Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Binaya Raj Shivakoti	General	0	0	0	0	APR includes a lot of general statements, definitions, and references with global scope (not necessarily APR focused). Some of the statements are duplication from already existing UN publication and are not direct fit to IPBES scope	Figures and statements have been reformatted to APR focus. Some content have been in comparison / reference to global situation.
Government of Japan	General	0	0	0	0	Data gaps exist througout the draft assessment report. For improvement of the current and future reports, data gaps, especially those on contents that have very limited scientific reports (e.g. EcoDRR, incentives and mainstreaming but not limited to these), should clearly state the existence of the data gaps in the report and possibly on the SPM as well.	Gaps have been identified and clarified throughout. Specific tables and other content with data gaps have also been ammened and augmented where possible.
IPBES Knowledge and Data Task Force (KD TF)/ Task Group on Indicators (TGI)	General	0	0	0	0	This review provides feedback from the IPBES Knowledge and Data Task Force (KD TF) / Task Group on Indicators (TGI) on the use of IPBES core indicators in your assessment. We see potential for inclusion of additional core indicators and for the more consistent use of the standardized visuals provided. For information on core indicators potentially relevant to a given chapter, please see http://www.ipbes.net/indicators (or see the tab named, "core indicators" in this spreadsheet) and check the indicator trend graphs shared by your TSU. For the trends of IPBES core indicator, standardized visualizations should be used as much as possible to ensure the consistency between and within the assessments. The KD TF/TGI aim to follow up with specific recommendations in the near future. In the meantime, do not hesitate to reach out to them through your TSU or the KD TF TSU (ipbes.kdtsu@gmail.com).	Where appropriate, IPBES KDTF/TGI Indicator graphics have been incorporated, though we anticipate that many will have been picked up in earlier chapters to which we refer.
IPBES NFP - Australia	General	0	0	0	0	In addition to our specific comments on the SPM and individual chapters, we also have some more general feedback below. We hope this feedback will be considered in the final drafting process to produce a comprehensive final paper, thus ensuring relevance and usefulness for a range of decision makers. Australia appreciates this is a second order draft and notes along with major final editing to ensure consistency of acronyms and references for example.

1.   There is a lack of clear guidelines and recommendations for policymakers, particularly in the Summary for Policy Makers which is where we would expect to see them. What is really needed is a quick and easy guide to help a range of decision makers develop and implement policies which reflect the latest scientific data which this report should include.
o   The SPM is a summary of the Executive Summaries of each chapter. Rather than a summary of key findings the SPM needs to cover in brief what is the state of the environment in the APR, what could it look like in the future and what are the actions that could be taken for the region. Presenting the information in its current format is not helpful to those who cannot read the document in full due to insufficient technical expertise or time constraints. | Exec Summary and SPM have been revised [CLA]; Linkages to other chapters (esp. Ch6) have been made as appropriate and we have aimed towards policy relevance, rather than policy presciption. SPMs have been developed as a synesis narrative, along with other chapters and the exec. summary now provides key outputs and messages. |
| IPBES NFP - Australia | General | 0 | 0 | 0 | 0 | 2.   The case studies in the report are not detailed enough in their current state to be broadly applicable, with little information on their outcomes, methods, and successes.

o   Case studies are frequently repeated across the chapters. More examples including possible applications in different landscapes/areas/political environments would be useful as well as the case studies effectiveness, implementation and any lessons learned. | We have addressed the use of case studies across chapters and sought connections that develop an illustrative examples drawing the characterstics of each chapter where relevant. |

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
IPBES NFP - Australia	General	0	0	0	0	3. Lack of consistency throughout the report's chapters, including definitions used for essential concepts. o For example, terminology with 'bio' in front should be referenced accordingly. Definitions exist for these terms and concepts in other international documents such as biocultural (CBD) and biosphere (UNESCO) where these definitions exist they should be referenced as such and if they are new concepts they must be referenced.	Terms have been aligned with the IPBES glossary.
IPBES NFP - Australia	General	0	0	0	0	4. The use throughout the report of references which are significantly dated or not consistent throughout the chapters. This makes the assessment appear to have a lack of a clear methodologies which seek to establish the quality and clarity of the evidence base used to make claims throughout the report. o Cross referencing across chapters needs to be fully considered. The statistics or information is conveyed differently across the chapters despite it discussing the same topic or issue. For example, the references to MEAs should be as per their official name and referenced consistently throughout. References to other things such as the Aichi Biodiversity Targets and the Fifth Global Biodiversity Outlook are referenced inconsistently.	As far as possible, up to date references have been used, with a lower limit set to 2005. However, the frequent paucity of information for the APR may require use of older material. Missing references have been included.
Pham Ngoc Bao	General	0	0	0	0	-Many repetitions and inconsistencies (words) are found in the report. Significant re-structuring (within and across the chapters) and editing are necessary.	Please refer to Comment 3 above.
