

Welcome to the Water Security and Responsibility Info Session

PURPOSE

Present and **collect feedback** on the draft Water Security and Responsibility Plan.

Learn more and have your say!

Read the full draft Water Security and Responsibility Plan and complete the survey at:

[getinvolved.Kelowna.ca/water-security-and-responsibility-plan](https://getinvolved.kelowna.ca/water-security-and-responsibility-plan)



LAND ACKNOWLEDGEMENT

Kelowna is located on the traditional, ancestral, unceded territory of the syilx/Okanagan people. We recognize the deep relationship and connection the syilx/Okanagan people have with siw̓k^w (water), and respect their knowledge, values, responsibilities, and rights to protect siw̓k^w. This Plan reflects a commitment by the City of Kelowna to work with local First Nations to incorporate these values into water responsibility management and best practices.

Why Water Security and Responsibility?

The City of Kelowna is developing its first **Water Security and Responsibility Plan**.

This plan is a comprehensive strategy that lays out a path forward to ensure a holistic approach to how we use, protect and share water, now and in the future.

WHY WATER SECURITY?

- The security of Kelowna’s supply and quality of water is being challenged by a growing population and the impacts of climate change.
- Focusing on **water security** will aim to ensure Kelowna and all communities and First Nations in the Central Okanagan have a clean, healthy, adequate supply of water.

WHY WATER RESPONSIBILITY?

- Kelowna and many other communities and partners rely on the Okanagan Lake basin to support the land, environment and community.
- Because we all use Okanagan Lake, we all share the **responsibility** to manage our water sustainably.

FAST FACTS



Okanagan Lake, our primary source of water, is managed to refill about 1.5 metres each spring. In dry years, it may not fill enough. Wet years can mean floods.



The Okanagan has one of the highest rates of water use per person in Canada. Watering household lawns and gardens accounts for approximately 24% of water used.



14.5 Olympic-sized swimming pools’ worth of untreated wastewater comes into the city treatment facility daily. That’s about 36,280 cubic meters of influent!

