

## **Strategy of management of a metropolitan river. The example of the Metropolis of Grand Paris.**

### **Stratégie de gestion d'un fleuve métropolitain. L'exemple de la Métropole du Grand Paris**

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#### **RÉSUMÉ**

La création au 1<sup>er</sup> janvier 2016, de la Métropole du Grand Paris en application de la loi MAPTAM du 27 janvier 2014, va constituer une opportunité pour ouvrir une nouvelle page des relations entre la ville et le fleuve. Paris étant une énorme agglomération implantée sur un petit fleuve, il convient de profiter de cette évolution pour redéfinir un cadre stratégique harmonieux et durable entre la métropole et son bassin versant incluant les rivières qui l'alimentent, à savoir la Seine et ses grands affluents de l'amont, l'Yonne, l'Aube et la Marne.

Au sein du projet métropolitain qui organise une nouvelle phase de densification et d'extension des réseaux de transports répondant aux critères modernes de développement durable, la place stratégique du fleuve doit être analysée et mise en perspective, au sein d'un Plan Seine renouvelé.

Seule peut faire écho aux approches administratives, économiques, démographiques, sociales qui président à l'élaboration de la métropole, une réflexion sur l'aménagement et la gestion équilibrée du fleuve, à l'échelle de son bassin versant amont. La rivière ne connaît pas les limites administratives. Elle ne peut être appréhendée que dans son ensemble, tant en termes de prévention des inondations et des sécheresses que de soutien d'étiage, de bonne qualité des eaux ou de culture du fleuve. Cette vision globale, liée à la mise en œuvre d'une vraie solidarité amont-aval est le gage d'une harmonie vitale entre la métropole du Grand Paris et la Seine.

#### **ABSTRACT**

January 2016 will see the official creation of the "Métropole du Grand-Paris" in application of the MAPTAM law of 27<sup>th</sup> January, 2014. This exciting new project is also an opportunity to open a new chapter in the relationship between the city and its river and go beyond obligations imposed by existing European directives. The imposing territory of the greater Paris area being located on a relatively small river, every advantage should be taken of this evolution to redefine a balanced and sustainable strategic framework to link the metropolis and the basin, together with rivers that feed it, namely the Seine and its major upstream tributaries, the Yonne, the Aube and the Marne.

On 1<sup>st</sup> January, 2016, the population of the Métropole du Grand-Paris (MGP) will total some 6.7 million people. It will principally combine Paris with the three Departments which currently form the Petite Couronne (those immediately surrounding Paris), Hauts-de-Seine, Seine-Saint-Denis and Val-de-Marne. MGP will therefore concentrate more than half of the population of the Ile-de-France region, a total of 12 million people representing 19% of the total French population, generating 31% of national GDP and making it the 1<sup>st</sup> European regional economy (612 billion euros in 2012).

This future metropolis, with its major human, social, and economic challenges, is traversed by a relatively small river, the Seine, responsible for the original development of the city. The river Seine will be an important player in the MGP, together with 3 of its major tributaries, the Aube, the Yonne and the Marne (which also flows through the Paris region). It is therefore important that, as of now, the river should be considered not only on the level of its drainage basin but also in terms of its situation within the burgeoning metropolis.

#### **MOTS CLES**

Bassin versant / culture du fleuve / inondations - étiages / Métropole du Grand-Paris / solidarité amont-aval

## **Management strategy for a metropolitan river. The example of Métropole du Grand-Paris (metropolitan greater Paris - MGP)**

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This future metropolis, with its major human, social, and economic challenges, is traversed by a relatively small river, the Seine, responsible for the original development of the city. The river Seine will be an important player in the MGP, together with 3 of its major tributaries, the Aube, the Yonne and the Marne (which also flows through the Paris region). It is therefore important that, as of now, the river should be considered not only on the level of its drainage basin but also in terms of its situation within the burgeoning metropolis.

Indeed, only a solution which creates a balanced development and management of the river can reflect the administrative, economic, demographic and social aspects which govern the development of the city. The river knows no political boundaries. It can only be understood as a whole, as much in terms of flood and drought prevention as in low water level support; in the preservation of good water quality or the river's culture. This global vision, linked to the implementation of true upstream-downstream solidarity, is the guarantee of an essential harmony between Grand-Paris and the Seine.

Within the overall metropolitan project, whose first priority will be the organisation of a new phase of intensification and expansion of its transport networks to meet the modern criteria of sustainable development, it is essential that the strategic position of the river be analysed and put into perspective within the framework of a renewed Seine River Plan.

