

A sunset over a body of water with a line of trees in the foreground. The sky is a mix of orange, yellow, and red, with the sun low on the horizon behind the trees. The water in the foreground is dark with some ripples.

Integrated Watershed Planning: What's it All About?

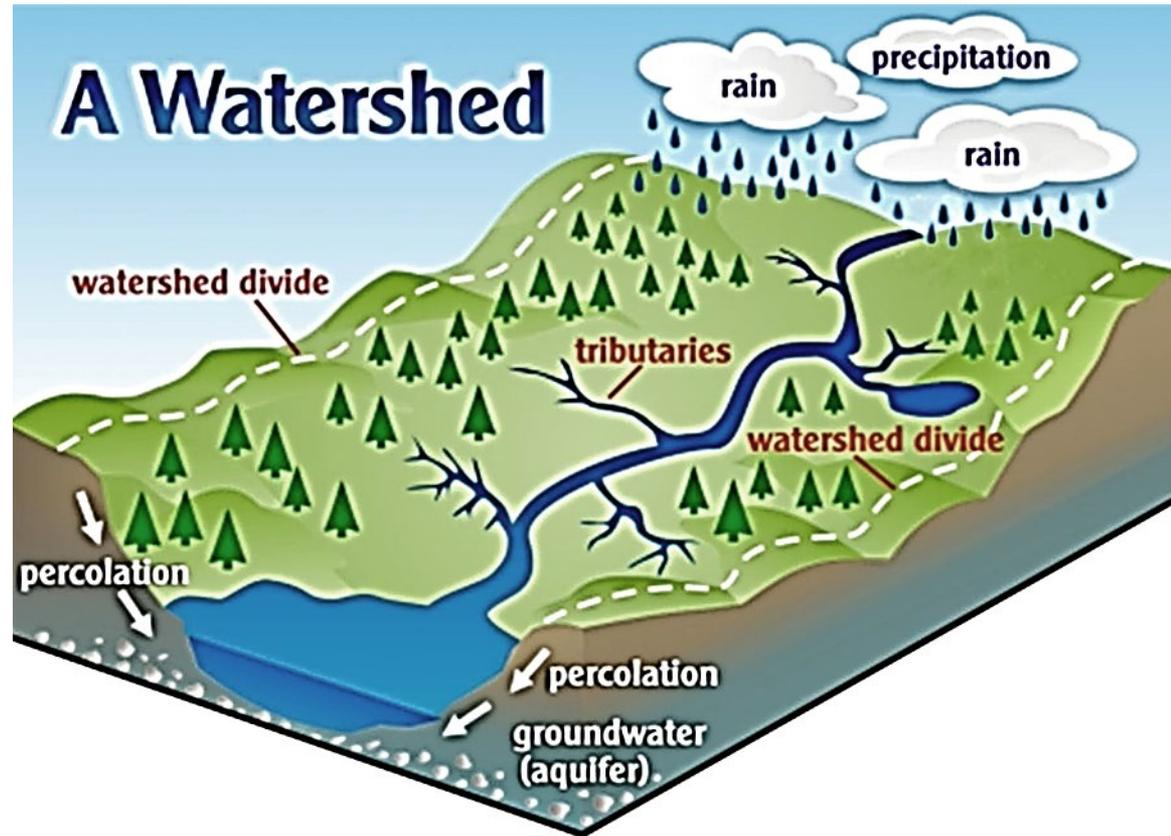
Presented to the
Muskoka Community Round Table, June 8, 2022

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Roles & Responsibilities of the Community Round Table

- ✓ To evaluate & integrate the results of 12 projects intended to help reduce the impacts of flooding & address the health of the Muskoka River Watershed, identify knowledge gaps remaining & recommend studies to fill those gaps.
- ✓ To consolidate the perspectives of the representatives into building an Action Plan for the implementation of Integrated Watershed Management as the basis for governance of the environment & land-use planning within the Muskoka River Watershed & to continue educating & informing the community about IWM.

What is a watershed?