Developing the Water Security and Responsibility Plan

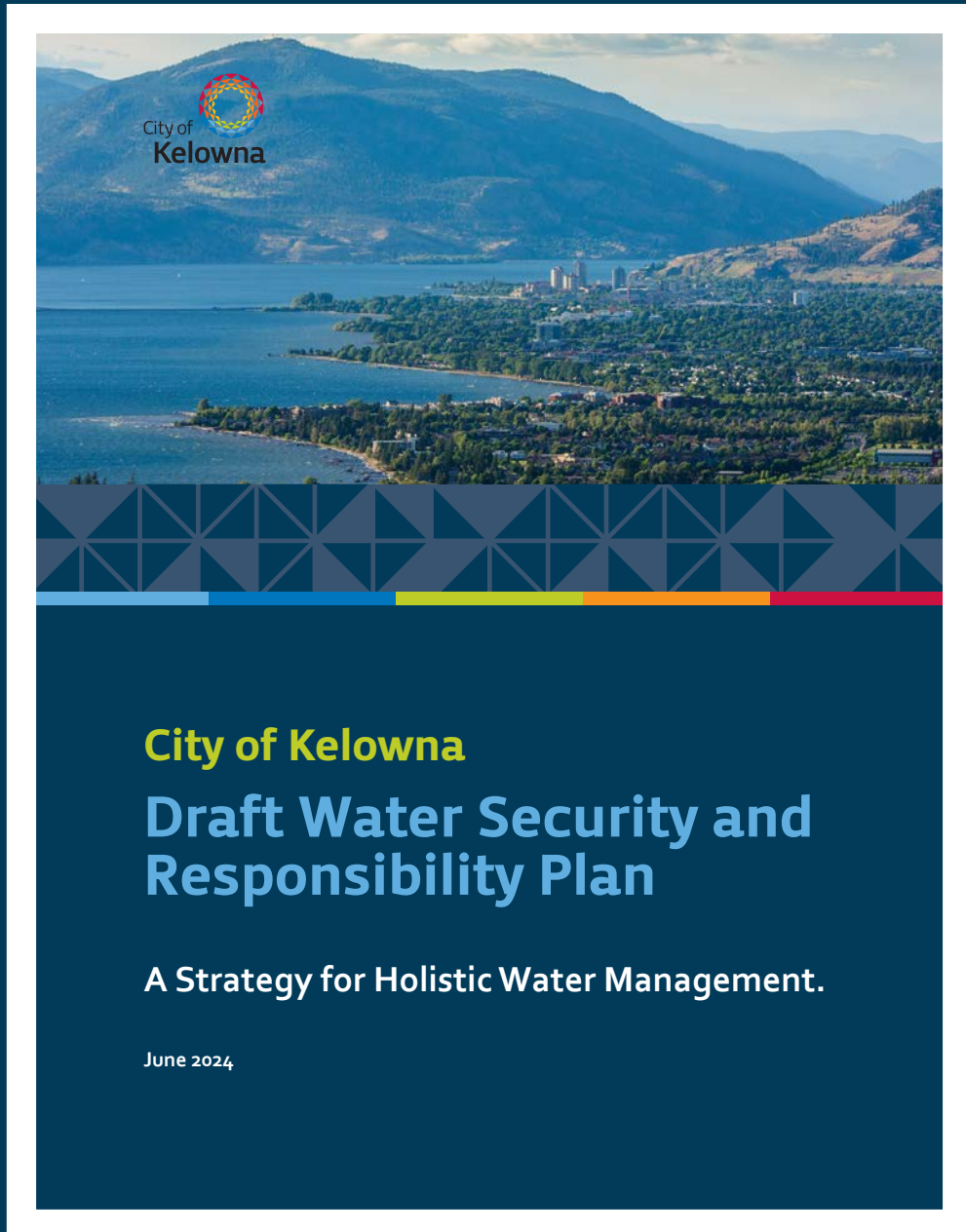
PURPOSE

This plan will help to establish a foundation for more collaborative water stewardship by:

- Achieving a more holistic and sustainable water management with one plan for multiple water sectors.
- Guiding local and regional decision-making and prioritization.
- Framing decision-making at the City from a “water lens.”

PROCESS

The City is undertaking a three-stage strategic planning approach to develop management practices to address water responsibility:



The plan consists of:

1 VISION

9 GUIDING PRINCIPLES

25 ACTIONS

Vision & Guiding Principles

The following **guiding principles** lay out the priorities for Kelowna’s water use and management and guide the actions in the plan.

VISION

Water management in Kelowna is approached from a holistic, “one water,” lens that guides decision-making and long-term planning, reflecting the importance of water for our communities and our environment.



GUIDING PRINCIPLES (Council endorsed)

- All residents and water users in the City have a safe, affordable, resilient and sustainable supply of high-quality drinking water and a reliable supply of water for agriculture.
- Protect Okanagan Lake, our human health, and our environment through efficient collection and effective treatment of wastewater.
- Stormwater is effectively managed without negatively impacting riparian areas, infrastructure, property, or Okanagan Lake.
- The community is resilient and resistant to lake and creek flooding.
- Okanagan Lake and upland watersheds remain a source of high-quality water.
- Account, protect, restore, and enhance natural systems that make up our asset inventory and increase environmental resiliency.
- Assure that the quality and quantity of water is available to support a healthy aquatic ecosystem.
- Indigenous knowledge, practice and permitting is effectively incorporated into water decision processes.
- The City works in partnership with other water providers and government agencies to ensure water management.

Taking a “One Water” Approach

The City is taking a holistic **One Water** approach to water stewardship that promotes the integration of water management practices between **six key sectors**. These sectors are supported by **three foundational elements** of water responsibility. There are **25 actions** in the plan supporting each of these areas.

