



The River Seine as a Great Garden: The Sources

Ecology & Habitability of the Seine and its Tributaries

Topic Document



Les Ateliers Internationaux de Maitrise d'Oeuvre Urbaine de Cergy-Pontoise

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Workshop Partners

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Les Ateliers de Cergy is a non-profit organization created in 1982 by the town planners of the Cergy-Pontoise new town, in the Paris region.

For more than 40 years, the organization has brought together students and young professionals of diverse nationalities and backgrounds each September in the Paris region. They work on-site in multidisciplinary teams and present their proposals and strategies at the end of the workshop to an international jury chaired by local authorities. The teams' proposals combine long-term visions for the territories with illustrated action ideas, creating a range of projects available to local decision-makers.

For 25 years, the organization has also been invited to work abroad to organize professional workshops. More than 100 workshops have already been held in France and around the world.



Illustration : The goddess of the River Seine, Sequana. This statue can be found at the source of the Seine.

43rd International Workshop:

"The River Seine as a Great Garden: The Sources, Ecology and Habitability of the Seine and its Tributaries"



Apply by 01 June 2025!

For the 43rd session of the International Summer Workshops, Les Ateliers de Cergy are launching a multi-year reflection on the Greater Seine Basin. Fifteen young professionals and students from all disciplines and nationalities will be selected through applications for twenty days of on-site team work in September 2025. Following scientific preparation and visits throughout the Seine Basin, the three teams will propose solutions and narratives for the territories of the Upper Seine Valley while considering both the overall basin and more localised territorial focuses.

The text of this topic document was written by the session co-pilots, Armelle Varcin and César Silva Urdaneta.

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Introduction

In the context of planetary habitability crises, the 43rd international workshop aims to be a collective exploration space that rethinks the River Seine territory and its tributaries as a vast living basin where water is the primary condition. In this perspective, it proposes to approach the entire watershed as a «Great Garden»: a living place where water, geography, biotic (human and non-human) and abiotic (mineral, humus, and elements), nature, and artifice intertwine with water to shape a perpetually moving landscape.

The entire hydrographic network is a source of life and has historically justified human settlement in this territory. Since then, it has been mistreated, remodelled, channelled, and artificialized. Human action on this precious resource raises questions about the future habitability of this vast living basin. However, water has a major potential for regeneration at all scales and can be a vector of connection and prosperity for all its inhabitants.

How can we inhabit the Seine basin in light of contemporary societal, political, and climaterelated challenges? How can we connect with water in its various forms? How should we approach this extensive territory to understand it at a human scale? How can we consider the watershed as a relevant scale of reflection?

The garden appears as the ideal metaphor for developing a multifactorial and transcendent approach, capable of nourishing visionary perspectives in harmony with the challenges of this vast territory.

Imagining the River Seine basin as a Great Garden is a project of nature and culture that places water at the heart of habitability challenges. Supporting life through a network of tributaries, bas ins, streams, and other brooks whose delicacy and richness require maintaining a dual attention to both the large and small scale, going beyond sectoral logics or any desire to cut or isolate parts of an inherently interdependent whole. The idea of the garden relies on what is most virtuous in water as a source of life: the call to life as a creative matrix, botanical genius as knowledge of dialogue and mutual respect between uses and the conditions for the flourishing of plants and all forms of life. The garden reflects gestures and ways of tending that focus on care and maintenance in contrast to the modern planning driven by infrastructure and civil engineering. The garden also represents the protection and enhancement of the water resource, the art of gardens teaching us the capture and conservation of water through history(from the ganats of ancient Persians to the channels of Gobert that supply the fountains of Versailles). These techniques participate in the construction of landscapes, while the garden allows us to mobilise the art of composition as an operational resource and the spectacle of life as an eternal source of enjoyment and flourishing. This perspective offers a sensitive path to adapting our planning practices and territories to ecological challenges.

The Great Seine Garden thus contributes to the weaving of territorial solidarities and forms of social cohesion, from the present to the future. It enables the recognition of water geographies as a structuring element of the territory and as a unifying narrative for the collective, with water sharing as a means of uniting questions, reflections, and actions on the ground.

From the Seine Basin to the Great Seine Garden

Why the watershed scale?

River territories are dynamic, and the appropriate scale for considering rivers and the solidarities to be imagined among their inhabitants is that of the watershed. In other words, it encompasses the entire area that carries each drop of rain it receives, whether it runs off or infiltrates, toward a single outlet: the point where all waters converge, following networks of brooks, streams, and rivers that join the main river before it meets marine waters via an estuary or delta. This great basin breaks down into multiple sub-basins around each tributary and sub-tributary, with low points and confluences serving as their outlets.

Should one travel all 777 km of the Seine to know it? That would neglect the lengths of the smaller rivers of the watershed (the Marne, the Yonne, the Oise, the Risle....).



Seine-Yonne Confluence at Montereau-Fault-Yonne

Covering an area of 78,600 km², about the size of a country (comparable to Portugal's 93,000 km², or twice the area of Belgium's 30,500 km²), the watershed's extent is hard to grasp without traversing it physically. Yet this is precisely the workshop's ambition: to ground all reflection, invention, and action at the scale of, or about, the Seine's watershed.

This scale challenge is shared by the area's inhabitants and stakeholders: How can one feel a sense of belonging to an entity whose geographic and hydrographic realities escape any individual's grasp? No resident along the River Oise (in the North of France) feels connected to those living by the Petit Morin (which flows into the Marne, south of Paris) There is no overarching narrative about the Seine to refer to. In contrast to other rivers (the Loire, for example, evokes a fully formed imaginary of a "wild river," and every French school child can cite the name of its source), the Seine has no widely shared narrative. Who knows of the garden developed around its sources, at the edge of the Langres plateau in Côte d'Or, in the tiny village of Source-Seine (60 inhabitants in 2022)? The City of Paris purchased this site a small valley in 1864 and had a 2-hectare garden designed around the seven springs by landscape architect Barillet-Deschamps, together with Victor Baltard and Gabriel Davioud for the sculptures... A little bridge was added in 2003, followed by a new sculpture in 2014 honoring Seguana, the goddess of the Seine.



