Publication Name, Author and Date	Description of Publication
A New Chapter in Fisheries Management (Horst Kleinschmidt, Shaheen Moolla, Marius Diemont 2005)	The Government of the Republic of South Africa, and in particular its Department: Environment and Tourism, Branch Marine and Coastal Management, will in 2005 record a watershed in the management of South African commercial fisheries by allocating fishing rights or quotas for periods of up to 15 years. The allocation of long term commercial fishing rights or quotas in 2005 marks the third phase in the maturation of the South African fishing industry in the post 1994 era.
IUU Fishing in South Africa: An acronym with an expiry date (Shaheen Moolla 2006)	South African fisheries interests are currently firmly focused on the milestone allocation of commercial fishing rights conservatively valued at R70 billion. However, as the process of rights allocation, which began some 24 months ago with policy design, comes to a close, the focus of fisheries managers and the industry as a whole must necessarily shift rapidly to sustainable management if the fishing quotas allocated are to remain environmentally and financially viable. The most fundamental and immediate threat to fisheries sustainability in South Africa and indeed across the globe is that of illegal, unregulated and unreported fishing (IUU fishing).
South African Development Community: Protocol on Fisheries (2001)	The objective of the Protocol is to promote responsible and sustainable use of the living aquatic resources and aquatic ecosystems of interest to State Parties in order to: a) promote and enhance food security and human health; b) safeguard the livelihood of fishing communities; c) generate economic opportunities for nationals in the Region; d) ensure that future generations benefit from these renewable resources; and

	e) alleviate poverty with the ultimate objective of its eradication.
Promoting Responsible Ports (High Seas Task Force 2006)	Active use of port State jurisdiction can be an effective weapon against illegal, unreported and unregulated (IUU) fishing operations. Port State controls can act as a disincentive to IUU operators by increasing the cost of their operations (e.g. by forcing them to seek out more remote and hence more costly ports). The key is to ensure that port State controls are applied widely and consistently in order to avoid the development of so-called ports of convenience. Once a vessel is in one of its ports, the port State needs to be able to act decisively and effectively. This means that necessary domestic legislation must be in place as well as cooperative mechanisms to coordinate action with other port States, flag States and market States. A regionally or globally harmonized and coordinated approach to port State control can help to overcome the practical limitations of action by individual States (e.g. IUU operators rapidly shifting operations from one port to another or transhipping at sea).
Tuna Seafood Industry Report August 2007 (Glitnr Seafood Team)	In terms of international trade, tuna is one of the most important fisheries species. Total export value of fisheries products amounted to USD 72 billion in 2004, whereof tuna accounted for USD 5.5 billion (7.6%). The three bluefin species are most valuable in terms of value per kilogram harvested, supply of these species is also the least or about 60,000 MT annually. This report gives an analytical overview over the global tuna value chain, its current situation and our evaluation of likely developments and future trends. At the end is a case study which focuses on tuna farming.

Abidjan Convention (5 August 1984)	Convention for the Co-operation in the Protection and Developement of the Marine and Coastal Environment of the West and Central African Region; and Protocol (1981) The Contracting Parties shall take all appropriate measures in conformity with international law to prevent, reduce, combat and control pollution in the Convention area caused by normal or accidental discharges from ships, and shall ensure the effective application in the Convention area of the internationally recognized rules and standards relating to the control of this type of pollution.
Draft Climate Change Strategy and Action Plan for the Western Cape (OneWorld Sustainable Investments 2007)	Responding to the challenge of climate change and sustainable development in the Western Cape Climate change is one of the biggest challenges facing the international community. Although media coverage and talk is generally about the future impacts of climate change, it is in fact already happening and, certainly, a level of climate change is inevitable . whatever the global response to reducing greenhouse gas emissions is. Research has indicated that the south-western corners of the three continents below the equator are likely to be the most affected by climate change. This has already been evidenced by the impact on Perth in Australia and similarly the Western Cape because of its location is likely to be particularly vulnerable and changes to the provincial climate will affect everyone in our community. Much work is being conducted on a global scale to evaluate global warming and its impact.
Australian Government Cost Recovery Guidelines (Department of Finance and Administration 2005)	In December 2002 the Australian Government adopted a formal cost recovery policy to improve the consistency, transparency and accountability of commonwealth cost recovery arrangements and promote the efficient allocation of resources.

