WHSRN SITES ASSESSMENT FRAMEWORK
An adaptation of Birdlife's IBA Monitoring Framework and WWF's Tracking Tool for Assessing Management Effectiveness in Wetland Protected Areas

Background document for WHSRN Sites Assessment Tool Version 2.0 (Excel Workbook)

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Chatterjee, A. and J. Pittock. 2005. Assessing Management Effectiveness in Wetland Protected Areas. A Tracking Tool. WWF. (Unpublished draft version)

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SUMMARY

The 64 sites enrolled in the Western Hemisphere Shorebird Reserve Network (WHSRN) are key places for shorebirds, and having their landowners commit to their conservation is a great achievement. Despite their protection though, virtually all sites face problems: from tourism pressures to water scarcity, climate change, invasive species, lack of funds for management and law enforcement; the list is long. Understanding these issues and having a current network-wide picture of the status of the sites is critical for WHSRN to set priorities for conservation action at the hemispheric level, as well as for targeted advocacy and fundraising.

A network-wide assessment demands a systematic approach. In response, WHSRN designed a **Site Assessment Tool** for conservation planning processes both at individual sites as well as network-wide. The site assessment tool has the following main goals:

- Review the state of conservation at WHSRN sites.
- Identify the critical threats at the sites and the conservation actions in need.
- Assess the effectiveness of site management and conservation efforts.
- Help sites engage in adaptive management by identifying priorities for action, information gaps, monitoring needs, and successes and failures in management and conservation actions.
- Provide standardized information for a network-wide analysis of the status of sites for use in priority setting, conservation action planning and advocacy.
- Contribute to wider protected area monitoring schemes, especially the Important Bird Area monitoring in the Americas and the assessment of status of Ramsar Sites.

The **Site Assessment Tool** is an Excel workbook with scorecards that every WHSRN site completes. It uses a qualitative scoring system that integrates a wide range of information. The assessments are meant to be participatory, involving stakeholders interested in the conservation of the site. In that sense, they are an important element for consensus building around the status of each site.

The intention is not to "rank" WHSRN sites; instead, a greater value comes after a second assessment, projected after three years, enables comparisons of progress and change; at this time it becomes a monitoring process of the status of WHSRN sites. The careful balance between thoroughness and ease of use will enable sites to carry out assessments every three years starting in 2006. Individual sites will benefit by having an overview of their situation in the context of the network, being able to draw experiences from fellow sites.

WHSRN's Site Assessment Tool contributes to a critical aspect of conservation science: monitoring the state of protected areas around the world. It incorporates methods developed and employed by IUCN, BirdLife International, TNC and WWF. Our network and site partners provided feedback. It was field-tested and revised in pilot sites at the Copper River Delta, the Upper Bay of Panama, and the Fraser River Estuary. Through partnerships, the assessments will contribute directly to the monitoring of Important Bird Areas (IBAs) in the Americas promoted by BirdLife International and to the evaluation of the status of Ramsar sites, given that many WHSRN sites share these designations as well.

INTRODUCTION

WHSRN is a voluntary, non-regulatory coalition that comprises 64 sites in 8 countries, with more than 200 partner agencies and organizations. Its mission is to conserve shorebird species and their habitats through a network of key sites in the Americas.

Its strategic plan 2004-2008 (WHSRN, 2004) has set forth these objectives:

- Undertaking significant conservation projects for species at greatest risk at sites known to be crucial for the species;
- Ensuring that conservation action is based on the best available science, and building on current information to identify both species and site-based threats as the basis for future action plans;
- Stimulating and supporting informed, interconnected and committed human communities at the sites as the basis for sustained conservation action; and
- Expanding and strengthening the Network, especially in South America, to include as-yet unrecognized and undesignated sites, and to support and enhance the power of partners at all levels to achieve the Network's goals.

Responding to these objectives, WHSRN has begun major endeavors to carry out strategic species and site-based planning for conservation action throughout the Hemisphere. To ensure the completeness of the action plan, it is approached in two ways: site-based and species-based. The former takes advantage of the existing Network of sites in a coordinated and efficient manner; the latter recognizes that for some species of high conservation concern, much needs to be done before site-based conservation can begin. The ultimate goal is to stabilize and rebuild threatened populations.

The site-based approach, which is the focus of this framework, is designed for implementation on the existing WHSRN sites. These have been designated on the grounds of supporting large populations of shorebirds at any given year (above a minimum of 20,000 or 1% of a biogeographic population). At present, the network possesses highly fragmented and at many times outdated information of the different sites, with no systematic analysis of their status. Thus, WHSRN has seen the need of evaluating the environmental status of Network sites using a common approach.

Just like WHSRN, many organizations are developing and implementing frameworks to monitor and evaluate conservation efforts around the world. The effectiveness of protected areas is one of main areas of concern, given that many of these places are losing the values for which they were set aside. The science of these evaluation frameworks is still evolving, being tested and refined in different areas. The **WHSRN Site Assessment Tool** has been therefore built by incorporating approaches constructed by IUCN, BirdLife, TNC and WWF with feedback from our network and site partners; thus contributing to develop this critical aspect of conservation science and monitor the state of protected areas around the world, as well as providing a useful instrument for conservation planning processes of individual sites and the whole network**.**

The Site Assessment Tool is an Excel workbook which every WHSRN site completes. It is based on **BirdLife International's Global Framework for Monitoring Important Bird Areas (IBAs)** (Bennun et al., 2005) and **WWF's Tracking Tool for Assessing Management Effectiveness in Wetland Protected Areas** (Chatterjee and Pittock, 2005), -especially designed for Ramsar sites-, both of which follow the **framework for evaluating management effectiveness of protected areas** from **IUCN's World Commission on Protected Areas (WCPA)** (Hockings et al., 2000). The **Five-S Framework for Site Conservation** by **The Nature Conservancy** (2003) is an important source for some aspects of the assessment as well.

The BirdLife IBA monitoring uses the widely adopted **Pressure-State-Response (PSR)** framework, with a standardized way to assign scores for the status and trends of IBA biodiversity ('state'), threats ('pressure') and conservation actions ('response'). The management effectiveness tracking tool complements this framework by qualifying the many elements of protected area management, categorized by the WCPA framework in criteria of **Context, Planning, Inputs, Processes, Outputs and Outcomes**. The Five-S framework was used as a model for the evaluation of the 'state' component of the assessment through the concepts of **conservation targets** and **ecological integrity**, which permit to qualify the conservation state of sites by **key ecological attributes** important for shorebirds at each site. The **IUCN Authority files for Threats and Conservation Actions** -sets of standard categories used for Red list assessments of threatened species- are used in the assessment, although some additions have been made, mostly from the Conservation Measures Partnership (Salzer et al., 2005) in favor of comprehensiveness. The breadth of the topics covered is large, but such a comprehensive approach is needed to better understand the problems and issues at the site scale and network scale. We have strived to make a balance between the information needs, the simplicity of the tool and the need to avoid duplication of efforts so that the most information is extracted with the least burden on site partners.

