



9th Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)

“Wetlands and water: supporting life, sustaining livelihoods”

Kampala, Uganda, 8-15 November 2005

River basin management: additional guidance and a framework for the analysis of case studies

(Resolution IX.1 Annex C i)

Contents

I Introduction: Challenges for integrating wetlands into river basin management

- I.1 Communication between water and wetlands sectors
- I.2 Cooperation and cooperative governance between the water and wetlands sectors
- I.3 Upscaling to basin level – sequencing and synchronisation of planning and implementation activities

II The “Critical Path” approach

III Description of Critical Path activities

- III.1 The planning phase (Steps 1 to 6)
- III.2 The implementation phase (Step 7)
- III.3 The strategic phase (Steps 8 and 9)
- III.4 Crosscutting issues and points to note

IV “Start anywhere; just get started”

- IV.1 The Critical Path as an analytical tool
- IV.2 Key places to resolve bottlenecks
- IV.3 Synchronisation with other sectoral planning and management cycles

I. Introduction: Challenges for integrating wetlands into river basin management

1. It has long been recognized, and is incorporated in all of Ramsar’s guidance on wetland management planning (notably through Resolution VIII.14 and Ramsar Wise Use Handbook 8), that land uses in and around a wetland must be managed and planned to be consistent with wise use objectives for the wetland.
2. Until recently, however, the equivalent water uses in, upstream of, and downstream of, a wetland have not always been given sufficient attention, and rather have been considered an external driving force more or less beyond the control of wetland managers.

3. Management and development of wetlands must be undertaken within the context of their larger surrounding “waterscape” (the river basin or catchment, including the hydrological processes and functions within the basin or catchment) as well their larger surrounding landscape.
4. It is not sufficient to integrate wetland management objectives into land use management plans; they must also be integrated into water resource management plans. Water-related management objectives for wetlands in a river basin should preferably be “hard-wired” into the business plans and operational plans of the relevant water management agencies, to ensure that wetland objectives are fully realized.
5. The aim should be to match water resources strategies with land use strategies, so that these can be implemented jointly to support the maintenance of healthy, functional wetlands that provide a full range of benefits/services for people (including water supply). Yet land use management and water management are generally the responsibilities of different agencies or authorities, resulting in a lack of alignment of objectives or priorities, which in turn leads to one or other of the land or water aspects of wetlands not being adequately protected or managed.
6. To improve the integration of wetlands into river basin management, attention needs to focus on three major areas of activity, each of which is described further below:
 - i) Communication of policy and operational needs and objectives across different sectors, primarily the water and wetlands sectors;
 - ii) Cooperation between sectors and sectoral institutions, ranging from informal collaboration to formal cooperative governance; and
 - iii) Sequencing and synchronization of planning and management activities in different sectors, including land, water and wetlands.

I.1 Communication between water and wetlands sectors

7. The Ramsar guidance, particularly on river basin management and water allocation and management (Ramsar Wise Use Handbooks 4 and 12) and environmental water requirements (*Ramsar Technical Reports* in prep.), has its origins in the environment/wetlands interest sector. It is aimed at providing supporting material for the Ramsar implementing authorities in each Contracting Party to use in persuading or influencing the water sector to change the way they do, or have done, river basin management so as to better maintain wetland ecosystem benefits/services.
8. However, most wetland managers at site or country level may not be fully familiar with such daily operational practices of river basin management, and so will have difficulty assisting the water managers to integrate the water requirements of wetland ecosystems into water resources planning and to implement these requirements in water management practices.
9. Frequently the two sectors fail to find common ground due, not to a mismatch in values or intentions, but rather to an inability to describe, quantify and communicate interests,

objectives and operational requirements. In order to ensure understanding and foster collaboration and cooperation between sectors, wetland managers and water resource managers must find a common language in which to set shared objectives for water resources and wetlands.

10. Bridging this particular communication gap between sectors often requires specialist communication, education and public awareness (CEPA) efforts at technical and policy levels, in addition to ongoing CEPA initiatives aimed at general awareness amongst the public and broad stakeholder groups.
11. Wetland managers need sufficient understanding of the technical and operational aspects of water resources management to understand:
 - i) first, how to articulate and quantify the requirements of wetland ecosystems in the operational currencies of river basin management; and
 - ii) second, how to work with water managers to develop basin operating rules and flow regimes that represent the optimal allocation of water between multiple uses, including ecosystem maintenance.
12. Similarly, water managers, particularly those working at the river basin scale, require knowledge and quantitative understanding not only of the water resource functions (benefits/services) of wetland ecosystems, and how to deliver the water required to maintain these benefits/services, but also of the operational currencies in which ecosystem water requirements are generally described. The supplemental guidance on environmental water requirements being prepared by the Scientific and Technical Review Panel (STRP) as *Ramsar Technical Reports* provides more detail and examples of these issues.