Ramsar Convention Secretariat	General	0	0	0	0	We recommend that as in the regional assessments for Africa and the Americas, the area of Ramsar Sites, wetlands protected under the Ramsar Convention as internationally important by sub-region, be included in this assessment as an indicator. See: https://rsis.ramsar.org/	We have addressed fresh water ecosystems more fully.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Core Indicator 'Protected area coverage of Key Biodiversity Areas' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Ed Lewis (email: Edward.lewis@unep-wcmc.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Core Indicator 'Percentage of Undernourished People' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Carlo Cafiero (email: Carlo.Cafiero@fao.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'The Wildlife Picture Index (disaggregated by protected area)' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Jorge Ahumada (email: jahumada@conservation.org).	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Wetland Extent Trend Index' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Sarah Darrah (email: Sarah.Darrah@unep-wcmc.org)	We are grateful for this observation and have made changes where appropriate.

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Trends in invasive alien species vertebrate eradications' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Shyama Pagad (email: s.pagad@auckland.ac.nz)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator RAMSAR areas is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Maria Rivera (email: RIVERA@ramsar.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Number of countries with national instruments on biodiversity relevant tradable permit schemes' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. These indicators are country-specific, so they can be disaggregated by countries in your region. However, given the incomplete country coverage, any regional aggregates cannot be taken to represent the entire region. Currently we have data on about 58 countries. [Just to note, we also have information on countries with biodiversity-relevant taxes in place]. More information on this is available from the Indicator Focal point Katia Karousakis (email: Katia.KAROUSAKIS@oecd.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Trends in potentially harmful elements of government support to agriculture (produced support estimates)' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator is available for the OECD as a whole and has not been disaggregated as such. The original data on (total) government support to agriculture is available on the OECD website by country. More information on this is available from the Indicator Focal point Katia Karousakis (email: Katia.KAROUSAKIS@oecd.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Better Life Index' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. The data is available for only 38 countries and therefore it would be difficult to be used regionally the way IPBES has classified these. More information on this is available from the Indicator Focal point Katia Karousakis (email: Katia.KAROUSAKIS@oecd.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Protected area coverage of terrestrial, marine and freshwater ecoregions' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Ed Lewis (email: Edward.Lewis@unep-wcmc.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Growth in species occurrence records accessible through GBIF' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Tim Hirsch (email: 'thirsch@gbif.org')	We are grateful for this observation and have made changes where appropriate.

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Trends in the numbers of invasive alien species introduction events' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Shyama Pagad (email: s.pagad@auckland.ac.nz)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Robert Hoft (email: robert.hoft@cbd.int)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Information provided through the financial reporting framework, adopted by decision XII/3' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Robert Hoft (email: robert.hoft@cbd.int)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the IPBES Highlighted Indicator 'Number of world natural heritage sites per country per year' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Douglas Nakashima (email: D.Nakashima@unesco.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Trends in Loss of Reactive Nitrogen to the Environment' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Albert Bleeker (email: Albert.Bleeker@pbl.nl).	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Ocean Health Index' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Benjamin Halpern (email: halpern@nceas.ucsb.edu)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Cumulative Human Impacts on Marine Ecosystems' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Benjamin Halpern (email: halpern@nceas.ucsb.edu)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Shyama Pagad (email: s.pagad@auckland.ac.nz)	We are grateful for this observation and have made changes where appropriate.

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Biodiversity Barometer' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Rik Kutsch Lojenga (email: rik@ethicalbiotrade.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Red List Index (impacts of utilisation)' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Tom De-Meulenaer (email: Tom.DE-MEULENAER@cites.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Water Quality Index for Biodiversity' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Hartwig Kremer (email: hartwig.kremer@unep.org)	We are grateful for this observation and have made changes where appropriate.
The Biodiversity Indicators Partnership (BIP)	General	0	0	0	0	We would recommend that the Indicator 'Number of Parties to the CBD that have deposited the instrument of ratification, acceptance, approval or accession of the Nagoya Protocol' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Beatriz Gomez (email: 'beatriz.gomez@cbd.int')	We are grateful for this observation and have made changes where appropriate.
