

SOUTH AFRICAN LINEFISH PROCUREMENT GUIDELINES

DESCRIPTION, HISTORY AND CHALLENGES FACING THE COMMERCIAL LINEFISHERY

Linefishing in South Africa is defined as the capture of fish with hook and line (maximum of 10 hooks per line), but excludes the use of set pelagic or demersal longlines. Together, the three sectors of the linefishery (commercial, recreational and subsistence) target over 200 of South Africa's 2 200 marine fish species.

The commercial linefishery (or the “traditional linefishery” as it is known) sector is exclusively boat-based and the total number of traditional linefish rights available for allocation in the sector, as of 2016, is 455. Furthermore, as of 2014, the continued use of the Interim Relief Measures (IRM) system accommodates a further 2000 fishers in 42 identified small-scale fishing communities who can target and sell certain linefish species (Ngqongwa, 2015ⁱ).

It is a low-earning, labour-intensive industry and is important from a human livelihood point of view. It employs an estimated 27% of all fishers and the estimated total value of the fishery is in excess of R2.2 billion per annum (DAFF, 2014ⁱⁱ). The traditional linefishery is currently managed by the Department of Agriculture, Forestry and Fisheries (DAFF) principally through effort limitation, based on boat and crew numbers, as well as additional restrictions such as bag limits and size limits to protect overfished species.

In December 2000, the then Minister of Environmental Affairs and Tourism, taking cognisance of the critical status of many linefish stocks, declared the linefish resource to be in a State of Emergency, as provided for in the Marine Living Resources Act. In response to this declaration, effort was reduced and fixed and the hake and tuna components of the fishery were developed into separate sectors.

When traditional linefishery rights were allocated in 2003 for the medium-term and in 2005 for the long-term, the Total Allowable Effort (TAE) was set to significantly reduce the total catch by at least 70%, a reduction that was deemed necessary to rebuild linefish stocks (DAFF, 2014). Furthermore, in 2007, the IRM system was implemented by DAFF after small-scale fishers won a landmark Equality Court ruling stating that a new policy be developed to include the small-scale fisheries sector. The IRM permit system was originally intended to provide temporary relief to small-scale fishers who did not benefit from Long Term Rights in policies developed by DAFF in 2005 while the new Small Scale Fisheries Policy was being drafted. The original intention was that the IRM permit system would only be applicable for two years; however the Small Scale Fisheries Policy was only adopted after a lengthy process in 2012. Subsequently, there was on-going uncertainty in the management of linefish stocks due to issues stemming from the execution of the 2013 long-term Fishing Rights Allocation Process (FRAP), the various Interim Relief Measures (IRMs) that DAFF had adopted as well as the impact of a growing open-access recreational sector. The combination of these factors created an environment for a potentially unsustainable expansion of effort on key linefish stocks. In 2016 the Minister of DAFF announced the final decision on the appeals filed against decisions taken in the traditional linefishery during FRAP 2013, as a result a total of 425 traditional linefishery rights were finalised and granted under FRAP 2013 with a further 30 traditional

linefishery rights being reserved for allocation to small-scale fishing community co-operatives (DAFF, 2016ⁱⁱⁱ).

Furthermore, with the DAFF Small Scale Fisheries Policy currently being in the implementation phase, it is likely that a large number of species will be shared between the small-scale sector and, amongst others, the commercial linefishery and recreational fishing sectors. To achieve this re-allocation without compromising the recovery of valuable linefish stocks, a comprehensive revision of the Linefish Management Protocol, first developed in 1999, is envisaged (DAFF, 2014).

It should also be noted that South Africa's 23 Marine Protected Areas (MPAs) are an essential component of sustainable linefish management as these areas provide protection for the juveniles and spawning stock of many vulnerable reef-associated linefish species. There is increasing evidence that MPAs are positively benefitting linefish species and fishers alike (Kerwath et al.^{iv}, 2013; Maggs et al., 2013 a^v & b^{vi}), however these gains could be jeopardised as there is growing concern around the management effectiveness in many MPAs.

