

Urban water management in Belo Horizonte: institutional mapping

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Abstract

The adoption of an integrated approach to urban water policies and management is a permanent challenge to local governance, not only due to the constant efforts related to a wide range of policy and management interactions to be pursued among different institutions and stakeholders within the state, but also between state and the civil society organized around issues related to the appropriation of urban water. In developing countries such as Brazil, that challenge is particularly intense because of the incomplete nature of urbanisation, based on the lack of adequate and/or universalised access to urban infrastructure and services and on informal housing processes, thus establishing a permanent conflict between environmental protection and social housing needs (Costa et al., 2007). In 2001 a Municipal Sanitation Policy was created in Belo Horizonte. It institutionalised a Municipal Sanitation Plan (PMS), a Municipal Sanitation Fund (FMS) and the Municipal Sanitation Council (COMUSA). The PMS articulates, integrates and coordinates technological, human, economic and financing resources, aiming at achieving higher levels of salubrious environment; and establishes the water basin as the planning unit for actions related to sanitation services, the same geographical unit adopted by the Drainage Master Plan (PDD) also created in the same year. The criteria to allocate resources coming from the fund (FMS) are established by the plan (PMS) and discussed within COMUSA. Since then, a Program of Environmental Recovery (DRENURBS) is associated to both the PMS and PDD. The Program aims to go beyond the traditional approach of sanitation and drainage, introducing the preoccupation with physical interventions, recovery of natural resources (animals and plants included) and the upgrading in the quality of life of local communities. Priorities for DRENURBS implementation are decided according to the following ranked criteria: general environmental situation, need for dwellers reallocation due to environmental risks, occurrence of water-transmitted diseases, occurrence of floods, among others. All the above policies, plan and programs are politically and institutionally managed by the Municipal Secretary of Urban Policies (SMURBE), part of the local administration structure. SMURBE is responsible for housing, urban regulation (land use), slums upgrading and land regularization, works (including drainage), transport and mobility, garbage collection, and environment. There are four participatory councils related to SMURBE: the Municipal Council of Urban Policies (COMPUR), established in 1997 as a requirement of the 1996 Master Plan; the Municipal Housing Council (CMH), created in 1994; the Municipal Environment Council (COMAM), created in 1985; and the already mentioned COMUSA. A

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first evaluation of such structure concerning state and participatory actions about urban policy and urban waters management in Belo Horizonte is presented. As a hypothesis we believe that this integrated and participatory urban policy can be seen as promising embryo of governance for integrated urban water management in Belo Horizonte.

Keywords: governance, urban politics, urban water, urbanization

1 A proposal for integrated urban water management in Belo Horizonte

Following the propositions contained in the 1996 Belo Horizonte Master Plan, several sectoral urban policies – transportation, environmental sanitation, housing, among others – were reviewed to adopt some of the founding political principles established by the municipal urban policy: popular participation in decision-making processes; social inclusion; articulation of public actions and policies; right to land, housing and salubrious environment. Those principles were in tune with widespread changes in urban and environment policies defined at national level, as the outcome of the social mobilization that resulted in the 1988 Federal Constitution, as discussed in a previous paper within SWITCH (Costa et al., 2007).

To design and implement urban, environmental and social policies from the perspective of urban waters constitute both an institutional challenge and a major ontological change of perspective. Standard urban policies, no matter if traditional or progressive, are used to conceive land, not water, as the main element around which processes and social relations that shape and transform urban space are analysed and understood.

We want to argue that at the level of ideas such major shift is already under way as it will be shown by the concepts and proposal stemming from the sanitation policies, plans and projects in Belo Horizonte. The institutional architecture to support such ideas, however, is not so easy to transform in practice, although several attempts are under way, as discussed in the following sections.

