CRC for Water Sensitive Cities

2.1 Water literacy - To improve citizens' knowledge of the water cycle, the water sector and the current state of water affairs so they can actively participate in decision making.

Objectives	Rating Scale	Guiding questions	Suggested data collection sources	Facilitator guiding questions and notes
Citizen engagement To improve citizens' knowledge of the water cycle, the water sector and the current state of water affairs so they can actively participate in decision making.	1. Generally little or **no understanding** of the water cycle and no interest either. 2. **Some interest** in the water cycle but **limited understanding** 3. People have some interest and a **general understanding** of most parts of the water cycle. People have some understanding of the water sector, sufficient to know what they are paying for and where key responsibilities sit organisationally 4. People have **general interest in and a thorough understanding of the water cycle**. People have a **general understanding of the water sector** to know what they are paying for, where key responsibilities sit organisationally and the current water situation broadly. People are aware of the existence of **water sensitive solutions**. **Reasonable participation rates** for the **outreach programmes** the water sector provides. 5. People have a **deep interest in and thorough understanding of the water cycle and the water sector**. People know what they are paying for, where key responsibilities sit organisationally and details of the current water situation politically, technically and environmentally. People have strong interest in the potential of **water sensitive solutions**. **Outreach programmes** are **developed** by, or in **close collaboration** with, the **community** and yield **high participation rates**.	**Citizen engagement** Do people have a general understanding about the water sector and know what they are paying rates for? How knowledgeable are people about the water cycle? What proportion of people are aware of the current state of water aware affairs at a local, state, national and international level? What opportunities are available for people to acquire knowledge about the water sector, the water cycle and the current state of water affairs? - Water education included in school curriculum - The number and frequency of events about water (e.g. water festivals) - The number of community group presentations about water - The number of outreach programs organised developed in collaboration with community and run by the water sector and the number of attendees.	Check websites of water authorities, Councils and Board of Education Existing surveys and market research about people's knowledge of water	**Hierarchy** 1. Little or no interest or understanding in water cycle 2. Some interest but limited understanding in water cycle 3. Some interest and general understanding of the water cycle; some understanding of the water sector 4. General interest in and thorough understanding of the water cycle; general understanding of the water sector; awareness of water sensitive solutions; reasonable participation in outreach programs 5. Deep interest in and thorough understanding of the water cycle and water sector; awareness of water sensitive solutions; strong interest in the potential of water sensitive solutions; high participation in collaborative outreach programs **Examples** Political knowledge – e.g. who's in charge? What are the current debates? Technical knowledge – e.g. what are the dam levels? Where does the water go? Environmental knowledge – e.g. what is the river health like? Why is recycled or harvested water good? **Definitions** **Water cycle** – both built and natural parts **Common Q and A's / Notes** **Why is water sector knowledge important?** Understanding responsibilities, services provided, basis of charges, system conditions and constraints, opportunities and potential solutions is important for community to interpret the current state of water affairs so they can participate meaningfully in dialogue and decision-making **Must mention**

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2.2   Connection with water - To foster pride and connectedness of people with water through improved understanding of water's role in landscape.