Most of the sites in the network have strategies in place for monitoring bird populations, conserving habitat and taking action for conservation. As a coordinating agent for efforts of shorebird conservation in the Americas, WHSRN is well placed to integrate much of this information to carry out analyses that span across several countries. Although the network-wide evaluation with these assessments will be too coarse to replace in-depth site assessments or provide detailed guidelines for adaptive management in particular sites, site managers themselves will find the analysis useful in summarizing the current status of their sites and putting them in context with the rest of the Network.

The reach of the Site Assessments goes beyond the narrow field of WHSRN. We have partnered with Birdlife and work closely with WWF, Ramsar and the protected area agencies of the WHSRN countries to streamline this tool into their planning processes so that it doesn't become an additional load but an opportunity for synergy and collaboration since our conservation goals are similar.

OBJECTIVES

We can list the objectives of the site assessments of WHSRN sites as follows:

- Review the state of conservation of WHSRN sites.
- Identify the critical threats at the sites and the conservation actions in need.
- Assess the effectiveness of site management and conservation efforts.
- Help sites engage in adaptive management by identifying priorities for action, information gaps, monitoring needs, and successes and failures in management and conservation actions.
- Provide standardized information for a network-wide analysis of the status of sites, for use in priority setting, conservation action planning and advocacy.
- Contribute to wider protected area monitoring schemes, especially the Important Bird Area monitoring in the Americas and the assessment of status of Ramsar Sites.

TIMELINE FOR THE WHSRN SITE ASSESSMENTS

1. <u>First round of document review and consultation.</u> *August 2005*. The draft Site Assessment Tool was reviewed internally by WHSRN and externally by several partners

including Birdlife, National Fish & Wildlife Foundation, Manomet Center for Conservation Sciences and site partners undertaking the pilot phase.

2. Pilot assessment of some WHSRN sites. *September-October 2005*. The Copper River Delta, Fraser River Estuary and Upper Bay of Panama WHSRN sites volunteered to implement the Site Assessment Tool and provide feedback on the methodology, reporting issues and problems. The Upper Bay of Panama had its own workshop facilitated by WHSRN in October to complete the Assessment Tool.
3. Site assessment workshop in Panama. *October 2005*. WHSRN site and network partners evaluated the methodology in the light of the feedback received up to then by the pilot sites, the ongoing review of the Birdlife Monitoring Framework and the experience of the participatory workshop for the assessment in the Upper Bay of Panama.
4. Second round of document review. *November 2005 – February 2006.* With the feedback received, the Site Assessment Tool was refined by the WHSRN Executive Office.
5. Presentation of Version 2.0 of the Assessment. *February 2006.* Shorebird Science Conference, Boulder, Colorado. The Assessment Tool was presented to the shorebird research community.
6. Launch to the Network. *March 2006.* The Site Assessment Tool is officially launched to the whole network in English and Spanish versions.
7. Engagement of WHSRN sites to complete assessment. *March 2006 onwards.* The goal is to have 20 sites engaged to complete the assessment by November 2006, with the help and assistance of the WHSRN Executive Office and BirdLife and other network partners.
8. Network Wide Report. *2007.* The WHSRN Executive Office will produce this report.
9. Development of projects and strategies to address priorities. *2007 onwards.* WHSRN and partners will respond strategically to the findings.
10. New round of site assessments. *2009 -2010*

BACKGROUND

Evaluating and monitoring WHSRN sites
WHSRN has been successful at incorporating numerous sites throughout the hemisphere during the last 20 years. Unfortunately, the network has not established a system to keep track of the evolution of sites since they are designated, so the actions of the network at the site level are currently based on fragmentary and/or old information. There have been periodic efforts for gathering new information about the sites, but a more systematic approach is necessary.

In 2002, WHSRN plotted a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) of the sites using the existing information from the site profiles and interviews with site points of contact. This outlined common issues at many sites like problems with aquaculture, drought, urban development, mining and oil exploration. This initial exercise also showed that many of them shared strengths, especially in management, outreach and community involvement.

Today, in order to become more strategic in our actions, garner more support and funding, WHSRN needs to make a current inventory of the status of its sites, and at the same time become more accountable on our performance, both on shorebird conservation and on our contribution to sustainable development. The Site Assessment Tool works in that direction, but its success depends on the involvement of every site in the network. The first round of assessments will encompass the 64 sites of the network and will be finished by 2007. However, most of the added value of the system will come after the second round of assessments is done 3 years after the first one, starting a formal *monitoring* of the status of sites. Then, comparisons between 2 standard sets of data will yield very important information about the status and trends of the sites and the effectiveness of the network. It is clearly a long term process, albeit extremely necessary. Our major contributors and partners emphasize

the need to introduce systems of monitoring and evaluation, so our future proposals for conservation projects will very likely win more support when they can be justified on the basis of evaluation results.

WHSRN has chosen the BirdLife IBA Monitoring Framework as a template for the site assessment system for several reasons. Firstly, all WHSRN sites are Important Bird Areas, or if not yet designated, comply with the criteria to become one. Given the very high number of IBAs and limited capacity of Birdlife partners, it is necessary to start at a small scale. The WHSRN network is a small subset of IBAs which is very useful as a pilot implementation subset for the IBA monitoring. By partnering with Birdlife, WHSRN is avoiding the duplication of efforts and benefiting from the strong institutional support and structure that BirdLife has in the Americas. The data from these assessments will be shared with the World Bird Database for the use of both WHSRN and Birdlife.

Since many WHSRN sites are also Ramsar sites, and given that the Ramsar Convention on Wetlands is also looking at the question of monitoring their status of sites beyond the update of the Ramsar Information Sheet every 6 years, as is the current mechanism; we noted that the Birdlife monitoring framework appears as an important input for Ramsar monitoring requirements, and that that is reflected into a Ramsar resolution (Ramsar, 2005) adopted by the 9th Conference of the Parties, in Uganda in November 2005. Both Birdlife and Ramsar also take into account and incorporate the work of the Convention of Biological Diversity on indicators and monitoring, as well as the work and experience of IUCN-The World Conservation Union, in setting standards for conservation practitioners worldwide.

With regard to Ramsar sites, the World Wide Fund for Nature (WWF) has developed a tool for assessing management effectiveness at wetland protected areas (Chatterjee and Pittock, 2005). The goal of this tool is to measure the effectiveness in management of Ramsar sites in order to learn, adapt and improve management actions. WWF pilot-tested the tool in several Ramsar sites during 2005 with promising results. The tool addresses the issue of management, which is not directly incorporated into the IBA framework of State, Threats and Conservation Actions because IBAs are not necessarily established protected areas. Because all WHSRN sites have some kind of public and private protection at least to some extent, it is pertinent to use this tool to evaluate their management as well.