1.1 Conceiving the sanitation policy¹

The context of social mobilization around the new constitution (1988) at the national level, and municipal constitutions at local levels (1990 for Lei Orgânica de Belo Horizonte) brought the urban and the environmental questions to the forefront of the debate. Within such context, the local government in Belo Horizonte was structured around four issues: a political axis related to ensuring citizenship and democracy, a social axis related to the right to the city and social justice, an economic axis related to income generation and distribution, and an administrative axis related to decentralization, transparency, modernization and participation. All sectoral policies were to be conceived accordingly (Bedê and Costa, 2006, p.65).

The 1996 Master Plan (Municipal Law 7165/96) pointed to the elaboration of a specific drainage master plan which began in 1999 following GIS oriented studies about the drainage system at different levels (macro, micro and watershed). The 2001 Drainage Master Plan (PDD) plan adopted an

¹ This section is based on several documents and municipal sanitation legislation: the Municipal Sanitation Plan (PMS), the Drainage Master Plan (PDD), an assessment of the institutional environment for DRENURBS (PBH, 2003), among others.

integrated approach acknowledging the interdependence between the drainage system and other urban sub-systems. The PDD expresses changes in local administration as it is founded in issues such as: recognition of interdependence between inhabitants and their territory, compatibility between drainage planning and urban expansion and densities, community involvement in the conception, implementation and surveillance of projects, compatibility between urbanism and drainage in the preservation of natural water channels and landscapes, development of methodological tools to be used in planning and priority decision-making based on principles of social justice and environmental equity, search for multi disciplinary approaches to problems that may lead to long term politically negotiated solutions and propositions.

Following the PDD, DRENURBS was conceived as a programme aiming at social and environmental improvement with emphasis on the preservation of water channels that remained in their original beds, although polluted and with margins densely occupied, usually by low income families. The scope and methodology of the programme were considered both innovative in the way of conceiving the role of urban waters, and progressive as it requires community involvement and participation in all phases of the process.

Such ideas were expressed by the Municipal Sanitation Policy designed in 2001 (Law 8260/2001) replacing the traditional sectoral approach to sanitation. Based on popular participation in the definition of state investments at local level, mainly through participatory budgeting, sanitation and all other policies adopted the concept of “gestão solidária” (shared administration and decision-making) whereby different stakeholders should take their share of responsibility in the implementation of programmes and projects (choice of solutions, conservation of structures, minimize pollution, etc). The Municipal Sanitation Policy includes water supply, sewage and garbage collection and treatment, drainage and control of water-transmitted diseases, all of them leads to achieving a salubrious environment, a necessary condition to health and well-being of the urban population. The policy comprises a sanitation system composed by the following institutional agents:

- a four year Municipal Sanitation Plan (PMS,) reviewed every two years, which articulates, integrates and coordinates technological, human, economic and financial resources. It defines how the resources of the FMS are to be invested
- a Municipal Sanitation Fund (FMS) which finances the propositions contained in the plan (PMS) which have been approved by COMUSA. The fund has administrative and financial autonomy, and the Municipal Finance Secretary is responsible for its management. Financial resources to the fund come from sanitation services tariffs, the municipal budget and international organization sources.
- a Municipal Sanitation Council (COMUSA)², a collegiate, consultive and deliberative institution, responsible for the implementation of the sanitation policy, including the approval of the plan (PMS, the surveillance of the application of resources coming from the FMS, the discussion of a wide range of bills and projects related to sanitation, the publishing of an “Environment Salubrity Report”. COMUSA is also responsible for mediating conflicts between different stakeholders related to the provision of environmental sanitation services, and may also call a Sanitation Municipal Conference, if necessary³. Their actions are to be articulated with those of other municipal councils such as the Municipal Environment Council and the Municipal Housing Council. It is composed by 8 members from the municipal executive appointed by the mayor and 8 members from the civil society⁴.

² Both COMUSA and the FMS were only created in 2004, by Municipal Decree n. 11.730.

³ The municipal government is responsible for calling the conferences ordinarily.

