



**KENYA LAKES SYSTEM IN THE GREAT RIFT VALLEY (ELMENTEITA, NAKURU AND BOGORIA) –
WORLD HERITAGE SITE**

Assessment of management effectiveness using the Enhancing Our Heritage Toolkit

The Africa Nature Program support from IUCN, AWHF and UNESCO

Compiled by staff and stakeholders based at

Lake Bogoria National Reserve

Lake Nakuru National Park

Lake Elmenteita National wildlife Sanctuary

April 2014

INTRODUCTION

State Party: Republic of Kenya

State, Province or Region: Rift Valley Province

Name of Property: Kenya Lakes System in the Great Rift Valley

Geographical Coordinates to the Nearest Second

Ref. No	Name	Location or Municipality	Coordinates of centre point
001	Lake Elementaita	Gilgil	36° 14' 23.92" E 0° 26' 33.47" S
002	Lake Nakuru	Nakuru	36° 05' 7.96" E 0° 21' 32.48" S
003	Lake Bogoria	Baringo/ Koibatek	36° 05' 51.82" E 0° 15' 30.12" N

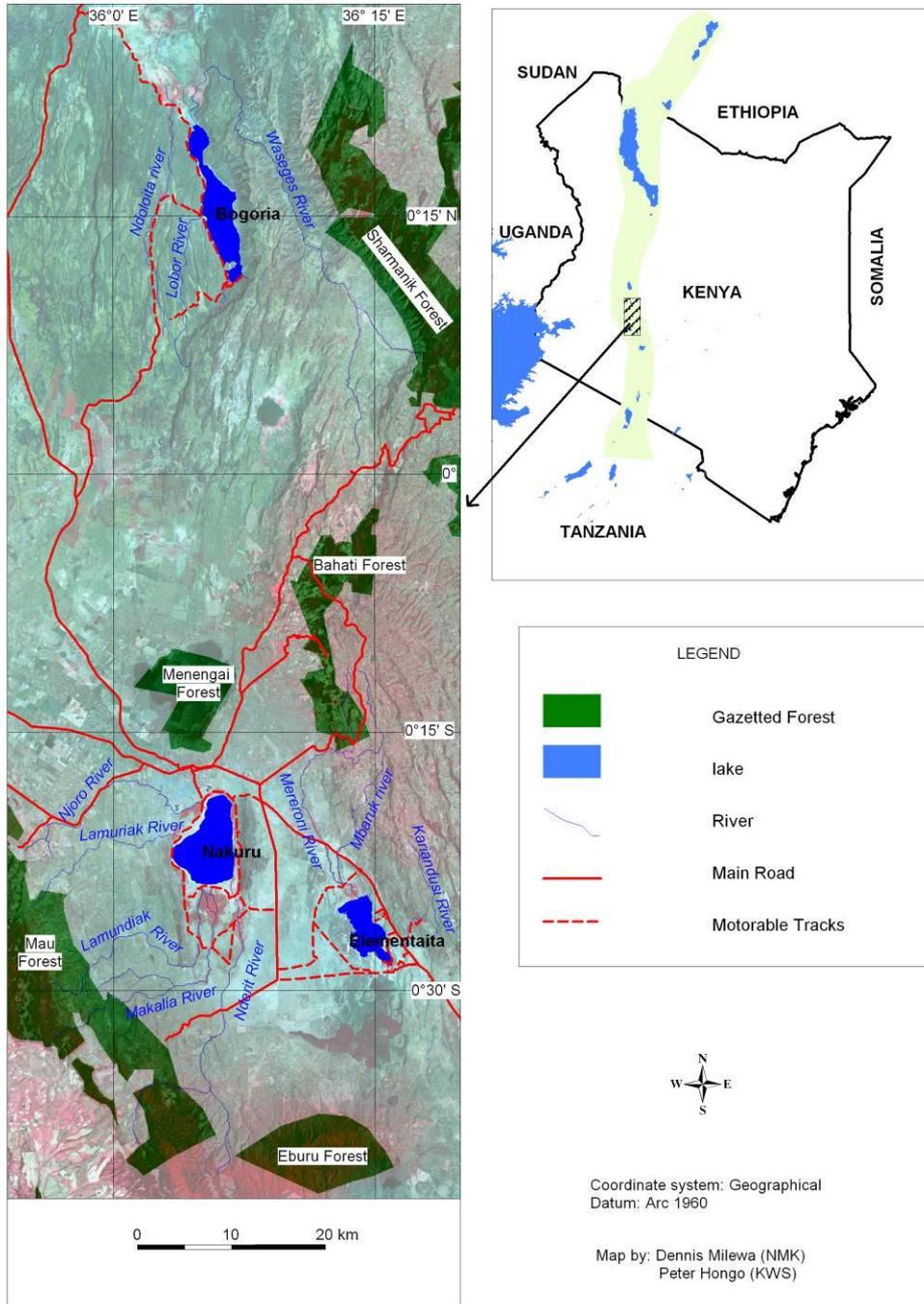
Lake Elementaita 001: Lake Elementaita Wildlife Sanctuary encompasses the whole of Lake Elementaita and its riparian land. Lake Elementaita lies on the floor of the Rift Valley at 1,776 m above sea level, in central part of Kenya some 20 km south-east of Nakuru Town. There are highlands in its 630 km² basin of internal drainage that reach 2,668 m above sea level. At its southern end, it is fed by the Kariandusi hot springs and two small streams, the Mereroni and Kariandusi, flowing from the eastern plateau. Dramatic rocky faults, volcanic outcrops and cones characterize the surrounding landscape, including the 'Sleeping Warrior' and what is commonly referred to as Delamere's Nose or the 'Horse Shoe Crater'. To the east, the lake is flanked by small-scale agricultural holdings, while two large wildlife conservancies namely Ututu and Soysambu surround the remainder of the lake.

Lake Nakuru 002: Lake Nakuru is a shallow alkaline lake on the floor of the Great Rift Valley on the edge of Nakuru town and about 160 Km from Nairobi. The lake, which is in the middle of the park, is highly alkaline and shallow with a maximum depth of 3 metres. The elevation of Lake Nakuru National Park ranges from 1,760 to 2,080 m

above sea level. The lake is surrounded by escarpments including Mau ranges to the West, Eburru to the South, Bahati Escarpment to the North-East and Menengai crater to the North. There exist high elevation points from which viewpoints have been established. These include: Lion hill, Baboon Cliffs and Out of Africa view points.

Lake Bogoria 003: Lake Bogoria, the deepest of the three lakes is a narrow, alkaline lake on the Great Rift Valley floor. It is 17 km long, has a maximum width of 4 km and a maximum depth of 14 meters. The lake is bordered by the Siracho escarpment to the east while on the relatively flat western shore is a series of spectacular hot springs and geysers. The lake covers an area of 3,800 ha and combined with the reserve, covers an area of 10,700 hectares. The lake's catchment area covers 93,000 hectares. Its surface recharge is from Sandai-Waseges, Lobo and Emsos River. There are however other minor perennial springs that discharge fresh water into the lake. The hot springs and geysers found on the shores supplement water recharge for the lake. The lake's level fluctuates between 11 and 14 metres

Map of the Kenya Lakes System



Justification Statement of Outstanding Universal Value

The Kenya Lakes System (Elementaita, Nakuru and Bogoria) are located within the EARS which is a continental-scale tectonic structure that has evolved through earth history to the present scenic and architectural beauty of the geomorphological features. It is characterized by steep fault scarps, deep gorges, step-faulted blocks, cinder cones and craters on the rift floor, horst and graben structures, ramp, box faults, gushing geysers and hot springs.

The extensive rift system running north-south with several lakes has established migratory habitats. The three lakes are hydrologically and hydrogeologically connected as opposed to most other lakes worldwide, and are essential to the hydrological cycle that contributes to geothermal energy. Heated geothermal waters contribute to the lake waters and result in very unique aquatic habitats that support unique assemblages of planktonic and benthic flora and fauna.

The East African Rift Valley System (EARS) is characterized by scenic beauty of the geomorphology: steep fault scarps, deep gorges, step-faulted blocks, cinder cones and craters on the rift floor, horst and graben structures, ramp and box faults and hot springs. Lake Bogoria has the highest concentration of geysers in Africa. The EARS acts as sedimentary traps vital for preservation and conservation of fossils and it provides a rich natural archive for palaeoanthropology (hominin and other faunal materials and artefacts) and palaeoecological study that has only begun to be explored. Lakes Elementaita, Nakuru and Bogoria are part of a system of lakes in the Eastern Rift Valley System that have a unique volcanic landscape, and share common geological history, hydrological processes and associated ecological features.

These factors and associated features combine to create diverse habitats and opportunities for conservation of globally significant biodiversity. The biodiversity includes diverse fauna and flora that is endemic, congregatory, range-restricted, biome-restricted and globally threatened.

Bird Conservation

Congregations:

The proposed Kenya Lakes System property sustains 75% of the globally significant threatened population of the Near-threatened Lesser Flamingo (*Phoeniconaias minor*).

This exceeds the 1% global threshold for congregations. This makes the Kenya Lakes System a critical site for the conservation of Lesser Flamingos in the world. The lakes also host globally significant populations of 11 congregatory waterbird species that meet or exceed the 1% global thresholds. These globally significant congregations of birds constitute a world heritage and therefore require international cooperation in conservation. Lake Elementaita, one of the sites within the Kenya Lakes System supports one of the major breeding colonies of the Great White Pelicans (*Pelecanus onocrotalus*) in the world.

Globally threatened bird species:

The network of sites support 11 globally threatened bird species and 8 Regionally-threatened bird species. The presence of these species requires strategic international cooperation for effective monitoring, management and conservation.

African-Eurasian Migratory flyway

The network of sites serves as stop-over, wintering and summering sites for millions of over 100 species of migratory water birds, soaring birds and other terrestrial bird species that use the Great Rift Valley flyway. The migratory birds originate from Europe and northern Asia as well as other parts of Africa.

International cooperation

The presence of these migratory birds provides a unique opportunity for the protection and long-term monitoring of population changes in relation to changes in local habitat conditions and effects of global climate change. It also offers a unique opportunity for north-south cooperation and collaborative management within the framework of African-Eurasian Waterbird Agreement, which is one of the agreements under the Bonn Convention (Convention on Migratory Species), as well as other Multilateral Environmental Agreements.

Mammals and other species

The network of the proposed Kenya Lakes System constitutes the most significant natural habitats for *in-situ* conservation of globally and regionally threatened mammal species. These include the Critically Endangered Black Rhino *Diceros bicornis* and Near-threatened White Rhino *Ceratotherium simum*, the Endangered African Wild Dog,

Lycaon pictus, the Vulnerable Lion *Panthera leo*, the Vulnerable Cheetah, *Acinonyx jubatus* and the Near-threatened Leopard, *Panthera pardus*. The terrestrial habitat of one of the sites, Lake Elementaita supports the endemic Kenyan Horned Viper (*Bitis worthingtonii*).

Wetlands of national, regional and international recognition

The three sites are protected under the Kenyan national legislation as biodiversity conservation areas. They have also been designated as Important Bird Areas by BirdLife International and also constitute wetlands of regional and international significance as recognized under the Ramsar Convention.

Criteria under which property is nominated:

Criteria met vii, ix, and x

Criterion vii:

The Kenya Lakes System combines geological and biological processes of exceptional natural beauty that is un-matched anywhere else. The birds that congregate in millions on the shores of the lake with their pink flamingo colour and with the backdrop of faulted scarps hot springs and geysers are a combination of what can only be described as phenomenal described by a famous ornithologist Sir Peter Scott as “A sight of incredible beauty and interest and there can be no more remarkable ornithological spectacle in the world”; and the abundant terrestrial plants and animal species that abound with the animals roaming the adjacent grounds provide a natural setting of superlative natural phenomenon.

Criterion ix:

The three lakes are outstanding examples representing ongoing ecological and biological processes in the evolution and development of saline lake ecosystems and communities of plants and animals. Bird migration phenomenon is a historical, biological and ecological process that are represent adaptation of birds to seasonal changes in the environment as well as breeding cycles. The systematic annual and seasonal migration processes provide us with an evolutionary window to understand the evolution of adaptations by species for survival under extreme and variable

environments. The East African flamingo populations have been observed to fly within the Rift valley lakes in Kenya and Tanzania breeding and foraging. Breeding attempts by the Lesser Flamingos have been recorded in the three lakes although they are known to breed in Lake Natron in Tanzania. There is frequent movement of flamingos between the Kenya Lakes System.

The lakes are rich in birdlife with 373, 400 and 450 species recorded for lakes Bogoria, Elementaita and Nakuru respectively. Lake Elementaita is a key breeding site of the Great White Pelican population. Up to 8,000 pairs of Great White Pelican have bred there when the water levels are high and the rocky outcrops in the eastern sector are flooded to form islets on which the birds can safely nest.

Criterion x:

The Kenya Lakes System constitute most important and significant natural habitats for in-situ conservation of biological diversity including globally and regionally threatened species of outstanding universal value from the point of view of science and conservation. The proposed Kenya Lakes System Property is a key feeding ground for the itinerant Rift Valley congregations of the Near-threatened Lesser Flamingo (*Phoeniconaias minor*). It sustains 75% of the globally threatened Lesser Flamingo population. Spectacular congregations estimated at between 1.5 and 2 million Lesser Flamingos occur at times, together with several hundred thousand of other congregatory waterbird species. The sites support several thousands of large congregations of Palaearctic migrants that winter or stop over in Kenya. Over 100 migratory species use the lakes system during their annual complex pattern of movement between Europe, northern Asia and Africa. The property is a key habitat in the Eastern Rift Valley migratory flyway and in recognition of this critical role they play, the respective lakes have been designated as Important Bird Areas by BirdLife International.

Globally threatened bird species found within the Kenya Lakes System include, the Lesser flamingo (Near-threatened), Lesser Kestrel, *Falco naumanni* (Vulnerable), Pallid Harrier, *Circus macrourus* (Near-Threatened), Maccoa Duck *Oxyura maccoa* (Near-Threatened), White-headed Vulture *Trigonoceps occipitalis* (Vulnerable), and Martial Eagle *Polemaetus bellicosus* (Near-Threatened), the vagrant Greater Spotted Eagle, *Aquila clanga* (Vulnerable), the Grey-crested Helmet-shrike, *Prionops poliophus* (Near-

Threatened), Jackson's Widowbird, *Euplectes jacksoni* (Near-threatened), Madagascar Pond Heron, *Ardeola ralloides* (Endangered) and the Grey-crowned Crane, *Balearica regulorum* (Vulnerable). Over 450 species of birds have been recorded at the proposed Kenya Lakes System Property.

The presence of diverse aquatic communities of microflora including *Spirulina platensis* and *Arthrospira fusiformis* provide stable food base for the Lesser Flamingo population. They are an important component of the food chain and the overall ecology of the East African alkaline lakes system. The extremophile bacteria found within the Kenya Lakes System has immense potential for the development of pharmaceutical products among other products needed for socio-economic development.

The terrestrial zone supports significant populations of threatened mammal species. These include the Black Rhino *Diceros bicornis* (Critically Endangered), and White Rhino *Ceratotherium simum* (Near-threatened), the African Wild dog, *Lycaon pictus* (Endangered), Lion, *Panthera leo* (Vulnerable), Cheetah, *Acinonyx jubatus* (Vulnerable) and Leopard, *Panthera pardus* (Near-threatened). The Kenyan Horned Viper (*Bitis worthingtonii*), which is endemic to the central Rift Valley is found within the Lake Elementaita terrestrial habitat.

The globally important concentrations of residents and migratory bird species, the presence of globally threatened and endemic species is a clear indication of the international significance of the proposed Kenya Lakes System property. These concentrations of waterbirds and the presence of globally threatened species contribute to the scenic beauty of the landscape, unmatched anywhere else.

Worksheet 1a: Identifying major site values and objectives

Value subheadings	Major site values	Is this a World Heritage value? (list World Heritage criteria numbers)	Information sources used for determining the values
<p>Values can be broken down into subgroups as suggested below. Some assessments can be carried out using these groupings</p>	<p>List major values here. There are many specific values present in world Heritage sites. It is not possible to manage each value separately. Instead, group these into a few major values that can help focus management efforts (see examples in the guidance notes)</p>	<p>Note here if a particular value is also officially recognized in the World Heritage nomination document and identifies the relevant World Heritage criterion. There are 10 criteria in the World Heritage Operational Guidelines used as a basis for World Heritage listing. World Heritage properties will be listed on the basis of one or more of these criteria</p>	<p>List all information sources such as the park gazettal notice, world Heritage nomination document, park management plan, research reports etc used in identifying major values</p>
<p>1. Biodiversity values</p>	<p>Bird Life Migratory and globally threatened species like the near-threatened Lesser Flamingo (<i>Phoeniconaias minor</i>) Lesser Kestrel, <i>Falco naumanni</i> (Vulnerable), Pallid Harrier, <i>Circus macrourus</i> (Near-Threatened), Maccoa Duck <i>Oxyura maccoa</i> (Near-Threatened), White-headed Vulture <i>Trigonoceps occipitalis</i> (Vulnerable), and Martial Eagle <i>Polemaetus bellicosus</i> (Near-Threatened), the vagrant Greater Spotted Eagle, <i>Aquila clanga</i> (Vulnerable), the Grey-crested Helmet-shrike, <i>Prionops polioloophus</i> (Near-Threatened), Jackson’s Widowbird, <i>Euplectes jacksoni</i> (Near-threatened), Madagascar Pond Heron, <i>Ardeola ralloides</i> (Endangered), the Endangered Grey-crowned Crane, <i>Balearica regulorum</i> (Vulnerable) and Great White Pelicans (<i>Pelecanus onocrotalus</i>)</p>	<p>Yes Criterion X</p>	<p>Nomination document, Water bird census reports, Ramsar nomination document, GMP, research reports</p>

