


BOIS DE VINCENNES (VINCENNES FOREST) - PARIS, FRANCE

Section	 <p>CLEARINGHOUSE 中欧城市森林应对方案</p> <p><i>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 821242</i></p>
1	TITLE OF CASE STUDY AREA: Bois de Vincennes (Vincennes Forest), Paris, France
2	<p>INTRODUCTION</p> <p>Located in the east of Paris, the <i>Bois de Vincennes</i> (“Vincennes forest”) is an urban park where a mix of landscapes, as well as several leisure, athletic and cultural facilities, can be found. The “natural” areas make up for about 850 ha of the park and facilities take 150 ha. The mix of landscapes consists of two forest massifs, several prairies, two English landscape gardens, four lakes and a few water streams. The park’s facilities include a zoo, an arboretum, a botanical garden, a horse-racing track, a bicycle-racing track, and a sport campus.</p> <p>The park’s history is tied to the Vincennes Castle (located in the north of the park): Previously belonging to the ancient forest belt that surrounded the Gallo Roman city of <i>Lutecia</i> (now Paris), the Bois de Vincennes was successively the property of the Church, of the Kings of France, and of the French State until the 19th century when the State donated the area to the City of Paris on the condition that the city maintained it and made it a “pleasant place for walks and entertainment for the industrious masses of eastern Paris”.</p> <p>Today, the City of Paris continues to maintain the Bois de Vincennes while also supporting environmental programmes. The park’s managers preserve and attempt to foster biodiversity by creating the conditions for the development of certain species (birds, amphibians, mammals, insects, plants), by mitigating the presence of visitors in some reserve areas, and by implementing circular principles in management practices all along the way. The Bois de Vincennes is home to several hundred species of plants, fungi, insects, birds, small mammals and amphibians.</p>
3	<p>KEY FACTS AND FIGURES OF THE CASE STUDY AREA</p> <p>Biogeographic region¹: Atlantic Surface area: 99.5 km² Country: France Region/Province: Paris, Île-de-France</p>

¹ <https://www.eea.europa.eu/data-and-maps/data/biogeographical-regions-europe-3>

<p>4</p>	<p>LOCATION MAP(S)</p> <p>Location of the study area – Paris, France.</p>
<p>5</p>	<p>NAME OF MUNICIPALITY AND WEBSITE ADDRESS City of Paris: www.paris.fr</p>
<p>6</p>	<p>LEAD ORGANISATIONS:</p> <ul style="list-style-type: none"> • City of Paris • Environment and Green Spaces Office of the City of Paris (<i>Direction des Espaces Verts et de l'Environnement de Paris, DEVE</i>), www.paris.fr/environnement
<p>7</p>	<p>LOCAL CONTACT(S) Joanne Schanté Head of Innovation Strategy LGI Sustainable Innovation +33 6 47 41 05 15 Joanne.schante@lgi-consulting.com</p>
<p>8</p>	<p>PRINCIPLE UF-NBS (Urban Forests as Nature-Based Solutions) ACTION(S)</p> <ul style="list-style-type: none"> • Creation of conditions for the spread of certain species (dry rocks, dead branches, ponds, water streams, etc.) • Natural zone of ecological interest, fauna and flora (Zone naturelle d'intérêt écologique, faunistique et floristique (ZNIEFF)) • Birds reserve, "witness" plots; • A "green buffer" connecting the eastern suburbs of Paris; • An interplay of ecosystems which exhibit a variety of habitats, plant and animal species;