⁴ All municipal councils in Belo Horizonte, by political decision of the local government, are composed by 50% of civil society members and 50% of local government officials.

The Municipal Sanitation Conference (COMUS) to be held every two years, is the instance where policies are evaluated and eventually reviewed, new propositions are made, and needs are acknowledged. Several social movements, government institutions, NGOs and other organizations are eligible to participate at the conference and in the formulation of the sanitation policy. They constitute an important element in the construction of urban water governance in Belo Horizonte.⁵

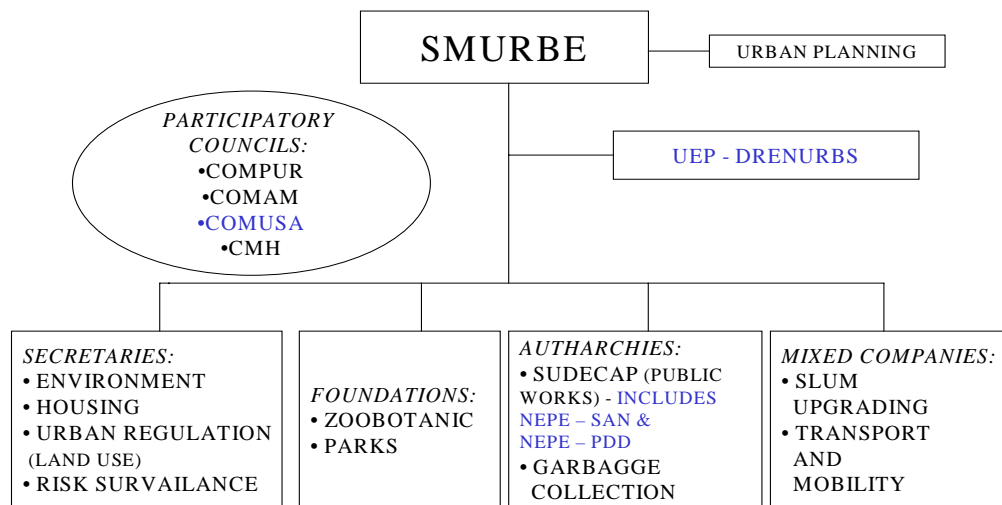
2 Integrated urban water management: towards an institutional mapping

Writing about the process of urban water management in Belo Horizonte, Champs et al. (2005, p. 46) conclude:

“It can be seen (...) that the several systems that compose the municipal urban policy integrate and relate themselves in a unique body, which are the structure of the city itself. Garbage collection, sewage system, soil erosion control, public health, urban land occupation planning, road system structure and other parts of that policy interfere in the water cycle in space and time, and dictate a cause and effect dynamic between the elements in question. **Drainage, therefore, can only be analysed while part of this complex system, and it must be planned in an integrated way to the other systems and urban services**”. (emphasis added)

The formal structure of this integrated and complex system is shown in the organizational scheme that follows. It can be observed that the proposed management organization of the urban policies is formally integrated into a Municipal Secretary of Urban Policies (SMURBE). According to interviews carried out with SMURBE officials, such structure is effective for urban policies related to land developments, regulation of land use and occupation, transport and spatial mobility of the population and housing. That is, those issues directly related to the process of production and reproduction of urban space (Lefebvre, 1993).