IPBES Secretariat/TSU	Ch.5	0	0	0	0	The guidance from the IPBES MEP and Bureau on the Summary for Policy Makers (SPM) has pointed out that the key findings should highlight subregional similarities/differences wherever possible, as all four regions are quite heterogeneous ecologically, socially and politically. Since any statement in the SPM must be backed by evidence contained in specific sections of the main chapter text, this means that each chapter needs to have covered all of the subregions (to the extent possible) in order to respond to the above guidance. Please therefore check whether it would be possible to improve the balance of the coverage of subregions in your chapter, in particular for the sections of the text that are biased towards only some parts of the Asia-Pacific.	The majority of scenarios and models used are presented at national or regional focus, though not necessarily aligning with IPBES subregions in all cases. Where possible, we have clarified alignments to IPBES subregions, but acknowledge that primary literature often precludes this approach. A key outcome from this chapter is to elucidate gaps and opportunities to develop better scenarios and models at subregional scale in the APR
Joanne Perry NZ Focal point	Ch.5	0	0	0	0	general comment on this chapter - there is limited use of case studies or examples. It is hard to envisage policy makers using this chapter for guidance. All it really tells them is that models and scenarios are valuable and should be used. This chapter is meant to assess what is happening in AP, the issue of models and scenarios is already addressed in a separate assessment process that is already complete. It is hard to identify the value added by this chapter.	The IPBES Methodological Assessment on Scenarios and Model deals with the overarching use of these approaches and their relevance to the APRA. Chapter 5 applies these principles and approaches to the APR specifically to elucidate future trends and interactions for BES and HWB. Repetition from the Methodological Assessment has been removed, although key references to this document are included. Case studies have been incorporated where appropriate.
Kwan-Sung Song (NFP Korea)	Ch.5	0	0	0	0	It is necessary to identify possible problems that could arise from measuring human well-being in the assessment when it is not agreed.	Content about HWB has been added and refined
MDFortes	Ch.5	0	0	0	0	Perhaps, it would be useful if the chronology of outcomes of the Ocean Health Index for the region is analyzed and used in this assessment process. This is not necessarily for this chapter, but others where appropriate may be considered.	Appropriate inclusion of the OHI has been made in context of the APR

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Tanya Lazarova	Ch.5	0	0	0	0	Suggestion for section 5.3: In order to make the structure of the whole section clearer, perhaps you can re-name section 5.3.1 to make it clear that here you extract information for the AP region from **global scale studies**. Then re-name section 5.3.2 to make it clear that here you assess **regional and local scale** literature. Perhaps, section 5.3.1.1 can be moved closer to section 5.3.2 or combined with it, as in both sections you talk about how you dealt with the review of scenario studies (grouping into scenario families, number of scenario studies per country, etc.). Perhaps section 5.3.1.2 can also go to section 5.3.2. This I think will improve the flow of section 5.3.	The naming of these sections has been revised to improve clarity. Subsectios have been refined and changes made to improve continuity and consistency
Margarita N. Lavides	Ch.5	3	50	3	50	I reiterate my comments as found in Chapter 1 regarding the use of (established but incomplete); (well-established); (established but inconclusive) etc. Please see my comments in Chapter 1 (re-pasted here): => I realized at this point that the use of the following: (Well-established); (Established but incomplete); (Established but inconclusive) are all over the document. If I correct every other sentence for that, I would not finish APR Regional Assessment for review. Therefore, I suggest to authors to limit from using these vague, confusing and contradicting phrases i.e. established but inconclusive??, especially when the sentence is a compound one. The reader is left confused with which one is established and which one is inconclusive. Also at which context it is established or inconclusive, spatially? temporally? or for which element in the sentence? Its also distracting for readers. I understand these 'phrases' are IPBES' but if its going to be used especially heavily in this document, it has be ensured that at the beginning these phrases are well-explained and defined. I came across these 'phrases' since the first sentence of Chapter 1 page 3 but only in page 36 under Communication of Uncertainty was the meaning of the 'phrases defined. There are also a number of grammar errors which external expert reviewers were guided not to comment on but which errors affect the intended message of each sentence and or paragraph. For example, missing 'as' ; 'to' etc. in between main words. There are also mispelled words.	we have attempted ensure consistency with other chapters and assess evidence on the basis of agreement within the chapter team. Consistent terminology have been adopted throughout.