	The policy applies to all Financial Management and Accountability Act 1997 (FMA Act) agencies and to relevant Commonwealth Authorities and Companies Act 1997 (CAC Act) bodies that have been notified, under sections 28 or 43 of the CAC Act, to apply the cost recovery policy. These entities are collectively referred to as 'agencies' for the purposes of these guidelines. The policy applied immediately in respect of new or significantly amended cost recovery arrangements and will be phased in for all existing arrangements over a period not exceeding five years (to 2007-08). For the purposes of this policy, 'cost recovery' broadly encompasses fees and charges related to the provision of government goods and services (including regulation) to the private and other non-government sectors of the economy.
Cost Recovery in Fisheries Management: The Australian Experience (Anthony Cox 2000)	Cost recovery has been a fundamental feature of the management of Australia's Commonwealth fisheries since the mid-1980s. The general philosophy of the current Commonwealth cost recovery model, introduced in 1994, is that the beneficiaries of government services should meet the costs of those services in accordance with the concept of user pays. As a result, the commercial industry pays for costs directly related to fishing activity while the government pays for activities that may benefit the broader community as well as the industry. The purpose in this paper is to review the Australian experience with cost recovery. The total cost of managing Australia's Commonwealth fisheries averaged 7.2 per cent of the gross value of production between 1992-93 and 1998-99. Total costs have increased in recent years due to increased Commonwealth government expenditure on surveillance of Australia's Fishing Zone and higher administration costs of the Australian Fisheries Management Authority. The industry

	contribution to the costs of fisheries management has averaged 34 per cent between 1992-93 and 1998-99. The degree of cost recovery varies significantly between individual fisheries as a result of differences in the attribution of the costs of management functions between industry and government.
Return to the Nation: Resource Rentals and Cost Recovery (Tom McClurg 2001)	The evolution of the Quota Management System of fisheries management in New Zealand has been accompanied by four innovations in the specific mechanisms used by government to collect revenue from commercial fishers and quota owners. These are: the introduction of resource rentals, the removal of resource rentals, the introduction of cost recovery and the proposed substantial modification of the cost recovery regime. This paper reviews the history of these innovations and identifies some of the key incentives associated with them. In particular, the interaction between these incentives and the overall incentive set suggested by a framework of secure property rights is examined.
EU Fleet Report (Knigge 2007)	A list of all European vessels that received subsidies for the period between 2000 to 2007. The list also includes the value of the subsidies.
The NEPAD Plan of Action for the Development of African Fisheries and Aquaculture (2005)	NEPAD recognises the vital contributions by African inland and marine fisheries to food security and income of many millions of Africans and to poverty reduction and economic development the region. Within the framework of the Comprehensive Africa Agricultural Development Program (CAADP), a series of regional technical consultations were held that identified the primary areas for investment to safeguard and further increase these benefits, together with a first set of priority actions in each. The NEPAD Plan of Action for Fisheries and Aquaculture

	Development describes these investment areas for inland fisheries, coastal and marine fisheries and aquaculture.
FAO Code of Conduct for Responsible Fisheries (1995)	Fisheries, including aquaculture, provide a vital source of food, employment, recreation, trade and economic well-being for people throughout the world, both for present and future generations and should therefore be conducted in a responsible manner. The Code sets out principles and international standards of behaviour for responsible practices with a view to ensuring the effective conservation, management and development of living aquatic resources, with due respect for the ecosystem and biodiversity. The code recognises the nutrintional, economic, social, environmental and cultural importance of fisheries, and the interests of all those concerned with the fishery sector. The Code takes into account the biological characteristics of the resources and their environment and the interests of consumers and other users. States and those involved in fisheries are encouraged to apply the Code and give effect to it.
Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas of Beyond National Jurisdiction (IUCN Marine Series No.1 2008)	This paper identifies regulatory and governance gaps at a global level. Regulatory gaps identified in this study include; • The absence of an instrument or mechanisms to ensure that modern conservation principles building on the general obligations contained in treaties such as UNCLOS, CBD, UNFSA • Absence of detailed international rules and standards to implement modern conservation principles for existing activities • Lack of regulation to manage increasing impacts from traditional uses • Lack of specific requirements for modern conservation tools