FOUNDATIONAL ELEMENTS

INDIGENOUS KNOWLEDGE

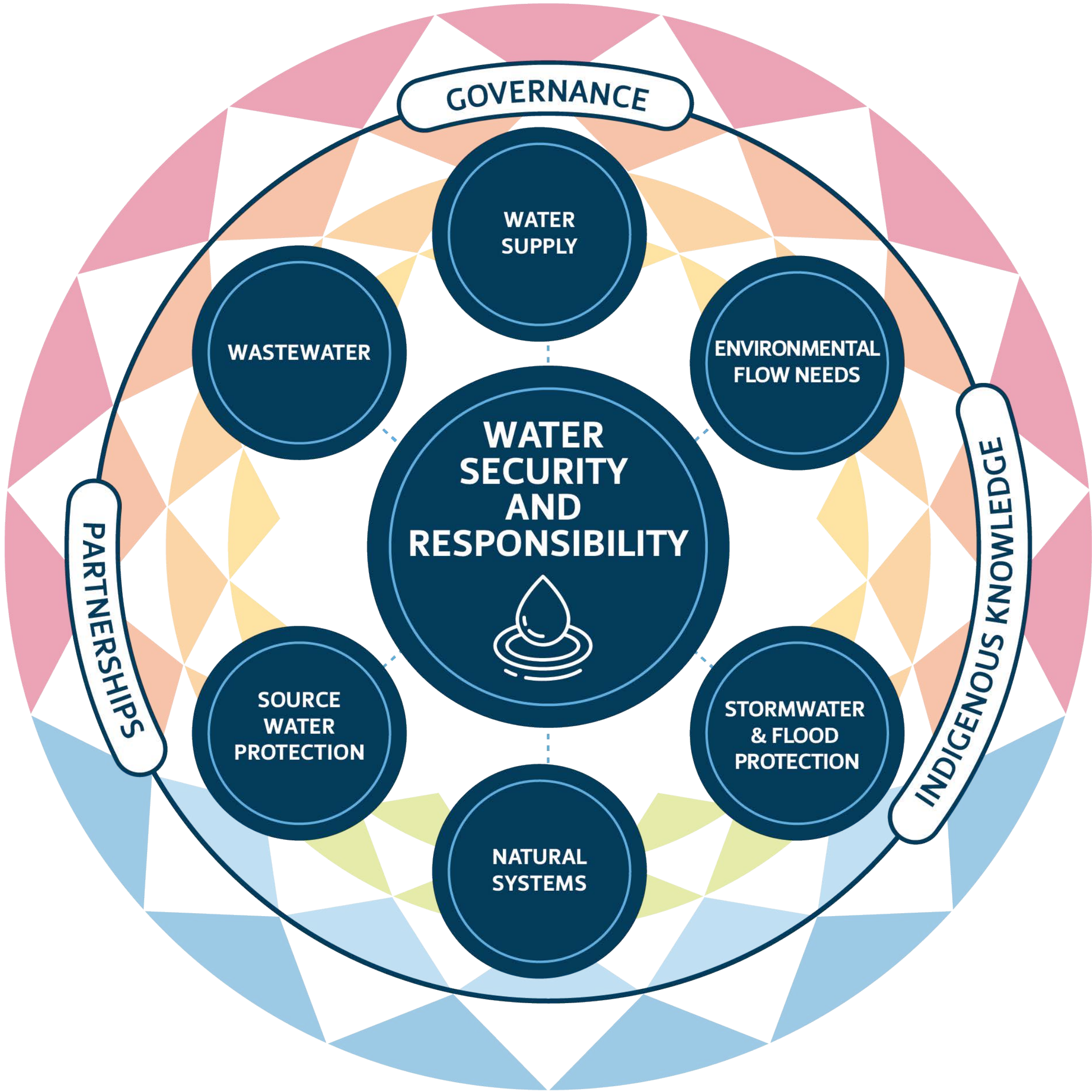
Decisions related to the use, management and protection of water should incorporate Indigenous knowledge and practices.

GOVERNANCE

Alignment with First Nations, municipalities, industries, private landowners to manage risks and responsibilities related to water.

PARTNERSHIPS

Collaborate with all partners in water security and responsibility.