Postcard of the Garden at Seine Source

The other sources of the main tributaries are more discreet, often on private land. Should we see in this the reflection of a lack of interest in making them symbolic places? This contrasts with the Seine's source, which has been enhanced due to its direct link with Paris

The landscapes of this great basin are varied, shaped by its geology and a long history of human occupations. As archaeological studies show, Celts (who gave Paris, Rouen, and Troyes their names, among others), Romans, and Vikings from various neighboring regions populated this territory, establishing their activities, crafts, agriculture, urban centers, infrastructure, etc. Over time, different activities have reshaped these places: urbanization, industry and logistics; various modes of agriculture (market, gardening, livestock for meat or dairy, bocage, orchards, largescale grain farming, fiber crops...); transport

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Map of the Seine River Basin

LIVING IN THE WATERSHED

Among the 18.3 million inhabitants of the Seine River Basin (representing nearly 30% of the metropolitan population), 11.8 million live in the Île-de-France region, which concentrates most of the urban population. This population is multicultural and encompasses all social backgrounds. Around 85% of the population resides in urban areas, leaving approximately 15% in rural territories, spread across municipalities–90% of which have fewer than 2,000 residents (1). Many inhabitants live in small to medium-sized towns located in peri-urban and industrial zones, which serve as interfaces between urban and rural areas and structure local employment basins. Agricultural employment, which has significantly declined, now includes about 125,000 workers, accounting for 1.5% of total employment in the basin.

Source: Seine-Normandy Water Agency

infrastructure (rail, road, river, air); energy production (nuclear and thermal power plants, wind farms, high-voltage lines); and all associated human activities – recreational areas, waste treatment sites, cemeteries, etc. With little attention paid to water systems, all these have produced the situation we see today.

Imagining the River Seine basin as a territory to cultivate for 18 million people a garden of multiple qualities, irrigated and defined by its hydrographic network leads us to the concept of the Great Seine Garden, named for its principal river. The garden metaphor, as an endless source of imagination nourished by powerful symbolism, stimulates the development of forward-looking visions that are compelling and galvanising within the workshop. Reflection on the Great Seine Garden builds on a continuity of inquiries led by Les Ateliers de Cergy since 2018 (the "Life in Metropolises" workshop) and visits and discussions in 2022 by Bertrand Warnier (urban planner and cofounder of Les Ateliers de Cergy), Philippe Enquist (urban planner from Chicago), and Meiring Beyer & Drew Wensley (landscape architects from Toronto). These efforts culminated in an advocacy piece, **The Seine river basin as a great park system**, a vision for the future of the Seine Basin.



THE SEINE RIVER BASIN AS A GREAT PARK SYSTEM

Plaidoyer pour un grand Jardin Séquanien

Bertrand Warnier-Philip Enquist-Drew Wensley Cover of the Manifesto for a Great River Seine Garden

1. Workshop Objectives



1.1 Habitability of a Shared Territory

From its sources to its estuary between Honfleur and Le Havre, the Seine Basin is not only a historic basin but also the vital heart of a territory with complex dynamics. As a livability crisis makes itself felt amid rampant urbanisation, territorial fragmentation, and climate disruption, it becomes imperative to rethink this living basin at the proper scale: one that duly considers the entire basin from local to global, and the interrelations of its challenges. Rather than continuing to confine towns and villages to unbridled expansion without vision, or projecting rural development based solely on market forces and the status quo, the workshop calls for integrating a culture of water within the various ecosystems and inhabited landscapes. It seeks a holistic approach that summons the aesthetic, symbolic, and mobilising power of the idea of the garden, to affirm a new paradigm of territorial development, one attuned to local inhabitants aspirations and responsive to the transformations our era demands. We aim to seize the Great Seine Garden as the time and place for inventing possible and desirable worlds. Here, the idea of the Garden becomes a project of weaving multiple alliances with living beings, soils, the existing environment, geography, the spirit of place, and the art of living across an entire territory.

1.2 Building a Sense of Territorial Belonging

Past and present development strategies have reinforced the territory's fragmentations along administrative and sectoral lines (urban planning and governance; territorial functions of industry, agriculture, housing), leading at times to a disconnect between inhabited environments and their planning, and between land uses and natural social environment. Such fragmentation of landscapes reduces ecological connectivity, which is essential for long-term ecosystem stability and resilience (maintenance and quality of water resources, soil quality, biodiversity, vulnerability to hazards, etc.). The compartmentalisation of territorial functions creates urban and landscape boundaries that break up the geographic continuum. Moreover, when it fails to contribute to building a shared imaginary, this compartmentalisation hinders the ethical and aesthetic capacity of landscapes and geography to serve as the foundation for a sense of belonging.

A sense of belonging is rooted in inhabitants' anchoring in a geographic identity. Through a "naturalised unconscious," it supports the affirmation of a cultural identity, social cohesion, and civic participation in the life of the territory. Thus, socio-territorial fragmentation associated with sectoral approaches harms not only the spatial dimensions of ecological and territorial continuities, but also the cohesion of a territory whose identity could be reconstructed as a key asset, a process to which the garden idea can contribute as a mobilising metaphor.

The garden, at the basin scale, can be seen as the art of composing and revealing the traits of a grand landscape, in which water's presence becomes the central figure and geography provides a lattice of representations in service of building a sense of belonging.

2. Key Themes and Strategic Directions of the Workshop

The workshop invites the mobilisation of ideas and participants across a strategic area of the greater Seine basin, applying a crossscalar approach. Participants are encouraged to consider how existing projects, knowledge, and proven experiences might be activated or adapted. Join us in imagining forward-looking strategies for transformation by mentally linking, at every stage, the single drop of water to the entire watershed guided by the following principles.

