

<Review comments by experts on Chapter 4 of the Second Order Draft of Wetlands Supplement>

ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0001	Lyde, Gund	4	0	0		This chapter is very interesting to me. Grammatically it is fine. However parts of this chapter are extremely wordy. I have indicated a couple of places where text can be shortened and clearer. Consider adding some color images to make the chapter more attention getting.		Accept
E_4_0002	Brown, Lynette	4	1	1		In the previous Chapters 1&2 land use has been spelled "land-use". In this Chapter the authors use both hyphenated and not, format for consistency. Also in Chapter 2 & 5 the Annex appears before the References but in this Chapter it appear after, format for consistency. Sometimes web sites in the text are underlined and other times they are not - format for consistency throughout Chapter. Review Chapter for citation formatting consistency - when 2 authors separate by the word "and" not "&" in the text to be consistent with previous Chapters and et al. has been italicized in the text and a comma placed between et al. and the year of publication - format for consistency. In Chapters 2&3 the 95% CI has been reported as a range (i.e. 0.47 - 0.51) - format tables throughout this Chapter for consistency.		Accept
E_4_0003	Lyde, Gund	4	30	30		Conversion from a land-use category that includes coastal wetlands' If Wetlands consists of either inland or coastal areas - then the only land use category that can include 'coastal wetlands' is the Wetlands category itself. Perhaps what is meant is 'Conversion from a different land-use category to (coastal) Wetlands'.		Accept

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E_4_0004	Lyde, Gund	4	33	33		Conversion to a land-use category that includes coastal wetlands' The only land use category that identifies and includes coastal wetlands is Wetlands itself. Perhaps what is meant is 'Conversion from 'coastal' Wetlands to another land use category.'		Accept
E_4_0005	Lucas, Richard	4	124	124		We recognise that remote sensing is currently not forming a major contribution to the IPCC methods. However, we would like to highlight that spaceborne optical and also radar data can be used for mapping changes in the extent of mangroves and transitions to and from other land covers. Hence, their role might be given more emphasis in the document. Whilst a number of studies have retrieved the biomass of mangroves at local to regional levels., such techniques currently cannot routinely provide estimate to a sufficient level of accuracy although this may become more feasible in the future.		Accept with modification. This is clarified as higher Tier implementation.
E_4_0006	Hirota, Mitsuru	4	125	170		A little bit unclear especially on relationship with the former 2006 IPCC Guideline. Please edit some part of this section easier to see the relationship, like the Introduction section of Chap. 5.		Accept
E_4_0007	Lyde, Gund	4	127	127		Delete 'defined here as'		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0008	Yano, Masato	4	127	128		In this sentence, coastal wetlands are defined as "organic and mineral soils", while this chapter addresses all IPCC pools. To prevent misunderstanding, this sentence should be amended as follows; "Coastal wetlands are defined here as area vegetated by vascular plants that ...".		Accept
E_4_0009	Villamizar, Alicia	4	127	131		I suggest erase Duarte 1991 reference to maintain the coherency with the next text. Noted that the next text (131 and 132 lines) is referring two more recent cites, for this reason the precedent text could not be "derived from" Duarte 1991.		Accept
E_4_0010	Kumar, Ritesh	4	127	135		Include reference to Ramsar definition for coastal wetlands, which limit to the depth of six meters, however coral reefs are included irrespective of depth. Apparently, the current coverage excludes lagoons and estuaries.		Accept
E_4_0011	Parish, Faizal	4	127	135		Has inclusion of coral reefs been considered? They are significant coastal habitat in many areas and have key GHG role. They are also impacted by coastal development, nutrient loading/sedimentation similar to seagrass beds etc		Noted
E_4_0012	Bing, Qiao	4	127	156		Salinity and depth are important factors in ecosystem and C-balance in coast area. It is better to explain more clearly the relationship between the classification of Table 4.1 to the two factors.		Accept with modification. This is addressed primarily with respect to CH4 at Tier 1. Higher tiers are encouraged for disaggregation of other parameters based on salinity.