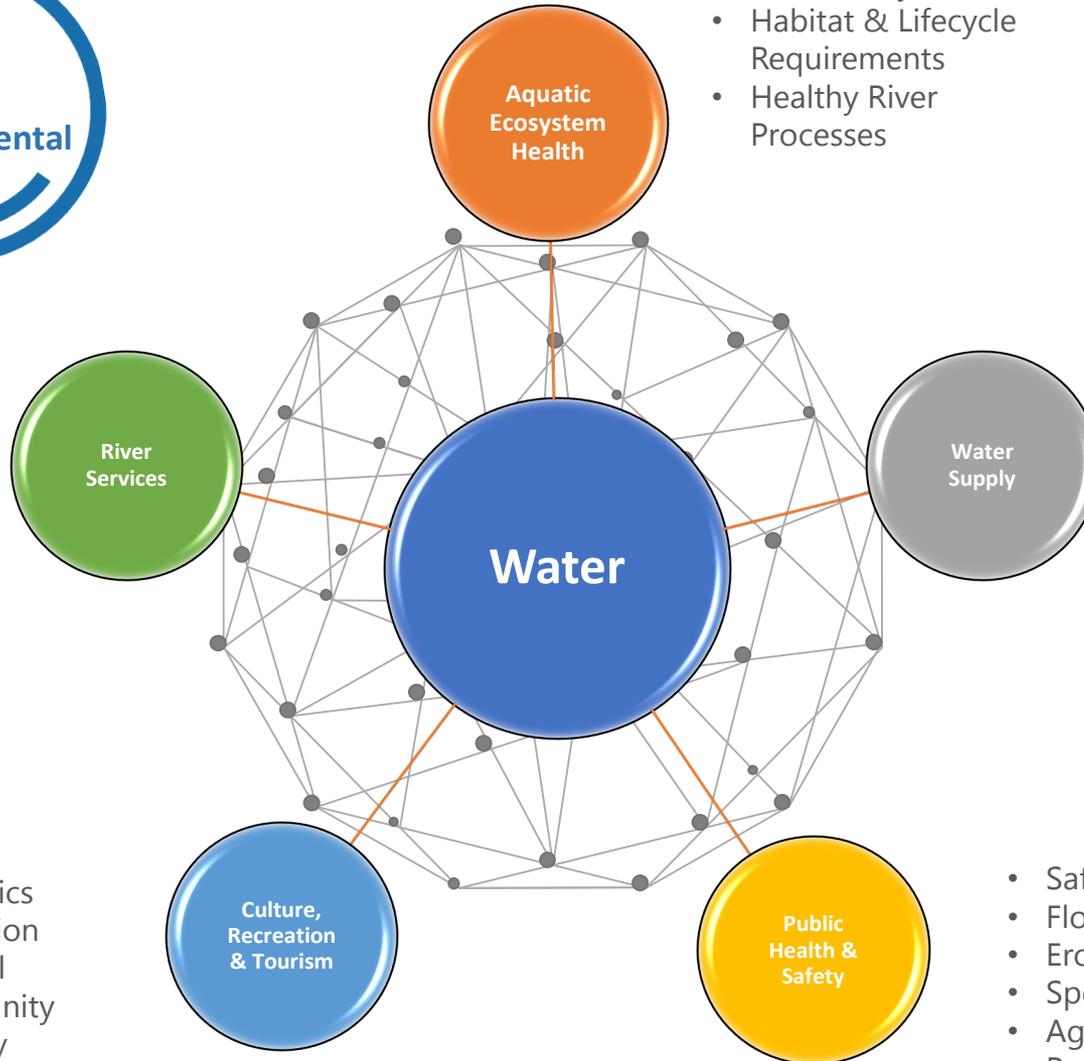
A watershed is the area that is drained by a river & its tributaries.

Uses, Needs and Value of Water



- Wastewater Assimilation
- Stormwater Management
- Hydroelectric Power
- Irrigation
- Commercial Fisheries