	<ul style="list-style-type: none"> • Home and refuge to many birds, small mammals, insects and amphibians; • So-called "green lung" of the east of Paris; • Climactic regulator for the region against urban heat island effect; • Recreational area for the population. 												
9	<p>OTHER PRINCIPLE NBS ACTION(S) – non-UF</p> <ul style="list-style-type: none"> • Encourage engagement of citizen with local green and green initiatives (educational programmes, shared gardens); • Provide a foundation for spiritual, scientific, educational, recreational, and visitor opportunities, all of which must be environmentally compatible with circular economy principles. 												
10	<p>LOCAL STAKEHOLDERS LIST ONLY</p> <ol style="list-style-type: none"> Governing authorities: City of Paris Associations: Ligue pour la Protection des Oiseaux (Bird Protection Association), Pêche Paris Bois de Vincennes (Fishing Association), Zoopolis (Association for Animals Protection) Citizens: visitors, associations members, residents of the neighbouring cities, Municipalities: City of Paris, Fontenay-aux-Roses, Nogent-sur-Marne, Joinville-le-Pont, Saint-Maurice, Charenton-le-Pont, Saint-Mandé, Vincennes Public/private institutions: n/a Park planner and authorities: City of Paris, Environment and Green Spaces Office (DEVE), French National Forest Office (ONF), Environment and Green Spaces Office (DEVE), Department of Youth and Sports (DJS), Department of Finance and Procurement (DFA), Department of Road and Travels (DVD) Technicians for park maintenance/monitoring and to educate and support citizens: The Department of Environment (DEVE) is in charge of the management and maintenance of trees, green spaces. Three departments of management are directly responsible for the operation of these spaces: garden services, cemetery services and tree and woods services. 												
11	<p>UF-NBS FRAMEWORK</p> <table border="1"> <tr> <td>a.</td> <td>UF-NBS typology <i>this section</i></td> <td> <p>Forested areas; Green urban areas, pocket parks; Historical gardens; Large urban public park; Amenity green spaces; Locally equipped areas for play; Hedgerows; Urban gardens with trees; Botanical gardens; Arboretum.</p> </td> </tr> <tr> <td>b.</td> <td>Integration</td> <td> <p>Built-up structure (accompanying buildings); Transport infrastructure in the vicinity (from the rest of the metropolis, metro, regional train, bus, tramway).</p> </td> </tr> <tr> <td>c.</td> <td>Network/connectivity</td> <td> <p>The park is located in the east of Paris, the capital city of France, with a metropolitan population of about 10 million. The park is entirely within the city of Paris' limits however, seven municipalities border the park: Fontenay-aux-Roses, Nogent-sur-Marne, Joinville-le-Pont, Saint-Maurice, Charenton-le-Pont, Saint-Mandé, Vincennes.</p> <p>The park can be accessed through different means of transportation: personal vehicle, metro, train, shared bicycle, tramway.</p> </td> </tr> <tr> <td>d.</td> <td>Multifunctionality</td> <td> <p>The park serves multiple purposes:</p> <ul style="list-style-type: none"> - Climate purposes (water protection and retention, carbon sequestration; regulation of micro, local and/or regional climate), - Environmental purposes (habitats and animal and plant biodiversity), - Cultural purposes (leisure, aesthetics, sense of place, presence of a buddhist temple), - And economic purposes (events, restaurants, cafés, touristic facilities, sport facilities). </td> </tr> </table>	a.	UF-NBS typology <i>this section</i>	<p>Forested areas; Green urban areas, pocket parks; Historical gardens; Large urban public park; Amenity green spaces; Locally equipped areas for play; Hedgerows; Urban gardens with trees; Botanical gardens; Arboretum.</p>	b.	Integration	<p>Built-up structure (accompanying buildings); Transport infrastructure in the vicinity (from the rest of the metropolis, metro, regional train, bus, tramway).</p>	c.	Network/connectivity	<p>The park is located in the east of Paris, the capital city of France, with a metropolitan population of about 10 million. The park is entirely within the city of Paris' limits however, seven municipalities border the park: Fontenay-aux-Roses, Nogent-sur-Marne, Joinville-le-Pont, Saint-Maurice, Charenton-le-Pont, Saint-Mandé, Vincennes.</p> <p>The park can be accessed through different means of transportation: personal vehicle, metro, train, shared bicycle, tramway.</p>	d.	Multifunctionality	<p>The park serves multiple purposes:</p> <ul style="list-style-type: none"> - Climate purposes (water protection and retention, carbon sequestration; regulation of micro, local and/or regional climate), - Environmental purposes (habitats and animal and plant biodiversity), - Cultural purposes (leisure, aesthetics, sense of place, presence of a buddhist temple), - And economic purposes (events, restaurants, cafés, touristic facilities, sport facilities).
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e.	Multi-scale		As the park is primarily managed by the Environment Office of the city of Paris, the scale of management is mainly local to local. As such, the multi-scale dimension is absent, except when considering national and international legal requirements on environmental protection and valorisation.
f.	Strategic planning processes		<p>The planning of the park's management strategy is decided for a 5-year period by the Environment Office of the city of Paris, in line with political decisions raised at the city Council. Currently, the strategy revolves around the following items:</p> <ul style="list-style-type: none"> - Biodiversity protection and valorisation; - Motorised vehicles restriction; - Visitors presence mitigation (in certain areas); - Impermeable land transformation; - Artificial lighting reduction; - Circular economy principles implementation; - Water depollution and use for biodiversity and landscaping; - Landscape maintenance; - Development of educational programmes and communication channels.
g.	Inter- and transdisciplinary		The management of the park requires a multi-disciplinary team putting to contribution knowledge in areas such as landscaping, water management, entomology, mycology, ornithology or silviculture.
h.	Social cohesion and biocultural diversity		The park is free, open to all, and the prices demanded by private entities renting facilities is regulated to favour social integration.
i.	Governance arrangements	I. Project management structure.	The Bois de Vincennes is entirely managed by the City of Paris through its office of environment (DEVE) with concessions granted to entities renting facilities (sport centres, botanical gardens, restaurants, etc.).
		II. Local community engagement and the nature of their engagement.	The park's management office wishes to further develop local community engagement in the park in the years to come. Today, engagement is made at the local level via the work done in certain places such as the Ferme de Paris (an urban farm serving a pedagogical purpose), the botanical garden, the arboretum, as well as the Maison Paris Nature where visitors can learn about biodiversity principles.
		III. City-scale and/or region-wide governance for the project and/or UF-NBS (city and regional stakeholders and character of their engagement)	The Bois de Vincennes is entirely managed by the City of Paris through its office of environment (DEVE) with concessions granted to entities renting facilities (sport centres, botanical gardens, restaurants, etc.).
		IV. National and international governance context (national and international stakeholders and character of their engagement)	n/a