2.1 Key Themes: The Great Seine River Garden of Water Culture

The Seine Basin at the Heart of a Global Ecosystem

- Integration instead of boundaries: Rethink the Grand Seine Basin as a continuous system rather than a series of dichotomies (urban/rural, metropolitan/ peripheral, natural/cultural, affluent/ disadvantaged).
- Water as a system of interdependencies and solidarities: Water transcends administrative boundaries, enabling a reading of land use through the lens of shared responsibility and mutual reliance.

The Garden as a Metaphor for Transformation

- A Culture of transformation: The garden serves as a conceptual model for change, using water as the seed of new practices in stewardship, habitation, and sharing of territory.
- **Garden of aspirations:** Harness the garden's symbolic resonance to shape territorial planning that aligns the aspirations of inhabitants with ecological imperatives.
- **Culture of the commons:** In an era of commodified relations and the financialisation of urban development, explore how the garden can help sustain and regenerate common resources.

Safeguarding and Enhancing the Water Resource

- **Quality, longevity, and uses:** Recognise water as a shared asset to be protected for its sanitary, aesthetic, and ecological value, while making thoughtful use of its potential for varied purposes.
- Water cycle and social engagement: Immerse residents in the water cycle, inviting them to become actors in preserving and managing the watershed.
- **History and symbolism:** Leverage the heritage and symbolic dimensions of water to cultivate identity and foster a deeper sense of place.

2.2 Strategic Directions

- Integrate hydrographic networks and ecological and landscape continuities as guiding elements for public amenities and to strengthen upstream-downstream solidarity rather than treating them merely as constraints to be addressed by technical solutions.
- Treat water as a common good by ensuring essential hydration at both individual and collective scales, maintaining its ecological integrity while balancing industrial, recreational, and transport uses.
- Manage urbanisation with care, informed by a comprehensive vision that prioritises the preservation of natural and nourishing spaces, and draws inspiration from the symbolic power of rivers and tributaries.
- Anticipate long-term social changes, the effects of climate disruption, and the growing manifestations of habitability crises.

3. The Terrain: The Seine Basin, a Diversity of Realities

The Seine Basin is emblematic of an entire country. "La Seine a de la chance... Elle coule à Paris" Jacques Prévert tells us (translated as The Seine is lucky... It flows through Paris).

How to characterise the singularities of this basin?

Flowing toward the sea, the river runs along chalk cliffs and agricultural plains truck farms near Montesson, grain fields, or Normandy pasturelands following winding meanders. Public or private forests are never far away either. The river and its tributaries are sometimes bordered by riparian Vegetation. The Seine skirts the city of Rouen and its large river port to reach the sea between Honfleur and Le Havre, France's leading maritime port by tonnage. Under sunlight or snow, the Seine has inspired countless artists; the Impressionists never ceased to paint it.

After the large new port of Gennevilliers at Paris's outskirts, one of the Seine's main tributaries, the Oise, joins the Seine at Conflans-Sainte-Honorine a boatmen's village that reminds us river navigation was once an artisanal trade. The Oise links the Seine basin to the northern waterway network, connecting to the future Seine-Nord canal and high-capacity barge traffic with convoys stretching hundreds of meters long. In Paris, the Seine itself is a major monument, coursing 13 km through the "City of Light" as the centerpiece of an urban tableau. The city's 37 bridges offer pedestrians myriad viewpoints, a succession of vistas where buildings and monuments speak to one another from one bank to the other. The lower banks and guays invite contemplation of the water and the barges gliding along. At Paris's entrance, the former Bercy warehouses remind us that the slopes of the Seine and its tributaries (the Yonne and the Marne) are wine country producing wines and Champagne now threatened by climate change. From the limestone in their soils, to the famed textile industries of Rouen, to older and newer industrial outputs, the towns of Troyes, Laon, Sens, Auxerre and also Reims, Chablis, Châlons as well as the poorer rural populations of the Morvan, the so-called "scrawny" Champagne region, or the Langres plateau, all have contributed to the Paris region's prosperity.



The Seine Before the Pont Neuf (1754), Jean-Baptiste-Nicolas Raguenet



Relief Map of the Seine Basin (1973)

3.1 The "Water Tower" of a Vast Living Basin

The Upper Seine territory and valley may lack dramatic mountain ranges with iconic peaks, yet it nonetheless forms a château d'eau, a water tower, a store of potable water whose quality and quantity are crucial for the survival of millions.

Downstream of Paris, the Seine plays a cleansing role after receiving the output from the Achères wastewater treatment plant, which to the best of its ability treats the waste of most of the Paris metropolitan population. The functioning of the whole system depends on each element of the hydrosystem: surface water, stream and rainwater, groundwater and on the exchanges these waters have with soil, air, and vegetation. This means not only preserving water quality for its own sake, but also encouraging and reestablishing the movement of these waters and their interactions with soil and air.

What solutions in the face of natural and human-induced water risks?

By nature, watercourses are dynamic. Water "What solutions in the face of natural and human-induced water risks?

By nature, watercourses are dynamic. Water flows and evaporates, freezes and stills under extreme cold (increasingly rarely now). It warms or accelerates and carries fine particles that cause what we call turbidity. Excessive heat in the water and high turbidity kill aquatic fauna and flora; fish gills cannot filter water that is too silt-laden. These phenomena are observed with increasing frequency, amplified by discharges of heated cooling water from industries, data centres, and nuclear power plants. Another natural phenomenon: river water overflows. It leaves its minor bed to spread into the floodplain (the major bed), whose limits are sometimes forgotten under development pressure and the necessity of finding housing for an ever-growing population. Rivers are fed by drainage from their entire watershed. Heavy rains generate runoff across all impervious surfaces (public spaces, streets, roads, parking lots... and even roofs). Water gathers at low points and floods whole neighbourhoods. Farmland that has been stripped bare, ditches filled in, hedgerows uprooted, and grassed strips from former agrienvironmental measures removed - no longer absorbs or holds back rainwater, especially since their soils have been rendered inert by pesticides that killed the fauna, which once kept the ground porous. In heavy rains, such fields erode, and muddy torrents rush down to the low points, into village homes. These phenomena occur repeatedly, upstream and downstream alike. Floods are becoming more and more frequent, causing immense financial and psychological damage. Conversely, major droughts dehydrate soils and cause clay soils to contract, leading to countless fissures and damage at costs that many homeowners cannot withstand. The insurance system we