Objectives	Rating Scale	Guiding questions	Suggested data collection sources	Facilitator guiding questions and notes
Community connection To foster pride and connectedness of people with water through improved understanding of water's role in landscape.	1. Communities **lack connection** with water-related assets. Water is **not recognised** as contributing to **sense of place**. 2. Communities feel **some connection** with water-related assets. Water is **recognised** as contributing to **sense of place** in **some parts** of the city, **but water's support of green infrastructure** is **not appreciated**. Connection to water can be positive or negative. 3. Communities feel a **reasonable connection** with water-related assets. Water is **recognised** as contributing to **sense of place** and **neighbourhood character** in **many parts** of the city. Water's support of green infrastructure in the neighbourhood is **appreciated for its role in gardens** (public or private) only**.** 4. Communities feel a **strong connection** with water-related assets. Water assets in their neighbourhood makes people **feel proud**. Water is **recognised** as **contributing** to **sense of place** and **neighbourhood character** in **most parts** of the city. Water's importance for supporting **green infrastructure and** delivering broader liveability in the neighbourhood is **appreciated by many** people. 5. Communities feel a **strong connection** with water-related assets. Water assets in their neighbourhood makes people **feel proud**. Water is **recognised** as being a **major determinant** in **sense of place** and **neighbourhood character** in all parts of the city. Water's importance for supporting green infrastructure and delivering broader liveability is **recognised and celebrated** by everyone.	**Community connection** Is water recognised as part of the neighbourhood and is water appreciated? Do people feel connected to water? How proud are people of natural and constructed water assets? Do people feel proud of their neighbourhood due largely in part to water? How much is water celebrated? Is water considered to be an asset to the neighbourhood? Consider religious or cultural practices and connections	Conduct a (sample) survey of residents to gather information about dot point 1 and 2 and/or use local survey results about perceptions of water Park visitation numbers (visitation information about parks where water is a main feature) Conduct a (sample) survey of various parks (where water is a main feature) and note the number of visitors. Refer to urban planning documents, note the number of water-related artworks e.g. water features, fountains etc. Contact Council Events Manager (or similar) and community groups about festivals where water is the major theme	**Hierarchy** 1. Lack connection with water assets; water not valued as contributing to sense of place and may even be seen as negative 2. Some connection with water assets; water valued as contributing to sense of place in some neighbourhoods; water's importance for green infrastructure not recognised 3. Reasonable connection with water assets; water valued as contributing to sense of place in many neighbourhoods; water's importance for some green infrastructure (ie gardens) is recognised 4. Strong connection with and local pride of water assets; water valued as contributing to sense of place in most neighbourhoods; water's importance for all green infrastructure and broader liveability is recognised by many 5. Strong connection and community pride of water assets; water major determinant of sense of place everywhere; water's importance for all green infrastructure and broader liveability is celebrated by everyone **Examples** **Water perceived as negative:** because of polluted streams, smelly sewers, frequent floods, etc. **Celebrations of water**: e.g. community festivals **Definitions** **Water-related assets:** natural assets (e.g. rivers, creeks, bays, beaches) and built assets (e.g. constructed wetlands, retarding basins, reservoirs, biofilters) **Green infrastructure:** private gardens, public gardens, street trees, public open space, biofilters, swales etc. **Neighbourhood character:** appearance and feel **Common Q and A's / Notes** Important to outline the connection between water, water in private gardens, water in public open space as the key differentiator as you move through the ratings. The stronger the rating, the more clearly people see the connection between water and different types of greening, liveability, etc. **Must mention**

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2.3   Shared ownership, management and responsibility of water assets - To increase the extent to which the community is an active participant in creating, operating and maintaining the water system and its infrastructures.