		V. Other (specify)	n/a
j.	Institutional frameworks	I. Project staff responsibilities.	n/a
		II. Project Management Committee (Y/N) if Y.	Y
		III. Frameworks <u>above the project</u> that exert influence on the project and/or UF-NBS e.g. Municipality, National Forestry Department.	National law 13/07/1852 National law 02/05/1930 ISO 14001 2002 Charter on management orientations of the Bois de Vincennes
		IV. Private companies that work on behalf of/or are embedded within the project.	n/a
		V. Trade representative organisations that are involved in the project	Restaurants, cafés and sports clubs are present in the park and rent facilities owned by the park's managing body, the City of Paris.
		VI. Regulatory frameworks that the project operates within (i.e. bylaws, municipal laws, national laws, licences and leases, partnership agreements etc)	<ul style="list-style-type: none"> - National law 13/07/1852 - National law 02/05/1930 <p>National laws by which the State donated the forest to the City of Paris and the decisions to classify them on the list of natural sites protected under the 1930 Act.</p> <ul style="list-style-type: none"> - Act of 22/11/1960 <p>This act heavily restricted construction permits within the park's area.</p> <ul style="list-style-type: none"> - 2002 Charter <p>Charter recognizing the ecological value of the Bois de Vincennes and setting three objectives: the protection and expansion of natural sites present in the forest, the reduction of motorized traffic, the transformation of public space to environmental goals. The Charter also establishes a piloting committee composed of representatives of neighbouring cities to rule over common management decisions on projects made in the Bois de Vincennes.</p> <ul style="list-style-type: none"> - Regional charter on biodiversity of natural habitats <p>This charter formalises the signatories' desire to publicise, preserve and manage biodiversity and the regional natural environments.</p> <ul style="list-style-type: none"> - Municipal plans for forest management 2006 and 2020 <p>Plans defining projects undertaken for a five years period for each one of the forest's plots.</p> <ul style="list-style-type: none"> - ISO 14001 <p>The City of Paris has the ISO 14001 certification which establishes criteria for a proper management of environmental responsibilities.</p>
		VII. Other (specify)	n/a