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E_4_0013	Wang, Baodong	4	128	1210		The units of salinity are rafferty throughout the text, sometimes ppt is used and sometimes without unit. Scientists used to report salinity in ppt (parts per thousand), but reporting salinity in ppt is obsolete now as the method of determining seawater salinity has been changed and practical salinity unit is used. I suggest reporting salinity without unit, for instance, "tidal water salinities are <18", rather than "tidal water salinities are <18 ppt"(line 1209).		Accept
E_4_0014	Parish, Faizal	4	133	133		What about tidal freshwater swamp forest - was this considered.		Accept with modification. Tidal freshwater swamp was considered and data were insufficient to develop global defaults.
E_4_0015	Brown, Sandra	4	133			I do not see a strong case, as I mentioned above, for including sea grasses--and as they are practically always submerged I imagine their CO2 dynamics is more complex--CO2 would remain in water and not really interact with atmosphere directly--seems adding this is apepars to be someones pet proejct but i am not convinced they need to be included in any GHG inventory --as siad above if include these plants then why not macro algae? i udnerstnd you limit to vascular plants but from a CO2 perspective etc i do not see how macroalgae beds are any different than sea grass meadows.		Reject. Macro algae are not an accretionary environment. While standing stock could be calculated the biomass volumes are considered minor. Seagrass beds are expansive and sequester stocks of carbon in soil via root biomass
E_4_0016	Kumar, Ritesh	4	135	135		term 'managed coastal wetlands' needs to be clarified		Accept

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E_4_0017	Wang, Changyong	4	135	135		In Table4.1, it may be clearer description to replace "Subtype" with "Subactivity".		Accept
E_4_0018	Brown, Lynette	4	136	136		Replace "greenhouse gas" with "GHG".		Accept
E_4_0019	Eggleston, Simon	4	136	157		The definitions of the 3 categories of guidance are confusing and should be re-worded as it confuses IPCC land class descriptions and coastal wetland conversions. The guidance is in three groups which is fine - it is the way they are described that is the issue. The first group is coastal wetlands remaining coastal wetlands whatever IPCC land class they fall into, the second is conversion from coastal wetlands to something else and the third is conversion to coastal wetlands. Unfortunately these do not easily map onto the IPCC land classes and land remaining and land converted, so some text that reduces this confusion is needed.		Accept
E_4_0020	Lyde, Gund	4	137	138		This is not clear - 'Wetlands' is one of the IPCC 6 land use categories. Wetlands may be inland or coastal. The sentence 'Land converted to another Land-use category in which the land converted is a coastal wetland' can be simplified 'Coastal wetlands converted to another land use category.' (lines 137-138). .		Accept
E_4_0021	Lyde, Gund	4	138	139		Conversion to a Land-Use ...classified.' I think you are trying to say 'Conversion from wetlands to another land use category'		Accept

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E_4_0022	Ma, Chun	4	138	139		The classification system or citation of the coastal wetland classification should be given, so that readers can find the value for a specific wetland.		Accept
E_4_0023	Brown, Lynette	4	144	144		Replace "greenhouse gas" with "GHG".		Accept
E_4_0024	Brown, Sandra	4	146	149		the complete sentence here----not sure I get the point here--of course wetlands can, like other ecosysems, emit or remove significant GHG gases regardless of a conversion--so what is the point? -thekey is how are these changed due to human activities--		Accept
E_4_0025	Brown, Lynette	4	152	152		Replace "greenhouse gas" with "GHG".		Accept
E_4_0026	Villamizar, Alicia	4	155	155		Tier level sound redundant. Sorry but the meaning of tier in Spanish is "nivel" (level). Please check.		Accept
E_4_0027	Xianmin, Meng	4	156	156		For it is easy to understand, the activity row should be followed by the row of subtype.		Accept