	• Lack of effective compliance and enforcement mechanisms • Absence of legally binding instruments in all ocean regions • Lack of rules or a process to coordinate regulation of interactions between activities • etc
Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction. (IUCN Marine Series No.2 2008)	This paper, building on a complementary study that identifies several significant regulatory and governance gaps, highlights a variety of short- and medium- term options for addressing the identified gaps. These options are grouped as follows**:** • **Option A:** Short term targeted actions to address specific gaps (e.g. United Nations General Assembly (UNGA) resolutions, codes of conduct, pilot initiatives, scientific studies, upgrading existing bodies); • **Option B:** Reform or expansion of the existing legal and institutional framework at the regional level in response to the regulatory and governance gaps (e.g. expand or establish new regional seas agreements and Regional Fisheries Management Organisations (RFMOs), region specific agreements, protocols or annexes for unregulated activities, environmental impact assessment (EIA), etc; • **Option C:** Development of new global sectoral or issue based instruments and other processes to address specific gaps (e.g. UNGA review process, global agreements for EIA and marine spatial planning, sector-specific agreements for unregulated activities, Port State Measures Agreements for fisheries and non-fi sheries activities, an Intergovernmental Panel on Oceans);

	• **Option D:** A new global comprehensive legally binding instrument to provide one integrated system for addressing all the identified regulatory and governance gaps (e.g. an agreement to implement Parts VII and XII of the United Nations Convention on the Law of the Sea (UNCLOS) (ie UNCLOS Implementing Agreement)). Drawing on these options, this paper recommends a practical approach of adopting a package of measures to address priority issues while building political support for more comprehensive action.
The Mid-Atlantic Ridge: A Case Study on the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction (IUCN Marine Series No.3 2008)	In April, 2008, the United Nations *Ad Hoc Open ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction* (UNWG BBNJ) will convene to discuss a range of topics critical to the health of the 64% of the world ocean that lies in areas beyond national jurisdiction (ABNJ). One of the key items on the agenda will be "Whether there is a regulatory or governance gap, and if so, how it should be addressed." This paper contains a case study on the conservation and sustainable use of marine biodiversity in the part of the Mid-Atlantic Ridge (MAR) that is located in ABNJ. The purpose of this paper is to review the scope and functioning of applicable regional regimes and to identify if, and what kind of, regulatory and/ or governance gaps exist. The case study complements and should be read in conjunction with the two studies that identify general regulatory and governance gaps at a global and regional level ('Gap Analysis') and options to address these gaps ('Options Paper') as well as with the background paper on Elements of a Possible Implementation Agreement to UNCLOS.

Profile of the illegal abalone fishery (*Haliotis Midea*) in the Eastern Cape Province, South Africa: Organised Pillage and Management Failure (Serge Raemaekers and Peter Britz 2008)	Since 1997 the Eastern Cape of South Africa has become a major source of supply for the illicit abalone trade as poachers have located a substantial abalone (*Haliotis midea)* resource. We determined illegal fishing effort and yield in the Port Elizabeth based abalone fishery, and used biological indices to determine the impact of fishing on the abalone stock. The failure of the state to issue fishing rights and conduct effective sea based compliance, combined with the incentives of fish abalone (high price, low cost, ease of access) created the conditions for a full scale illegal fishery to emerge very rapidly. By 2005, the scale of the fishery was remarkable: a fleet of 30 purpose built vessels existed, harvesting 1000 – 2000 tons of abalone with an export value of 35-70 million USD per annum. The uncontrolled fishing effort had a dramatic effect on the stock: - the average size of abalone decreased significantly, densities declined in the sampling areas, but recruitment of young abalone was still observed a the heavily poached Cape Recife site. It is concluded that the poaching operations and the resultant ecological effects on the abalone resource, reflect deficiencies in South Africa's abalone fisheries management and compliance paradigm.
Illegal Fishing in Arctic Waters – Catch of Today, Gone Tomorrow? (WWF 2008)	The Arctic holds outstanding nature values and rich ecosystems, from large marine mammals such as the polar bear and bowhead whale to abundant fish stocks of cod, Alaska pollock, herring and capelin to the small but numerous species such as zoo plankton. Few places in the world are changing as fast as the arctic seas. Surrounded by countries with strong and growing economies, the region faces challenges associated with global warming, rapid development, and exploitation of natural resources. The global seafood trade integrates the regional economies into a

