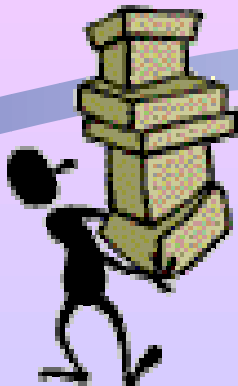
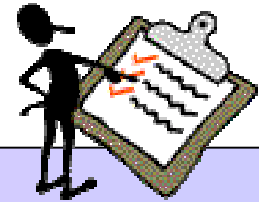


Watershed Planning Process Overview



*How to Gather Information
to Make Decisions in Your Watershed*

March 2002
Brought to you by the
Watershed Planning Training Workgroup

**We know we want to have a watershed plan.
We're just not too sure what one looks like.....**



**.....and that's AFTER
you gave us the checklist!**

**A watershed plan records
discoveries
and decisions.**

**Watershed plans
are written to create
change.**

Gather a group

Share a vision

Investigate the watershed

Sift through the data &
develop goals

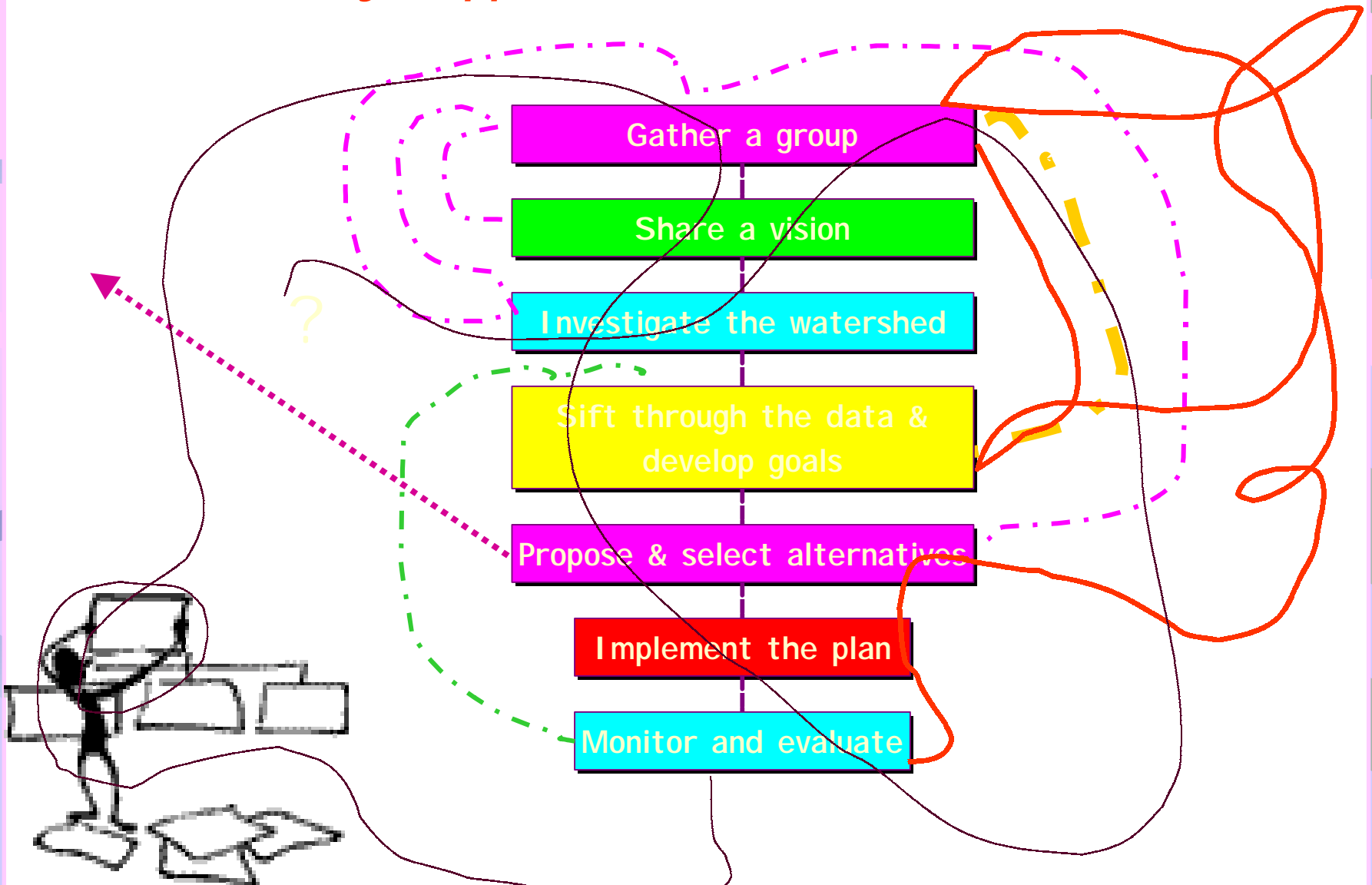
Propose & select alternatives

Implement the plan

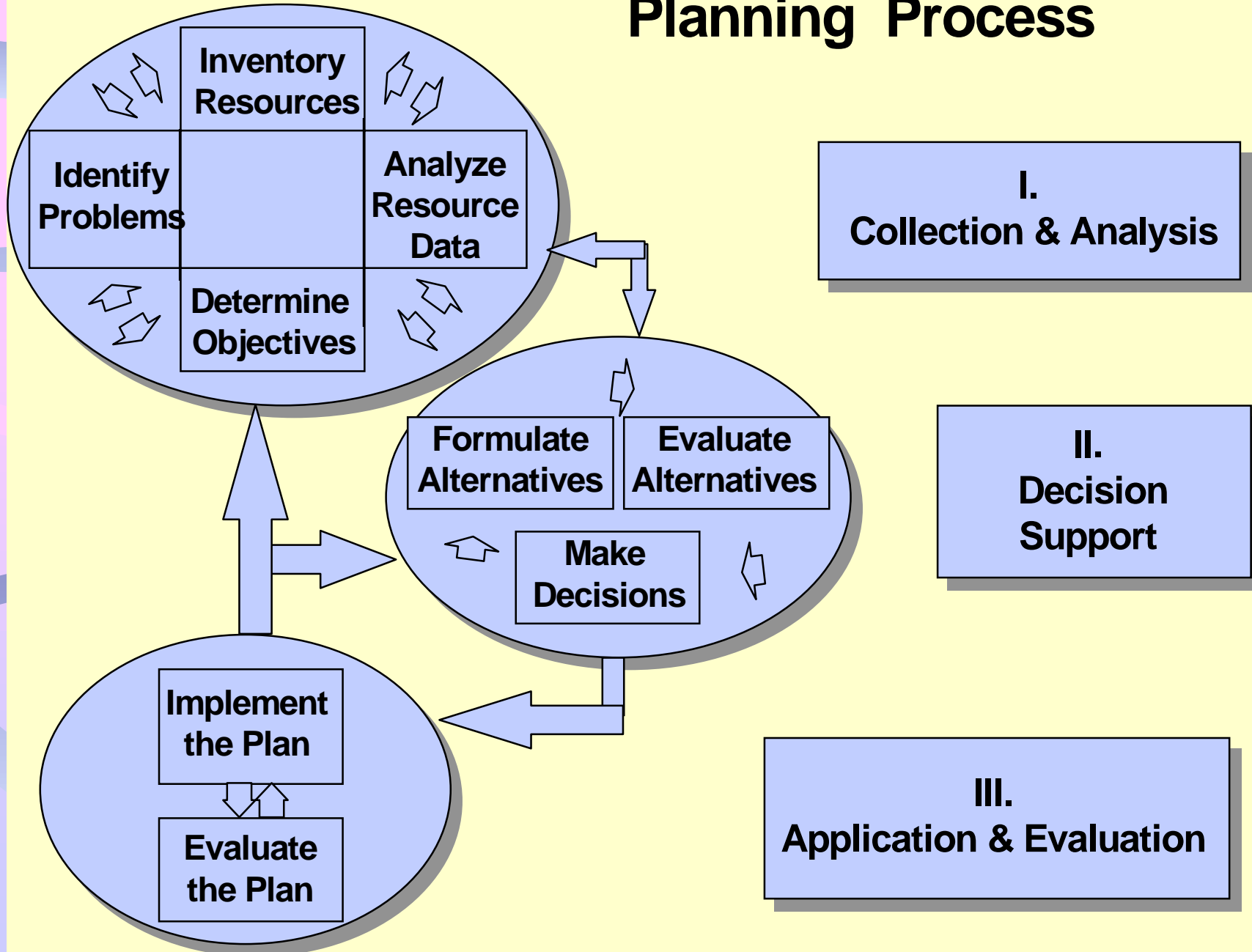
Monitor and evaluate

How it
looks on
paper.....

How it really happens!



Planning Process



Who does what when....

- Identify Problems.....stakeholder concerns from early meetings + the data available on the watershed + what you find out during the inventory & assessment.
- Inventory Resources.....data already available + what you discover during your investigation.
- Analyze Data.....combining all the information + any modeling or calculations
- Determine Objectives.....vision of the group + goals set during early meetings + targets determined after analyzing all the data

What/when.....

- Formulate & evaluate alternatives....."fixes" suggested during early meetings + alternatives proposed by technical assistance agencies + alternatives proposed by the group + assessment of the impacts of those alternatives
- Make decisions.....which steps the group determines to take/recommend after all the analysis

And finally.....

- Measure progress.....monitor water quality, program accomplishments, and other changes
- Re-evaluate the plan and make adjustments.....weigh monitoring results and other factors against goals and objectives; adjust plan as needed

Focusing on the inventory

- *“Inventory Resources.....data already available + what you discover during your investigation.”*