I.2 Cooperation and cooperative governance between the water and wetlands sectors

13. Providing an enabling environment for collaboration, integration and joint planning between the water and wetlands sectors, and indeed with other sectors such as agriculture and land use, requires attention to the policy and regulatory context in all related sectors.
14. It is not always necessary to review formally and to harmonise policy and legislation across sectors. But at the very least conflicting policy objectives should be resolved and mechanisms provided in the policies and regulations of each sector to allow better integration of decision-making and operational procedures, whether through consultative or statutory processes.
15. Institutional change can also help to improve cooperation and collaboration. River basin organizations can be potential focal points for achieving both the necessary vertical integration from basin level down to site level, as well as the horizontal integration between different agencies, land and water users and interest sectors.
16. However, significant institutional reform or restructuring is not a prerequisite for ensuring effective cross-sectoral cooperation, since much can be achieved through less formal means such as the facilitation of cross-sectoral communication and agreement between different sectors on how overlapping responsibilities will be shared or assigned.

I.3 Upscaling to the basin level – sequencing and synchronisation of planning and implementation activities

17. The move towards the integration of wetlands and wetland water requirements into the water sector has only really begun in most countries since the mid-1990s, although the awareness of the need for this has been growing for a long time in the environment and wetlands communities.
18. Many countries are still grappling with the policy and regulatory reforms needed to recognize ecosystems as legitimate users of water, which is the first step in formalizing the status of wetland ecosystems in water allocation and management.
19. Whilst many countries have achieved good results in integrating wetland management and water resources management at the local, site or sub-basin level, successful upscaling of these approaches to the basin level has generally proved difficult, although not impossible.
20. One of the significant obstacles to successful upscaling is often the lack of attention to wetlands at an early stage in the process of water resources planning at the basin scale. A clear, understandable and sequential process of water resources planning allows much better opportunities for wetland managers to formulate their inputs appropriately and engage with water resource planners and managers.
21. Although there appears to be a general sequence of planning and management activities that can promote effective integration of wetlands into river basin management (as set out in the “Critical Path” approach, described below), the exact sequence is perhaps less important than the fact that there is a formal, organized and transparent process established, with which all relevant sectors can engage.

II. The “Critical Path” approach

22. A generic version of the “Critical Path” is provided in Figure 1, and described in more detail in the following text. For further information, the original version of the Critical Path provides an example of specific details designed to suit the South African situation and is available in Dickens *et al.* (2004)¹.
23. The Critical Path approach to integrating wetlands into river basin management evolved out of many experiences of the bottlenecks and obstacles to implementation of the protection, management and wise use of individual wetlands at site level.
24. Additional experience from implementation of environmental flows concepts and policies has also brought the recognition that there is a certain degree of sequencing required, between planning and management activities at river basin level and between management and user activities at individual wetland or site level. Activities need to be progressively initiated and completed, in time and through scales from basin scale down to site scale, in order to ensure the successful management and wise use of wetlands.

¹ Dickens C., Kotze D., Mashigo S., MacKay H. & Graham M. (2004). *Guidelines for integrating the protection, conservation and management of wetlands into catchment management planning*. Water Research Commission Report Number TT220/03, Pretoria, South Africa. Available on request from the Water Research Commission www.wrc.org.za.