	<p>Mammals Globally threatened species Black Rhino <i>Diceros bicornis</i> (Critically Endangered), and White Rhino <i>Ceratotherium simum</i> (Near-threatened), the African Wild dog, <i>Lycaon pictus</i> (Endangered), Lion, <i>Panthera leo</i> (Vulnerable), Cheetah, <i>Acinonyx jubatus</i> (Vulnerable) and Leopard, <i>Panthera pardus</i> (Near-threatened).</p> <p>The Greater Kudu and the Rothschild's Giraffe</p>	<p>Yes Criterion X</p> <p>No, the Giraffe and Greater Kudu are not WHS values</p>	<p>Nomination document, Mammal census reports, GMP, research reports</p> <p>GMP, Site management, Mammal census reports, research reports</p>
	<p>Reptile life Kenyan Horned Viper (<i>Bitis worthingtonii</i>), which is endemic to the central Rift Valley is found within the Lake Elmenteita terrestrial habitat</p>	<p>Yes Criterion X</p>	<p>Nomination Document, GMP, Research reports</p>
	<p>Plant life diverse aquatic communities of microflora including <i>Arthrospira fusiformis</i></p>	<p>Yes Criterion X</p>	<p>Nomination Document, GMP, Research papers,</p>
	<p>Good representation of the Euphobia forest community in Elmenteita and Nakuru that is one of the key habitats for wildlife and birds</p>	<p>No</p>	<p>GMPs, Site Management</p>
2. Other natural values	<p>Outstanding examples representing ongoing ecological and biological processes in the evolution and development of saline lake ecosystems and communities of plants and animals. Bird migration phenomenon is a historical, biological and ecological process that represent adaptation of birds to seasonal changes in the environment as well as breeding cycles.</p>	<p>Yes Criterion IX</p>	<p>Nomination Document, GMPs, Research papers,</p>
	<p>Key habitat in the Eastern Rift Valley as a migratory flyway for bird life from within Kenya, other parts of Africa and Eurasia. Key breeding site globally of the Great White Pelican and other species</p>	<p>Yes Criteria IX and X</p>	<p>Nomination document, research documents, GMPs</p>

	and has been inscribed as one of the Important Bird Ares due to this key role it plays		
	Geological and biological processes of exceptional natural beauty (landscape beauty and the sights of a congregation of the red lesser flamingo) Part of the Great East African Rift valley ecosystem with backdrop of faulted scarps, deep gorges, step-faulted blocks, cinder cones and craters on the rift floor, horst and graben structures, ramp, box faults, gushing geysers and hot springs offer a combination of what can only be described as a phenomenon of natural beauty.	Yes Criteria Vii,	Nomination document, research documents, GMPs
3. Cultural values	Cultural artefacts at lake Bogoria – Cultural ritual ceremonies sites near the Hot springs. The site is associated with the prehistoric people and the Sirikwa culture, and is a cradle of mankind	No,	Site Management, GMP
4. Economic values	Centre for tourism attraction and revenue generation for both the Kanyan Government, private sector and the Local community. Communities use Lake Elmenteita for salt extraction for subsistence purposes, Salt licks at lake Bogoria are a source of minerals for community livestock. Also communities around Lake Bogoria use the park for bee keeping and hence honey harvesting. All the lake sites are a source of employment and income to the communities that live next to them	No	Site Management, GMP, Management reports, Kenya Tourism Federation Publications,
5. Educational values	Opportunity for research for students and scientists at higher institutions of learning Universities at both national and international levels. Centre for lower school group tours.	No	Research papers, GMP
6. Other social values	Association of the communities with the area phenomena, e.g. naming their children after the landforms, occurrences, situations (hotsprings, Lake names). Hot springs are believed to have healing abilities especially the impact of the hot water	No	Site management, tourism reports, GMPs
Analysis and conclusions	A greater part of the site values were captured under the nomination document and are clearly documented for management protection. The key natural site values were adequately documented and recognized at the time of site nomination.		
Comparison with	N/A, this is the first assessment of the WHS		

previous assessments	
Gaps and challenges	The Greater Kudu and the Rothschild's Giraffe are under serious threat of extinction and should have been mentioned as part of the key values for site management in the nomination document
Opportunities, recommendations and follow-up actions	The values are well documented, The Greater Kudu and the Rothschild's giraffe could be proposed in the addendum of the nomination document as additional biodiversity site values.

Worksheet 1b: Documenting management objectives and their relationship to site values

	Principal objectives	Major values linked to principal objectives	Information sources used for determining the values
	<i>List Principal Management Objectives (from park management plan or other source documents) grouped according to the major values they relate to.</i>	<i>Identify major values related to this objective (there may be more than one value related to a principal management objective)</i>	<i>Give the source of the particular objective (e.g. management plan, work plan, etc.)</i>
Biodiversity values	To protect and conserve the habitat of one of the largest congregation of birds in East Africa and especially the lesser flamingos and other endangered species such as Rhinos, Wild dog, Rothschild's giraffe and their habitats for the present and future generations	diverse aquatic communities of microflora including <i>Arthrospira fusiformis</i>	Site management, Draft management plan for Lake Nakuru
	To conserve the biodiversity and environmental resources of the Great lakes system and their catchment especially species that are endemic, endangered and migratory in nature such as the Lesser flamingo, Greater kudu, rhino, and Rosh child's giraffe	Bird and animal life values of the great rift system, including the reptiles	Draft Management Plan for Lake Bogoria, site management
	To protect and conserve the Lake Elmenteita water body and the unique birdlife, habitats and wilderness landscapes of the Greater Lake Elmentaita Conservation Area (GLECA) for the benefit of present and future generations	Habitat, bird and animal life including the Lesser and Greater flamingo, Great white Pelicans, Rosh Child's giraffe, Great crowned crane, and reptiles.	Draft Plan for Lake Elmenteita (Great lakes Elmenteita Conservation Area Plan)
	Protection and conservation of the genetic and biological	Bird and animal life, including	Expired GMP for Lake Bogoria

	diversity of species assemblages, the integrity of the abiotic resources and interactions to ensure continued ecosystem processes of Lake Bogoria	plant communities (microflora of the lake)	
Other natural values	To protect and conserve the Lake Elmenteita water body and the unique birdlife, habitats and wilderness landscapes of the GLECA for the benefit of present and future generations	Landscape values (beauty)	Draft Plan for Lake Elmenteita (Great lakes Elmenteita Conservation Area Plan)
	To protect and conserve the habitat of one of the largest congregation of birds in East Africa and especially the lesser flamingos and other endangered species such as Rhinos, Wild dog, Rothschild's giraffe and their habitats for the present and future generations	(See worksheet 1a) – Ecological, geological and biological processes including the natural beauty	Draft Management plan for Lake Nakuru, Site management
Cultural values	Bogoria – No specific objective	Cultural rituals at the sacred sites of the hot springs	Expired GMPs and site managements, Draft Management Plans
	GLECA – No specific objective	Hotsprings, caves, Kariandusi prehistoric site, Delamere family history and graves	
	Lake Nakuru – No specific objective	Prehistoric sites for sirikwa culture, caves	
Economic values	To expand and diversify GLECA's offering of visitor activities and their supportive infrastructure, in order to attract an increased number of visitors to the area and encourage tourism use of the entire GLECA.	Site is Centre for tourism attraction and revenue generation for both the Kanyan Government, private sector and the Local community.	Draft GLECA GMP
	Provide a basis for diversification of tourism, benefit sharing and poverty alleviation by instituting sustainable land use practices, environmental conservation and natural resource management	Site is Centre for tourism attraction and revenue generation for both the Kanyan Government, private sector and the Local	Lake Bogoria GMP, Lake Nakuru GMP

		community.	
Educational values	Strengthen management oriented scientific research	Waterfowl, Large mammals, Water quality, invertebrates, human-wildlife conflict, wetland ecosystem functioning	GMPs, Site management, Research papers, census reports, nomination document
	Promote environmental education and awareness for effective stakeholders' participation	General protection of all the site values	GMPs, site reports, site management
	Human-wildlife conflict reduced	Protection of Large and medium sized mammals	
Other social values	No specific objective	Tourism - Bird watching paradise, Important bird area	GLECA GMP, Lake Nakuru GMP, Lake Bogoria GMP
Analysis and conclusions	Many Objectives are not very specific to the site values, they are generic in nature. Some of the value conservation objectives are missing		
Comparison with previous assessments	N/A		
Gaps and challenges	No approved GMPs, Site Management plans review is under way		
Opportunities, recommendations and follow-up actions	The urgent completion of individual site GMPs that include the catchment areas. Joint GMP for all the three Lakes would be good if funding support could be identified		

Tool 2: Identifying threats								
List Threats	List values threatened	Current or Potential Threat?	Identify major causes of threat	Impact of threat		Management response		Data source
				Extent	Severity	Action	Urgency of action	
List all important threats	List any of the values of the site affected by the particular threat	Distinguish between current threats already taking place and potential threats that are known but have not yet impacted	List activities which are causing or contributing to the threat. Each threat has at least one, and may have several, causes.	Describe the extent of the impact, e.g. area, habitat type, cultural value (rate as low – 10%; medium – 11 to 25%; high – 26 to 75% or very high – 76 to 100%)	Describe how severe the impact of the threat is on the value (rate as low; medium; high or very high)	Describe what actions are planned or have taken place to manage the threat	Estimate and/or rate as low; medium, high or very high the urgency of action needed	Record whether the assessment has been made through expert workshop or from using the results of monitoring or research etc.
Flooding and loss of water sources	Biodiveristy Breeding, and survival of the key migratory species of bird life (flamingo)	Current	Climate variability (too much or too little rain)	Very high	High	Routine water level monitoring and research being planned Implementation of the catchment protection regulations, including their rehabilitation Engagement of the political wing	Very High	Site management NEMA, WRMA, KFS, County Government All stakeholders
Loss of habitat and catchment forest	Habitat quality and size	Current at Elmenteita	Encroachment/ settlement expansion and developments	high	Very severe	Engaging the relevant authorities like NEMA to control expansions	Very urgent	WHC communication, site management, reports, management communication to NEMA

		All the sites (Nakuru, Elmenteita and Bogoria (Current))	Invasive species	Very high	Very severe	Control programs initiated, strategy in place	Very urgent	National Strategy and action plan for the management of invasive plants (2013 – 2018), site management, GMPs
Pollution	Lake ecosystem (habitat, water quality, aesthetic values – beauty,	Mainly Lake Nakuru and other sites relatively affected (current)	Urbanization and expansion of developments – solid and liquid industrial waste (chemicals too)	Medium	Severe at Nakuru especially during the wet season, low at other sites	Follow up with NEMA/WRMA, Polluter pays principle – development plans from polluters, prosecution of the people involved, waste collection programs from sites, water quality monitoring	Very urgent	Reports, site management, Records from Courts of Law, GMPs
Loss of animal species/ biodiversity/ Negative population trends/ extinction	Biodiversity (both plant and animal species – endangered species like the rhino targeted for its horn, flamingos, plus other migratory birds	Current at all sites	Poaching, disease, starvation, lack of resources, fire	medium	Medium	Disease surveillance and clinical interventions, focused patrols against rhino poaching, fire breaks at Nakuru, fire fighting equipment will soon be acquired at Elmenteita, Fire engine at Nakuru already, mobilization for fire fighting,	Very urgent when it occurs	Site Management Reports, site management, draft fire management plan, GMPs,
Loss of habitat catchment buffer zone	Habitat quality, water quality (siltation), aesthetic beauty, flooding of the lakes, low lake water levels	Current At all sites	Encroachment and deforestation, development of Hotels/ Lodges around lakes, mining in Elmenteita and Bogoria	High	High	Involvement of stakeholders, communities in restoration programs of the catchment areas, engagement of NEMA in control of developments	Very urgent	Site Management, reports, GMPs, Sub-catchment management plans

Loss of buffer zone and habitat, Riparian land	Aesthetics (landscape beauty), breeding of pelicans, water quality, waste pollution – habitat quality	Current especially Nakuru and Elmenteita	Tourism infrastructure development within and outside the boundaries of the site (Elmenteita)	High at Elmenteita, Low at Nakuru	High at Elmenteita	Engagement of NEMA/ WRMA/ National Land Commission Implementation of the catchment protection regulations, including their rehabilitation	Very urgent	Reports and correspondences, site management, GMPs
Loss of aesthetic/ landscape beauty values	Aesthetic value and habitat quality, water quality	Current	Urbanization around Lake Nakuru and excessive developments and construction of lodges around the Elmenteita	High at Nakuru and Elmenteita	High	Engage NEMA	Very urgent	Site management reports and correspondences
Lack of dispersal and building up of gene pools	Population gene diversity, breeding, habitat quality,	Current at Elmenteita and Nakuru, and Bogoria for the Kudu	Fencing and encroachment of dispersal areas and corridors, urbanization and developments around the site	High for all the sites	High	Translocation, proposal on creation of a wildlife corridor, creation of conservancies around Bogoria	Very Urgent	Site reports, minutes, GMPs, Censuses, Community enterprise strategy (2012 – 2017) on wildlife non-consumptive utilization, WHC Decision No. 35 COM July 7, 2011
Degradation of habits	Habitat quality,	Current at Elmenteita and Bogoria	Livestock grazing	High	High	Barriers, patrols, community engagements	Very urgent	Reports, Site management

List the main issues affecting either the stakeholder group or the site	<i>Main issues associated with this stakeholder</i>	Resource off take, land	Use site to sell their businesses, contribute to site management through marketing and conservation fees	Provide funding to specific site management programs, play advocacy role	Policy provision and guidance, site management, resource provision, implementation of management programs, law enforcement,	Provide data for management purposes,	Provide dispersal areas for wildlife, advocacy role, partners in conservation	Developments, Mining	Provide corridors and dispersal areas for wildlife, use chemicals that affect water quality	Monitor maintenance of sites, provide support, advocacy	There is a variety of interests for the different stakeholders. Most of the stakeholders contribute positively
How, and to what extent are stakeholder groups dependent on the site value(s) for economic or other benefits?	<i>Dependency of stakeholders on site</i>	Poaching and Grazing, salt licks, salt harvesting, bee keeping, revenue sharing, water sources for livestock Low extent at Bogoria, High at Elmenteita and only poaching at Nakuru	Tourists use sites for relaxations and tourism, lodges use site for business, High extent	Use sites to secure funding for their existence Low	Protect the site resources and revenue generation for KWS High	Use sites as education platforms especially on research, school groups use site for study tours High	Depend on sites for marketing their areas, depend on dispersal of wildlife for their existence Medium	Depend on site tourism to further their businesses, need mining permits, revenue collection (county govt), High	Sell of their products,/ business development Medium	They support site conservation Low	Most of the stakeholders depend on the site for economic gains
What is the nature and extent of any negative physical impacts on site value(s). For example, do	<i>List negative impacts of stakeholders on</i>	Illegal Grazing at Elmenteita results into degradation of habitat, siltation from	Pollution of sites from inappropriate waste disposal, habitat	None	None	Illegal research that does not benefit site Management	None	Pollution and poaching, catchment degradation	Pollution from chemicals	None	Main sources of negative impacts are the communities and business developments

	stakeholders still extract resources from the site such as timber? Note whether these are legal or illegal.	<i>site</i>	deforestation and catchment destruction,	destruction from off-road driving			nt, Concealment of data leads to lack of management information					within and around the sites
	What are the negative impacts of the World Heritage site on the stakeholders? For example, were communities displaced when the site was declared? Are they excluded from traditional hunting grounds?	<i>List negative impacts of site management on stakeholders</i>	Livelihood impacted especially traditional resource harvest, impacts on cultural values as a result of tourism,	None	Drain resources to have the site maintained	None	None	None	Limiting developments	None	None	The outward impacts of site management are almost inexistent save for the communities who lost uncontrolled right of land and access
	What is the nature and extent of any positive impacts of the stakeholders on site value(s)? For example, do local tourism guides alert rangers to problems? Does surrounding land use provide connectivity to the site?	<i>List positive impacts of stakeholders on site</i>	Fire fighting, waste collection, provide labor, community leaders involved in awareness Medium	marketing, provision of accommodation to site visitors, their payments as fees support site management High	Provide funding and technical support Medium	Provide funding and policy guidance Very High	Provide management information Medium	Dispersal habitat, information sharing, bring in visitors, provide accommodation for tourists High	Fund raising sources Low	Dispersal areas and catchment Medium	International recognition of site, funding Medium	Site existence is dependent on stakeholders

	What are any direct benefits of the site to the stakeholder group? For example, does the site provide employment opportunities for local people? Does a forested area provide catchment protection and improved water quality for local people? Do tourism ventures benefit from site values?	<i>List positive impacts of site management on stakeholders</i>	NTP, employment, sell of their agricultural products, revenue sharing	Business Development and advantage over other sites, tourists relaxation,	Donor Funding	Revenue to govt, Status of protection is pride to KWS	Fundraising for Research funding	Protection of wildlife (Revenue)	Business development (income from tourists)	Income	Enriching the WHS list – more donor funds	The site is key to the improvement of stakeholders' business and income/ revenue generation
	What is the stakeholder group's receptivity to participating in management of site values? Under what terms and conditions?	<i>Willingness/capacity of stakeholders to engage with site management</i>	Willingness mostly in management planning, willing to be involved in any form of discussions that are key to site management,	Willingness to engage in management programs, fund raising and events, marketing,	Willing to offer technical and financial support, advocacy	Total protection and policy provision, funding, management generally	Provision of information for management purposes	Management planning, connectivity, wildlife habitats,	Events and fundraising	Connectivity and corridors	Technical and financial support to site in particular areas, advocacy	Stakeholders's willingness to engage is undoubtable but will require initial efforts fro site management
	What is the site management's relationship with the stakeholder group? What is the	<i>Willingness/capacity of management to engage</i>	Sites programs reflecting community engagement are documented in	Provided for in the GMPs for the sites	Good relationship in areas of	Total support in management	Good relationship in information generation	Good in partnership support especially in conservation	Sometimes have conflicting interest with site management	Partnerships in conservation of habitat	In areas of technical support and resource mobilization	Generally good relationships and good environment for engagement with

	capacity (including resources) for engagement?	<i>with stakeholders</i>	GMPs		partnership in conservation		through research	n of the site values	nt but can be engaged for support		n	stakeholders
	What is the stakeholder group's relative political or cultural leverage or influence on site values?	<i>Political/social influence</i>	Have ability to work through their political representatives to have something done	No political or cultural influence. Only have an association at National level that primarily discusses their business	Play an advocacy role in protected area management	Manage and make decisions for site management. Enforcement is spearheaded by government institutions who are mandated to enforce policy and regulations governing the site	No political influence	Have advocacy influence as a group not individually	Can influence developments and influence government to have certain areas developed	Ranchers can influence type of on habitat use especially at their privately owned land	Advocacy role and can influence government decision	
	How and to what degree is the stakeholder group organized, relative to efficient and effective engagement in management? Are there any specific community institutions that facilitate engagement?	<i>Organization of stakeholders</i>	Communities are organized in local community groups that site management can engage with	Lodges have a national association but there is no recognized association at the site level.	Association exists and can team up if there is need for advocacy	Very key to site management and decision making	Government uses research data to develop policies	Can play an advocacy role, have association at regional and national level	There some business associations that have high lobbying ability	Ranchers have influence over their land regardless of whether it is a wildlife corridor	UNESCO and IUCN have strong advocacy and political influence when it comes to WHS managements	Most of the stakeholders have political influence and if well organized can play advocacy role for the site or against it
	Describe the nature		Can influence	Contribute to	Participate	Very	Can	Contribute	Influence	Have lot of	Have	Stakeholders

	<p>and extent to which the stakeholder group contributes to decision-making in relation to site values</p> <p>Are there formal or informal management agreements in place?</p>		actions in management plans	management planning and implementation	participate in management planning and can influence program implementation	supportive, key player in day-to-day management of site	provide information that will determine direction of decisions	to information that is fed into management	resource mobilization and land-use planning in the catchment and dispersal areas	influence on what is done on adjacent land (catchment and dispersal areas)	strong influence over what is done at WHS at policy level	have potential to influence and contribute to site management
	<p>Describe the actual engagement of the stakeholder group in the management of the specific value(s)</p> <p>Are stakeholders consulted regularly regarding value management?</p> <p>Where possible, provide details of the nature and extent of engagement.</p>		Community leadership is engaged in management planning, community meetings that are part of management plan implementation	Participate in management planning, infrastructure development, marketing	Fundraising and advocacy, strategic policy and management planning	Key management authority on a day to day basis, provide policy guidance and enforce the law	Provision of management information from research work	Monitoring values, support wildlife censuses, provide dispersal areas, protection of habitat and biodiversity	Events and fundraising	Engaged in habitat management and dispersal areas, census information and monitoring	Inscription of sites, policy review, monitoring suitability of policy implementation, fundraising	There is a lot of interest from stakeholders and this could be enhanced to protect site values
	<p>Based on the information above, provide a brief description of the</p>		Effective management of site will require the	They are key in resource mobilization and	Key in advocacy and fundraising	Is the overall site manager and coordination	Site management will require information	Very key in conservation of wildlife as	Very key in providing services to tourists	Ranchers are key in determining extent of	Very key at policy and political level	All the stakeholders are key to the survival of site

	overall picture of stakeholder engagement		engagement of communities to solicit support, they are a key element in site program implementation and management plan development	generation, provide accommodation for tourists and can provide more services (logistical) if well mobilized	, also participate in management planning, events and technical support areas	of policy implementation.	that will always be provided by researchers	level of engagement is high in key areas of wildlife management – census, corridors, dispersal areas, fire fighting	that site cannot provide. They in a way support site tourism activities	wildlife habitat.		values
	Very good: more than 75% aspects positive Good: 51 to 74% aspects positive Fair: 26 to 50% aspects positive Poor: 25% or less of the aspects are positive		Good	Good	Fair	Good	Fair	Fair	Fair	Fair	Fair	
Comments/explanation:	The positive contributory engagement of stakeholders isn't much due to limited resources. Site management will need more resources to mobilize stakeholder engagements											
Analysis and conclusions:	Fair engagement as site management still gets best ways of engaging stakeholders to contribute positively to site values conservation											
Comparisons with previous assessments	N/A											
Gaps and challenges	Resource envelop small for the challenges being faced by the site, need for more meaningful engagements or interest more stakeholders											
Opportunities, recommendation and follow up actions:	Need for government to allocate more funds to engage stakeholders. Need for site management to engage more the stakeholders in protection of site values.											