rely on is irreversibly fraying. Everyone has forgotten the winter flood of Paris in 1658 or the (controversial) summer flood of 1615; even the national flood monitoring site, Vigicrues, fails to mention them. In Île-de-France, however, everyone dreads the return of the January 1910 flood (+8.62 m in Paris), even if few truly believe it will recur. The blackand-white flood photos are viewed almost romantically. Let's recall other episodes that have marked the region, such as the 1955 flood, which prompted the construction of low flood walls to raise banks and guays. These are regularly sealed with stoplogs when the Seine threatens to overflow, as seen in June 2016 (+6.12 m in Paris) and January 2018 (+5.88 m in Paris). Now-mandatory high-water marks inform passers-by of these past flood levels. But is that enough to build a collective risk culture? Every year, exceptional floods occur throughout France and the world - including in Île-de-France. Along the Marne, the Petit and Grand Morin rivers are hardly controllable. Upstream on the Seine, the Loing unpredictably triggered Paris's 2016 flood. Further upstream, the Armançon and the Serein tributaries of the Yonne regularly overflow too. Despite all



The 1910 Seine Flood, Pont Sully, Paris

these events and widespread information, the public scarcely believes a great flood like 1910 could happen again. No one is unaware of the risk, but each person feels protected by infrastructure meant to safeguard Paris: large retention basins, whose capacities have been increased by expansion (as with Lake Der-Chantecog near Vitry-le-François on the Marne), or by the creation of new potential floodwater storage like the Bassée project near Montereau-Fault-Yonne. Downstream of the Seine-Yonne confluence, the Bassée is a flood expansion zone divided into compartments by dikes on farmland to store water diverted from the Seine during a flood. This system complements the major reservoirs built since the mid-20th century at Pannecière on the Yonne, on the Seine and Aube near Troyes (the Orient Forest Lakes), and at Lake Der. These artificial reservoirs were initially created to maintain minimum flow levels to enable navigation and potable water production. They are filled in winter and emptied in summer, retaining the waters of the Marne, Seine, Aube, and Yonne and releasing water in the dry season. However, their total storage volumes would not prevent a catastrophe if an event comparable to January 1910 occurred. The situation is especially critical if a flood strikes in May or June, because at that time, the reservoirs are kept full to offset potential summer droughts - they would have no capacity to hold back floodwaters, with potentially disastrous consequences for the Paris region. Nor can we reasonably imagine building new retention basins, large or small. Their ecological impacts are debated; their surface area causes water loss through evaporation (depriving us during droughts); and when they release water into rivers..."From Protection to Resilience

It is no longer reasonable to consider erecting fortress-like walls along the banks. Instead of sheer resistance, resilience has become the focus-learning to live with water rather than fighting against it. Public demand shows a desire for closer proximity to water. Urban planning regulations increasingly incorporate flood risk; flood prevention plans are being drawn up. Nonetheless, hundreds of building permits have been granted in known flood zones. We know all too well that after a drought, flood risk is forgotten or downplayed. Should we adapt or demolish? Where and how











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should new construction be located, and with what funding? These issues call for national mobilisation and reflection, fully involving local stakeholders and communities

When it comes to stormwater runoff, numerous efforts are improving everyone's living environment. In France, the new towns of the 1960s-70s pioneered the first openair stormwater ponds to retain runoff. Since then, countless underground tanks have been built (for example, beneath the lawn of the Stade de France lies one of the largest). So-called alternative techniques to standard storm sewers are being used to manage rainwater, contributing to the development and beautification of public spaces: creation of landscaped swales (planted drainage ditches), various kinds of floodable areas, disconnection of rooftop downspouts, creation of rooftop water retention, permeable roadways, parking and sidewalk surfaces that foster infiltration or detention all to slow water down and reduce volumes entering pipes.

Even so, combined underground sewer networks (carrying both stormwater and wastewater) become overloaded during heavy rains, leading to massive overflows of polluted water into rivers. Additionally, after a dry spell, runoff washing over roads carries hydrocarbons and tire residue into the Seine; in urban areas, it also sweeps up animal droppings (dog and rodent faeces), which are particularly toxic. Solutions do exist and are increasingly used to curb runoff thus any action to slow runoff and encourage infiltration deserves to be generalised.

From Farming Practices Ignoring Water to Regenerative Hydrology

In the agricultural realm, solutions are equally well known but are they being applied? Advocates of regenerative **hydrology** are bringing them to the forefront. These solutions revive practices from before the mechanisation of agriculture. It's about rethinking water's pathways and working the soil toward regeneration, to recover its capacity for drainage, water storage, plant nutrition, fertility, and infiltration. Techniques include creating swales (shallow ditches cut perpendicular to the slope), installing fascines (bundles of branches) on steep land

to retain soil, minimising chemical inputs, etc. Such regenerative hydrology techniques demonstrate a great potential for restoring agricultural lands. However, putting them into practice on actual farms is a challenge: How can we move from theoretical principles to the adoption of practices that yield lasting change?