SUSTAINABILITY COMMENTS ON STOCKS, FISHING IMPACTS AND MANAGEMENT

Although there are signs of improvement in some of the stocks relevant to the traditional linefishery and small-scale fisheries sector, the majority of commercially relevant reef-associated species remain overfished. There are also concerns regarding the stocks of species with dense spawning aggregations that are accessible to traditional linefishers, species reliant on the estuarine environment for their reproductive cycle as well as species with stocks that are overfished as a result of cumulative efforts across different fisheries (most notably between the inshore trawl and various linefishery sectors). An urgent need for effective stock rebuilding is thus still required for many species and, in some cases, improved catch/effort monitoring and stock assessments are necessary. The stocks of some of the most commercially important linefish species were reassessed/ assessed recently and, based on the Linefish Scientific Working Group recommendation for the 2014/2015 fishing season, a commitment has been made to regularly assess the 8 most important linefish species at least every 5 years. If reliable catch return information is provided by all fishers, the new stock assessment framework will enable tracking of the stock trajectories of the most important linefish species, providing a strong foundation for scientifically-based sustainable management (DAFF, 2014).

With regards to gear impact, the traditional linefishery and small-scale fisheries sector in South Africa uses traditional rod-and-reel methods to catch their target species, most of these species are reef-associated with a handful being pelagic. The fishery has few discards and there are very few "non-target" species landed in the sector. However, when targeting reef-associated species (such as red roman, santer and englishman), the traditional linefishery is likely to have an impact on overfished, vulnerable or Endangered, Threatened or Protected (ETP) species^{vii}. When targeting pelagic species (such as snoek, yellowtail and dorado) the traditional linefishery and small-scale fisheries sector is not likely to cause significant damage to the above mentioned species because the impact to reef-associated species is anticipated to be small.

In terms of management, some Ecosystem Based Management (EBM) measures have been put in place but EBM remains in a state of implementation due to the lack of a comprehensive strategy to implement an Ecosystems Approach to Fisheries (EAF) management for the traditional linefishery as well as the small-scale fisheries sector. An Ecological Risk Assessment (ERA) was undertaken for the traditional linefishery in 2008 and 2009 (Petersen et al., 2010^{viii}) which outlines key challenges in the fishery with regard to implementation of an EAF, and describes a road map for implementation. Many research-related issues that were flagged in the 2009 Linefish ERA have improved, but many of the management-related issues identified still need to be addressed.

MARKET RELEVANCE AND WWF-SASSI LISTINGS OF KEY SPECIES

Through information gathered from WWF-SASSI participating retailers and suppliers and a review of the 2012 linefish catches (Fishing Industry Handbook, 2015 and DAFF, 2014), a list of 11 linefish species has been developed which are likely to be most relevant to the South African seafood market. The table below notes these species, their current WWF-SASSI listing status and review/assessment cycle, the 2014 estimated catches and the most relevant information available on stock assessment models for these species:

Common Name	Species Name	Current WWF-SASSI Status	Assessment status	2014 Catches (kg)	Stock Assessment Information
Snoek	<i>Thyrsites atun</i>	GREEN	Last assessed 2015	3, 767, 143*	Catch per unit effort (CPUE) ONLY (2013). ^{ix}
Yellowtail	<i>Seriola lalandi</i>	GREEN	Last assessed 2015	965, 425*	Biomass production model for western stock (2013). ^x
Geelbek**	<i>Atractoscion aequidens</i>	RED	Last assessed 2015	166, 076*	Standardised CPUE time series (2011) & virtual stock assessment (1998). ^{xi}
Carpenter	<i>Argyrozona argyrozona</i>	GREEN	Last assessed 2015	459, 920*	Age structured production model (2013). ^{xii}
Slinger	<i>Chrysoblephus puniceus</i>	GREEN	Last assessed 2015	128, 767*	Age structured production model (2013). ^{xiii}
Silver kob** Dusky kob**	<i>Argyrosomus inodorus</i> <i>Argyrosomus japonicus</i>	RED	Last assessed 2015 Last assessed 2014	122, 512*	Age structured production model (2013). ^{xiv} Per-recruit analysis (1997). ^{xv}
Hottentot	<i>Pachymetopon blochii</i>	GREEN	Last assessed 2015	186, 263*	Age structured production model (2013). ^{xvi}
Santer	<i>Cheimerius nufar</i>	ORANGE	Last assessed 2014	53, 280*	No stock assessment for SA. ^{xvii}
Red Roman	<i>Chrysoblephus laticeps</i>	ORANGE	Last assessed 2014	33, 126*	Per – recruit analysis (2004). ^{xviii}
Englishman	<i>Chrysoblephus anglicus</i>	ORANGE	Last assessed 2014	14, 837*	Per – recruit analysis (2004). ^{xix}