caomingchang	Ch.5	3	80	3	83	Please replace the content concerning the impact on Biodiversity with the impacts on Biodiversity and Ecosystem Services	This text has been amended
caomingchang	Ch.5	3	95	4	130	Please change the sign "§" into "Section"	This text has been amended
Tanya Lazarova	Ch.5	4	101	4	101	remove ''or bundle'' as it repeats	This text has been amended
caomingchang	Ch.5	5	151	5	152	Please add the contributing of population growth in the APR to global population growth	This text has been amended
caomingchang	Ch.5	5	155	42	1294	Please change 'within APR','in APR' into 'within the APR'and 'in the APR', and change "APR region" into "APR"	This text has been amended
caomingchang	Ch.5	5	161	5	163	The sentence is a little bit obscure	This text has been amended
caomingchang	Ch.5	5	164	5	164	What is the meaning of "existing scenarios"?	This text has been amended
Thomas Brooks	Ch.5	5	168	5	179	Good figure. Add citation for the base data for this figure, which is "IUCN (2010) The IUCN Red List of Threatened Species. http://www.iucnredlist.org/". Also NB that the figure shows "Numbers of vertebrates globally threatened by overexploitation, 2010" not "number of threatened vertebrates globally" - correct accordingly.	Citations have been added throughout
caomingchang	Ch.5	6	172	7	187	Please unify the note and source between Figure 5.2 and Figure 5.4	This text has been amended
caomingchang	Ch.5	6	177	6	177	All figures and graphics will be redrawn and refined [CLAs / Sonali]	All figures and graphics have been redrawn and refined

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Tanya Lazarova	Ch.5	6	178	6	178	You can remove "Map showing" from the title of figure 5.2b, "Barpolot showing" from the title of Figure 5.3 and "Map showing" from the title of figure 5.4. Same for Figure 5.6b, 5.7, 5.8, 5.9a, 5.9b, table 5.1	This text has been amended
Shamik Chakraborty	Ch.5	6	178	6	179	Figure 5.2b: I do not see high values in **most** of the APR countries, may be changed to **many?** Also in terms of area it shows low values over large areas too. So only countries is not a good explanation for this figure.	This text has been amended
K.N.Ninan	Ch.5	7	189	7	189	Insert 'of ' before BES in the section title	This text has been amended
caomingchang	Ch.5	8	201	8	201	Figure 5.5 is not very clear	All figures and graphics have been redrawn and refined
K.N.Ninan	Ch.5	8	218	8	221	Another reason for high pollution in aquatic systems is due to rapid expansion of intensive shrimp farming esp. in south and south east asia.	This text has been amended
K.N.Ninan	Ch.5	9	234	9	236	Figure 5. 6b: Figure may also include the change in forest area in the right side panel of this figure in addition to crop land and pasture land	All figures and graphics have been redrawn and refined
Shamik Chakraborty	Ch.5	9	235	9	237	Figure 5.6b: No mention about the line graph	All figures and graphics have been redrawn and refined
K.N.Ninan	Ch.5	10	239	10	242	Figure 5. 7: This figure is more or less similar to Figure 5.4 presented earlier. What is the value addition of this figure ?	All figures and graphics have been redrawn and refined
India NFP	Ch.5	10	240	10	247	Fig 5.8, Incorrect Map of India is shown in this figure.	All figures and graphics have been redrawn and refined
Shukla Acharjee	Ch.5	10	245	10	245	fig 5.8 showing India's northern boundary incorrectly	All figures and graphics have been redrawn and refined
caomingchang	Ch.5	11	252	11	252	Figure 5.9b is not very clear	All figures and graphics have been redrawn and refined
caomingchang	Ch.5	11	256	11	261	One or two examples will help the reader to understand the role "integrated modelling and scenario analysis of BES and HWB interactions"	Content has been revised to provide examples as suggested. Reference to IPBES Methological Assessment on Scenarios and Modeling have also been made.
Tanya Lazarova	Ch.5	11	256	11	262	Will Section 5.1.1.3 be extended? If not, you can just add it to section 5.1.1.2, because now it looks incomplete.	This section has been reviewed and incorporated into revised sections with reference to gaps in data and sources for the APR
caomingchang	Ch.5	11	266	11	266	Please change 'it' into 'its'	This text has been amended
Tanya Lazarova	Ch.5	11	266	11	266	I guess you mean "its great diversity" not "it great diversity"	This text has been amended
Tanya Lazarova	Ch.5	11	275	11	275	Perhaps better to use something like "resources" instead of BES in this sentence. Now it says.. Growing demand for more biodiversity and ecosystem services to sustain the need..	This text has been amended
Tanya Lazarova	Ch.5	12	300	12	305	Will Section 5.1.3.2. be extended? It seems strange to have a whole section which contains only one sentence. Perhaps you can put together some of the sections which do not contain much information.	This text has been amended
K.N.Ninan	Ch.5	12	307	12	314	It is quite odd that readers have to wait until page 12 to know the objectives of the chapter. These need to be spelt out in the beginning of the chapter itself.	This text has been amended
caomingchang	Ch.5	12	313	12	314	The citation is missing	Citations have been checked and amended throughout
K.N.Ninan	Ch.5	12	316	12	316	What is 'APRA' methods mentioned in the section title ? Not clear to the reader.	This text has been amended

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Prakash Nelliyat	Ch.5	13	354	17	466	The Biodiversity and Ecosystem Services (BES) and Human Well-Being (HWB) from different ecosystems may be assessed through direct and indirect methods. BES related HWBs' Direct aspects include: (a) income / employment / food / medicines for the communities who directly involved in the collection / cultivation of biological resources like income from fishing for fishermen. (b) Peoples enjoyments / happiness from the scenic beauty of Biodiversity and Ecosystem. BES related HWBs' Indirect aspects include: (a) Well-being due to the consumption of a product derived from the biological resources. (b) Obtain employment and income in/from a biological resources based entrepreneurship.	This comment is gratefully noted and we hope these points are addressed more effectively in the revised text.
