

Comments from 1st Review Phase of Chapter2. Deliverable 2b. Americas Assessment on Biodiversity and Ecosystem Services.

Review Editor: Brenda Parlee

Affiliation: Department of Resource Economics and Environmental Sociology, University of Alberta

Address: 2-06 Agriculture Forestry Centre, University of Alberta, Edmonton, Alberta, Canada T6G 2P5

Email address: bparlee@ualberta.ca

Review Editor: Laura Nahuelhual

Affiliation: Instituto de Economía Agraria, Facultad de Ciencias Agrarias. Universidad Austral de Chile.

Address: Campus Isla Teja Valdivia, Región de los Rios Chile

Email address: lauranahuel@uach.cl

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur	General Comment				Below is a list of references that may also be helpful. Not complete of course.	References were included, if apply
Liette Vasseur	General Comment				Baldi, G. and Paruelo, J.M. (2008). Land-use and land cover dynamics in South American temperate grasslands. <i>Ecology and Society</i> 13:6. Accessed on: 2 March 2015. [Online] URL: http://www.ecologyandsociety.org/vol13/iss2/art6/ .	References were included, if apply
Liette Vasseur	General Comment				Baldi, G., Guerschman, J.P. and Paruelo, J.M. (2006). Characterizing fragmentation in temperate South America grasslands. <i>Agriculture, Ecosystems and Environment</i> . 116:197-208.	References were included, if apply
Liette Vasseur	General Comment				Fidelis, A., Blanco, C.C., Müller, S.C., Pillar, V.D. and Pfadenhauer, J. (2012). Short-term changes caused by fire and mowing in Brazilian Campos grasslands with different long-term fire histories. <i>Journal of Vegetation Science</i> . 23:552-562.	References were included, if apply
Liette Vasseur	General Comment				Fidelis, A., Delgado-Cartay, M.D., Blanco, C.C., Müller, S.C., Pillar, V.D. and Pfadenhauer, J. (2010). Fire intensity and severity in Brazilian campos grasslands. <i>Interciência</i> . 35:739-745.	References were included, if apply
Liette Vasseur	General Comment				Fidelis, A., Müller, S.C., Pillar, V.D. and Pfadenhauer, J. (2010). Population biology and regeneration of forbs and shrubs after fire in Brazilian Campos grasslands. <i>Plant Ecology</i> . 211:107-117.	References were included, if apply

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur	General Comment				Fidelis, A., Overbeck, G.E., Pillar, V.D. and Pfadenhauer, J. (2009). The ecological value of <i>Eryngium horridum</i> in maintaining biodiversity in subtropical grasslands. <i>Austral Ecology</i> . 34:558-566.	References were included, if apply
Liette Vasseur	General Comment				Forrestel, E.J., Donoghue, M.J. and Smith, M.D. (2014). Convergent phylogenetic and functional responses to altered fire regimes in mesic savanna grasslands of North America and South Africa. <i>New Phytologist</i> 203:1000-1011.	References were included, if apply
Liette Vasseur	General Comment				Gardner, T.A., Barlow, J., Sodhi, N.S. and Peres, C.A. (2010). A multi-region assessment of tropical forest biodiversity in a human-modified world. <i>Biological Conservation</i> . 143:2293-2300.	References were included, if apply
Liette Vasseur	General Comment				Innes, C., Anand, M. and Bauch, C.T. (2013). The impact of human-environment interactions on the stability of forest-grassland mosaic ecosystems. <i>Scientific Reports</i> . 3:2689. doi: 10.1038/srep02689.	References were included, if apply
Liette Vasseur	General Comment				Mendoça-Lima, A., da Silva Duarte, L. and Hartz, S.M. (2014). Comparing diversity and dispersal traits of tree communities in plantations and native forests in Southern Brazil. <i>Natureza e Conservação</i> . 12:24-29.	References were included, if apply
Liette Vasseur	General Comment				Overbeck, G.E., Müller, S.C., Fidelis, A., Pfadenhauer, J., Pillar, V.D., Blanco, C., Boldrini, I., Both, R. and Forneck, E.D. (2007). Brazil's neglected biome: The South Brazilian Campos. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> . 9:101-116.	References were included, if apply
Liette Vasseur	General Comment				Parr, C.L., Lehmann, C.E.R., Bond, W.J., Hoffmann, W.A. and Andersen, A.N. (2014). Tropical grassy biomes: misunderstood, neglected, and under threat. <i>Trends in Ecology and Evolution</i> . 29:205-213.	References were included, if apply
Liette Vasseur	General Comment				Ribeiro, M.C., Metzger, J.P., Camargo Martensen, A., Ponzoni, F.J. and Hirota, M.M. (2009). The Brazilian Atlantic Forest: How much is left, and how is the remaining forest distributed? Implications for conservation. <i>Biological Conservation</i> . 142:1141-1153.	References were included, if apply

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur	General Comment				Souza, A.F., Rocha Cortez, L.S. and Longhi, S.J. (2012). Native forest management in subtropical South America: long-term effects of logging and multiple-use on forest structure and diversity. <i>Biodiversity Conservation</i> . 21:1953-1969.	References were included, if apply
Liette Vasseur	General Comment				Tabarelli, M., Aguiar, A.V., Ribeiro, M.C., Metzger, J.P. and Peres, C.A. (2010). Prospects for biodiversity conservation in the Atlantic Forest: lessons from aging human-modified landscapes. <i>Biological Conservation</i> . 143:2328-2340.	References were included, if apply
Liette Vasseur	General Comment				Darnis, Gérald; Robert, Dominique; Pomerleau, Corinne; Link, Heike; Archambault, Philippe; Nelson, R.; Geoffroy, Maxime; Tremblay, Jean-Éric; Lovejoy, Connie; Ferguson, Steve; Hunt, Brian; Fortier, Louis. 2012, Current state and trends in Canadian Arctic marine ecosystems: II. Heterotrophic food web, pelagic-benthic coupling, and biodiversity. <i>Climatic Change</i> . Nov2012, Vol. 115 Issue 1, p179-205. 27p. DOI: 10.1007/s10584-012-0483-8.	References were included, if apply
Liette Vasseur	General Comment				Atkinson, Scott C.; Jupiter, Stacy D.; Adams, Vanessa M.; Ingram, J. Carter; Narayan, Siddharth; Klein, Carissa J.; Possingham, Hugh P. 2016. Prioritising Mangrove Ecosystem Services Results in Spatially Variable Management Priorities. <i>PLoS ONE</i> . 3/23/2016, Vol. 11 Issue 3, p1-21. 21p. DOI: 10.1371/journal.pone.0151992.	References were included, if apply

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Diego Pacheco	General Comment				<p>This is still a very unorganized chapter, oriented to the commodification of nature in the region, and very much oriented to few cases emphasizing the Amazon and forests. The main drawbacks of the chapter are the following: 1) There is not a clear setting about what ecosystem functions and services are going to be analyzed, the time-period of the analysis; 2) The principal trends studied in this chapter are still very poor and biased towards deforestation and land use change; 3) This is not comprehensive and is not showing the positive impacts of sustainable management practices in the region. Therefore the chapter appears to be very biased. 4) There is a complete ignorance of the different knowledge systems in the management of the different subregions and biomas. This need to be strenghtened a lot. 5) A lot of emphasis in forests but not in another types of management (for example there is no mention to the Andean region or to the Chaco, which are important biomas in the Americas). 6) The document is also advocating and promoting the commodification of nature in the America for the bneefit of private business and multinational corporations, this is unacceptable. 7) It seems that in America there is not indigenous peoples and local communities, which is also very unacceptable in the approach of this document.</p>	The new structure of the chapter hopefully makes this clearer
Guiomar Nates	General Comment				<p>In general, I suggest reviewing bibliographic references. Missing many!</p>	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz	General Comment				In general, there is little adoption of the IPBES conceptual framework categories, other than in the titles. There is confusion between nature's benefits to people (NBP) and ecosystems goods and services, and also between both of them and ecosystem process in several places. I will point to some examples, but this should be controlled throughout the chapter. The adoption of the IPBES conceptual framework (CF) is made explicit at the level of titles, but then the terminology and especially the inclusive categories of nature, nature's benefits to people and good quality of life are often abandoned, and the text reverts to biodiversity and ecosystem services, which are included, but do not fully represent, the inclusive categories. It is true that the name of the Platform contains the words "biodiversity and ecosystem services", but such name was chosen before the inclusive, interdisciplinary, participatory CF was constructed. During that construction, and after extensive consultation, it was decided that the inclusive categories reflected better the multiple worldviews and wider range of stakeholders of the Platform, and therefore were put forward as the main categories for reporting. These are nature (which includes biodiversity, ecosystems, the evolutionary process, biogeochemical cycles, etc., but also similar categories used by other knowledge systems), nature's benefits to people (which includes ecosystem goods and services but it is not restricted to them. including also categories such as nature's gifts, and a good quality of life that includes the classical human wellbeing but, again, goes beyond that). By using nature, nature's benefits to people and good quality of life.	Thank you, we have clarified the terminology
Sandra Díaz	General Comment				The Chaco biome, one of the most extensive and threatened in the region, and with a good number of studies, does not seem to be explicitly mentioned anywhere.	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz	General Comment				In order to achieve full usefulness, this chapter needs to be more specific in its findings. At the moment it contain many generic statements which, although true, do not really inform decision makers. If one were to construct a summary for policy makers on its basis, it would not be much different from the Millennium Ecosystem Assessment. I suggest making an effort for being more specific, and on the basis of this specificity, providing more synthetic figures or tables that summarize THE EVIDENCE backing up each of the generic statements. Trthought the chapter I try to make some suggestions as to how to achieve this.	Thank you for this comment
Sandra Díaz	General Comment				In the chapter in general, but especially in the description of NBP per biome/system, more data are needed. The statemnts are often too general; one can soemtimes imagine what they refer to, and sometimes resonate with them, but there is not enough information for the reader to judge (rather than accepting the authors general statement at face value). This information could be "hard numbers" if they are there, but also some concrete qulitative examples, something to anchor the general statements. For example, a set of tables or figures could be organized, either by biome/system or general, in which all this cocnrete information is summarized, and gives some empircal support to the statements of the main text.	The new structure of the chapter hopefully makes this clearer
Sandra Díaz	General Comment				this chapter has a good bibliographic analysis, but is missing a considerable body of directly relevant information. Some authros that come to my mind for the Latin America are, for example: Maas, Finnegan, Balvanera, Caceres, Mastrangelo, Ladio, Barbaran, Díaz, Paruelo, Sala, Oesterheld, Austin (Patagonia), Aizen, Garibaldi... the literature with the "ecosystem service" keword is enormous in the region, although it not always provides concrete data.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz	General Comment				This chapter really needs some synthetic products. For example, there could be a large syntehctic table (or set of hihgly coordianted individual tables, on the basis of the ones already provided) of biomes/main NBP/main stakholders/ concrete examples. For example, if in one biome freshwater fisheries are important, say the NBP associated with them (food? recreation? social bonding?), the main stakeholders (indigenous groups, subsistance fishermen, commercial fishing companies, recreational anglers?), and some examples of the fisheries (e.g. salmon in Alaska, trout in Titicaca lake, dorado and surubí in Paraná river). the there could be, when available, some quantification (hectares, USD, tourists, nubmer of subsistance-fishing famlies), and references.	The new structure of the chapter hopefully makes this clearer
Sandra Díaz	General Comment				Suggest the authors consider the IPBES document on NBP system and adapt terminology and description of ecosystem services provided by each biome to it, for consistency across regions.	Thank you, we have clarified the terminology
Sandra Díaz	General Comment				There are several paragraphs per biome of general description of what the biome is and what are the drivers oc change. I suggest these all can go to some other Chpaters and here just refer to them, and go straight into the NBP.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists	General Comment				For each Chapter, a half-Page abstract related to the background, methodology and key findings would be helpful, particularly for new readers.	This comment will be addressed in the Executive Summary section.
German IPBES Coordination Office and national scientists	General Comment				Many sections in Chapter 2 are addressing general (and or global relevant) aspects that are of (the same) importance to all Regional Assessments - this should be kept as short as necessary. Main focus should be on examples with special relevance for the Americas Regions.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
German IPBES Coordination Office and national scientists	General Comment				Please reflect the contents and outline on Chapter 2 in IPBES/3/6/Add. 1 and provide related input - here especially "asses the different impacts of changes in nature's benefits to people on food security, energy security, livelihood security and health..." and "adress issues realted to under the three Aichi Targets (14,15 and 16)".	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists	General Comment				Indicating the three concrete Aichi Targets 14, 15 and 16 will be crucial and of utmost importance to link all the Regional Assessments (including Americas) directly with the upcoming Global Assessment under IPBES and the the planned GBO5 under CBD. So we would like to encourage the authors to quote relevant Aichi Targets linked with concrete issues and findings.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists	General Comment				Important hints concerning knowledge gaps are of utmost importance and the authors are therefore encouraged to outline major knowledge gaps more clearly with the end to include them in the upcoming SPM, in terms of capacity building needs and/or research needs at the regional/subregional and national levels. The authors are also encouraged to outline major regional discrepancy in available knowledge and knowledge gaps more clearly as their identification and classification are necessary contributions to support decisions, conservation and for ongoing and future assessments.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists	General Comment				The authors are encouraged to outline major regional discrepancy in available knowledge and knowledge gaps more clearly as their identification and classification are necessary contributions to support decisions, conservation and for ongoing and future assessments.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists	General Comment				Please select certain relevant key messages for the upcoming SPM and add uncertainty statements or qualitative confidence levels to all of them to ensure the credibility of the assessment.	This comment will be addressed in the Executive Summary section.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
German IPBES Coordination Office and national scientists	General Comment				Consider quoting and reference to Hill et al (2015): A social–ecological systems analysis of impediments to delivery of the Aichi 2020 Targets and potentially more effective pathways to the conservation of biodiversity. Global Environmental Change 43, 22-34.	References were included, if apply
German IPBES Coordination Office and national scientists	General Comment				Consider quoting and reference to publications "Planetary boundaries: Guiding human development on a changing planet" and "The trajectory of the Anthropocene: The Great Acceleration" (both Steffen et al 2015) to include reflections and links on global, regional and subregional levels.	References were included, if apply
German IPBES Coordination Office and national scientists	General Comment				The recently published WWF Amazonas Report 2016 might be considered as it offers some new findings and provides many relevant publications. The report draws heavily on research carried out by academics, independent researchers and other NGOs. More than 300 key references and notes are given. (see: http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_living_amazon_report_2016_mid_res_spreads_1.pdf).	References were included, if apply
German IPBES Coordination Office and national scientists	General Comment				We greatly appreciate the well structured approach to choose the biomes most relevant for the Americas (see also Chapter 1, Line 536, Table 1) which are investigated and referred to in detail in all 6 Chapters. Please ensure that an order once agreed upon (which might be the one in Chapter 1, cited above) is maintained, as in the current sections of the document the order is very often mixed up and might complicate conclusions concerning certain biomes (see e.g. Chapter 2.3.1 to 2.3.9).	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
CONABIO	General Comment				Consideramos importante que en este capítulo se refleje que la intervención social también es positiva, y que incluso es la que la da valor a los “servicios ecosistémicos”; convirtiéndolos precisamente en “servicios”. El ser humano participa cultivando, domesticando y aprovechando la biodiversidad. Esta transformación es la que convierte al servicio ecosistémico en un beneficio (ej. los servicios de “provisión”).	The new structure of the chapter hopefully makes this clearer
CONABIO	General Comment				Por otro lado, también consideramos importante mencionar que las intervenciones humanas no sustentables que derivan en la degradación de ecosistemas, pueden tener como consecuencia una mayor diversidad de microorganismos que se propagan y transmiten enfermedades al ser humano y otras especies.	The new structure of the chapter hopefully makes this clearer
Lucía Almeida-Leñerc	General Comment				La información es muy repetitiva, es necesario hacerlo mas visual y didáctico, la parte de la evolución del concepto se podría manejar con líneas de tiempo	The new structure of the chapter hopefully makes this clearer
Lucía Almeida-Leñerc	General Comment				Por cada bioma el formato es diferente	The new structure of the chapter hopefully makes this clearer
Lucía Almeida-Leñerc	General Comment				La manera de citar no es cronológica no es homogénea	The new structure of the chapter hopefully makes this clearer
Lucía Almeida-Leñerc	General Comment				faltan muchos ejemplos de más países de América Latina	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston	General Comment				try to keep the sentences from including multiple foci – each sentence should address one idea and be reasonably concise. The primary audience for IPBES is governments, so the level and tone of the language should be aimed at a more general educated reader but not necessarily at experts in these subjects. Try to go easy on the ‘extra’ words like ‘of course’, ‘however’ and ‘indeed’. Also important is to go easy on words that could be seen as exaggeration, implying exhaustiveness, or attributing more weight to a subject than is warranted – these can be ‘red flags’ for cautious or skeptical readers.	The wording has been improved
Susan Preston	General Comment				re the in-text citations. it would be useful to readers to know if the sources being cited in each case are: 1. people whose point of view you are reporting; 2. if they are examples of where your point can be found (which can be identified by inserting “e.g.” at the start of the citation inside the parentheses); or 3. if they are people who have reported on a point that you are repeating but it is not stated in their publication as their own point of view. Normally all three of these are relevant at different times, and the differences are important for readers’ understanding of the text.	The wording has been improved
Margot Hurlbert	General Comment				General comment: There is not a lot of data in this chapter on north america or Canada	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		0	0	0	0	There is a major discrepancy with respect to other regional assessments that have assessed service by service rather than biome per biome. Both approaches are of course complementary. Concrete information on trends through time and across space might be more easily obtained service by service. The assessment of biome per biome allows for understanding the tradeoffs among services and stakeholders. The assessment biome per biome could in theory allow for further assessing contrasting values and world views but I wonder if that could not be more easily conveyed in a section across biomes that would rather address these issues across the Americas. The ways different groups of people depend on the services supplied by the different biomes is quite useful, but does not allow for dissecting important topics such as food, water or energy security, power relations, contrasting world views, and their implications into governance and decision making. The major drawbacks I see of the approach by biomes are: 1) the inability to present data on temporal trends from a range of data sources such as statistics, 2) the inability to provide America's wide patterns across space for different topics, 3) and integration of key issues across the Americas. I would need more time to reflect further on this structure and the specific contributions of this chapter. On the other hand, this chapter reads to me like a literature review rather than an assessment. How will we know if the spatial and temporal patterns will have evolved within 10 years? How do we know whether current patterns are converging towards Aichi Targets of the SDGs with the kind of revision found in this	The new structure of the chapter hopefully makes this clearer
sandra LUQUE		1	0	8	0	As mentioned in the introductory chapter CONSOLIDATE the introduction, here again there are repetitive statements. Focus on the Indigenous people is a good path but need to integrate other aspects as well in terms of the huge contrasts that could be found in the Americas and how this affects people's values of nature	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Garry Pierzynski		1	1	68	2275 This chapter has too much emphasis on South America and not enough emphasis on North America	The new structure of the chapter hopefully makes this clearer
Garry Pierzynski		1	1	68	2275 Essential sections are missing	We do not understand this comment
Garry Pierzynski		1	1	68	2275 Many references listed in the text are not listed in the list of references.	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Kevel Lindsay		1	1	31	1016	<p>While this chapter, and the whole report is laudible, this does not help local people in Ministries, Departments, NGOs and community-based organizations and many other stakeholders in the Caribben to relate to the information, translate it into various approaches, media and to agitate for improved situations and changes. The report is aloof, detached and frankly contributes to the many problems of numerous studies and reports that are lauded internationally but have no particular relevance to the local situations, where it is EXACTLY needed. This may help in the UNEP and its partners to deal with the issues at the international levels, but on the ground, this will not change much of the efforts that grassroots organizations, persons and projects are spearheading, and the changes that they are trying to effect. This report will not filter down to any meaningful changes and effects on the ground, even through the various funds and mechanisms for global and local change.</p> <p>This goes for all the remaining chapters 1 to 6 for the Americas region.</p> <p>I suggest using regional agencies with levels of support at grassroots level to test the relevance and understanding of the purpose, aims, objectives and efforts of the IPBES and similar efforts, and to engage stakeholders in key feedback mechanisms and solutions as to how to address these problem, bring obscure publications, studies, research, data and on-ground efforts into the fold of this effort. While local people may have little interest in reviewing and commenting</p>	<p>Thank you, we have endeavoured to make the language more acceptable to a wide audience and clarified terminology</p>
German IPBES Coordination Office and national scientists		2	29	2	29	<p>"Coastal areas" and "Marine, offshore, deepwater system" should be dealt seperatly and not in one Chapter as they are very different biomes (see also Chapter 1, Table 1).</p>	<p>Thank you for this comment</p>
Susan Preston		2	20			<p>copyedit item – remove ‘the’ from ‘Assessing the nature’s benefits...’</p>	<p>The wording has been improved</p>