Another well developed methodology for site conservation planning, the 5-S Framework for Site Conservation by The Nature Conservancy, was used as an important reference for the section analyzing the State of the site, refining the BirdLife Framework for this part of the assessment to make it more apt for sites featuring highly migratory birds such as shorebirds. The 5-S is coherent with the BirdLife monitoring framework albeit fairly complex and elaborate for having it implemented in its entirety at all the network sites.

BirdLife IBA Monitoring in the Americas

The Important Bird Area (IBA) Programme of BirdLife International aims to identify, monitor and protect a global network of IBAs for the conservation of the world's birds and other biodiversity. BirdLife Partners take responsibility for the IBA Programme nationally, with the BirdLife Secretariat taking the lead on international aspects and in some priority non-Partner countries. In many countries the BirdLife Partnership has moved beyond IBA identification to the next stages of the process. These involve conservation advocacy and action to protect these sites in perpetuity.

IBAs are sites of international biodiversity conservation importance, chosen using agreed objective, quantitative and scientifically defensible criteria. As such they form part of the set of key biodiversity areas. IBAs are selected because they hold bird species that are threatened

with extinction or have highly restricted distributions; species assemblages characteristic of particular biomes; or exceptionally large numbers of congregatory bird species.

IBA identification has advanced significantly in the Americas to date, with published directories existing for Argentina, Canada, Mexico, Panama and Peru and largely underway for the United States, whereas there is a partial one for Brazil and none in Suriname – only to review the progress for countries part of the WHSRN network. The data for each IBA are progressively being added to the World Bird Database (WBDB), hosted and maintained by BirdLife, which provides the information management tool through which the BirdLife Partnership manages, analyzes and reports on the breadth of its scientific knowledge - Species, Important Bird Areas (IBAs) and Endemic Bird Areas (EBAs).

Monitoring of IBAs is a part of a broader monitoring strategy by BirdLife which includes monitoring globally threatened birds, and to detect habitat-level changes, of common bird species. IBA monitoring is needed both to assess the effectiveness of conservation measures and to provide an early warning of problems.

The standardized Global IBA Monitoring Framework, in development with the input of many Birdlife partners, addresses Pressures, or threats that a site is facing; State, or the current condition of the site in terms of its ecological values; and Response, in terms of the conservation actions in place or that are needed to respond to the pressures and improve or maintain the state. Implementations of the framework have occurred in Africa, and there is specifically a successful case study from IBAs in Kenya (Otieno et al., 2004).

With the standardized Global Monitoring Framework, it will be possible to yield comparable information about the status of IBAs throughout different geographic regions and should feed directly into national reporting to, for instance, the Conference of Parties of the Convention on Biological Diversity (CBD) or the Ramsar Convention on Wetlands. During the BirdLife Americas Partnership Meeting in Belize City, May 16-20, 2005, partners recognized the importance of monitoring IBAs but recognized the difficulty surrounding the implementation of such a large exercise mainly because of capacity constraints and the sheer number of IBAs in the region. Further discussion on this issue will be carried out by Americas BirdLife Partners in 2006.

The WHSRN Site Assessment Tool has been designed as to incorporate the BirdLife monitoring framework, so that the assessments will be able to feed data for IBA monitoring. WHSRN sites are an ideal subset of IBAs to start these assessments and the IBA monitoring process in the Americas, both for BirdLife and for WHSRN. It will help advance WHSRN's goals of building a stronger network of sites and implementing shorebird conservation actions by using the best available information; while also pioneering a hemispheric initiative whose goal is to cover thousands of IBAs in the Americas.

> **Note 1:** the overlap between WHSRN sites and IBAs is not perfect in many cases, because some sites incorporate more than one IBA, the IBA is larger than the site, or the WHSRN site larger than the IBA. For the WHSRN monitoring however, it will be done at the scale of the WHSRN site. The same is true for Ramsar sites.

The WCPA framework for assessing management effectiveness of protected areas
IUCN's World Commission of Protected Areas developed a framework (Hockings et al., 2000) to provide some overall guidance in the development of assessment systems for protected areas and to encourage basic standards for assessment, reporting and adaptive management, which will ultimately help to improve conservation and management effectiveness of protected areas – both for protected area systems and individual sites. The framework responds to the fact that little is known comparatively about the health and status of many protected areas, yet

many trends suggest that many of these places are in danger of losing the very values for which they were set aside. Other areas exist in paper only, the so- called "paper parks".

The management cycle of protected areas can be separated into different elements, all of which can be the subject of evaluation and monitoring. (Table 1)

Table 1. Framework for assessing management effectiveness of protected areas and protected area systems. (From Hockings et al. 2000)

Elements of evaluation	Context	Planning	Input	Process	Output	Outcome
Explanation	*Where are we now?*	*Where do we want to be?*	*What do we need?*	*How do we go about it?*	*What were the results?*	*What did we achieve?*
	Assessment of importance, threats and policy environment	Assessment of PA design and planning	Assessment of resources needed to carry out management	Assessment of the way in which management is conducted	Assessment of the implementation of management programmes and actions; delivery of products and services	Assessment of the outcomes and the extent to which they achieved objectives
Criteria that are assessed	Significance Threats Vulnerability National context	Protected area legislation and policy Protected area system design Reserve design Management planning	Resourcing of agency Resourcing of site Partners	Suitability of management processes	Results of management actions Services and products	Impacts: effects of management in relation to objectives
Focus of evaluation	Status	Appropriateness	Resources	Efficiency Appropriateness	Effectiveness	Effectiveness Appropriateness

The WCPA Framework distinguishes three different levels of evaluation of these elements depending on circumstances, resources and needs (Hockings et al., 2000):

- Level 1 requires little or no additional data collection but uses readily available data to assess the *context* of the protected area network, or individual site, along with the appropriateness of *planning, inputs* and *processes* of management. Assessment of management processes is often judged against generic criteria that are applicable across a wide variety of protected areas but are not adapted to directly match local circumstances. It may include limited assessment of outputs and outcomes. Assessment relies largely on literature research and the informed opinions of site or system managers and/or independent assessors.

- Level 2 combines the approach taken in Level 1 with some additional monitoring of *outputs* and *outcomes* of management. In addition, the indicators used in making assessments may be adapted to suit local or site specific management standards or circumstances.

- Level 3 places greatest emphasis on monitoring the achievement of management objectives by focusing on *outputs* and *outcomes* while retaining measures of management *context, planning, inputs* and *processes* used in Levels 1 and 2. Level 3 evaluations are directed mainly at the site level.

Where does the WHSRN Site Assessment Tool fit in? Since we are working at a system level, the WHSRN Assessments are placed in Level 1. The Birdlife IBA Monitoring framework focuses on Context and output variables of Condition, threats and conservation actions, whereas the

WWF tracking tool evaluates broadly all the categories from Context to Outcomes with generic criteria. The latter is not a fine-tuned analysis of management of the sites, but provides information that helps put management decisions into context.