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E_4_0028	Federici, Sandro	4	156	157	4.1	In table 4.1 the activity "Extraction" has been included under land remaining under the same land use. However, all subtypes consist in a change of the land cover and consequent land use (to settlements). Further, the subtype "Land clearing" has been included under the activity "Harvesting of Aquatic Resources (HARV)"; also land clearing of Mangroves (i.e. deforestation) is a land use change (simple harvesting is included either under Wood or Charcoal)". Further, drainage and restoration of Mangroves implies always a land-use change (either deforestation or reforestation).		Accept
E_4_0029	Garcia-Diaz, Cristina	4	156	157		Table 4,1,: is this an exhaustive list of activities. There could be other activities not included here, therefore, the title of the table should be changed to "examples of management activities....", in order to ensure that there is not any measure excluded.		Accept
E_4_0030	Lyde, Gund	4	156	157		Table 4.1 - Consider carrying headers on to succeeding pages		Accept
E_4_0031	Parish, Faizal	4	156	157		What about tidal freshwater swamp forest - was this considered.		Accept with modification. Tidal freshwater swamp was considered and data were insufficient to develop global defaults.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0032	Christian, Robert	4	157	170		(1) The chapter does not discuss sulfur gases that may affect climate. Sulfide containing molecules are commonly produced (2) It also does not discuss intertidal or subtidal flats of mud or sand. These can have considerable primary production from microphytobenthos and macroalgae and all of the other metabolisms discussed for other wetlands.		Reject. Beyond scope of the document.
E_4_0033	Lyde, Gund	4	157	170		What is not covered in this chapter. Most of this paragraph deals with what is covered. It can be reduced to 'Nutrient enrichment effects on CO2 emissions from this type of agricultural run-off affecting mangroves and tidal marshes are not covered as there is inadequate information to provide emission factors for all pools and risk of double-counting across pools. It excludes carbon losses or gains via tidal exchange (see Section 4.6).'		Accept
E_4_0034	Brown, Lynette	4	158	158		Delete space between waste and water - it is one word (see line 160).		Accept
E_4_0035	Lyde, Gund	4	165	165		Change 'marshes is' to 'marshes are'		Accept
E_4_0036	Lovelock, Catherine	4	165			and there are risks of double-counting		Accept

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E_4_0037	Lovelock, Catherine	4	165			I can understand there is inadequate information to give an emission factor associated with agricultural run-off, but is the risk of double counting to do with N or C? This might require 2 sentences in order to clarify what is meant here.		Accept
E_4_0038	Lyde, Gund	4	176	194		Consider including an image or two of coastal wetlands to make the text more interesting		Noted
E_4_0039	Radunsky, Klaus	4	177	185		Figure 4.1: It is suggested to include another box, reflecting the decision whether or not there is a coastal wetland in the country or not (linking to figure 1.1).		Accept
E_4_0040	Penman, Jim	4	178	179		In the top rhombus 'Are information' should be 'Is information'. Actually I am not sure why we need this rhombus and the arrow leading to Box 3. Wouldn't it be covered by the line below, if we make Box 2 a Tier 2 or 3 outcome?		Accept
E_4_0041	Rosenqvist, Ake	4	184	184	4.1	accounts --> account		Accept
E_4_0042	Brown, Lynette	4	185	185		Insert) after Guidelines		Accept
E_4_0043	Parno Guimaraes, Giselle	4	186	194		This topic proposes to assist in identifying the types of coastal wetlands, but the text is very general and should be more objective.		Accept

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E_4_0044	Lyde, Gund	4	188	188		aerial photographs are remotely sensed data.. Delete the 'and' after 'data,'		Accept
E_4_0045	Radunsky, Klaus	4	189	189		Start the sentence as follows: Coastal wetlands ...		Accept
E_4_0046	Radunsky, Klaus	4	192	192		Start the sentence as follows: Thus, coastal wetlands ...		Accept
E_4_0047	Lovelock, Catherine	4	194			a reference for >12% OC and mottling?		Accept
E_4_0048	Lyde, Gund	4	196	196		Consider deleting 'apply the concept of managed land in order to'		Accept
E_4_0049	Lyde, Gund	4	201	205		Consider deleting 'Additionally...pools.'		Accept
E_4_0050	Lyde, Gund	4	207	208		Consider deleting 'when applying the guidance in this chapter is the ecosystem type that'		Accept
E_4_0051	Penman, Jim	4	207	212		I am unsure what this material is trying to convey. It would be an improvement for the sentence An improvement would be for the sentence starting in L 211 to be redrafted to say 'While countries should follow their own national definitions of coastal wetland ecosystem types, this should be done consistently, taking account of the guidance elsewhere in this chapter'		Accept
E_4_0052	Lyde, Gund	4	213	213		Change 'practice' to 'practices'		Accept