Objectives	Rating Scale	Guiding questions	Suggested data collection sources	Facilitator guiding questions and notes
Community Engagement To increase the extent to which the community is an active participant in creating, operating and maintaining the water system and its infrastructures.	1. **No shared ownership and management by households or communities**. Responsibility of water assets is with formal water governance organisations. No desire, or even opposition, to changing this situation. 2. **Ownership, management** and responsibility of water assets is with **formal water governance organisations,** except for **local ad hoc water management solutions** implemented by households. These local water management solutions are **not monitored by a designated authority**. 3. **Households and communities** drive a **small role** in the ownership and management of **local water management solutions**. These local water management solutions are **monitored by designated authorities** to inform formal planning and management systems. 4. Formal water governance organisations **encourage households and communities** to have a **role** in the ownership and management of local water management solutions**.** These local water management solutions are **coordinated and monitored by designated authorities** to inform formal planning and management systems. The design and implementation of the neighbourhood's water servicing has been **informed by the community**. 5. Formal water governance organisations **encourage and enable households and communities** to play a **significant role** in the ownership and management of local water management solutions**.** These local water management solutions are **coordinated and monitored by designated authorities** to inform formal planning and management systems and ensure they **connect with other local water networks as part of an integrated system**. The design and implementation of the neighbourhood's water servicing has been done in c**lose collaboration with the community**.	**Operation and maintenance** What is the proportion of local assets? What kind of assets are they e.g. rainwater tanks, raingardens, wetlands, waterways? To what degree does community own, operate and maintain water assets? What is the level of interaction between governance organisations and community? Are there meetings run by formal water governance organisations (utilities, councils), about water assets with community representatives/members present? Do the local solutions inform part of broader regional water strategy and planning?	Evidence used to decide that there are community owned and managed water asset. E.g. asset data base on private properties, planning applications, bureau of statistics, etc. Gather data from water utility community surveys and meetings?	**Hierarchy** 1. No household or community ownership and management 2. Ad hoc household ownership and management, no coordination or monitoring by authorities 3. Households and communities drive a small role in ownership and management, with monitoring by authorities 4. Authorities encourage households and communities to have a role in ownership and management, with coordination and monitoring by authorities 5. Authorities encourage and enable households and communities to have a significant role in ownership and management, with coordination and monitoring by authorities; local networks connect with each other as part of an integrated system **Examples** **Local water management solutions:** e.g. rainwater tanks, septic tanks, groundwater bores, raingardens, greywater recycling systems, communal water assets **Definitions** **Formal water governance organisations and designated authorities:** water utilities, local councils, state government agencies **Ownership, management and responsibility:** asset ownership, asset operation and maintenance, responsibility for system performance and compliance conditions **Common Q and A's / Notes** **Why "No desire, or even opposition, to changing this situation" in Rating 1?** Indicates low awareness of, or even hostility to, calls for community-scale contributions to water system management **Must mention**

2.4   Community preparedness and response to extreme events - To empower citizens to cope with impacts associated with an extreme water-related event and minimise the severity and duration of its impact.

Objectives	Rating Scale	Guiding questions	Suggested data collection sources	Facilitator guiding questions and notes
Citizen engagement To empower citizens to cope with impacts associated with an extreme water-related event and minimise the severity and duration of its impact.	1. **No formal** or community **response plans** are in place to respond to a water-related extreme event, and the community is not prepared. 2. Communities have **some capacity** to respond to extreme events due to either social opportunities and connections or formal emergency services. **Regional response plans exist** but the public is poorly informed about them. The public is **generally not well prepared** at the household scale for an extreme event. 3. Communities have **capacity to respond** to extreme events and are generally prepared, either through social opportunities and connections or formal emergency services. Either the informal or formal system **is more dominant** than the other, creating a locked-in and at-risk system. **Regional response plans exist** and the **public is generally informed** about them. **Some** of the public **prepared** at the **household scale.** 4. Communities **have capacity to respond** to extreme events and are well prepared. Both social opportunities and connections exist as well as formal emergency response measures, and each function well but separately. **Regional response plans exist** and the public is **well informed** about them. **Household plans complement** these **regional** response **plans**. Efficient emergency services provide **regular community engagement** to facilitate **preparedness to cope** at the **household scale**. 5. Communities have a **strong capacity to respond** to extreme events and are well prepared. Both social opportunities and connections exist as well as formal emergency response measures, and they function well together to support a robust emergency response system. **Strong relationships** between emergency services and citizens create **resilience networks** capable of **mobilising action** before, during and after an extreme event. **Regional response plans exist** and the **public has contributed** to their development. **Household plans complement** these **regional** response **plans**. Efficient emergency services **regularly engage with the community to** facilitate **preparedness to cope** at the **household scale.**	**Citizen engagement** How aware is the community of the risks associated with extreme events? How prepared are the community to respond to an extreme event? What information and education campaigns are provided to the community? What formal emergency services plans are in place? What resources are committed to community engagement and support? What response plans do households have in place? What communication channels are established for community to access before, during and after an extreme events?	Refer to disaster management plans, emergency plans, etc., to provide evidence that emergency services cater to both regional plans and household scale plans Regulation and policy documents Education and engagement programs The measures in place e.g. designated areas specifically designed to accommodate citizens in the event of a disaster	**Hierarchy** 1. No response plans in place 2. Responsibility sits entirely with formal emergency services. Public poorly informed about regional response plans and are not prepared at household scale 3. Responsibility sits mostly with formal emergency services. Public generally informed about regional response plans and some are prepared at household scale 4. Responsibility sits with both formal emergency services and the community. Public well informed about regional response plans. Proactive community engagement facilitates preparation at household scale. 5. Strong relationships between formal emergency services and the community support joint responsibility and development of community and household response plans. Regular community engagement facilitates preparation at household scale. **Examples** **Extreme events:** storm, flood, heatwave, cyclones, extreme UV incidents (cancer risk over the long-term), urban fires **Regional disaster response plan:** emergency evacuation procedures **Definitions** **Extreme events:** Acute events which will result in impacts that the water system has a role to play in mitigating or responding (e.g. not chronic drought) **Common Q and A's / Notes** This indicator is about the community's ability to respond to extreme events, not about the system's ability to protect people equitably – this is covered in Equity of Essential Services (e.g. Indicator 3.3 Equity of access to flood protection) **Is bushfire included?** No **Must mention**