Worksheet 4: Review of National Policy Context

Policy areas	Policy name/description	Strengths	Weaknesses	Comments/explanation
Assess the impacts of the legislation/policy/treaties or conventions - not just list them	Describe the specific legislation/policy/treaties or conventions for the site	Record how the policy supports management of the site values/ objectives	Record how the policy can impede management of the site values/ objectives	
World Heritage Site and Protected areas legislation	World Heritage Convention	Critical - provides the rationale for managing the WHS.	Mechanism for funding the site is not clearly outlined	Need for WHC to commit government to have specific budgets for the WH sites
	The National Wildlife Conservation and Management Policy, 2012	<p>Conservation and Management (Amendment) Act Section 3 the Kenya Wildlife Service is Established as a body corporate with a mandate to conserve and manage wildlife nationally.</p> <p>Provides for the establishment of national parks, national reserves and sanctuaries</p>	<p>Does not address the current challenges of protected area management: Weak penalties for wildlife offences, management of wildlife outside of protected areas not clear, coordination with member state for migratory birds not clear</p> <p>Not harmonized with other policies: Forest Act, Agriculture Act, Water Act</p>	Under review new draft bill is through parliament and awaiting ratification
	The Wildlife Conservation and Management Act 2013	This has solid foundation to secure wildlife and organise the wildlife sector. The main emphasis of this Act is on finding means to secure optimum returns from the	Duplication of the research function between KWS and the	Supportive to conservation of site values

		<p>wildlife resource and to ensure equitable sharing of the accruing benefits, consistent with the aims of the Convention on Biological Diversity and with the obligations of the Constitution.</p> <p>Punitive enough to support conservation of the site values with especially as regards the endangered species.</p>	Research Institute	
	The Water Act of 2002	<p>It has punitive penalties for globally threatened species. Has strong protective clauses for wildlife outside protected areas</p>		New bill being proposed to strengthen the current Act
	Forest Act No. 7 of 2005	<p>The act provides for the management, conservation, use and control of water resources and for the acquisition and regulation of rights to use water; water resource development and sewerage services. It sets rules for management of catchment areas from which emanates rivers and streams and all the water bodies in Kenya. The Act ensures sustainable use of the water resource so that there is no over abstraction of water which would impede the river flow to the lakes.</p>	<p>Has very little control over privately owned land if one wishes to develop his area. Conflicts with the Agriculture and Land Acts</p>	<p>The provisions of the Act are good but the implementation is not done due to resources and political issues</p>
	Constitution of Kenya 2010	<p>The Act provides for the establishment, development and sustainable management including conservation and utilization of forest resources for socio economic development. Designates the role of the Kenya Forest Service in conserving forests and reforesting depleted areas. Establishes modalities for community participation in conservation. The Act's main area of operation as regards the Kenya Lakes System is at the catchment areas</p>	<p>Conflicts with wildlife policy on utilization of forest resources</p>	<p>Harmonization required</p>

		where there is forest cover which comprises of both the natural and the plantation forests.		
Conservation within broader government policy	Environmental Coordination and Management Act(EMCA) 1999	The constitution of Kenya 2010 recognized environmental rights under Chapter 5 (Land and Environments) in Part 2 (Environment and Natural Resources). Section 42 gives every person right to clean and healthy environment. Section 60.1 (e) provides for the sound conservation and protection of ecologically sensitive areas in Kenya.	Devolution and systems are new.	Need for harmonization of the natural resource related laws
	Kenya National Biodiversity Strategy and Action Plan (NBSAP) of 2000	EMCA, 1999 provides for the establishment of an appropriate legal and institutional framework for the management of the environment and related matters. The Act established and gave powers to the National Environmental Management 91 Authority (NEMA) to co-ordinate environmental conservation through vetting of activities and operations that may impede negatively on the environment. The Act provides that an Environmental Impact Assessments (EIAs) shall be undertaken on all upcoming development activities.	NEMA has inadequate capacity to implement EMCA effectively and the mandate is too broad.	Under review. Need for more resources to implement EMCA Need for punitive penalties for offenders Need for NEMA capacity building to implement the Act
	National Wetlands Conservation and Management Policy Draft 2013	Formulated by the Ministry of Environmental and Natural Resources with an overall objective to ensure that the rate of biodiversity loss is reversed and for maintaining the present levels of biological resources at sustainable levels for posterity. It therefore outlines the issues that threaten biodiversity and what needs to be done, how it should be done and the time frame within which it should be done.		
	Legal Notice No. 270 of 12	Seeks to identify the limits of the boundaries of the site	Does not cater for the	Should provide for buffer

	October 1974 and a87 boundary plan No. 216/26.	for purposes of keeping their integrity. Helpful to management in keeping the size of the sites under their jurisdiction.	fluctuations in the lake water levels	of the lake waters to take care of the water level fluctuations
	Legal notice No. 137 of 12 June 1986 and has a boundary plan 204/57	The legal status for protection Lake Bogoria National Reserve The reserve is protected within a protected area of 10,700 ha	As above	As above
	Legal notice 5 of 2010 under boundary plan No. 216/67 Gazette Notice No. 8077 (Cap 376)	The legal status for protection of Lake Nakuru National Park was gazetted which delineates a total protected area of 18,800 ha.	As above	As above
	Kenya Land Act No 6 of 2012	The legal status for protection of Lake Elementaita and the riparian land are owned by the Government of Kenya under the Kenya Government Land Act Cap 280. Lake Elementaita Wildlife Sanctuary has been gazetted vide legal notice 5 of 2010 under boundary plan No. 216/67. 2533.9 hectares		
	Kenya Land Policy	An Act of Parliament to give effect to article 68 of the Constitution to revise, consolidate and rationalize land laws: to provide for sustainable administration and management of land and land based resources and for connected purposes		
	The Physical Planning Act of 1996 Cap 286	The National Land Policy (NLP) has a vision to guide the country towards a sustainable and equitable use of land. The land policy calls for immediate actions to addressing environmental problems that affect land such as degradation, soil erosion and pollution. For instance, the policy stipulates the principle of conservation and		

		management of land based natural resources, the principle of protection and management of fragile and critical ecosystems including wetlands and arid lands. The policy further calls for extensive overhauls to current policies and institutions in an attempt to address chronic land tenure insecurity and inequity.		
	Convention on Wetlands of International Importance especially as waterfowl habitats (the Ramsar Convention)	An Act of Parliament to provide for the preparation and implementation of physical development plans and for connected purposes. The director of physical planning is empowered by the Act to formulate national, regional and local physical development policies, guidelines and strategies. It is also the duty of the director to ensure compliance by the local authorities in execution of proper physical development control and preservation orders.		
International conservation conventions and treaties	Convention on Biological Diversity	Provides for the protection of wetland habits and recognizes them as areas of international values which raises their status of protection		
	Convention on International Trade in Endangered Species of Wild Fauna (CITES)	This also provides for the protection of species diversity with emphasis on endangered, threatened and endemic species. Provides for involvement and benefit to communities		
	Convention on the Conservation of Migratory Species of Wild Animals	Controls trade in Endangered, threatened and endemic species, henceforth offers protection of these species		
	United Nations Framework Convention on Climate Change (UNFCCC)	The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or Bonn Convention) aims to conserve terrestrial, aquatic and avian migratory		

		species throughout their range.		
	AEWA – African Eurasian Waterbird Agreement	Calls for States to provide for protection of key natural habitats to mitigate the effects of climate change.		
	Kenya Wildlife Service Strategy 2.0 2012-2017 Species specific and other strategic plans - Black Rhino Strategic Plan - Carnivore Lions and hyena - Cheetah and Wild dog - Invasive Species - Lesser Flamingo action plan (draft?) - Climate change strategy (draft) - site management plans	Provides for conservation of flyways for migratory birds and the birds themselves		
Government Support for World Heritage Site	Budget Support	Provides for a number of policies and Strategies that create an amble environment for protection of WHS resources and its habitats		Resource allocation for WHS Site Management
	KWS and National Reserve (County Government)	Financial support for site management implementation	Inadequate resources	More funds allocation required from Govt
Management Authority and the World Heritage Site	Draft Community Land Bill Forest Act 2005 (above) Water Act of 2002 (above) Wildlife Act	Mandated to manage and provide funding for management of WHS	Inadequate capacity and limited mandate to manage areas of catchment and buffer	Resource allocation for the Sites is needed for site management
Legislation/policy affecting community		Support for community participation in planning	Have some restrictive areas to free access of	

participation in site management and sharing of benefits			communities to resources	
Analysis and conclusions	Most if not all the Acts and policies are very supportive to site conservation			
Comparison with last assessment	N/A			
Gaps and challenges	Implementation is a problem due to resources, some of the bills are still in draft form			
Opportunities, recommendations and follow-up actions	Fast tracking ratification of the Laws and policies that are yet to be ratified. Lobby Government to allocate more resources for WHS management. Implementation of policies that presence serious gaps in implementation			

Worksheet 5a: Management Planning Information Sheet

Name of plan	Level of approval (L,G,A, SA,D)* = see key below	Year of preparation, or most recent review	Year specified for next review	Comments/Explanation
	See key below for rating system details			Comments should concentrate on the adequacy, currency, and integration of the plan with other planning instruments
Lake Nakuru Integrated Ecosystem Mgt Plan	Approved at Board Level but now Expired	2002	2012	New Management plan being formulated
Lake Bogoria Integrated management Plan	Approved at County Council level (Local Government) but expired	2007	2012	New management plan being prepared under the County Government
Greater Lake Elmenteita Conservation Area Management Plan	Still in draft form, not yet approved (D)	2011	2021	Yet to be approved and adopted by KWS Board
Kenya Wildlife Service Strategy 2.0 2012-2017	Approved by KWS Board (A)	2012	2017	In force and being implemented
Baringo county Integrated Development Plan	Approved by Baringo County Government (G)	2013	2018	Being implemented, already approved by the County Government
Analysis and conclusions	General Management plans being reviewed, an overall management plan would facilitate better management of site			
Comparison with last assessment	N/A.			
Gaps and challenges	Draft Management plans that are yet to be finalized			
Opportunities, recommendations and follow-up actions	Fast track individual GMPs. The availability of the technical staff to facilitate planning is an opportunity to site management planning			

L = plan has force of law (i.e has been approved by parliament or is a legal instrument)	A = plan has been approved at Head of Agency level
G = plan has been approved by government but is not a legal instrument	D = plan is a draft and has not been formally approved
SA = plan has been approved at a senior level within the Agency	

Worksheet 5b: Adequacy of Primary Planning Document

Name of Documents being assessed: **General Management Plan**

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
Issue being assessed	Choose one of the four responses, ranked from very good to poor. The questions and responses can be refined to suit individual site needs	Tick box	Add any comments or explanations as to why the assessment was made	Discuss any recommendations or next steps in terms of actions which need to be taken following this assessment
Decision making framework				
1. Does the plan establish a clear understanding of the desired outcomes of management in clear terms rather than just specifying actions to be taken	Very Good - Desired outcomes are explicitly articulated		Some of the objectives are general statements rather than being specific to the values.	Review of the GMP to focus on specific objectives.
	Good - Desired outcomes are reasonably articulated			
	Fair - Desired outcomes are not clearly articulated but are implied or can be inferred from plan objectives	√		

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
	Poor - Plan focuses more on actions and doesn't indicate the desired outcomes for the site			
2. Does the plan express the desired future for the site in a way that can assist management of new issues and opportunities that arise during the life of the plan?	Very Good - Desired future is expressed in a way that provides clear guidance for addressing new issues and opportunities		The plan only provides limited guidance on dealing with new emerging threats but does not specifically have information on how to act on them.	The plan should outline the present and projected future threats and mitigation like floods, fire, catchment degradation, habitat loss
	Good - Desired future is expressed in a way that gives some guidance for addressing new issues and opportunities			
	Fair - Desired future is not clearly articulated and provides only limited guidance for addressing new threats and opportunities	√		
	Poor – The plan focuses more on present issues and doesn't provide guidance for addressing new threats and opportunities			
3. Does the plan provide for a process of monitoring, review and adjustment during the life of	Very Good - Plan provides a clear, explicit and appropriate process for monitoring, review and adjustment		Provisions are clearly stipulated but follow up with relevant bodies was	All monitoring programs should be acted upon by site management instead of other government bodies

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
the plan?	Good - Provisions for monitoring, review and adjustment of the plan are present but are incomplete, unclear or inappropriate in some minor respects	√	left out or unclear.	who do not take action.
	Fair - Need for monitoring, review and adjustment is recognised but is not dealt with in sufficient detail			
	Poor - Plan does not address the need for monitoring, review and adjustment			
4. Does the plan provide an adequate and appropriate policy environment for management of the World Heritage site?	Very Good - Policy requirements for the site are identified and adequate and appropriate policies are established with clear linkages to the desired future for the site		The Plan is not a legal document although it provides for policy formulation and implementation	Need to have the Management plan to be recognized as a legal document
	Good - Policy requirements for the site are identified and policies are largely adequate and appropriate although there are gaps	√		
	Fair - Policies in the plan are inadequate or incomplete in many respects			

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
	Poor - Plan either doesn't establish policies for the area or the policies are inadequate or inappropriate in major respects			
5. Is the plan integrated/linked to other significant national/regional/sectoral plans that influence management of the World Heritage site?	Very Good - Relevant national, regional and sectoral plans that affect the site are identified and specific mechanisms are included to provide for integration or linkage now and in the future		Every site has its own management plan with different management structures.	We need to develop all the plans (Business plans, Management Plans etc and integrate them to the management of the WHS. A joint plan is required
	Good - Relevant national, regional and sectoral plans that affect the site are identified, their influence on the site is taken into account but there is little attempt at integration	√		
	Fair - Some relevant national, regional and sectoral plans are identified but there is no attempt at integration			
	Poor - No account is taken of other plans affecting the site			

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
6. Is the plan based on an adequate and relevant information base?	Very Good - The information base for the plan is up to date and adequate in scope and depth and is matched to the major decisions, policies and issues addressed in the plan		The strategic plan is broad based and focused on all conservation sites countrywide rather than site specific strategic plan, business plan(Nakuru) The information contained in the expired GMPs need to be updated	Site plan should be developed with focussed objectives, mission and vision that match the major policies and values of the WHS.
	Good - The information base is adequate in scope and depth but maybe a little out dated and/or contains irrelevant information (i.e. a broad compilation of data rather than matching information to the decisions, policies and issues addressed in the plan)	√		
	Fair - The information base is out of date and/or has inadequacies in scope or depth so that some issues, decisions or policies cannot be placed into context			
	Poor - Very little information relevant to plan decisions exists			
7. Have the values for the site been identified in the plan and linked to the management objectives and desired outcomes	Very Good - The site values have been clearly identified and linked to well defined management objectives and desired outcomes for the site		Not all values have been articulated in the plan of all 3 sites and linked to the Objectives of the	All site values should be clearly identified and linked to site objectives.