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E_4_0053	Lyde, Gund	4	213	228		Box 4.1 - I find this box difficult to understand. Consider deleting		Accept with modification. The box was revised to clarify and enhance user friendly presentation.
E_4_0054	Radunsky, Klaus	4	215	215		Box 4.1: The following wording is suggested: Land of a given land-use category that includes coastal wetlands remaining in the current land-use category:		Accept
E_4_0055	Federici, Sandro	4	217	217	4.1	Mangrove forests cannot be classified as wetland. They are, of course, forests. According to the 2006 IPCC Guidelines wetlands category includes areas of peat extraction and land that is covered or saturated by water for all or part of the year (e.g., peatlands) and that does not fall into the Forest Land, Cropland, Grassland or Settlements categories. Forest land has therefore a higher hierarchical order, and the presence of trees that exceed the forest definition threshold classify mangroves as forest. Different is the case of mangroves that do not reach, or have the potential to reach, the forest thresholds, if any. Maybe you may refer to "mangroves shrubs", if any.		Accept with modification. Text modified and clarified.
E_4_0056	Parish, Faizal	4	219	220		It is more logical that managrove forests would be classified as forests rather than wetlands but after harvesting they would remain as forests - ie appropriate for inclusion in this box.		Accept
E_4_0057	Radunsky, Klaus	4	221	221		Box 4.1: The following wording is suggested: For conversion from a land-use category that includes coastal wetlands to another land-use category:		Accept
E_4_0058	Radunsky, Klaus	4	223	223		Box 4.1: .. classified as coastal wetlands		Accept

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E_4_0059	Radunsky, Klaus	4	226	226		.. Whether the soil type ..		Accept
E_4_0060	Federici, Sandro	4	227	227	4.1	replace: "When mangrove forests classified as Forest Land are deforested..." with "When mangrove forests are deforested..."		Accept
E_4_0061	Lyde, Gund	4	230	230		Consider deleting 'A unique aspect of this chapter in the Supplement is that'		Accept
E_4_0062	Penman, Jim	4	230			Delete 'unique'. I think the duality of mineral and org soils occurs elsewhere.		Accept
E_4_0063	Parno Guimaraes, Giselle	4	231	232		The sentence is confusing. You can not be sure whether or not it is used the same emission factor for different soil types. Using the same emission factor should not be recommended.		Accept
E_4_0064	Federici, Sandro	4	232	232	4.1	I'm surprised that the same eission factor is applied for mineral and organic soils		Accept with modification. Clarified in chapter where the data from these soils have been aggregated and why.
E_4_0065	Lyde, Gund	4	240	241		Delete 'Assumption' Also delete (i) and (ii) as you have them numberd 1 and 2		Accept
E_4_0066	Penman, Jim	4	240	244		These rules look useful but are they complete? What does one do if neither assumption 1 nor assumption 2 is the case?		Accept.
E_4_0067	Brown, Lynette	4	244	244		Durr et al., 2011 is not listed in the References - please add to References or delete from text.		Accept

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E_4_0068	Radunsky, Klaus	4	245	245		Change title to: Land of a given land-use category that includes coastal wetlands remaining in the current land-use category		Accept
E_4_0069	Kumar, Ritesh	4	246	253		The issue of variability in setting wetland boundaries must be highlighted.		Accept
E_4_0070	Parno Guimaraes, Giselle	4	250	251		All methodological guidance is found in section 4.2, 4.3 and 4.4		Accept
E_4_0071	Penman, Jim	4	252			Can one extend the sentence to read '...appropriate methodological guidance in section 4.2'. That would clarify things.		Accept
E_4_0072	Federici, Sandro	4	257	271	4.1	The clearing of Mangrove forests is a land-use change i.e. deforestation; any activity that determine the loss of the mangrove forest cover has to be reported as a change in land use, within the deforestation category (i.e. forest land converted to wetlands).		Accept
E_4_0073	Brown, Sandra	4	261	265		First --where does the excess organic matter come from in the fish ponds/shrimp ponds? And how different would this from from the background amount in the original ecosystem? We clearly need to be able to estimate the change in emissions /removals of GHGs as a result of the activity --not the absolute amount due to the activity alone.		Accept with modification. Only N2O emissions linked to considered based on fish production.