* FISHING INDUSTRY HANDBOOK 2015, South Africa, Namibia & Mozambique, 43rd Edition

** These have been assessed as species of “Critical” concern by WWF-SASSI and should not be bought or sold

WWF-SASSI LINEFISH PROCUREMENT GUIDELINES

Compliance and enforcement is a significant issue across the commercial, recreational and small-scale components of the linefishery and, although there are active Fisheries Compliance Officers (FCOs) tasked with enforcing regulations, law enforcement remains a challenge. Monitoring and data availability for the traditional linefishery also remains a concern with key issues being the effectiveness of the Vessel Monitoring System (VMS) that is currently being employed, the indications that traditional linefishery landings are not adequately monitored and the fact that there is currently no observer programme in place for this fishery (although tenders went out in January 2013 to try and reinstate the Linefish Observer Programme).

In light of these challenges, it is important that seafood retailers and their suppliers are fully aware of relevant fishery compliance requirements and that they only support fishers in the traditional linefishery sector and the small-scale fisheries sector who act in accordance with their permit conditions and relevant fishery regulations. The guideline below highlights a process that should inform procurement from the commercial linefishery sector and small-scale fisheries sector to ensure compliance and transparency:

South African Linefish Procurement Guidelines:

1. If you are procuring from traditional linefishers directly, ensure that a copy of their current commercial vessel license and traditional linefish permit are kept on record, these are issued on an annual basis by DAFF. The validity of these documents should be cross referenced with the list of successful FRAP 2013 applicants^{xx} (including the decisions published in 2016 on appeals filed against FRAP2013 allocations^{xxi}) and the expiration dates should be noted to ensure that dated documents are timeously updated/replaced. The traditional linefishers procured from should be cognisant of the REVISED TRADITIONAL LINEFISH POLICY ON THE ALLOCATION AND MANAGEMENT OF FISHING RIGHTS: 2013^{xxii} and in full compliance with their traditional linefish permit conditions^{xxiii}, you should be made aware of any transgressions and applicable fines that have been paid by the rights holder in the past and repeat transgressors (more than one transgression for any one condition) should not be supported.

If sourcing from an Interim Relief Measures (IRM) permit holder, then;

2. Ensure that a copy of their current and valid interim relief vessel license, a true and certified copy of their DAFF issued interim relief permit as well as a true and certified copy of their South African identity document are kept on record. The expiration dates on the vessel license and interim relief permit should be noted to ensure that dated documents are timeously updated/replaced. The small-scale fishers procured from should be in full compliance with their permit conditions^{xxiv}, you should be made aware of any transgressions and applicable fines that have been paid by the permit holder in the past and repeat transgressors (more than one transgression for any one condition) should not be supported.

To mitigate risk of Illegal, Unregulated and Unreported (IUU) product and identify compliant traditional linefish rights holders;

3a. Request that all traditional linefishers who are listed on your companies supplier database send you copies of their monthly DAFF catch data submissions (commonly referred to as the “Blue Book” submissions). Check that the submissions have been stamped by DAFF before the 15th of every month, the deadline date for submissions, by either the DAFF Customer Services Centre (CSC) or the local DAFF Fisheries Control Officer (FCO). Alternatively the submissions should be accompanied by corresponding registered mail receipts if submissions are posted to the DAFF “Traditional Linefish Catch Statistics” team. The validity of the “Blue Book” submissions received can be verified by contacting the DAFF “Traditional Linefish Catch Statistics” team.