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
for the site?	Good - The site values have been reasonably identified and linked to management objectives and desired outcomes for the site	√	WHS. The plans were prepared before the site was inscribed	
	Fair - The site values have not been clearly identified or linked to management objectives and desired outcomes for the site			
	Poor - The site values have not been identified			
8. Does the plan address the primary issues facing management of the World Heritage Area within the context of the desired future of the site?	Very Good - Plan identifies primary issues for the site and deals with them within the context of the desired future for the site (i.e. plan is outcome rather than issues driven)		There are so many unidentified primary issues facing the management of the sites such as wildlife dispersal areas, fire out break plans, human resource management plans, resource mobilization, joint management planning covering all the lake sites	Identification of all issues facing management from all the different areas and stakeholders should be incorporated and dealt with.
	Good - Plan identifies primary issues for the site but tends to deal with them in isolation or out of context of the desired future for the site	√		
	Fair - Some significant issues for the site are not addressed in the plan or the issues are not adequately addressed			
	Poor - Many significant issues are not addressed or are inadequately dealt with in the plan			

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
9. Are the objectives and actions specified in the plan represented as adequate and appropriate response to the issues?	Very Good – Objectives and actions are adequate and appropriate for all issues		Most issues have been captured and assigned appropriate actions.	All issues in the site should be exhaustively analyzed and auctioned.
	Good - Objectives and actions are adequate and appropriate for most issues	√		
	Fair - Objectives and actions are frequently inadequate or inappropriate			
	Poor - Objectives and actions in the plan do not represent an adequate or appropriate response to the primary issues			
10. Were local and indigenous communities living in or around the World Heritage site involved in developing the management plan and setting direction for the management of the World Heritage site?	Very Good - Local and indigenous communities living in or around the World Heritage site were meaningfully and fully involved in developing the management plan and setting direction for the World Heritage site	√	The communities were involved including their local leaders, opinion leaders and religious leaders.	Continued involvement of the community among other stakeholders in the implementation stage.
	Good - Local and indigenous communities living in or around the World Heritage site were partly involved in developing the management plan and setting direction for the World Heritage site			

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
	Fair - Local and indigenous communities living in or around the World Heritage site were only minimally involved in developing the management plan and setting direction for the World Heritage site			
	Poor - Local and indigenous communities living in or around the World Heritage site were not involved in developing the management plan and setting direction for the World Heritage site			
11. Does the plan take account of the needs and interests of local and indigenous communities living in or around the World Heritage site?	Very Good - Plan identifies the needs and interests of local and indigenous communities and has taken these into account in decision making		The community interests are considered but some decisions may not favour their interests.	Decision making should involve the stakeholders living adjacent to the sites due to the invaluable indigenous knowledge they may have about the site.
	Good - Plan identifies the needs and interests of local and indigenous communities but it is not apparent that these have been taken into account in decision making	√		
	Fair - There is limited attention given to the needs and interests of local and indigenous communities and little account taken of these in decision making			

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
	Poor - No apparent attention has been given to the needs and interests of local and indigenous communities			
12. Does the plan take account of the needs and interests of other stakeholders involved in the World Heritage site?	Very Good - Plan identifies the needs and interests of other stakeholders and has taken these into account in decision making		The stakeholder needs and interests have been taken into account.	Continued stakeholder needs and interests should be considered during decision making.
	Good - Plan identifies the needs and interests of other stakeholders but it is not apparent that these have been into account in decision making	√		
	Fair - There is limited attention given to the needs and interests of other stakeholders and little account taken of these in decision making			
	Poor - No apparent attention has been given to the needs and interests of other stakeholders			
13. Does the plan provide adequate direction on management actions that should be undertaken in the World	Very Good - Management actions specified in the plan can be clearly understood and provide a useful basis for developing operational plans such as work programmes and budgets		Operational plans have been well indicated but clear priorities should be set in operations to	The WHS secretariat in the country to provide the basis for development of operation plans such as

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
Heritage site?	Good - Management actions specified in the plan can generally be clearly understood and provide an adequate basis for developing operational plans such as work programmes and budgets	√	adequately manage the sites.	budget plans to adequately manage the sites.
	Fair - Management actions are sometimes unclear or lacking in specificity making it difficult to use the plan as a basis for developing operational plans such as work programmes and budgets			
	Poor - Management actions are unclear or lacking in specificity making it very difficult to use the plan as a basis for developing operational plans such as work programmes and budgets			
14. Does the plan identify the priorities amongst strategies and actions in a way that facilitates work programming and allocation of resources?	Very Good - Clear priorities are indicated within the plan in a way that supports work programming and allocation of resources		There is no clear prioritization of the program in all sites since there is no clear monitoring programs to evaluate the program, stipulated periodically.	There should be proper prioritization of the activities and programs in every site as stipulated in the plans.
	Good - Priorities are generally indicated making their use for work programming and resource allocation adequate most of the time			

Question	Possible responses	Rating	Comment/Explanation	Opportunities, recommendations and follow-up actions
	Fair - Priorities are not clearly indicated but may be inferred for work programming and resource allocation	√		
	Poor - There is no indication of priorities in the plan so that the plan cannot be used for work programming and resource allocation			
Analysis and conclusions	The WHS plans capture the issues and objectives from a general perspective rather than focus on the specific issues that touch the values of the sites.			
Comparison with last assessment	N/A			
Gaps and challenges	Need for prioritization of urgent actions, need for clear focus on scope, programs should be well articulated, conflicting policies by different governing bodies .			
Overall opportunities, recommendations and follow-up actions	New formulations should bring out clear objectives and highlight priority areas for management action			

Worksheet 6: Design Assessment

1. Ecological integrity

This relates to the major biodiversity and other natural values (refer to Tool 1a for a list of these major values):

Design aspect	Brief Explanation	Strengths of World Heritage site design in relation to this aspect	Weaknesses of World Heritage site design in relation to this aspect	Comments and explanations
Key habitats	Does site contain the key areas needed to conserve species and other natural values?	Yes, site has breeding areas for the Pelican in Elmenteita, has a variety of micro-ecosystems (terrestrial ecosystem for mammals, freshwater springs in Bogoria and saline water in all the lakes for flamingo and other migratory birds) that contribute to diversity of ecological conditions necessary for biodiversity survival	Flamingo breeding breed from Lake Natron which is not part of the World Heritage site. Lakes Oloiden, Logipi, Sonachi, Natron and Magadi are also key habitats to the Flamingo and other migratory species. Nakuru is too small for a reasonable Rhino population and other terrestrial mammals. Most of the wildlife migrate out of the site to either breed or look for alternative sources of food at some point during the year.	The WHS is mainly comprised of the lakes ecosystem with very little terrestrial buffer to provide adequate protection to the water ecosystem and enough grazing land for mammals. The Kenyan govt should Endeavour to add the mentioned lakes to the site or protect them as key habitats for the Flamingo and other migratory birds
Size	Is site large enough to conserve species and other natural values?	It has the right depth (Bogoria and Nakuru) for the multiplication and growth of the microflora and can accommodate a big population of	The lakes (Nakuru and Elmenteita) are prone to shrinkage in drought times and this impacts on the size of the habitat and availability of food.	Kenyan Government should recognize all lakes as PAs & negotiate with Tanzania to include L. Natron

Design aspect	Brief Explanation	Strengths of World Heritage site design in relation to this aspect	Weaknesses of World Heritage site design in relation to this aspect	Comments and explanations
		flamingos (over 2 million) at any one time.	Breeding fields for the Greater Kudu are outside Bogoria, Breeding grounds for the flamingo are at L. Natron which is not part of the WHS. Other foraging grounds for the flamingo and other key migratory birds are outside the WHS (Odoiden Logipi, Sonachi, Natron and Magadi)	
External interactions	Do external interactions (e.g. adjacent land use) impact on site values?	Lake Nakuru is fenced off and so there is very little direct impacts on the site. Bogoria is located in a rural sparsely populated setup with very little pressure from communities.	Destruction of the catchment areas affect the water levels and quality, and hence the aquatic life and flamingo food. Dispersal areas for mammals in Elmenteita and Bogoria are outside the WHS. Nakuru is being affected by pollution from Urbanization, Agricultural activities around the WHS affect the lake conditions	Catchment destruction leads to siltation of the lakes, pollution is from the nearby Nakuru town as a failure for town authorities to properly dispose of the wastes
Connectivity	Can species move easily between the site and other suitable habitat?	Migratory birds can fly from one lake to another, Mammal dispersal areas are available in the nearby ranches and conservancies. Nakuru and Elmentaita have possibilities of connectivity through Soysambu Conservancy	Corridors are being blocked by development activities and population settlements. Soon the mammals will find no alternative dispersal area. Lake Nakuru has no dispersal areas as it is faced off – no connectivity. Other suitable dispersal areas are not protected and prone to	Population increment and agricultural developments have a big impact on the sizes and quality of the dispersal areas. Need for cooperation of all range states of the Flamingo

Design aspect	Brief Explanation	Strengths of World Heritage site design in relation to this aspect	Weaknesses of World Heritage site design in relation to this aspect	Comments and explanations
			degradation. The birds also fly out of Kenya and the WHS Authorities have no control over such sites	and other migratory birds
Sources of information	GMPs, Site management			
Analysis and conclusions	Not all the key habitats for the survival of the values are part of the WHS as the breeding sites for the Key birds are outside the WHS			
Comparison with last assessment	N/A			
Gaps and challenges	Site management has no control over the other developments and activities happening outside the WHS.			
Opportunities, recommendations and follow-up actions	Kenyan Government to include Lakes Olodein, Logipi, Sonachi, Natron and Magadi as part protected area system. Work with communities and stake holders to protect the dispersal areas and corridors, Kenyan govt to negotiate with Tanzania for inscription of Lake natron. Kenyan government to work with other range states to protect habitats for the migratory birds including the Flamingo			

2. Community well-being

This relates to major cultural, economic, educational and other social values and other community/site issues important to the wellbeing of the community (refer to Tool 1a for a list of these values):

Design aspect	Brief Explanation	Strengths of World Heritage site design in relation to this aspect	Weaknesses of World Heritage site design in relation to this aspect	Comments and management action required
Key areas	Do local communities have access to key areas of cultural, religious or economic importance?	Communities participate in tourism for cultural dances, guiding, artifact display, access to cultural sites in Bogoria, lodges, grazing resources, employment, fresh water springs	Mining in Elmenteita, overgrazing, overharvesting of medicinal plants (Sandlewood). Lake Nakuru is fenced and communities have no access . The policy restricts communities from use of particular resources (fuel wood)	There is very little to be harvested and therefore little access is available. The policy is restrictive
Size	Is the site large enough to deliver ecological services or support sustainable harvesting (if permitted)?	Site management has zoned Bogoria to designate grazing areas in the dry season. This leaves adequate grazing land for wildlife. salt licks are adequate	Grazing of livestock at Elmenteita cannot be sustained if not checked. There is high competition for fresh water between wildlife, livestock and communities at bogoria. These sources are inadequate for the site and community needs. No fresh water for communities at Elmenteita. No access at Nakuru	Because of the small size of the WHS, there is not enough resources to be shared between communities and wildlife
External interactions	Does the management of the site impact on local community functioning?	Flamingos, pelicans and other key migratory birds are basically depend on lake ecosystem and have little interaction with the community land. Site contributes to livelihood	Mammals need wider grazing areas and sometimes move out of the site for breeding and	The site is more beneficial to the communities despite the restricts, more benefits could be created

Design aspect	Brief Explanation	Strengths of World Heritage site design in relation to this aspect	Weaknesses of World Heritage site design in relation to this aspect	Comments and management action required
		improvement through tourism	better/ more food sources – wildlife competes with livestock for resources out of the site. Cultural values of communities being negatively affected due to tourism, Grazing inside the WHS is restrictive	
Legal status and tenure	Are legal status and rights clear? Do conflicts impact on the community?	Legal status for the site is clear, communities are aware that the site is a government gazetted area	Even with the knowledge that the land is legally gazetted, communities still take it as their traditional homeland and feel they should have free access, sometimes don't understand the purpose for the restrictions.	Formulation and Implementation of the management plan will cater for the sustainable needs of the communities
Sources of information	Site management, Expired GMP			
Analysis and conclusions	The existence of the site is creating more benefits than impacts			
Comparison with last assessment	N/A			
Gaps and challenges	Limited resource availability for community access inside the site as size of the WHS and habitats cannot sustain the demand			
Opportunities, recommendations and follow-up actions	Creation of alternative benefits, development of tourism to benefit communities. Employment and education of the communities			

3. Management factors

This relates to the practicalities of management of the site (e.g. legal status, access for patrols and boundary issues with neighbours):

Design aspect	Brief Explanation	Strengths of World Heritage site design in relation to this aspect	Weaknesses of World Heritage site design in relation to this aspect	Comments and management action required
Legal status and tenure	Do problems or uncertainties over legal status or tenure affect capacity to manage?	No legal issues with the site at Nakuru which is fenced and boundaries are clear	Boundaries for Elmenteita and Bogoria have disputes. This affects the capacity to totally protect the legally inscribed area	Need for boundary marking to make them clear to management and communities
Access points	Does lack of control over access to the site impact on management effectiveness?	Nakuru is fenced and has no access points for community use except for tourism purposes	Bogoria and Elmenteita have porous borders that allow community access in every corner of the sites. This makes management a little difficult and expensive	Need for site management to have control over, and to negotiate access points with Communities
Neighbours	Does the location and nature of boundaries support or impede management?	The lake ecosystems are adequate for bird life especially the iconic Flamingo	The boundaries leave out critical habitats for wildlife breeding and food sources.	Need to inscribe more lake ecosystems for protection, need for negotiations with neighbours on corridors and grazing land.
Sources of information		GMPs, Site management, management reports, research publications		
Analysis and conclusions		Legal status are clear but boundaries need to be clearly marked and corridors established to enhance protection of biodiversity		
Comparison with last assessment		N/A		
Gaps and challenges		Adequate resource to implement the legal framework. The boundaries of Lake Elmentaita have no provisions for staff infrastructure development, not even for tourism and other management actions, no buffer		
Opportunities, recommendations and follow-up actions		Boundary marking, corridor establishment, incorporation of other key habitats of wildlife and birds, Government should acquire more land around Lake Elmenteita to buffer the lake.		

Tool 7a: assessment of management needs and inputs for staff (LAKE NAKURU)										
Staff category	Location	Required no. of staff	Current no. of staff	No. of trained staff	Type of training required	Level of training				Comments/ Explanations
						Poor	Fair	Good	Very good	
List staff positions, including all categories of permanent & temporary staff	Identify where staff are posted (in some cases there will be more than one location within a particular category)	Estimate the ideal number of staff in this category	Give current number of staff	Identify the proportion of staff who are trained in each category	Detail the type of training required	<ul style="list-style-type: none"> - Very good: More than 75% of the staff is trained to adequate level - Good: 50-75% of the staff is trained to adequate level - Fair: 25-50% of the staff is trained to adequate level - Poor: Less than 25% of the staff is trained to adequate level 				Give detail of how the assessment was made i.e. how required staffing was calculated
Senior Warden	Based at Park headquarters	1	1	1	MBA, Public administration course and finance for non-finance managers			Good		He is experienced and requires minimal training
Wardens in-charge of different sections and assistant wardens	Based at the Park headquarters and outposts	21	18	18	Advanced wildlife management training, finance management, communication skills and conflict resolution,			Good		All have experience in wildlife management and paramilitary training that forms basic requirement for their jobs
Rangers	Based at the Park headquarters and outposts	137	116	116	Monitoring, data collection and GPS use, customer care, investigation and intelligence			Good		Have basic training on wildlife management
Drivers	Based at the Park	25	16	16	Basic mechanics, defensive			Good		Have training in driving

	headquarters and outposts				driving and customer cares					and basic vehicle operations
Radio operators	Based at the Park headquarters or outposts	8	5	5	Communication skills and basic radio maintenance			Good		Trained in radio operations
Human Capital officers	Based at the Park headquarters	3	3	3	Advanced training in human resource, public relations, guidance and counselling, and records management			Good		Have skills in human resource management
Office assistants	Based at Park headquarters	10	6	6	Public relation, records management and customer care			Good		Have skills in office administration
Customer care staff	Based at the Park headquarters and gates	34	26	26	Communication skills, conflict management, product knowledge and language proficiency and diversification			Good		Have the required skills for their field but need more training in communication skills and language diversity
Tour guides	Based at Park headquarters	2	0	0						Need for recruitment
Accounts staff	Based at Park headquarters	8	5	5	Advanced financial accounting and management skills			Good		Have excellent training in financial management
Supplies and Procurement staff	Based at Park headquarters	7	3	3	Advanced training in supplies and public procurement, records management, on job training on new procurement policies			Good		Have the required skills on their current job
Hostel & guesthouse staff	Based at guesthouse and hostel	3	2	2	Training in housekeeping and catering , customer care, language skills			Good		Have the required skills on their current job
Telecomm staff	Based at Park headquarters	5	3	3	Modern equipment training e.g. digital radios			Good		Have the required skills for their current job
Fence	Based at the Park	5	3	3	Training on modern fence			Good		Need more training on

technicians	headquarters and outposts				installation and maintenance, animal behaviour skills					modern fence installation and maintenance
Mechanical workshop Staff	Based at Park headquarters	12	10	10	Advance training in motor vehicle and plant maintenance and skills upgrading			Good		Have good training but with changes in vehicle models they require skills upgrade
Civil works and building construction staff	Based at Park headquarters	8	5	5	Advanced training in civil and buildings construction work			Good		Have the required skills for their current job
Research staff	Based at Park headquarters	7	4	4	Training in GIS, data collection and management. Research skills, climate change, Advance training in general Ecology			Good		Have basic training for the current job but require advanced training in respective fields
Source of Information	Management reports, site management, management plan									
Analysis and conclusion	There is inadequate manpower, however those in place have good training to deliver the required services									
Comparison with previous assessments	N/A									
Gaps and Challenges	Gaps exist in numbers of staff required									
Opportunities, recommendations and follow-up actions	Need for recruitment/sourcing of more staff for the Park and skills upgrading to handle emerging challenges									

Tool 7b: Assessment management needs and inputs for budget (LAKE NAKURU NATIONAL PARK)

Expenditure category	Budget required (KSH in '000)	Actual budget available (KSH in '000)	Funding sources	Comments/explanations
This categories should relate to the category used for the sites annual budget	Record requirements here (detail of how the assessment was carried out should be given in the comments	Provide details on budget available and period July first,2012 to June 30 20013	Give details on where funding comes from e.g government, NGO...	Provide details on how information given in previous columns has been determined
Salary	Not available		KWS/Govt of Kenya (GOK)	Payroll information processed at head quarters
Other personnel costs (NSSF, PAYE, etc)	Not Available		KWS/GOK	As above
Staff Training	Not Available		KWS/GOK	Budget at training office at head office
Education and awareness creation (Education dept and District warden's Budget Combined)	2000.09	1828.77	KWS/GOK	Budget include other areas
Maintenance and rehabilitation of wildlife barriers - fence maintenance	2520	3293.12	KWS/GOK	Budget enhanced because of wildlife protection
Maintenance of plants and equipments (Mechanical services)	1,061	941.67	KWS/GOK	Budget include other areas
Technical services buildings - maintenance/construction of buildings	1759	6951.47	KWS/GOK	Budget increase because of relocation of offices and rangers accommodation due to flooding
Civil works - Roads	7,640	11,152.35	KWS/GOK	Budget increased due to re-routing and redesigning of roads due to floods.
Park administration and management	11250	22163	KWS/GOK	Increased park activities due to flooding and security challenges

Intelligence	2000	2460.66	KWS/GOK	Budget increased due to Rhino security threats
Ticket inspection	567	494.36	KWS/GOK	
Investigations		788.26	KWS/GOK	Intensification of security due to emerging wildlife threats
Security administration and management	1600	1518.72	KWS/GOK	
Rhino surveillance	3600	4062.13	KWS/GOK	Budget increased due to emerging Rhino security threats
Canine Units management	400	335.06	KWS/GOK	
Gate revenue collection management	162.90	110.58	KWS/GOK	
Product development and management	2090	7395.95	KWS/GOK	Most of the tourism products (e.g. campsites & picnic sites) were submerged , hence had to be relocated to new sites
Tourism administration and management	914	660.03	KWS/GOK	
Bus hire programs		1457.97	KWS/GOK	
Customer service	370	294.97	KWS/GOK	
Biodiversity research - Ecological monitoring & species monitoring	2184.77	962.56	KWS/GOK	Budget for research programmes reduced. There is need for more funding to support research
Biodiversity resource inventory	412.50	185.95		
Habitat management	1823	538.34	KWS/GOK	There is need for more funding to support habitat restoration and

				management programmes
Biodiversity administration	1265	506.77		
Environmental Impact Assessment and audits	216	84.55	KWS/GOK	
Human wildlife conflict resolution - Problem animal control		491.97	KWS/GOK	
Partnership administration and management		2491.54	KWS/GOK	
Telecommunication maintenance	1200	1259	KWS/GOK	
Procurement	1000	797	KWS/GOK	
IT and safari card maintenance	518	491.67	KWS/GOK	
Staff welfare (medical) etc.	5,600			
Sources of information:	Annual operations work plans, site management			
Analysis and conclusion:	Budget cuts and increases was due to emerging wildlife security threats and flooding			
Comparisons with previous assessment:				
Gaps and challenges:	Due to expiry of GMP, it was not possible to get estimated budgets for column two, the estimates were based on annual work plans			
Opportunities, recommendations and follow- up actions:	KWS should set aside an emergency budget to cater for emergency response to budget cuts on planned activities. Need for all information on personnel to be availed to the site managements for completion of this report.			