The Pressure – State – Response Framework
The Pressure-State-Response (PSR) framework is a widely used framework for environmental assessment. It has been used and adopted by amongst others, the OECD, the Convention of Biological Diversity and by Birdlife International with its monitoring framework. This simple framework merely states that *human activities exert pressures* (such as pollution or land use changes) on the environment, which can *induce changes in the state of the environment* (for example, changes in ambient pollutant levels, habitat diversity, water flows, etc.). *Society then responds* to changes in pressures or state with environmental and economic policies and programs intended to prevent, reduce or mitigate pressures and/or environmental damage. (LEAD, 1999)

The CBD (2003 b) defines the components of PSR as follows:

> (a) **Pressure** includes indirect or direct human-induced pressures that affect biological diversity. Indirect pressures are related to demography, economy, technology, culture and governance. Direct pressures include *inter alia* land use, alien invasive species, climate change, emissions of nutrients and pollutants, fragmentation, exploitative human uses;

> (b) **State** is the abiotic state of soil, air and water, as well as the state of the biological diversity at ecosystem/habitat, species/community and genetic level. State includes ecosystem goods and services, the direct benefits of biodiversity and the societal impacts of biodiversity loss;

> (c) **Responses** are the measures taken to change the state, pressure or use. They include measures to protect and conserve biodiversity *in situ* and *ex situ*. They include measures to promote the equitable sharing of the monetary or non-monetary gains arising from the utilization of genetic resources. Responses also include steps taken to understand the causal chain and to develop data, knowledge, technologies, models, monitoring, human resources, institutions, legislation and budgets required to achieve biodiversity conservation.

Environmental assessment evaluates environmental conditions at a specific point in time, and predicts future changes. It uses available information on historic trends and can look at the present situation on the ground, and the PSR framework is one way to model this situation. (LEAD, 1999). *Monitoring* in turn, is the process of repeated observation, for specified purposes, of one or more elements of the environment, according to prearranged schedules in space and time and using comparable data collection methods. It can be used to assess change in environmental parameters over time. It is important to note that monitoring need not only address the state of the external physical and social environment, but can also focus on the activities and processes of management (Hockings et al., 2000). Monitoring using the PSR framework implies at least two assessments in time.

Monitoring looks for changes in indicators. An indicator quantifies and aggregates data that can be measured and monitored to determine whether change is taking place. But in order to understand the process of change, the indicator needs to help decision makers understand why change is taking place. (LEAD, 1999), Indicators link monitoring, research and policy making. The current state is determined from monitoring, while models of cause-effect relationships provide information on the effectiveness of measures and point towards responses needed. (CBD, 2003b)

There have been further elaborations of the PSR model. One of them is the DPSIR (driver, pressure, state, impact, response) model (LEAD, 1999). This model distinguishes general driving forces (or indirect pressures in the PSR model) from the direct pressures. For example, poverty is a driving force that leads to the pressure of unsustainable harvesting of an *x* resource. It also separates impacts (like reduced water flow) from the state of the environment (water level *x*). Although the DPSIR model is useful for conceptualizing the various parts in the chain of causes, effects and possible responses, the CBD has kept the PSR framework because the DPSIR complicates matters and frequently appears to cause confusion, especially when applied to biotic components. This is because the same factor can relate to different indicator categories and the distinction between driver and pressure indicators as well as that between state and impact can be difficult to establish. For example, biodiversity can be both an aspect of the 'state' of the ecosystem and the 'impact' which policies are intended to address.

The Nature Conservancy (2003) uses the 5-S system for Conservation Area Planning which can be regarded as a variant of the PSR model. The five S's include: *Systems:* the conservation targets occurring at a site, and the natural processes that maintain them; *Stresses:* the types of degradation and impairment afflicting the system(s) at a site; *Sources:* the agents generating the stresses; *Strategies:* the types of conservation activities deployed to abate sources of stress and persistent stresses; and *Success:* measures of biodiversity health and threat abatement at a site. TNC considers practical to distinguish "Stresses" and "Sources of Stress" when analyzing threats in their 5-S model. This is a more rigorous framework than just considering pressures because the stress is the actual ecological force that is affecting the ecosystem (e.g. soil compaction, altered water availability), whereas the source of the stress can be grazing or dam building.

Limitations of the PSR framework
The PSR framework is a simple model of the cause-effect interactions between human or human induced activities in the environment. Its appeal is due to its simplicity and easiness of use. However, one must be conscious of the limitations.

As the CBD (2003b) points out, categories like 'human use', 'benefit sharing' and the 'capacity' required to formulate and implement responses do not fit comfortably into the PSR framework. **Uses** are the various human uses of biodiversity. Some uses are also pressures but others not necessarily so. The PSR framework suggests a prevailing negative connotation of human interventions in the environment, because the model doesn't make a space for positive interventions that are not necessarily responses that abate a threat, but actions that benefit biodiversity per se, like certain agricultural or water management practices.

We realize this drawback when adopting the BirdLife Monitoring Framework, but there was a need to draw a line not to expand the WHSRN site assessments too widely. Nonetheless, some of the missing points are addressed by the Tracking Tool of Management Effectiveness, which looks at the institutional capacity, management processes, communication and participation, amongst other topics not obviously included in the PSR framework.

Even though it is important to distinguish stresses and sources as TNC does with its 5-S framework; for basic site assessment purposes we believe that distinction becomes too complicated, so we opted to trade-off this additional precision for the simpler model of the PSR. This fine tuning is surely necessary at a site level but not necessarily at a network level. Nonetheless, a measure of stress by a given threat is somewhat included in the scoring system for threats with the combination of *extent* and *severity*.

THE SITE ASSESSMENT TOOL: DESIGN AND IMPLEMENTATION

Site assessment schemes, which become monitoring schemes once they are regularly repeated in time, are much more likely to be successful if they are planned systematically. Five questions in sequence need to be taken into consideration:

1. Why evaluate and monitor?
2. What should we evaluate and monitor?
3. How should we evaluate and monitor?
4. Who should evaluate and monitor?
5. What happens next?

All these questions are important, but the first and last generally receive far less attention than the others. Techniques for data collection are well documented, but there is less advice available on how to design the system in the first place and how to use the information collected to achieve real conservation objectives.

This is partly because people often think of assessment and monitoring as just the business of collecting data. In fact, **monitoring is a process and a means to an end—that end, in this case, is better conservation**. It involves the stages of design, data (including collection, storage and interpretation) and application. A good monitoring scheme also has appropriate feedback loops built in at each stage.

Why evaluate and monitor WHSRN sites?
The overall reason for monitoring WHSRN sites is clear. WHSRN sites are internationally important places for shorebird conservation and therefore for biodiversity conservation too. We need to understand what is happening to them and adapt our interventions accordingly to use the limited resources and capacity of the network most effectively.

WHSRN site evaluation and monitoring should happen at each individual site. However, to be fully effective the assessment scheme also needs to be integrated with information at the national, regional and global scales, as well as integrating with the rest of the monitoring for other IBAs.