25. These obstacles and issues are common to many countries and many wetland situations. Bottlenecks have often occurred when higher-level water resources planning, management and water allocation issues had not been adequately addressed prior to the design and implementation of wetland management plans. It appears that failure to implement management plans, and thus to achieve wise use objectives for individual wetlands, is often due to the failure to resolve critical bottlenecks in the progression from planning at basin level to implementation at individual wetland level.
26. The Critical Path approach (see Figure 1) provides a “road map” which helps to navigate through:
 - i) progressive planning, survey and decision-making activities related to water resources (Steps 1 to 6);
 - ii) on to implementation of wetland management objectives (Steps 7a and 7b); followed by
 - iii) strategic steps of monitoring, reporting and review of objectives and plans (Steps 8 and 9).
27. The critical path approach is a cyclical one, because it is also an adaptive approach to management: learning and new understanding gained in the first application of the approach should be fed back into improving performance in future application.
28. Ideally, the cycle should be started at the beginning (Step 1) and completed in full and in sequence, but basins and situations are different and flexibility should be promoted. In many cases, water management at basin level and wetland management at site level may have been going on in parallel and more or less independently for a long time and will probably not be synchronized. Hence the most practical approach is to identify where each sector is in their planning management cycle, and start from there in a process of gradual integration and synchronisation.
29. In summary, implementation of wetland management plans will continue to be difficult until broader land use and water resources management plans at river basin level fully integrate the management and wise use objectives for the wetlands in question. This is the primary bottleneck to implementation progress, represented by the hatched arrow in Figure 1. Without this bottleneck being resolved, wetland management plans will tend to repeatedly fail in implementation, or the wetland management objectives may not be fully realized.
30. Ramsar’s COP7 guidance on river basin management (Handbook 4) provides a basis and the necessary tools for resolving the primary and secondary bottlenecks and obstacles to the integration of wetland management into river basin management. This additional guidance provides more detail on sequencing of the activities that use these tools. Figure 1 shows the cross-references from steps in the critical path to existing, more detailed Ramsar guidance.

III. Description of Critical Path activities

31. This section provides an overview of each of the major components of the Critical Path (planning Steps 1 to 6, implementation Steps 7a and 7b, and strategic activities Steps 8 and 9). Some additional detail is then also provided on many of the individual steps.

III.1 The planning phase (Steps 1 to 6)

32. The activities in Steps 1 (policy, regulatory and institutional contexts), 2 (stakeholder participation process), 3 (inventory, assessment and technical studies), 4 (setting priorities) and 5 (setting objectives) are arranged in a general sequence of initiation. However, in practice most of these steps can be undertaken in parallel, as long as all are at an adequate level of completion prior to Step 6 (water and land use management plan for the basin).
33. A bottleneck can occur if the activity of agreeing on, and setting priorities for, wetlands in a basin (Step 4) does not include all the relevant stakeholders, including water and land users, as well as responsible agencies or authorities, in a legitimate decision-making process. Thus it is essential that policy, regulatory and institutional issues be resolved such that the relevant authorities can work together, and that a credible, inclusive stakeholder participation process is well under way (with stakeholders having been helped to understand the relevant technical and strategic issues).
34. Inventories and specialist desk and field studies, covering ecological, hydrological, economic and social aspects (Step 3), can commence at an early stage in the process. However, it should be recognized that the level of detail and resolution required in these studies will be influenced by the process of determining quantitative objectives, which in turn will require a certain degree of numerical confidence, depending on the sensitivity and importance of the wetlands and the associated water resources. Hence there can be some iteration required between Steps 3, 4 and 5.
35. If some or all of Steps 1 to 5 have not been addressed sufficiently before commencing the development of a management plan for the basin in Step 6, then it is likely that wetland requirements, particularly for water quantity and water quality, will not be recognized adequately. The implementation of wetland management plans at site level could then be compromised.
36. This bottleneck can be resolved by returning to undertake Steps 1 to 5 and then coming back to Step 6. However, this does not necessarily mean stopping the whole planning process in order to fill in the missing steps: rather, the missing steps can be addressed by relatively rapid desktop studies or scoping exercises, on the understanding that the necessary detail can and will be provided in the next iteration of the Critical Path cycle.

Step 1: Policy, regulatory and institutional contexts

37. Refer to Ramsar Handbooks 2, 3 and 4 for further detailed guidance.
38. It is generally necessary to ensure that the policy, regulatory and institutional arrangements are supportive of efforts to integrate wetland management into river basin management. Reviewing policy and legislation can be a lengthy process, and although it can be

undertaken in parallel with the other implementation steps 1 to 5, implementation (Steps 7a and 7b) will definitely be compromised if this step is not sufficiently advanced, and preferably substantially completed, by the time implementation begins.