Groundwater: the Invisible Pillar of the Seine Basin

The hydro system also comprises groundwater invisible yet indispensable. As the Seine-Normandy Water Agency notes, "the [Seine] basin is rich in groundwater. This groundwater meets nearly 60% of the drinking water needs and plays a decisive role in the functioning of rivers." Groundwater hydrates soils and helps prevent the shrink-swell of clay. During periods of intense rain, however, aquifers can rise and inundate streets and homes when the ground is saturated and the foundations of structures and infrastructure impede their flow. Still, the quality and quantity of these waters remain vital: groundwater provides the bulk of the drinking water we



The Water Cycle, CONSUM® Southwest Florida Water Management District

A balanced cultivation of both surface and ground waters contributes to an ecological equilibrium that underpins the resilience of infrastructure and the quality of drinking water. There is much more to be said about water, how can we not mention lake and pond waters, filling former gravel pits and now serving as rare yet precious refuges for wetland flora and fauna; these recent ecosystems are places where "an entire wild community today benefits from past human activities." Indeed, the entire water cycle must be taken into account by institutions, industries, and individuals through their actions and their political choices. Public and economic actors can no longer ignore the problems, nor fail to implement the proven solutions that exist. Professionals in planning increasingly trained on these issues can no longer look away either.

This Great Garden is Vast, How Can We Comprehend It?

The vast 78,600 km² Seine River basin, with its diverse landscapes and communities, inspired a unique approach: a three-year cycle of workshops focused on intense, short-term experimentation the hallmark of the Cergy International Workshops. This spatio-temporal approach invites us to view the basin as a global system divided into three interconnected sequences.

• **Upper Seine Valley:** from the sources of the Seine and its tributaries, through the rural territories of Burgundy and Champagne, up to the beginnings of metropolitan urbanity in Île-de-France.

- **Metropolitan Seine Region:** the most urbanised river valley in France, the heart of a "world-city" model, integrated within a vast agro-natural system.
- Lower Seine Valley: from the fringes of Île-de-France, where rural and urban blend to the estuary, a succession of river towns opening onto Le Havre and the immensity of the ocean.

3.2 Upper Seine Valley: From the Garden of Sources to the Upper Seine – Marne and Yonne

To address the Upper Seine Valley - Upper Seine sequence is to integrate the complexity of territorial realities and ecosystem dynamics across different scales and through their interactions. On one hand, it is essential to take a close-up look at the small tributaries and communes to grasp local variability and implement concrete actions, while articulating these at the broader framework of inter-municipal groupings and departmental boundaries. On the other hand, this exploration must be set at the extended scale of the watershed, to feed a strategic vision in the short, medium, and long term and to put ecological and hydrological interactions at the heart of territorial development. These different levels, from local to grand landscape, from inter-departmental to global, sharpen our understanding of ecosystems and make the



The Seine: the Upper Valley, the Metropolitan Seine, the Lower Valley

strategic proposals from the workshop truly operational, a necessary condition for crafting a desirable project.

Plains and valleys become the guardians of an increasingly scarce resource. Rivers and tributaries become the water towers of an essential common good on which we now critically depend. The Great Basin is a garden where the most precious resource water is cultivated.

A land of Wealth

The presence of water in all its forms is a source of wealth for this territory intrinsically, as well as for the entire watershed.

Water is inseparable from all agricultural, industrial, and more broadly economic activities by enabling the flow of goods and people, and the tourism it allows.

Agricultural Landscapes: Exposed and Concerned Farmers

From the sources down to the doorstep of the Paris basin, the area is covered with extensive cereal crops, barley, wheat, rye, oats along with rapeseed and peas (for livestock feed). These are joined by some of France's most renowned vineyards: red and white Burgundy wines in the Yonne, and Champagne wines in the Aube and Marne départements, not to mention timber production in public and private forests (for example in Nièvre, Marne, Aube's Orient Forest, and Haute-Marne). Livestock farming cattle, sheep, pigs, poultry is also well represented, contributing to the local economy. These activities draw the landscapes: from the broad open plateaus of northern Yonne, to hillsides etched with the neat lines of vines for wine or Champagne, to the bocage

Lower Seine Valley

The Metropolitan Seine Region

Upper Seine Valley

Nogent-sur-Seine Nuclear Power F









e-Dame de Pa





country where Charolais cattle are traditionally raised for beef. The planted deciduous and coniferous forests for the timber industry also impart their own ambience, ecosystems, and aesthetics.

Agriculture in all its facets shapes productive landscapes, but also the infrastructure needed to store and transport products. Massive grain silos emerge like cathedrals on the plateaus or along the Seine and its main tributaries. These out-of-scale metal or concrete cylinders have become monuments and landscape markers by virtue of their gigantism and verticality. Some are now protected as heritage to be preserved and passed on; others, disused, are in search of new uses.

On the front line of issues linking water and soil, farmers whether conventional or not; cereal growers, livestock breeders, winegrowers, market gardeners, or foresters are all aware of the effects of climate disruption. Some still place great trust in chemistry and mechanisation; others seek solutions to limit water stress, halt soil depletion, avoid surface crusting and mudflows, or to end raising animals "offsoil" in inhumane farming and slaughter conditions. They are looking to implement rational, ecological techniques for animal welfare, to reduce soil and water pollution, and to cut down on the illnesses affecting farmers themselves.

As mentioned, the principles of regenerative hydrology and agroforestry align with these aims: retain and slow down water, encourage its infiltration to feed soils structurally and biologically, foster the development of soil "workers" (fauna that aerate and naturally fertilize the earth), thereby promoting exchanges and the creation of high-quality ecological environments. Positive initiatives benefiting ecosystems, animals, and humans are numerous and span all domains.

Yet today the agricultural world is undergoing a deep crisis, rooted in ecological, environmental, economic, and societal factors all at once. Rural and urban populations now share the same aspirations for comfort and services, but the means to achieve a balanced coexistence



Drawing by Bertrand Warnier

reconciling production, consumption, and environmental respect remain to be invented. The Great Seine Garden must contribute to this effort through the actions it will carry out, reframing the role of farmers in a positive, contemporary narrative without indulging in nostalgia for an idealised peasantry.

Water-hungry industrial and energy landscapes for cooling.

Historically, thanks to its soil and subsoil, its forests, and its hydrological network for power production, cooling machinery, and transport, this Upper Seine Valley territory is still peppered with active industrial sites. Medieval watermills, the steam engines of the Industrial Revolution, more recent combustion and electric motors, and nuclear power plants all are bound to water. For industries still operating (for example, the Nogent-sur-Seine nuclear plant), how can we ensure a viable production that minimizes harmful emissions and discharges into air, soil, and water?