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E_4_0074	Brown, Lynette	4	263	263		Burford and Langton 2001 is not listed in the References - please add to References or delete from text.		Accept
E_4_0075	Lyde, Gund	4	263	263		Burford & Langton 2001 not listed in references		Accept
E_4_0076	Sonwa, Denis	4	263	263		check if the reference "Burford & Langton 2001" is present in the reference		Accept
E_4_0077	Brown, Sandra	4	272	282		refers to sediments rather than soils which I prefer--this is clearly a complex issue as mentioned above --can a tier 1 method and default data be produced for this. How much of fuses actually go directly into atmosphere as opposed to staying dissolved and transported elsewhere and not captured in some other accounting system? although good to try and track all sources of GHGs i expect the effort to do a reasonable job with seagrass beds /fish farming is not worth the effort--the magnitude relative to other sources is not likely to be a key category in any country. And as most seagrass beds will exist in the tropical latitudes along coastlines of developing countries--are we really expecting these countries to spend resources on this flux when others are more significant!		Accept with modification. Only N2O emissions linked to considered based on fish production.
E_4_0078	Brown, Lynette	4	279	279		Do you mean Holmer and Heilskov 2008 (see line 1908)?		Accept
E_4_0079	Lyde, Gund	4	279	279		Holmer & Heilskov 2000 not in references but there is one for 2008. See line 1908-1910.		Accept

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E_4_0080	Kabo-bah, Amos	4	280	281		repetition of "thus" as "..thus it is thus" needs to be corrected		Accept
E_4_0081	Brown, Lynette	4	281	281		Delete "thus".		Accept
E_4_0082	Villamizar, Alicia	4	287	287		Please erase More recently		Accept
E_4_0083	Brown, Sandra	4	287	288		I hardly call a reference to work published in 1993 as more recent!		Accept
E_4_0084	Brown, Lynette	4	293	293		Change the word "as" to "to".		Accept
E_4_0085	Christian, Robert	4	293	294		Salt ponds often are used for longer periods of time. The effects of sea-level rise during years or decades of use may impact what happens with abandonment more than with aquaculture.		Accept with modification. Higher tiers could be used to implement this level of methodological guidance.
E_4_0086	Brown, Lynette	4	294	294		Change the 1st occurrence of the word "in" to "is".		Accept
E_4_0087	Radunsky, Klaus	4	294	294		.. so similar guidance is given ..		Accept
E_4_0088	Kabo-bah, Amos	4	294	294		...so similar guidance in given in both instances needs modification. Statement is not clear		Accept

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E_4_0089	Federici, Sandro	4	296	304	4.1	The clearing of Mangrove forests is a land-use change i.e. deforestation; any activity that determine the loss of the mangrove forest cover has to be reported as a change in land use, within the deforestation category (i.e. forest land converted to wetlands).		Accept
E_4_0090	Parish, Faizal	4	298	298		better to put "pond aquaculture" rather than aquaculture to differentiate from pen aquaculture/mariculture that does not involve excavation		Accept
E_4_0091	Wiseman, Michael	4	299	299		change IN to IS after word guidance		Accept
E_4_0092	Kabo-bah, Amos	4	299	299		...so similar guidance in given in both instances needs modification. Statement is not clear		Accept
E_4_0093	Ye, Siyuan	4	300	1184		There are no methods for estimating changes in soil carbon for Tier 1 associated with filling in the shallow sea and building roads in the coastal wetlands		Accept
E_4_0094	Brown, Lynette	4	306	306		Change the period to a semicolon after "1993"		Accept
E_4_0095	Lyde, Gund	4	306	306		Ertlinmeyer et al 2012 not in references but there is one for Ertlinmeyer and Shuail 2012 - see lines 1809-1812.		Accept
E_4_0096	Brown, Lynette	4	309	309		Insert space after "extraction" and "to".		Accept