Tanya Lazarova	Ch.5	13	356	13	356	Perhaps this section and the one starting on line 447, p.17 could have numbering	The chapter structure have been addressed
Tanya Lazarova	Ch.5	13	356	13	361	Perhaps here you can give a brief overview of what the main elements of the pathways for people who are not familiar with the PBL 2012 report.	We have provided further details on pathways in the revised text
Margarita N. Lavides	Ch.5	13	359	13	361	The meaning of each alternative pathways should be elaborated here. Its not enough to just enumerate them here and assume that readers understand based on the phrase used for each alternative pathways.	We have provided further details on pathways in the revised text
Prakash Nelliyat	Ch.5	13	371	13	375	"Increasing demand for food, energy, and materials from a growing population will significantly impact regional biodiversity (PBL, 2012, 2014), for example as more land is required for agriculture and increasing urbanisation. *Under this trend, APR will continue to lose habitats and species at the similar pace with the global rate, and a loss of approximately 45% of the original species abundance (MSA) is expected by 2050*". But it may vary with respect to the public awareness on biodiversity and ecosystem services as well as various conservation measures taken by the nations. This might be considered in any policy decision / action plan.	This text has been amended in the revised version
Tanya Lazarova	Ch.5	13	375	13	375	Include the full name of MSA here as the acronym is mentioned for the first time	This text has been amended
Tanya Lazarova	Ch.5	14	381	14	381	Here, you can perhaps use the original publication on the GLOBIO model (Alkemade et al. 2009, DOI: 10.1007/s10021-009-9229-5), when you talk about MSA	This text has been amended
Tanya Lazarova	Ch.5	14	394	14	395	Why are some of the pathways missing from the South Asia graph?	These fell below the 50% threashold on the y-axis. Graphics and data have been amended to show the full range of pathways.
Tanya Lazarova	Ch.5	14	414	14	414	remove ''is'' to become '''which will peak..''	This text has been amended
Tanya Lazarova	Ch.5	15	406	15	406	Remove ''s'' from models	This text has been amended
caomingchang	Ch.5	15	409	15	412	The citation is missing	Citations have been checked and amended throughout
Tanya Lazarova	Ch.5	15	416	15	416	Spell out the full names of the pathways here to be consistent with the rest of the section	This text has been amended
caomingchang	Ch.5	15	425	15	427	Figure 5.11 does not to show the pressure driving biodiversity loss and projected land use changes in other regions of the APR	This has now been presented for APR subregions
Tanya Lazarova	Ch.5	15	426	15	426	Add ''s'' after pressure in the title of the figure	This text has been amended
Tanya Lazarova	Ch.5	15	429	15	431	Here you say that biodiversity loss will be highest under GT pathway for certain regions and highest for the CC pathway for others. Looking at figure 5.10, the Baseline scenario in ALL regions has the highest biodiversity loss. I think it would be better to present this analysis from a different point of view: which pathways are doing best for which Asian regions. If you present this section in the way it is currently written, it looks like the pathways are not really contributing to reducing biodiversity loss, while they actually are.	Thank you for this comment, the text has now been amended.

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Tanya Lazarova	Ch.5	15	436	16	438	Please make sure to read the background report (PBL 2012) to ensure that you interpret the data from GLOBIO correctly! For example, in the Consumption Change pathway it is assumed that people will eat less meat and dairy products, so land for grazing will actually reduce, not expand, like you say here.	Thank you for highlighting this - we have amended the text to represent these pathways more accurately.
Tanya Lazarova	Ch.5	16	445	16	445	Table 5. 1: The dash is in the wrong place: it should be "Human well-being" (Second column of the table)	This text has been amended
Tanya Lazarova	Ch.5	16	445	16	445	Table 5. 1: It would be good if you add citations to the information you have included in the table to make clear where it came from. If it is based only on the PBL 2012 pathways, please make clear which pathways match which statements	Citations have been checked and amended throughout.