World's perfect inventory

All the information you need, all at once

One person or agency does all the work & organizes the results

Land data, water data, social/economic data, trends, etc

Real World

Some of the information you need, acquired over time

Inventory conducted by many people

Land, water, etc. data but may have gaps or uneven quality

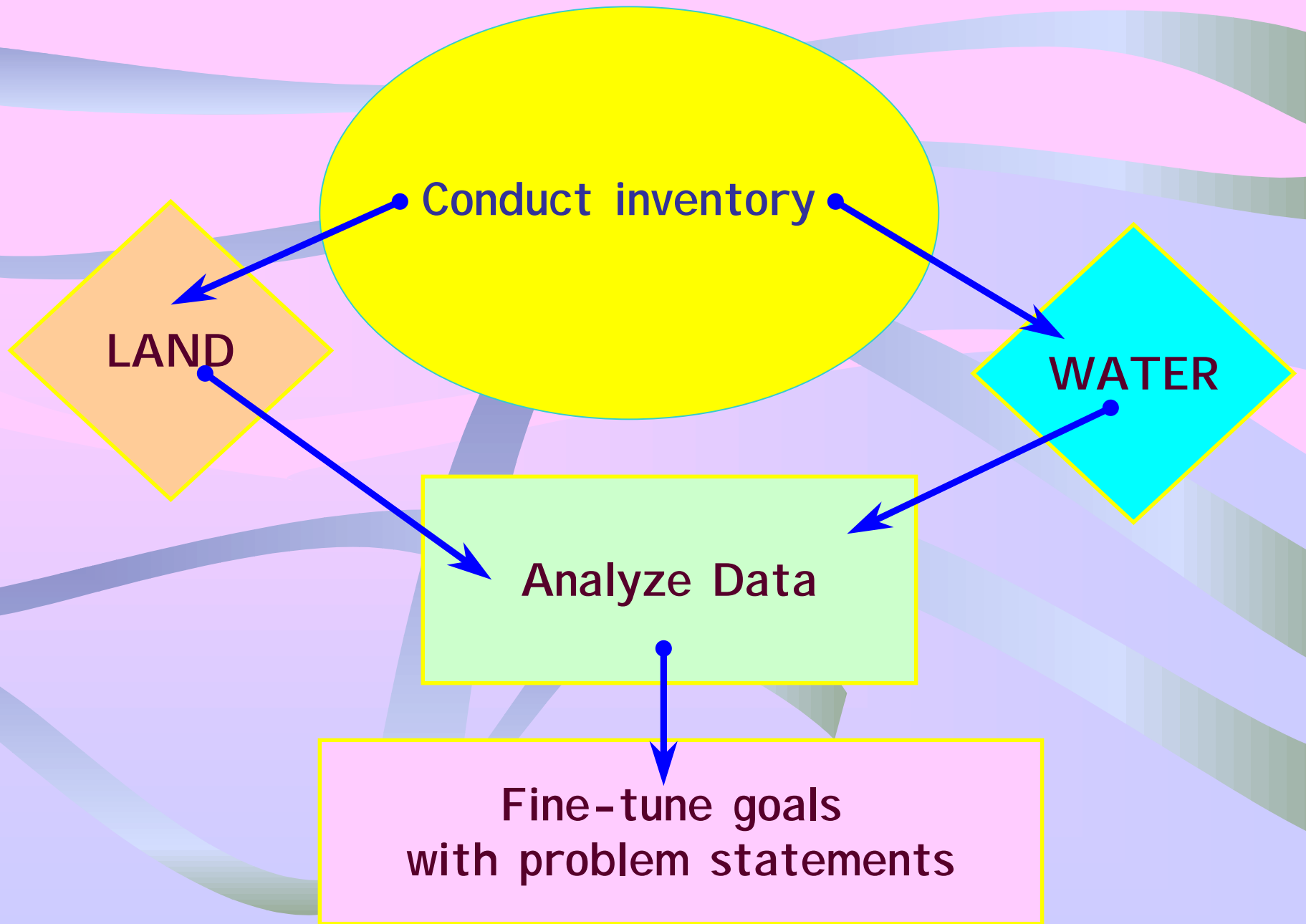
Gather a group

**Vision
Mission
Goals**

**Identify problems
Conduct inventory
Analyze data
Fine-tune goals**



**Alternatives
Decisions**

**Implement
Evaluate**



Map of the Watershed Planning Process

Planning Phase	Steps	Key Questions	WHO??	Activities	Products & Measures	
<p>Assessment Phase</p> <p><i>Build public support</i></p> <p style="text-align: center;">↓</p> <p><i>Create an Inventory of the Watershed</i></p> <p style="text-align: center;">↓</p> <p><i>Define the Problems</i></p>	<p>1. Engage the public</p> <p>2. Identify Concerns</p>	<p>What does the community see as threats to water quality?</p> <p>What are the community's concerns related to water quality?</p>	<p>Steering Committee, Coordinator, Outreach Committee, Stakeholders</p>	<p>Public meetings, surveys, public notices, website, listening sessions, focus groups</p>	<p>Description of the community</p> <p>Lists of stakeholders</p> <p>Lists of concerns</p> <p>Vision & mission statements</p>	
	<p>3. Conduct Watershed Land Inventory</p> <p>4. Collect Water Quality Data</p>	<p>What are the land uses, physical characteristics, and history of the watershed?</p> <p>What is the historical and current water quality in the watershed?</p>	<p>Technical Committee, Land Use Committee, Coordinator, Technical assistance agencies, Volunteers</p>	<p>Committee meetings, data collection from web & documents, visual observation, interviews, volunteer monitoring, professional monitoring, mapping</p>	<p>Watershed Land Inventory</p> <p>Water quality characterization</p>	