We monitor WHSRN sites in order to:
• Review changes to the conservation values of the site due to real change or the availability of more information.
• Detect and act on threats in good time. Monitoring data provide ammunition for advocacy and information for designing interventions.
• Assess the effectiveness of conservation efforts. Is investment in conservation actually bringing about an improvement? Are efforts being directed to the most pressing issues, or are they tackling minor problems only? Are 'sustainable use' approaches really proving sustainable?

We understand that site managers and site partners have limited time to carry out site assessments and then monitor change every few years. They would have even less time if disparate requirements come from National Protected Area Agencies, International Conventions like Ramsar, BirdLife and WHSRN all separate. We have borne in mind all through the development of this framework that one of the main issues is feasibility – if it can't get done, it is not the right framework. We have strived to make a balance between the information needs, the existing reporting structures, and the simplicity of the framework; so that we get the most information we need with the least burden on our site partners.

The assessments will benefit individual site partners in many ways. First of all, they will put each site into context with respect to others in the network. The analysis will enhance understanding of the issues each site faces, increase possibilities of information exchange between sites with similar problems and characteristics and raise attention to the main issues the sites report. The assessment can also be a starting point for more detailed evaluations of each site and facilitate the selection of variables and indicators for in-depth monitoring. The assessment is designed to be built upon the consensus of site managers, experts and stakeholders interested in the conservation of the site. This makes its findings strong, reliable and useful as planning instruments. However, the assessment will generally be too coarse to replace other valuable in-depth site evaluations or detailed management plans.

In the assessment tool, site partners need not be wary of reporting problems about the loss of conservation assets in fear of it being "badly ranked", de-listed as a WHSRN site or lowering down of category; the most important thing is for WHSRN to understand what is happening and have the information necessary to help sites and give appropriate feedback to the whole network.

What should we evaluate and monitor?
The conservation of important shorebird populations is a priority for all WHSRN sites. These shorebird populations also enable the site to qualify as an IBA and/or Ramsar site. Therefore we need to understand what is happening to WHSRN sites in relation to those shorebird species **for which it was designated.** This basic point is fundamental, because it defines the conservation targets.

Nonetheless, we recognize that shorebird conservation is usually not the only objective as protected areas for these sites, so given that WHSRN wants to emphasize complementarities and compatibility, the Site Assessment Tool has been designed to be useful for sites besides shorebird conservation. For that reason, the tool goes beyond asking about the state of shorebirds at the site and delves into many other topics related to protected areas.

The structure of the **Site Assessment Tool** can be described as follows: it is an Excel workbook which every WHSRN site completes. There are 5 worksheets (**Protected Area Tracking Tool for Management Effectiveness, State, Threats, Conservation Actions and Basic Info**) to be filled in digital format, plus additional **Introduction**, **Scoring Guidance** and a **Glossary** sections.

The state, threats and conservation actions worksheets measure the three elements of the Pressure-State-Response framework addressed by the IBA monitoring. The tracking tool for management effectiveness in wetland protected areas complements this framework by qualifying the many elements of management of protected areas, categorized by the WCPA framework in criteria of **Context, Planning, Inputs, Processes, Outputs and Outcomes**. As shown in Figure 1, the Tracking Tool for Management Effectiveness covers aspects of state, threats and conservation actions as well, but does not look at them in great detail, only in so far as components of the management of protected areas, whereas the state section details indicators of the condition of the site, the threats section qualifies individual pressures, and the conservation actions section addresses specific strategies and activities geared towards conservation.

Therefore, the Management Effectiveness Tracking Tool is the **Minimum level** of the WHSRN Site Assessments, the least that each site should cover. However, all sites are strongly encouraged to complete the full level of the assessment detailing the State, Threats and Conservation Actions at the site, because these sections provide invaluable insight about the types of pressures affecting the sites, as well as to the interventions that are needed. All these

sections together comprise an excellent overview of the status of sites at the time of the assessment.

The assessment relies on the available information that site partners have at the time and does not require additional information to be collected, precisely because one of its objectives is to find out information gaps for the site. In that sense, it should not constitute an unrealistic or overwhelming task for site partners.

Figure 1. Structure of the WHSRN Site Assessment Tool.
Minimum level: *Tracking Tool for management effectiveness*
Complete Assessment*: Tracking Tool for management effectiveness + State + Threats + Conservation Actions*
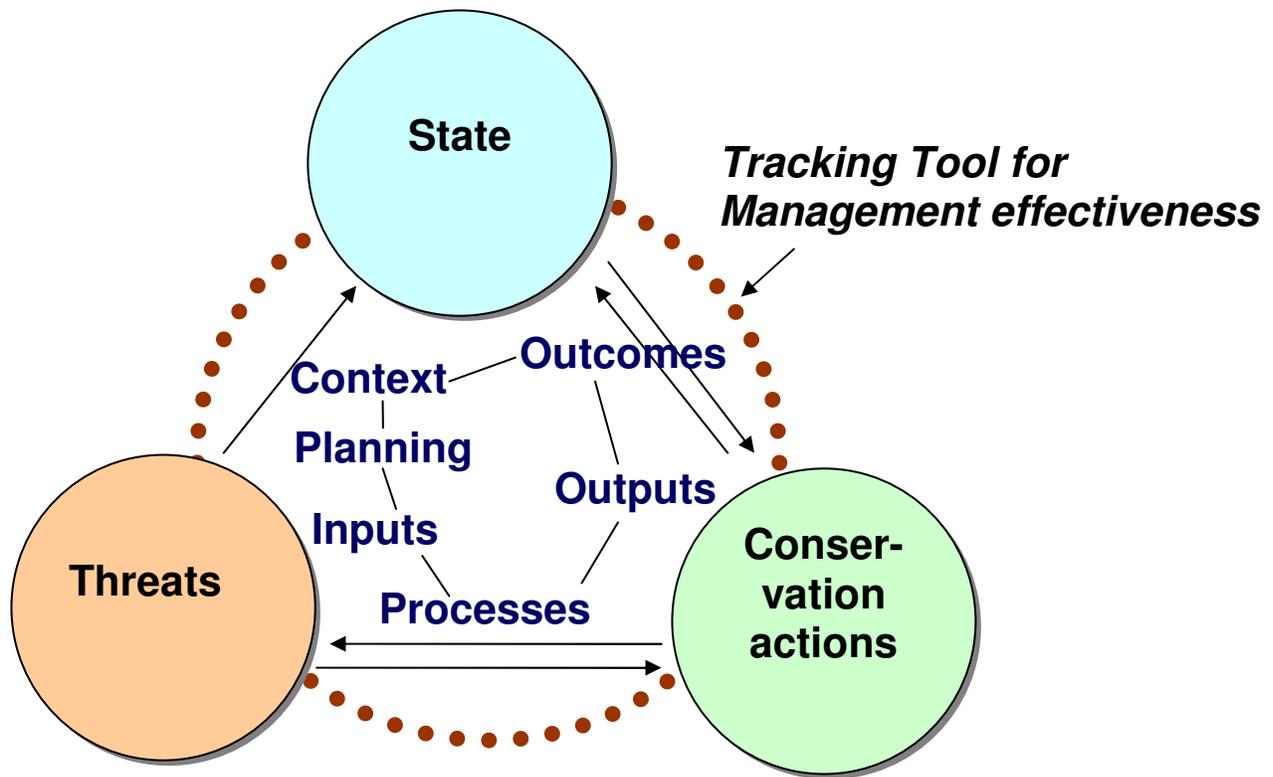
Management effectiveness
The analysis of management effectiveness with the tracking tool covers the full cycle of management from Context to Outcomes, including issues of a) *Design*: covering both the size and shape of individual protected areas and of protected area systems; b) *Appropriateness*: looking at how management is conducted and how well management is responding to challenges, including, for example, aspects of planning, training, social relations and implementation; c) *Delivery*: assessing whether protected areas are achieving their stated aims, both biologically (such as whether key species are surviving, recovering or declining) and socially (such as recreational use or the attitudes of local human communities towards the protected area).