caomingchang	Ch.5	16	445	17	446	In the column of "Human-Wellbeing Component"of Table 5.1, it may be more clear if list the five HWB constituents,component by component	Where possible HBW have been detailed along with levels of confidence
Margarita N. Lavides	Ch.5	17	446	17	446	Human Well Being component lacking in Table 5.1 for Marine and Coastal Ecosystem. If there is insufficient assessment to merit an APR wide conclusion, this should be indicated. Nevertheless, for aspects like climate change and pollution in coastal and marine ecosystem, where possible APR wide conclusions can be derived or gleaned, HWB component can also be specified here.	This text has been amended
Tanya Lazarova	Ch.5	17	464	17	475	Fish production is sufficient, not fish food production (relevant for the whole paragraph)	This text has been amended
Tanya Lazarova	Ch.5	17	465	17	465	What is ASEAN?	Text has been refined throughout and acronyms spelled out on first use
Margarita N. Lavides	Ch.5	17	483	17	483	Examples of reforms in current and fisheries and aquaculture practices to help ensure continued productivity of coastal and marine fisheries production in APR, should be given and briefly described here.	This text has been amended
Tanya Lazarova	Ch.5	17	489	17	492	Perhaps this paragraph could be removed as it repeats what is said in line 447-449	This text has been amended
Margarita N. Lavides	Ch.5	18	494	18	496	Nereus Program of Nippon Foundation and University of British Columbia and partners is a good source of most recent References on marine fisheries on global and regional and other scales.	Data are available, but fall outside remit of IPBES. Reference have been made where appropriate

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
K.N.Ninan	Ch.5	18	494	19	496	A common refrain in the chapter especially in first few pages is the lack of Scenario studies in the AP region especially at country or sub-regional level. But there are glaring omissions in the chapter of such studies for some countries or sub regions of AP region which are available. Table 5.2 may include two studies by N Ravindranath et al on 'Impact of Climate Scenarios on Forests in India' published in Current Science, Volume 90, No.3, February 2006 (he is an LA in this chapter) and the other by Pieter van Beukering et al. on the Economic Value of the Leuser National Park in Indonesia where the authors used 3 alternate scenarios (BAU, Selective felling and conservation scenarios) to assess the flow and value of ecosystem services or impact on BES (Ecological Economics, 2003).See also the study by Y. Trisurat in Thailand at watershed level which also figures in IPBES 2016. Similarly are there no studies from Australia ? Difficult to believe since there are several researchers at CSIRO, Australia and in New Zealand who have spearheaded research and studies in this area. (for e.g. studies by Simon Ferrier with case studies from Australia).Similarly I believe there are studies from China which have used scenario analysis to assess their impact on BES. Inclusion of these in the table or as separate case studies or boxes will add value to this chapter. Also a recent ADB report (Assessing the costs of climate change and adaptation in south asia) published in 2014 has used SRES Climate scenarios corresponding to low, medum and high emission scenarios to assess the impact of climate change on BES and HWB for the South Asia region and countries.This can be downloaded from the web.Authors may like to include a few case studies covering different sub regions and ecosystems involving scenario analysis and corresponding to the scenario typologies presented in Figure 5.5 and the methodological assessment report, 2016.	Assessment is being refined and additional sources may become available or appropriate. In such cases, these have been incorporated
caomingchang	Ch.5	19	505	19	507	Table 5.3 is not very clear	The text has been refined throughout
K.N.Ninan	Ch.5	19	505	19	507	Table 5. 3: Table showing changes in regional fisheries production... what is the time period for this analysis over which changes are assessed for BAU and Reform scenarios ?	This has now been amended and clarified
K.N.Ninan	Ch.5	20	509	20	511	Figure 5. 14: What is the source of data presented in this figure ?	Citations have been refined and added
caomingchang	Ch.5	20	513	21	543	Section 5.3.1.1 is not well written, it explains the source selection of scenario narratives,rather than the trends in sub-regional or local BES and HWB interactions in APR	The text has been refined throughout
Tanya Lazarova	Ch.5	20	516	20	516	Better to say (Based on the archetypes defined by Hunt et al. 2012), rather than just putting (Hunt et al. 2012)	The text has been refined throughout
Tanya Lazarova	Ch.5	20	517	20	519	I think that this sentence contradicts a bit the sentence after that. You say that 65% of the storylines do not follow any of the known development trajectories and in the next sentence you say you grouped them per scenario family, so I guess these 65% do fit somehow in the known development trajectories. Perhaps it should be re-worded to make it clearer: explain that with the first sentence you mean that 65% of the studies developed their own scenarios, while the rest were based on existing scenarios from IPCC, GEO, etc.	The text has been refined throughout
K.N.Ninan	Ch.5	20	519	21	546	In the context of the scenario typologies presented in Figure 5.5. which is drawn from IPBES 2016, for the benefit of readers you may like mention and link up the scenarios listed here and also presented in Figure 5.15 with those in Figure 5.5 or the methodological assessment report, 2016.Not clear to the reader.i.e. exploratory scenarios vis-a-vis policy screening/target seeking scenarios.	Clarification has been made