How to handle drought episodes? Less water available means pollutants concentrate more and receiving waters risk overheating from warm effluents. Lastly, how to reconcile human activities, the economy, and vital local production without causing rural depopulation and at the same time meet ecological challenges, of which water is a key indicator?



Cereal fields of the Paris Basin

Water Landscapes: Carriers of Flows, Activities, and Economy

When navigable, the hydrographic network enables transport.

The invention of the pound-lock in the 15th century in Italy, and of the summit-level canal in 16th-century France, made it possible to extend and regulate the fluvial network for moving goods and people. In the 17th century, Colbert mandated the creation of towpaths along navigable waterways 24 feet wide on one bank and 10 feet on the other, an edict formalised in an 1870 law still in force. These continuous paths skirting navigable rivers remain a visible legacy in the landscape. France expanded waterway transport up to the 19th century, standardizing navigation routes



Regional Natural Park of the Forêt d'Orient

Bridge heights, water depth, lock dimensions, and boat sizes all limit navigation. In the 19th century, barges up to 38 m long by 5 m wide could carry 300-350 tons; lock chambers had to be at least those dimensions (plus a small margin). In the 20th century, river transport in France declined in favour of trucking, civil works, and road building. Today, Europe encourages high-capacity barge traffic (vessels ~95 m × 11.4 m carrying 3,500 tons), which requires widening waterways, raising bridges, and reinforcing banks of all infrastructure with arguable ecological merits.

Loaded with containers, these larger barges still cannot pass through Paris: doing so



would require demolishing its bridges! Yet the Seine basin and its tributaries form a bundle of waterway axes that could be (re)activated. Ferries to cross from one bank to another, river shuttles like in Rotterdam or Venice, approached ecologically are examples of fluvial mobility prototypes to imagine for the Upper Seine and the Upper Valley, combining daily mobility, transport, territorial appeal, and tourism development.

Tourism and Water: Valorisation Beyond Conflicting Uses

Tourism is a topic unto itself. Historic hydraulic works raise questions for elected officials, locals, and conservators. How can we showcase, for example, the seven sluices of Rogny (Yonne)? How to integrate this heritage into contemporary actions and narratives? How to valorise all water-related heritage that speaks of human-altered waters: wash-houses, wells, watering troughs, fountains, pumps...?

Waterways and bodies of water are also potential sites for swimming and water sports, a source of conflict with technical managers. It is complex to reconcile social and political demands with ecological concerns, sanitary safety, and needs for navigation or regulation.

Montereau-sur-Yonne, confluence of the Seine and the Yonne

How can the use of lakes be shared between recreational activities, maintaining lowflow levels for navigation, and drinking water supply, while respecting health and technical constraints?

The "Great Seine Garden" offers an ideal framework and rich content for cultural tourism, for river tourism, and for both traditional and novel nature activities. It remains to imagine these, in order to move beyond the associated conflicts of use.

The Garden serves as a matrix of forward-looking visions, featuring the water that irrigates the basin



Swimmers on the Banks of the Seine, 1942

4. The Great Seine Garden – Framework of Garden Imaginaries

The garden is not wilderness; it is a representation of the relationship humans maintain with nature. Whether artistic or nourishing, it always requires the attentive, context-sensitive action of gardeners - men and women who ensure a balance between the garden's idealisation and its seasonal realities. Embodying the encounter of aesthetics and quality of life, the Garden is a plural space at times a symbol of fertility and abundance, at others a locus of power, a space of leisure or purification, the ultimate place of rejuvenation and escape.

The ideas in this matrix are presented as vectors of prospective inspiration, using the notion of the garden as an art of composition and planning to highlight the landscape potentials of the Seine Basin. Drawing inspiration from the Garden invites exploration of new paths for imagining the development, uses, and governance of the Great Seine Basin. It means leveraging its geographic and landscape features to build a sense of belonging, and rooting the aspirations of its inhabitants in an ancient story, that runs from geology to myths, from nature to culture.

4.1 A Garden is an Art

Composing Landscapes Through Aesthetics, Imagination, and Design

The garden is an art in its own right, a creative expression in pursuit of pleasure and beauty. It embodies an aesthetic language conveying cultural foundations and singular ways of being in the world. As an ecosystem and a dialogue between water, space, and living things, the garden is defined by acts of composition, the shaping of landscapes, and the meticulous selection of plants. Far from merely structuring space, the garden shapes human settlements and stands as a laboratory of stories, where imagination paves the way for the transformation of territories.



The Garden of Earthly Delights, Hieronymus Bosch

An Art of Composition

The art of composing a garden lies in transforming space into a tapestry of relationships among water, plants, soils, and minerals, within a landscape and through the cycles and caprices of seasons and time. In a garden, proximity and distance, sequence and continuity, enclosure and openness are arranged according to modes of organisation and perception - from segregation to segmentation, through sequential progression and the alternation of exteriority and interiority. This constructive approach, both concrete and abstract, reflects a way of thinking and the expression of a symbolism. Whether the garden is for nourishment, meditation, or cosmology, it unfolds as a space of sociability, translating relationships into an aesthetic language where nature and culture unite to provide meaning and beauty.

A Project of Embellishment and Pleasure-Seeking

The Garden partakes in a dynamic quest for pleasure and well-being, where every detail contributes to a sensory experience. A garden is a living theatre of sensations and emotions. Embellishment transcends mere decoration the garden becomes a symbolic space, a microcosm where built features such as mounds, belvederes, pools, and groves, combined with the ever-renewing cycle of blooms, fruits, seeds, and colours, establish rhythms capable of kindling joy, provoking reflection, or offering refuge...