⁵ It is interesting to notice that other municipal policies, such as housing and the environment, are structured in the same way, that is, there is a system composed by a council, a fund, a plan within a governmental secretary, and a conference when the policy is more widely discussed. In the case of the sanitation policy, however, there is no sanitation secretary in the organizational structure, but a set of other institutional arrangements designed to implement urban water and sanitation policies, as discussed in the following section. Besides local political options, the main reason for that still lies in the centralized structure of the national sanitation policy, in force in Brazil since the late sixties and up to now still quite strong. Water provision and sewage systems were implemented as services, by federate state level companies (actually public companies with an entrepreneurial approach to services) to which local governments would give permits to operate the services at local level. So, there was no need to have a municipal secretary for that. As far as drainage policies were concerned, they were taken care of by the correspondent of the municipal works secretary. This was coherent with a conception of urban drainage as a technological problem to be solved by the adoption of covered channels, or other solutions. It was only when a new and more comprehensive approach to urban waters emerged, that drainage and environmental sanitation policies required a transformation in the institutional structure to cope with the new ideas. Such change, not unrelatedely, coincide with a major change in the national sanitation policy, in which local governments began to reclaim a larger share in decision making and in financing of sanitation services. For an overview of the national basic sanitation policy since the seventies see Costa (1984) and for a discussion about urban water governance related mainly to water supply and sewage services, see Heller (2007).



As far as urban waters are concerned, however, the correspondent management system is not as clear as that of land use and occupation. First, because both conception and implementation of urban policies related to urban waters, including drainage and sanitation are under the responsibility of two sectoral and transitory management groups within an institution that is concerned with public works. These groups are: the Sanitation Management Group – GGSAN and the Drainage Master Plan Management Group – GGPD. However, the history of those two groups shows that they are in fact consolidated, institutionalised and legitimised as a system of urban water and sanitation management within the complex map of institutions above.

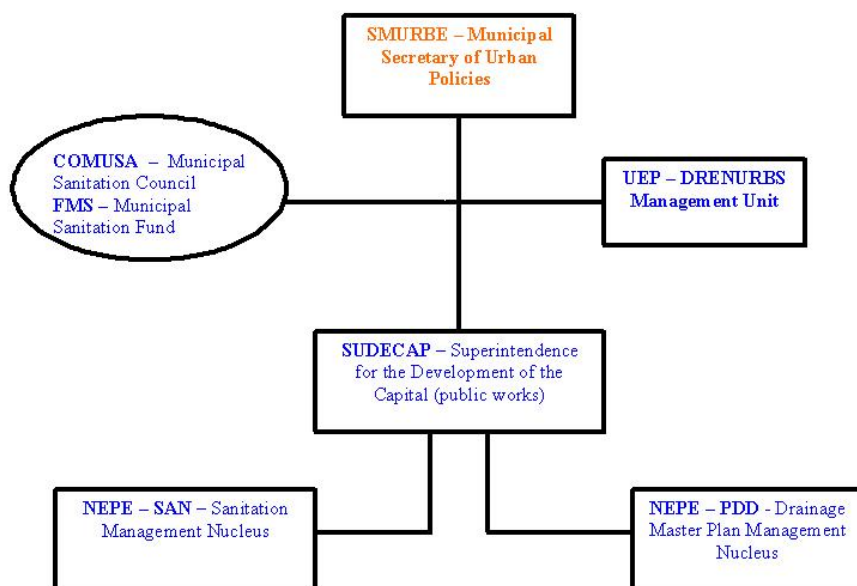
GGPD was first created in 1999, as a transitory unit within SUDECAP – Superintendence for the Development of the Capital – the institution responsible for public works within the municipal administrative structure of Belo Horizonte. The main function of GGPD was to support the elaboration of the Drainage Master Plan (PDD), according to what was determined by the general municipal Master Plan, approved in 1996. As such, the group was responsible for the coordination, planning, supervision and several other related activities concerning drainage in the city.⁶ Besides that, the group has also been the main institution to support a management unit (UEP, formerly UGP), responsible for the coordination of plans and projects preparation and all the interventions related to DRENURBS, since this Program began to be conceived in 2001. That is, GGPD, in spite of its transitory character, has been actually one of the main institutions responsible for the management of urban waters in Belo Horizonte. Recently renamed NEPE – PDD⁷, that management group has as its main objective the implementation of the PDD based on a new concept that considers the integrated management of urban waters and the participation of the communities involved. Because of this approach, NEPE – PDD is the coordinator of those aspects of SWITCH project within the administrative structure of the demonstration city of Belo Horizonte.