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		3	48		copyedit item – remove comma from between ‘seagrass, beds’	The wording has been improved
Susan Preston		3	50		copyedit item – change ‘for’ to ‘from’	The wording has been improved
Susan Preston		3	54		copyedit item – remove comma from between ‘Ecosystem, services...’	The wording has been improved
Susan Preston		3	57		doe?	The wording has been improved
Susan Preston		3	56		since the Conceptual Framework is in title format on line 65, maybe it could be here too, and be consistent – Analytical Conceptual Framework in both?	The wording has been improved
Liette Vasseur		4	76	77	This is the same sentence are the previous one with different words: can be integrated.	The wording has been improved
Liette Vasseur		4	83		remove the word "general"	The wording has been improved
Liette Vasseur		4	87		add a s at "level"	The wording has been improved
Liette Vasseur		4	92		no really sure why you use the word "a nuanced..." remove the word	The wording has been improved
Liette Vasseur		4	98	99	this sentence is more or less clear.	The wording has been improved
Liette Vasseur		4	109		change might for may	The wording has been improved
Liette Vasseur		4	110	114	should probably mention urban versus rural as an example	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Diego Pacheco		4	73	5	157 The introductory part should extract inputs of the IPBES Conceptual Framework. So we propose the following orientation: Human life would not be possible without biodiversity and ecosystems. However, the intervention in nature by human societies to meet their needs has modified the composition, structure and ecosystem functions and has caused disastrous changes that seriously threaten the long-term sustainability of societies around the world. In many cases, biodiversity loss and poverty are trapped in a mutually reinforcing vicious circle. Overall, the efforts made on conservation and on the sustainable use of biodiversity and ecosystems have not kept pace with increasing human pressures. A stronger response by Governments, public organizations, communities, the private sector, households and individuals thus requires an improved understanding of such pressures and concerted action to change them (Conceptual Framework, 2013). add the figure of the conceptual framework and the explanations for: "Nature" "Anthropogenic assets" "Nature's benefits to people", taking in a count different knowledge systems "Drivers of change" "Institutions and governance systems and other indirect drivers" "Direct drivers"	The conceptual framework will be addressed in Chapter 1.
Guiomar Nates		4	76		Daily 2005a is not in references	References were included, if apply
Guiomar Nates		4	89		Ehrlich, Kareiva, & Daily, 2005a is not in references	References were included, if apply
Guiomar Nates		4	94		2005a...is Pereira et al?	References were included, if apply

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Guiomar Nates		4	101		IPBES 2016. is not in references	References were included, if apply
Sandra Díaz		4	79	4	80 "services": consider using the PBES more inclusive terminology, nature's benefits to people, that includes ecosystem goods and services and also other similar concepts more aligned with knowledge systems other than mainstream natural and economic sciences. See general comment above.	Thank you, we have clarified the terminology
Sandra Díaz		4	81	4	84 In this sentence ecosystem services (according to MA) or NBP (according to IPBES inclusive terminology) are mixed with ecosystem properties (structure and processes). I suggest formalating all of them either as services (NBP) or ecosystem properties. For example the processes are carbon assimilation and storage and the NBP biological carbon sequestration, the processes are transpiration, etc. and the NBP climate regulation.	Thank you, we have clarified the terminology
Sandra Díaz		4	83	4	85 This statement is too sweeping. Surely if the consensus was so great we would not be doing these assessments. Also the citation is correct but not enough for such a sweeping statement	The wording has been improved
Sandra Díaz		4	100	4	100 what does "agricultural extensification" mean in this context?	The wording has been improved
Sandra Díaz		4	115	5	119 Concerning values, I suggest using the IPBES Guide to the diverse values of biodiversity and refs. therein	Thank you for this comment
German IPBES Coordination Office and national scientists		4	99	4	101 Considering the results of the IPBES Pollination Assessment (3a) is appreciated. But it would be more suitable to refer to outcomes with concrete relationship to Americas (North-, Meso-, South).	The new structure of the chapter hopefully makes this clearer
Susan Preston	4		76		first citation – need to insert “MA” before “2005a”; and again in the last citation of the para (and elsewhere in the chapter)	Thank you for this comment
Susan Preston		4			very well done, effectively communicated	Thank you for this comment
Susan Preston		4			very well done, good choice of ideas to focus on	Thank you for this comment
Susan Preston		4	105		copyedit last phase on the line to say “but in other cultures, sharks are valued for their ecological...”	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		4	110		for reading flow, you could consider reorganizing the sentence: Recognition of the links between ecosystem services and human well-being is also scale-dependent.	The wording has been improved
Susan Preston		4	111		'... tend to acknowledge these links more fully...' (plural)	The wording has been improved
Susan Preston		4			good issue to raise, and could be explained with just a few more words – as it is now it's a little too compact for clarity	The wording has been improved
Liette Vasseur		5	125	126	"These systems": such as what?	The wording has been improved
Liette Vasseur		5	126	128	are we talking here about weaker than economic valuation? Unclear	The wording has been improved
Liette Vasseur		5	139		there is a word missing: unclear	The wording has been improved
Liette Vasseur		5	141		I think you meant rely, not relay	The wording has been improved
Liette Vasseur		5	148		(2005b): need complete reference	Thank you for this comment
Liette Vasseur		5	149		add a s to "other"	The wording has been improved
Guiomar Nates		5	130	131	(Kumar et al. 2013 is not in ref.	Thank you for this comment
Guiomar Nates		5	131		Sagoff 2004 is not in ref.	Thank you for this comment
Guiomar Nates		5	133		Balvanera et al 2012 is not in ref.	Thank you for this comment
Guiomar Nates		5	133		Kin et al 2012 is not in ref.	Thank you for this comment
Guiomar Nates		5	147	148	Degradation of ecosystems and their services affect all levels of society, albeit dissimilarly (2005b). REF?	Thank you for this comment
Guiomar Nates		5	156	6	160 Define acronyms, the first time they are used: Uas, WB, ES	Thank you for this comment
Sandra Díaz		5	123	5	124 wellbeing is part of quality of life (IPBES) or, in other contexts, a synonym; in any case you don't need both in the sentence; I suggest just using "quality of life"	Thank you for this comment
Sandra Díaz		5	129	5	133 No objection to the statements about economic valuation made, but the general point of the whole paragraph is not very clear. Is this aiming at highlighting the strengths or the limitations of economic valuation, or both? And how does it relate to the statements about the "gamut of values" mentioned in paragraph starting on p. 4 line 115?	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		5	134	5	134	"improvements in knowledge and technological advancements"that contribute to the provision of NBP are conceptualized as part of "anthropogenic assets"in the IPBES CF.	The wording has been improved
Margot Hurlbert		5	141	5	151	Why is it important that land managers etc understand this?	The wording has been improved
Patricia Balvanera		5	115	6	133	More explicit links to diverse values of nature and its benefits in consistency with the approach suggested in the IPBES values guide is needed here.	Thank you for this comment
Susan Preston		5	127-128			Reference to 'cultural and spiritual services' on lines 127 and 128 needs to be revised because Spiritual ES are one of many types of Cultural Ecosystem Services. In addition, following the IPBES inclusive framework, cultural meanings and values of nature are also conceptualized in more ways than ES, e.g. through relational worldviews. So the sentence could say instead, e.g. "	The wording has been improved
Susan Preston		5	128-130			in light of the advice above, you will need to vet the chapter for all references to 'valuation' to check if you are only referring to economic valuation or if you mean all kinds as per the values guide linked above. Edit as needed for clarity and consistency. So, e.g., sentence starting line 128 could be revised slightly as follows: "While economic valuation can be useful for weighing opportunity costs, it is not without limitations. Some proponents argue, however, that not incorporating monetary estimates of value for natural capital into economic accounts contributes to the vulnerability of ecosystems in institutional decision making (Kumar et al. 2013; Sagoff 2004; Schägner et al. 2013)." this articulates the point more specifically.	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		5	134		as the introduction it would probably be best keep the terminology about benefits from nature as broad as possible, rather than focusing only on ES, so the first sentence in the para could be edited to say ‘...advancements, nature’s benefits have enabled human societies...’	The wording has been improved
Susan Preston		5	136-7		this is a good example of a pair of related ideas that would be more clearly communicated in two sentences.	Thank you for this comment
Susan Preston		5	138-140		example of the kind of copyediting proposed in this set of comments generally. the sentence could be revised as follows: It is important to underscore that the increased pressure on, and demand for, benefits from nature has led to the degradation of many ecosystems. This places ongoing access at risk, with consequent negative effects on human well-being.	The wording has been improved
Susan Preston		5	second to last para		good set of ideas to wrap up the intro with	
Susan Preston		5	141 and elsewhere in the chapter		IPBES uses ‘ecosystem services’ rather than ‘ecosystem goods and services’ – it might be helpful to maintain consistency.	Thank you for this comment The wording has been improved
Susan Preston		5	141		copyedit: Ecosystem services and human well-being rely on the health of ecosystems.	The wording has been improved
Susan Preston		5	144-		suggested edit: “...world population. It is therefore essential that land managers...dynamics through which these benefits from nature are affected by human activity, how human well-being is affected by changes in ecosystems, and how nature’s benefits can be sustained over time.”	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		5 149-151			suggested edit: "...health and integrity, securing the supply... because saying "to guarantee" implies that the [only] reason for respecting nature is for human utility, which is not universally agreed. Rather, maintaining ecosystem integrity has as a key outcome the support of human well-being [among other things like the well-being of other species].	The wording has been improved
Susan Preston		5	153		put "(UA)" immediately after Unit of Analysis - if this term will be used a lot in the chapter, otherwise spell it out each time.	The wording has been improved
Orlando Rey		6	175	7 183	TEEB consideration of ecosystem services, follow the MEA classification on 4 categories: provisioning, regulating, cultural, supporting. However on lines 180 to 182 references are made to the there first categories. Please clarify. Subsequently, on Table 4.1 consider to grouping the services listed accordingly with the categories,	The new structure of the chapter hopefully makes this clearer
Orlando Rey		6	168	6 179	Executive Summary. Which is the level of confidence of this findings, based in the IPBES four-box model of confidence?	The Executive Summary and key finding' section will address this issue.
Liette Vasseur		6	160		In the table, it would be good to define primary and secondary (or add words like direct and indirect). I am surprised that the happiness index is not there fo the social component. I imagine that "staying the same" means stable?	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		6	160	6	160	<p>Taking into account the conceptual framework should consider the following changes in analysis:</p> <p>Change: Well-being (examples and / or indicators) for different knowledge systems to achieve the "Quality of Life"</p> <p>INclude Well-being in the column examples</p> <p>Change: Relevance (for well-being) FOR: Relevance (different knowledge systems to achieve the "Quality of Life")</p>	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		6	164	7	182	<p>Change: Values for Monetary and non monetary Values</p> <p>Adjust all of this chapter since it should be focused according to the conceptual framework and should go with the title: "Benefits of nature for people" taking into account other knowledge systems</p>	The new structure of the chapter hopefully makes this clearer
Garry Pierzynski		6	160	6	161	Should "Diversity and Options" be "Diversity of Options", or something else?	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		6	table	6	table	Good idea! Some of the categories need tightening. For example, I suggest they are better aligned with those in the CF. Also, for exmale, it is not clear what "diversity" and "resilience" are components of a good qulity of life.	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		6	172	6	174	Definition of TEEB OK, but note it is narrower than recommended by the CF. The IPBES defintion of NBP includes the TEEB definition, but is vroader than this one	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		6	175	6	180	Great paragraph	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Olivier Blond		6	160	7	183	<p>I propose changes to the table describing well being indicators related to nature or a fusion will table 2.1. This is based on a methodological guide proposed by the Council of Europe. On page 204 of this guide, there are indicators proposed by a significant amount of citizens participating in this experiment (these indicators helped to collectively decide actions thereafter), around the world. Source: "Involving citizens and communities in securing societal progress for the well-being of all - Methodological guide", Council of Europe, 2011 - http://www.coe.int/t/dg3/socialpolicies/socialcohesiondev/source/GUIDEINVOLVINGCITIZENS_EN.pdf</p> <p>In fact I do not understand the actual table, line 160. The indicators discussed are not used after. These are probably indicators used by the OECD. It should be precised that they are used for a global (state by state) evaluation of wellbeing - these indicators are linked to data gathered for other purposes. And they are not concrete enough to decide actions. The table 2.1 is very close to the needs of people when they are asked and national or local statistics should be able to provide datas to feed indicators described in Table 2.1. In other words, national statistics should be orientated in a way wellbeing indicators collected can lead to actions favorising biodiversity and ecosystem services. OECD indicators of wellbeing should not be used unless they are improved</p>	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		6	170	6	174	<p>Please ensure that a once decided definition (like here on "ecosystem services" referring to TEEB) is used in ALL Chapters and ALL Regional Assessments (Africa, Asia & Pacifics, ECA) to be able to compare results and conclusions.</p>	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		6	160	6	161	I d onot agree that the list of topics under well being are in fact indicators of well-being. While some of them are, this list within the IPBEs values guide rather refered to the types of values attached to a good quality of life not to indicators of its status. Please provide more information on how you decided to classify status into these conditions (which criteria were used)	The new structure of the chapter hopefully makes this clearer
Patricia Balvanera		6	165	6	174	I would argue that consistency with the IPBES conceptual framework and not the TEEB one is needed	The new structure of the chapter hopefully makes this clearer
Susan Preston		6	table at top of page			likewise (and through the chapter) each time you are going to introduce an acronym it should be placed in parentheses immediately after the fully spelled term. (WB) should be inserted right after "Well-being" and "(ES) should be positioned the first time "Ecosystem Services" are mentioned in the chapter, on page 4	The new structure of the chapter hopefully makes this clearer
Susan Preston		6	161, 163, generally in doc			check for consistency with spelling 'well-being' with hyphen	
Susan Preston		6	169			suggest replace 'drive' with 'underpin'	Thank you for this comment The wording has been improved
Susan Preston		6	170 and throuhout			according to the Millennium Ecosystem Assessment, it's abbreviation is MA rather than MEA. MEA is widely known as the acronym for Multilateral Environmental Agreements.	The wording has been improved
Susan Preston		6	170			suggest change 'many' to 'several' – there are not really that many. The CICES classification is quite different from the MA and TEEB and perhaps better known than Nahlik et al, so you might consider noting it as an example.	The wording has been improved
Susan Preston		6	177-180			please break this sentence into 2 or 3 sentences for clarity.	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		6	178		<p>“particular culture”? ES are used by cultures, yes, but use is also chosen by individuals, groups within communities, and groups within cultures. You might say “any service that people choose to use...”</p>	The wording has been improved
Orlando Rey		7	183	7 184	<p>As a matter of consistency, if Table 2.1 represents the “ecosystem services reporting categories”, subsequent categorization of ecosystem services under the different ecosystems/unit/biomass (Tables 2.2. to 2.11), should show consistency with the general categorization under Table 2.1.</p> <p>Consistency is also required in the meaning of the information. e.g Table 2.2 focused in the differences between private and public owners, focus on Table 2.3 is on “primary and secondary stakeholders”, while Table 2.4 is just focused in the services with examples of measures.</p> <p>Of course, to develop that consistency is contingent to the availability of information, and maybe it not possible to reach it in a 100%, but even in this case, these differences on the available information provide an opportunity to identify gaps and produce recommendation for science and policies</p>	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		7	186		add , after the website address	The wording has been improved
Liz Nichols		7 table 2.		7 table 2.	<p>"Pest and disease control" would more accurately be pest and infection control, as infection is the state of being infected, disease is the outcome of being infected AND having an immune system that couldn't prevent symptoms from occurring. It seems picky, but it's a persistently mis-used term. ES cannot influence one's immune system (perhaps excluding issues of malnutrition+infection), and therefore can regulate infection risk, but not disease risk.</p>	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sally Valdes		7	183	7	183	Recent research has emphasized the physiological and psychological benefits of spending time in natural settings or simply viewing natural scenes. Not sure how this fits into the clearer table of ecosystem services. These are tangible benefits. Here are some additional references on benefits to human well-being Alcock et al 2014. Longitudinal effects on mental health of moving to greener and less green urban areas, Environ Sc; Ryan et al 2010. Technolo 48(2):1247-1255; Brown et al 2013. Viewing nature scenes positively affects recovery of autonomic function following acute mental stress. Environ Sci Technol 47(11): 5562-5569; Ryan et al. 2010. Vitalizing effects of being outdoors and in nature. Journal of Experimental Psychology 30:159-168.	The new structure of the chapter hopefully makes this