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E_4_0097	Radunsky, Klaus	4	309	309		The direct effects of extraction on seagrass meadows are when soil is removed to deepen ...		Accept with modification. Text modified and clarified.
E_4_0098	Wiseman, Michael	4	309	309		possible loss of a space EXTRACTIONON also TODEEPEN		Accept
E_4_0099	Yano, Masato	4	309	309		Replace the word “extractionon” with “extraction on”. Also replace the word “todeepen” with ”to deepen”.		Accept
E_4_0100	Kabo-bah, Amos	4	309	309		extractionon should read "extraction on"		Accept
E_4_0101	Kabo-bah, Amos	4	309	309		todeepen should read " to deepen"		Accept
E_4_0102	Lovelock, Catherine	4	309			to deepen (typo)		Accept
E_4_0103	Brown, Sandra	4	312	312		Talks about the Gulf region--need to be more specific as to which Gulf		Accept
E_4_0104	Brown, Lynette	4	316	316		Delete)		Accept
E_4_0105	Federici, Sandro	4	319	326	4.1	The clearing of Mangrove forests is a land-use change i.e. deforestation; any activity that determine the loss of the mangrove forest cover has to be reported as a change in land use, within the deforestation category (i.e. forest land converted to wetlands).		Accept
E_4_0106	Radunsky, Klaus	4	321	321		Start the sentence as follows: In coastal wetlands ...		Accept

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E_4_0107	Brown, Lynette	4	324	324		Alongiet al., 1998 is not listed in the References - please add to References or delete from text.		Accept
E_4_0108	Lyde, Gund	4	324	324		Alongi et al. 1998 not in references		Accept
E_4_0109	Brown, Lynette	4	328	329		The phrase "good practice" has been italicized in the previous Chapters - format remainder of Chapter for consistency.		Accept
E_4_0110	Brown, Sandra	4	328	329		as long as it stays as a march and only grazed surely the carbon stock in vegetation is likely to be minimally different between with grazing and w/o grazing....this is all that is needed, the difference and like grazing lands it can be nexcluded from accounting		Accept with modification. Activity removed.
E_4_0111	Brown, Lynette	4	343	343		Insert "of" after "effects".		Accept
E_4_0112	Kabo-bah, Amos	4	343	343		the effects nutrients should read "the effects of nutrients"		Accept
E_4_0113	Rosenqvist, Ake	4	343	344	4.1.1	the effects nutrient availability on plant community structure and aboveground and belowground biomass is not well understood. should perhaps be "the effects OF nutrient availability on plant community structure and aboveground and belowground biomass ARE not well understood.		Accept