Tanya Lazarova	Ch.5	20	531	20	531	Remove etc.	The text has been refined throughout

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Tanya Lazarova	Ch.5	21	541	21	541	Be careful with such statements "the future will evolve under Market Forces and Policy Reforms"..	Clarification have been made
Tanya Lazarova	Ch.5	21	549	21	549	I'm not sure if this title matches the content of the section below. Perhaps this section can also be comined with section 5.3.1.1.	The text has been refined throughout
caomingchang	Ch.5	21	549	22	588	Please change "Asia Pacific region", "AP region" , "Asia-Pacific region" into "APR"	The text has been refined throughout
Tanya Lazarova	Ch.5	22	578	22	584	Perhaps you can add a word after each SDG to make it clearer for people who do not know all SDGs by heart. Example: SDG 13 (climate action), SDG 15 (life on land)	The text has been refined throughout
Shamik Chakraborty	Ch.5	22	600	23	636	The UNU Policy Brief synthesizes multi-country perspective selecting wider set of landscapes for summarising learning points for decision-makers with integrative landscape approach. For more see: https://collections.unu.edu/eserv/UNU:6026/UNUIAS_PB_8.pdf	This comment is not clear
K.N.Ninan	Ch.5	22	611	22	612	"..and aquatic ….involving well known biodiversity hotspots (Ramsar site, World heritage sites). Please give examples and actual names of the hotspots studied instead of mentioning Ramsar site, World heritage site). Or redraft the sentence since you have given examples in the latter statements.	The text has been refined throughout
K.N.Ninan	Ch.5	22	614	22	614	mangroves of Ayeyarwady delta. Mention the country where this is located. Is it Myanmar ?	This is also known as the Irrawaddy Delta and is in Myanmar. This has been added to clarify the text
K.N.Ninan	Ch.5	22	620	22	621	Since you have cited India here along with China please cite an example from India as well as illustration of the studies conducted on urban expansion scenarios. Both examples you have cited are from China.	The text has been refined throughout and further illustrative examples added
K.N.Ninan	Ch.5	22	621	22	622	"Regional and …..Aichi targets". This sentence seems to be incomplete !!!???	The text has been revised
K.N.Ninan	Ch.5	23	625	23	627	Figure 5. 16: Right side bottom panel (3rd one) on characteristics of landscapes, the information on the vertical axis please put in bold or increase the font size since it is not legible to readers.	All graphics have been refined
K.N.Ninan	Ch.5	24	662	24	664	Insert "Note" before "Cell values……." Put this in a different font or smaller font to denote it is a note to the figure so as to distinguish it from the main text.	All graphics have been refined
Tanya Lazarova	Ch.5	25	726	25	726	Change "crap" to "crop" :)	The text has been revised
Tanya Lazarova	Ch.5	26	737	28	836	I am a bit confused by this section: The title suggests it's about archetypes, but in paragraphs 3,4 and 5 you describe global scale scenario literature (GEO-3, MEA, IMAGE/GLOBIO literature), in which they developed scenarios, but these are not scenario archetype studies like Hunt et al. 2012 and van Vuuren et al. 2012.	This has been clarified
Tanya Lazarova	Ch.5	26	743	26	743	The placement of the citation "UNEP 2000" seems not to be correct	Citations have been checked throughout
Shukla Acharjee	Ch.5	26	743	26	744	while on one hand line seems to be confusing	The text has been revised
K.N.Ninan	Ch.5	26	743	26	745	The sentence: "While on the one hand this allows (UNEP, 2002) future…." Not clear . Allows what ?	The text has been revised
Tanya Lazarova	Ch.5	26	749	26	749	Perhaps give a few examples of the many recent studyes (e.g. Hunt et al. 2012, van Vuuren et al 2012 http://dx.doi.org/10.1016/j.gloenvcha.2012.06.001)	This has been clarified
Tanya Lazarova	Ch.5	27	778	27	778	GLOBIO is not an integrated assessment model. Perhaps you can just say: global-scale models, such as IMAGE, GLOBIO..	This has been clarified
Tanya Lazarova	Ch.5	27	795	27	801	This paragraphs repeats what was already said in 5.3.1.1.	The text has been revised
Tanya Lazarova	Ch.5	28	838	28	855	I am confused by the use of the term "archetypes" throughout the chapter. Here the title of this section is about archetypes, however, in the text you say that you based your chapter on three global scale reports (MEA, GEO-3 and 4). MEA and GEO-3 do not talk about scenario archetypes, they developed their own new scenarios.	This has been clarified

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Tanya Lazarova	Ch.5	28	857	31	911	Perhaps in this section you can cite the IPBES 2016 methodological assessment of scenatios and models to explain that the reader can find a more comprehensive overview of models of BES in there, while here you concentrate on how models have been used in the APR.	This has been clarified
Tanya Lazarova	Ch.5	29	889	29	889	Change ''of'' to ''on''	The text has been revised
Thomas Brooks	Ch.5	31	909	31	909	For the top line of Table 5.4 on Page 31, maybe a useful example of application of species-area relationship scenarios applied in the APR is Brooks et al. (1997) Conservation Biology 11: 382–394.	This has been clarified
Government of Japan	Ch.5	31	926	31	926	Not "Tomokomai" but "Tomakomai"	The text has been revised
Margarita N. Lavides	Ch.5	31	930	32	932	The sentence is vague. It should explain why it is useful to simulate changes in both ecosystem functions and ecosystem structures due to the localness of estimates.	The text has been revised