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		7	183	7	183	<p>This box must agree with the agreed upon conceptual framework and must be divided as follows:</p> <p>Change: "Ecosystem Service" FOR "Benefits of nature for people" taking into account other knowledge systems.</p> <p>This column should be: "Benefits of nature for people" taking into account other knowledge systems and must be divided into:</p> <p>The ecosystem goods, Ecosystem Services, Gift of nature benefits of nature aspects of nature that can be negative "Living in harmony with nature".</p> <p>In the Examples of Measures: you must generate a new list under the parameters given in the conceptual framework There is the need to introduce a reflection of different biomas not only those related to the Amazon region and forests. For example the case of the Andes and Chaco are very important in the Americas overall assessment.</p>	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		7	184	7	184	<p>Change: Ecosystem services, benefits, values and human well-being: how are they linked? FOR: Different knowledge systems to achieve the "Quality of Life": How are they linked? Be consistent with the conceptual framework of the IPBES.</p>	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		7	185	7	189	Clean up (Eliminate?) all this section because it is explained in the introductory part This replacement must be undertaken in the whole chapter. It is inaccurate and contrary to the conceptual framework of IPBES.	The new structure of the chapter hopefully makes this clearer
Joel Houdet		7	183	7	184	Table 2. 1. Ecosystem Services Reporting Categories is not very useful. It mixes exemples with what is called "measures". The typology used is not clear as well and seems to be a new one?	The new structure of the chapter hopefully makes this clearer
Guiomar Nates		7	183	Table 2.1		Pollination and propagule dispersa: suggestion: Pollinator diversity, related to pollination efficiency	The wording has been improved
Gerardo Suzán		7	table 2. in Pest and disea		after "Control of pests and diseases, regulation of trophic-dynamics, reduction of herbivory by top predators, control of prey species" this can be added ", control of vectors and reservoirs for infectious diseases and disease control."	The wording has been improved	
Sandra Díaz		7	table 2.		See IPBES NBP system document; some adjustments suggested	The wording has been improved	
Sandra Díaz		7	186	7	186	According to the document apporved by plenary, human wellbeing is part but not really synonym of a good quality of life, the latter is broader and includes the former; suggest using good quality of life	Thank you, we have clarified the terminology
Margot Hurlbert		7	183	7	184	On teachtable aethetic appriciation and inspiration for culture, art and design is listed but little explanation or reference to the rich literature surrounding this. This literature needs inclision	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		7	183	7	183	Table 2.1 is too general and not focused on Americas - informations would be relevant for all Regional Assessments.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		7	185	8	195	Conceptual Framework has been focused and explained at length in Chapter 1.2. Authors are encouraged to cross check content between the 6 Chapters to avoid redundance.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
CONABIO		7	Table 2.1		Pág. 7. Se sugiere complementar la Tabla 2.1 con base en el esquema de la Tabla 2.5. (pág. 30), además de información adicional (parte de ésta a ser enviada directamente por expertos), ya que en la primera se identificaron omisiones importantes. Por ejemplo, en cuanto a los ejemplos que se mencionan sobre alimentación, se omite mencionar a las especies silvestres, entre otras que consideramos relevante se incluyan.	The new structure of the chapter hopefully makes this clearer	
Patricia Balvanera		7	184	11	289	It is unclear to me what this section is trying to achieve. The presentation of the IPBES framework is done by chapter 1 already	The new structure of the chapter hopefully makes this clearer
Susan Preston		7	181-182			opening sentence could be cleaned up grammatically for flow	The wording has been improved
Susan Preston		7	table			‘education, skills, knowledge, etc’ is quite distinct from ‘aesthetic appreciation’ and I suspect that this is just a formatting oversight since they are a whole separate type of ES – you need to insert a description of aesthetic appreciation in the right column and move the ‘education’ text over to the left column. There are other inconsistencies in the table as well that should be checked against the MA and TEEB. Existence and bequest value are not types of ecosystem service, they are categories of value particularly relating to economic valuation approaches, and should not be conflated with types of ES. If you want to you can draw from this text that I developed, adapted from the MA, TEEB, and other sources as well as my own research. It’s in a national ES Assessment guide for Canada that will be published later this year. The citation is : Federal, Provincial, and Territorial Governments of Canada. 2016. Completing and Using Ecosystem Service Assessment for Decision-Making: An Interdisciplinary Toolkit for Managers and Analysts. Ottawa, ON: Canadian Councils of Resource Ministers	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
---------------	-----------	-----------	-----------	-----------	---------	--------------------

Susan Preston		7	table		this table was sent in editable format. The TSU has it when needed.	Thanks for this comment
---------------	--	---	-------	--	---	-------------------------

Cultural identity and heritage	Ecosystems influence the types of social relations that are established in particular cultures. Fishing societies, for example, differ in many respects in their social relations from nomadic herding or agricultural societies. Many societies place high value on the maintenance of either historically important landscapes ("cultural landscapes") or culturally significant species. (MA) Identity and heritage are grounded in experience everywhere, in every type of ecosystem, and are informed by relationships with nature that are distinctive to each place. Ecosystems thus support social cohesion through shared experience and shared understanding of the world.
Spirituality and religion	Many religions, cultures, and individuals around the world attach spiritual and religious values to the earth, to ecosystems or their components, or find deep spiritual inspiration in their experience of nature. These values are found everywhere in the world, in industrialized as well as traditional and indigenous societies. These beliefs and experiences provide a sense of deep purpose and profound meaning to human life.
Knowledge systems and education	As the primary context of human existence, perception of the Earth's ecosystems and their processes and functions are the foundation for all human knowledge systems. Ecosystems influence the types of knowledge systems (traditional and formal) developed by all cultures and societies. Ecosystems and their components and processes are the basis for both formal and informal education. Observation of ecosystems at all scales is increasingly the basis for technological problem-solving e.g., through biomimicry. Language, knowledge and the natural environment have been intimately related throughout human history. (TEEB)
Cognitive development, psychological and physical health and well-being	Direct contact with nature is essential to support human cognitive development and psychological health. Two key benefits are decreased incidence of crime and improved socialization. It is also proven to support physical health and healing (in addition to benefits that come through physical exercise). (see WHO-CBD 2015)
Aesthetic experience	Humans experience the world through sensory perception and cognitive interpretation. Aesthetic experience refers to the cognitive and associated emotional response to perceived beauty in any form. The appreciation of beauty in the sounds, sights, scents, and sensations of nature is of recognized importance to the human condition and is documented throughout history, across cultures and traditions. While aesthetic experience can be a powerful source of inspiration for creative works or spiritual beliefs, the experience of aesthetic appreciation itself is highly significant in human quality of life by supporting emotional, psychological, and (by extension) physical health.
Inspiration for human creative thought & work	Nature has always been and continues to be an important source of inspiration for much human art, literature, folklore, music, architecture, industrial design, symbols, and science. (adopted from MA and TEEB)
Recreation, ecotourism	Nature-based recreation and leisure are highly valued aspects of life for people around the world, whether in urban, rural, or remote wilderness settings. These activities, and ecotourism, are all dependent on the direct experience of nature and engagement with it in some form. They provide significant quality-of-life benefits including physical, psychological, emotional well-being. These activities generate direct economic benefits to society but can be a contributing factor to ecosystem degradation if not wisely managed.
Sense of place	Sense of place is experienced by individuals and can be shared collectively within groups and whole communities based on common and shared experiences of a place. It is informed strongly by characteristics of that place which may be both natural and human-modified or built. Within communities the sense of place can further inform a sense of community identity.

Susan Preston		7	184-9		good intro	Thanks for this comment
Liette Vasseur		8	figure 2.1		change et al.	Thank you for this comment
Liette Vasseur		8	194		add , after training; Box 2.1 (space at wrong place)	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		8	Box 2.1		it should be relation with the land instead of relationship with the land	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		8	197	8	197	Change Box 2. 1. Indigenous peoples values of nature by Worldviews of Indigenous Peoples on Nature and Mother Earth Please use another framework if necessary. I consider that is not necessary since the IPBES has already one framework there is no need to develop the analysis based on a different framework.	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		8	197	8	197	Inside the box include an example of Latin America (Bolivia) enclosed as Annex (biocultura)	The new structure of the chapter hopefully makes this clearer
Guiomar Nates		8	197	Box 2.1		Wuttunee 2000. Is not in ref.	Thank you for this comment
Sandra Díaz		8	197	9	198	Box 2.1. I celebrate the inclusion of this box. However, in order to make it more useful, I suggest making it more detailed, more informative, and less declarative. For example "indigenous peoples demand that this is a high concern in relationship to development instead of focusing on the economic revenues it [the land] might generate". Irespective of ones agreement (or not) with the statement, it sounds as part of a declaration of principles, rather than part of an assessment. The rest of the box is more aligned with the style of an assessment, and contains very valuable statements, some of which could be expanded to give more details and brief examples about the comsovisions, the categories and in what ways they mismatch with the "western" ones. ideally with citations to some kev sources.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		8	197	9	198	Box 2.1 should be focused on concrete examples concerning ILK in the Americas (here only on Canada). More and relevant input is expected from the Dialogue Workshop for the Americas Region to be held in Sucre, Bolivia, during the week July 20-22, 2016. It might be helpfule to select some concrete Case Studys and examples of good practice in intergating ILK for the illustation in the Regional Assessment on Americas.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		8	197	9	198	This box is quite interesting and relevant but seems to me a bit out of place. It would also need to be further expanded to fully assess the different worldviews and sets of values of nature's benefits to people and a good quality of life within the region	The new structure of the chapter hopefully makes this clearer
Susan Preston		8	figure 2.1			please try to get a higher resolution version of the image to use in the final chapter – this is a little blurry.	Thank you for this comment
Susan Preston		8	190-7			good para	We do not understand this comment
Liette Vasseur		9	Box 2.1			change "demand that this is a high concern in relationship to development instead of focusing on the" to focus on the relationship instead of development and the...	The wording has been improved
Liette Vasseur		9	Box 2.1			add components or parameters to "between biotic and abiotic,"	The wording has been improved
Liette Vasseur		9	Box 2.1			add , between: "respect and..."	The wording has been improved
Liette Vasseur		9	199			change "absent from policy-making and resource management assessment and decision processes" for absent from policy processes and decision making and ...	The wording has been improved
Diego Pacheco		9	198	9	206	The conceptual framework identifies various concepts that are used in the world that are not only Ecosystem Services, but are also offerings, goods and negative aspects, all these concepts are within "Benefits of nature for the people". For this reason Ecosystem Services should be changed to "Benefits of Nature for the people" taking into account other systems of knowledge (BN)	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		9	207	9	207	Change ES to BN	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		9	214	9	214	international policy instruments (ej. World Bank's Wealth Accounting and the valuation of Ecosystems-WAVES and the Economics of Ecosystems and the 2015 Biodiversity TEEB) Since both documents are proposals that are not within the multilateral negotiations and include the Joint Mechanism of Mitigation and Adaptation for the Integral Management of Mother Earth that recognizes local community management for the conservation and Integral development of Forests (UNFCCC 2013, 2014, 2015) This chapter continues with the economic mindset of analysis. Important to understand the multiple conceptualization of values of biodiversity.	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		9	198	11	289	All analysis must be consistent that already agreed upon in the conceptual framework, that is to say: "Benefits of nature for the people" taking into account other systems of knowledge (BN) in the same way the human well-being must be changed by: different knowledge systems to reach the "quality of life" The cases selected for comprehensive analysis are very weak and poor, and does not reflect the important trends in the region regarding biodiversity.	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		9	206	9	206	the key role given to institutions (broadest sense) in the IPBES CF seems to be lost here	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		9	207	9	208	I don't have the original sources handy, but I would be surprised if ecosystem services were considered a synonym of ecosystem processes by these authors; please double-check	The wording has been improved
Susan Preston		9	198 para			good. a para like this would be very important for the intro to this chapter, and addresses my comment above about the structure of the intro	The wording has been improved
Susan Preston		9	207 para			good, although not sure WAVES and TEEB are "policy instruments".	The wording has been improved
Liette Vasseur		10	217			change particularly is crucial to is particularly crucial	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		10	230	231	put "for example, in the U. S.federal government and other public contexts (USEPA, NOAA, USGS)" in (e.g., in the U. S.federal government and other public contexts (USEPA, NOAA, USGS)). So that it is more readable	The wording has been improved
Liette Vasseur		10	247		remove the word "other": does not really make sense	The wording has been improved
Liette Vasseur		10	246	257	The other issue that should be discussed here is the long term consequences and financials of PES.	The wording has been improved
Diego Pacheco		10	217	10 217	Change ES to BN Very strong emphasis on carbon is inappropriate with this example of the importance of forests.	The wording has been improved
Diego Pacheco		10	229	10 229	Change ES to BN Be consistent with the conceptual framework of the IPBES.	The wording has been improved
Guiomar Nates		10	227		Clayton and Myers 2009. is not in ref.	Thank you for this comment
Guiomar Nates		10	255		Espinoza 2005: not in Ref.	Thank you for this comment
Guiomar Nates		10	257		Arriagada et al. 2015 not in ref.	Thank you for this comment
Sandra Díaz		10	220	10 228	Please refer to IPBES document on NBP system	The wording has been improved
Sandra Díaz		10	256	10 257	Considering the key role played by the Americas in the establishment of PES, I suggest making a systematic evaluation of the biodiversity and NBP outcomes of PES in the region, on the basis of recent articles by e.g. Pascual et al., Ferraro, STAP-GEF etc. It would be great contribution of the Regional Assessment	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		10	226		We appreciate the integration of different values and views and would suggest replacing the wording "social sciences" with "social sciences and humanities (SSH)" to take into account the broader definition. For better integration of SSH see http://www.de-ipbes.de/media/content/IPBES%202016%20Biodiversity%20Policy_final.pdf .	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		10 217 para			good, clear. re line 222, not sure the idea of 'final' services has been that dominant in the overall ES literature – could just say 'to produce services'. The last sentence seems a bit extraneous.	The new structure of the chapter hopefully makes this clearer
Susan Preston		10	230		typo – 'are just beginning'	The new structure of the chapter hopefully makes this clearer
Susan Preston		10 229 para			good, clear. might consider editing references to vastly distant time horizons because it may have the effect of distracting readers from the core points. perhaps allude to 'thousands of years' without featuring the amounts of time with as much detail. just a thought. your last sentence of the para is really THE point that you want to emphasize, not as an afterthought.	The new structure of the chapter hopefully makes this clearer
Susan Preston		10	246		first sentence of para. is this really the case? Are there not lots of studies documenting how humans are impacting ecosystems (besides the obvious MA)?	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		11	271		add , after responsibilities	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		11	275		change "This value and valuation plurality is an inherent aspect" to This value and valuation plurality are inherent aspects...	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		11	284		remove is in "ES, as is proposed by IPBES"	The new structure of the chapter hopefully makes this clearer
Floyd Homer		11		25	The examples of uses, benefits, status and trends for the various UVs mention mostly Latin America, with no reference to small island developing states (SIDS) as part of the Americas. Uses of forest, savannas and dryland in the Caribbean SIDS in some instances are likely to show some differences in scale and importance or cultural practices. For example the increasing importance of wildlife farming of several species of forest mammals in trinidad and tobago for local consumption.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		11	290	11	290	Change: Assessing the benefits to people and quality of life by nature's: to Assessing nature's benefits to people and quality of life taking in to count different knowledge systems	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		11	298	11	298	Cambiar: Links between benefits (services) and well-being/quality of life (status and trends) per stakeholder For: Links between "Benefits of nature for the people and different knowledge systems to reach Quality of life by stakeholder The very rich diversity of the America region in the management of natural resources is lost, since the chapter is not showing up the diversity of knowledge systems in the great diversity of biomas of the region. Please include them.	The wording has been improved
Diego Pacheco		11	299	12	336	The analysis must be between Benefits of nature to people and different knowledge systems to reach "Quality of Life" This is advocating for the commodification of nature in the Americas. This is not acceptable.	The new structure of the chapter hopefully makes this clearer
sandra LUQUE		11	291	17	539	For the Forest section I strongly advice to use FAO 2014, FRA 2015, reports from IUFRO Forest and people thematic area (they could be find on the IUFRO web site) What about the other forests systems, in particular the "forgotten forests" (as we call them in South America), all other native forests and important forest ecosystems that are not in the tropics?!	Thank you for this comment
Sandra Díaz		11	273	11	278	Excellent	Thank you for this comment
Sandra Díaz		11	292	11	297	At the beginning of each biome, I suggest quickly defining its limits/scope, or referring to some map or formal description in another chapter, so the reader very quickly has an idea of what is included where. In this respect, see also my comment to the "production systems" section (line 1538).	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		11	303	11	306	These statements are too sweeping to be useful. It needs better referencing and more nuancing. For example, not all of South American tropical and subtropical dry forests are rich in endemisms. Another example, most if not all terrestrial biomes on Earth provide air quality regulation, cultural enrichment, some food and fiber, etc.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		11	276	11	278	Authors are encouraged to provide proposals how to include other knowledge systems and relevant expertise to add some more informations as it is a crucial challenge (see Conceptual Framework). More and relevant input (among others) is expected from the Dialogue Workshop for the Americas Region to be held in Sucre, Bolivia, during the week July 20-22, 2016. It might be helpful to select some concrete Case Studys and examples of good practice in intergating ILK for the illustation in the Regional Assessment on Americas.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		11	281	11	281	Please explain meaning of "aggregate human well being".	The wording has been improved
German IPBES Coordination Office and national scientists		11	281	61	1920	We greatly appreciate the well structured approach to choose the biomes most relevant for the Americas (see also Chapter 1, Line 536, Table 1) which are investigated and referd to in detail in all 6 Chapters. Please ensure that an order once agreed upon (which might be the one in Chapter 1, cited above) is maintained, as in the current sections of the document the order is very often mixed up and might complicate conclusions concerning certain biomes (see e.g. Chapter 2.3.1 to 2.3.9).	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		11	291	11	291	In Chapter 2.3.1 the same figure as in Chapter 2.3.3 (Fig. 2.2) would be necessary for countries like Brazil etc.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		11	298	14	429	Chapter 2.3.1.1 seems to be too general - please provide specific links pointed out: e.g. pollination, disease protection, indirect water protection (see APP's in Brazil).	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		11	309	11	309	Please define "historically" providing clear reference / date.	The wording has been improved
Patricia Balvanera		11	258	12	271	This discussion is quite relevant but very conceptual. I wonder if it will not be better placed in chapter 1 and here focus on the actual assessments	The new structure of the chapter hopefully makes this clearer
Patricia Balvanera		11	290	12	341	This sections reflects well the knowledge we have for TDFs, but it is highly focused on very few study cases namely the Chamela region in the pacific coast of mexico from which most of the references come from. What can we say about tropical dry forests in all the americas? are the any data sources that could be drawn to asses services at a regional rather than site scale?	The new structure of the chapter hopefully makes this clearer
Susan Preston		11	272			para good, and good to see reflexive statement. were you unable to access experts in health, social science, and ITK?	The new structure of the chapter hopefully makes this clearer
Susan Preston		11	279			para good content, very self-aware and thoughtful. the last two sentences would benefit from some editing for clarity and flow. When you say 'this section seeks to highlight' do you mean section 2.2? or the whole chapter? please be more specific. thanks.	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		12	317			(2005b): need complete reference	Thank you for this comment
Liette Vasseur		12	328			change "(Balvanera et al., 2011) categorize" to Balvanera et al. (2011) categorize	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		12	328	329	change: "(Balvanera et al., 2011) categorize stakeholders of TDFs into private and public and assigns them at the various scales at which the benefits of multiple TDF ecosystem services are accrued (Table" Balvanera et al. (2011) assign the various types of ecosystem services to two broad categories of stakeholders: private sector and general public (Table... This will make it easier to read.	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		12	330		change" has changed" to has been modified	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		12	221		but it is important to remember regarding this sentence that it is also indirectly when products are bought or acquired by local people	The wording has been improved
Liette Vasseur		12	334		is it really public stakeholders or in fact ALL stakeholders?	The wording has been improved
Diego Pacheco		12	377	12	337 In the analysis of table N ° 2.2 is necessary to make the following changes: 1. differentiate between more public stakeholders (could be municipality, state, country, global) and Comunitary Life Systems (Indigenous People, Local community) since they have different governance systems and worldviews; 2. Change ecosystem services to: Benefits of nature for the people, The analysis must be done at the level of Indigenous peoples and local communities. I suggest to read and include elements of policiy analys of the books of Pacheco, Diego (2014) Vivir Bien en armonía y equilibrio con la Madre Tierra, y Pacheco Diego (2014) Hacia la descolonización de las políticas ambientales y de los bosques. Published by the Fundacion of la Cordillera. La Paz, Bolivia.	The new structure of the chapter hopefully makes this clearer
Diego Pacheco		12	342	12	342 Change: Ways that well-being/quality of life benefits are "valued" by stakeholder groups to: "Benefits of nature for the people" and ways that different knowledge systems achieve "Quality of life" per stakeholder	The new structure of the chapter hopefully makes this clearer
Gerardo Suzán		12			table 2. in Pest and disea change "vector disease regulation" for" Vector and reservoir disease regulation"	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
German IPBES Coordination Office and national scientists		12	317	12	321 Which stakeholders are meant here, discussion on stakeholder - see Schöenberg et al. 2015.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		12	327	12	327 Check references and cross cutting with sources quoted in the text (e.g. Balvanera et al 2011 is frequently quoted in the text but not mentioned in the final References, Page 36ff).	Thank you for this comment
German IPBES Coordination Office and national scientists		12	328	12	336 Stakeholder categories are insufficient; e.g. please differentiate in local, (sub)regional, global groups of stakeholders.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		12	333	12	336 REDD+ (Reducing Emissions on Deforestation and Forest Degradation) should be added for municipalities and ethnic groups (see e.g. REDD+ implementation in the Ecuadorian Amazon: Why land configuration and common-pool resources management matter T. Loaiza a,b,*, U. Nehren a, &, G. Geroldb Forest Ppolicy and Economics 2016).	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		12	333	12	336 There exist many experiences and knowledge within REDD+ / ILK coming from a number of projects evolved under the International Climate Initiative ICI (see https://www.international-climate-initiative.com/fileadmin/Dokumente/2014-project_list_biodiversity.pdf).	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		12	337	12	337 Table 2.2 is not specific - please provide more differentiation with groups of ecosystem services: what is specific for tropical dry forests, focus on special tropical dry forests ecosystems in Americas (names of regions, rivers etc.). Provide sources and references.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		12	342	13	384	Same comment as above. In order to understand the different world views of people living within tropical dry forests a much more systematic assessment would be needed throughout the region to encompass the different indigenous cultures found within such biome, but also to take into account the world views of other stakeholders, those promoting intensive agriculture, tourism, industries, urbanization, and to take into account perspectives of business people etc.. I know that such information is not available but then is there a more systematic approach to assessing the region geographically and across the different stakeholder types. In the book chapter I elaborated I tried to include other worldviews but indeed information is not systematically available and was very sparse. The approach used might need to be thoroughly questioned in order to get to a perspective that is relevant for all the region. The assessment of the different values of nature's benefits and a good quality of life that would emerge from identifying these world views would be then needed. A more systematic assessment of the anthropological literature might help, but again is likely	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		13	343		all chap	Socio or social ecological systems? It seems that both have been used in the chapters but this should be consistent. Usually we use social-ecological systems.	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		13	353		354	change "values of goods and services provided" to provided goods and services	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		13	373		379	I would move these sentences to the next section: it would make more sense.	The wording has been improved
Liette Vasseur		13	384			I agree with the comments to move this to chapter 4	Thank you for this comment
Diego Pacheco		13	343	15	482	The analysis should be focused on "Benefits of nature" for people and different knowledge systems to achieve "Quality of life"	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz		13	348	13	352 The paragraph about "recent studies of TDF restoration..." is not very useful unless more detail is given. It does not add to the readers information or helps their judgement.	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		13	368	13	363 The point of non-monetary NBP has been made a couple of times before in the chapter; no need to make it here again in general terms. I suggest, instead, giving much more complete examples of such NBPs and their values.	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		13	366	13	367 Which NBP have come at the expense of which other NBP? Be more concrete, otherwise the statement is of little use to the reader	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		13	367	13	384 Most of this would be better placed in the chapter about drivers of change; and such chapter could be simply referred to here.	Thank you for this comment
German IPBES Coordination Office and national scientists		13	345	13	348 Please provide clear references to the recently published IPBES results concerning Deliverable 3a (Thematic assessment of pollinators, pollination and food production). We would like to encourage authors to include findings (concerning Americas) for future development of this Chapter.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		13	364	13	384 A further topic and recent reference which might be considered in this or another suitable section of tropical dry forests (Ch. 3.1) would be that grazing can have substantial impacts on forests in arid and semi-arid regions, possibly including severe loss of carbon from the soil. The objective of the study of Schulz et al. (2016) was to better understand grazing effects on soil organic carbon in seasonal tropical dry forests of north-eastern Brazil (Caatinga) by quantifying carbon stocks along a gradient of grazing intensity while accounting for other influencing factors such as soil texture, vegetation, landscape topography, and water availability. reference: Schulz K, Voigt K, Beusch C, Almeida-Cortez JS, Kowarik I, Walz A, Cierjacks A (2016): Grazing deteriorates the soil carbon stocks of Caatinga forest ecosystems in Brazil. Forest Ecology and Management 367, 1, 62–70.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		13	364	13	384	Section is too general: please provide differentiating on tropical dry forests-regions e.g. Chaco dry forest, Cerrado savannah with forests e.g. see deforestation rates for regions and countries FAO 2005 Forest assessment.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		13	376	13	378	Please define climate changes impact. For tropical dry forests's mostly higher rainfall variability is simulated, but in part there might be reduction of rainfall.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		13	388	13	388	Provide numbers or include a table with conversion rates of forest - see FAO 2005, 2010.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		13	388	13	388	Please provide a clear definition of "forests" (source FAO?) when talking of forest conversion. Concerning biodiversity and ecosystem services, definitions of "forest" might have huge impact on conclusions and evidence (e.g. monocultural and planted forests are inconsistent to biodiversity richness and secondary forests have other impacts than primary forests). A forest area as such is not valid as indicator for its biodiversity. Furthermore different effects and impacts concerning afforestation with native versus non-native trees/species should be discussed.	The new structure of the chapter hopefully makes this clearer
Patricia Balvanera		13	385	14	411	I have a major problem with this section. On one hand it duplicates somehow the information in the drivers section, which is actually gathered in a much more systematic way through remote sensing and other sources. On the other, what really matters is what tradeoffs arise as a result of these kinds of interventions. By tradeoffs I mean tradeoffs among services, in general tradeoffs between provisioning and regulating and supporting services, but also tradeoffs between services and biodiversity conservation, as well as tradeoffs among stakeholders and among components of well-being.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		13	344		please make small edit so that we keep a clear use of 'value' as a broader than economic term – could say something like 'Most of these services have been assessed in terms of economic market prices...'	The new structure of the chapter hopefully makes this clearer
Susan Preston		13	353	para	good! re line 358 – 'there is a need to devise' – there already are ways to do this, the gap is that these ways are not widely understood outside of the social sciences so they are not often used in ES work that tends to be most often by other disciplines. The OPENNESS working papers are helpful in this regard – see: http://www.openness-project.eu/sites/default/files/Deliverable%204%201_Integrated-Valuation-Of-Ecosystem-Services.pdf and http://www.openness-project.eu/sites/default/files/OpenNESS%20D4.2%20Framework_%20Integrated_Valuation_Final_Draft_March_23-2015.pdf and http://www.openness-project.eu/library/reference-book/sp-non-monetary-valuation . Also, importantly, see the various articles from Satterfield, Chan, etc about cultural values and other-than-economic methods. Any social research methods textbook that covers qualitative and quantitative methods will explain them, it's just that they have not been applied to the ES context very much. And for incorporating them into ES assessments, MCA approaches can be used, are are discussed in the IPRES Guide to Values	The new structure of the chapter hopefully makes this clearer
Susan Preston		13	385	and generally	It's really good to see this attn to human modification as a key section in this assessment. It ought to help government managers and other readers target activities that may need policy attention in order to ensure ongoing provision of ES benefits. It could just as easily have been part of other chapters in the assessment. I assume the writing team has ensured there is not substantial overlap between chapters since this one has a lot of status and trends info.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Susan Preston		13			385 and generally	If you are able to obtain more evidence specific to diverse values to add to the chapter that would be very much recommended.	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		14			395	remove the s to climate change to make it more consistent with the rest of the chapter.	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		14			402	I think you meant the increase in spatial extent, not reduction	The wording has been improved
Liette Vasseur		14			409	remove the extra (before Calvo	The wording has been improved
Liette Vasseur		14			413	414 change: "(C. A. Portillo-Quintero & Sánchez-Azofeifa, 2010) report" to Portillo-Quintero and Sánchez-Azofeifa (2010) report	The wording has been improved
Liette Vasseur		14			416	421 this sentence is very vague and may need to be reworked to make more sense for this section	The wording has been improved
Liette Vasseur		14			423	change "Prieto-Torres, NAVARRO-SIGÜENZA, SANTIAGO-ALARCON, & ROJAS-SOTO" to Pietro-Torres et al.	The wording has been improved
Liette Vasseur		14			424	remove the d at concluded	The wording has been improved
Liette Vasseur		14			432	change in for of the Amazon Basin	The wording has been improved
Liz Nichols		14		14	436 482	Two references that pertain to (1) who are the primary and secondary stakeholders, and (2) describing tropical rainforest ES's that should be included are: Newton, P., Miller, D.C., Byenkya, M.A.A. & Agrawal, A. (2016). Who are forest-dependent people? A taxonomy to aid livelihood and land use decision-making in forested regions. Land Use Policy, 57, 388-395. and E. Ojea, M.L. Loureiro, M. Alló, M. Barrio Ecosystem services and REDD: estimating the benefits of non-carbon services in worldwide forests World Dev., 78 (2016), pp. 246–261	References were included, if apply