	<p>5. Develop problem statements</p>	<p>What uses are impaired?</p> <p>What are the problems?</p> <p>What are the causes and sources?</p>	<p>Technical Committee, Land Use Committee, Steering Committee, technical assistance agencies</p>	<p>Committee meetings, bringing in technical assistance, crafting problem statements, comparing results with others, modeling, mapping</p>	<p>Problem statements</p> <p>Water resource assessment</p>	
	<p>Development Phase</p> <p style="text-align: center;">↓</p> <p><i>Set goals and develop solutions</i></p> <p style="text-align: center;">↓</p>	<p>6. Identify Target Conditions</p>	<p>What are the restoration goals?</p> <p>Are there any reference watersheds?</p>	<p>Technical & Land Use Committees & agencies, followed by Steering Committee</p>	<p>Committee meetings, possible additional inventory, discussion of "desired future condition"</p>	<p>Measurable goals & targets</p> <p>Measurable indicators</p>
		<p>7. Develop Restoration Targets</p>	<p>What is the "problemshed?" (scope of issues to be addressed)</p> <p>What are the existing loads or conditions?</p> <p>What are the desired loads or conditions?</p>	<p>All parts of group working together; may need to get info/assistance from outside agencies such as IDEM</p>	<p>Figuring out how much reduction of specific pollutants or conditions is realistic and how long it will take</p>	<p>Map targeting specific areas to be addressed for specific problems</p> <p>Specific, measurable goals and objectives with target timeframes</p>