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E_4_0114	Lovelock, Catherine	4	343	356		In this section the literature cited only concerns salt marsh. There are numerous mangrove studies that could be included: e.g. Feller et al. 2002, 2003, Lovelock et al. 2007 (aboveground growth, photosynthesis); McKee et al. 2007 (roots and reductions in elevation in N fertilized soils), Castenada-Moya et al. 2011 (roots across nutrient gradient),		Accept with modification. Activity removed.
E_4_0115	Lovelock, Catherine	4	345			no references provided for mangroves, but reference provided for tidal marshes. Include fertlization references		Accept with modification. Activity removed.
E_4_0116	Brown, Lynette	4	354	356		Awkward sentence, please try to clarify, mabe divide it into 2 sentences. Also should Simpson et al., 2013 be 2012 (see line 2358)?		Accept
E_4_0117	Yano, Masato	4	358	358		The term “urbanization of the coastal zone” is not clear. To promote understanding, some examples should be provided in this sentence or footnote.		Accept with modification. Activity removed.
E_4_0118	Brown, Lynette	4	359	359		Delte the word "covers".		Accept
E_4_0119	Radunsky, Klaus	4	359	359		Delete: "covers"		Accept
E_4_0120	Brown, Lynette	4	361	361		Delete space between waste and water - it is one word.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0121	Federici, Sandro	4	371	384	4.1	Still, whether mangroves forest is lost, this is a land-use change		Accept with modification. Activity removed.
E_4_0122	Kumar, Ritesh	4	371	384		What is the impact of diversity change on carbon cycles?		Reject. Beyond scope of the document.
E_4_0123	Lovelock, Catherine	4	375			Cite McKee 2011_biological contributions to elevation change (Estuarine Coastal Shelf Science)		Accept
E_4_0124	Brown, Lynette	4	376	376		Delete the word "on".		Accept
E_4_0125	Federici, Sandro	4	385	397	4.1	Is there the case of drainage of mangrove forests without land clearing? Further, whether drainage of mangroves is accompanied by land clearing then it is a land-use change (deforestation)		Accept with modificaiton. Clarified in the secton on mangrove forest management
E_4_0126	Lyde, Gund	4	391	392		Armentano and Menges 1986 not in references		Accept
E_4_0127	Brown, Lynette	4	393	393		Heminga et al., 1998 is not listed in the References - please add to References or delete from text.		Accept
E_4_0128	Lyde, Gund	4	393	393		Heminga et al., 1998 not in references		Accept
E_4_0129	Schwendenmann, Luitgard	4	397	397	4.1.1	not clear what DOM stands for (Dissolved organic matter or dead organic matter, see below)		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0130	Radunsky, Klaus	4	399	399		The following wording is suggested: .. restoration of coastal wetlands, results ..		Accept
E_4_0131	Garcia-Diaz, Cristina	4	402	407		If gains in the carbon sequestration capacity are achieved by wetland restoration, restoration activities should also be accounted in carbon balances		Accept
E_4_0132	Radunsky, Klaus	4	403	403		.. leading to coastal wetland restoration.		Accept
E_4_0133	Brown, Lynette	4	404	404		Should Breithaup be Breithaupt (see line 1646)?		Accept
E_4_0134	Lovelock, Catherine	4	405			This assumes that current C sequestration rates can match those in the past. There are also empirical studies of C sequestration following mangrove restoration - e.g. Osland et al. 2012, Ecosystems.		Accept.
E_4_0135	Radunsky, Klaus	4	408	408		.. soils at created coastal wetland sites are ..		Accept
E_4_0136	Radunsky, Klaus	4	409	409		..layer of natural coastal wetlands ...		Accept
E_4_0137	Federici, Sandro	4	423	429	4.1	Other activities is not needed here. Parties have always the chance to report additional emissions/removals under the category "Other"		Accept
E_4_0138	Radunsky, Klaus	4	425	425		management activity related to coastal wetlands that ..		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0139	Rosenqvist, Ake	4	426	426	4.1.1	"currently" appearing twice in "For example, currently salt production is currently not considered a management activity..."		Accept
E_4_0140	Radunsky, Klaus	4	427	427		delete "currently"		Accept
E_4_0141	Rosenqvist, Ake	4	427	427	4.1.1	Punctuation missing between "provided" and "However"		Accept
E_4_0142	Radunsky, Klaus	4	428	428		Insert fullstop after "provided".		Accept
E_4_0143	Kabo-bah, Amos	4	428	428		provided However should read "provided. However...."		Accept
E_4_0144	Radunsky, Klaus	4	428	429		Rewrite: Thus, the management activity "other activity" allows to capture such potential changes in conditions.		Accept
E_4_0145	Lovelock, Catherine	4	428			missing a "." typo		Accept
E_4_0146	Lyde, Gund	4	436	438		For...classified Good point.		Accept