SIX KEY SECTORS

Wastewater: how sewage and wastewater from homes and businesses in Kelowna is treated and discharged.

Water Supply: the system that ensures we have water to use in our homes, at workplaces, for agriculture and in public spaces and amenities.

Environmental Flow Needs: the ideal volume, timing and quality of water flow needed to keep an aquatic ecosystem healthy and sustainable.

Source Water Protection: how we protect where the water we use comes from, primarily Okanagan Lake and upland watersheds.

Natural Systems: lakes, creeks, wetlands, forests, soil and more.

Stormwater & Flood Protection: how the City manages runoff from rainwater or melted snow to prevent flood damage and impacts on Okanagan Lake water quality.

Governance

Guiding Principle: The City works in partnership with other water providers and government agencies to ensure water security

These actions support alignment with First Nations, municipalities, industries and private landowners to manage risks and responsibilities related to water.



ACTION

- Update and align infrastructure master plans with an assessment of risks (likelihood and consequence) facing service delivery including asset condition, capacity, compliance and undertaking a climate vulnerability assessment for the water systems.
- Prepare risk registries and contingency plans for water responsibility infrastructure assets.
- Align major system infrastructure plans and upgrades with funding needs, including reserves and grant opportunities.
- Align City operations and key performance indicators with the guiding principles of the Water Security and Responsibility Plan.
- Prioritize projects based on their impact to providing or sustaining service.
- Develop a communications strategy to support service levels.
- Assess and refine development policies and processes to incorporate requirements to include source water protection, natural system preservation, and prevention of development on floodplains.
- Set, measure and report on clear performance metrics (targets) for service levels.

Partnerships

Guiding Principle: The City works in partnership with other water providers and government agencies to ensure water security.

ACTION

Establish regular meetings with other water purveyors in Kelowna to collaborate on water supply challenges and share expertise in urban and rural water supply needs.

Facilitate best management discussions with other Okanagan agencies and the Okanagan Basin Water Board.

Collaborate/partner with other communities to share experiences and improve service delivery.

Collaborate with Kelowna water purveyors, Interior Health, and other Provincial Ministries on developing and sharing best management practices for protecting the community’s water sources across jurisdictional lines.