The issue of vulnerability, although not explicit in the PSR framework, is taken into consideration by the Management Effectiveness Tracking Tool, especially in its human dimensions: legal status, boundary demarcation, legal agreements with local communities to use protected area resources, etc. (Hockings et al, 2000). Since WHSRN sites are present in 8 countries, the assessment of the national context is also important for the network, in terms of

the policy environment towards conservation, availability of resources, law enforcement. WHSRN maintained most of the questions in the WWF tool (Chatterjee and Pittock, 2005), and added several other questions to tailor for WHSRN sites.

State

For WHSRN sites, state refers to the condition of the site as ideal for its shorebird populations for which the site qualifies as a WHSRN site.

However, evaluating the state of a site is not such a straight forward exercise, like diagnosing the health of a person is sometimes tricky. To approach it, we use the concept of ecological integrity (Parrish et al., 2003). The ecological integrity of the site can be evaluated through the viability of conservation targets using indicators of Key Ecological Attributes, as it is done within the 5-S Framework for Site Conservation by The Nature Conservancy. (Note 2)

Note 2: Concepts of ecological integrity, conservation targets, viability of conservation targets and Key ecological attributes.

Ecological integrity expresses the degree to which the physical, chemical, and biological components (including composition, structure, and process) of an ecosystem and their relationships are present, functioning, and capable of self-renewal. Ecological integrity implies the presence of appropriate species, populations and communities and the occurrence of ecological processes at appropriate rates and scales as well as the environmental conditions that support these taxa and processes. (Parrish et al., 2003) It is akin to the concept of "ecosystem health". Therefore, an ecosystem is in good state when it has a high ecological integrity.

Conservation targets are a limited number of species, natural communities or entire ecosystems that are chosen to represent the biodiversity of a landscape or protected area. They are usually explicit in protected area objectives, namely the elements of biodiversity that were selected to be conserved by the protected area.

The viability indicates the ability of a conservation target to persist for many generations or over long time periods. It is evaluated by looking at the state of key ecological attributes that are necessary for the conservation target to exist in the first place.

Key Ecological Attributes are pivotal aspects of conservation targets that define their ecological integrity and can be classified as attributes of size (measure of abundance, population or habitat area); condition (measure of composition, structure and biotic interactions); and landscape context (dominant environmental regimes, geographic attributes). (TNC, 2003)

Given that shorebird populations are highly migratory, the data on population counts of shorebirds at a given site might or might not be an indicator of the condition of the site itself, because for instance if populations are declining, this might be due to problems at the shorebird breeding grounds or other stopover sites. Therefore, it is important to allow other indicators to be possible measures of the state of sites as they relate to shorebirds. The 5-S approach is robust in that regard, because it asks for Key Ecological Attributes to be identified for the site; that is to say, attributes that enable conservation targets, in this case shorebirds, to persist at the site. Key Ecological Attributes are varied depending on the case, and they can encompass variables of habitat, general environmental conditions, ecological interactions, availability of resources, among others.

Even though the state of the site will be assessed through shorebirds as conservation targets, it is expected that this acts as an "umbrella" that reflects the overall state of the site. The use of additional conservation targets that are appropriate to complement the shorebird component is encouraged, but not required for the assessment.

Although this approach is a departure from the one used by BirdLife in its monitoring framework in the sense that the state of the site is not measured necessarily by bird populations or habitat area figures, it is consistent with the PSR model and the end results should be comparable as well.

Threats (Pressures)

For the purpose of the WHSRN assessment, the focus of evaluation is on direct threats to WHSRN sites, and not on indirect threats. Threats are scored according to their timing, scope or severity, in relation to how they are likely to affect the ecological integrity of the site in general, with special consideration for the 'trigger' bird species at the site, which for WHSRN sites are shorebirds. Threats dealt here include those that happen inside of the site as well as those located outside but that have an impact on the site (i.e. a dam upstream). Past, present and future threats are included. Natural phenomena that are not directly caused by humans but which act as a pressure to habitat (e.g. increased drought frequency, spreading of disease) are also included as well. For WHSRN analysis, we use the term threat and pressure interchangeably.

The IUCN threats authority file, which has been used for the Red list assessments of threatened species, is used as the set of standard categories, although some additions have been made, mostly from the Conservation Measures Partnership (Salzer et al., 2005b) in favor of comprehensiveness.

The Conservation Measures Partnership (CMP), a joint venture of conservation NGOs and other collaborators that are committed to improving the practice of conservation are developing a new taxonomy of threats, addressing some of the shortcomings of the former related to simplicity, hierarchy, consistency, expandability, comprehensiveness, exclusiveness and scalability. The most current version (Salzer and Salasky, 2005b) shows important developments in threat categorization. Nonetheless, its subcategories have not yet been defined in detail.

Recognizing the important developments that this new taxonomy brings, but also the fact that it is still evolving, for the WHSRN site assessment the IUCN threats file has been slightly adapted adding new categories for threats such as climate change, but its structure hasn't been altered for the sake of maintaining comparability with Red List Assessments. At the time of writing this document, IUCN and CMP are working together on the standardization of a single authority file, for threats, which will be adopted by the WHSRN Site Assessment Tool as soon as it is accepted. WHSRN is participating in the review process of this file.

Many of the categories might not apply to shorebird sites, so only those that affect the site should be scored. Depending on the circumstances and the amount of information available, the threat assessment may be based on:

 - Knowledge about the site (and especially the key habitats on which the 'trigger' species depend) as a whole.
 - Each trigger species assessed individually (then applying the 'weakest link' approach) Note 3.
 - One or more trigger species for which there is good information.

Timing, scope and severity scores are then combined to give an impact score, and these are compared between years to give a trend score for each selected threat. The location is given for reference.

Note 3: The weakest link approach is one used for scoring the Site Assessment Threats section whereby the threat score for a given category is based on the worst case (e.g. the most threatened species or the least intact habitat). This approach is precautionary and gives a simple decision-rule to use when only incomplete information is available.