39. A specific bottleneck can occur in relation to the legal status of water allocations and entitlements, since water allocations for wetland ecosystems are unlikely to be implemented until given some status in law, whether this is in statutory or customary law.
40. Complete revision of existing laws and policies is not always necessary, and also can be difficult and very slow if not supported at the political level. It is often sufficient to identify and analyse:
 - i) policies and laws from various national sectors (such as water, agriculture, environment, economic development, social development) that positively support the integration of wetland management with river basin management, and that generally contain shared principles and objectives;
 - ii) policies, laws and regulations from various national sectors that conflict with the objectives of integrating wetland management and wise use into river basin management, and where revision or reform may be necessary; and
 - iii) policies, laws and regulations that can be used for sanctions or enforcement purposes during the implementation phase if necessary, such as pollution prevention, land use planning controls, resource exploitation limitations.
41. Policies and laws can be formal and based in the statutory legal system of a country, or they can be customary and based in particular community systems of practice and law. The principles of identifying the supporting and conflicting elements of policy and law apply equally to statutory as to customary law, although the challenges of integrating statutory and customary systems, and providing for a pluralistic legal environment, can be significant.
42. New institutional arrangements, at international, national or local levels, are likewise sometimes politically difficult to implement from scratch, and it is necessary and generally better to begin working with the existing range of responsible and interested institutions.
43. Memoranda of cooperation, or cooperative policy, can be used to formalize relationships when necessary. As relationships and understanding grow, the structure and function of new institutions that would be more appropriate to the task should emerge, and institutional reform and restructuring will then have more support.

Step 2: Stakeholder participation process

44. Refer to Ramsar Handbooks 2, 3, 4, 5, 6 and 9 for further detailed guidance.
45. Although, for convenience, this is noted as a single discrete step in Figure 1, in fact participation of interested, affected and accountable stakeholders is a process that should continue throughout the cycle of the Critical Path.

46. At different steps, different stakeholders may need to be involved, and the process may take various forms from awareness-raising, through participatory appraisal, consultation, participation and formal negotiation.
47. Participation is included as Step 2 because the participatory process must be designed early in the cycle and properly resourced. Training, as well as the preparation of information and learning materials, may be needed well ahead of the key planning step of setting priorities (Step 4). In addition, it is important to allow enough time to identify all the relevant stakeholders, well before key implementation decisions are taken.

Step 3: Technical studies (inventory, assessment and hydrological function)

48. Refer to Ramsar Handbooks 7, 8, 10 and 12, Resolution IX.1 Annex C i.] and *Ramsar Technical Report* (in prep.) “Reviews of environmental flow methodologies for wetlands” for further detailed guidance.
49. This is a step that can be initiated early in the process, and it can run in parallel with policy and institutional development as well as participatory and consultation efforts. The scope of work and the level of technical detail required for these studies is partly influenced by priority-setting in Step 4; it may be necessary to undertake more detailed or intensive field studies on wetland ecosystems which are considered priorities due to importance or sensitivity. Nevertheless, Step 3 can begin with desktop studies, later progressing to much more detailed field work, according to a fieldwork and measurement programme which is informed by planning priorities.

Step 4: Setting agreed priorities for wetlands in the basin

50. Refer to Ramsar Handbooks 1, 4, 5, 11 and 12 for further detailed guidance.
51. It is vitally important that this step includes all stakeholders, and that it is well structured and formalized, with appropriate records of decision on the relative priorities of all wetlands in the river basin.
52. Some wetlands may be afforded a higher protection status than others, due to their importance in conservation, economic, social or cultural terms, their sensitivity, or the dependence of local populations upon their benefits/services.
53. The List of designated Ramsar sites provides a tool for recognizing and agreeing on wetlands of international importance, which in turn will convey a high protection status in the river basin management plan, but similar tools are needed to recognize wetlands of regional, national or local importance, or those of hydrological importance within a basin. Note also that not all wetlands which qualify as internationally important have as yet been designated by Contracting Parties, and the importance of any such sites not yet designated should also be taken into account.
54. Ensuring that this step is formalized, participatory and well-informed will greatly assist in prioritizing implementation actions later, including the use of financial resources as well as the allocation of water.