k.	Economic frameworks	I. Community fundraising	n/a
		II. Project delivered services and monies raised by project	n/a
		III. City, regional general funds	The budget allocated to the management of the Bois de Vincennes is entirely provided by the City of Paris. As such, the money needed for the park takes its origin in the pool of revenues attributed to the City of Paris' general affairs (taxes, contracts, loans, etc.).
		IV. Special funds e.g. National Lottery, Challenge funds	n/a
		V. National government funds	n/a
		VI. Private sector investment	The City of Paris is the sole owner of the vast majority of the park's facilities (sport clubs buildings, restaurants, etc.) and rents them to private actors. The revenues of the rent feeds in the city's general budget which in turn is allocated to the park's management after decisions taken at the city Council. Hence, private entities finance the park's management only indirectly.
		VII. International funds e.g. European Union structural funds, LIFE + etc.	n/a
		VIII. Other (specify)	n/a
l.	Sino/European comparative relevance		<p>The metropolitan area of Paris is the largest of the European Union with about 12 million inhabitants. However, only 2.1 million people live within the city's limits. UN Habitat predicts that the metropolitan population will only slightly increase by roughly 5 thousand people by 2025, a 0.8% increase from 2015.</p> <p>Paris city centre is very dense and lacks green areas however, the two parks of Bois de Boulogne (west of centre) and Bois de Vincennes (east of centre) serve as two green pockets.</p> <p>City officials have recently been trying to expand green amenities to tackle densification, enhance biodiversity, and find solutions against urban heat island effects and other climatic challenges. The conversion of the central urban highway bordering the Seine river into a public park (voie sur berge), is symbolical of this effort.</p>
m.	UF-NBS valorisation		<p>Actions implemented to enhance the valorisation of biodiversity are:</p> <ul style="list-style-type: none"> - The creation of biodiversity habitats (humid areas, dry areas, natural reserves); - Soil conversions; - The mitigation of human presence in certain areas; - The restriction of motorised vehicles presence within the park.



	<p>n. Procurement of UF-NBS</p>		<p>Procurement of UF-NBS is made through public procurement and public financing.</p>
	<p>p. Ecosystem services (list the three most important services being provided in no more than 50 words)</p>		<ul style="list-style-type: none"> - Pollution mitigation (carbon sequestration; microclimate regulation, solution against urban heat island effects), - Biodiversity enrichment (preservation and enhancement of fauna and flora habitats), - Leisure and cultural purposes (recreational value, aesthetic pleasure; sense of place, inspiration)
	<p>q. Renaturing</p>		<p>Renaturing programmes are being implemented in several locations: on former impermeable lands (parking lots, roads, facilities), in areas formerly occupied by amenities, in water areas (lakes, streams), as well as in other places throughout the park.</p>
<p>12</p>	<p>LESSONS AND TRANSFERABILITY</p> <p>The Bois de Vincennes is an urban park with a complex history consisting of a mix of landscapes with different degrees of human interventions. For the City of Paris, the sole manager of the park, the protection of its leisure and aesthetic purposes is primordial however, the city also develops its management strategy on the following basis:</p> <ul style="list-style-type: none"> - The enrichment of biodiversity through the creation and protection of specific habitats within the two main forest massifs; - The implementation of renaturing programmes of impermeable lands and artificial areas; - The guarantee of natural preservation through restrictions concerning visitors' access, artificial lighting use and motorised transport traffic. 		
<p>13</p>	<p>REFERENCES (Harvard style)</p> <p>Cour des Comptes, 2017, Gestion des bois de Boulogne et de Vincennes – Exercices 2010 et suivants – Observations définitives. https://www.ccomptes.fr/sites/default/files/2017-09/IDR2017-37.pdf</p> <p>European Environment Agency, 2016, Biogeographical regions. https://www.eea.europa.eu/data-and-maps/data/biogeographical-regions-europe-3</p> <p>Lestréhan, M., 2015, Évaluation et requalification de milieux écologiques : étude de cas au Bois de Vincennes, Université Paris 1 Panthéon Sorbonne. https://www.masterbioterre.com/sites/default/files/Evaluation%20et%20requalification%20milieux%20%C3%A9cologiques%20Bois%20Vincennes%20lestr%C3%A9han.pdf</p> <p>Atelier Parisien d'Urbanisme (APUR), 2013, L'eau dans les bois de Boulogne et de Vincennes – Valorisation de la ressource, Mairie de Paris. https://www.apur.org/sites/default/files/documents/eau_bois_boulogne_vincennes_ressources.pdf</p>		