Tool 7a: assessment of management needs and inputs for staff (ELMENTEITA)

Staff category	Location	Required no. of staff	Current no. of staff	No. of trained staff	Type of training required	Level of training				Comments/ explanations
						Poor	Fair	Good	Very good	
List staff positions, including all categories of permanent & temporary staff	Identify where staff are posted (in some cases there will be more than one location within a particular category)	Estimate the ideal number of staff in this category	Give current number of staff	Identify the proportion of staff who are trained in each category	Detail the type of training required	<ul style="list-style-type: none"> - Very good: More than 75% of the staff is trained to adequate level - Good: 50-75% of the staff is trained to adequate level - Fair: 25-50% of the staff is trained to adequate level - Poor: Less than 25% of the staff is trained to adequate level 				Give detail of how the assessment was made i.e. how required staffing was calculated
Warden In-Charge	Naivasha – Karagita (90Km away from the Site)	1	1	1	Human Resources management			Good		He is experienced and requires minimal training
Assistant Warden in-charge of Site	Elmenteita	1	0	0	Human resource training, wildlife management and paramilitary skills, finance management, customer care, human wildlife conflict resolution, data analysis and recording, community handling and					Need to recruit and deploy a warden to be in-charge of the station

					communication skills, conflict resolution,					
Rangers	Elmenteita	15	3	3	Paramilitary and wildlife management, monitoring, data collection and GPS use, customer care, Human wildlife conflict resolution, investigation and intelligence,			Good		Need training in customer care and continuous training
Source of Information		Management reports, site management, Plans								
Analysis and conclusion		There is inadequate manpower, the site is very understaffed								
Comparison with previous assessments		N/A								
Gaps and Challenges		Data gaps in regard to training of the wardens								
Opportunities, recommendations and follow-up actions		Need for an assistant warden, and administrative staff on site who are well trained, motivated and facilitated								

Tool 7b: Assessment management needs and inputs for budget (ELMENTAITA)

Expenditure category	Budget required KSH	Actual budget available	Funding sources	Comments/explanations
This categories should relate to the category used for the sites annual budget	Record requirements here (detail of how the assessment was carried out should be given in the comments	Provide details on budget available and period July first,2012 to June 30 2013	Give details on where funding comes from e.g government, NGO...	Provide details on how information given in previous columns has been determined
Salary			KWS	Info to be obtained from KWS-HQ payroll department
Ecological Management Programme				
Objective 1: Conservation statusof the GLECA’s threatened wildlife enhanced (Ecological Monitoring)	3,665,000	784,000	KWS, GLECA, WRUA, Facility Owners, Soysambu Conservancy	KWS and Soysambu contribute their are part of the budget.
Carry out biannual water fowl census	160,000		KWS	
Carry out a study on flamingo and pelican movement	60,000		KWS	
Carry out Environmental Audits (EA) for all major facilities (industrial and tourism)that have potential to	800,000		KWS	

pollute the Lake water				
Implement the EMPs	1,000,000		GLECA, Facility owners	
Support WRUAs in the GLECA areas to develop and implement watershed management plans	500,000		KWS, WRUA	
Carry out water quality and quantity monitoring in the Lake and tributaries	240,000		KWS	
Determine suitable stocking levels for Rothschild's giraffe within GLECA	300,000		Soysambu	
Study Rothschild's giraffe population dynamics Activity 1.3.2	50,000		Soysambu	
Implement measures to retain desired stock levels	500,000		Soysambu	
Evaluate effectiveness of the management procedures based on results of Activity 1.3.2 above	5,000		Soysambu	
Carry out a study on the impacts of giraffe on woody species	50,000		Soysambu	
Objective 2: Threats to critical habitats reduced	3,965,000	327,000	KWS, Soysambu conservancy	Only KWS contributed, Soysambu contributed on staff time
Activity 2.1.1 Stakeholders meeting	636,000		KWS	
Activity 2.1.2 Monitor abstraction agreement adherence	100,000		KWS	
Activity 2.1.3 Monitor shore line levels	50,000		KWS	
Activity 2.1.4 Monitor pelican responses to shore line levels	100,000		KWS	
Activity 2.2.1 Produce baseline status report on developments	30,000		KWS, Soysambu	
Activity 2.2.2 Produce bi-weekly status updates on development activities	2,000		Soysambu	
Activity 2.2.3 Check on regular basis with Land Department on status of any new developments	2,000		KWS, Soysambu	
Activity 2.2.4 Initiate public action and possible opposition against any identified illegal developments	5,000		KWS, Soysambu	
Activity 2.3.1 Train relevant staff on use of GPS/ GIS technology for collection of spatial data	1,250,000		KWS	
Activity 2.3.2 Establish a GIS linked data base	100,000		KWS	

Activity 2.3.3 Produce and disseminate relevant maps as required	20,000		KWS	
Activity 2.3.4 Digitise the land tenure map of GLECA	20,000		KWS	
Activity 2.7.1 Carry out a survey of all materials mined in GLECA	50,000		KWS	
Activity 2.7.2 Develop a mining regulation to be adhered to by all miners within GLECA			GLECA	
Activity 2.7.3 Monitor adherence to mining regulations by all miners within GLECA			KWS	
Activity 2.9.1 Carry out inventory and mapping	800,000		KWS	
Activity 2.9.2 Set up experimental plots	100,000		KWS	
Activity 2.9.3 Initiate control programmes and follow up	100,000		KWS	
Activity 2.9.4 Rehabilitate degraded habitats	500,000		KWS	
Activity 2.10.1 Establish research advisory committee to supervise research functions for GLECA	100,000		GLECA	
Objective 3: Protection of river systems enhanced	4,500,000	0	WRMA, GLECA	Need to get actual budget from WRMA. No donor funding was realized by GLECA to support the budget
Activity 3.2.1 Support WRMA in water quantity and quality monitoring	800,000		WRMA	
Activity 3.2.2 Support WRMA in water abstraction monitoring	100,000		WRMA	
Activity 3.2.3 Support WRMA in enforcing water abstraction allocations and stop illegal abstractions	100,000		WRMA	

Activity 3.6.1 Prepare integrated water resource management plans for priority rivers flowing into the GLECA	1,000,000		GLECA	
Activity 3.6.2 Plan, attend and facilitate community planning meetings for integrated water resource plans	2,000,000		GLECA	
Activity 3.6.3 Facilitate governance of WRUAs	500,000		GLECA	
Objective 4: Dispersal area secured	1,800,000	0	KWS, GLECA	GLECA and KWS anticipated to get funds but it was not realized.
Activity 4.1.1 Carry out an inventory of land use / land tenure	400,000		KWS	
Activity 4.1.2 Carry out a biodiversity inventory	350,000		KWS	
Activity 4.1.3 Carry out wildlife tracking using radio telemetry	100,000		KWS	
Activity 4.1.4 Carry out a socio-economic study	200,000		KWS	
Activity 4.2.1 Mobilise relevant land owners to create viable habitat connectivity	500,000		GLECA	
Activity 4.2.2 Negotiate agreements for protection of habitat connectivity	200,000		GLECA	
Activity 4.2.3 Implement the agreements developed under activity 4.2.2 above	50,000		GLECA	
Tourism Development and Management Programme				
Objective 1: The GLECA tourism product expanded and diversified	180,000	0	KWS	KWS endeavour to acquire land around the lake to develop tourism products
Activity 1.1.1 Carry out a survey to identify areas suitable for proposed	40,000		KWS	
Activity 1.1.2 Identify stakeholders interested in developing the proposed visitor activities	50,000		KWS	
Activity 1.1.3 Enter into contract agreements with the stakeholders in Activity			KWS	

1.1.2 above				
Activity 1.2.1 Identify areas suitable for the development of various types of tourist accommodation facilities	40,000		KWS	
Activity 1.2.2 Identify stakeholders interested in developing the proposed visitor facilities	50,000		KWS	
Activity 1.2.3 Enter into contract agreements with the stakeholders in Activity 1.2.2 above			KWS	
Objective 2: GLECA is marketed as a single destination	7,597,000	0	GLECA, KWS	KWS follow up on budgetary allocations
Activity 2.1.1 Design the survey	50,000		GLECA	
Activity 2.1.2 Identify the products to be marketed	2,000		GLECA	
Activity 2.1.3 Develop and package the products	100,000		GLECA	
Activity 2.1.4 Disseminate the products	200,000		GLECA	
Activity 2.2.1 Collect and collate relevant information for the guidebooks	50,000		KWS	
Activity 2.2.2 Produce the guide books	200,000		KWS	
Activity 2.2.3 Distribute the guidebooks	50,000		KWS	
Activity 2.3.1 Collect relevant information for mapping	50,000		KWS	
Activity 2.3.2 Digitize the spatial information	15,000		KWS	
Activity 2.3.3 Print the maps	5,000		KWS	
Activity 2.3.4 Disseminate the maps	20,000		KWS	
Activity 2.4.1 Design the display panels	20,000		KWS	
Activity 2.4.2 Install display panels containing historical information on GLECA	100,000		KWS	
Activity 2.4.3 Install interpretation displays on exceptional resources	100,000		KWS	
Activity 2.5.1 Participate in local and international trade fairs	1,000,000		GLECA	
Activity 2.5.2 Link with other international marketers to advertise GLECA	500,000		GLECA	
Activity 2.5.3 Carry out a sales <i>bliz</i>	1,000,000		KWS	

Activity 2.5.4 Advertise GLECA through the local and international media	200,000		GLECA	
Activity 2.6.1 Design the information centre	120,000		KWS	
Activity 2.6.2 Construct the information centre see Activity 3.2.6 under Protected Area Operations programme	3,000,000		KWS	
Activity 2.6.3 Source for information materials	500,000		KWS	
Activity 2.7.1 Identify the event	5,000		GLECA	
Activity 2.7.2 Identify participants and sponsors	10,000		GLECA	
Activity 2.7.3 Advertise the event	300,000		GLECA	
Objective 3: GLECA visitor management improved	2,070,000	0	KWS, GLECA	KWS follow up on budgetary allocations
Activity 3.1.1 Identify potential tour guides	10,000		GLECA	
Activity 3.1.2 Register local community tour guides	100,000		GLECA	
Activity 3.1.3 Train the tour guides in visitor handling	500,000		KWS	
Activity 3.2.1 Develop GLECA visitor code	50,000		KWS	
Activity 3.2.2 Give conservation talks to visitors at the entry gate and lodges	60,000		GLECA	
Activity 3.3.1 Construct official gates see Activity 3.3.4 on infrastructure under Protected Area Operations programme	1,000,000		KWS	
Activity 3.3.2 Create awareness on the official gates and the new status of the GLECA area	100,000		KWS	
Activity 3.3.3 Close illegal access routes	200,000		GLECA	
Activity 3.3.4 Carry out spot checks on illegal entries	50,000		KWS	
Community Partnership and Education Programme				
Objective 1: Conservation education and awareness programme strengthened to gain community support	5,300,000	133,000	KWS, GLECA	GLECA to source for funds to support budgetary allocation
Action 1.1 Initiate community mapping programme (see proposal submitted by GLECA to PACT)	1,000,000		GLECA	

Activity 1.2.1 Illustrate the uniqueness of GLECA's resource values	500,000		KWS	
Activity 1.2.2 Prepare and disseminate interpretation materials, targeting various age groups in the community	500,000		KWS	
Activity 1.3.1 Prepare articles on GLECA and publish them in the local dailies	200,000		GLECA	
Activity 1.3.2 Design a GLECA website	400,000		GLECA	
Activity 1.3.3 Prepare a GLECA media package	100,000		GLECA	
Activity 1.3.4 Participate in local as well as international events such as World Environment Day, World Wetlands Day, and Agricultural Society of Kenya (ASK) shows, etc.	1,000,000		GLECA	
Activity 1.4.1 Organize public awareness meetings	100,000		KWS	
Activity 1.4.2 Organize workshops and seminars	900,000		KWS	
Activity 1.4.3 Organize for community study tours	500,000		KWS	
Activity 1.4.4 Establish community conservation committees	100,000		GLECA	
Objective 2: Human-wildlife conflict reduced	1,700,000	592,000	KWS	Budget constraints
Activity 2.1.3 Identify and recommend a honorary warden to assist in resolving the conflict issues			KWS	
Activity 2.1.4 Train community project management committee on operations and maintenance of any development project	500,000		KWS	
Activity 2.4.1 Establish a HWC mobile telephone hotline	200,000		KWS	
Activity 2.4.2 Establish community game scouts and issue them with hand held radios	1,000,000		KWS	
Objective 3: Opportunities for local communities to benefit from GLECA improved	5,980,000	0	KWS, GLECA	GLECA to source for funds
Activity 3.1.1 Carry out a needs assessment through PRA and RRI	50,000		KWS	
Activity 3.1.2 Develop project proposals for priority activities	50,000		GLECA	

Activity 3.1.3 Provide funding support to priority projects	800,000		GLECA	
Activity 3.2.1 Identify potential for conservation related income generating projects eg eco tourism activities in community land	40,000		GLECA	
Activity 3.2.2 Prioritise and support the identified projects	800,000		GLECA	
Activity 3.3.1 Support value addition to Aloe products	500,000		GLECA	
Activity 3.3.2 Support marketing of Aloe products	500,000		GLECA	
Activity 3.3.3 Organise study tours to other existing successful Aloe projects	1,000,000		GLECA	
Activity 3.4.1 Identify the potential areas for wildlife conservancies	40,000		KWS	
Activity 3.4.2 Negotiate with the land owners	100,000		KWS	
Activity 3.4.3 Initiate process of registration	100,000		KWS	
Activity 3.4.4 Train conservancy managers	1,000,000		KWS	
Activity 3.4.5 Develop and implement a management plan for the conservancy	1,000,000		KWS	
Protected Area Operations and Security Programme				
Objective 1: Institutional collaboration formalised and strengthened	1,505,000	0	GLECA	GLECA to source for funds
Activity 1.1.1 Review lessons learnt from other similar community based conservation management arrangements eg NRT, AET, Laikipia Wildlife Forum	60,000		GLECA	
Activity 1.1.2 Develop and agree on GLECA management structure	500,000		GLECA	
Activity 1.1.3 Develop an agreed service contracts	40,000		GLECA	
Activity 1.1.4 Develop and sign a MoU for implementation of the GLECA management plan	100,000		GLECA	
Activity 1.2.1 Develop the ToRs for MAC	100,000		GLECA	
Activity 1.2.2 Operationalize MAC	700,000		GLECA	
Objective 2: Human resource capacity enhanced	3,850,000	277,000	KWS	Number of staff is small
Activity 2.1.1 Identify optimal staffing levels per institution			KWS	
Activity 2.1.2 Liaise with relevant human capital departments to deploy staff	50,000		KWS	

based on the outcome of Activity 2.1.1 above				
Activity 2.2.1 Provide recreational facilities	2,000,000		KWS	
Activity 2.2.2 Reward staff creativity/innovations	150,000		KWS	
Activity 2.2.3 Provide accessible medical facilities	100,000		KWS	
Activity 2.3.1 Organize joint activities eg study tours, exchange programmes, recreational activities eg annual sports events	500,000		GLECA	
Activity 2.4.1 Carry out a training needs assessment	50,000		KWS	
Activity 2.4.2 Undertake relevant training based on the needs	1,000,000		KWS	
Objective 3 Infrastructure to support GLECA developed	6,661,000	0	KWS	Need for land acquisition for infrastructure development
Activity 3.3.1 Identify the number of gates required	1,000		KWS	
Activity 3.3.2 Design the entry gates	120,000		KWS	
Activity 3.3.3 Tender the entry gate works	50,000		KWS	
Activity 3.3.4 Contract the entry gate works	2,000,000		KWS	
Activity 3.5.1 Apply to the water company for water supply	10,000		KWS	
Activity 3.5.2 Install the piping system and storage tanks	3,000,000		KWS	
Activity 3.6.1 Identify appropriate sites for installation of signages	30,000		KWS	
Activity 3.6.2 Tender the works	50,000		KWS	
Activity 3.6.3 Contract the work	1,000,000		KWS	
Activity 3.7.1 Replace the beacons	300,000		KWS	
Activity 3.7.2 Clear the boundary where necessary	100,000		KWS	

Objective 4: Security of the site and wildlife	20,050,000	2,093,560	KWS, GLECA, UTUTU	Small budget allocated for patrols, security for wildlife and response to PAC cases
Activity 4.1.1 Establish a 24-hour security mobile hotline between GLECA security officers and tourist facilities	500,000		GLECA	
Activity 4.1.2 Provide a shared radio frequency see action 3.4.2	500,000		KWS	
Activity 4.1.3 Liaise with the local police to enhance security at tourist accommodation facilities	50,000		KWS	
Activity 4.1.4 Establish a 24-hour security link between GLECA security officers and local police	500,000		GLECA	
Activity 4.2.1 Equip the new outpost with binoculars, GPS and a vehicle, to facilitate ground patrols	8,000,000		KWS	
Activity 4.2.2 Procure patrol gear	5,000,000		KWS	
Activity 4.2.3 Establish new outposts in the Ututu Conservation Area to prevent continued destruction of the environment in this area	5,000,000		KWS,UTUTU	
Activity 4.2.4 Carry out intense ground and aerial patrols	300,000		KWS	
Activity 4.2.5 Carry out joint de-snaring activities	200,000		KWS,GLECA	
Sources of information:	GLECA One Year Activity Plan 2011-2012 and KWS annual budget for Lake Elmenteita Sanctuary 2013/2014			
Analysis and conclusion:	The site is underfunded, understaffed and no land for infrastructure development.			
Comparisons with previous assessment:	None			
Gaps and challenges:	Lack of revenue generated from the site, lack of stakeholder budgetary contribution			
Opportunities, recommendations and follow- up actions:	Mobilization of stakeholders to contribute to management of the site. Need for land acquisition for infrastructure development.			

