Own resources in the form of dedication of municipal staff.

**FINANCING** → Municipal funds

#### MONITORING INDICATORS

- Number of meetings held.
- % of actual assistance in relation to planned assistance

#### RISK MITIGATION

- **Low participation:** make the invitation to participate directly from the Mayor's Office.
- **Lack of interest and difficulty in conveying the message:** use powerful and direct communicative messages, and specific and contrasted data.



# 5.

## Implementation framework



## 5. Implementation framework

### 5.1. Governance and accountability mechanisms for the IAP

The City of Cieza, through the **Department of Environment and Circular Economy**, will be the body responsible for leading the implementation of the IAP, with the active collaboration of the departments of Circular Economy, Works and Planning and Aguas de Cieza.

Coordination will be carried out through **annual meetings** (Action 1.1), convened by the Department of Environment, in which representatives of the departments involved will participate. These meetings will make it possible to assess the progress of the actions, resolve possible difficulties and plan the implementation of new activities.

**Fluid communication channels will be established between departments** to facilitate information exchange and decision-making.

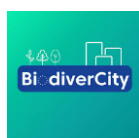
### 5.2. Participatory approach during implementation

The IAP recognizes that citizen participation and involvement of local actors are essential not only in planning, but throughout the implementation phase and beyond the formal closure of the project. Therefore, the following mechanisms will be established to ensure this continuity:

1. **Regular workshops and follow-up meetings, organised at least once a year, involving residents, associations, vulnerable groups, municipal technicians** and experts to assess progress and collect proposals for improvement. Local associations and citizens will play a key role in many of the actions of the plan. In particular in actions 2.1, 2.2, 3.1, 3.5, 4.1 and 4.2.
2. **Continued use of digital platforms and social networks** to inform, raise awareness and facilitate the active participation of citizens in real time, through the planning and implementation of the communication strategy (4.1).
3. **Stable collaboration with schools and universities**, promoting educational programmes and applied research projects that support urban biodiversity and sustainability. In particular, opportunities for collaboration with universities will be strengthened through Action 4.4 to implement other actions of the plan, such as Action 4.1.

### 5.3. Overall costs and funding approach

As shown in the previous section, the design of the IAP has included an estimate of the costs associated with each specific action. The funding approach shall be based on:



1. **Municipal funds** allocated in the annual budgets, prioritizing investments in green infrastructure.
2. **Subsidies and public support at regional, national and European level**, especially in the framework of sustainability, climate change and biodiversity programmes.
3. **Public-private cooperation**, which involve local companies in renaturalisation projects, environmental education and green technologies.

The economic plan shall provide for a **flexible system to adapt to emerging financing opportunities**, ensuring financial sustainability in the medium and long term.

In total, an approximate budget of €9,715,000.00 is estimated for the complete implementation of the Plan, to be executed in the next 10 years.

Scope of intervention	ID	Action	Budget
<b>Consilient urbanism and institutional innovation</b>	1.1	Regular interdepartmental coordination meetings	0,00 €
	1.2	Comprehensive analysis of traceability in the life cycle of the works, from their design to their execution	0,00 €
	1.3	Better regulations in the General Municipal Planning Plan (PGMO)	10.000,00 €
	1.4	Approval of the municipal biodiversity ordinance	0,00 €
	1.5	SMART CITY and biodiversity	50.000,00 €
	1.6	Support for participation in networks	20.000,00 €
<b>Functional and connected green and blue infrastructure</b>	2.1	Connection between the urban nucleus and the riverside promenade of the Segura River	2.000.000,00 €
	2.2	Improvement of the riparian ecosystem	450.000,00 €
	2.3	Creation of wetlands for amphibians	15.000,00 €
	2.4	Runoff water management	3.000.000,00 €
<b>Ecological restoration and biological diversification</b>	3.1	Renaturalisation of schools and gardens	900.000,00 €
	3.2	Improvement of parks and gardens	1.000.000,00 €
	3.3	Increase of tree cover on streets and creation of new green areas	2.000.000,00 €
	3.4	Conservation of unique trees	50.000,00 €
	3.5	Increase of biodiversity in fauna	100.000,00 €
	3.6	Soil improvement	50.000,00 €
<b>Green culture and citizen participation</b>	4.1	Annual communication strategy	30.000,00 €
	4.2	Community and educational participation	20.000,00 €
	4.4	Participation in scientific and technical dissemination forums	20.000,00 €
	4.5	Training workshop for politicians	0,00 €
<b>TOTAL</b>			9.715.000,00 €