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		14	434	14	435	Can you tell me about such influences, or at least provide references?	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		14	394	14	398	Too general: which production and provision is impaired?; regulating services decline - which one? E.g. carbon storage above ground, water quality...	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		14	401	14	403	References are missing; reduction of runoff and erosive processes is mistaken; there is an increase in runoff and sediment delivery with erosion.	References were included, if apply
German IPBES Coordination Office and national scientists		14	412	14	429	Provide adding converted tropical dry forests areas, as Mato Grosso belongs to the most productive agricultural areas with crop production.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		14	421	14	423	Provide adding the role of better land management; e.g. no-tillage systems see Franchini JC, Debiasi H, Balbinot Junior AA, Tonon BC, Boucas Farias JR, Neves de Oliveira MC, Torres E (2012) Evolution of crop yields in different tillage and cropping systems over two decades in southern Brazil Field Crops Research 137:178-185 doi:10.1016/j.fcr.2012.09.003.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		14	423	14	429	Table of protected areas of Americas tropical dry forests might be illustrative; where appropriate quote LifeWebInitative (https://lifeweb.cbd.int/).	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		14	431			Ecological functions and networks in general are the basis for all benefits (water balance, soil quality, stability of microclimate etc.) and should be mentioned in a short section/sentence as this is crucial for the following explanations (see e.g. Line 477 or 490).	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		14	437	14	445	Please provide more studies - see e.g. Tschardt et al. 2012 Global food security, biodiversity conservation and the future of agricultural intensification; Biological Conservation.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		14	412	14	429	this section offered a nice opportunity for combining the biomes approach with the assesment of each of the services. Yet, no quantitative data on any of the services, on spatial or temporal patterns and trends is available at present	The new structure of the chapter hopefully makes this clearer
Liette Vasseur		15	445			add a . to Corvalen et al 2005	References were included, if apply
Liette Vasseur		15	453			"and ameliorate infectious disease" should make a separate sentence as they are two different ideas	The wording has been improved
Liette Vasseur		15	453		457	This should be a paragraph by itself with a little more explanation than what is there right now.	References were included, if apply
Liette Vasseur		15	471			add a . to et al	The wording has been improved
Liette Vasseur		15	480			change "found" to find	The wording has been improved
Liette Vasseur		15	481			change "were" to are	The wording has been improved
Liette Vasseur		15	490			change it's to its	The wording has been improved
Liette Vasseur		15	491			add a , after cycles	The wording has been improved
Liette Vasseur		15	492			all chap in some cases you have stake holders and others stakeholders: consistency	The wording has been improved
Liette Vasseur		15	492	16	493	remove "and provisions that sustain the local populations": not really needed. It does not add informaiton.	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Liz Nichols		15	458	15	468	I think this section needs to be strongly re-thought. Deforestation and degradation are not one-way tickets to increased infection risk (see Valle, D. & Clark, J. (2013). Conservation efforts may increase malaria burden in the brazilian amazon. PLoS ONE, 8, e57519.). A significant specific thing to consider, is supply and demand - there may be equal infection risk (= supply), but higher human population density (higher demand) in deforested areas (defined basically, as having more people). I strongly urge more nuance here, and citing of more recent summary work, including Myers, S.S. & Patz, J.A. (2009). Emerging threats to human health from global environmental change. Annual Review of Environment and Resources, 34, 223-252.	The new structure of the chapter hopefully makes this clearer
Gerardo Suzán		15	458		468	other example can be included from Panama with hantavirus pulmonary sindrome HPS (Suzán et al 2009, Experimental Evidence for Reduced Rodent Diversity Causing Increased Hantavirus Prevalence. PLoS ONE 4(5): e5461.doi:10.1371/journal.pone.0005461)	The new structure of the chapter hopefully makes this clearer
Sandra Díaz		15	458	15	488	The complex interactions between tropical rainforest and health are of crucial importance. They need to be given a more in-depth treatment, or at least more detailed information provided: what are the human-regulation aspects, precisely; what aspects of the forest favour and what aspects ameliorate disease? Where and what diseases? Also there is a considerable portion of these paragraphs that are about the drivers (mining operation, etc. not about the benefits (or not) of the ecosystem itself for human health.	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz		15		15	Considering the funamental role of rainforest in the Americas in the regulation of the subcontinental-to-global climatic dynamics, the issue needs much better treatment in this chapter	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		15	446	15 456	References are partially too old; look Fearnside, Soares-Filho, The Amazon basin in transition: NATURE 2012; Eric A. Davidson 1, Alessandro C. de Araú'jo 2,3, Paulo Artaxo4, Jennifer K. Balch 1,5, I. Foster Brown 1,6, Mercedes M. C. Bustamante 7, Michael T. Coe 1, Ruth S. DeFries 8, Michael Keller 9,10, Marcos Longo 11, J. William Munger11, Wilfrid Schroeder 12, Britaldo S. Soares-Filho 13, Carlos M. Souza Jr 14 & Steven C. Wofsy 11.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		15	452	15 456	Please consider the role of protected areas andthe national climate plan of Brazil.	The new structure of the chapter hopefully makes this clearer
German IPBES Coordination Office and national scientists		15	458	15 476	Too general!!!, Please provide informations on the role of agroforestry systems e.g..	The new structure of the chapter hopefully makes this clearer