Tool 7a: assessment of management needs and inputs for staff (BOGORIA)										
Staff category	Location	Required no. of staff	Current no. of staff	No. of trained staff	Type of training required	Level of training				Comments/ explanations
						Poor	Fair	Good	Very good	
List staff positions, including all categories of permanent & temporary staff	Identify where staff are posted (in some cases there will be more than one location within a particular category)	Estimate the ideal number of staff in this category	Give current number of staff	Identify the proportion of staff who are trained in each category	Detail the type of training required	<ul style="list-style-type: none"> - Very good: More than 75% of the staff is trained to adequate level - Good: 50-75% of the staff is trained to adequate level - Fair: 25-50% of the staff is trained to adequate level - Poor: Less than 25% of the staff is trained to adequate level 				Give detail of how the assessment was made i.e. how required staffing was calculated
Chief Warden	Bogoria – County head Quarters	1	1	1	Human Resources management, Paramilitary and wildlife management, tourism skills and customer care, community – communication, conflict resolution), finance management, computer and internet use, driving skills, data analysis, Intelligence skills, Knowledge of existing policies				Very Good	He is experienced and requires minimal training, MSc trained

Senior Warden	Loboi Gate	1	1	1	Human Resources management, Paramilitary and wildlife management, tourism skills and customer care, community – communication, conflict resolution), finance management, computer and internet use, driving skills, data analysis, Intelligence skills, Knowledge of existing policies			Good		Dip. In wildlife management
Warden Tourism	Mogotio	1	0	0	Wildlife training, interpretive and customer care, Data analysis, Computer and internet, human resource, conflict management, communication skills, product knowledge, public relations, Knowledge of existing policies, financial management					Need for a tourism warden to be recruited and deployed
Warden Community/ Education	Loboi	1	0	0	Wildlife management, communication skills, conflict management,					Need for a community warden

					interpersonal skills and public relations, conflict resolution, Knowledge of existing policies, financial management					
Warden Park Operations	Loboi	1	1	1	Human Resources management, Paramilitary and wildlife management, tourism skills and customer care, community – communication, conflict resolution), finance management, computer and internet use, driving skills, data analysis, Intelligence skills, Knowledge of existing policies, financial management			Good		Has Dip. In wildlife management. Needs BSc in wildlife management as basis for his career development and promotion
Accountant	Loboi	1	1	1	Financial management, budget generation and monitoring, procurement, public relations, business administration skills			Good		Needs skills in proposal writing and fundraising, wildlife management skills, budgeting and controls. Should be trained in CPA and should be registered as a certified

										accountant
Clerical Officer	Loboi	1	1	1	Financial management, budget generation and monitoring, procurement, public relations, business administration skills			Good		Need continuous training.
Administrator/HR	Loboi	1	0	0	Human resource management, customer care, conflict resolution, policy development, public relations, family affairs,					Need for recruitment
Head of Research.	Loboi	1	1	1	Leadership skills, wildlife management, data analysis, interpersonal and customer care skills, computer skills, EIA skills			Good		Has a degree in Environmental Planning and Monitoring . Need further training GIS application and modelling.
Head of Works and Estates	Loboi	1	0	0	Maintenance skills, Engineering works, procurement, budgeting skills and proposal generations, public relations					Need recruitment.
Rangers	Loboi, and outposts	20	12	12	Paramilitary, wildlife management, Data collection and			Good		Need for staff to be trained further in the areas identified.

					reporting, conflict resolution, customer care and product knowledge, safety and first aid skills.					
Customer Care Staff	Loboi and outposts	14	10	10	Good communication skills, computer skills, public relations, book keeping skills, foreign language knowledge			Good		Diploma in Customer Care. Need continuous training
Secretary	Loboi	1	1	1	Office ethics, front office management, Good communication skills, computer skills, public relations, record keeping			Good		Require further training
Drivers	Loboi and outpost	4	2	2	Driving licence, certificate of good conduct ,tour guiding, first aid, disaster management			Good		They have the basic training needed.
Campsite attendants/cleaners	Loboi and outposts	20	13	13	Camping/picnic skills, customer care and product knowledge, good communication skills, janitorial skills, tourism knowledge, waste management, interpersonal skills, public relations, foreign language knowledge			Good		Need further training.

Stores Clerk	Loboi	2	2	2	Book and record keeping, good organization skills, computer skills, procurement procedure knowledge			Good		Need further training
Source of information	Management reports, site management plans, BCG payroll, BCG HR records.									
Analysis and conclusion	There is inadequate manpower									
Comparison with previous assessments	N/A									
Gaps and Challenges	Shortage of personnel, limited resource allocation for more manpower, inadequate capacity.									
Opportunities, recommendations and follow-up actions	Need for training to enhance skills in productivity in various areas of management, need to fill the vacant positions, need to allocate enough resources.									

Tool 7b: Assessment management needs and inputs for budget (BOGORIA)

Expenditure category	Budget required	Actual budget available	Funding sources	Comments/explanations
This categories should relate to the category used for the sites annual budget	Record requirements here (detail of how the assessment was carried out should be given in the comments) Jun 2013-2014	Provide details on budget available and period July first,2012 to June 30 2013	Give details on where funding comes from e.g government, NGO...	Provide details on how information given in previous columns has been determined
Salary	20,000,000	14,112,000	Baringo County Government	The county board has not approved the recruitment of new staff.
Other personnel costs (NSSF, PAYE, etc)	2,800,000	1,539,000	Baringo County Government	
Staff Training	3,000,000	850,000	Baringo County Government	The board did not approve all the budget due to limited resources.
Advertising, awareness and Public campaigns	1,000,000	630,000	Baringo County Government	
Corporate Social Responsibility	2,000,000	2,000,000	Baringo County Government	This is the priority area for the BGC
Electricity	300,000	240,000	Baringo County Government	

Telephone/ network/Internet	300,000	260,000	Baringo County Government	
Postage and Courier services	30,000	18,000	Baringo County Government	
Travelling and Subsistence/ Patrol	900,000	1,867,200	Baringo County Government	There was need to intensify patrols and awareness in respect to poaching activities in the area.
Printing and Stationery	1,000,000	928,000	County Government	
News Papers	50,000	50,000	County Government	
Trade Shows and Exhibitions	1,000,000	1,000,000	County Government	The CGB prioritized marketing strategies.
Safety gears and Uniform	500,000	850,000	County Government	The CGB prioritized marketing strategies. There was need to intensify patrols and awareness in respect to poaching activities in the area.
Sanitary services	100,000	60,000	County Government	
Fuels and Oils	2,000,000	1,200,000	County Government	There was need to intensify patrols and awareness in respect to poaching activities in the area.
Vehicle repairs and Maintenance	500,000	432,000	County Government	

Restoration/ Beautification	200,000	150,000	County Government	
Equipment maintenance	200,000	200,000	County Government	It was a priority area for the CGB
Furniture and fittings	500,000	400,000	County Government	
Procurement of Computers and IT Eq	600,000	580,000	County Government	
Installation and construction of Signage	250,000	240,000	County Government	
Construction of curio shops	5,000,000	5,000,000	County Government	The CGB prioritized marketing strategies
Construction of view points	2,500,000	2,500,000	County Government	The CGB prioritized marketing strategies
Equipment of Mogotio Info centre	10,000,000	7,000,000	County Government	The CGB prioritized marketing strategies
Sources of information:	Baringo County Government Budget 2013-2014, Baringo County Integrated Development Management Plan, National Budget Control .			
Analysis and conclusion:	The budget is fairly allocated. More funds were allocated to priority areas like Patrols and Tourism marketing			
Comparisons with previous assessment:	N/A			
Gaps and challenges:	Entire budget was not attained because of the limited resources.			
Opportunities, recommendations and follow- up actions:	Continued lobbying for more funding in the areas with funding gaps. There is need to source for external funding.			

Worksheet 8a: Assessment of Management Processes

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
Management standards relevant to the site	Four responses are given which describe best practice in relation to the management standard and which can be rated from very good to poor. Choose the one most appropriate to the situation in the World Heritage site.	Add the rating here	Add details of why the assessment was made	Discuss future actions that may, if necessary, improve performance relating to this management issue
Management Structures and Systems				
1. World Heritage values Have values been identified and are these linked to management objectives?	<p>Very good: The World Heritage site has agreed and documented values and the management objectives fully reflect them</p> <p>Good: The World Heritage site has agreed and documented values, but these are only partially reflected in the management objectives</p> <p>Fair: The World Heritage site has agreed and documented values, but these are not reflected in the management objectives</p> <p>Poor: No values have been agreed for the World Heritage site</p>	Good	The values are well documented in the nomination document and management plans but the Objectives are very general	Ongoing review of the GMPs is an opportunity for the reformulation of the objectives to realign them with the site values
2. Management planning Is there a plan and is it being implemented?	<p>Very good: An approved management plan exists and is being fully implemented</p> <p>Good: An approved management plan exists but it is only being partially implemented because of funding constraints or other problems (please state)</p>	Fair	The individual protected areas within the site have expired management plans which are being	Need for a joint management plan and urgent review of the site specific plans

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
	Fair: A plan is being prepared or has been prepared but is not being implemented Poor: There is no plan for managing the World Heritage site		reviewed. Elmenteita has a draft plan that is yet to be approved, the site generally lacks a joint management plan	
3. Planning systems Are the planning systems appropriate i.e. participation, consultation, review and updating?	Very good: Planning and decision making processes are excellent Good: There are some planning and decision making processes in place but they could be better, either in terms of improved processes or processes being carried out Fair: There are some planning and decision making processes in place but they are either inadequate or they are not carried out Poor: Planning and decision making processes are deficient in most aspects	Good	The management plans have no system of incorporating new emerging issues and review periods are not clearly stated	Review period of plans need to be specified
4. Regular work plans Are there regular work plans or other planning tools?	Very good: Regular work plans exist, actions are monitored against planned targets and most or all prescribed activities are completed Good: Regular work plans exist and actions are monitored against planned targets, but many activities are not completed Fair: Regular work plans exist but activities are not monitored against the plan's targets Poor: No regular work plans exist	Very good	Usually AOP and Quarterly plans are generated	Need to uphold the planning and monitoring. Need for more resources to address the gaps in workplan implementation
5. Monitoring and evaluation	Very good: A good monitoring and evaluation system exists, is well implemented and used for adaptive management	Good	Annual evaluations of work plans are done and	Uphold and improve where necessary

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
Are management activities monitored against performance?	Good: There is an agreed and implemented monitoring and evaluation system of management activities but results are not systematically applied to management		staff appraised based on activity implementation, but the results of appraisal are not necessarily implemented	
	Fair: There is some <i>ad hoc</i> monitoring and evaluation of management activities, but no overall strategy and/or no regular collection of results			
	Poor: There is no monitoring and evaluation of management activities in the World Heritage site			
6. Reporting Are all the reporting requirements of the World Heritage site fulfilled?	Very good: Site managers fully comply with all reporting needs and have all the necessary information for full and informative reporting	Good	Some reports have been submitted to WHC with gaps that need to be filled. No report yet for this year	Compliance requirements should be fulfilled in reporting
	Good: Site managers fully comply with all reporting needs but do not have all the necessary information for full and informative reporting			
	Fair: There is some reporting, but all reporting needs are not fulfilled and managers do not have all the necessary information on the site to allow full and informative reporting			
	Poor: There is no reporting on the World Heritage site			
7. Maintenance of equipment Is equipment adequately maintained?	Very good: Equipment and facilities are well maintained and an equipment maintenance plan is being implemented	Good	There are systems in place that require regular maintenance and checking of equipment although they are not fully implemented	Need for a maintenance plan
	Good: There is basic maintenance of equipment and facilities. If a maintenance plan exists it is not fully implemented			
	Fair: There is some <i>ad hoc</i> maintenance but a maintenance plan does not exist or is not implemented			

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
	Poor: There is little or no maintenance of equipment and facilities, and no maintenance plan			
8. Major infrastructure Is management infrastructure (e.g. roads, offices, fire towers) adequate for the needs of the site?	Very good: Management infrastructure is excellent and appropriate for managing the site Good: Management infrastructure is adequate and generally appropriate for the site Fair: Management infrastructure is often inadequate and/or inappropriate for the site Poor: Management infrastructure is inadequate and/or inappropriate for the site	Fair	Elmenteita doesn't have offices, has no roads, gates. Nakuru has offices which are affected by flooding, roads are inadequate for tourism during flooding, has gate. Bogoria has infrastructure which is affected by flooding	Need for fresh planning of infrastructure at appropriate sites in Nakuru and Bogoria, need for infrastructure in Elmenteita.
9. Staff equipment and facilities Are the available facilities (e.g. vehicles, GPS, staff accommodation) suitable for the management requirements of the site?	Very good: Staff facilities and equipment at the World Heritage site are good and aid the achievement of the objectives of the site Good: Staff facilities and equipment are not significantly constraining achievement of major objectives Fair: Inadequate staff facilities and equipment constrain achievement of some management objectives Poor: Inadequate staff facilities and equipment mean that achievement of major objectives is constrained	Good	Staff equipment in place – GPS, radios, Compasses, vehicles and accommodation for rangers	More accommodation required at Elmenteita
10. Staff/ management communication	Very good: Staff directly participate in making decisions relating to management of the site at both site and management authority level	Good	Weekly and monthly meetings are conducted but sometimes	Solicit for support to facilitate the budget

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
Do staff have the opportunity to feed into management decisions?	Good: Staff directly contribute to some decisions relating to management		management fails to meet the needs of the staff due to resource constraints	
	Fair: Staff have some input into discussions relating to management but no direct involvement in the resulting decisions			
	Poor: There are no mechanisms for staff to input into decisions relating to the management of the World Heritage site			
11. Personnel management How well are staff managed?	Very good: Provisions to ensure good personnel management are in place	Good	Human resources manual in place which can be improved	Review of the policies to bridge the gaps
Good: Although some provisions for personnel management are in place these could be improved				
Fair: There are minimal provisions for good personnel management				
Poor: There are no provisions to ensure good personnel management				
12. Staff training Is staff adequately trained?	Very good: Staff training and skills are appropriate for the management needs of the site, and with anticipated future needs	Good	All staff have been equipped with the required skills could be improved further	Routine needs assessment should be upheld, and refresher training conducted
Good: Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management				
Fair: Staff training and skills are low relative to the management needs of the site				
Poor: Staff lack the skills/training needed for effective site management				

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions						
13. Law enforcement Do staff have the capacity to enforce legislation?	Very good: The staff have excellent capacity/resources to enforce legislation and regulations Good: The staff have acceptable capacity/resources to enforce legislation and regulations but some deficiencies remain Fair: There are major deficiencies in staff capacity/resources to enforce legislation and regulations Poor: The staff have no effective capacity/resources to enforce legislation and regulations	Good	Staff have been trained in all field of law enforcement but resources are not adequate	Uphold and continue refresher						
14. Financial management Does the financial management system meet the critical management needs?	Very good: Financial management is excellent and contributes to effective management of the site Good: Financial management is adequate but could be improved Fair: Financial management is poor and constrains effectiveness Poor: Financial management is poor and significantly undermines effectiveness of the World Heritage site				Good	Resources not adequate and could be redistributed to meet the needs of the WHS	Need for more support from Govt, training of staff should be ongoing			
Resource Management										
15. Managing resources Are there management mechanisms in place to control inappropriate land uses and activities	Very good: Mechanisms for controlling inappropriate land use and activities in the World Heritage site exist and are being effectively implemented Good: Mechanisms for controlling inappropriate land use and activities in the World Heritage site exist but there are some problems in effectively implementing them							Good	Poaching, illegal grazing still occur despite the strict protection of the sites, some activities are outside the control of site management	Need for appropriate intelligence systems

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
(e.g. poaching)?	Fair: Mechanisms for controlling inappropriate land use and activities in the World Heritage site exist but there are major problems in implementing them effectively Poor: There are no management mechanisms for controlling inappropriate land use and activities in the World Heritage site		especially land use in the catchment areas	
16. Resource inventory Is there enough information to manage the World Heritage site?	Very good: Information on the critical habitats, species and cultural values of the World Heritage site is sufficient to support planning and decision making and is being updated Good: Information on the critical habitats, species and cultural values of the World Heritage site is sufficient for some areas of planning/decision making and there plans (e.g. research and monitoring) to fill existing data gaps Fair: Some information is available on the critical habitats, species and cultural values of the World Heritage site, but this is insufficient to support planning and decision making and further data gathering is not being carried out Poor: There is little or no information available on the critical habitats, species and cultural values of the World Heritage site	Good	Not all the research data is assembled in one place, scattered, some not remitted	Need for establishment of strong data base
17. Research Is there a programme of management-orientated survey and research work?	Very good: There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs Good: There is considerable survey and research work directed towards the needs of World Heritage site management Fair: There is limited survey and research work directed towards the needs of World Heritage site management.	Good	Most of the research is done by staff and there is a survey team in place. A regular monitoring program is in place and being	Need for more staff and equipment, role out for more research

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
	Poor: There is no research taking place directed towards the needs of World Heritage site management		impleented	
18. Ecosystems and species	Very good: Requirements for management of critical ecosystems and species are being substantially or fully implemented	Good	Systems in place but constraint are in resources allocation	Need to lobby for corridors and dispersal areas, budget beef ups
Is the biodiversity of the World Heritage site adequately managed?	Good: Requirements for management of critical ecosystems and species are only being partially implemented			
	Fair: Requirements for management of critical ecosystems and species are known but are not being implemented			
	Poor: Requirements for management of critical ecosystems and species have not been assessed and/or active management is not being undertaken			
19. Cultural/ historical resource management	Very good: Requirements for management of cultural/ historical values are being substantially or fully implemented	Good	Cultural sites at Bogoria well managed, Nakuru is fenced off from community access	
Are the site's cultural resources adequately managed?	Good: Requirements for management of cultural/ historical values are only being partially implemented			
	Fair: Requirements for management of cultural/ historical values are known but are not being implemented			
	Poor: Requirements for management of cultural/ historical values have not been assessed and/or active management is not being undertaken			
Management and Tourism				
20. Visitor facilities	Very good: Visitor facilities and services are excellent for current levels of visitation	Good	Adequate for now but will need to be redesigned to avoid flood areas. Elmenteita	Need for more visitor faculties at the site
Are visitor facilities (for tourists, pilgrims etc)	Good: Visitor facilities and services are adequate for current levels of visitation but could be improved			

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
adequate?	Fair: Visitor facilities and services are inappropriate for current levels of visitation Poor: There are no visitor facilities and services despite an identified need		and Nakuru may require visitor centres. Elmenteita requires roads, Bogoria's has a road tarmacked up to the gate	
21. Commercial tourism Do commercial tour operators contribute to World Heritage site management?	Very good: There is good co-operation between managers and tourism operators to enhance visitor experiences and protect site values Good: There is limited co-operation between managers and tourism operators to enhance visitor experiences and protect site values Fair: There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters Poor: There is little or no contact between managers and tourism operators using the World Heritage site	Good	Tourism department has regular meetings with tour operators to improve operations at Nakuru, this could be done at Elmenteita	There is need for tourism systems at Elmenteita
22. Visitor opportunities Have plans been developed to provide visitors with the most appropriate access and diversity of experience when visiting the World Heritage site?	Very good: Implementation of visitor management policies and programmes is based on research and monitoring into visitor use and requirements and the carrying capacity of the World Heritage site Good: Policies and programmes to enhance visitor opportunities are being implemented but these are not based on research and monitoring of visitor use and requirements Fair: Consideration has been given to policies and programmes to enhance visitor opportunities but little or no action has been taken	Good	Establishment of facilities depends on research information	

