

Activity Plan

Activity Title	Technical support for an urban water management plan for Sao Paulo
Activity Number	360600.01
Partners	Ministry of Sanitation and Water Resources, State of Sao Paulo, Brazil
Expected Activity start / end date	12 December 2016 – 31 January 2017
Activity summary	<p>A concept proposal from the Ministry of Sanitation and Water Resources of the State of Sao Paulo was received through the Australian Embassy in Brasilia, to assist with development of a plan for demand management to reduce water consumption in Sao Paulo. This request follows a number of exchange visits between Australian water specialists and academics to Brazil and reciprocal visits to Australia.</p> <p>Sao Paulo wishes to draw on the experience and approaches used in Australia to reduce water consumption in urban centres, especially during Australia's "millennium drought". Further information can be found in Annexure A.</p>
Aims of the Activity	<p>The management of water resources in Brazil needs to be improved in part through introduction of institutional or economic management tools to enable effective allocation of water during extreme events, such as the current drought.</p> <p>The State of São Paulo intends to learn from the Australia's experience during the Millennium drought, new tools for water demand management. In particular, Sao Paulo is interested in assistance to address:</p> <ul style="list-style-type: none"> • Urban demand management to reduce water consumption; • Institutional mechanisms, such as water rights, allocation and economic mechanisms, that allow for water sharing among multiple purposes with the greatest possible benefits. <p>To develop the management alternatives, it is suggested that three representative watersheds in the state of Sao Paulo are used:</p> <ul style="list-style-type: none"> • Alto Tiete, where the metropolitan regions of Sao Paulo is located and the competing uses are water supply, irrigation and hydroelectricity; • Piracicaba, where the competing uses are water supply, irrigation and industrial uses;

	<ul style="list-style-type: none"> • A third watershed to be chosen, depending on the type of the selected mechanisms.
<p>Outputs</p>	<p>A delegation of Australian experts has been requested for the week of December 12 2016 to assess the water situation of the state of São Paulo and to prepare a plan to which advises on the planning and implementation of programs and actions to reduce water consumption using economic and institutional mechanisms.</p> <p>The short-term output from this delegation will be:</p> <ul style="list-style-type: none"> • An Urban Water Management Plan, comprised of critical analysis of innovative options for Government of Sao Paulo (GoSP) in both areas, (Noting existing legislative and other constraints, e.g. water trading being prohibited by law in Brazil). • Identification of any prospective down-stream projects (in 2017) that would be negotiated with GoSP (or other local entities) by individual Australian organisations, and funded on a basis to be agreed with the SP partner/client (not by AWP)
<p>Resources & expertise</p>	<p>The AWP is seeking up to 3 experts in the two focus areas listed below to deliver the outputs identified above.</p> <p>1. URBAN DEMAND MANAGEMENT</p> <p>The main topics to be developed will focus on the reduction of water consumption in urban areas, with proposals for the long-term goals, under the concept of preparedness, and also for the short-term measures that can be taken during the drought event.</p> <p>The two main questions in this area are:</p> <ul style="list-style-type: none"> • How can we better prepare our cities to move towards efficient levels of water consumption? • What types of measures can be taken during drought events to adjust water consumption to a reduced offer? <p>In both cases, the discussion may encompass several different types of tools, from improving residential water efficiency to water pricing.</p>

	<p>2. MANAGEMENT TOOLS FOR MULTIPLE WATER USES UNDER SCARCITY CONDITIONS</p> <p>Water allocation during droughts requires a set of analytical and regulatory tools to reduce the risk of severely affecting water supply to populations and economic outputs from the region.</p> <p>The main questions in this area are:</p> <ul style="list-style-type: none"> • What type of mechanisms can be used and, in the Australian experience, what are the pros and cons? • How to prepare water users to the onset of droughts so that the restrictive measures are “expected” or more easily accepted when put in place? <p>These mechanisms can be related to price, insurance, or market tools, but also to regulation. Risk-related regulation is a theme also of interest.</p>
Working arrangements	The AWP support will focus on advice to assist the development of public policies for water management in the state of São Paulo. It is not expected to involve equipment or field-work.
Expected work location	<ol style="list-style-type: none"> 1. Delegation - São Paulo, Brazil (1 week in country) 2. Plan Development - Australia (To the 31st of January 2017)
Method of engagement	Open partner engagement

Alignment with AWP Theory of Change

AWP Target Outcomes	Knowledge Sharing	Sustained sharing of water reform knowledge and cooperation with the Australian water industry
	Capacity Building	Greater capacity of individuals, organisations and industries to lead and implement IWRM reforms
Water Reform Themes	Understanding the Resource Base	
	Managing Demand and Efficiency	
AWP Key Results Areas	Demand	Outreach by AWP brokers and grows international demand for Australian water expertise and experience
	Engagement	Australian partners have greater opportunity and capacity to engage and collaborate internationally
	People	Participation in AWP activities by staff and citizens from international partner organisations
	IWRM Capacity	Greater capacity of individuals, organisations and industries to lead and implement IWRM reforms
	Aid for Trade	Co-investment by international partners and trade-related outcomes arising from AWP activities
	Water Use	More equitable, efficient and environmentally sustainable water use

Annexe A: Terms of Reference

BRAZIL- AUSTRALIAN WATER PARTNERSHIP

Technical support for an urban water management plan for Sao Paulo

The State of São Paulo intends to learn from the Australia's experience during the Millennium drought, new tools for water demand management. In particular, Sao Paulo is interested in assistance to address

- Urban demand management to reduce water consumption;
- Institutional mechanisms, such as water rights, allocation and economic mechanisms, that allow for water sharing among multiple purposes with the greatest possible benefits.

To develop the management alternatives, it is suggested that three representative watersheds in the state of Sao Paulo are used:

- . Alto Tiete, where the metropolitan regions of Sao Paulo is located and the competing uses are water supply, irrigation and hydroelectricity;
- . Piracicaba, where the competing uses are water supply, irrigation and industrial uses;
- . a third watershed to be chosen, depending on the type of the selected mechanisms.

URBAN DEMAND MANAGEMENT

The main topics to be developed will focus on the reduction of water consumption in urban areas, with proposals for the long-term goals, under the concept of preparedness, and also for the short term measures that can be taken during the drought event.

The two main questions to be answered are:

1. How can we better prepare our cities to move towards efficient levels of water consumption?
2. What types of measures can be taken during drought events to adjust water consumption to a reduced offer?

In both cases, the discussion may encompass several different types of tools, from improving residential water efficiency to water pricing.

MANAGEMENT TOOLS FOR MULTIPLE WATER USES UNDER SCARCITY CONDITIONS

Water allocation during droughts requires a set of analytical and regulatory tools to reduce the risk of severely affecting water supply to populations and economic outputs from the region.

The main questions to be answered are:

1. What type of mechanisms can be used and, in the Australian experience, what are the pros and cons?
2. How to prepare water users to the onset of droughts so that the restrictive measures are "expected" or more easily accepted when put in place?

These mechanisms can be related to price, insurance, or market tools, but also to regulation. Risk-related regulation is a theme also of interest.

Annexe B: AWP Theory of Change