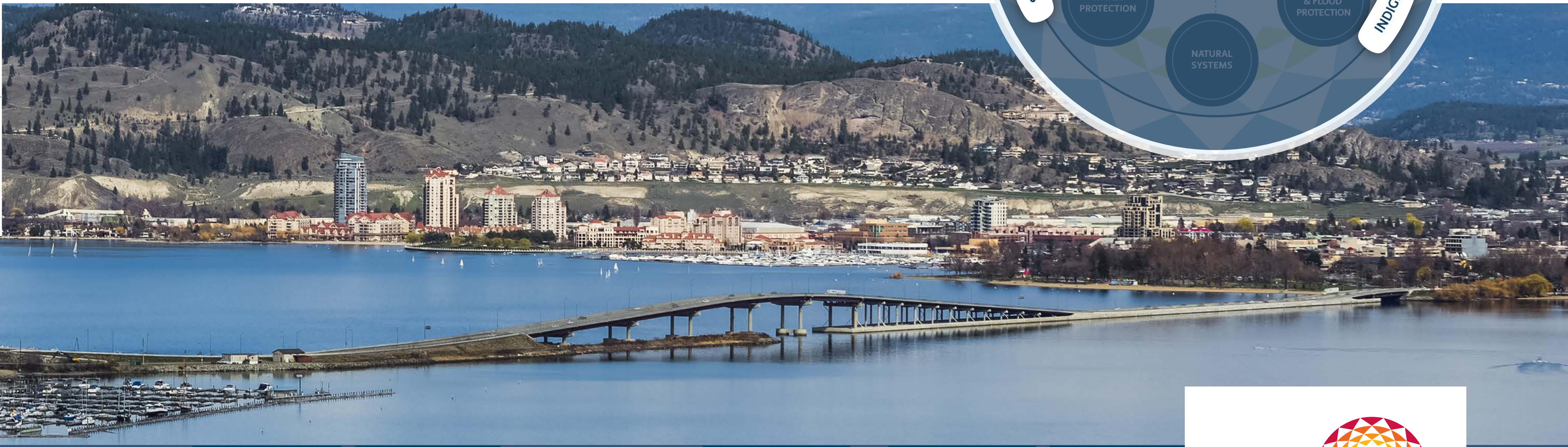
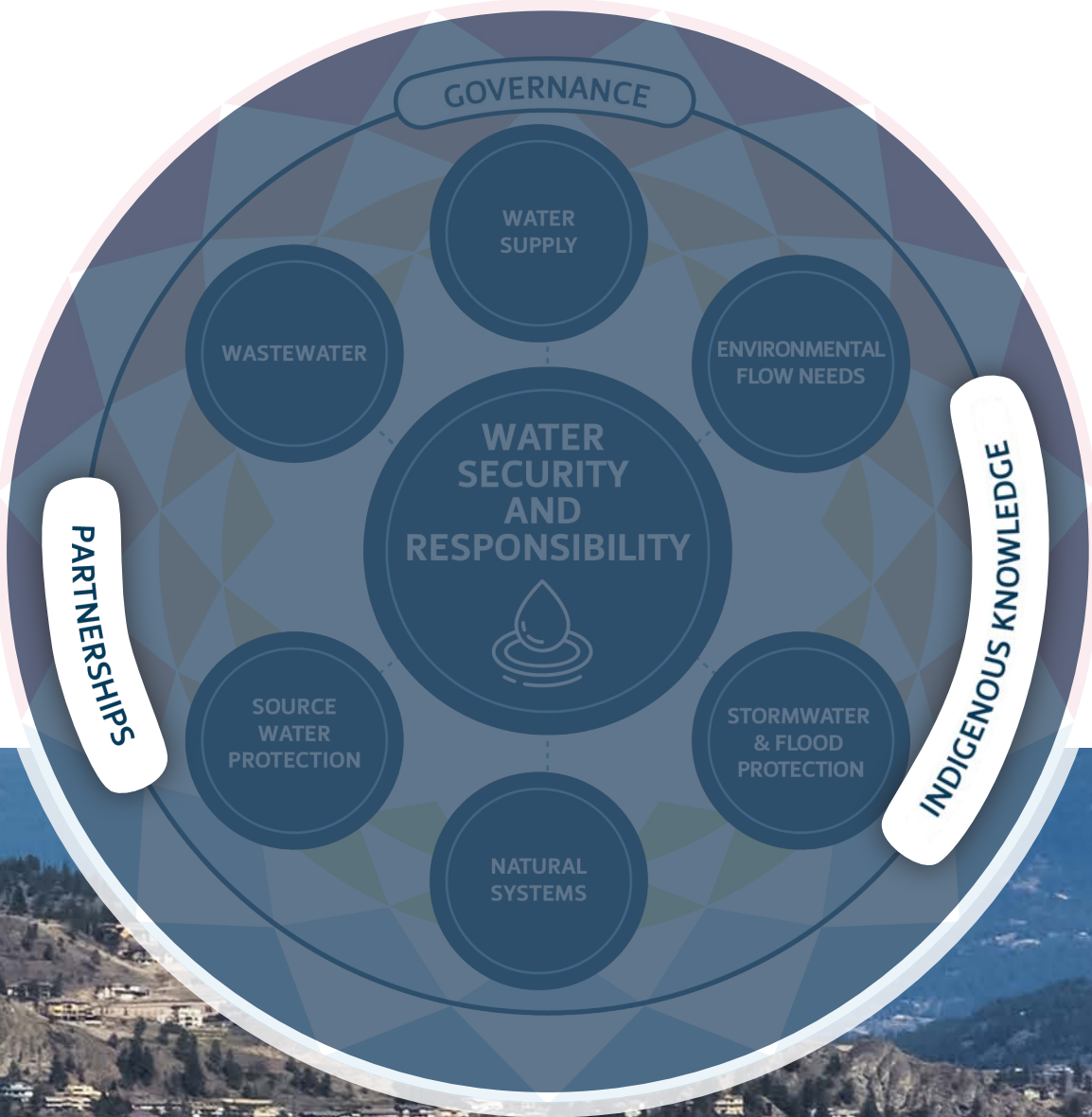
Leverage funding from senior levels of government to support water responsibility initiatives in all key sectors.