	global trading network with challenges and opportunities for marine conservation. Illegal, Unregulated and Unreported fishing (IUU) represents a significant threat, causing serious economic, social and environmental problems. On a global scale, IUU fishing has been estimated to cost up to €10 billion (US$15.5 billion) annually. This report discusses the Barents Sea in Northern Europe and the Western Bering Sea and the Sea of Okhotsk in the Russian Far East. The Russian Federation and Norway are the two major fishing nations in these areas, and most of the fishing grounds are covered by either Norway's or the Russian Federation's national exclusive economic zones. The whitefish fisheries in these two regions have Atlantic cod and Alaska pollock as the main species. The combined catch, mostly exported to international markets, makes up 20-30 per cent of global supply of whitefish.
In Dead Water – Merging of Climate Change with Pollution, over-harvest and Infestations in the Worlds Fishing Grounds (UNEP 2008)	The World's oceans play a crucial role for life on the planet. Healthy seas and the services they provide are key to the future development of mankind. Our seas are highly dynamic, structured and complex systems. The seafloor consists of vast shelves and plains with huge mountains, canyons and trenches which dwarf similar structures on land. Ocean currents transport water masses many times larger than all rivers on Earth combined. In this report, the locations of the most productive fishing grounds in the World – from shallow, coastal waters to the deep and high seas – are compared to projected scenarios of climate change, ocean acidification, coral bleaching, intensity of fisheries, land-based pollution, increase of invasive species infestations and growth in coastal development.

Report on SADC Port State Control Measures to Combat IUU Fishing for the FAO Regional Workshop on Port State Control Measures (Feike 2008)	This Report examines the status of port state control measures among SADC Port States. In concluding, this Report not only identifies some of the more significant challenges faced by SADC Port States in the implementation of port state control measures, but also proposes solutions.
Presentation to the FAO Workshop on Port State Measures in SADC (Shaheen Moolla, 2008)	Presentation based on the "Report on SADC Port State Control Measures to Combat IUU Fishing for the FAO Regional Workshop on Port State Control Measures".
Stop Illegal Fishing in Southern Africa (Stop Illegal Fishing Programme 2008)	A common misconception is that all Illegal, Unreported and Unregulated (IUU) fishing is illegal. Equally, IUU fishing is frequently considered to constitute piracy. From a legal perspective, neither of these perceptions is technically correct. During the first half of the 1990s, a growing number of international legal instruments were negotiated under the auspices of the 1982 United Nations Convention on the Law of the Sea (UNCLOS). These 'hard' (legally binding) and 'soft' (non-legally binding) agreements outlined provisions to combat unsustainable fishing practices and to promote conservation of fishery resources. The most prominent examples of 'hard instruments' of the time are the 1993 Compliance Agreement3 and the 1995 United Nations Fish Stocks Agreement. The most prominent 'soft' instrument is the 1995 FAO Code of Conduct for Responsible Fisheries.
Contextualising Illegal, Unregulated and Unreported Fishing of Marine Resources in South African Waters (Shaheen Moolla 2008)	The most recognisable and immediate threat to the commercial viability of wild fisheries in South Africa, and indeed across the globe, is that of IUU fishing. In South Africa, IUU fishing has been blamed for the collapse of the traditional line fishery, abalone and Patagonian toothfish