- Aesthetics
- Recreation
- Spiritual
- Community Amenity

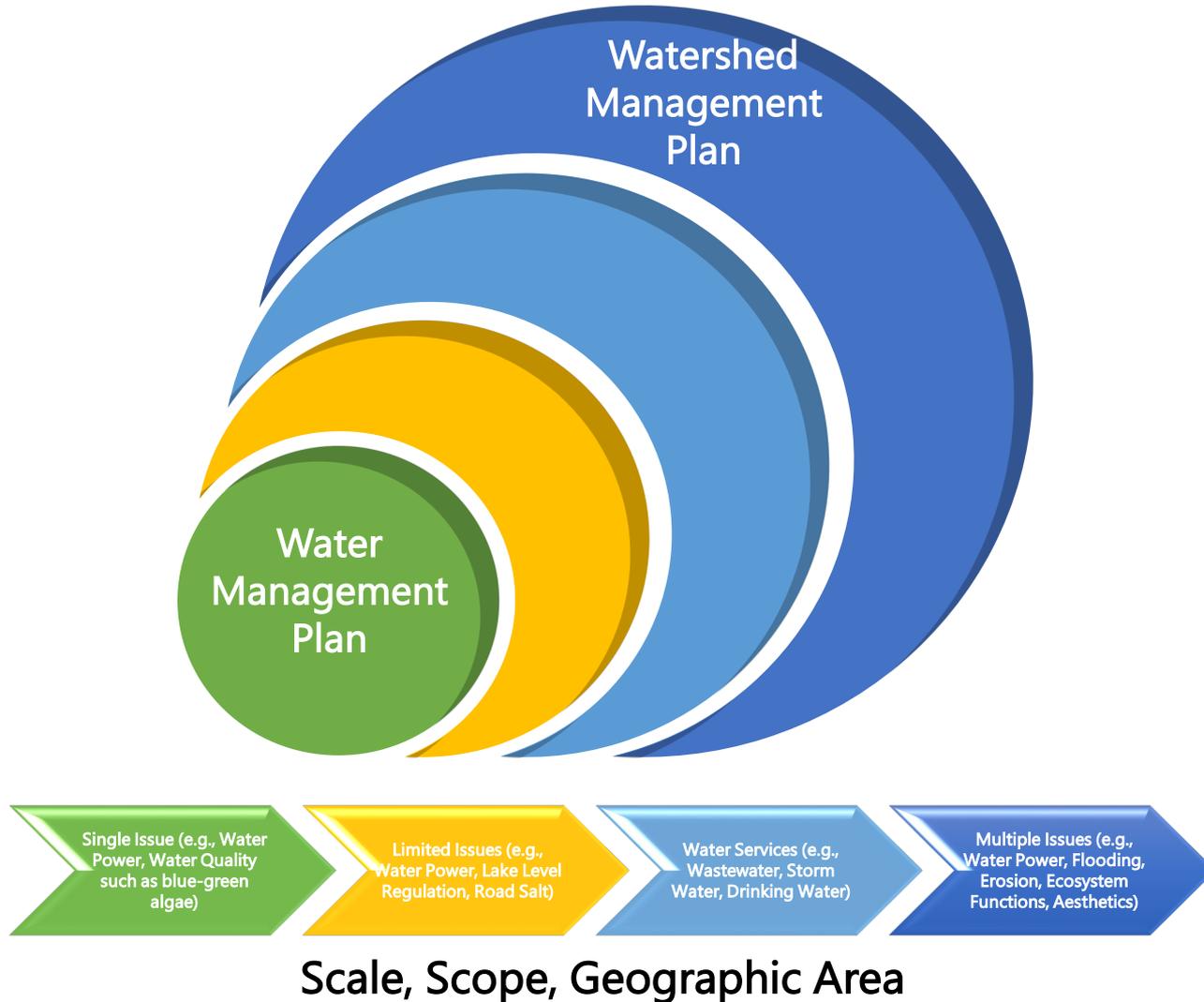


- Biodiversity
- Habitat & Lifecycle Requirements
- Healthy River Processes

- Residential
- Industrial
- Commercial
- Agricultural

- Safe Drinking Water
- Flooding
- Erosion
- Sports Fishery
- Agricultural Food Production

A Plan is a Plan is a Plan – Right?



What is Integrated Watershed Management (IWM)?