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		15	469	15	482	The pivotal effects of the development of ever more hydroelectric dams (and other land-use implications likewise roads, burning etc.) in the Amazon basin can hardly properly reported of without referring to the work of Philip Fearnside, see e.g.: Fearnside PM (2014): Impacts of Brazil's Madeira River Dams: Unlearned lessons for hydroelectric development in Amazonia. Environmental Science & Policy 38, 164-172; Fearnside, P.M. (2007): Brazil's Cuiabá - Santarém (BR-163) Highway: The Environmental Cost of Paving a Soybean Corridor Through the Amazon. Environmental Management 39: 601-614; Fearnside PM, Lima de Alencastro Graça PM (2006): BR-319: Brazil's Manaus-Porto Velho Highway and the Potential Impact of Linking the Arc of Deforestation to Central Amazonia. Environmental Management 38: 705-716; Fearnside, P.M. (2006): Dams in the Amazon: Belo Monte and Brazil's Hydroelectric Development of the Xingu River Basin. Environmental Management 38: 16-27; Fearnside, P.M. (2005): Deforestation in Brazilian Amazonia: History, Rates, and Consequences. Conservation Biology 19: 680-688; Fearnside, P.M. (2002): Avanca Brasil: Environmental and Social Consequences of Brazil's Planned Infrastructure in Amazonia. Environmental Management 30: 735-747; Fearnside, P.M. (2001): Environmental Impacts of Brazil's Tucuruí Dam: Unlearned Lessons for Hydroelectric Development in Amazonia. Environmental Management 27: 277-296	The new structure of the chapter hopefully makes this clearer. Drivers should be addressed in Chapter 4.
German IPBES Coordination Office and national scientists		15	469	15	482	The recently published WWF Amazonas Report 2016 might be considered as it offers some new findings and provides many relevant publications. The report draws heavily on research carried out by academics, independent researchers and other NGOs. More than 300 key references and notes are given. (see: http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_living_amazon_report_2016_mid_res_spreads_1.pdf).	The new structure of the chapter hopefully makes this clearer. Drivers should be addressed in Chapter 4.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		15	477	15	482	Whats about the impact on regional water balance, carbon storage ... see e.g. COE, M. T., COSTA, M. H., BOTTA, A. und C. BIRKETT (2002): Long-term simulations of discharge and floods in the Amazon Basin. – Journal of Geophysical Research 107. S. LBA 11-1-LBA 11-17.COSTA, M. H. und J. A. FOLEY (1999): Trends in the hydrologic cycle of the Amazon basin. – Journal of Geophysical Research 104. S. 14189-14198. D'ALMEIDA, C., VÖRÖSMARTY, C. J., HURTT, G. C., MARENGO, J. A., DINGMAN, S. L. und B. D. KEIM (2007): Review. The effects of deforestation on the hydrological cycle in Amazonia: a review on scale and resolution. – International Journal of Climatology 27. S. 633-647.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		15	484	15	490	Provide informations on process of large colonization in Colombia, Brazil Ecuador; only 25% account for forest conversion by 'slash and burn'.	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñerc		15				falta ejemplos de México	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		16	493	495		this is quite a repetitive form the previous section	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		16	504		507	this paragraph needs quite more information. There are a few papers that can be used here. E.g.: Uriarte, M., Pinedo-Vasquez M., DeFriesa R.S., Fernandes, K., Gutierrez-Veleza. V., Baethgenc., W.E., Padochd., C. 2012. Depopulation of rural landscapes exacerbates fire activity in the western Amazon. PNAS vol. 109, p: 21546-21550.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		16	532			Should the tables be consistent for all the sections? It is confusing when one is with private sector and public and now back to primary and secondary stakeholders.	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		16	508	16	508	It is not only an issue of "estimate of cost",but quality of life should be considered from their own worldview ,in their environment and their relationship with mother earth as part of their spirituality	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		16	532	17	532	1. change the title in the table of ecosystem services to "Benefits of nature" for people in the tropical forests of the Americas should include the following variables: The ecosystem goods and those of which are in are in Primary and secondary stakeholders. The ecosystem services and which are received by Primary and Secondary stakeholders. Nature's offerings and those which are received by Secondary to the Primary Stakeholders. The Primary stakeholders should include indigenous people, given that their worldviews and ways of understanding the gifts of the natives are different to those documented written in the convention literature	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		16	498	16	499	This conclusion might not be suitable for all stakeholders as e.g. wellbeing of farmers has increased.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		16	504	16	507	Please cross-check to avoid wrong informations: see different scenarios in 5.5.3; increase of temperature has no significant impact: in controversial discussion is the change of rainfall - see Malhi et al. 2008: MALHI, Y., ROBERTS, J. T., BETTS, R. A., KILLEEN, T. J., LI, W., NOBRE, C. A. (2008): Climate Change, Deforestation, and the Fate of the Amazon. – Science 319. S. 169-172.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		16	508	16	520	Too general; provide examples for economic values of non timber forest products (NTFP) and land use types; mostly NTFPs are not attractive by net value - e.g. see Müller 2012: Policy options to reduce deforestation in the Bolivian lowlands based on spatial modeling of land use change.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		16	523	16	531	The text doesn't cover the title of this Chapter; please rethink focussing on benefits.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		16	528	16	531	German initiative ICI (International Climate Initiative) and LifeWeb Initiative to promote protected areas projects can help maintaining especially benefits of Tropical Forests für people (List of biodiversity projects funded by the German Federal Ministry for the Environment, Nature Conservation Building and Nuclear Safety at: https://www.international-climate-initiative.com/fileadmin/Dokumente/2014-project_list_biodiversity.pdf).	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		16	532	17	533	Table is not systemtically written; not clear for the reader, not concrete and relevant on regional scale.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		17	Table 2.3			Cultos: do you mean cultural?	The wording has been improved
Liette Vasseur		17	539			also note: talking to the deputy minister of Agriculture in Ecuador in June 2014, he explained that they were unable to measure the number of hectares that were cut by "colonizers" coming illegally from other countries (mainly Colombia) along the border in the tropical rainforests. according to him, the number could double.	Thank you for this comment
Liette Vasseur		17	547			change "et al. 2015); these" to et al. 2015)+G55. Tthese... Makes it easier to read	The wording has been improved
Liette Vasseur		17	552			you have . . At the end of the pargaraph	The wording has been improved
Liette Vasseur		17	557			change "now has taken" to has now taken	The wording has been improved
Sandra Díaz		17	533	17	539	Suggest moving to drivers chapter	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		17	541	17	552	OK, but could be moved to chapter 3 and just referred to here.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		17	550	17	552	The Patagonian steppe carried large herbivors during its whole recent evolutionary history; even after the Pleistocene extinctions, very large numbers of Camelidae existed and were the support of the livelihoods of several indigenous tribes. So these setepes, as most of the open systems in Argentina, dveloped under herbiovry pressure. What was indeed unprecedented were the stocking rates of livestock introudced by Europeans. See e.g. Lauenroth Ecologia Austral, Díaz et al. 1994 J. Veg. Science, Cingolani, Noy-Meir & Díaz Ecol. Appl, Dáiz et al. 2007 Glob. Change Biol., etc. This is in agreement with the statements of the next paragraph, that does not seem to be very well connected with this one.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		18	563			change "have importance" to are also common	The wording has been improved
Liette Vasseur		18	569		all chap	Make sure that you keep the units consistent: 13.592.000 should be 15,592,000	The wording has been improved
Liette Vasseur		18	566		578	it seems that the grasslands of the USA and Canada were completely forgotten. However there are quite a lot of information	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		18	584			change anomal for animal	The wording has been improved
Liette Vasseur		18	585			change medical for medicinal (this is a mistake made a few times in the text)	The wording has been improved
Guiomar Nates		18	601			Suggestion: Decaënsa et al. 2003. Seed dispersion by surface casting activities of earthworms in Colombian grasslands. Acta Oecologica. Volume 24, Issue 4, September 2003, Pages 175–185	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Gerardo Suzán		18	601		this sentence can be included" In grasslands from nothern Mexico, keystone species suchs as prairie dogs (Cynomys luduvicianus) can regulate reservoir populations for hantavirus pulmonary syndorme SPH. (Moreno-Torres, et al. 2014. Serological survey of hantavirus in rodents from prairie dog ecosystems in Chihuahua, Mexico. Southwestern Naturalist. 59 (4): 590-594	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		18	559	18	569 In what way is the fact that ruminants convert forage into protein more efficiently than poultry relevant to this chapter?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		18	559	18	578 What about sheep? They are important in the Andes, Patagonia, etc.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		18	559	18	578 The emphasis here seems to be on production of food and fiber for the national and international markets, which is of course important. But there is little mention to pastoral systems by subsistence farmers (indignous and criollos) based on sheep, goats, cows, Camelids, which are extremely important in the whole region, culturally very ric, and in some cases very ancient.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		18	581	18	583 Here and previous paragraph, remarks about biodiversity repsonses to grazing, and overgrazing effects, are too general to be useful and also they arguably don't belong to this chapter, unless their link to NBP are made more explicit.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		18	591	18	600 Give us some numbers	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		18	559	18	578 Adding a table for countries with area development of grassland could be helpful.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
German IPBES Coordination Office and national scientists		18	576	18	578 Please provide more explicit information on overgrazing (in which regions). E.g. in Patagonia steppes, in NE-Brazil.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		18	584	18	589 It might be mistaken to discuss Brazilian Cerrado for grassland; main types of Cerrado as Cerrado sensu stricto are dry woodlands.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		18	591	18	600 Please emphasise the important role of grassland and savannas for carbon storage: see e.g. carbon storage importance in Lal 2002 Advances in Agronomy: The potential of soils of the tropics to sequester carbon and mitigate the greenhouse effect and changes in soil carbon storage after cultivation. Mann, L. K. in Soil Sciences 1986.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		18	591	18	600 Please consider quoting Bond, W. (2016), Ancient grasslands at risk; Science Vol 351; p.120-122 revealing striking differences in old-growth versus secondary grasslands and the challenges in replacing them by afforestation projects.	References were included, if apply
German IPBES Coordination Office and national scientists		18	598	18	599 Provide mistaken informations: concerning woody species there is an increase in soil carbon (above and below ground).	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		18	601	18	605 Avoid misunderstanding: On degraded grassland (overgrazing) there is an increase in runoff and erosion; furtheron well managed cropland as no-tillage in Brazil (soy-corn) has less surface runoff and erosion then grassland/pastures.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		19	613		add have between grasslands provided	The wording has been improved
Liette Vasseur		19	614		add have between people used	The wording has been improved
Liette Vasseur		19	621		the international components should also be added	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		19	623		exported: where? Needs a little more details	The wording has been improved
Liette Vasseur		19	643	649	This paragraph can add more information from other grasslands like in Canada. E.g.: Smith, Anne M.; Hill, Michael J.; Yongqin Zhang. 2015. Estimating Ground Cover in the Mixed Prairie Grassland of Southern Alberta Using Vegetation Indices Related to Physiological Function. Canadian Journal of Remote Sensing. Vol. 41 Issue 1, p51-66. 16p. DOI: 10.1080/07038992.2015.1042101. OR Nestola, Enrica; Calfapietra, Carlo; Emmerton, Craig A.; Wong, Christopher Y. S.; Thayer, Donnette R.; Gamon, John A. Monitoring Grassland Seasonal Carbon Dynamics, by Integrating MODIS NDVI, Proximal Optical Sampling, and Eddy Covariance Measurements. Remote Sensing. 2016, Vol. 8 Issue 3. p1-25. 26p. DOI: 10.3390/rs8030260.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		19	646		change is lacking for are lacking (data is plural).	The wording has been improved
Guiomar Nates		19	612		(e.g. the llanero in Venezuela and Colombia	The wording has been improved
Sandra Díaz		19	610	19	618 What about indigenous groups in grasslands and savannas in South America? (e.g. Mapuche)	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		19	629	19	641 Highly relevant, but give us some numbers, please. This is the kind of sector in which numbers (in terms of land, yield, money, gases, etc.) are likely available	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		19	645	19	649 OK, but biodiversity is not a service, see comment below.	The wording has been improved
Sandra Díaz		19	645	19	649 There are numerous studies of plant diversity and ecosystem properties (and some NBP) for grasslands (pampas, patagonia), see e.g. works by Paruelo, Jobaggy, Golluscio, Oesterheld, Sala, Chaneton, Pinheiro, etc.; some of them are better placed in chapter 3, but some are directly relevant here.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz		19	654	19	657 Surely PES in one possible way, but not the only one? Any assessment of how PES has worked in the region?	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		19	633	19	649 Too general!! Give examples of land use change; increase of stocking rates and effects of overgrazing; e.g. in Patagonia sheep overgrazing is leading to desertification; in Brazil overgrazing and the encroachment of bushes leads to soil fertility loss; projects with pasture rotation were introduced partly in Argentina (Pampa, Patagonia steppes). Provide sources.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		19	643	19	649 Please add more references; on carbon storage see e.g. Lal 2011; Don A, Schumacher J, Freibauer A (2011) Impact of tropical land-use change on soil organic carbon stocks - a meta-analysis Global Change Biology 17:1658-1670 doi:10.1111/j.1365-2486.2010.02336.x.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		19	645	19	646 Good example for mentioning data and knowledge gaps, as often in the text it remains unclear what are the reasons for missing data/case studies (lack of contributing experts, lack of language, general lack of knowledge etc.).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		20	671		672 The issue of soil salinization due to intensive agriculture and groundwater recharge limitation in Canadian and US prairies/grasslands should also be discussed. This is a real issue that will increase with climate change.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		20	674		missing a) after management	The wording has been improved
Liette Vasseur		20	683		I imagine it is where biodiversity	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		20	692	698	This paragraph can be expanded. E.g.: Farley, Kathleen A.; Bremer, Leah L.; Harden, Carol P.; Hartsig, James. 2013. Changes in carbon storage under alternative land uses in biodiverse Andean grasslands: implications for payment for ecosystem services. Conservation Letters. Vol. 6 Issue 1, p21-27. 7p. DOI: 10.1111/j.1755-263X.2012.00267.x. OR PONETTE-GONZÁLEZ, ALEXANDRA G.; MARÍN-SPIOTTA, ERIKA; BRAUMAN, KATE A.; FARLEY, KATHLEEN A.; WEATHERS, KATHLEEN C.; YOUNG, KENNETH R. 2014. Hydrologic Connectivity in the High-Elevation Tropics: Heterogeneous Responses to Land Change. BioScience. Vol. 64 Issue 2, p92-104. 13p. DOI: 10.1093/biosci/bit013.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		20	658	20	665 Great, but how does this relate to NBP?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		20	667	20	667 The focus of this subsection is not clear. In what ways does it differ from the specific focus of the drivers chapter?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		20	568	20	570 Biodiversity is not a service; it provides them (cfr. MA 2005, Díaz et al. 2006 PLoSB, Díaz et al. 2015, IPBES plenary decision about IPBES CF, etc.)	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		20	699	20	699 In the mountain biome, I feel that the role of Andean cultures in the nature-society interface is not given enough attention. Ture that there is an Andes case sutdy, but overall I beleie that the role of indigenou coutures in the Americas mountains is not given enough profile. What about the traditional systems of use of different altitudinal belts? what about the centers of origin of potatoes. maize, just to name a few. I feel that this bime is a great opportunity to showcase the importance of showcasing with nice detail the importance of considering ILK. an opoortunity that so far is not exploited in the chapter.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
German IPBES Coordination Office and national scientists Liette Vasseur		20	699	25	874 Well structured Chapter on mountains with lot of concrete regional examples. Good regional balance with examples from Northern, Meso- and Southern Americas.	Thank you for this comment
Sandra Díaz		21	726	728	This is a weird sentence. I think it needs to be modified to better fit the rest of the chapter.	The wording has been improved
Sandra Díaz		21	209	21	217 Not really sure the discussion about Andean glaciers belong to this chapter.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		21	Table 2.4		Please consider IPBES document on NBP system; also, this looks like a generic table applicable to any terrestrial biome on Earth. Please consider tailoring to Americas mountain ecosystems in particular, with concrete examples, citations, etc.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists Lucía Almeida-Leñerc		21	734	22	734 Table 2.4 is too general - it should be focused on "Mountains of Americas" like pointed out in the title.	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñerc		21	722		faltan ejemplos de las Sierras Madres para México	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		22	739	742	I am very surprised that there is no word about mining. However this is a huge concern in Rocky Mountains and others. This should be a paragraph by itself. It is somewhat mentioned on page 25 line 837 but only for Andean regions.	The new structure of the chapter hopefully makes this clearer. Drivers should be addressed in Chapter 4.
Lucía Almeida-Leñerc		22	739		falta ejemplos de México	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		23	Fig. 2.2		doe? Missing a (The wording has been improved
Guiomar Nates		23	776		(Cabrera and Ramírez 2007. Not in Ref.	Thank you for this comment
Guiomar Nates		23	775		Tejedor Garavito et al. 2014 Not in Ref.	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Guiomar Nates		23	770		Suggestion : Sarmiento, C., C. Cadena, M. Sarmiento, J. Zapata y O. León. 2013. Aportes a la conservación estratégica de los páramos de Colombia: Actualización de la cartografía de los complejos de páramo a escala 1:100.000. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt. Bogotá, D.C. Colombia. http://www.humboldt.org.co/es/boletines-y-comunicados/item/408-aportes-a-la-conservacion-estrategica-de-los-paramos-de-colombia	References were included, if apply
Guiomar Nates		23	770		Cabrera, M. y W. Ramirez (Eds). 2014. Restauración ecológica de los páramos de Colombia. Transformación y herramientas para su conservación. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt (IAvH). Bogota, D.C. Colombia. 296 pp.	References were included, if apply
Royal Gardner		23	770	24	808 In the Andean mountains case study, you may wish to note the Ramsar Convention's Regional Initiative for the Conservation and Wise Use of High Andean Wetlands, which seeks to maintain the ecosystem services provided by these wetlands: http://archive.ramsar.org/cda/en/ramsar-activities-regional-initiatives-initiativesamericas/main/ramsar/1-63-478-543_4000_0__	References were included, if apply
Sandra Díaz		23	Fig. 2.2		Fig 2.2 and associated text. The problem is that it is not clear whether this GDP (reginal differences and temporal trends) have anything to do with haven protions f the Andean biome in the countries. In order to be relevant to this chapter, the display item shoudl deal either with the portion of GDP coming from Andean ecosystems (not mineral resources). Alternatively, a chart could be made for different countries in the Americas, showing what proprtion of GDP come from different NBP or biomes.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		23	750	23	769 Nice to have a somewhat detaied section on national parks. I suggest to have such section in all biomes, perhaps as a synthesis table or set of tables	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		23	754	23	755	The amount of DGP per capita is one of the indicators commonly used to assess human wellbieng. This indicator is highly relevant to this assessment both with respect to the drivers that might underpin changes in nature and nature's benefits as well as to show the links between nature's benefits and human well-beng. Yet, such a connection is lost here, and it is unclear why such a figure is only available for one of the sections per biome. The use of biome is certainly a major obstacle towards assessing these interlinkages given that the data is available largely at national scales.	The new structure of the chapter hopefully makes this clearer.
Patricia Balvanera		23	769	24	808	Sudy cases are indeed a great way to assess the complex ways in which different kinds of values are related to nature's benefits and a good quality of life. Yet, in order to be helpful I would argue that a set of study cases encompassing the major world views relevant to the region (or the biome) are needed, and that they can be presented in boxes while a systematic assessment of what all this information mean would be placed in the main text	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñerc		23	760			se puede poner ejemplo del libro del Eje Neovolcanico publicado por la Facultad de Ciencias, UNAM	Thank you for this comment
Lucía Almeida-Leñerc		23	768			no se ponen los millones de personas que viven en las montañas de México	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñerc		23	778			poner ejemplos de Zacatonal Alpino	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		24	798		799	I would be careful about such statement when it is not completely true everywhere. In San Juan, Chimborazo, Ecuador, women had to move from quinoa to lupine beans because they produced too much quinoa and could not sell more on the market. Site visit: December 2015.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		24	810		There is a good paper in Frontiers of Ecology and Environment (2015) on ecosystem services assessments in the new road in mountain range of Bolivia. This should be included as a very good case study.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		24	815		Regional projects: what projects? Need to have a few examples or references	The wording has been improved
Liette Vasseur		24	815	821	These sentences do not make sense and should be reworked.	The wording has been improved
Guiomar Nates		24	784	785	(Bogota-Colombia (8 million inhabitants), Quito-Ecuador (2 million), Lima-Peru (10 million) and 784 La Paz/El Alto-Bolivia (2 million	The wording has been improved
Guiomar Nates		24	794		(Körner et al. 2005 not in ref.	References were included, if apply
Sandra Díaz		24	769	24	795 This could be highly relevant to the chapter. Unpack, tell in more detail what are the NBPs or nature's relevant knowledge that are kept in the Andes; be specific to add value to the statement. Make a box if necessary.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		24	796	24	808 What about the centers of origin of some of the traditional Andean crops? Where are they located? Who are the custodians? What is the status/degree of threat? How many people whose food security depends on them?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		24	815	24	827 this is not really useful in its present form. Suggest unpacking, providing more concrete detail and better framing in the conceptual framework of the assesment, perhaps in a box if necessary.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		24	815	24	827 A discussion about the different afforestation/reforestation projects in Andean countries (e.g. with native species, Euclyptus that are not native but seem to provide most of the fuelwood and timber in some areas) I perhaps relevant here, framed with the framework of multiple and sometimes conflicting NBP.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		24	823	24	831	Excellent. The distinction between salqa and away is a great illustration of ILK categories directly relevant to the goals of this assessment. Examples like this merit more development and are likely more useful than very generic statements in capturing the attention of readers. It is also a neat demonstration of different values (e.g. vicunhas, however economically valuable, are salqa; relational values according to Chan et al. PNAS 2015).	Thank you for this comment. The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		24	793	24	795	Good example for mentioning data and knowledge gaps, as often in the text it remains unclear what are the reasons for missing data/case studies (lack of contributing experts, lack of language, general lack of knowledge etc.).	Thank you for this comment. The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		24	686	31	1016	Authors should be aware that not all of the sources quoted in the text are listed in the references. Please cross-check carefully all references with all quoted sources in Chapter 1 (see e.g. Line 327).	Thank you for this comment
Lucía Almeida-Leñerc		24	783			mejorar la edición de la figura 2.3	Thank you for this comment. The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		25	852		855	These sentences do not make sense and should be reworked.	The wording has been improved
Liette Vasseur		25	859		861	this sentence should be moved to the top of this paragraph.	The wording has been improved
Guiomar Nates		25	874			(Renaudeau 2005. Not in Ref.	Thank you for this comment
Sandra Díaz		25	834	25	842	This is mostly about drivers, not NBP	Thank you for this comment
Sandra Díaz		25	845	25	874	it would be nice to synthesize all the information related to the contribution of Andean Camelidae-related NBP in some sort of aggregated figure, table or box. Income? Externalities? I believe this could be a nice, well-documented story, of NBP, sustainability, and interweaving with ILK.	The new structure of the chapter hopefully makes this clearer.
Guiomar Nates		26	897			Nelson et al. 2008. not in ref.	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz		26	Fig. 2.3		Fig. 23. far too detailed for this assessment; see instead my suggestion above about a much more aggregated figure.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists Lucía Almeida-Leñerc		26	876	31	998 Well structured Chapter on Temperate and Boreal Forests with lot of concrete regional examples.	Thank you for this comment.
		26	883		se puede meter o mencionar a la Cd de México	The new structure of the chapter hopefully makes this clearer.
Susan Preston		26	2.3.4		<p>good to see the attention to different culture groups and their relationships with the temperate and boreal forests. there is much more that could be added, particularly from the anthropological literature, as well as from studies that the Indigenous communities have conducted, sometimes in the context of land claims and resource management cases. Key authors re: Canada include Harvey Feit, Paul Nadasdy, Colin Scott, Fikret Berkes, Julie Cruickshank, Richard Preston, among others (and I have also published on this). You might check one of these sources, e.g. Feit or Scott re the JBNQA for a Cree perspective.</p> <p>re: New Brunswick, there was a detailed study a few years ago about how residents valued the forests - http://www2.gnb.ca/content/dam/gnb/Departments/nr-rn/pdf/en/ForestsCrownLands/ForestSurvey.pdf</p> <p>See also http://www.borealbirds.org/sites/default/files/pubs/report-full.pdf and http://www.borealbirds.org/sites/default/files/publications/report-ethnobotany.pdf</p> <p>http://www.davidsuzuki.org/publications/reports/2008/the-economics-of-protecting-old-growth-forest-an-analysis-of-cnotted-nwl-habitat/</p>	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		27	908		change "other than" to instead of	The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		27	911		add s to occupation	The wording has been improved
Liette Vasseur		27	920		open aggression: there should be a mention of fracking and First Nations in coastal communities like Elsipogtog (New Brunswick). E.g. Kimantas, Janet. 2014. Fracking Hotspots. Alternatives Journal (A\J) - Canada's Environmental Voice. Vol. 40 Issue 1, p32-33. 2p	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		27	937		change center industry to dominant industry	The wording has been improved
Liette Vasseur		27	939		This is more or less true. Many men from NB have moved to Alberta to work in the tar sands. This is pushed with the modification of employment insurance for fishermen. Important to note that you have an old reference for this. things changed a lot starting in 2009-2010.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		27	944	951	There is an issue here since we move from boreal to south. However, it is important to underline that most temperate forests in southern Canada are being destroyed for urban centres and agricultural intensification. (Oyarzun et al. 2005 not in ref.	The new structure of the chapter hopefully makes this clearer.
Guiomar Nates		27	927			Thank you for this comment
Sandra Díaz		27	905	27	925 Unpack, within the chapter's framework: what NBPs are at stake, how different institutions come into play, etc?	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñerc		27	923		meter ejemplo de la selva Lacandona	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		28	962	970	I cannot undersand why there are so many old references regarding Canada versus recent references for the south. E.g. Simon, Julie A.; Marrotte, Robby R.; Desrosiers, Nathalie; Fiset, Jessica; Gaitan, Jorge; Gonzalez, Andrew; Koffi, Jules K.; Lapointe, Francois-Joseph; Leighton, Patrick A.; Lindsay, Lindsay R.; Logan, Travis; Milord, Francois; Ogden, Nicholas H.; Rogic, Anita; Roy-Dufresne, Emilie; Suter, Daniel; Tessier, Nathalie; Millien, Virginie. 2014. Climate change and habitat fragmentation drive the occurrence of Borrelia burgdorferi, the agent of Lyme disease, at the northeastern limit of its distribution.Evolutionary Applications. Vol. 7 Issue 7, p750-764. 15p. DOI: 10.1111/eva.12165.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		28	967	970	Should this be in the previous section where it was discussed?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		28	Box 2.2		Fine, but what is the take-home message for this assssment? Is this box about NBP? About institutions as indirect drivers of change? Please expend and/or tilor more to the specific target of chapter.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		29	995		I would qualify this differently. You are here talking about the temperate forests of Canada and US, not the boreal forests where the density of people is in fact less than in the south.	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñerc		29	997		ejemplo de Mesoamerica o Bosque de Agua	The new structure of the chapter hopefully makes this clearer.
Garry Pierzynski		30	998	30	998 This is a nice table but it makes no reference to North America.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		30	998	31	998 Table 2.5 is excellent as it mentions lot of concrete regional examples and might be a prototype for all others biomes duiscussed in Chapter 2. Authors are encouraged to cross check and find even more regional relevant examples for each biome and each kind of services.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston		30	998		Wondering why use the Landers and Nahlik classes in this table when the intro says the chapter is using the TEEB classes? just thinking in terms of consistency...	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		32	1006		the word nonetheless is overused in this sentence which is very complicated to read.	The wording has been improved
Liette Vasseur		32	1013		Inuit: Note that In Canada, the term Inuit is preferred over Eskimo BUT in Alaska, they prefer Eskimo. And note that in Quebec, they are Inu. I storngly suggest that you change this for Arctic people	Thanks for this comment
Liette Vasseur		32	1023		change "communities varies greatly throughout the Tundra region" to communities greatly varies. No need for repeating tundra since it is in previous line.	The wording has been improved
Liette Vasseur		32	1042		"fuel, and food and fibre production": are they regulating services?? This sentence may need to be reworked.	The wording has been improved
Liette Vasseur		32	1042		There are many more recent references.	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		32	1016	32 1016	Change:Links between benefits (services) and well being/quality of life(status and trends) per stakeholder To: Links between Benefits of nature for people and different sknowledge systems to acheive Quality of life per stake holder	Thanks for this comment
German IPBES Coordination Office and national scientists		32	999	34 1112	Well structured Chapter on Tundra which might be a relatively "easy to understand" biome in relation to anthropogenic influence and impacts - irrespective the Inuit with very low population numbers and density. So it migh be easier to find all relevant links and exchanging elements between "nature" and "human well being" etc. as in the other quite more complex biomes. We rpopse to use it as a prototype example, presented in a Box - or even linked directly with the Conceptual Framework (see Chapter 2, Figure 2.7).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		33	1058		important to underline that most of these traditions are transmitted orally	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Liette Vasseur		33	1081		One major part missing is the impacts of white people on this ecosystem, besides climate change. There is the pollution that came with the installation of station and explorations (and now exploitation). There should be at least one paragraph about this.	The new structure of the chapter hopefully makes this clearer.	
Diego Pacheco		33	1068	33	1068	Change: Ways benefits and well-being/quality of life are "valued" by stakeholder groups to: Ways that the benefits of nature for the people and different knowledge systems to achieve quality of life for stakeholders.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		33	1055	33	1055	What about fisheries, seals, bears?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		33	1066	33	1067	What is the connection between the decrease of dog-led sledges and the decline of fish harvest?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		33	1086	33	1087	About the igllos: what is the relevance to the specific focus of this chapter?	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		34	1110		This can be expanded since it is quite complex and threatening than most people think.	The new structure of the chapter hopefully makes this clearer.	
Liette Vasseur		34	1112		why there is no summary table for tundra like the others?	The new structure of the chapter hopefully makes this clearer.	
Liette Vasseur		34	1136		stockholders? I imagine it was stakeholders?	The new structure of the chapter hopefully makes this clearer.	
Sandra Díaz		34	1106	34	1112	Very interesting, but not the main focus of the chapter; re-focus to NBP or leave out.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		34	1122	34	1123	At first sight, it appears to me that the preservation of historic remains is a direct consequence of the very dry (and sometimes also very cold) climate, rather than a benefit provided by the ecosystems!	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		34	1125	34	1135	True, but it would be equally true for most systems or earth. Tailor it more specifically to biome or otherwise move it to more general sections of chapter (or delete if readundant with such sections).	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		34	Table 2.5			Graing rights is the isntitution, fodder is the NBP.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		34	Table 2.6			The provision of sand and minerals, or fossil fuels, are the focus of IPBES.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		34	1113	36	1170	Well structured Chapter on Drylands - see previous comment on complexity of Tundra biome.	Thanks for this comment
Liette Vasseur		35	Table			last word: climate change	Thanks for this comment
Liette Vasseur		35	1137			freshwater is not only crucial for human health but also all species on earth. If not, no ecosystem services	Thank you for this comment
Liette Vasseur		35	1153		1154	Split the sentence. Put a . After ecology and start For exmaple, ...	The wording has been improved
Liette Vasseur		35	1155		1158	There is a need to add something about desertification of adjacent ecosystems	The wording has been improved
Sandra Díaz		35	Table 2.7			Conservation of culturally important items is a ditrect consequence of the cliamte, not of the ecosystems, and therefore not a NBP	Thank you for this comment
Sandra Díaz		35	1137	35	1168	In this section there is a mixture between NBP and drivers. I suggst sorting out and sending driver-related text to the corresponding chapter.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		36	1169		1170	There is a need for additional information in this paragraph to better explain what are the mechanisms and how it impacts services.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		36	1173	1176	This section should first introduce the importance of this ecosystem for word populaiton and this is true in the Americas, where over 40% of the population live along coastal areas (i.e. within 100 km of the coast). This is important as there will be a need later on to discuss further the challenges related to climate change, ecosystem vulnerability and its role as buffer (especially salt marshes which are not discussed in this section).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		36	1185		invErtebrates	The wording has been improved
Liette Vasseur		36	1184		consistency wellbeing, weel-being, weel being: to use the same everywhere.	The wording has been improved
Liette Vasseur		36	1198		you could add the importance of salt marshes here and how they are culturally important. E.g. Vasseur, L. and E. Tremblay. 2014. Coastal ecosystem in Kouchibouguac National Park of Canada: adaptation possibilities for protecting traditional knowledge of local a community. In Buyck, C. (Ed.). Safe Havens: Protected Areas for Disaster Risk Reduction and Climate Change Adaptation. Gland, Switzerland: IUCN. xii + 168 pp.: 33-40.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		36	1200	1205	This sentence (especially the beginning) does not make any sense. It also need some rework as many other issues have not beeb examined such as cities and marine transportation (piers).	Thanks for this comment
Sally Valdes		36	1208	36	1208 Perhaps add dredging for construction and maintenance of ports	The new structure of the chapter hopefully makes this clearer.
Sally Valdes		36	1209	36	1209 Perhaps add coastal wetlands and barrier islands and spits.	The new structure of the chapter hopefully makes this clearer.
Floyd Homer		36		41	Insufficient reference to the coastal mangroves of South America and Mesomerica used in this section. Examples that may show the differences in uses or scale should be considered.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		36	1172	36	1172	Change:Links between benefits (services) and well being/quality of life(status and trends) per stakeholder To: Links between Benefits of nature for people and different sknowledge systems to acheive Quality of life per stake holder	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		36	1173	37	1240	The analysis should be made between " Benefits of nature for people and different sknowledge systems to acheive Quality of life.	The new structure of the chapter hopefully makes this clearer.
Guiomar Nates		36	1171			http://sanandresislas.es.tl/RESERVA-DE-BIOSFERA-SEA-FLOWER.htm	References were included, if apply
Guiomar Nates		36	1171			Correa A., Sandra (2012). "Procesos culturales y adaptación al cambio climático: la experiencia en dos islas del Caribe colombiano". En Boletín de Antropología. Universidad de Antioquia, Medellín, Vol. 27, N.o 44, pp. 204-222.	References were included, if apply
Guiomar Nates		36	1171			Márquez Pérez, Ana Isabel CATBOATS, LANCHS AND CANOES: APUNTES PARA UNA HISTORIA DE LAS RELACIONES DE LAS ISLAS DE PROVIDENCIA Y SANTA CATALINA CON EL CARIBE CENTROAMERICANO E INSULAR A TRAVÉS DE LA CONSTRUCCIÓN Y EL USO DE EMBARCACIONES DE MADERA Passagens. Revista Internacional de História Política e Cultura Jurídica, vol. 6, núm. 3, septiembrediciembre, 2014, pp. 480-508 Universidade Federal Fluminense Rio de Janeiro, Brasil. Disponible en: http://www.redalyc.org/articulo.oa?id=337331847004	References were included, if apply