Indigenous Knowledge

Guiding Principle: Indigenous knowledge, practice and permitting is effectively incorporated into water decision processes.

ACTION

Ensure environmental stewardship policies and practices incorporate an understanding of Indigenous values related to water and fish.

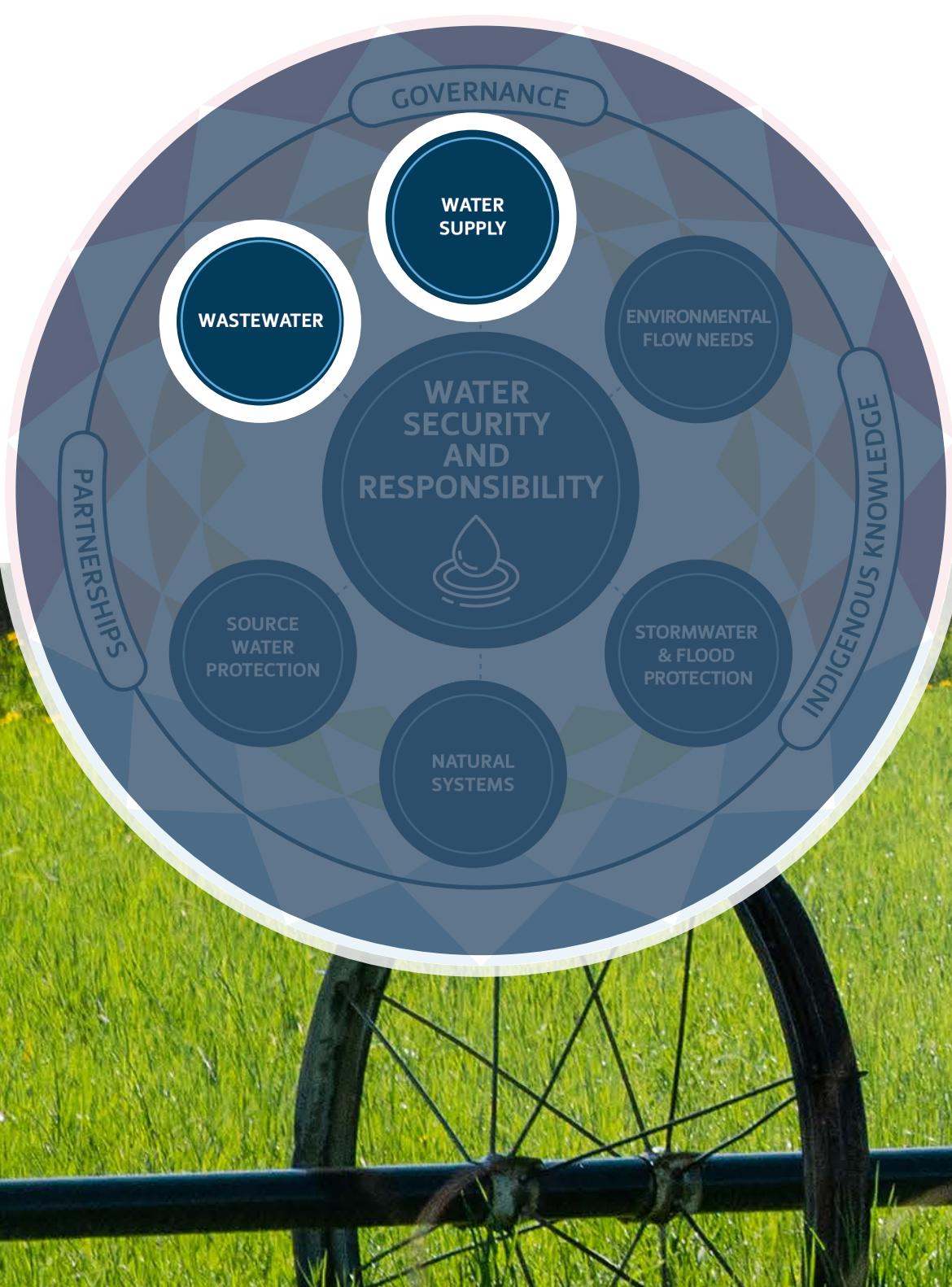


Water Supply

Guiding Principle: All residents and water users in the city have a safe, affordable, resilient and sustainable supply of high-quality drinking water and reliable supply of water for agriculture.

ACTION

Focus long-term planning on the respective needs of urban and rural sectors to reinforce responsible water use and land management.



Wastewater Management

Guiding Principle: Protect Okanagan Lake, human health and our environment through efficient collection and affective treatment of wastewater.

ACTION

Undertake an assessment of multiple biosolid processing solutions, such as composting, anaerobic digestion or mine reclamation.

Plan for an alternate treatment plant site to be included in the development of new processes and capacity improvements.

Continue process to transition on-site septic systems to community sewer in urbanized areas.

Work with Interior Health to add tracking of emerging contaminants of concern that are under the City's scope of responsibility.



Environmental Flow Needs

Guiding Principle: Assume that the quality and quantity of water is available to support a healthy aquatic system.