Note: Copies of these submissions should be sent to you regardless of whether or not catches were made in a month as, even in such a case, a zero catch submission needs to be submitted to DAFF. This will assist in identifying traditional linefishers who are compliant with DAFF data submission requirements^{xxv} and will provide a cross-check for the purposes of eliminating IUU product from supply chains^{xxvi}.

Note: If species are procured from the hake handline or tuna pole sectors (both target and linefish species), this requirement should be consistently applied to fishers from these sectors.

To mitigate risk of Illegal, Unregulated and Unreported (IUU) product and identify compliant interim relief permit holders;

3b. Ensure that each purchase from an interim relief fisher at a designated landing site^{xxvii} is accompanied with a receipt issued on behalf of the interim relief permit holder by an authorised Catch Data Monitor. The receipt must clearly indicate the following particulars; full details of the purchaser/ buyer, full details of the interim relief permit holder, the whole mass/ number of fish sold, and the date of the sale.

Note: If the interim relief permit holder is transporting fish for sale from a designated landing site, then in addition to the above, they must provide you with a copy of a valid DAFF transport permit^{xxviii}.

Note: ABALOBI^{xxix} is an integrated small-scale fisheries information-management system, if procuring linefish species from interim relief permit holders operating in one of the six ABALOBI pilot sites, then ABALOBI Fisher and ABALOBI Monitor electronic data submissions can be used as an acceptable substitute for receipts issued by Catch Data Monitors. For more information please contact the ABALOBI team on support@abalobi.info

To ensure that all fishing vessels procured from are compliant with Vessel Monitoring System (VMS) requirements, the following should be implemented as an additional but not necessary component of this guideline;

4. Strongly advise all traditional linefishers who are listed on your companies supplier database and interim relief permit holders procured from to:
 - a) Email the DAFF Operations Room on daffops@daff.gov.za prior to sailing out to confirm that a functioning VMS is installed onboard (request that you are copied in on this email); and if possible
 - b) Notify DAFF Operations Room on 021-402 3077/ 76 prior to sailing out to verify that the VMS unit onboard is functional; and where relevant
 - c) In cases where VMS units are non-functional, current permit conditions require that vessel owners have written permission from DAFF prior to sailing out and that this should be kept onboard at all times. Therefore, if relevant, request from vessel owner a copy of this written permission from DAFF or at least have on file a copy of relevant correspondence submitted to DAFF by the vessel owner.

Note: Interim relief permit holders who operate using vessels less than 5 meters in length (these vessels are often referred to as “bakkies”) are exempted from fitment of a VMS unit.

To ensure that fish procured is within the conditions of the traditional linefish permit conditions and interim relief permit conditions;

5. Ensure that all fish procured from traditional linefishers is meeting the following criteria when checking in deliveries:
 - a) No species on the PROHIBITED SPECIES LIST^{xxx} should be procured;
 - b) All species procured should meet the MINIMUM SIZE, BAG LIMITS, CLOSED SEASON and AREA RESTRICTION requirements of the SPECIES LIST^{xxxi} for traditional linefishers;
 - c) All species procured from interim relief permit holders are subject to compliance with specific species conditions contained in their permit^{xxxii}
 - d) A scale (to accurately determine the total weight of individual species procured as well as verifying relevant minimum species weights), measuring ruler (to verify minimum sizes for applicable species), copies of the PROHIBITED SPECIES LIST & SPECIES LIST (for reference) and a species identification resource for visual identification purposes (such as the book COASTAL FISHES OF SOUTHERN AFRICA^{xxxiii} or the poster FISHES OF THE EASTERN CAPE PROVINCE^{xxxiv}) should be available for your staff at all delivery/collection points; and
 - e) All your receiving staff that deal with the procurement from traditional linefishers and interim relief permit holders should undergo relevant training to meet the requirements above.