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Avelino G. Suarez		36	1209	37	1225	GEO 4 Perspectivas del Medio Ambiente Global ..(2007) pag 203.Cuadro 5.5. "Se estima que el valor neto global de los arrecifes de coral en relación con la pesca, la protección costera, el turismo y la biodiversidad asciende a un total de 29.800 millones de US\$/año. Sin embargo, existen informes acerca de que casi dos terceras partes de los arrecifes de coral del Caribe están amenazados por las actividades humanas. La presión predominante en la región es la sobreexplotación de los recursos pesqueros, que afecta aproximadamente al 60% de los arrecifes de coral del Caribe. Otras presiones incluyen grandes cantidades de polvo originado en los desiertos de África, que es transportado por los vientos a través del océano Atlántico y se deposita en los arrecifes del Caribe, lo que provoca una significativa mortalidad de los corales. Se ha atribuido a la acción de este fenómeno el blanqueamiento de coral que comenzó en 1987, en correlación con uno de los años de mayor trasvase de polvo hacia el Caribe. La degradación de coral tiene impactos negativos sobre las comunidades costeras, inclusive la pérdida de sustento basado en la pesca, pérdida de ingresos turísticos y un incremento de la erosión costera. Fuentes: Burke y Maidens 2004, Cesar y Chong 2004, Griffin y otros. 2002, MA 2005, Shinn y otros. 2000"	References were included, if apply
Royal Gardner		36	1179	36	1183	To support the proposition that ICZM has been identified as the best approach globally to balance competing interests, you may wish to reference Ramsar Handbook 12 on coastal management, which discusses ICZM and related Ramsar Resolutions: http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-12.pdf	References were included, if apply
Sandra Díaz		36	1164			Section could start here.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Sandra Díaz		36	1186	1187	A large demand of shells and corals is for the manufacture of ornaments, not mentioned here.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		36	1197	36 1199	Give more details about the whale hunting, what is hunted, why and under what conditions?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		36	1204		cooling by seawater is not really a NBP provided by coastal ecosystems, any water that is cold enough and in enough quantities, even if not coastal, even if heavily polluted, could be used for cooling in heavy industry. If the intention of the sentence is the impact of cooling industrial facilities on coastal ecosystems, then this is relevant, but more to the drivers chapter than to this one.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		36	1213	36 1215	The decline of mangroves is given here as the cause of fisheries decline; is this factually proven? If so, provide reference; otherwise tone down.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		36	1171	36 1171	Biomes "Coastal area" and "Marine, offshore and deepwater" should explicitly be dealt separately (see Chapter 1, Table 1, Units 8 and 9) as they are very different in provision of benefits to people and respect their different services (regulation, provision etc.) . All information concerning Open Oceans should be dealt with emphasis, underpinning the importance of this biome. Where appropriate please refer to relevant results, but also to possible knowledge gaps in the World Oceans Assessment (WOA) (recently published in January 2016).	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		36	1173	41	1329	The biomes mentioned are very complex and knowledge is relatively high on some of them (coral reefs), medium (mangroves) and very low on others (grasslands, open oceans). It might be helpful not to mix-up to many different examples at the expense of specific information: E.g. focussing on coral reefs might be helpful for providing informations on complex interlinkages. Authors are therefore encouraged to shape and select some focused and clear structured examples. As Open Oceans (missing here) is crucial (see General comment) we would encourage to provide data on this biom and select some examples - maybe focussing on some species (e.g. seaweed, whale, fish etc.).	The new structure of the chapter hopefully makes this clearer.
CONABIO		36			Pág. 36. – El último párrafo sobre ecosistemas costeros de las Américas, se refiere solamente al Caribe. También es necesario incluir información sobre el Pacífico. Especialistas mexicanos enviarán esta información por las vías oficiales.	The new structure of the chapter hopefully makes this clearer.	
Liette Vasseur		37	1241		as previously mentioned salt marshes have been completely missed and they should be discussed in this section. They are hugely important for many reasons and they are not freshwater systems.	The new structure of the chapter hopefully makes this clearer.	
Sally Valdes		37	1217	37	1217	Not only mangroves provide protection against waves and storms. Wetlands of all sorts (mangroves can be defined as a kind of wetland)	The new structure of the chapter hopefully makes this clearer.
Sally Valdes		37	1237	37	1237	Beaches are also critically important for foraging for shorebirds and nesting for shorebirds and seabirds	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		37	1234	37	1240	Sort out NBP for drivers; sand in beach not an obvious NBP to me.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		38	1242	40	1242	Table 2.7 is far too general and not helpful - see possible prototype Table 2.5, Line 998 in this Chapter).	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		38	1242	38	1242	this is a very nice table that might be elaborated for all biomes and ecosystem services. An assesement of wich services benefit which stakeholders in which biomes and what are whether there are evidences of increase or decline in these benefits or threats to the long-term sustainability of the supply of these services would be fantastic	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		40	1252			the word subsistence should be added with vital resource	The new structure of the chapter hopefully makes this clearer.
Guiomar Nates		40	1275			[Bryant et al, 1998) not in ref.	Thank you for this comment
Liette Vasseur		41	1302			another aspect that needs ot be added with salt marshes is their filling to be able to develop urban or cottage divisions as close as possible to the ocean. This has led to major problems regarding ecosystem services, epecially water filtration and storm buffer. E.g. 18. Vasseur, L. and N. Catto. 2008. Chapter 4 – Atlantic Region. In D.S. Lemmen, F.J. Warren, J. Lacroix and E. Bush (Eds.). From Impacts to Adaptation: Canada in a Changing Climate 2007. Government of Canada, Ottawa, ON. 119-170.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		41	1324			add a s to forest	The wording has been improved
Liette Vasseur		41	1326			change "This loss of" to This provision of	The wording has been improved
Diego Pacheco		41	1332	41	1332	Change:Links between benefits (services) and well being/quality of life(status and trends) per stakeholder To: Links between Benefits of nature for people and different sknowledge systems to acheive Quality of life per stake holder	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		41	1333	44	1410	The analysis should be made between " Benefits of nature for people and different sknowledge systems to acheive Quality of life.	The new structure of the chapter hopefully makes this clearer.
Guiomar Nates		41	1314			Jackson et al, 2014 is not in Ref.	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		41	1332	49	1574	The "biome" seems to be very mixed-up and quite different in depth and quality for special issues and regions. In Chapter Table 1: Biome 7 "Freshwater, Surface Waters and Water Bodies - rivers, lakes, wetlands and estuaries, peatlands" is very broad and might be not focused enough. For the elaboration of certain issues it might not be helpful to sum up all these "biomes" under one bullet point. Especially peatlands should be focused as they are one of the most relevant and most endangered ecosystems concerning biodiversity and services. (Compare with Chapter 5, Page 17, Line 444 to 465, and Chapter 5, Page 22, Line 649 to 656).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		42	1342		remove to provide water: not necessary	The wording has been improved	
Liette Vasseur		42	1345		1347 This sentence is weird. You should mention first that water comes form two basic sources: surface and groundwater. Then you can explain where the water for each comes from and for what it is used.	Thanks for this comment	
Liette Vasseur		42	1348		This is not always true: it is location dependent. For exmaple, Sudbury, Canada, most (80%) of the city relies on surface water for drinking water while the mining industry in the community relies mostly on ground water.	The new structure of the chapter hopefully makes this clearer.	
Sandra Díaz		42	1348		What are "biological and geophysical services?"	The new structure of the chapter hopefully makes this clearer.	
Sally Valdes		43	1375	43	1376	Wetlands also contribute to the recharging of aquifers.	Thank you for this comment
Sally Valdes		43	1402	44	1406	Should include references and time frames for these statistics.	Thank you for this comment
Royal Gardner		43	1392	43	1398	To expand upon the importance of peatlands in this context, you may wish to refer to or incorporate data from the peatland case study in Chapter 4 of the LDR assessment. For example, in the LDR assessment it notes that a peatland area the size of England was recently discovered in Amazonia.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		43			without line	Figure 2.4 is very general and might not be helpful to shape the aspects on Americas. See previous comment.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		45	1411			Table 2.8 is far too general and not helpful - see two previous comments and possible prototype Table 2.5, Line 998 in this Chapter).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		46	1424			this is the first time this is mention but it shold have been in coastal ecosystems	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		46	1424	1427		wrong place for this sentence: it should have been in coastal and marine. Same for line 1430	Thanks for this comment
Liette Vasseur		46	1440	1446		This is a lot based on the USA. However there are data and exmaples from other places. This should be expanded to add more general overview.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		47	1467	1468		This case study box shold be in coastal	Thank you for this comment
Liette Vasseur		47	1473			add a s to condition	The wording has been improved
Liette Vasseur		47	1492			change and being to are being	The wording has been improved
Liette Vasseur		47	1492	1494		This was already stated. Maybe better to integrate at the other place.	Thanks for this comment
Liette Vasseur		47	1507			to change: in the US. . At its	Thanks for this comment
German IPBES Coordination Office and national scientists		47	1467	47	1478	Case Study on "Value of salmon" might be valuable and helpful.	Thank you for this comment
German IPBES Coordination Office and national scientists		47	1470			Watersheds are not "biomes" in a narrower sense and focus very much on the issue "ground water" which is just one of several crucial aspects mentioning "freshwater systems". Check definitions to shape this section.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		47	1492	47	1496	Including fig. 2.5 (Page 48). The pivotal effects of the development of ever more hydroelectric dams (and other land-use implications likewise roads, burning etc.) in the Amazon basin can hardly properly reported of without referring to the work of Philip Fearnside, see e.g.: Fearnside PM (2014): Impacts of Brazil's Madeira River Dams: Unlearned lessons for hydroelectric development in Amazonia. Environmental Science & Policy 38, 164-172; Fearnside, P.M. (2007): Brazil's Cuiabá - Santarém (BR-163) Highway: The Environmental Cost of Paving a Soybean Corridor Through the Amazon. Environmental Management 39: 601-614; Fearnside PM, Lima de Alencastro Graça PM (2006): BR-319: Brazil's Manaus-Porto Velho Highway and the Potential Impact of Linking the Arc of Deforestation to Central Amazonia. Environmental Management 38: 705-716; Fearnside, P.M. (2006): Dams in the Amazon: Belo Monte and Brazil's Hydroelectric Development of the Xingu River Basin. Environmental Management 38: 16-27; Fearnside, P.M. (2005): Deforestation in Brazilian Amazonia: History, Rates, and Consequences. Conservation Biology 19: 680-688; Fearnside, P.M. (2002): Avanca Brasil: Environmental and Social Consequences of Brazil's Planned Infrastructure in Amazonia. Environmental Management 30: 735-747; Fearnside, P.M. (2001): Environmental Impacts of Brazil's Tucuruí Dam: Unlearned Lessons for Hydroelectric Development in Amazonia. Environmental Management 27: 277-296	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		47	1492	47	1496	Including fig. 2.5 (Page 48). Dam building in Amazonas could be one Case study / Box as there is quite a lot of data and publications on it (see previous comment).Cross check with other Chapters (especially 3 and 4 with numerous links to dam building in Amazonas) to avoid redudance. Additionally the recently published WWF Amazonas Report 2016 might be considered as it provides many relevant publications. The report draws heavily on research carried out by academics, independent researchers and other NGOs. More than 300 key references and notes are given. (see: http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_living_amazon_report_2016_mid_res_spreads_1.pdf).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		48	1513			The degradation of freshwaters has a: this does not sound right. Weird way to state degradation of waterbodies.	Thanks for this comment
Royal Gardner		48	1536	49	1536	It is good to include the Ramsar Convention's definition of wetlands in Box 2.3, especially since Ramsar National Focal Points are identified as a key audience on page 7 in Chapter 1. Note that under the Ramsar wetland classification system, lakes, reservoirs, and rivers are considered wetland types: http://ramsar.rgis.ch/cda/en/ramsar-documents-guidelines-classification-system/main/ramsar/1-31-105%5E21235_4000_0 .	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		48	1536	49	1537	Definition of Wetlands relaying on the Ramsar Conventions definition would be helpful at the beginning. The map is helpful too. See comment on Chapter 2, Line 1332 and General Comment on Biomes Table 1, Chapter 1;.Page 18. Line 536).	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		48	1509	48	1509	This figure is a great example of the dangers of the biome approach. In this case the map of hydroelectric projects refers to water bodies. Yes, indeed, it is the water in the rivers that generated the hydropower. But, the forest found upslope of that river are critical to the supply of such services. In that sense, both the maintenance of the integrity of the water body, and the maintenance of the upstream forest and soils are as important to the supply of this services. As for the delivery or use of the service, that is where the user of the service, in this case the hydroelectric plant, and the supply and flow of the service intersect, the superficial water body plays a key role. With respect to the demand of the service, information would be needed on where that electricity is sent to, and who are the demanding that service	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		49	1557			remove the s at plays	Thanks for this comment
Liette Vasseur		49	1558			add a s to resource	Thanks for this comment
Diego Pacheco		49	1539	49	1539	Change:Links between benefits (services) and well being/quality of life(status and trends) per stakeholder To: Links between Benefits of nature for people and different sknowledge systems to acheive Quality of life per stake holder	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		49	1540	49	1566	The analysis should be made between " Benefits of nature for people and different sknowledge systems to acheive Quality of life.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		49	1532			Food production systems: important to clarify the limits between this "biome"/system and the other biome/systems (see my general comment to the chapter above) for example, what situations are included in livestock systems and which ones in grasslands and rangelands? (there is a lot about lviestock, grazing and overgrazing, etc. in the grassland section); what issues go in "coastal" and which ones in "aquaculture"?	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		49	1537	49	1537	Title and content of Chapter 2.3.9 are quite confusing. Mixing up "Production systems" and "Urban systems" is very confusing, doesn't fit to the former structure of biomes and doesn't seem to be helpful for clarity. Provide better structure as especially "Urban structure" might be misleading here. Production systems might be better shifted to the Chapter 3 on Status and trends or to 4 on Drivers and impacts. Text is not clear in focusing on "benefits" (which is the main title of Chapter 2). Please provide clear differences and focus . See comment on Table 1 (Chapter 1, Page 18, Line 536).	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur Diego Pacheco		50	1572			remove , after such as	Thanks for this comment
		50	1567	52	1627	The analysis should be framed in the conceptual framework based on the joint contribution between nature and the anthropogenic activities than that contribute to desirable relationships, like those that occurs among people and people and nature, alike living " in harmony with nature".	The new structure of the chapter hopefully makes this clearer.
Gerardo Suzán		50	1567		1615	in agriculture and livestock sections alternative (sustainable) modes of food production should be mentioned	The new structure of the chapter hopefully makes this clearer.
Garry Pierzynski		50	1566	50	1567	This figure should mention the contributions of the soil resource and natural rainfall	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		50	Fig 2.7			There are some conceptual problems with the alignment of the mazi case to the IPBES CF; besides it is not clear how this alignment exercise, in isolation, really adds value to the chapter. It would be a useful exercise if the same is intended for all biomes/systems. In such case, the MEP can assist in better aligning cases to CF elements and interconnections	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
German IPBES Coordination Office and national scientists		50	1551		Figure 2.7: excellent example of the Conceptual Framework showing and illustrating concrete links and exchanges related to "maize production" - it might be helpful to put it into a box as it doesn't refer to a "biome" but to a complex example of using one species for providing benefits (e.g. food) with complex impacts on different levels and interlinkages. Might be shifted to other Chapter (Chapter 1 setting the scene?).	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		51	Table 2.9		What is the relevance of Table 2.9 to the main focus of the chapter? Please spell out. What do these demographic trends mean in terms of NBP? Can anything be said, relevant to NBP in the region, about the different trends in rural population of Central America as opposite to the rest of the subregions? Anything about how the opposite gender trends in the different subregions matter to the chapter?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		51	1608	51 1609	Explain what are the important NBP produced by grazing systems (as opposite to mixed and industrialized systems), or refer to another section in the chapter (e.g. grasslands?). Also does "these production systems" refer to the mixed-industrialized or to the grazing systems?	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		51	1588		Table 2.9 is providing interesting informations but not directly on "nature's benefits", might be shifted to Chapter 3 on "Status and trends" or 4 on "Drivers".	The new structure of the chapter hopefully makes this clearer.
CONABIO		51		52	Pág. 51-52 – Nos parece importante que se mencione que si bien las actividades productivas a las que se refiere el análisis han tenido como consecuencia general un impacto negativo sobre la biodiversidad y los SE, cuando éstas son manejadas de ciertas maneras, pueden no sólo ser sustentables, sino contribuir a su conservación. Además, estas actividades han derivado en la riqueza biocultural con que contamos actualmente en la región.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Patricia Balvanera		51	1588	51	1589	These trends are very interesting and relevant for identifying changes in the demand for different services, that in turn are also drivers of change in the ecosystem that affect the tradeoffs among services and the bundles of services (or packages of services) supplied within different social-ecological context. These trends can certainly be divided by countries, or major regions within the americas, but hardly into biomes. This kind of information is extremely relevant for this IPBES assessments and could more systematically be linked to the supply, delivery (or use) and demand of services in the americas. A bit more temporal resolution might be desirable though	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		52	1621		1627	There is a need here to discuss the issues related to escapees from aquaculture and displacement of native species. E.g. Asian carp in the USA and Great Lakes threat. Famous cases such as zebra mussels and complete change in lake ecosystem and services.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		52	1611	52	1614	the different NBP of livestock production merit a more detailed analysis. For example, can a synthesis be done on the positive NBP (such as food) and negative NBP (such as greenhouse gas emission, etc.) of these systems be made, per subregion or for the whole region?	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		52	1616			the treatment of aquaculture is too terse. Where are the main operations in the region? What sort of organisms do they involve? More detail about concrete negative impact on NBP other than protein production? Where are the largest/most important ones are? Where does the protein go? Local population, export, where?	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Sandra Díaz		52	1628	53	1660	This section is a good start in terms of what are the positive and negative NBP from the different production systems, and for whom. But it is far too general. What is needed here is a synthesis, as quantitative as possible (but at least with some broad trends), of the different production sectors. for example, what are the surfaces, the positive and negative NBP and to whom they contribute, of major crops, such as soybean, maize, coffee? Is the proportion of e.g. maize used for biofuel increasing or decreasing and where? Whose food security/fuel/lifestyle depends on what crops/ what is the embedded water and soil fertility of these export crops? etc. Fig. 2.8 is a start, but without an analysis of what this means in terms of NBP it is of little use in the context of this assessment.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		53	1653			remove "to indirect"	Thanks for this comment
Liette Vasseur		53	1661			change "diversity" for diversities	Thanks for this comment
Garry Pierzynski		53	1646	53	1646	The figure shows negative production for South America	Thanks for this comment
German IPBES Coordination Office and national scientists		53	1645	53	1645	Figure 2.8 is providing interesting informations but not directly on "natres benefits", might be shifted to Chapter 3 on "Status and trends" or 4 on "Dirvers".	The new structure of the chapter hopefully makes this clearer.
Patricia Balvanera		53	1245	53	1246	Very nice and clear figures that are most relevant to the assesment.	Thank you for this comment.
Patricia Balvanera		53	1646	53	1660	Is it possible to quantify this food security in a more quantitative and systematic way throught space and time?	The new structure of the chapter hopefully makes this clearer.
Patricia Balvanera		53	1771	54	1673	This is a very relevant point that could be expanded. Are the tradeoffs among services and tradeoffs between services and biodivesriyt of very different nature in areas dominated by native cultural diversity? If so, what are the implications? hybrids of what?	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		54	1668				The wording has been improved

