

3.1 Equitable access to safe and secure potable water supply – To provide safe, secure and affordable water supply services that are accessible to all households, educational institutions, health institutions and businesses.

Rating Scale	Guiding questions	Suggested data collection sources
<p>1. Few people (less than 30% of urban population) have access to safe and secure* water for basic needs. The source of supply (communal stand pipe, well, roof tank or metered supply) is within 1000 m of the home and collection time does not exceed 30 minutes. River, creek or other represent inadequate access.</p> <p>2. Some people (30-60% of urban population) have access to safe and secure* water for basic needs. The source of supply (communal stand pipe, well, roof tank or metered supply) is within 1000 m of the home and collection time does not exceed 30 minutes. River creek or other represent inadequate access.</p> <p>3. Many people (60-95% of the urban population) have access to safe and secure* water for drinking and other consumptive purposes. The source of supply (communal stand pipe, well, roof tank or metered supply) is within 1000 m of the home and collection time does not exceed 30 minutes. River, creek or other represent inadequate access. Water is affordable at less than 3% of household income.</p> <p>4. Safe and secure* water is available to almost all people (more than 95% of the urban population) all of the time for drinking and other consumptive purposes. Water is available as metered tap water (or tank water) in houses and affordable at less than 3% of annual household income.</p> <p>5. Safe and secure water is available to everyone for drinking and other consumptive purposes. Water is available as metered tap water (or tank water) in houses and affordable at less than 3% of annual household income. Measures are in place (such as discounted bills etc.) to address affordability and access for disadvantaged and low-income groups.</p>	<p>Water system design Is a safe water supply capable of supplying between 50 and 100 litres of water per person per day available to everyone?</p> <p>What proportion of households, educational institutions, health institutions and businesses are connected or have access to potable water?</p> <p>Monitoring and evaluation Is safe water supply available to everyone? If not, what percentage of the urban population has access?</p> <p>What are the international standards for quality and how does the quality of supply compare?</p> <p>Legislation and regulation Does national and/or local standards for drinking-water quality reflect the measures and requirements defined by the World Health Organization (WHO) Guidelines for drinking-water quality?</p> <p>Revenue, funding and investment What is the cost of water?</p> <p>Are mechanisms available for lower income households to be subsidised?</p> <p>Are mechanisms available for to provide access to homeless people?</p>	<p>Policy, legislation and regulation Existence of national and/or local standards for drinking-water quality that are based on measures of drinking-water safety defined by the World Health Organization (WHO) Guidelines for drinking-water quality</p> <p>Contact water utilities to determine the proportion of households connected to mains water system and or alterative supplies (such as, recycled water supplied via separate supply network). Also include households with independent supply e.g. rainwater tanks</p> <p>WHO international standards Monitoring data for micro-organisms, chemical substances colour, odour and taste for domestic use.</p> <p>Calculate the cost of water relative to household incomes. (Water charges as a percentage of various household income groups. i.e. the relative cost of water to household incomes) - collect household income data from ABS - contact water retailers/utilities for water costs and standards</p> <p>Compare and contrast household income to cost of water</p> <p>Identify mechanisms to subsidise costs for lower income households</p>

3.2 Equitable access to safe and reliable sanitation – To provide reliable sanitation services that is affordable and accessible to all households, educational institutions, health institutions and businesses.

Rating Scale	Guiding questions	Suggested data collection sources
<p>1. Few people (less than 30% of urban population) have access to safe and reliable sanitation (pit latrine with slab/ventilated, sealed privies).</p> <p>2. Some people (30-60% of urban population) have access to safe and reliable sanitation (pit latrine with slab/ventilated, sealed privies), not shared by too many and of sufficient capacity.</p> <p>3. Many people (60-95% of the urban population) have access to safe and reliable sanitation (pit latrine with slab/ventilated, sealed privies), not shared by too many and of sufficient capacity.</p> <p>4. Safe and reliable sanitation is available to almost all people (more than 95% of the urban population). Most households are connected to a sewer system or otherwise have a hygienic toilet facility in house (flush/pour flush to sewer, septic tank or pit latrine, or composting toilet). Most discharge to the environment that causes public health risk is prevented (including leaks) or treated at wastewater treatment plant to at least secondary standards prior to release.</p> <p>5. Safe and reliable sanitation is available to everyone. All households are connected to a sewer system or otherwise have a hygienic toilet facility in house (flush/pour flush to sewer, septic tank or pit latrine, or composting toilet). Discharge to environment that causes public health risk is prevented (including leaks) or treated at wastewater treatment plant to at least secondary standards prior to release. Measures are in place (such as discounted bills etc.) to address affordability for disadvantaged and low-income groups.</p>	<p>Water system design Is safe sanitation available to everyone at affordable prices?</p> <p>What proportion of households have access to safe and reliable sanitation?</p> <p>Monitoring and evaluation What are the international standards?</p> <p>What are the monitored or reported results for water supply quality?</p> <p>Legislation and regulation Does national and/or local standards for sanitation services reflect the measures and requirements defined by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)?</p> <p>Revenue, funding and investment What is the cost of water supply compared to household income? Are mechanisms available for lower income households to be subsidised?</p>	<p>Contact water utilities to determine the proportion of households connected to a sewerage system. Also include households with access to an alternative hygienic domestic toilet facility e.g. septic tanks, pit latrine, sealed privies, etc.)</p> <p>WHO international standards</p> <p>Legislation and regulation</p> <p>Policy documents</p> <p>Calculate the cost of sanitation relative to household incomes. (Sanitation charges as a percentage of various household income groups. i.e. the relative cost of safe sanitation to household incomes) - collect household income data from ABS - contact water retailers/utilities for sanitation costs and standards</p> <p>Compare and contrast household income to cost of sanitation</p> <p>Identify mechanisms to subsidise costs for lower income households</p>