Note: If any one fish in a batch of fish bought from a vessel is in contravention of traditional linefish permit conditions or interim relief permit conditions (i.e. undersize, out of season, over bag limit, etc.), then the details of the transgression must be immediately reported telephonically to the DAFF Customer Service Centre at 021 402 3180 and within one day be faxed to 086 505 8180 as well as to 021 425 7324 for attention: The Chief Director: Monitoring, Control and Surveillance (MCS). All transgressions should be recorded and repeated infringements by a vessel should be flagged and reported to DAFF MCS.

If procuring from a fish processor/fish supplier (as in the case of a retailer);

- 6) Ensure that all the fish processors/fish suppliers you buy from have:
 - a) A valid Fish Processing Establishment (FPE) permit^{xxxv}; and
 - b) That they meet all the requirements in steps 1-5 above; and
 - c) That annual supplier audits are conducted to verify compliance; and
 - d) A suitable traceability system^{xxxvi} is employed to ensure full transparency.

Note: To achieve this, it is advisable that these requirements are incorporated into product spec sheets that fish processors/fish suppliers are held accountable to or that a checklist is collaboratively developed with the fish processor/fish supplier to ensure on-going compliance with these requirements.

To meet progress towards meeting sustainability targets:

- 7) Make sure that you implement the following prioritisation system when procuring from the traditional linefishery or interim relief permit holders:
- Preferentially procure WWF-SASSI Green-list^{xxxvii} species, ensure that source fishers are aware of the WWF-SASSI listing and endeavor to meet this requirement as far as possible;
 - Do not actively incentivise increased demand for WWF-SASSI Orange-list^{xxxviii} or Red-list^{xxxix} species in your store and ensure that source fishers are aware of the challenges in marketing these species based on sustainability concerns;
- Note: If retailers and suppliers adopt and fully implement this Procurement Strategy and subsequently support a WWF-SA FCP for linefish species (and can verify that they are doing so), then they can actively promote their involvement with these processes provided that this does not result in an effort to increase sales of WWF-SASSI Orange-list or result in the sale of WWF-SASSI Red-list species that are assessed by WWF-SASSI as being of “Critical” concern.

- It is important to note that this document provides a guideline for best practice when procuring South African linefish species but does not address key sustainability issues related to linefish species on the WWF-SASSI Red-list and Orange-list. For this reason WWF-SA messaging will remain consistent and the WWF-SASSI advice to consumers will continue to be “Don’t Buy” for WWF-SASSI Red-listed linefish species and “Think Twice” for WWF-SASSI Orange-listed linefish species.**

NOTES AND CLARIFICATIONS

ⁱ Abongile Ngqongwa, University of Cape Town: Faculty of Science, Department of Environmental and Geographical Science, Thesis submitted in fulfillment of the requirements of the degree of Master of Science 2015. Page 23. See

https://open.uct.ac.za/bitstream/handle/11427/15586/thesis_sci_2015_ngqongwa_abongile.pdf?sequence=1

ⁱⁱ DAFF Status of the South African Marine Fishery Resources, 2014. Department of Agriculture, Forestry and Fisheries; Branch: Fisheries. Cape Town. Page 25-28. See
http://www.nda.agric.za/doaDev/sideMenu/fisheries/o3_areasofwork/Resources%20Research/STATUS%20OF%20THE%20SOUTH%20AFRICAN%20MARINE%20FISHERY%20RESOURCES%202014%20WEB.pdf

ⁱⁱⁱ DAFF Press Statement: FINAL DECISIONS BY MINISTER ON APPEALS LODGED IN THE TRADITIONAL LINE FISHERY, 2016. Department of Agriculture, Forestry and Fisheries; Branch: Fisheries. See
<http://www.nda.agric.za/docs/media/Ministers%20statement%20on%20FinalDecisions%20on%20Linefish%20appeals%2011%20May2016.pdf>

^{iv} Attwood, C.G., 2013, “Background to the theme: A decade after the emergency,” In: Attwood, C., T. Booth, S. Kerwath, B. Mann, S. Marr, J. Duncan, J. Bonthuys and W. Potts (eds), 2013, A Decade After the Emergency: The Proceedings of the 4th Linefish Symposium, WWF Report Series – 2013/Marine/001, Cape Town. See http://awsassets.wwf.org.za/downloads/line_fish_symposium_18_nov_2013.pdf

^v Maggs JQ, Mann BQ, Cowley PD, (2013a), “Contribution of a large no-take zone to the management of vulnerable reef fishes in the South-West Indian Ocean,” Fisheries Research 144: 38-47.