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Diego Pacheco		54	1674	54	1674	Change the focus of instead of "Major ways that humans modify UAs to increase provision of these benefits /aspects of well-being ways" to: Ways to maintain the relationship in harmony with nature, while improving the benefits of nature for the people for a good quality of life"	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		54	1675	54	1712	The analysis should be focused on ways of maintaining the relationship in harmony with the nature, improvinh the benefits of the nature for the people " to acheive a good quality of life"	The new structure of the chapter hopefully makes this clearer.
Garry Pierzynski		54	1685	54	1686	Add "advanced plant breeding and genetic methods" for genetic improvement under Agriculture in this table. This collection of techniques holds more promise than GMO's in the developing world.	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		54	1674			This section also points in the right direction, but it needs to be more specific ans systematic; what NBPs are involved in these processes, for example? Tha table is far too generic to assess what the trends are specifically in the Americas	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		54	1681	54	1684	Broader reflection and discussion on "benefits" and "negative impacts" of using Genetically Modified Organisms (GMO) concerning biodiversity and ecosystem services should be provided as this is a complex issue. Findings from the recently published IPBES report on pollination (3a) might be helpul for completion.	The new structure of the chapter hopefully makes this clearer.
sandra LUQUE		55	1713	55	1714	This figure should be updated or deleted. No sense to publish data up to 2010. The figure is missing the impact of soy high increase from 2010 later of transgenic maize. ALL figures and data should be updated otherwise there is no point of publish old data on this report	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		55	Table 2.9			Good start, but can anything be said on what sort of systems are the ones increasing in each of the subregions? Also please consider putting all in the same graph, so that one can better compare the trends all in the same scale.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists Patricia Balvanera		55	1713	55	1713	Figure 2.9 is providing interesting informations but not directly on "natures benefits", might be shifted to Chapter 3 on "Status and trends" or 4 on "Drivers".	The new structure of the chapter hopefully makes this clearer.
		55	1713	55	1714	Nice. Would this mean that there are important shifts in yields? You could easily document those with the same data sources	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		56	1738			add a s to perturbation	Thanks for this comment
Liette Vasseur		56	1741		1743	This sentence does not make sense.	The wording has been improved
Liette Vasseur		56	1747		1756	There should be another paragraph to explain how green spaces in urban areas can be used to enhance food security through the development of urban gardens. There are interesting examples of community gardens in many cities and many references can be found. In addition, some that do not have as much spaces, have discovered other ways such as street boxes (e.g. Moncton downtown, New Brunswick, where boxes on Main street have vegetables instead of only flowers. People can pick them up when mature and for free.	The new structure of the chapter hopefully makes this clearer
Sally Valdes		57	1763	57	1763	Habitat in urban areas can provide stopovers for migrating species.	Thanks for this comment
Olivier Blond		57	1753	57	1753	Gregory N. Bratman et al, "Nature experience reduces rumination, Proc Natl Acad Sci U S A. 2015 Jul 14;112(28):8567-72 - Source: http://www.pnas.org/content/112/28/8567.full	The new structure of the chapter hopefully makes this clearer.
						In table 2.11, I would replace "psychological wellbeing" by "mental health" that is more used	
German IPBES Coordination Office and national scientists		57	1763	57	1763	Table 2.11 is helpful to focus on Urban areas concerning benefits.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Liette Vasseur		58	1784		I think this may need ot be expanded to include a little more discussion on spirituality and reduction of stress level. Despite the paucity of literature, it is possible to still bring some elements.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		58	1799	1800	This sentence is lost as a single paragraph. I think it is linked to the next one, which is based mainly on one reference. It has to go a little further. There are more articles on this than this one.	The wording has been improved
German IPBES Coordination Office and national scientists		58	1785	59 1833	Very general. Please ensure that a once decided definition on "wellbeing" (which is not the right place to discuss here but in direct relation to the Conceptual Framework) is used in ALL Chapters and ALL Regional Assessments (Africa, Asia & Pacifics, ECA) to be able to compare results and conclusions at the end.	Thanks for this comment
Patricia Balvanera		58	1785	58 1785	A more systematic assessment of the links between the trends in ecosystem services and the different components of well being (e.g. Material, health, security...)would be most desirable	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		59	1824		I understand that this section will be devleped further. However I would be cautious to only look at value in terms of economics. This is where the contribution can be improved by looking at other elements: especially health.	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		59	1836		remove the) after city and also remove "in a city" a little further since it is redundant. The problem is that this sentence does not really mean a lot. Seems a little empty and repetitive.	Thanks for this comment
Liette Vasseur		59	1848	1854	One major part missing here is the importance of restoration of watercourses and parks in cities to improve resilience in case of extreme events. There are great examples in Montreal, Canada where this was done. These "corridors" not only serve to improve greening but also climate change resilience.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Liette Vasseur		59	1858		the aspect of gathering and social interactions is very minimal here but should be improve as a separate paragraph. In many large cities these green spaces serve for fesitvals, events and recreation and are the savior for urban citizens. This has been demonstrated in large cities. E.g. erón-Palma, Ileana; Sanyé-Mengual, Esther; Oliver-Solà, Jordi; Montero, Juan-Ignacio; Ponce-Caballero, Carmen; Rieradevall, Joan. 2013. Towards a green sustainable strategy for social neighbourhoods in Latin America: Case from social housing in Merida, Yucatan, Mexico. Habitat International. Vol. 38, p47-56. 10p. DOI: 10.1016/j.habitatint.2012.09.008. OR Hernández Bonilla, Mauricio. 2013. The signficance and meanings of public space improvement in low-income neighbourhoods 'colonias populares' in Xalapa-Mexico. Habitat International. Apr2013, Vol. 38, p34-46. 13p. DOI: 10.1016/j.habitatint.2012.09.003.	The new structure of the chapter hopefully makes this clearer.	
Diego Pacheco		59	1834	59	1834	Change: How do humans modify urban areas to increase the provision of these services to modification of urban areas to increase the benefits of nature for people to achieve a good quality of life	Thank you for this comment
German IPBES Coordination Office and national scientists		59	1824	59	1827	Very important point!! Please ensure that a once decided definition on "values" (which is not the right place to discuss here but in direct relation to the Conceptual Framework and/or with the Experts on Deliverable 3d) is based on results of the used in ALL Chapters and ALL Regional Assessments (Africa, Asia & Pacifics, ECA) to be able to compare results and conclusions at the end.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		59	1834	60	1920	Valuable and concrete links and cases with relevance to Urban ecosystems - helpful concerning the issue "benefits".	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		60	1866			add is between it and common	Thanks for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Liette Vasseur		60	1865	1873	This paragraph remains vague but there are a few papers that could be used. E.g. Haase, Dagmar; Larondelle, Neele; Andersson, Erik; Artmann, Martina; Borgström, Sara; Breuste, Jürgen; Gomez-Baggethun, Erik; Gren, Åsa; Hamstead, Zoé; Hansen, Rieke; Kabisch, Nadja; Kremer, Peleg; Langemeyer, Johannes; Rall, Emily; McPhearson, Timon; Pauleit, Stephan; Qureshi, Salman; Schwarz, Nina; Voigt, Annette; Wurster, Daniel. 2014. A Quantitative Review of Urban Ecosystem Service Assessments: Concepts, Models, and Implementation. <i>AMBIO - A Journal of the Human Environment</i> . Vol. 43 Issue 4, p413-433. 21p. DOI: 10.1007/s13280-014-0504-0.	Thanks for this comment	
Liette Vasseur		60	1881		I would be careful and recheck the literature since there has been new papers especially in 2015 and 2016. E.g. Siña, Mariella; Wood, Rachel C.; Saldarriaga, Enrique; Lawler, Joshua; Zunt, Joseph; Garcia, Patricia; Cárcamo, César. 2016. Understanding Perceptions of Climate Change, Priorities, and Decision-Making among Municipalities in Lima, Peru to Better Inform Adaptation and Mitigation Planning. <i>PLoS ONE</i> . 1/25/2016, Vol. 11 Issue 1, p1-13. 13p. DOI: 10.1371/journal.pone.0147201.	The new structure of the chapter hopefully makes this clearer.	
Garry Pierzynski		60	1899	60	1899	Change "Afro-Americans" to "African Americans"	Thanks for this comment
Patricia Balvanera		60	1874	60	1875	It is unclear to me what you mean by subregion. I was hoping for a cross biome or cross region comparison here with quantitative data, rather than a comparison among a few study cases	The new structure of the chapter hopefully makes this clearer.
Liette Vasseur		61	1910		change to associated with the (not due)	Thanks for this comment	
Liette Vasseur		61	1914		add a , after poverty	Thanks for this comment	