3.3 Equitable access to flood protection – To reduce nuisance flooding to protect citizens and infrastructure and to deliver affordable protection against flood risk to everyone.

Rating Scale	Guiding questions	Suggested data collection sources
<p>1. Rainfall events lead to minor flooding that always disrupt everyday activities. Substantial proportion of the urban population (more than 10%) are at risk of severe consequences to life associated with flooding. Almost no action is undertaken to address the issue.</p> <p>2. Rainfall events lead to minor flooding that regularly disrupt everyday activities. Significant proportion of the urban population (2-10%) are at risk of severe consequences to life associated with flooding. To address these risks, one or more of the following actions occur across some areas: relocation of those most at risk, infrastructure planning that provides protection against flooding.</p> <p>3. Rainfall events lead to minor flooding that sometimes disrupt everyday activities. Some of urban population (less than 2%) are at risk of severe consequences to life associated with flooding. Measures are undertaken to reduce the impact on infrastructure and property. A coordinated response is undertaken to address these risks across some areas. One or more of the following actions are being undertaken: relocation of those most at risk, urban planning and infrastructure planning that provides protection against flooding, housing typology that responds to flood events. Detention measures located in catchments reduces downstream impacts associated with peak flood events.</p> <p>4. Rainfall events generally do not disrupt everyday activities. Almost everyone's lives is well protected against flood risks, although extreme events may affect some property in some areas in a negative manner and the risks are understood. Measures are undertaken to reduce the impact on infrastructure and property. A coordinated and integrated response is undertaken with urban planning, infrastructure planning and housing typology (raised or floating dwellings) explicitly taking flood risks into account. Harvesting and detention measures throughout catchments reduces flooding impacts associated with peak flood events.</p> <p>5. Rainfall events do not disrupt everyday activities. Human safety is virtually guaranteed, and infrastructure and property damage are infrequent; risks are well understood. A coordinated and integrated response is undertaken with urban planning, infrastructure planning and housing typology explicitly taking flood risks into account. Urban areas are designed to provide a flood mitigation function as part of multifunctional landscapes.</p>	<p>Water system design Do rainfall events disrupt normal day-to-day activities?</p> <p>What level of flood protection is in place? Are people and properties protected and if so how?</p> <p>What is the probability of flooding events with human lives lost, significant economic damage and social disruption?</p> <p>What urban design initiatives and infrastructure have been implemented to protect against flooding?</p> <p>What planning and preparedness measures are in place?</p> <p>What town planning controls on urban development are in place?</p>	<p>Calculate the cost of flood risk protection to household incomes. (Flood risk protection costs as a percentage of various household income groups. i.e. the relative cost of flood risk protection to household incomes) - collect household income data from ABS - contact water retailers/utilities water costs</p> <p>Refer to disaster management plans, emergency plans, building codes, policy etc., to provide evidence that urban planning and design specifically takes into account fluvial flood protection</p> <p>The measures in place in flood-prone areas e.g. designated areas specifically designed to accommodate flooding, elevated homes, retarding basins, floodways, overland flow paths etc.</p> <p>Refer to flood modelling and mapping for data about the probability and effects of flooding</p>

3.4 Equitable and affordable access to amenity values of water-related assets – To enhance amenity values associated with urban landscapes and provide affordable access to water related assets with high amenity values to everyone.

Rating Scale	Guiding questions	Suggested data collection sources
<p>1. Water-related assets do not provide amenity benefits in most areas of the city. Enjoyment of available amenity benefits of assets comes at a relatively high cost for some households.</p> <p>2. Water-related assets provide amenity values in some areas of the city. These areas are not easily accessible and enjoyment of these benefits comes at a relatively high cost for some households.</p> <p>3. Water-related assets provide amenity values in large areas of the city. These areas are mostly accessible and come at a moderate cost for some households.</p> <p>4. Water-related assets provide amenity values in most areas of the city. These areas are highly accessible and enjoyment of these benefits comes at low cost.</p> <p>5. Water-related assets provide amenity values in all areas of the city and are implemented to improve lower socio-economic areas. These areas are highly accessible and enjoyment of these benefits comes at no cost.</p>	<p>Urban landscape design What amenity values are associated with water-related assets? Where are they located? Are they easily accessible?</p> <p>Are the amenity values of most water-related assets accessible to different income groups? Are there admission costs?</p> <p>Revenue, funding and investment How are the relative costs to enjoy such amenities distributed between different income groups?</p>	<p>Review policy documents</p> <p>Use GIS to map the distribution of water assets with high amenity values</p>