caomingchang	Ch.5	32	948	34	1061	What is the foundation of classifying the BES models into Process Based Models, Integrated Assessment models, Socio-economic models, and Models for ecosystem services and human well-being?	This has been revised and refined
Margarita N. Lavides	Ch.5	32	955	32	957	A brief description of the results and analysis of Fuji et al. 2009 viz a vis DGVM.	This has been revised and refined
K.N.Ninan	Ch.5	33	981	33	981	Below Table 5.5. source Caverich et al, 2016 it is mentioned Table 1. This is confusing for the reader. Is this table 1 from Caverich et al, 2016. If so please shift this to below table 5.5. as a note. State that this is taken from Table 1 in…. with explanation.	This has been revised and refined
Tanya Lazarova	Ch.5	35	1068	35	1068	Millennium Ecosystem Assessment with capital letters	The text has been revised
Margarita N. Lavides	Ch.5	35	1086	35	1089	Examples of multiple intermediate and final goods, which are often invisible, provided by natural capital (ecosystems) should be mentioned here.	This has been revised and refined
Tanya Lazarova	Ch.5	36	1114	36	1114	..of the world inlcuding COUNTRIES IN the Asia Pacific REGION.	The text has been revised
Tanya Lazarova	Ch.5	36	1117	36	1117	Correct to Figure 5.22, not 5.20	The text has been revised
India NFP	Ch.5	36	1144	36	1148	Fig 5.23 , incorrect map of India is shown.	Graphics and maps have been revised
K.N.Ninan	Ch.5	37	1137	37	1139	Figure 5. 22: Need to improve the resolution of the figure for the benefit of readers. Otherwise not very clear	Graphics and maps have been revised
Shukla Acharjee	Ch.5	38	1146	38	1146	fig 5.23 showing India's northern boundary incorrectly	Graphics and maps have been revised
Thomas Brooks	Ch.5	40	1208	40	1208	Change "annilhation" to "extinction" in Fig 5.24	The text has been revised
K.N.Ninan	Ch.5	40	1208	40	1210	Figure 5.24 is quite complex and difficult for the reader to understand and assimilate. Not clear or understand the objective for this figure and especially column 2 i.e. themes considered for scenario classification ? What message does this figure seek to convey to policy makers and others ? Not clear to me. Is this a common format followed in all the regional assessments ? Does the figure seek to convey the scenarios used in various existing studies pertaining to the AP region vis-a-vis the SDG goals and Aichi targets or future scenario work required for the AP region in the context of the SDG Goals/Aichi targets ? If the latter, is it not possible to do scenario analysis that can cover multiple SDG goals/Aichi targets ? Is there any way of simplifying this complex table and making it easily understandable to policy makers and others ? What is the source of the information presented in the figure ? Not cited in the figure.If this figure relates to suggested priorities for future scenario work then what does the second column set with sub regionwise studies show. Is it scenario studies conducted so far thematic wise and by sub regions ? Very confusing and complex figure for readers to understand as stated earlier.	This graphic has been revised

Reviewer Name	Chapter / SPM	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	Response
Margarita N. Lavides	Ch.5	40	1216	41	1220	Brief description of SEA and Oceania scenario exercises depicting future occurrence, distribution and production and consumption of coastal/marine ecosystem services based on cited literatures, should be included here.	This content has been clarified
Shamik Chakraborty	Ch.5	41	1249	41	1250	The threefold approach of the Satoyama Initiative can be referred: http://satoyama-initiative.org/wp-content/uploads/ 2015/11/20151007_ID-PDF_UNU-DL-flyer-EN-with-new-diargam.pdf (This approach is also being replicated in several countries)	The text has been revised
Tanya Lazarova	Ch.5	41	1252	41	1252	Put a space in between ''part due''	The text has been revised
Tanya Lazarova	Ch.5	41	1262	42	1271	I'm not sure if this section is needed	The text has been revised
Tatsuya Horikiri	Ch.5	41	1265	42	1271	The text referred to here as "mission statement" of vision is, as I understand, meant to describe the state of "living in harmony with nature", not how to attain the vision . They have distinct part of short-term (ten year) "mission" after "vision" in the CBD strategic plan 2011-2020. It is better to consult the Annex of the Decision X/2 of CBD COP10.	The text has been revised
Margarita N. Lavides	Ch.5	42	1297	42	1309	A new journal on biodiversity/environment and health called Lancet Planetary Health with weblink below is a good source of additional literature. Both the first issue (April) and current (May) can be referred to : http://www.thelancet.com/journals/lanplh/issue/current	The text has been revised
K.N.Ninan	Ch.5	43	1349	43	1350	Here 'run-of- the-river' hydro projects are being developed. What is this ? Further in line 1350 the sentence : "….by created by large dams… Please check or redraft the sentence.	The text has been revised
caomingchang	Ch.5	43	1378	43	1378	It recommends the GEO3/GEO4 scenarios,MA scenarios in the previous text, why mention the GBO-4 here?	The text has been revised
Tanya Lazarova	Ch.5	44	1384	44	1387	Perhaps it woud be better if the last paragraph of the chapter does not once again emphasize on the gaps in knowledge, but provides a synthesis of the pathways and options found in scenario and modelling studies for achieving the goals outlined in the previous paragraph.	The text has been revised
K.N.Ninan	Ch.5	45	1420	45	1425	The reference: Bohensky et al is repeated twice.see line 1420. It is mentioned as 2011a and 2011b.But the reference is the same	Citations have been checked and amended throughout