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
	Poor: No consideration has been given to the provision of visitor opportunities to the World Heritage site			
23. Education and awareness programme	Very good: There is a planned, implemented and effective education and awareness programme fully linked to the objectives and needs of the World Heritage site	Good	Department of awareness exists in KWS, stakeholder engagement is also exhibited in tourism. Gaps exist in education of other tourism stakeholders and communities	More resources to implement these programs
Is there a planned education programme that addresses all audiences (i.e. local communities as well as visitors)?	Good: There is a planned education and awareness programme but there are still serious gaps either in the plan or in implementation			
	Fair: There is a limited and <i>ad hoc</i> education and awareness programme, but no overall planning for this			
	Poor: There is no education and awareness programme			
24. Access	Very good: Visitor management systems are largely or wholly effective in controlling access to the site in accordance with objectives	Good	No control at Elmenteita but systems available at other sites	Research should establish carrying capacity for visitors that can visit in a single day. Entry gates should be put in place in Elmenteita
Is visitor access sufficiently controlled? For example, through patrols, and permits etc.	Good: Visitor management systems are moderately effective in controlling access to the site in accordance with objectives			
	Fair: Visitor management systems are only partially effective in controlling access to the site in accordance with objectives			
	Poor: Visitor management systems are ineffective in controlling access to the site in accordance with objectives			
Management and Communities/Neighbours				
25. Local communities	Very good: Local communities directly and meaningfully participate in all relevant management decisions for the site	Good	Participation in management planning	
Do local communities resident in or near the	Good: Local communities directly contribute to some relevant management decisions but their involvement could be improved			

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
World Heritage site have input to management decisions?	Fair: Local communities have some input into discussions relating to management but no direct involvement in decision-making			
26. Indigenous people Do indigenous and traditional peoples resident in or regularly using the site have input to management decisions?	Fair: Local communities have no input into decisions relating to the management of the World Heritage site	Good	Involvement in management planning but not in day-to-day decision making	
Very good: Indigenous and traditional peoples directly participate in all relevant management decisions for the site	Good: Indigenous and traditional peoples directly contribute to making some relevant management decisions but their involvement could be improved			
Fair: Indigenous and traditional peoples have some input into discussions relating to management but no direct involvement in decision-making	Poor: Indigenous and traditional peoples have no input into decisions relating to the management of the site			
27. Local, peoples welfare Are there programmes developed by the World Heritage managers which consider local people's welfare whilst conserving the site's resources?	Very good: Programmes to enhance local, indigenous and/or traditional peoples welfare, while conserving World Heritage site resources, are being implemented successfully			
Good: Programmes to enhance local, indigenous and/or traditional peoples welfare, while conserving World Heritage site resources, are being implemented but could be improved	Fair: Programmes to enhance local, indigenous and/or traditional peoples welfare, while conserving World Heritage site resources, exist but are either inadequate or are not being implemented			
Fair: Programmes to enhance local, indigenous and/or traditional peoples welfare, while conserving World Heritage site resources, exist but are either inadequate or are not being implemented	Poor: There are no programmes in place which aim to enhance local, indigenous and/or traditional peoples welfare			
Poor: There are no programmes in place which aim to enhance local, indigenous and/or traditional peoples welfare				

Management area	Possible responses	Rating	Comments/ Explanation	Opportunities, recommendations and follow-up actions
28. State and commercial neighbours Is there co-operation with neighbouring land/sea/ owners and users?	Very good: There is regular contact between managers and neighbouring official or corporate land/sea users, and substantial co-operation on management	Good	Management planning, dispersal areas	Need to strengthen coordination on conservation of hinterland and dispersal areas
	Good: There is contact between managers and neighbouring official or corporate land/sea users, but only some co-operation on management			
	Fair: There is contact between managers and neighbouring official or corporate land/sea users but little or no cooperation on management			
	Poor: There is no contact between managers and neighbouring official or corporate land/sea users			
29. Conflict resolution If conflicts between the World Heritage site and stakeholders arise, are mechanisms in place to help find solutions?	Very good: Conflict resolutions mechanisms exist and are used whenever conflicts arise	Good	CC Department in place to handle conflicts but problem animal conflicts , dispersal areas, resource access, boundaries and benefits present a challenge	Explore new avenues for conflict resolution
	Good: Conflict resolutions mechanisms exist but are only partially effective			
	Fair: Conflict resolution mechanisms exist, but are largely ineffective			
	Poor: No conflict resolution mechanisms exist			

Worksheet 8b: Assessment of Management Processes - Summary

Management area	Question	Rating	Distribution of rating
Management structures and systems	1	Good	Very good: 7%
	2	Fair	Good: 86%
	3	Good	Fair: 7%
	4	Very Good	Poor:
	5	Good	
	6	Good	
	7	Good	
	8	Fair	
	9	Good	
	10	Good	
	11	Good	
	12	Good	
	13	Good	
	14	Good	
Resource management	15	Good	Very good:
	16	Good	Good: 100%

	17	Good	Fair:
	18	Good	Poor:
	19	Good	
Management and Tourism	20	Good	Very good:
	21	Good	Good: 100%
	22	Good	Fair:
	23	Good	Poor:
	24	Good	
Management and Communities /Neighbours	25	Good	Very good:
	26	Good	Good: 100%
	27	Good	Fair:
	28	Good	Poor:
	29	Good	
Analysis and conclusions	The general rating of the site in terms of management processes is good		
Comparison with last assessment	N/A		
Gaps and challenges	Gaps exist in formulation of management plans and infrastructure development		
Opportunities, recommendations and follow up action	Need to complete the review of the site specific management plans and formulation of the Site-wide management plan		

Worksheet 9: Assessment of Management Plan Implementation				
Status Code	Education	Ecological M	Park Mgt and Security	Tourism
Each action should be assessed against the status codes provided below	Percentage of Planned Activities implemented			
1. Not commenced	24	26.5	23	26.5
2. Reactive work only	0	0	100	0
3. Planning in progress	58	22	13	7
4. Planning complete work commenced	36	30	24	10
5. Substantial progress	28	18	34	20
6. Action completed	42	22	25	11
Analysis and conclusions	Amount of work un commenced is almost equal in all the components and is one quarter of all the work. Much of the work is ongoing or substantially done (32%) and about 25% completed.			
Comparisons with previous assessments	N/A			
Gaps and challenges	Evaluation only depended on expired and draft GMPs, no approved up-to-date GMP available			
Opportunities, recommendations	Formulation of new GMPs should be expedited and activity implementation supported.			

GRAPHICAL REPRESENTATION OF GMP IMPLEMENTATION

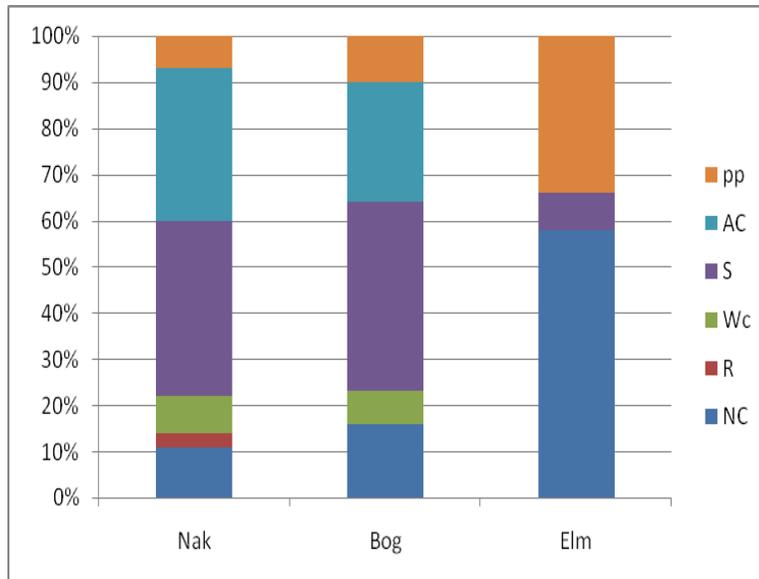
Nak = Lake Nakuru, Bog = Lake Boogoria, Elm = Lake Elmenteita

Tou = Tourism, PM & S = Park Mgt and Security, Ecol = Ecological Monitoring, Edc = Community and education Program

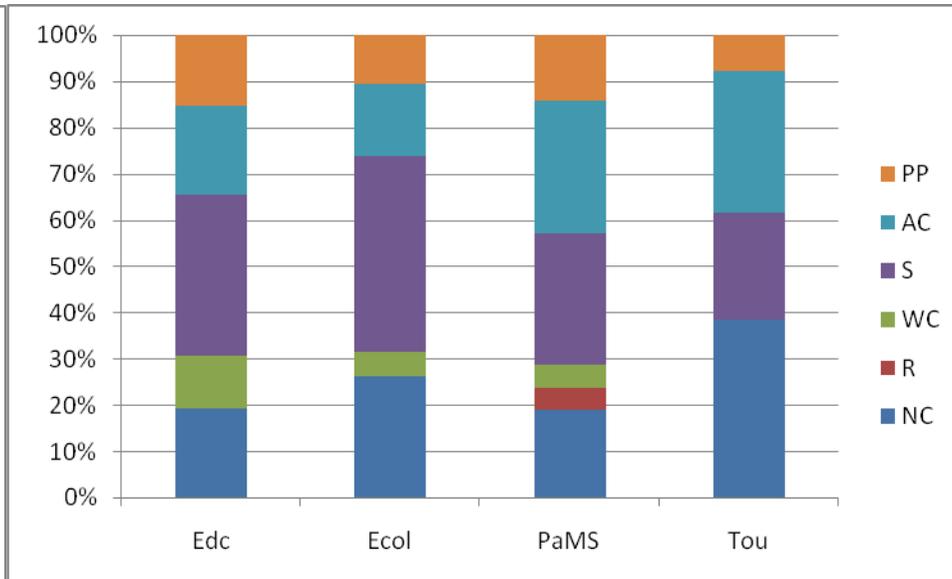
NC = Activity not Commenced, R = Activity Done Reactively with no plan, WC – Plan completed and Activity just commenced

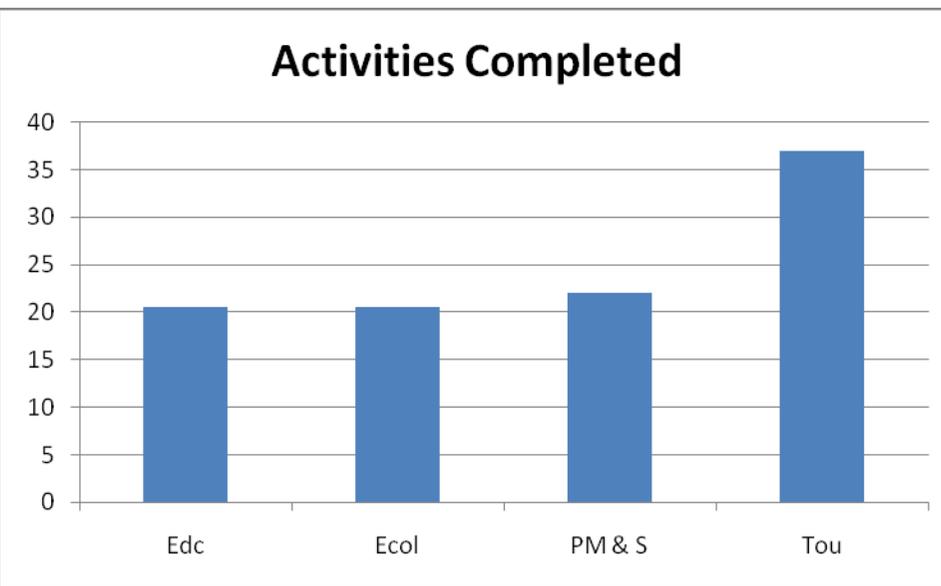
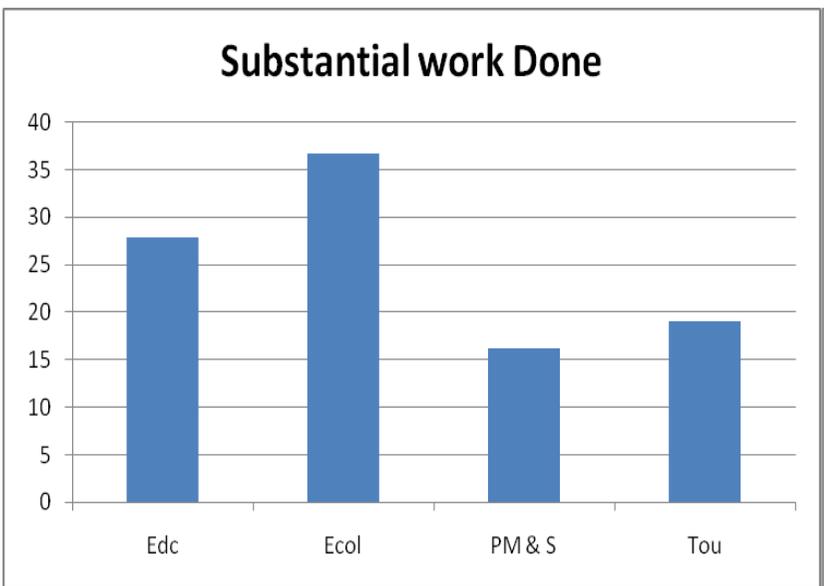
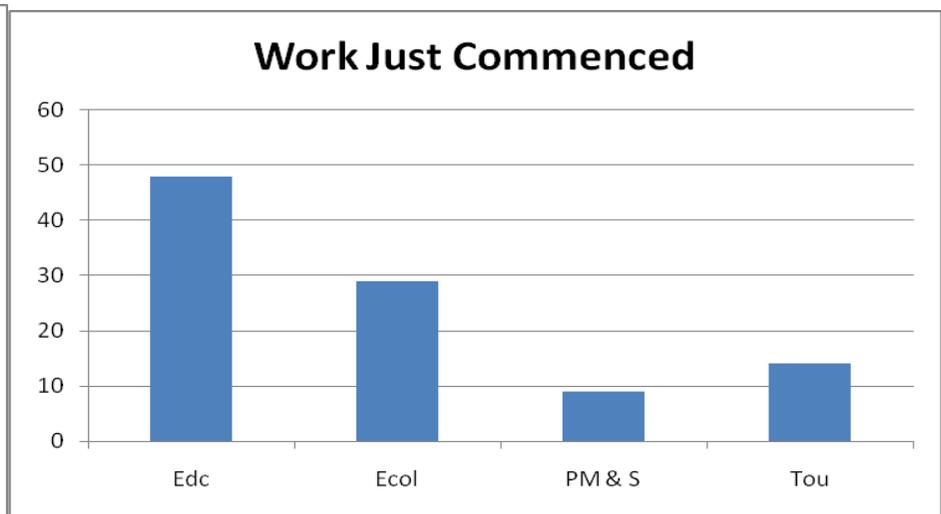
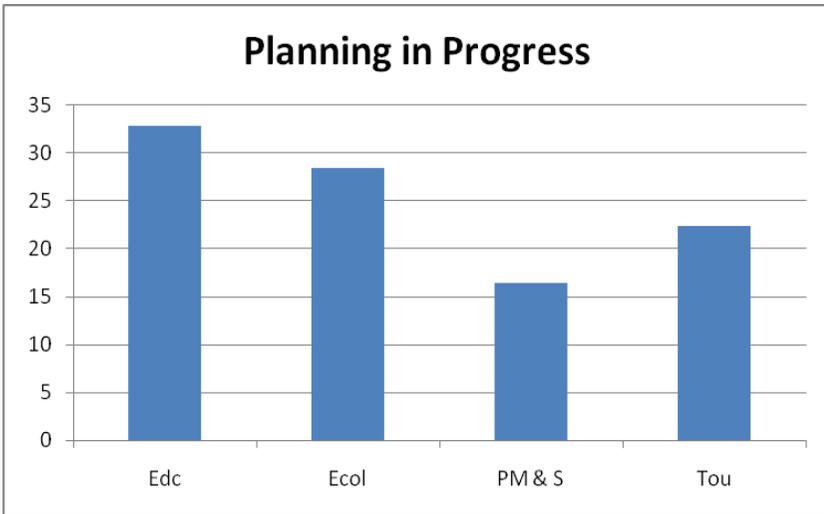
S = Substantial work done, AC = Activity completed, PP = Planning in Progress

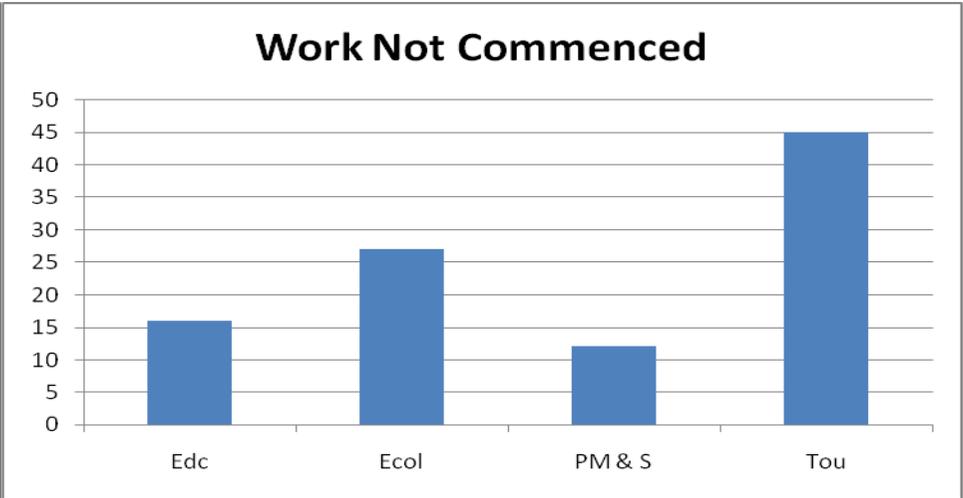
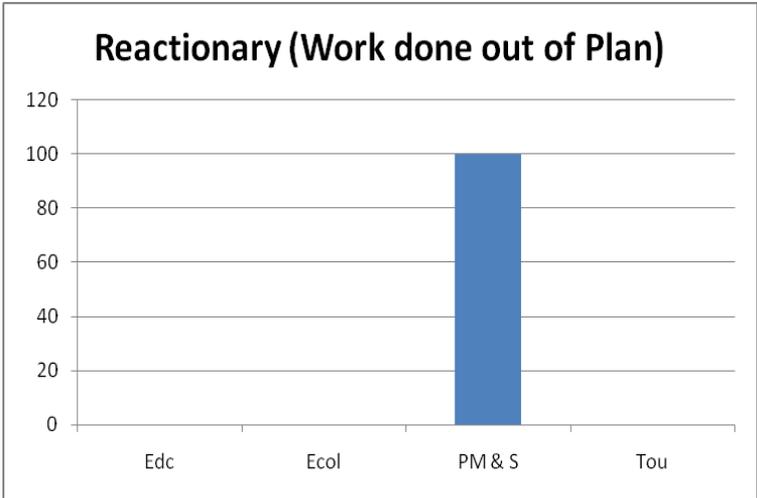
GMP IMPLEMENTATION AT INDIVIDUAL SITE LEVEL