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Liette Vasseur		61	1925		While there are few studies, it does not mean it cannot be discussed. There are some papers that goive good exmaples. E.g. Leadley, Paul; Proença, Vânia; Fernández-Manjarrés, Juan; Pereira, Henrique Miguel; Alkemade, Rob; Biggs, Reinette; Bruley, Enora; Cheung, William; Cooper, David; Figueiredo, Joana; Gilman, Eric; Guénette, Sylvie; Hurtt, George; Mbow, Cheikh; Oberdorff, Thierry; Revenga, Carmen; Scharlemann, Jörn P. W.; Scholes, Robert; Smith, Mark Stafford; Sumaila, U. Rashid. 2014. Interacting Regional-Scale Regime Shifts for Biodiversity and Ecosystem Services. BioScience. Vol. 64 Issue 8, p665-679. 15p.	The new structure of the chapter hopefully makes this clearer.	
Liette Vasseur		61	1951		Issue of trade-off. This can be expanded a little. E.g. Daw, Tim M.; Coulthard, Sarah; Cheung, William W. L.; Brown, Katrina; Abunge, Caroline; Galafassi, Diego; Peterson, Garry D.; McClanahan, Tim R.; Omukoto, Johnstone O.; Munyi, Lydiah. 2015. Evaluating taboo trade-offs in ecosystems services and human well-being.Proceedings of the National Academy of Sciences of the United States of America. Vol. 112 Issue 22, p6949-6954. 6p. DOI: 10.1073/pnas.1414900112.	The new structure of the chapter hopefully makes this clearer.	
Diego Pacheco		61	1921	61	1921	Cambiar: Implication for human well-being to Implicaciones to reach a quality of Life through the Benefits o Nyture to people.	The new structure of the chapter hopefully makes this clearer.
Diego Pacheco		61	1922	63	2013	The analysis should be based on the conceptual framework, based on the interrelationships of the benefits of nature for the people and the different systems to achieve a good quality of life, This chapter should be able to reflect the articulation of the anthropogenic drivers, driving natural principals, with the benefits of nature for people, generating a good quality of life.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
Royal Gardner		61	1921	63	2013	As Ramsar National Focal Points are identified as a key audience of this assessment, it may be useful to incorporate Horwitz, P., Finlayson, M. and Weinstein, P. 2012. Healthy wetlands, healthy people: a review of wetlands and human health interactions. Ramsar Technical Report No. 6. Secretariat of the Ramsar Convention on Wetlands, Gland, Switzerland, & The World Health Organization, Geneva, Switzerland. http://www.ramsar.org/sites/default/files/documents/pdf/lib/rtr6-health.pdf	The new structure of the chapter hopefully makes this clearer.
Sandra Díaz		61	1921	63	2053	This is an interesting section, well-oriented, but at the moment lacks specificity to the region/subregions.	The new structure of the chapter hopefully makes this clearer.
Olivier Blond		61	1911	61	1911	Michelle Kondo et al, "Effects of greening and community reuse of vacant lots on crime", Urban studies, October 20, 2015 - Source: http://usj.sagepub.com/content/early/2015/10/19/0042098015608058.abstract and Eugenia C Garvin et al, "Greening vacant lots to reduce violent crime: a randomised controlled trial", Inj Prev 2013;19:198-203 - Source: http://injuryprevention.bmj.com/content/19/3/198.long However several experiments in the USA have shown that the greening of vacant lots, in other words not only in wealthy neighbourhoods, reduces many type of reported crimes.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		61	1922	61	1923	Highly appreciated approach.	Thank you for this comment
German IPBES Coordination Office and national scientists		61	1930	61	1932	Education as a key element and should be elaborated more in particular and linked with awarness rising leading to better maintainace and care for nature finally leading to provide more and better benefits.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations	
German IPBES Coordination Office and national scientists		61	1930	61	1932	Quoting person and work of Alexander von Humboldt, who has been an intermediary not only between natural, cultural and social sciences and humanities but also between the "old world" and the "new world" might be helpful for awareness rising on biodiversity and educational aspects concerning Americas region on (sub)regional and global level.	The new structure of the chapter hopefully makes this clearer.
German IPBES Coordination Office and national scientists		61	1921	63	2013	Please avoid confusing focus and content of Chapter 2.4. and be aware of focussing to the issue "benefits" (which is the main title of Chapter 2). Some sections might be better shifted to the Chapter 3 on status and trends or to 4 on drivers and impacts.	The new structure of the chapter hopefully makes this clearer.
Patricia Balvanera German IPBES Coordination Office and national scientists		61	1921	61	1922	Looking forwards for such a systematic analysis	Thank you for this comment.
		62	1960	62	1966	Spatial mismatches between service production and utilization sites is a key for the definition of "benefit" and "wellbeing" and should be considered with high relevance. Please consider leakage and leakage effects based on this observation (see also Chapter 4 drivers).	The new structure of the chapter hopefully makes this clearer.
Susan Preston		63	References			a few items cited in the chapter do not yet appear in the reference list – please update	Thank you for this comment
Orlando Rey		72	4	6	162	As in chapter 1, there are also long tranches of methodological considerations, see introduction, lines 73 to 158, Section 2.2 (165 to 289), See possibility of simplify, make the chapter more straightforward and "Americas" focused, taken into account the previous existence of a methodological framework applicable to all regional assessments	Thanks for this comment
Marina Rosales Benit		450	453	14	14	Economic policies, including macroeconomic, fiscal, monetary, or policies on agricultural policies, fishery, mining, energy, play a significant role in influencing people's decisions and behaviour and the way in which they relate to nature in the pursuit of benefits.	Thanks for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Marina Rosales Benit		749	750	22	22 I suggest to actualize the information till 2015 on the influence of the Andean mountains with seven countries is very important in terms of GDP per capita (Figure 2. 2)	The new structure of the chapter hopefully makes this clearer.
Marina Rosales Benit		845	874	25	25 It is very important Bolivia's information. It could be in a box as a case study. However, we need more balance. I suggest, please consider the information of andean countries that have been managing Vicugna vicugna since the Incas civilization as Peru, Argentina and Chiles should included.	The new structure of the chapter hopefully makes this clearer.
Marina Rosales Benit		1442	1442	38	38 It could be important to consider coastal hills (lomas costeras) in table 2.7.	The new structure of the chapter hopefully makes this clearer.
Gerardo Suzán		1881			a sentence like this can be included. Few macroecological studies in the Americas are available. For example (Rubio et al2014) showed that habitat fragmentation in the Americas should be considered as an epidemiological risk factor for hantavirus transmission to humans because rodent reservoir populations increase in fragmented landscapes regarding habitat type. Ecohealth DOI 10.1007/s10393-014-0944-9	The new structure of the chapter hopefully makes this clearer.
Marina Rosales Benit		2009	2013	63	63 Additionally, given the pervasiveness of human-dominated landscapes across the units of analysis assessed here, multi-functionality is a viable option to maintain and even increase some key services for human well-being including economic growth in the context of sustainable development and green economy.	The new structure of the chapter hopefully makes this clearer.
Susan Preston	11-14				good! (check the citations though, one has a year and no author – presumably MA, and a few grammar edits to be made)	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston	4-5				The first sentence is quite problematic because it is unclear about the intent of the use of “values” terminology and it significantly biases monetary values as being “mainstream” thus implying that socio-cultural values are somehow peripheral. To provide a neutral introduction to values (importance generally) you could remove that sentence and instead say something like this:	Thanks for this comment
Susan Preston	4-5				Human societies attach a wide range of meanings and significance to ecosystems, benefits from nature, and ecosystem services. This importance can be understood and reported in different ways, as appropriate, such as through socio-cultural valuation approaches that involve, e.g., description, through economic approaches that may involve, e.g., monetary valuation, and through valuation approaches based in the human health sciences. Although there has been considerable attention to economic approaches in recent years, there is increasing recognition of the need to use additional approaches that can be better suited to assess socio-cultural and health values. I think you can go ahead and keep the citation you use, and you might add Chan, K. M. A., T. Satterfield, and J. Goldstein. 2012. Rethinking ecosystem services to better address and navigate cultural values. <i>Ecological Economics</i> 74: 8-18. My point here is that in introducing ‘valuation’ it’s important to be consistent with the IPBES framework and the IPBES values guide that “valuation” is not limited to the economic conception of that term, but refers to the many different ways that significance can be analysed. Have a look at the comparison figure in the IPBES Guide to Values, Figure 1.2 on page 12 – that says it all about diverse valuation approaches in relation to the IPBES framework. http://www.ipbes.net/sites/default/files/downloads/IPBES-4-INE.12_EN.pdf	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston	4-5	119-		126	Sentences from lines 119 to 126 are alright, but seem to jump across concepts without as much justification/support as they could with just an additional few clauses to clarify the connections.	Thanks for this comment
Susan Preston	4-5				I suggest not referring to economic approaches as “systems” because that will confuse readers. Just call them economic approaches and economic methods for consistency. So, e.g., line 124, the sentence could say “Economic valuation methods can be effective at capturing...” and then on line 126, “...these methods are less effective at capturing...” (that way you set up a clear parallel structure in the logic of the para.)	Thanks for this comment
Susan Preston	4-6		intro		re the intro to the chapter – the issues that are introduced are all good and relevant. As the ‘values’ chapter it should discuss the different conceptualizations of values that IPBES has adopted, not just ‘valuation’ of ‘ecosystem services’. Please consider a slight restructuring when ‘values’ are introduced that summarizes this diversity as depicted in Figure 2.1. Please comment briefly on how the chapter will address these three broad conceptualizations of values. You could, for example, briefly advise readers that the information sources for these diverse conceptualizations of value include analyses from the biophysical, social, health, and economic sciences and ITK. You could draw from the summary ‘short guide’ that is positioned as section 1 in the IPBES guide to diverse values. The pluralist vantage that IPBES offers is central to these assessments, and as complex as it is for assessment authors, it really should be used to guide the structure of information gathering, analysis, and reporting.	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston	8-9	box 2.1			for flow, consider 'Based on their intimate relationships with the Earth and all living creatures, Indigenous peoples have developed unique knowledge systems that reflect their worldviews. These worldviews encompass spirituality, mythology, social order, systems of justice, and resource management. All of these characteristics encompass beliefs about right relationships among humans and with other species. ...'	The new structure of the chapter hopefully makes this clearer.
Susan Preston	8-9	box 2.1			There is a bit of repetition in the box that could be edited out.	Thanks for this comment
Susan Preston	8-9	box 2.1			Consistency with use of capital letters for Indigenous.	Thanks for this comment
Susan Preston	8-9	box 2.1			The content is quite useful and the ideas are clearly expressed.	Thank you for this comment
Susan Preston	8-9	box 2.1			Note that 'the land' in many Indigenous cultures is a short-form way of referring to the Earth and all the life that comprises it. This includes what scientists call the biotic and abiotic environments since for many cultures the components of the 'land' [traditionally] were also respected as 'persons'. At the same time that IPBES work respects and recognizes the distinct worldviews of Indigenous and non-Indigenous cultures, it's really important to avoid what anthropologists call "essentializing" Indigenous peoples because that really does a disservice to them and to everyone else's understanding and appreciation of their cultures.	Thanks for this comment
Susan Preston	10-11	last para			good	Thank you for this comment

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Susan Preston	14-17	Section 2.3.1.2			first para – you note that the QoL has been poorly studied, and comment on economic work. have you looked at ethnographic, human ecology, and environmental anthropology research? It won't be written up as 'ecosystem services' but there should be literature about people and their relationships with the environments in which they live. It will take cross-referencing geographically too, since the studies are more likely to be place-based rather than biome-based.	The new structure of the chapter hopefully makes this clearer.
Susan Preston	14-17	Section 2.3.1.2			section good overall. glad to see the para on health. pls try to include some more socio-cultural values evidence – think in terms of significance rather than 'valuation'. Terminology may be a hindrance when crossing disciplines. the text starting line 490 begins to address this, but needs a little more specific text about this significance.	Thanks for this comment
Susan Preston	17-20	2.3.2			the text in the section is all very good and well-composed but there is inadequate attention to the diverse values aspect that is the purpose of the chapter. please try to explore the literature noted in the previous comment for some useful evidence that you could use. I suspect this will apply across the chapter.	The new structure of the chapter hopefully makes this clearer.
Susan Preston		20 2.3.3			table 2.4 has same problems in the Cultural section as noted in comments for page 7. Re: 'values' associated with mountains – the British Columbia government dept of Environment periodically completes studies of provincial park users and could be a good source for ecotourism values and preferences.	The new structure of the chapter hopefully makes this clearer.
Guiomar Nates					Duarte, B y Roa T. El dilema del páramo: diferentes concepciones en un contexto de justicia hídrica. El caso del páramo de Santurban. Revista Javeriana. Enero – Febrero 2012. Número 801. Tomo 150. https://totumasymaracas.files.wordpress.com/2014/05/art_bibianatiana_dilema-de-los-paramos_rfinal.pdf	The new structure of the chapter hopefully makes this clearer.

Reviewer Name	From Page	From Line	Till Page	Till Line	Comment	Author Annotations
Guiomar Nates					In general, I suggest reviewing bibliographic references. Missing many!	Thank you for this comment
sandra LUQUE		875		997	Providing the striking differences in between boreal and temperate forest types, this section will need to be considered separately. Both forest types have a great importance for the region as a whole but also for the sub region where they are placed. The sections as presented, is extremely messy difficult to follow, presenting too many inconsistencies, trivialize important concepts. Considering then two separate sections will help to be more consistent and present the differences between temperate and boreal in a more clear way for the reader. In all needs to be rewritten	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñero					introducir un ejemplo para México de Pago por servicios ambientales hay muchos trabajos.	The new structure of the chapter hopefully makes this clearer.
Lucía Almeida-Leñero Susan Preston					Cual es la razón de repetir el marco conceptual I ran out of time and was unable to review further than the Tundra section. Over all I think it's safe to say that my comments on the first half of the chapter carry forward through the remainder. The sections on UAs are all clear and concisely written, and the information is good. However, given that the chapter focus is on the diverse values of these UAs in the Americas, my advice is that if the team is able, you really need to dig deeper for more evidence of the significance of these UAs. The chapter has a good start on this, naturally in some sections more than others, but readers will be looking for more about values of all kinds – socio-cultural, health, and economic – with what ever metrics and descriptions you can summarize. Beyond that, a considerable revision of the introduction is strongly encouraged. It could reflect the structure of the chapter and place much greater emphasis on what is meant by diverse values and how they can be researched and reported. The IPBFS values guide can be a big help to you on that account.	Thank you for this comment The new structure of the chapter hopefully makes this clearer.