Conservation Actions (Response)
In the WHSRN context, we would refer interchangeably to Responses or Conservation Actions. Response indicators identify and track conservation actions: for example, changes in legal status; funding of conservation projects or establishment of Site Support Groups (SSGs). For responses, WHSRN uses the IUCN Conservation Actions authority file, which has also been used longstanding for the Red list assessments of threatened species. Some additions have been made, mostly from the Conservation Measures Partnership (Salzer et al., 2005) in favor of comprehensiveness.

Assessors are asked to indicate the conservation actions or measures that are in place or have been recently implemented, and rate its success or effectiveness. In addition, they are asked to indicate the actions that are needed for the site and indicate their priority. In suggesting what actions are needed, assessors are asked to be realistic and not simply select everything. The selection should be for those actions which are most needed and which could realistically be achieved in approximately the next five years.

As with Threats, at the time of writing this document, IUCN and CMP are working together on the standardization of a single authority file for conservation actions, which will be adopted by the WHSRN Site Assessment Tool as soon as it is accepted. WHSRN is participating in the review process of this file.

How are the assessments and monitoring carried out?

Scoring system
The WHSRN Site Assessment Tool uses qualitative assessments. These are standardized into numeric scores. The assessments are broad-based, covering a wide range of issues, but shallow, because they are not covered in depth. For that reason, most of the issues can be assessed through qualitative evaluations. Quantitative indicators are not indispensable in most cases because items are assessed through scorings. However, if they are available, it is worth mentioning them because indicators increase the reliability of the assessment. The value of the qualitative scores is heightened once a second assessment is made and change and progress can be detected easily.

This scoring system allows clear and easily-understood presentation of the results, both site-by-site and between sites, in a similar way for each of Management Effectiveness, Pressure, State and Response. Its simplicity is appropriate for a system that will often be based on qualitative data, and that aims to capture a valid general impression (rather than a precise measurement) of status and trends.

However, the scoring system is not an end in itself in the sense that the intention is not to "rank" WHSRN sites. The scoring system is fraught with difficulties and possibilities for distortion, as for instance in the management effectiveness tool where it assumes that all questions cover issues of equal weight.

The worksheets have been designed so that it is easy to complete them electronically during a workshop while projecting onto a screen; but printing each of them is also possible. **Specific instructions for scoring the worksheets are given in the Site Assessment Tool Excel workbook.**

Resources and frequency
Site assessments and monitoring are worthless unless they produce results that can be interpreted meaningfully. Thus monitoring must be:
• Soundly designed
• Systematic
• Regular (though not necessarily frequent)
• Sustained.

The local resources available for monitoring are scarce, and external project support is rarely available for more than a few years. It is essential therefore that site monitoring schemes operate as inexpensively as possible. In practice, this means making the best possible use of existing personnel, data-collection schemes and co-ordinating mechanisms.

This in turn implies that **monitoring techniques need to be kept simple, robust and cheap**. It is far better to collect basic data reliably over many years than to adopt a more ambitious scheme that soon collapses. We require systems that produce useful data, but avoid unnecessary sophistication. The Site Assessment tool has been designed with those criteria in mind.

As for monitoring frequency, BirdLife suggests an annual or biennial process for IBA monitoring. For WHSRN sites, a 3 year lapse between site assessments is a good balance between the need to keep track of the changes, and the limited capacity that the network has. Therefore, the second round of assessments is scheduled to begin in 2009.

Level of Monitoring
It is important to have a system that allows us to track both the **status** (what the situation is now) and **trend** (how the status has changed since last time), at least at a basic level, of as many sites as possible across the network. At the same time, there will be need for more detailed data collection at particular sites that for various reasons are a focus of attention.
This requires a two-tier framework. The first tier is basic monitoring, taking place across all sites of the network via the Site Assessment Tool. The second tier is detailed monitoring, across a sub-set of sites. BirdLife strongly recommends that initial efforts should be devoted in the short term on setting up and maintaining basic monitoring, with little effort put to initiating detailed monitoring at IBAs where it is not already happening or planned under other programs or schemes, such as those that may take place at WHSRN sites like International Shorebird Surveys, International Waterbird Census, Breeding Bird Surveys, etc. For that reason, this document focuses on the basic tier of monitoring.

Detailed in-depth monitoring will need more precise quantitative indicators for it to yield accurate information. In many cases, WHSRN sites already have some detailed monitoring underway of i.e. bird populations (e.g. Neotropical Waterbird Census, International Shorebird Surveys), water quality, land use change, which are very useful as feedback in the management cycles of those areas. However, only in very few cases do different sites have similar arrays of data that allow comparison and analysis at a network scale. The site assessments will facilitate the task of identifying detailed monitoring needs for all or a subset of WHSRN sites.

Indicators
Indicators are units of information measured over time that document changes in a specific condition. As mentioned, the site assessment tool mostly uses qualitative assessments. Some of them can be considered indicators, although mostly they capture valid general impressions rather than precise measurements, in order to have information available across areas and sites.

However, in the evaluation of the state of the site, sites are requested to identify and give if available indicators about the situation of Key Ecological Attributes. In addition, the analysis of the Site Assessments throughout the sites will highlight those issues that need to be monitored in detail with indicators across a subset of sites, because they are for instance, common pressures WHSRN sites face or Key Ecological Attributes that are relevant but for which there is no data. Therefore, it is a good idea to review the criteria that make indicators useful.

These criteria, specifically for management effectiveness of protected areas have been outlined by Hockings et al (2000).

Indicators to measure management effectiveness should:
- have an unambiguous, predictable and verifiable relationship to the attribute being assessed;
- be sensitive to change in the attribute being assessed;
- integrate environmental effects over time and space (i.e. reflect enduring change rather than short-term or localized fluctuations in conditions);
- reflect changes and processes of significance to management (including biophysical, social, cultural, economic, political and managerial attributes);
- reflect changes at spatial and temporal scales of relevance to management;
- be cost-effective in terms of data collection, analysis and interpretation;
- be simple to measure and interpret;
- be able to be collected, analyzed and reported on in a timely fashion;
- be policy relevant and meaningful;
- have broad acceptance

Good indicators will actually indicate or track something—they will respond clearly to changes. Thus, numbers of recently cut stumps might be a good indicator of logging intensity (a 'pressure' variable) in a forest; mean monthly rainfall probably would not. An indicator should also be linked clearly to the conservation management goals for the site. For example, it might not be useful to monitor the amount of dry grassland within a site that is reverting to scrub if the species for which the site is important live only in wetlands.

As another example, the threat of recreational disturbance could appear in the site assessment tool as pervasive in many WHSRN sites, so this would warrant the need of quantitative indicators from further in-depth monitoring showing the levels of disturbance. But this can be measured in many different ways: visitor numbers, visitor density, number of bird flights in response to disturbance, energy consumed by shorebirds on those flights… The selection of the most adequate indicator demands careful evaluation.

For further detailed monitoring, it must be possible to collect information for the indicator within the likely constraints of capacity and resources. Many monitoring schemes are over-ambitious, designing indicators that are informative but that also require expensive and time-consuming data collection. Such schemes simply do not work. Finding indicators that fulfil all these requirements is not always easy.