Step 5: Setting quantitative management objectives for wetlands in the basin

55. Refer to Ramsar Handbooks 4, 8 and 12, Resolution IX.1 Annex C i.] and *Ramsar Technical Report* (in prep.) “Reviews of environmental flow methodologies for wetlands” for further detailed guidance.
56. This is primarily a scientific task, but it still requires the participation of responsible agencies as well as affected stakeholders.
57. The agreed priorities assigned in Step 5 must be translated into practical, measurable, implementable and enforceable management objectives. These objectives need to then be integrated into the business planning of the responsible land, water and environmental management agencies, as well as into any community or customary use agreements.
58. These objectives also form a very important baseline against which to assess environmental impacts at later stages.

Step 6: Integrated land and water management plan for the basin

59. Refer to Ramsar Handbooks 1, 4, 8, 10 and 12 for further detailed guidance.
60. This is a very important step in the cycle, and one at which it is essential that the different sectoral planning and management processes are synchronized and integrated.
61. Whether this is an initial concept plan (based on desktop studies and containing limited detail) or a comprehensive operational plan for land, water and wetland management in the basin, ideally there should be a formal plan, signed off by all the responsible agencies, and with one agency formally accepting the lead role in implementation.
62. There is no single best way to set out such an integrated plan, and each country or basin should consider what format and structure would be most appropriate for their own situation.

III.2 The implementation phase (Step 7)

Steps 7a and 7b: Parallel and integrated implementation at wetland and basin level

63. Refer to Ramsar Handbooks 4, 8, 11 and 12, Resolution IX.1 Annex C i.] and *Ramsar Technical Report* (in prep.) “Reviews of environmental flow methodologies for wetlands” for further detailed guidance.
64. Countries or basin authorities may have considerable experience in implementing either site-level wetland management plans or basin-level water resource management plans. However, the challenge generally lies in the implementation of these two instruments in parallel, while ensuring integration, consistency and synchronization at particular times and places.
65. Spatial and temporal planning scales are often very different, depending on the sector and the objectives; separate agencies may be responsible for the lead in each case; business planning cycles may not be matched; effective communication channels for data, information, policy and problems may not have been established.

66. Sometimes the problems of working in parallel can be addressed through a joint working group which is fully inclusive of the various agencies and interest groups. This could have the status of, for example, the governing board of a basin authority, or it may be a much less formal working group of technical officials who meet often to discuss and resolve operational problems.
67. Whatever the level at which the joint working group is established, it needs political support from the highest levels of all the organizations and agencies that are members of the working group. If this political support is not forthcoming, then committed technical field officials can often address most operational problems, but their work can be greatly hampered by legal challenges (for example, related to water allocations) and lack of organizational policy guidelines.

III.3 The strategic phase (Steps 8 and 9)

Step 8: Monitoring and reporting at wetland and basin level

68. Refer to Ramsar Handbooks 8 and 10 for further detailed guidance.
69. Sustainable adaptive ecosystem management approaches generally rely on the inclusion of explicit monitoring and reporting steps to close the cycle. This step provides the “glue” which holds the whole Critical Path together. Yet monitoring and reporting activities are often those for which the least time and money is budgeted, and they are often the first to be cut back when budgets are tight.
70. Monitoring programmes need to be designed against the priorities and objectives set in Steps 4 and 5. There is little value in monitoring if the resulting information cannot be used to assess achievement of or progress towards the agreed management objectives for the river basin and for the wetlands within the basin.
71. It is likely that some of the management objectives will be social or economic, related to livelihood protection and enhancement. For these, the monitoring programme will then also need to provide information to track progress on these objectives, as well as on more widely-understood hydrological and ecological objectives. Performance criteria against which to evaluate the progress and management of planning and implementation activities are also necessary.
72. Information on status, trends and progress may need to be packaged in different ways for different audiences such as politicians, agency managers, stakeholders, and community interest groups.

Step 9: Review, reflect and revisit plans and priorities

73. Refer to Ramsar Handbooks 2, 3, 4, 5, 6, 7, 8, 10, 12, Resolution IX.1 Annex C i.] and *Ramsar Technical Report* (in prep.) “Reviews of environmental flow methodologies for wetlands” for further detailed guidance.
74. Like monitoring, this is a critical strategic step whose importance is generally greatly underestimated. There are two levels of review:

- i) At the operational level, monitoring results can feed back very quickly into refined management objectives or remedial actions, without necessarily requiring substantive review of the formal basin and wetland management plans;
 - ii) Formal strategic review of wetland and basin management plans should be conducted on a regular basis (5 to 10 years is an appropriate time period, but it can be matched to business planning cycles). As a result of this review, management priorities and objectives may be substantively revised (rather than just refined) to take account of changing ecological, social or economic conditions.
75. If carried out properly at both operational and strategic levels, this review step closes the Critical Path cycle and ensures effective “learning-by-doing”, which is the foundation principle of adaptive management of ecosystems.