## 5.4. General timetable for implementation

Similarly, **each IAP action has been scheduled**, covering a 10-year implementation framework. Two main stages are distinguished:

- **Stage 1 (2025-2030):** includes the most immediate and well-defined actions, for which funding opportunities have already been identified or requested. Although short-term viability is not fully assured, these actions are more likely to be implemented due to their greater clarity and preparedness.
- **Stage 2 (2030-2035):** It consists of actions that, although they respond to ideas or identified needs, require a review and update. This stage involves more flexible planning, adapted to the changes that may arise during the implementation of the IAP.

Even so, many of the actions are included in both stages, since they are part of what the City Council considers continuous and necessary management so as not to be left behind. This includes, for example, actions that rely on emerging technologies, which require constant updating and adaptation. Other large-scale actions to be carried out progressively are also included, as funding will not come at once and it is not possible to carry out all the works at once.

The following shows how the timetable of the Plan would look like.

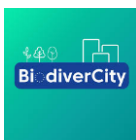


			STAGE 1					STAGE 2					
Scope of intervention	ID	Action	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Consilient urbanism and institutional innovation	1.1	Regular interdepartmental coordination meetings											
	1.2	Comprehensive analysis of traceability in the life cycle of the works, from their design to their execution											
	1.3	Better regulation in the PGMO											
	1.4	Approval of the municipal biodiversity ordinance											
	1.5	SMART CITY and biodiversity											
	1.6	Strengthening participation in networks											
Functional and connected green and blue infrastructure	2.1	Connection between the urban nucleus and the riverside promenade of the Segura River											
	2.2	Improvement of the riparian ecosystem											
	2.3	Creation of wetlands for amphibians											
	2.4	Runoff water management											

Ecological restoration and biological diversification	3.1	Renaturalisation of schools and school areas												
	3.2	Improvement of parks and gardens												
	3.3	Increased tree cover on streets and creation of new green areas												
	3.4	Conservation of unique trees												
	3.5	Increase of biodiversity in fauna												
	3.6	Soil improvement												
Green culture and citizen participation	4.1	Annual communication strategy												
	4.2	Community and educational participation												
	4.4	Participation in scientific and technical dissemination forums												
	4.5	Training workshop for politicians												

## 5.5. Risk management

The monitoring of the risks of the IAP will be supported by the regular assessment of the risks identified in each Action file. These risks will be reviewed annually during the follow-up meeting with other departments, and a progress report will be compiled that will include the status of each of them and the mitigation actions taken.





6.

## Conclusion



## 6. Conclusion

### 6.1. Communication and dissemination plan at local level

The dissemination of the IAP will be carried out through the implementation of the annual communication strategy (4.1), which ensures the visibility of the actions, encourages citizen participation and provides accessible information on the progress of the IAP. This strategy will be aligned with the values of the project, using local channels to ensure outreach to all stakeholders and keep citizens informed about the progress and achievements of the plan.

### 6.2. IAP Implementation Guarantees

The implementation of the IAP has a robust management framework, based on the allocation of clear responsibilities, monitoring of indicators and periodic review of progress. In addition, sources of funding and contingency measures have been identified to ensure the viability of the actions.

The plan enjoys strong political support, which has been maintained over time, even with changes in local government. This support is possible thanks to the conviction of the technical team, which is fully confident that this is the right direction for the development of the city and has the necessary tools to prove that it is. Consistency with the city's strategy and the steps taken in recent years reinforce the certainty of its successful implementation.

### 6.3. Contact details of the key persons responsible for the implementation of the IAP

- Miguel Ángel Piñera: [miguelangel.piñera@cieza.es](mailto:miguelangel.piñera@cieza.es)
- Eduardo Morcillo: [eduardo.Morcillo@cieza.es](mailto:eduardo.Morcillo@cieza.es)