IWM Goal =
protection &/or
restoration of water
& land resources
within a watershed to
sustain human well-
being & the
ecosystem



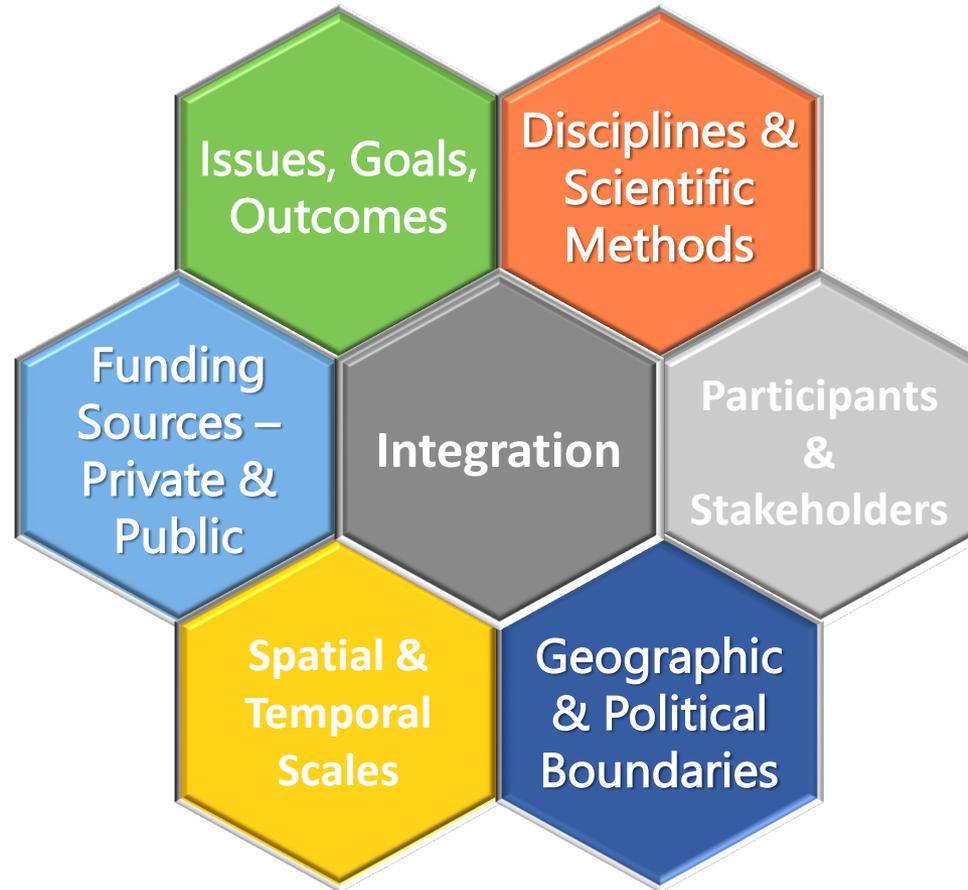
IWM Process = a
shared
process/approach to
collectively achieve a
common vision,
goals, & on-the-
ground results



IWM – Embedded Concepts



IWM – What are we Integrating?