Creative and Artistic Expression

As a primordial place of creation, the idea of the garden nourishes artistic production and cultural innovation. It invites us to rethink space through the lens of creation: from art to festivals, from installations to performances, the Seine Basin envisioned as a creative garden celebrates the beauty and richness of a water-based territory, opening the door to transformative possibilities for places and echoing their values and history, as André Guillerme expresses in his "testament of the Seine" chronicling the painters' visions:

"...It is not just the simple boating fad that attracts the painters of the late 19th century. For them, water is a source and a resource of light and luminosity; water is flat and thus the theoretical horizon line of perspective; yet the incessant movement of nature shapes and reshapes this iconography. From Courbet to Manet, the horizontal line is called into question and water plays a determining role in this. Impressionism delights in water's mirror, with ever more floral reflections. Post-Impressionism punctuates the blue book of rivers and warms the shimmering skin of the riverside dwellers..."



Plan of the André Le Nôtre Garden, 1737

4.2 A Garden Reconciles Time and Space

Shaping Territories Through Memory, Transmission, and Heritage

An age-old method of shaping and transforming territory, the garden weaves a story between a geography and a community. A garden is by definition an arrangement that lasts and is transmitted as a heritage that is maintained so it can be shared with future generations through acts and forms of care. The symbolism of the garden can serve as a model for organising and managing territory in the interest of longevity and the

The River Seine as a Great Garden: The Sources - 43rd International Workshop - Topic Document

transmission of resources and practices. The Seine Basin imagined as a Great Sequanian Garden becomes a weaving together of times and places of transmission, of memory, and of the invention of desirable transformations.

Sedimentations

The long history of all these inhabited valleys, great and small, reveals a vast diversity of ways of adapting to the land. From access to drinking water to river transport, from foraging to agriculture, from irrigation to soil stewardship that generated this great basin's wealth, looking through history can provide the seeds of solutions for today's challenges. The garden thus becomes a metaphor for continuity: for durable development dynamics and ways of living, moving, and nourishing ourselves that foster new ecological, societal, and political balances.

Genius Loci (Spirit of Place)

The garden metaphor calls upon the genius loci, knowledge drawn from an intimate understanding of places, shaped by practices handed down through generations. This living heritage can inform solutions that build on local traditions, via a process of appropriation that roots territorial transformations in collective know-how. By tapping into the spirit of place as a creative resource, the garden helps cultivate a sense of belonging to the Great Sequanian Basin.

Places of Memory

Gardens are living vectors of collective memory and help transmit practices and usages from botany to cultivation techniques, from leisure to festivities, from rituals to customs. They embody an art of living in symbiosis with nature, founded on sustainable management of local resources and the valorisation of timehonoured practices. As time and place for the memory of locales, gardens contribute to maintaining and enhancing local identity - a precious resource to cultivate, care for, and share.

4.3 A Garden is a Place of Culture

Fostering Identities, Narratives, and Transformative Creativity

As a place where future transformations are cultivated, the Garden embodies the potential for alliances between knowledge and aspirations. A stage for collective future narratives, the garden is a creative resource to inspire meaningful stories. It is a living laboratory where traditions and innovations meet, a site for the emergence of solutions to ecological and societal challenges.



A Sunday Afternoon on the Island of La Grande Jatte (1884-1886), Georges Seurat

From Cosmogony to Identity

Imagine the Great Seine Garden as a cosmogony, a cultural expression of its creators where histories, myths, artistic expressions, symbols, and identities tied to a territory all intertwine. This invites us to account for beliefs, ways of being in the world, and ways of relating to an environment from the ancient deity Sequana, healing goddess of the Seine, to the Marne's Matrona (Materna), the Gaulish mothergoddess of fertility. The symbolism of water can guide us in crafting galvanising narratives to carry forthcoming transformations. The cultural potential associated with the river can become a framework of meaning and the living matter for re-enchanting our environments.

From Park to Garden: Laboratory of Inhabited Environments

The garden as a space of culture and design has always been at the heart of innovations that shaped the Parisian basin. From the medieval hortus conclusus to the invention of the French formal garden, from the promenades of the Champs-Élysées to the grand boulevards, the garden has been the testing ground for major transformations of the Sequanian basin. In the 19th century, the Second Empire introduced a system of parks, squares, and gardens, structuring Paris's urban landscape. Later, projects like the Delouvrier plan mobilised the geographic assets of the Seine Valley. The new towns were built on a principle of nature as urban framework "In the new towns, nature would structure urban space; paradoxically, nature would make the city" (de Saint-Pierre, 2003). Cergy-Pontoise, as well as Sénart or Évry in the Upper Seine area, pursued visionary innovations that called upon major natural structures in city-building. By interweaving nature and culture from a large park to a garden, across varied landscapes a method of planning inhabited environments was cultivated that relies on nature and geography as its armature.

4.4 A Garden is a Multiplicity of Uses and Nourishing Resources

Linking Food, Mobility, and Everyday Life in Shared Landscapes

Nourishing Landscape

From the kitchen garden to the orchard to the courtil (household plot), the garden is a resource for subsistence. As a shared or family garden in the city, it can, at a larger scale, become an agricultural park that reconciles professional food production with public enjoyment of nature. The benefits of short supply chains and the art of bringing together the skills for processing and adding value to food are by now well proven.

exemplifies Italy agritourism and bioregionalism; likewise, the Seine basin could be a place to invent new practices that reconcile ecological imperatives with food security. By cultivating the land, inhabitants also cultivate a symbolism of our connection to place, to the seasons, to the rhythms of living things. This approach shines a light on market gardening landscapes, farmlands, and vineyards. As a nourishing landscape, the Great Sequanian Garden becomes both a source of sustenance and a model for disseminating ecological and solidarity-based practices.

Mobility and Connectivity / Rhythms

Paths, movement, stops, and linkages mark the history of gardens. Imagining the Seine Basin as a garden carries the idea of a network of interconnected spaces and a diversity of mobilities - from gentler, ecological modes to railways, underground systems, and other heavy infrastructures - whose legacy should be rethought to sustainably uphold the basin's liveability and the well-being of all its inhabitants. This means envisioning routes, greenways, and promenades that connect, at various scales and paces, a certain vision of the basin as an integrated system emphasising the sensory experience of interaction and the interweaving of nature with human settlements.