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2.5   Indigenous involvement in water planning - To ensure indigenous economic, cultural and/or spiritual interests are considered in the planning and management of water systems

Objectives	Rating Scale	Guiding questions	Suggested data collection sources	Facilitator guiding questions and notes
Water system planning To recognise indigenous economic, cultural and/or spiritual interests are considered in the planning and management of water systems

Legislation and regulation To mandate indigenous representation in governance activities and that cultural associations with water systems are protected.

Policy and strategy To develop policy that requires indigenous economic, cultural and/or spiritual interest are considered in planning and management of water systems. | 1. **Little**, or no **recognition** of indigenous interests and knowledge in the planning and management of water systems.

2. **Informal recognition** by water policy makers, planners and/or managers of indigenous interests and knowledge in water system planning and management.

3. **Broad policy** and frameworks in place to recognise indigenous interests and knowledge in water system planning and management. **Some attempt to involve** indigenous people and cultures in the planning and management of water systems.

4. **Detailed policy** and frameworks ensure that indigenous economic, cultural and/or spiritual interests and knowledge are considered in water system planning and management. **Indigenous people and cultural involvement** in water planning and management is **common, driven and supported by formal requirements**. It is **common** practice to **protect** and **enhance** the **cultural associations** with water systems.

5. **Comprehensive policy** and frameworks ensure that indigenous economic, cultural and/or spiritual interests and knowledge are considered in water system planning and management. **Legislative requirements** mandate indigenous representatives are included in governance activities and are effective in giving **a voice to indigenous interests and knowledge**. **Legislation requires** that **cultural associations** with water systems are **protected** and **enhanced**. **Indigenous knowledge is actively sought and valued** as a part of water system planning | **Water system planning** How well are the different perspectives by indigenous people included in water planning and management?

What examples exist that demonstrate indigenous economic, cultural and/or spiritual interests are considered in planning and management of water systems?

Legislation and regulation Does legislation exist that mandates indigenous representatives are included in governance activities?

How does this translate in representation and positions held within organisations?

Policy and strategy How much is this part of official policy and the identity of the organisations?

Consider Indigenous communities' capacity to engage and have meaningful conversations and relationships.

Relationships need to be woven through, and legislation supports that. | Interviews or surveys within organisations

Legislative documents

Policy documents

Identify formal roles for indigenous people | **Hierarchy**

1. Little or no recognition of indigenous interests and knowledge in water planning and management
2. Informal recognition of indigenous interests and knowledge in water planning and management
3. Broad policy and frameworks recognise indigenous interests and knowledge in water planning and management. Some attempt to involve indigenous people and cultures in practice.
4. Detailed policy and frameworks recognise indigenous interests and knowledge in water planning and management. Formal requirements to involve indigenous people and cultures drive common practice.
5. Comprehensive policy and frameworks recognise indigenous interests and knowledge in water planning and management. Legislation mandates involvement of indigenous people and cultures and drives mainstream practice.

Examples

Definitions

Indigenous interests: cultural, spiritual, economic, environmental

Common Q and A's / Notes

This indicator goes beyond engagement of Indigenous people as part of the community, but speaks to issues of sovereignty and the special role they have in water system stewardship

Importance of inclusion of knowledge, not just interests

Must mention |