	stocks. More recently, IUU fishing has also impacted on the viability of South Africa's largest fisheries, namely hake and pilchards. There are also increasing numbers of reports of an "IUU creep" in the South African lobster and shark industries Although this paper will analyse more closely the ecological, social and economic impacts of IUU fishing on a number of these fisheries, it may be useful to introduce briefly the context of the crises affecting them.
Sustainability and present-day approaches to fisheries Management – are the two concepts irreconcilable? (GM Pilling and AIL Payne 2007)	Sustainability may be defined as the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations. But how do modern management systems aim to achieve this in the face of natural fluctuations and human-induced pressures? Using four case study fisheries (northern Atlantic cod [both *Gadus morhua*], Pacific sablefish *Anoplop fimbria* and South African West Coast lobster *Jasus lalandii)* we examine the components and considerations used in the development of management systems. Historically these considerations have biology-based, incorporating reference points appropriate for management goals or targets. Following some quite spectacular failures, however, inputs from disciplines such as socio-economics and ecosystem science are increasingly important drivers behind management decisions, but have the potential to increase management complexity greatly. We identify three areas of particular importance. Precautionary, robust and responsible management is needed, with pre-agreed actions to be taken when particular conditions are experienced. Management decisions need to be based upon adequate scientific

	information, particularly given the increasing variety of drivers for management. Finally, fisheries management needs to be a collaborative process, involving all stakeholders, thereby raising the credibility of management for all participants. Integrating all these aspects within the fisheries management framework is complex, but when combined with the realisation that harvests are likely to be lower that historical levels, there appears to be a greater chance of successful sustainable exploitation.
Benchmarking the first decade of post-apartheid fisheries reform in South Africa. (L. Van Stittert, G. Branch, M. Hauck and M. Sowman 2006)	The paper uses the three legislative criteria of resource sustainability, economic stability and social equity to measure the past decade of fisheries reform in South Africa. All three components of the reform process have been successful, although this judgement is subject to a number of important qualifications. First, the data available to measure success are limited. Second, both sustainability and stability are vulnerable to volatile factors external to the reform process (particularly variability in recruitment, climate change and exchange rate fluctuations) capable of derailing the process. Substantial alteration of the fishing industry by internal transformation of existing companies and the reallocations of access rights to new black entrants has led to a composition that closely reflects that of society as a whole, and therefore meets the goal of equity. In the process, however, *bona fide* traditional fishers with a historical dependence on fishing have largely been denied legitimate access to the fisheries, and meeting their aspirations remains a challenge.

South African Fisheries Management: The Long-term Path to Ruin? (H. Kleinschmidt, S Moolla and W. Sauer 2008)	There are three choices that face Government (in the form of the Minister and the Portfolio Committee), the Administration in the form of DEAT (MCM), and the wider stakeholders, including fishing communities, fishing companies and their workers and not least fisheries scientists, by all accounts the best organised group of them all. The choices are as follows: First, do nothing until compelled to do something. Second, design sound plans and strategies to respond rationally and with empirical evidence that supports sustainable solutions or allow for populist and emotive sentiment to rule the day. This paper argues that the second option is the only viable option and that it was this option that informed the development of fisheries policies since 2000. However, this paper also recognizes that South African fisheries policies are increasingly tending to slide toward option 3 – populism – as our fisheries management capacities and capabilities continue to be eroded.
The Chimera of Redistribution: 'Black Economic Empowerment' (BEE) in the South African Fishing Industry (Stefano Ponte and Lance van Stittert 2008)	In this paper, we examine redistributive processes in the hake deep-sea trawl (HDST) industry through historical analysis of the principles, narratives and management systems that have been used to identify certain groups as 'legitimate fishers' since the late nineteenth century. We place this evolution as a background for a nuanced understanding of the first allocation of long-term fishing rights that took place in early 2006. We conclude that BEE, despite its formal intentions, is doubly conducive to the interests of large-scale South African capital – for which investment in fishing is only one among many others. First is has largely confirmed the historical share of fishing rights to