ACTION

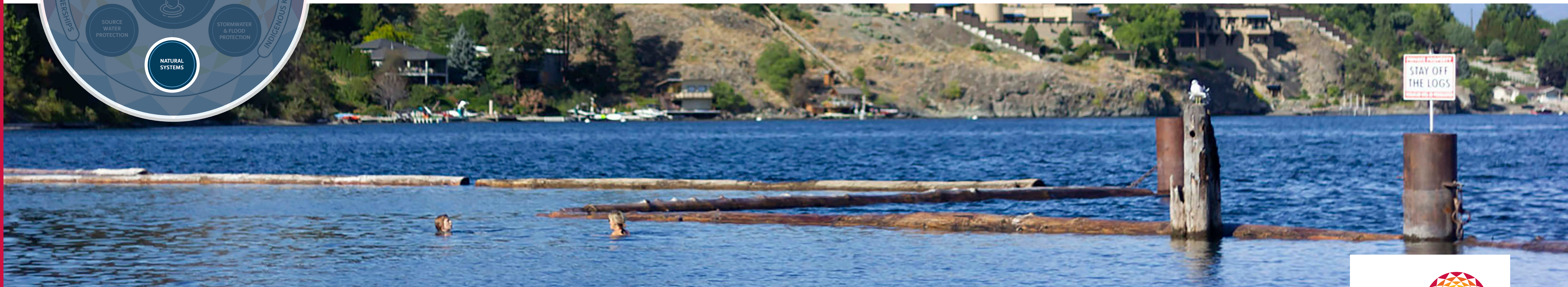
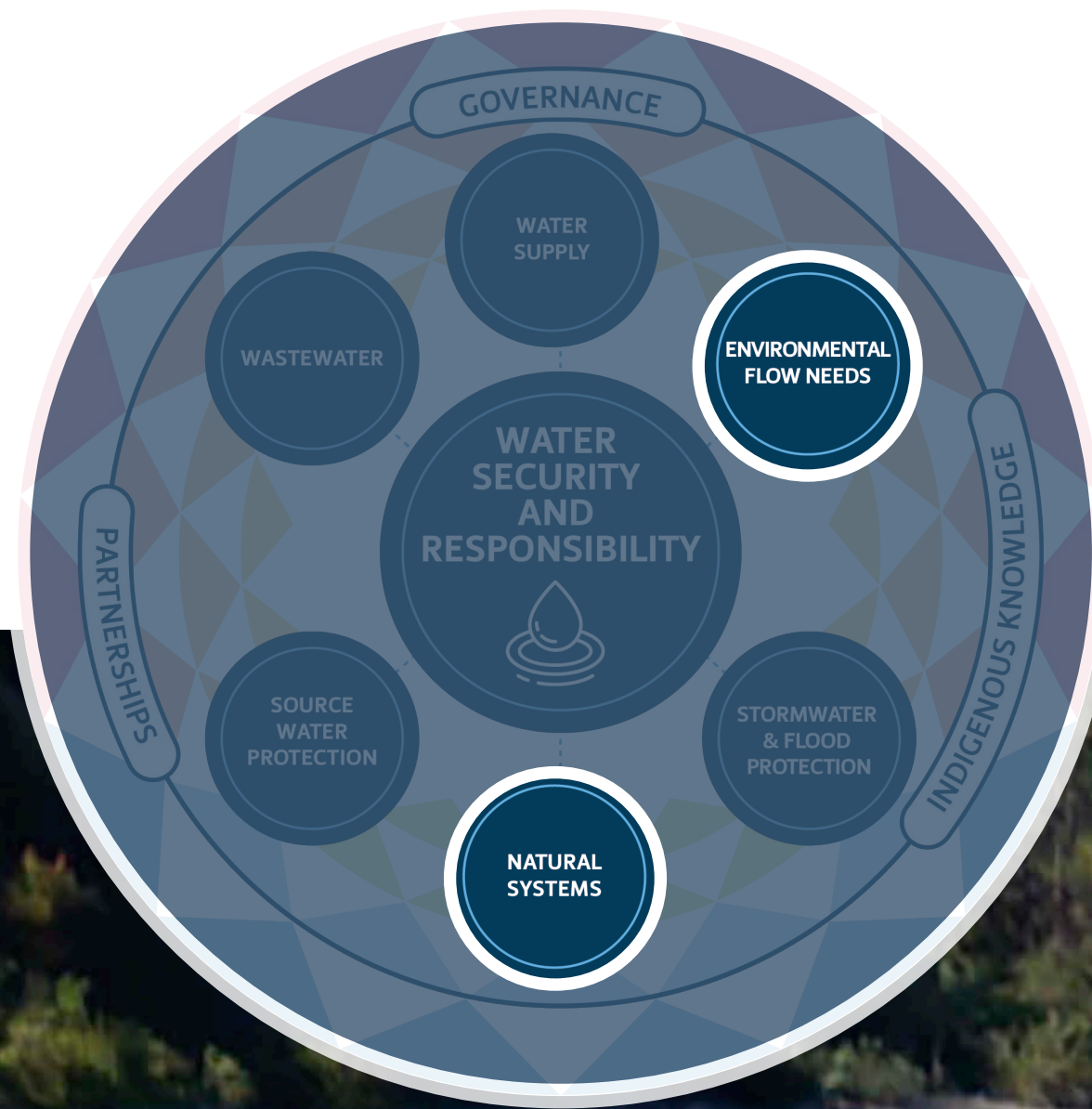
Complete the natural asset inventory by adding water responsibility considerations and incorporating the inventory into the City's Asset Management Program.

Natural Systems

Guiding Principle: Account, protect, enhance and restore natural systems that make up our asset inventory and increase environmental recovery.

ACTION

Establish guidelines for maintenance and operation of naturalized storm ponds and constructed areas.



Stormwater Management

Guiding Principle: Stormwater is effectively managed without negatively impacting riparian areas, property or Okanagan Lake. The community is resilient and resistant to lake and creek flooding.

ACTION

Incorporate critical flow needs into the City’s drought management and water shortage plan procedures.

Establish stronger requirements and processes for water quality monitoring and creek flow measurement.

Source Water Protection

Guiding Principle: Okanagan Lake and upland watersheds remain a source of high-quality water.

ACTION

Prepare plans and policies to ensure regulatory requirements are met, including any policies related to water management that could impact the Interior Health Filtration Exemption.

Improve data collection and monitoring of water quantity and quality.