^{vi} Maggs JQ, Mann BQ, Cowley PD, (2013b), “Reef fish display station-keeping and ranging behaviour in the Pondoland Marine Protected Area on the east coast of South Africa,” African Journal of Marine Science 35(2): 183-193.

^{vii} Overfished:

- Silver kob* *Argyrosomus inodorus* (DAFF, 2014)
- Squaretail kob* *Argyrosomus thorpei* (Fennessy and Mann, 2013)
- Geelbek* *Atractoscion aequidens* (DAFF, 2010)

Vulnerable:

- Dusky kob* *Argyrosomus japonicus* (Sink et al., 2012)

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- Black musselcracker *Cymatoceps nasutus* (Mann et al., 2014))
 - White-edged rockcod *Epinephelus albomarginatus* (Fennessy, 2004)
 - Scotsman *Polysteganus praeorbitalis* (Mann et al., 2014)
 - Soupfin shark *Galeorhinus galeus* (Walker et al., 2006)
 - Smoothhound shark *Mustelus mustelus* (Serena et al., 2009)

Endangered:

- White steenbras *Lithognathus lithognathus* (Mann et al., 2014))
- Red steenbras *Petrus rupestris* (Mann et al., 2014))
- Yellowbelly rockcod *Epinephelus marginatus* (Cornish and Harmelin-Vivien, 2004)
- Red stumpnose *Chrysoblephus gibbiceps* (Mann et al., 2014)

Critically Endangered:

- Seventy-four *Polysteganus undulosus* (Sink et al., 2012)
- Dageraad *Chrysoblephus cristiceps* (Buxton et al., 2014)

Note: Species with an asterisk are also currently under review for placement on the IUCN Red List.

viii Petersen, S.L., S. Kerwath, B. Paterson, and N. Okes, (2010), “Ecological Risk Assessment for the South African Linefishery”, in S. Petersen, B. Paterson, J. Basson, N. Moroff, J-P. Roux, J. Augustyn, and G. D’Ameida (eds.) Tracking the implementation of an Ecosystem Approach to Fisheries in Southern Africa, WWF South Africa Report Series – 2010/Marine/001. See

http://assets.wwfza.panda.org/downloads/ecosystem_approach_to_fisheries_april2010_volume_2.pdf

ix Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track B being selected in the WWF-SASSI assessment for this species “Substantial fishery data is available, but no reference points are defined OR reference points are defined but a recent quantitative stock assessment is lacking.”

x Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track B being selected in the WWF-SASSI assessment for this species “Substantial fishery data is available, but no reference points are defined OR reference points are defined but a recent quantitative stock assessment is lacking.”

xi Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track B being selected in the WWF-SASSI assessment for this species “Substantial fishery data is available AND a reliable quantitative stock assessment is conducted on a regular basis AND reference points are defined.”

xii Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track A being selected in the WWF-SASSI assessment for this species “Detailed fishery data is available AND a reliable quantitative stock assessment is conducted on a regular basis AND reference points are defined.”

xiii Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track A being selected in the WWF-SASSI assessment for this species “Detailed fishery data is available AND a reliable quantitative stock assessment is conducted on a regular basis AND reference points are defined.”

xiv Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track A being selected in the WWF-SASSI assessment for this species “Detailed fishery data is available AND a reliable quantitative stock assessment is conducted on a regular basis AND reference points are defined.”

xv Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track B being selected in the WWF-SASSI assessment for this species “Substantial fishery data is available, but no reference points are defined OR reference points are defined but a recent quantitative stock assessment is lacking.”

xvi Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track A being selected in the WWF-SASSI assessment for this species “Detailed fishery data is available AND a reliable quantitative stock assessment is conducted on a regular basis AND reference points are defined.”

xvii Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track C being selected in the WWF-SASSI assessment for this species “Little or no fisheries data AND no stock assessment AND no reference points are available OR [Bycatch]: Species is not targeted directly - it is taken as bycatch which is retained/landed.”

xviii Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI.