Implement- ation Phase <i>Create an action plan</i> 	8. Evaluate & choose alternatives, BMPs, and programs	What are some alternatives (BMPs) for restoration? What are the criteria for selecting the “best” solutions? What are the best solutions? What will they cost? Who will benefit?	Technical Committee and others develop, then present to Steering Committee for decision	Proposing & evaluating alternatives Selecting alternatives Setting boundaries & expectations	Record of decisions about how to address problems in the watershed Descriptions of the practices and programs that will be used.
	9. Prepare Implementation Plan	Who is responsible for implementing programs and practices? Who will provide assistance? When and where will each thing be done? How will it be paid for? Are contracts, grants, easements, or other instruments needed?	Get input from stakeholders, then Committees prepare and present to Steering Committee for decision	Subcommittee & Steering Committee meetings Hammer out implementation plan [What -who -how -when -where] Meet with stakeholders	Implementation plan Action register with who, what, how, when, where, and checkpoints Cost estimates
Validation Phase <i>Implement and evaluate</i> 	10. Monitoring and Evaluation	How will the watershed be monitored to measure progress? Who will be responsible, and what resources are necessary? How will progress be evaluated? What indicators will be used?	Subcommittees, technical assistance agencies, steering committee	Develop long range monitoring plan Determine when and how the plan will be evaluated and adjusted if necessary	Monitoring plan Evaluation strategy
	11. Implement Plan	Who should get copies of the plan? How will the community be kept informed of progress?	Steering Committee, Coordinator, sponsoring agencies & organizations, technical assistance agencies, stakeholders	Complete plan document. Publicize & distribute plan. Enter into agreements, contracts, or programs.	Watershed plan finalized. Plan distributed to community, and submitted to agencies as needed.

<p>12. Annual Validation Activities</p>	<p>Are practices being implemented? Are loads decreasing as expected? Is the health of the ecosystem improving? Are water quality standards being met and designated uses restored? If not, do we need to change something we are doing? Do we have new information? Are there any new threats or trends that we need to adjust for?</p>	<p>Everyone, but particularly Steering Committee</p>	<p>Review monitoring results, document practices and programs, evaluate progress against the action register and goals. Adjust goals & action register as needed to adapt to current knowledge & conditions. Continue to engage the community in the plan.</p>	<p>Updates and changes to watershed plan as needed Celebration of progress toward meeting goals</p>
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IDEM Watershed Management Section ~ 2/8/2002 ~ [Much of this "map" was borrowed from the Green Mountain Institute and modified for use in Indiana.]