⁶ SUDECAP Internal Resolution 72/1999.

⁷ Municipal Decree 12,769 of 2007.

The Sanitation Management Group – GGSAN was created in 2000 with the objective of studying a way to transfer the management of water supply and sewage system from the provincial state managed company – COPASA – to the municipal level. The company’s concession of those services, in force since 1973, would expire in 2000, and the local administration had taken the political decision of not renovating the concession. Thus, GGSAN had the important function of analysing the conditions for the transition process. However, new negotiations ended with the decision to renovate the concession with COPASA in 2002. The conditions for the concession include new functions for the municipal administration, which meant a redefinition and not the extinction of GGSAN. Nowadays GGSAN (renamed NEPE – SAN in 2007⁸) is the executive secretary of COMUSA, created together with the Municipal Sanitation Fund - FMS. The former GGSAN also coordinated the process of elaboration the Municipal Sanitation Plan – PMS. This plan is a central piece for the new sanitation policy insofar as only those projects and works it defines are eligible to get financial resources from the FMS.

In short, the present urban waters management structure in Belo Horizonte can be summarized as follows⁹:



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3 Final remarks

The analysis of documents and legislation, associated with interviews with local government officials point out to a steady process of consolidation towards an integrated urban water management within the local institutional structure in Belo Horizonte. It coincides and reinforces the construction of a multi-scale environmental sanitation policy in Brazil, from the national to the local level. Central to

⁸ Municipal Decree 12,770 of 2007.

⁹ According to interviews carried out with SMURBE officials.

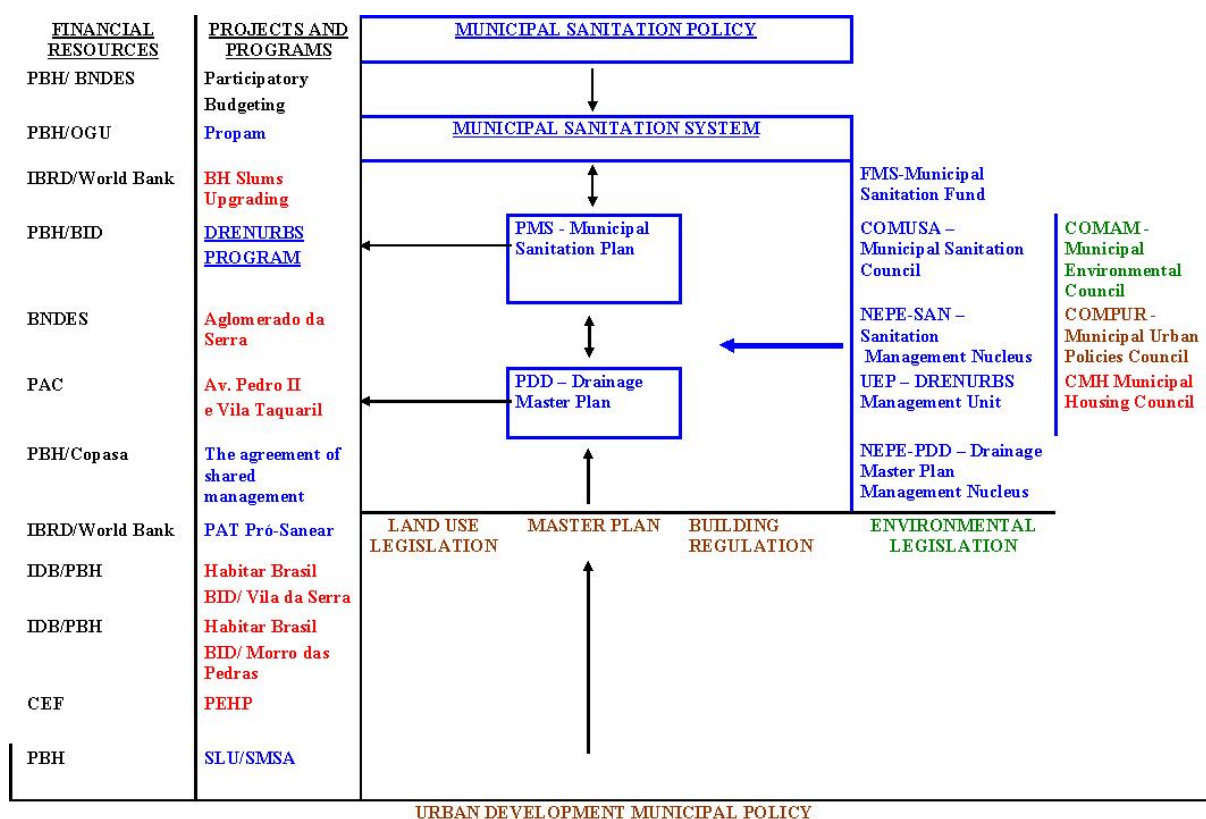
the notion of environmental sanitation is therefore the progressive integration of former sectoral policies: water supply and distribution, sewage collection and treatment, urban drainage, garbage collection and adequate disposal, and vectors control.