Resulted in Track B being selected in the WWF-SASSI assessment for this species “Substantial fishery data is available, but no reference points are defined OR reference points are defined but a recent quantitative stock assessment is lacking.”

^{xix} Source: South African Marine Linefish Species Profiles 2013, edited by B. Q. Mann, ORI. Resulted in Track B being selected in the WWF-SASSI assessment for this species “*Substantial fishery data is available, but no reference points are defined OR reference points are defined but a recent quantitative stock assessment is lacking.*”

^{xx} A comprehensive listing of all successful FRAP 2013 applicants is available at <http://www.daff.gov.za/daffweb3/Branches/Fisheries-Management/-Fishing-Rights-Allocation-Process-FRAP-> where a document entitled FINAL MASTRIGHTS ALL SECTORS 4 MAY 2015 can be downloaded. The successful traditional linefish rights applicants (215 in total) are contained in the work sheet TRADITIONAL LINEFISH.

^{xxi} See Minister of DAFF final Traditional Line Fish appeal decisions at: Traditional Line Fish Zone A at <http://www.nda.agric.za/docs/media/Traditiona%20Line%20Fish%20Zone%20A.pdf> and Traditional Line Fish NE All Zones at <http://www.nda.agric.za/docs/media/Traditional%20Line%20Fish%20NE%20All%20Zones.pdf> and Traditional Line Fish RH Zone B at <http://www.nda.agric.za/docs/media/Traditional%20Line%20Fish%20RH%20Zone%20B.pdf> and Traditional Line Fish RH Zone C at <http://www.nda.agric.za/docs/media/Traditional%20Line%20Fish%20RH%20Zone%20C.pdf>

^{xxii} Department of Agriculture, Forestry and Fisheries; Branch: Fisheries Management DRAFT REVISED TRADITIONAL LINEFISH POLICY ON THE ALLOCATION AND MANAGEMENT OF FISHING RIGHTS: 2013 (this policy must be read with the general policy on the allocation and management of fishing rights 2013, available at www.daff.gov.za), see http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/Draft%2orevised%2oLINEFISH%2oPOLICY%2oMay%20%202013.pdf

^{xxiii} See applicable Permit Conditions: Traditional Linefish (Zone A, B & C) at http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%2oConditions/Permit%2oConditions%2oTraditional%20Line%20Fish%20Zone%20A.pdf and http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%2oConditions/Permit%2oConditions%2oTraditional%20Line%20Fish%20Zone%20B.pdf and http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%2oConditions/Permit%2oConditions%2oTraditional%20Line%20Fish%20Zone%20C.pdf (note that the Permit Conditions: Traditional Linefish, Fishing Season 2016/ 2017 for Zone A, B & C are not currently available on the DAFF website, for a copy of these documents please send an email to sassi@wwf.org.za)

^{xxiv} Note that the Section B: Interim Relief 10 Dispensation Permit Conditions: Fishing Season: 2016/ 2017 is not currently available on the DAFF website, for a copy of this document please send an email to sassi@wwf.org.za

^{xxv} Monthly DAFF catch data submissions should be kept on file with the commercial vessel licence and traditional linefish permit. If no submission is received for a particular month, even if no product was bought from the fisher or no catches were made by that fisher, then no further transactions should be concluded with the fisher until the matter has been resolved and the discrepancy rectified with DAFF.

^{xxvi} Regular checks on individual traditional linefishers supplier accounts should be done to verify that the amount of any individual species supplied in a month does not exceed the DAFF catch data submission for that species for that month. If a discrepancy is noted, no further transactions should be concluded with the fisher until the matter has been resolved and the discrepancy rectified with DAFF.