More than ever, the regulation of the river, both in terms of flooding and low water levels, is a major factor demanding careful attention.

The Etablissement Public Territorial de Bassin (Public Territorial Basin Establishment - EPTB) Seine Grands Lacs (Seine Great Lakes) today includes Paris and the 3 surrounding Departments of the Petite Couronne. It is already planned that the governing structure of the EPTB will be enlarged, a change scheduled for 2018 at the latest, but already today the EPTB Seine Grands Lacs is an integral part of this approach and an active player in various European projects.

It was in this context that, in partnership with the government and the Ile-de-France region, EPTB Seine Grands Lacs ordered a study from the OECD covering the macroeconomic implications of a major flood in the Paris basin. Published in 2014 it demonstrates that the inherent damage caused by a great flood would generate a cost of between 3 and 30 billion euros, depending on the scenario. This amount only covers the direct effects and clearly indicates the significant impact of such a flood in terms of GDP, national debt and employment. As part of the flood prevention measures put in place by the government, Seine Grands Lacs is today responsible for the 2014-2019 Action Programme to prevent flooding by the Seine and Marne rivers in the Paris region. A programme developed jointly with the city of Paris and the 3 surrounding Departments of the Petite Couronne, in close consultation with government services.

Furthermore, it should be noted that if different studies have so far failed to discern the impact of climate change on flooding, they have clearly highlighted its impact on low flows. In 2050, it is

anticipated that the Seine will suffer a reduction of approximately 30% in low water levels, a scenario which demonstrates the importance of continuing to work on the management of low water periods.

The EPTB also shares its expertise with the various working bodies attached to the creation of the Métropole du Grand-Paris, such as the Atelier International du Grand-Paris (Greater Paris International Workshop) and the technical support mission (coordinated by the Prefect of the river basin), in the creation of a new entity known as GEMAPI (gestion de milieux aquatiques et préventions des inondations - public body for the management of aquatic environments and flood protection). Created by the law of 27 January 2014 the aim of GEMAPI is to strengthen local project management notably in order to meet European requirements.

In order to deal with the various issues brought to light and which need to be managed on the global scale of the Seine river basin, the current territorial reform should be an opportunity to readjust the governing structure of the EPTB. Indeed, in order to protect Paris and its surrounding Departments from flooding, 4 reservoirs were built upstream from the French capital between 1949 and 1990. The creation of these lakes, today managed by the EPTB, was perceived by the local population as being a demonstration of the French capital's dominance. Even if it today it is less strong, this feeling still remains, especially as the elected representatives for the upstream area were never involved in the governance of these lakes. With the creation of the Métropole du Grand-Paris, it is more important than ever to establish long-term trust and solidarity between the upstream and downstream communities. To do this it will suffice to create a new balance within the governing structure of the EPTB by opening it to the representatives of the upstream communities. Seine Grands Lacs began its preparations for this evolution by establishing an advisory committee composed of the various stakeholders in the upstream basin of the river Seine.

It is therefore clearly up to the EPTB to jointly construct a new governing structure based on a shared analysis. This new governance should enable it, both within the framework of its missions and alongside the Seine-Normandy water agency and other river basin stakeholders, to participate in the development of an upstream basin management strategy for the Seine. This strategy for the river basin, based on current public policy and with a firm local anchorage, must be capable of providing the solutions to today's challenges: preserving water resources, preventing floods, establishing and maintaining ecological continuity, conserving biodiversity and harmonising the uses and functions of the river for a sustainable future.

The first examples of this type of co-development were seen in the implementation of certain European directives (Water Framework Directive and Floods Directive) with, for example, the creation of the Comité territorial Seine amont (upstream Seine Territorial Committee), led by Seine-Grands-Lacs at the request of the French State and where all the communities present worked together to construct coherent local strategies to combat flooding.

The recently created GEMAPI is a valuable tool which will enable the different policies inherent in the great water cycle to be strengthened and developed. This is a fundamental challenge for the Métropole du Grand-Paris which must be implemented within its geographical limits whilst taking into account the varied problems of the entire upstream basin of the river Seine.

In this field, EPTB will be a precious tool. Thanks to its comprehensive approach to the river basin and to its future, more open, governance, it will be capable of forging a strong link between greater Paris and the upstream communities, providing the support essential to ensuring consistency in their respective policies on the management of aquatic environments and flood prevention.

**NB:** Given the legal and regulatory changes underway in the framework of the current territorial reform, this communication will be complemented by news items presented at the meeting on the day of the conference.