Who carries out the assessments?

Participatory approach
The assessments are built on the principle that site monitoring and evaluation is participatory, so the assessment should involve stakeholders interested in the conservation of the site, from scientists to managers to local authorities and communities. The end goal is to build consensus around the answers and the scoring and arrive at a final accepted version. If the assessments and future monitoring are 'institutionalized' within these organisations, so that it becomes part of their routine work, then direct costs can be kept relatively low.

The WHSRN points of contact for every site are asked to coordinate the synthesis of information and the completion of the Site Assessment Tool, which can be carried out in several ways.

- A whole-day workshop (8 hours estimated time to complete the workbook) where different participants (site managers and stakeholders interested in the conservation of the site) aided by a facilitator discuss and agree on the answers. This is a useful format for sites that do not have a wealth of information to begin with, so the assessment can serve as a knowledge inventory as well.
- Several experts carry out an information review and fill out the assessment independently. These individual assessments are later compiled and the result is validated by a larger group of stakeholders during a workshop, or electronically if unable to meet. This is a useful format for sites that already have a large amount of information, where it is more effective for a small group of people to review the existing information at first and reflect it on the assessment.
- A variation of the latter, where several experts convene in a workshop and fill out the assessment as a group. This is later validated by a larger group of stakeholders in a larger workshop. This option is recommendable when experts themselves can easily convene physically.
- The assessment is filled by the site manager/site point of contact independently and then it is validated by stakeholders. This is the least desirable of the options because it is the least participatory.

In any case, workshops need a facilitator who is familiar with the content of the Site Assessment Tool and can lead the participants through it. The facilitator can be the WHSRN Site Point of Contact. The WHSRN site point of contact is free to choose the people who are to fill out the assessments and participate in the workshop, but careful thought should be given to select a representative group of stakeholders interested in the conservation of the site.

The benefits of a participatory approach to Site Assessments are numerous, as pointed out by WWF in its Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) Methodology (Ervin, 2003), also adopted from the WCPA framework:

- It is likely to generate more accurate and thorough data
- It is likely to have more acceptance by site managers
- Allows greater stakeholder participation
- Participants can negotiate a common interpretation of each question, providing a more consistent and standardized approach to the questionnaire
- Builds and validates participation in management, sense of ownership, sense of responsibility for the site.
- Builds trust providing a means for feedback and encouragement
- Creates new skills and disseminates information.
- Encourages organizations to 'buy in' to the monitoring process and be prepared to institutionalize it.

Some sites might be concerned about the confidentiality or sensitivity of some of the information they provide. Site points of contact are requested to voice any such concerns in the assessment form so that WHSRN takes the necessary precautions with the use of that information.

Assistance to sites
The WHSRN Executive Office has a limited level of assistance available to enable sites to carry out their assessments. On the other hand, BirdLife Partners (National Audubon Society, Bird Studies Canada, Nature Canada) are also committed to collaborate in the process at national

levels, as well as the U.S. Fish and Wildlife Service in individual refuges and other government partners.

In order to facilitate the completion of the assessment, the WHSRN Executive Office will "pre-fill" it in for each site with the existing data available from 3 authoritative sources: WHSRN site profiles, IBA Fact sheets and Ramsar Information Sheets.

Box 1. Roles for key players involved in WHSRN site assessments and monitoring
Site level
WHSRN Site point of contact (Local or National Government agency field/site staff, NGO)
- Coordinate assessment and necessary workshops with experts and stakeholders
- Gather existing data and participate in completion of the assessment
- Return monitoring forms to WHSRN Executive Office
- Take and promote action based on results

Researchers involved at the site, other field/site staff, Site Support Groups, volunteers and stakeholders
- Gather existing data
- Participate in the completion of the assessment
- Take action based on results

National level
Birdlife IBA coordinators and Government partners (USFWS -USA, CONANP -Mexico, CWS -Canada, ANAM-Panama, Suriname Forest Service-Suriname, Secretaría de Medio Ambiente –Argentina, CEMAVE - Brazil)
- Liaise with WHSRN Executive Office and WHSRN sites
- Provide guidance for use of the methodology to national site partners
- Promote the institutionalization of WHSRN site assessments within the national framework

International Level
WHSRN Executive Office
- Design site assessment tool for WHSRN sites with an appropriate review and pilot process.
- Provide training and guidance for use of the methodology to national partners
- Launch the initiative to the whole network
- Liaise with BirdLife and government partners and Site Points of Contact to coordinate assessments.
- Store data into WHSRN database and link to World Bird Database (BirdLife), Ramsar and Government partners.
- Analyze the data, produce reports and executive summary
- Disseminate the findings.

BirdLife Secretariat
- Incorporate data for Important Bird Areas into Continental and Global Assessments.

What happens next?
The WHSRN Executive Office will carry out the analysis of the assessments and produce a detailed report including a clear list of actions and recommendations for distribution within the network and site partners, as well as an executive summary targeted to the wider public and decision makers, strengthening international advocacy and fundraising work.

Data relevant to the IBA monitoring will be fed into the World Bird Database maintained by BirdLife. The results would also most certainly be facilitated to the national protected area agencies responsible for the sites, as well as to the Ramsar Convention, for those WHSRN sites that are Ramsar sites

For WHSRN, the analysis will provide input to other WSHRN initiatives like the Species Action Plans, help with advocacy and projects to address common issues of concern at many sites,

exchange of best management practices between sites, communication and public awareness initiatives, among others.

The network-wide report will put the sites into context and answer interesting questions like: Do other sites share this similar problem? What is going on at the sites with which ours shares species? Can we relate some decline in shorebird populations to problems at another site? Are there ideas about conservation actions to be tried? Are there geographic patterns evident? Are there innovative institutional approaches tried in other sites that we could learn from? This information can be fed back for better management on the ground.

Birdlife International will use the data, which will be mostly fed into the World Bird Database, for their own regional and global analysis of the status and trends of IBAs, which in turn helps international-level advocacy to stimulate conservation action. The impacts of economic and environmental policies that affect more than one IBA could eventually be assessed, and presumably, data will be also used for Red List assessments of threatened birds. A regular IBA status report is a very useful product for national advocacy by BirdLife Partners, as can be seen with the Kenya IBA report on status and trends for 2004 (Otieno et al., 2004).

Since this will be the first application of the Site Assessment and the Birdlife framework in the Americas, changes are very likely to be suggested for the next round of assessment of WHSRN sites. Lessons will be learned about what approaches work best for monitoring and conserving sites across the world. These lessons need to be documented, analyzed, interpreted and published – and fed back into strategies for site conservation.

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ANNEX
WHSRN Site Assessment Workbook. *EXCEL FILE.*
Worksheets include:
- *Instructions*
- *Scoring Guidance*
- *Management Effectiveness*
- *State*
- *Threats*
- *Conservation Actions*
- *Basic Information*
- *Glossary*