	incumbent, largely white-controlled, operators. It has also allowed for the more flexible allocation of rights via the market in response to changing environmental, economic and social conditions. Second, BEE has created a new layer of 'black captains of industry' to whom incumbent players are increasingly outsourcing primary production in a volatile, high risk and currently loss-leading sector. While fishing operations are being outsourced under the banner of redistribution, fish trade is still effectively controlled downstream by white capital through logistics, distribution, marketing and branding assets.
Ecolabels and Fish Trade: Marine Stewardship Council certification and the South African Hake Industry (Stefano Ponte 2006)	Protecting consumers from unsafe food, the environment from over-exploitation of resources and pollution, and workers and produces from unjust labour and trade relations are generally considered objectives worthy of intervention – whether through regulation or, increasingly, through the establishment of voluntary standards and codes of conduct. Yet, abstract principles are eventually applied in concrete situations and have a variety of effects on differently endowed countries, groups and individuals. Developing countries have been generally reluctant to participate in ecolabelling initiatives. They have highlighted the embedded protectionist elements of some of these initiatives and the naiveté of some standards in assuming that certain models of environmental management can be exported *taut court* to the South. This reluctance has been countered by assurances of transparency, non-discrimination and technical assistance. In essence, ecolabels are assumed to be 'good for the global commons' and their justification has been offered within a discourse of science,

	objectivity, independent certification, transparency and systems management. If shortcomings arise, they can be fixed technically and managerially. Yet, the case study of Marine Stewardship Council (MSC) certification of the hake industry in South Africa illustrates that ecolabelling is sought in the context of competitive pressures, political economies, and specific interpretations of conservation and competition, MSC certification in South Africa was employed as one of the tools against the redistribution of fish quotas away from 'white-owned companies' to the possible benefit of 'black-owned companies'.
Overview of Fish Production, Utilization, Consumption and Trade (Stefania Vannuccini 2004)	In 2002, world total fishery production (excl. Aquatic plants) was reported to be 133.0 million tonnes of which 41.9 million tonnes from aquaculture practices. World capture fisheries production amounted to 93.2 million tonnes, representing a slight increase of 0.4% compared to 2001, but a 2.4% decline from the peak 95.5 million tonnes reached in 2000 (due to the remarkable increase in the environmental driven catches of Peruvian anchoveta in that year). The estimated first sale value of the capture fisheries production in 2002 amounted to some US$78 billion, a 1.6% decline compared to 2000, partly due to the decrease of total catch, but also due to the decline unit value of landings for food consumption.
World Review of Fisheries and Aquaculture - Fisheries Resources: Trends in Production, Utilization and Trade (FAO 2004)	Global production from capture fisheries and aquaculture supplied about 101 million tons of food fish in 2002, providing an apparent per capita supply of 16.2 kg (live weight equivalent), with aquaculture accounting for the growth in per capita supply since 2000 (Tables 1 and 2 and Figures 1 and 2). Outside China,

	the world's population has been increasing more quickly that the total fish supply; as a result per capita fish supply outside China declined from 14.6 kg in 1987 to 13.2 kg in 1992 and has since remained stable (Figure 2). Overall, fish provided more than 2.6 billion people with at least 20% of their average per capita animal protein intake. The share of fish proteins in total world animal protein supplies grew from 14.9% in 1992 to a peak of 16% in 1996 and remained close to that level (15.9%) in 2001.
Offshore Options: Managing Environmental Effects in New Zealand's Exclusive Economic Zone (New Zealand Ministry for the Environment 2005)	New Zealand's Exclusive Economic Zone is the area offshore from 12 to 200 nautical miles. This zone holds not only a wealth of biodiversity, but also economic wealth-creating opportunities such as fishing, petroleum mining and shipping. The EEZ connects New Zealand to the rest of the world via undersea telecommunications cables, and ships and aircraft passing through the zone. This report has been produced by the Ministry for the Environment with the aim of looking at how environmental effects are assessed and managed in New Zealand's EEZ. It is a 'think piece' report, designed to stimulate debate and inform subsequent, more detailed thinking and analysis as a national Ocean Policy evolves. The report is structured into three key sections; • Current environmental legislation in the EEZ and management gaps • International environmental management of activities in the EEZ

	• Options for improving environmental management in the EEZ