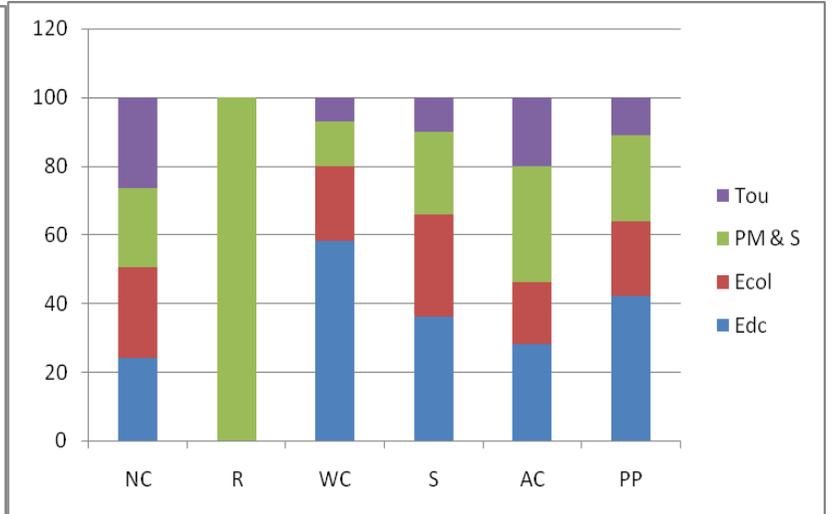
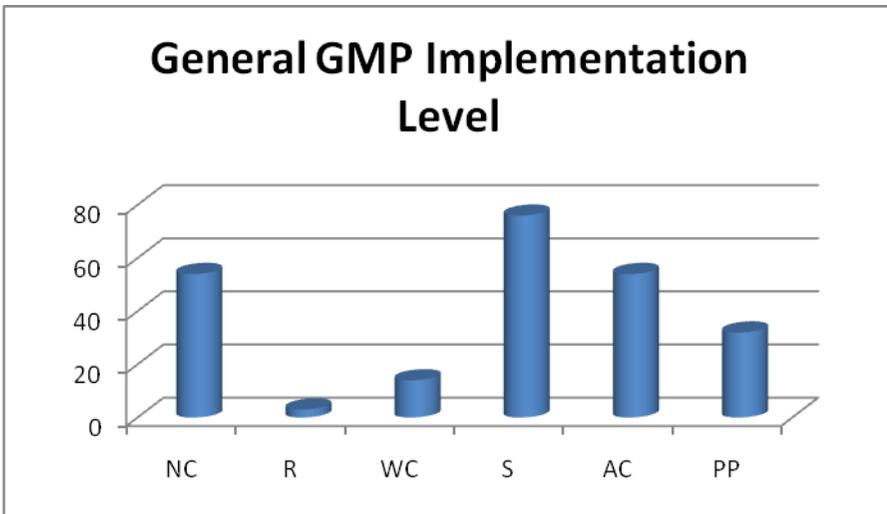
GMP IMPLEMENTATION AT DEPARTMENTAL LEVEL







GMP



Worksheet 10: Assessing Outputs – Lake Nakuru 2013/2014 fy

Indicator	Work output Target	Performance	Performance/level in previous year	Comments/ explanation	Sources of Information
<i>List indicators (these are usually expressed in a numeric way and may include user numbers, volume of work output and physical outputs)</i>	<i>Identify a measurable target for each indicator</i>	<i>List actual performance so that this can be compared to the target</i>	<i>List (where they exist) last year's outputs relating to the indicator</i>		
Number of Patrols conducted	Conduct 50 patrols	365, daily patrols conducted		No assessment conducted for last year. Patrols intensified due to emerging security threats	Annual work plan Quarterly reports
Number of outposts constructed	Nil	4 new outposts established		Enhancement of wildlife security	Annual work plan Quarterly reports
Number of trained staff					
No. of community groups formed and engaged					
Number PAC cases attended					

to					
Number of community awareness forums held					
Number of education outreach programmes conducted					
Number of censuses conducted	4	3 conducted (2 water fowl & 1 mammal census)		Could not conduct all the planned census because of budget reduction	Annual work plan Quarterly reports
Number of water quality monitoring reports generated	Monthly Report	10 Reports		The activity was not implemented in all the months due to lack of a sampling boat	Annual work plan Quarterly reports
Acreage cleared of invasive species	600 acres	1238 acres		The activity was implemented under a one year project funded by Parks Canada and KWS	Quarterly reports Project Report
Number of EIA and EAs conducted	4	6 (2 EIAs and 4 audits conducted)			Annual work plan Quarterly reports
Kilometres of fence maintained	78 km				
Kilometer of roads maintained or upgraded					
Kilometer of new roads constructed					

Number of new buildings constructed/ number of buildings renovated					
Number of tourism infrastructure (campsites, guest house and signages) rehabilitated					
Number of collaborative projects & initiatives with local communities					
Amount generated and number of fundraising events held					
Percentage increase in revenue generated					
Number of telecommunication equipment					
Analysis and conclusions					
Comparisons with previous assessments					
Gaps and challenges					
Opportunities, recommendations					

Worksheet 10: Assessing Outputs (ELMENTAITA)

Indicator	Work output Target	Performance	Performance/level in previous year 2012/2013	Comments/ explanation	Sources of information
<i>List indicators (these are usually expressed in a numeric way and may include user numbers, volume of work output and physical outputs)</i>	<i>Identify a measurable target for each indicator</i>	<i>List actual performance so that this can be compared to the target</i>	<i>List (where they exist) last year's outputs relating to the indicator</i>		
Number of Patrols conducted	365	304		Security patrols on a daily basis covers financial year June to July	Naivasha Station Workplan
Number of outposts constructed	4 uni pod	0	0	Work in Progress	Naivasha Station Workplan
Number of trained staff	6	3	2	Allocation of staff to other areas	Naivasha Station Workplan
No. community groups formed and engaged	4	0	0	No Funding	Naivasha Station Workplan
Number of censuses conducted	2 wildlife dry/wet 2 bird Jan/Jul	2 wildlife 2 bird	2 wildlife 2 Bird	Budget constraints limit monitoring	KWS/Soysambu
Community Barazas	12	1	4	Need reporting on activity – who, what, when, where	Naivasha Station Workplan
No of PAC cases handled	0	12	39	Reducing Cases	KWS

Signage	1	1	0	KWS Lake Elmenteita National Wildlife Sanctuary	Naivasha Station Workplan
Participation in WMBD	0	1	0		
De Snaring	0	8	18		KWS/Soysambu
Giraffe Monitoring	104	94	80		Soysambu
Invasive Species					Soysambu
Water Quality Monitoring	12	10	10		KWS LNNP
WRUA Meetings	4	2	2		KWS/Stakeholders
Training and awareness Workshops	5	7			
Dispersal Area Linkages					
Number of Tourism beds	122				
Staff Meetings	4	4	4		Naivasha Station Workplan
Analysis and conclusions	Better data is needed to fully understand the performance of the work plan.				
Comparisons with previous assessments	None				
Gaps and challenges	Work Plans do not relate to the management plan thereby the budgeting is not in line with the needs of the activities related to the MP.				
Opportunities, recommendations	Lake Elmenteita should be under a separate work plan and budgeting from the Naivasha Station. More resource allocation should be a priority.				

Worksheet 10: Assessing Outputs Bogoria

Indicator	Work output Target	Performance	Performance/level in previous year	Comments/ explanation	Sources of information
<i>List indicators (these are usually expressed in a numeric way and may include user numbers, volume of work output and physical outputs)</i>	<i>Identify a measurable target for each indicator</i>	<i>List actual performance so that this can be compared to the target</i>	<i>List (where they exist) last year's outputs relating to the indicator</i>		
Number of Patrols conducted	600	576	576	3 patrols every week by the 4 different outposts on average. Intensify patrols within and without the reserve. Improvement of emergency response system	LBNR Occurrence Book, reports and work tickets
Number of outposts constructed	4	4	4	The outposts serve the reserve adequately	LBNR management plan
Number of trained staff	71	24	30	More staff need to be recruited and existing ones need more capacity building.	BCG HR records, LBNR MP, BCG Payroll
No. of community groups formed and engaged	10	9	9	Community is actively involved in conservation programmes within and around the reserve.	Ministry of Cultural and Social Services
Number of censuses conducted	6	6	6	Biannual census for water fowl species and quarterly census for mammals.	LBNR, NMK, KWS, Bird life international
Analysis and conclusions	The output is satisfactory considering the resources available, there is need to recruit and train staff for optimum output.				
Comparisons with previous assessments	N/A				
Gaps and challenges	Limited resource allocation				
Opportunities, recommendations	There is need for more resources to enhance productivity				

WORKSHEET 11 a: Monitoring management outcomes

INDICATOR: Positive population trend of birds and mammals (e.g. Flamingos, Rhinos, Greater kudu, Giraffes, Water birds diversity)							
Major Site Values/Objective assessed by the Indicator: BIODIVERSITY							
Justification for Selection: Major site values for which the site was inscribed and are the measure for site integrity							
Indicator thresholds	Confidence level of threshold	Management Responses	Monitoring activity/methods	Frequency	Timing	Person Responsible	Cost and funding source
<i>Level beyond which urgent management action will be needed (usually an upper and lower limit)</i>	<i>The likely accuracy of the threshold (high, medium or low)</i>	<i>Review here the management responses if the indicators threshold is exceeded</i>	<i>Summarize how information will be collected (survey, use of monitoring equipment etc) and whether monitoring is already taking place (current) or new (needs to be developed)</i>	<i>Identify the proportion of staff who are trained in each category</i>	<i>When</i>	<i>By who</i>	<i>List the likely cost and whether money is currently available</i>
Lesser Flamingo Upper Level: 2.5 million Lower Limit: 50,000	Medium, flamingos keep flying from one site to another	Continue monitoring	Current: 1. Bird Census 2. Daily monitoring of mortality and numbers	150 (Engage experts) 50 staff	Twice a year Daily	Ecological Staff Warden and rangers	US \$12,000 US \$
Migratory Water Bird Diversity Upper Limit: 50 species Lower Limit: Not known	Medium, data derived from census and observation	Continue monitoring	Current: 1. Bird Census 2. Daily Monitoring	Engage Experts (150) 50 staff	Twice a year Daily	Ecological Staff Warden and rangers	Part of the budget reflected above

Black Rhinos Upper Limit: Lower Limit:	Specific for Nakuru		Current: 1. Mammal Census 2. Daily Monitoring				
Giraffe Upper Limit: Lower Limit:			Current: 1. Mammal Census 2. Daily Monitoring				
Greater Kudu Upper Limit: 300 Lower Limit: 150	Medium, data obtained through census	Monitoring, working with communities to conserve the dispersal and breeding areas	Current: 1. Mammal Census 2. Daily Monitoring	20 staff 10 staff	Yearly Daily	Ecological Staff Patrol rangers	US \$500
Lesser Kudu Upper Limit: Lower Limit:	No data yet as activity is planned		Current: 1. Mammal Census 2. Daily Monitoring				

INDICATOR: Maintained Water quality of the lakes							
Major Site Values/Objective assessed by the Indicator: Ongoing Ecological and Biological processes							
Justification for Selection: Water quality is a key factor in determining the biodiversity of the water birds, its also a key site nomination value							
Indicator thresholds	Confidence level of threshold	Management responses	Monitoring activity/methods	Frequency	Timing	Person Responsible	Cost and funding source
<i>Level beyond which urgent management action will be needed (usually an upper and lower limit)</i>	<i>The likely accuracy of the threshold (high, medium or low)</i>	<i>Review here the management responses if the indicators threshold is exceeded</i>	<i>Summarize how information will be collected (survey, use of monitoring equipment etc) and whether monitoring is already taking place (current) or new (needs to be developed)</i>	<i>Identify the proportion of staff who are trained in each category</i>	<i>When</i>	<i>By who</i>	<i>List the likely cost and whether money is currently available</i>
Water Quality:		Monitoring and water catchment protection, engage communities in conservation of the water catchment areas.	Current: 1. Water quality monitoring and analysis	6 KWS staff	Every Month	Ecological Monitoring staff	

WORKSHEET 11b: Assessment of outcomes of Management

Major Site Value: Biodiversity value					
Indicator	Threshold	Status of Indicator in relation to threshold	Rating	Comparison with previous assessment	Management Interventions: Urgency and details of Actions
<i>These should have been recorded in Worksheet 11a</i>	<i>These should have been developed in Worksheet 11a</i>	<p><i>Using the monitoring data gathered for each indicator, assess the status and trend of the indicator in this text field.</i></p> <p><i>Is the status of significant concern, developing concern or fine?</i></p> <p><i>Is the condition improving, unchanged or deteriorating?</i></p>	<p><i>Summarize the status and trend of the indicator using the graphics</i></p>	<i>How does this compare with any previous assessments?</i>	<i>Identify any specific actions needed in response to information collected in the monitoring and assessment of objectives</i>
Positive population trend of birds and mammals (e.g. Flamingos, Rhinos, Greater kudus, Giraffes, Water birds diversity)	Lesser Flamingo	At Limit of the assessment, the population was under the lower limit	↓	This is the first assessment	Research into the cause of the fall down in numbers
	<p>2.5 million upper limit and 50,000 on the lower limit</p> <p>Migratory Water Bird Diversity</p> <p>Upper limit: 50</p> <p>Lower Limit:</p>	No change	↔	N/A	Continue monitoring

	Unknown Black Rhinos Giraffe Greater Kudu Upper limit: 300 Lower Limit: 150	Within the limits	↑	N/A	Continue Monitoring
Analysis and conclusions		Since the Flamingos have a variety of ecosystems, it could be that they are elsewhere. The low numbers could have resulted from the higher levels of the lake waters which could have changed the water PH and turbidity that affected the growth of the microflora that form the main food sources for the Lesser flamingo.			
Comparison with last assessment		N/A			
Gaps and challenges		Gaps in Data for the main site values – Rhinos, Flamingos, Giraffes, Water quality, Lesser Kudu and Greater Kudu			
Opportunities, recommendations and follow-up actions		Need for the data gaps to be bridged and frequent monitoring recommended. A central data base recommended			

Tool 12: review of management effectiveness assessment results		
Elements	Tool	Follow-up actions
Elements of the WCPA framework	List the tools (adapt as necessary to the particular assessment)	Summarize follow-up actions listed at the end of each worksheet
Context	Tool 1a: Identify site values and management objectives	The Greater Kudu and the Rothschild's giraffe could be proposed in the addendum of the nomination document as additional biodiversity site values.
	Tool 1b: Identify site threats	The urgent completion of individual site GMPs that include the catchment areas. Joint GMP for all the three Lakes would be good if funding support could be identified
	Tool 2: Identify threats	More resources should be allocated to management and other government authorities to attend to the pressures facing the WHS. Need for commitment of all government institutions towards conservation of WHS values. Need for policy implementation on catchment conservation. There is a very urgent need for the Management authorities to prioritize the management of the various pressures. There is also need for the institutions of Government to ensure that the relevant laws are implemented
	Tool 3: Relationships with stakeholders/partners	Need for government to allocate more funds to engage stakeholders. Need for site management to engage more the stakeholders in protection of site values.

	Tool 4: Review national context	Fast tracking ratification of the Laws and policies that are yet to be ratified. Lobby Government to allocate more resources for WHS management
Planning	Tool 5a: Assessing management planning	Fast track individual GMPs. The availability of the technical staff to facilitate planning is an opportunity to site management planning
	Tool 5b:	New formulations should bring out clear objectives and highlight priority areas for management action
	Tool 6: Design assessment	Kenyan Government to include Lakes Olodein, Logipi, Sonachi, Natron and Magadi as part protected area system. Work with communities and stake holders to protect the dispersal areas and corridors, Kenyan govt to negotiate with Tanzania for inscription of Lake natron. Kenyan government to work with other range states to protect habitats for the migratory birds including the Flamingo. Creation of alternative benefits, development of tourism to benefit communities. Employment and education of the communities. Boundary marking, corridor establishment, incorporation of other key habitats of wildlife and birds, Government should acquire more land around Lake Elmenteita to buffer the lake.
Inputs	Tool 7a: Assessment of mgt needs and inputs	Nakuru: Need for recruitment/sourcing of more staff for the Park and skills upgrading to handle emerging challenges Elmentaita: Need for an assistant warden, and administrative

		<p>staff on site who are well trained, motivated and facilitated</p> <p>Bogoria: Need for training to enhance skills in productivity in various areas of management, need to fill the vacant positions, need to allocate enough resources.</p>
	Tool 7b:	<p>Nakuru: KWS should set aside an emergency budget to cater for emergency response to budget cuts on planned activities. Need for all information on personnel to be availed to the site managements for completion of this report.</p> <p>Elementaita: Mobilization of stakeholders to contribute to management of the site. Need for land acquisition for infrastructure development.</p> <p>Bogoria: Continued lobbying for more funding in the areas with funding gaps. There is need to source for external funding.</p>
Processes	Tool 8: Assessment of management processes	Need to complete the review of the site specific management plans and formulation of the Site-wide management plan
Outputs	Tool 9: Assessment of management plan implementation	Formulation of new GMPs should be expedited and activity implementation supported.
	Tool 10: Assessing outputs	<p>Nakuru:</p> <p>Elementaita: Lake Elmenteita should be under a separate work plan and budgeting from the Naivasha Station. More resource allocation should be a priority.</p> <p>Bogoria: There is need for more resources to enhance</p>

		productivity	
Outcomes	Tool 11b: Assessing outcomes of management		Need for the data gaps to be bridged and frequent monitoring recommended. A central data base recommended
	Values Assessed	Trend of each value based on indicator	
	Lesser Flamingo (all lakes)	Positive population trend	Research into the cause of the fall down in numbers
	Migratory Birds (all Lakes)	Diversity of birds at the site	Continue monitoring
	Black Rhinos (Nakuru)	Positive population trends	
	Giraffe (L. Elmentaita)	Positive population trend	
	Greater Kudu (Bogoria)	Positive population trend	Continue Monitoring
	Lesser Kudu (Bogoria)	Positive population trend	
	Zebras (Elmentaita)	Positive population trend	
	Water	Water Quality	