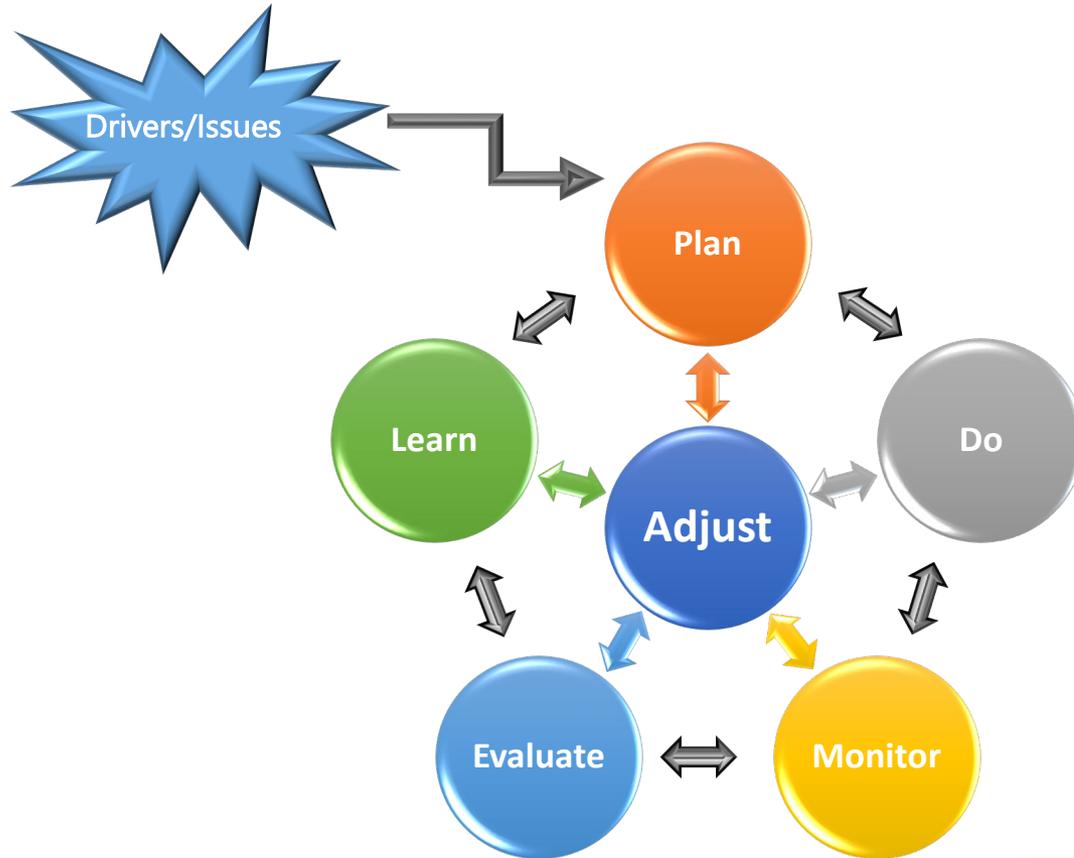
IWM – Value Added



- The whole is greater than the sum of its parts
- Integration is within and among plans
- The parts address cross boundary issues & opportunities that are specific to the watershed
- Implementation is shared among partner agencies & stakeholders within individual mandates
- People working together towards a common goal produces:
 - focused efforts,
 - builds on existing strengths,
 - reduces duplication, pools human & financial resources, and
 - effects change on-the-ground

Watershed-based plans can be integrated into a broader integrated watershed management plan