Multiplicity of Daily Uses

The garden unfolds as a versatile space, inviting a wide range of activities leisure, social gatherings, gardening, sports, or moments of contemplation thus meeting the varied needs of inhabitants. The Garden idea calls for designing a variety of places where flexibility, modularity, and the temporal dimension of uses allow each person to find their own ways to live, explore, cultivate, play, or recharge, within spaces genuinely shared by everyone.

4.5 A Garden is a Shared Commons

Collective Governance, Water as a Commons, and Territorial Stewardship

Shared Project and Collective Governance

By its open and plural nature, the garden presents itself as a common good. It invites shared management, where stakeholders residents, professionals, institutions collectively take part in the design, upkeep, and evolution of spaces. It is an ideal metaphor for a collective endeavour on the scale of territories. In positioning itself as a commons, the garden embodies a mode of development that transcends fragmented projects. It becomes the place where aspirations, citizen initiatives, and diverse expertise meet a catalyst for innovations to tackle the challenges of a sustainable future.

Water as the Primary Commons of the Great Sequanian Garden

Water source of life and an essential vector for sustaining and regenerating territories today is subject to specialised exploitation, based on performance metrics of analysis and treatment. Yet this approach is no longer sufficient to ensure ecosystem resilience, nor does it do justice to water's fundamental role as a common good. The basin is thus confronted with the need for a new, integrated water management, an that recognises water's intrinsic approach value as a commons, while taking into account the conditions for its long-term sustainability (climate disruption, drought episodes, lowflow requirements) in order to guarantee a fair distribution of water resources.



The Gardener, Afternoon Sun, Éragny (1899), Camille Jacob Pissarro

GARDENER

We can imagine countless gardeners, and just as many ways of gardening...

A gardener is one who plants ideas for tomorrow.

A gardener is one who safeguards water, the source of life.

A gardener is one who engages in dialogue with living beings.

- A gardener is one who reveals the layers of the landscape.
- A gardener is one who nurtures and maintains natural balance.
- A gardener is one who builds with soil, roots, and care.

A gardener is one who reserves space for imagination to flourish.

A gardener is one who orchestrates the symphony of natural elements.

A gardener is one who anticipates and encourages resilient futures.

- A gardener is one who imagines uses from nature to culture.
- A gardener is one who maps out pathways towards new horizons.

5. Cultivating the Water of the Great Seine Garden: Questions to Explore

Open and stimulating framework: Far from imposing an exhaustive checklist, this workshop offers participants the freedom to draw on various lines of inquiry to enrich their reflections. The proposed themes serve as a creative springboard – teams are invited to adapt them, combine them, or even set some aside in order to generate original and pertinent ideas.

Promote a shared water culture.

What actions can be taken to accommodate different uses, reduce conflicts, and preserve the water resource?

• Imagine elements of a territorial narrative.

Stimulate imaginations through narrative-driven tools: on what foundations should they be built? How can such a narrative be embodied and made collective?

• Mobilise knowledge in the service of territorial development.

Encourage the application of proven knowledge: what strategies can integrate this know-how into territorial projects?

Raise awareness ofwater sharing.

How can interdependencies be translated into new forms of action and governance?

The 43rd International Workshop, to be held in 2025, seeks to contribute to the invention of this Great Seine Garden by fostering a sense of territorial belonging founded on the hydrographic network, the symbolism of water, and the narrative potential of the garden. Drawing on the seductive qualities of water, including its imaginaries, its vast lexicon, and the myths tied to each tributary, each confluence, and to the Seine itself, as well as on the geographic, hydrologic, and social realities, and through a fine-grained exploration of the field, we aim to envision long-term livability in these territories for both humans and nonhumans. This must be done with respect for welcoming each and every being, so as to spark an awareness of shared responsibilities that embraces the paths and qualities of every drop of water flowing from the sources to the sea, in a spirit of necessary hydro solidarity and with the daily pleasure of living in these places.

Through your contributions, the specific characteristics of the Upper Seine Valley will be revealed. This territory must no longer be seen as merely a functional space, but as a lived-in territory, one that bears meanings, imaginations, attachments, and diverse practices that together form an art of living. Imagining its future means recognising its symbolic, economic, and cultural qualities in order to craft a narrative that identifies the Sources of the Great Seine Garden at the scale of the entire basin.

Apply to the Workshop !

Who is it for ?

The workshop is open to 15 young professionals of all nationalities and disciplines, as well as to master's-level students (or higher) from diverse fields including urban planning, sociology, the arts, economics, agronomy, engineering, architecture, history, landscape architecture, and more provided they are under 30 years of age. Participation is voluntary. A strong command of English is required, as participants will be working in international teams.

How to apply?

Check the topic document on the workshop page: https://www.ateliers.org/fr/workshops/243/

> Fill out the online application form: https://www.ateliers.org/l/apply-seine

- Attach your CV (1 or 2 pages), the ID form (from the workshop page) and a brief personal introduction (80 words)

- **Include a personal work** (or an excerpt, max 6 pages) related to the workshop theme.

We invite you to reflect on the rivers and waterways that shape your own region culturally, ecologically, and historically as the foundation for this exploration.

Submissions are open in format and may include illustrations, photographs, drawings, maps, or other forms of visual or graphic representation that convey your perspective.

Let the water guide your response.

Conditions of Participation

The application is free of charge. The participation fee for the workshop, which includes membership to Les Ateliers' non-profit organisation, is €150. This fee covers accommodation for the entire duration of the workshop in Cergy-Pontoise, regional transport and organised visits, group meals, lectures, and drawing materials.

EXTENSION: Application deadline Sunday, 15 June 2025 at 11:59 PM (Paris time)



Representation of the Seine's hydrography as a tree of life, by Bertrand Warnier



write to us at: seine@ateliers.org