^{xxvii} See pages 10-11 on the Section B: Interim Relief 10 Dispensation Permit Conditions: Fishing Season: 2016/ 2017. Note that this document is not currently available on the DAFF website, for a copy of this document please send an email to sassi@wwf.org.za

^{xxviii} See page 14 on the Section B: Interim Relief 10 Dispensation Permit Conditions: Fishing Season: 2016/ 2017. Note that this document is not currently available on the DAFF website, for a copy of this document please send an email to sassi@wwf.org.za

^{xxix} For more information about the ABALOBI initiative as well as details on the current ABALOBI pilot sites, please see <http://abalobi.info/about/>

^{xxx} See TABLE 1 of the Permit Conditions: Traditional Linefish (Zone A, B & C) at http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%2oConditions/Permit%2oConditions%2oTraditional%20Line%20Fish%20Zone%20A.pdf and http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%2oConditions/Permit%2oConditions%2oTraditional%20Line%20Fish%20Zone%20B.pdf and http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%2oConditions/Permit%2oConditions%2oTraditional%20Line%20Fish%20Zone%20C.pdf (note that the Permit Conditions: Traditional Linefish, Fishing Season 2016/ 2017 for Zone A, B & C are not currently available on the DAFF website, for a copy of these documents please send an email to sassi@wwf.org.za)

^{xxxii} See TABLE 1 of the Permit Conditions: Traditional Linefish (Zone A, B & C) at http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%20Conditions/Permit%20Conditions%20Traditional%20Line%20Fish%20Zone%20A.pdf and http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%20Conditions/Permit%20Conditions%20Traditional%20Line%20Fish%20Zone%20B.pdf and http://www.nda.agric.za/doaDev/sideMenu/fisheries/21_HotIssues/April2010/AllocationOfRights/General%20Conditions/Permit%20Conditions%20Traditional%20Line%20Fish%20Zone%20C.pdf (note that the Permit Conditions: Traditional Linefish, Fishing Season 2016/ 2017 for Zone A, B & C are not currently available on the DAFF website, for a copy of these documents please send an email to sassi@wwf.org.za)

^{xxxiii} See pages 6-8 on the Section B: Interim Relief 10 Dispensation Permit Conditions: Fishing Season: 2016/ 2017. Note that this document is not currently available on the DAFF website, for a copy of this document please send an email to sassi@wwf.org.za

^{xxxiv} See the South African Institute for Aquatic Biodiversity website at <http://saiab.co.za/bookshop/coastal-fishes-of-southern-africa.htm>

^{xxxv} See the South African Institute for Aquatic Biodiversity website at

<http://www.saiab.ac.za/bookshop/fishes-of-the-eastern-cape-province.htm>

^{xxxvi} In terms of the Marine Living Resources Act No. 18; 1998: FPE “means any vehicle, vessel, premises or place where any substance or article is produced from fish by any method, including the work of cutting up, dismembering, separating parts of, cleaning, sorting, lining and preserving of fish, or where fish are canned, packed, dried, gutted, salted, iced, chilled, frozen or otherwise processed for sale in or outside the territory of the Republic;” To review a copy of this Act, see <http://www.gov.za/sites/www.gov.za/files/a18-98.pdf>. To verify if a FPE is valid make sure that the establishment is listed on the FPE register which is available at <http://www.daff.gov.za/daffweb3/Branches/Fisheries-Management/Marine-Resource-Management> where a document entitled FISHING RIGHTS ALLOCATION PROCESS can be downloaded, the list of FPE permits is contained in the work sheet titled FPE.

^{xxxvii} See the WWF Smart Fishing Initiative TRACEABILITY PRINCIPLES FOR WILD CAUGHT FISH PRODUCTS at

http://assets.worldwildlife.org/publications/796/files/original/WWF_Traceability_Principles_for_Wild-Caught_Fish_April_2015.pdf?1430410438

^{xxxviii} See the WWF-SASSI website at <http://wwfsassi.co.za/sassi-list/> for a comprehensive listing of all Green-list species.

^{xxxix} See the WWF-SASSI website at <http://wwfsassi.co.za/sassi-list/> for a comprehensive listing of all Orange-list species.

^{xxxi} See the WWF-SASSI website at <http://wwfsassi.co.za/sassi-list/> for a comprehensive listing of all Red-list species.