The IWM Process



The process is NOT consecutive;
different aspects can be worked on
concurrently

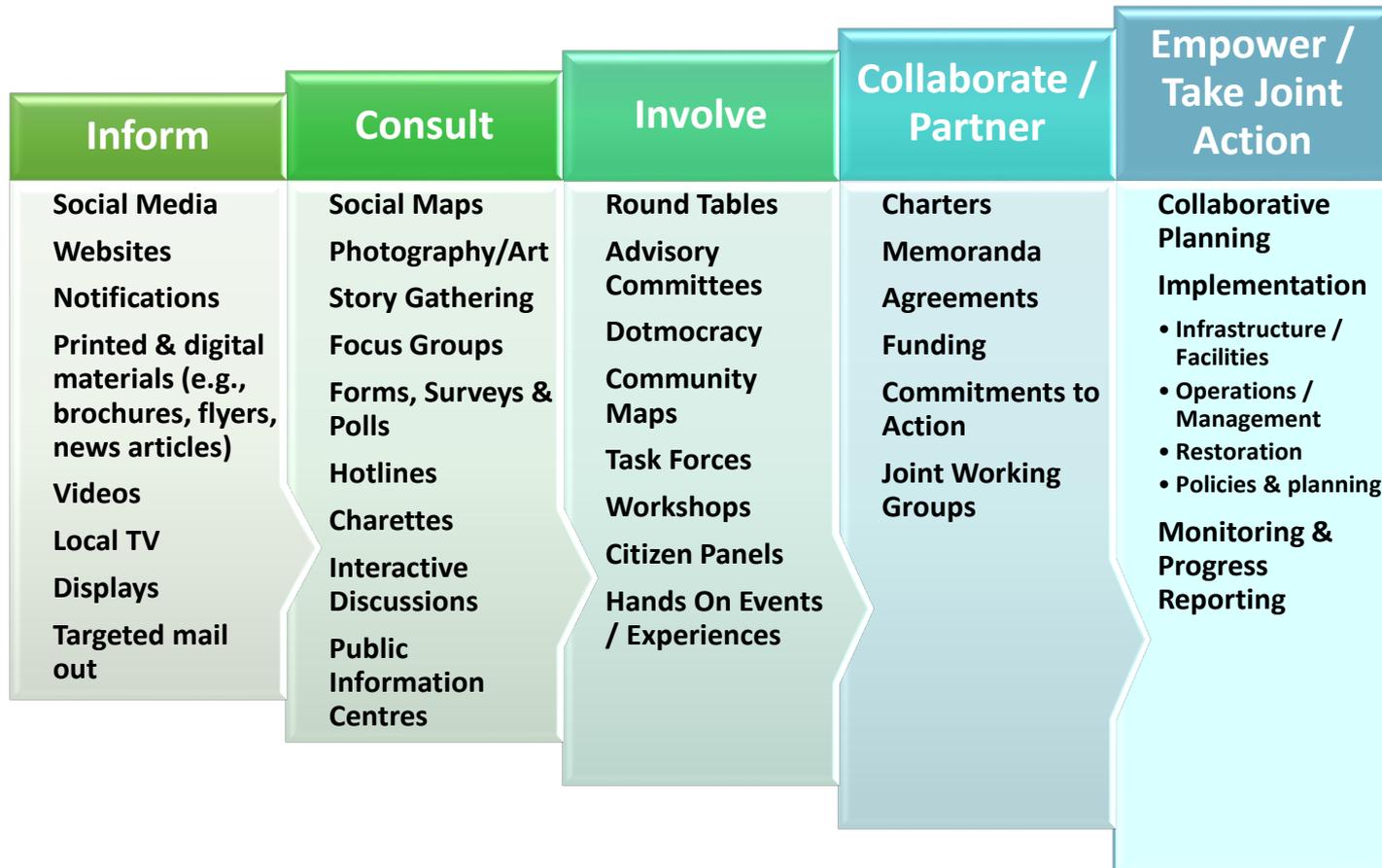
Some Key Questions



Create the Vision & Scope the Plan

- What are the priority watershed issues & drivers/causes?
- Do these problems resonate with the community?
- What level of community involvement is desired?
- What future does the community desire considering economic, social & environmental benefits/challenges (vision)?
- What are the principles underpinning the plan?
- What technical, managerial, & institutional options are acceptable to the public & are technically appropriate to address the issues?
- At what level of implementation will actions be undertaken?
- What data is available to support the plan?
- What is the terms of reference for the initiative?
- What is the process for attracting, engaging & motivating partners (consider a Charter)?
- What is the time frame for planning & implementation?

Level of Public Engagement to Consider





Some Key Questions

Develop the Plan

- What do existing data & studies tell us about the watershed (characterization of features and functions)
- What are the goals, objectives, targets and desired outcomes of the plan?
- What criteria & measures will be used to assess options & over what time frame?
- What is the range of options that could be used to address the problems?
- What are the preferred “best value solutions” to address the priority issues?
- What are the motivations & mechanisms for implementation?
- Who does what & who pays for what (action plan)?
- What is the timeline for action?
- What are the indicators and measures of performance and success (input, effort, process, performance, impact)?

Some Key Questions



Implement the Plan

- Who is responsible for implementing the plan or actions within the plan and over what time frame?
- Who coordinates & monitors actions/activities to ensure implementation?
- Who tracks progress of activities & reports on the status?
- Who troubleshoots barriers to implementation?
- How is the process supported & motivated?



Some Key Questions

Monitor the Results

- What information/data is being collected and by whom?
- Who collates/consolidates/interprets the data?
- What protocols for evaluation are being used? Are they scientifically defensible & consistent?
- What analytical tools will be used to assess the data?
- Is the current monitoring program sufficient to track all necessary indicators?
- Is the current monitoring program spatially explicit?



Some Key Questions

Evaluate & Document Results

- Is the information being collected sufficient to determine whether on-the-ground results being realized to meet the goals, objectives, & targets?
- Is implementation progressing as anticipated?
- Are additional data, indicators, information, or analytical/modelling tools needed to describe interactions and assess effectiveness?
- How will the results be rated?
- How often & at what scale will the results be reported?
- Are outcomes as expected or are there surprises?

Some Key Questions



Learn

Observations & Lessons Learned

- What are the lessons learned through the process & how will they be used to adjust the process?
- How will gaps & challenges be addressed?
- Are outcomes as expected or are there surprises?
- How will results be reported to partners, stakeholders and the public?
- How will successes be recognized & celebrated?



Adjust

Adapt & Carry On

- Process is iterative
- Adjust & adapt throughout

If done well, IWM provides