III.4 Crosscutting issues and points to note

76. A number of key issues are not linked to any specific step, but can cause problems anywhere in the Critical Path if they not attended to. These include:
- i) **Ensuring adequate technical, institutional and infrastructural capacity**, in good time to prevent bottlenecks. This includes specialist hydrological and ecological expertise, as well as expertise in policy, legal and institutional matters. Institutional capacity may be needed in the form of budgets, if not actual delegations, secondments or assignments of responsible staff where no institutions at all exist to initiate the process.
 - ii) **The value of sustained, credible leadership**. This often comes down to a single, committed individual with strong leadership skills and the ability to mobilize people into integrated teams. Political leadership of this kind is just as important as the facilitation-style leadership of the person or group who manages to get all the stakeholders, agencies and interested groups to reach consensus at various stages of the process.
 - iii) **Providing a continual flow of information into the process**. Integrated, adaptive approaches, such as the Critical Path approach described here, are being applied in many different situations around the world. Ensuring a continual flow of information on best practices, new developments and new scientific tools and techniques, will improve application “on the ground”.
 - iv) **Ensuring a continual flow of information out of the process**. The importance of communication and awareness initiatives, at various levels from policy and technical through to the general public, cannot be overestimated. A free flow of information, appropriately packaged, greatly reduces resistance to change and helps people to see the benefits of working towards multiple social, environmental and economic objectives in a river basin.

IV. “Start anywhere; just get started”

IV.1 The Critical Path as an analytical tool

77. Although it appears to be a strongly sequential and thus constraining process, in fact the maxim of the Critical Path is “**Start anywhere, just get started**”. The value of applying this approach is that, even when a specific implementation process seems to have broken down completely at wetland level, the Critical Path can be used as an analytical tool to identify gaps, obstacles and bottlenecks related to water or river basin management issues, solve the most acute of these, and hopefully get implementation back on track and progressing again.

IV.2 Key places to resolve bottlenecks

78. If the process seems blocked, perhaps due to inability of stakeholders to agree on priorities, or unwillingness to trade off other values in order to meet wetland needs for water, then two key places to revisit are Steps 2 and 4.
79. In these steps, the legitimacy and feasibility of the priorities for wetlands are decided. If the stakeholder process has not been sufficiently inclusive or participatory, this could lead to perceived failure of the legitimacy of objectives. If the priorities that are set for wetlands in a basin are not practical or feasible, for example in terms of the amount of water that must be released from a dam, then this will probably lead to failure to recognize the wetland objectives and hence failure to implement them.

IV.3 Synchronisation with other sectoral planning and management cycles

80. Deciding where to start is also influenced by the status of the larger water resources and land planning processes which may already be ongoing in a river basin.
81. The Critical Path approach is focused on wetlands and their role in a basin: this wetlands-focused cycle should be recognized as being nested within or closely linked to other planning and management cycles. Understanding the status and progression of these other cycles, particularly the water resources cycle, assists in synchronizing the wetlands cycle with these other cycles and avoiding duplication of work.
82. For example, Step 3 in the Critical Path requires technical studies related to wetlands. If this is carried out at the same time that water managers are undertaking a water resources situation assessment and yield analysis for the basin, much information and data can be shared between the two cycles.
83. Step 4 in the Critical Path for wetlands should ideally be synchronized with the participatory process led by the water sector to decide on water allocation priorities.
84. Specialist CEPA initiatives from the wetlands sector can support the building of links and synchronization between the wetlands Critical Path and other sectoral processes. If the other sectoral processes are not well-structured, then focused CEPA initiatives could help to identify and clarify current processes in other sectors, in order for the wetlands sector to link with them.

85. If the other sectoral processes are well-structured but perhaps well ahead of the wetlands sector planning and management process, then rapid or desktop execution of steps in the Critical Path should be considered in order for the wetlands sector to “catch up” and at least get wetland needs and values on the water agenda in the basin. Critical Path steps can be executed more fully in the second iteration of the cycle.

Figure 1: Generic version of the “Critical Path” approach. Note that stakeholder participation and other CEPA tools should continue throughout the entire cycle.