Although the concept of environmental sanitation seems quite widespread, there isn't so far an institutional "place" organized around the urban waters in a broader sense. In the implementation of the policies in practice, that role is performed by NEPE-PDD and NEPE-SAN, as discussed above. The paper showed the formation of the local environmental sanitation system, derived from the Municipal Sanitation Policy, constituted by a plan (PMS), a fund (FMS) and a council (COMUSA). The system and its results are reviewed and discussed every two years at a conference with expressive participation of the civil society organized around the issue of urban waters and environmental sanitation. Very similar to procedures adopted by other local policies such as housing, transportation and the urban policy, such conferences may constitute important moments for urban, social and environmental politics and eventual legitimation of urban water governance in Belo Horizonte.

Social demands concerning environmental sanitation come from different sources, both within and outside the institutional structure. They come from citizens, from the Participatory Budgeting, from infrastructure works, from programs - such as DRENURBS, housing projects, or slum upgrading programs as shown in the charter below - and sectoral policies, or even from local constituencies claimed by members of the Municipal Elected Council (vereadores).

Summing up there is an institutional arrangement in process of construction and the present moment represents a transition from a rather disperse framework into a more integrated one. The development of concepts and design of policies are usually carried out by the planning sector of SMURBE together with the two above mentioned nuclei and the environment secretary to a lesser extent. It seems that there is a demand for a more central institutional place for integrated conception and implementation of the environmental sanitation policy, since concepts and social indicators and criteria are already created, and several attempts to exercise social control and decision-making with popular participation are also under way.

On the other hand, it seems that a cultural turn is required if water is to become the integrative element in urban and environmental policies (and politics). As the relationship between water and urbanisation is seen in multiple and sometimes ambiguous ways, so is its management within the local institutional framework. As a public service, its exchange value is reinforced, whereas as a fundamental right its use value is stressed. Water management belongs both to the realm of environmental policies such as watershed management or environmental preservation, sometimes transcending municipal boundaries, and to the sphere of the municipal environmental sanitation policy discussed in the paper. As a consequence of those multiple uses, there is a Hydric Resources Management within the Municipal Environment Secretary that supports the licensing of activities in Belo Horizonte, while the implementation and maintenance of programs, projects and works remain within SUDECAP. Besides all that, water supply and sewage services are provided by the state company concessionary of the services in Belo Horizonte - COPASA - although the municipality plays increasingly larger role in influencing political decisions over the policy. The charter below is therefore a concluding attempt to summarize the institutional structure not as it is formally conceived, but as it can be seen from the view point of urban water management. The next step towards the understanding of a more complete institutional mapping will require the articulation of the state framework with other sectors of civil society involved with urban water governance and politics in Belo Horizonte.



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