E_4_0147	Federici, Sandro	4	436	440	4.1.2	The example reported is not correct. According to 2006 IPCC Guidelines, a forest mangroves needs to be classifiedas forest land.		Accept
E_4_0148	Lyde, Gund	4	438	439		For example...classified as Wetlands.' This sentence is not very clear. How does it reflect what was written in the previous sentence. Consider clarifying		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0149	Radunsky, Klaus	4	444	444		Rewrite: ..meet the definition of coastal wetlands as presented ..		Accept
E_4_0150	Schwendenmann, Luitgard	4	461	462	4.2	DOM not defined		Accept
E_4_0151	Brown, Lynette	4	465	465		Replace "greenhouse gas" with "GHG".		Accept
E_4_0152	Federici, Sandro	4	473	476	4.2	Did you consider that different activities may occur on the same piece of land? How has been implemented in equation 4.1 the occurrence of multiple activities on the same piece of land? In general, the chapter does not address the possibility of having more than a single human activity impacting the same hectare. An option could be to assume at Tier 1 that the area is assigned at the activity that is expected, under Tier 1, to cause the higher loss of carbon.		Accept
E_4_0153	Xianmin, Meng	4	473	488		The contribution of "Other Activities" to the Annual change in carbon pools in land remaining in a land use category should be added into the Equation 4.1 As described in line 423 to 429 although it is omitted for current guideline. Correspondingly, its description should be added under line 488 as "delta COA=Change in Carbon stocks associated with creation activity"		Accept with modification. "Other activities" removed.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0154	Christian, Robert	4	473			Equation 4.1 assumes no effect of sea-level rise response and the ability of the coastal wetland to maintain itself in the face of SLR.		Reject. Unfortunately, data are not sufficient to include this level of detail in Tier 1 guidance.
E_4_0155	Brown, Lynette	4	497	497		Delte 1st occurrence of "follow".		Accept
E_4_0156	Federici, Sandro	4	502	503	4.2.1	Still, whether mangroves forest is lost, this is a land-use change		Accept
E_4_0157	Lyde, Gund	4	502	503		Table 4.2 Note 2 - Change 'EXT-D = where biomass are is' to 'EXT-D = where biomass is'		Accept
E_4_0158	Parish, Faizal	4	502	503		Typo in note line 1 "biomass are is" to "biomass is".		Accept
E_4_0159	Penman, Jim	4	502	503		The information in the 3rd col of this table is very dense and needs explaining. Readers will not understand it as it is.		Accept
E_4_0160	Brown, Sandra	4	502	table 4.2		clarify in footnote to this table that equaitons are in Ch 2 of the supplment--also Table is spelt wrong in second line		Accept
E_4_0161	Kabo-bah, Amos	4	503	503		biomass are needs checking.		Accept
E_4_0162	Vermaat, Jan	4	503			first line table footer biomass are should be biomass		Accept
E_4_0163	Rock, Joachim	4	505	508		Tier 1 does also allow for the stock-difference method to assess emissions from removal of woody biomass. Please correct this paragraph.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0164	Brown, Sandra	4	505	516		maybe make each point a bullet to clarify this text		Accept
E_4_0165	Parish, Faizal	4	508	508		clarify or elaborate on the gain loss method		Accept
E_4_0166	Parish, Faizal	4	511	511		Chapter 2 of wetland Supplement or 2006 guidelines		Accept
E_4_0167	Penman, Jim	4	512			What is meant by 'the indirect effect of the extraction activity'?		Accept with modification. Activity removed.
E_4_0168	Parish, Faizal	4	514	516		Why no reference to chapter 2/3 of the current supplement for drainage restoration of organic soils		Accept
E_4_0169	Brown, Sandra	4	519	520		once again clarify these eqations are those in Ch 2 of this supl reprot--(I assume) as confusing when you send them to Vol 4 of 2006 IPCC GL		Accept
E_4_0170	Penman, Jim	4	526			Is there no 2006GL reference? (point applies elsewhere also)		Accept
E_4_0171	Lyde, Gund	4	533	534		Drop the comma after 'factors' and delete 'based at' and substitute with 'at a'		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0172	Federici, Sandro	4	540	545	4.2.1.1.	Please clarify the following text (comments provided in brackets): "In the case of seagrasses, where extraction, nutrient enrichment, or aquaculture resulting in either reduced water quality or redeposition of sediments is significant leading to a land category or pool that is key (seagrasses can be a key category only if wetland is a key category, you cannot find seagrasses anywhere else, further you cannot say "or pool" since a pool can be "key" only if a land category is key), Tier 2 methods can involve data collected from permanent sample plots or other means of acquiring country-specific data as covered in standard texts (what standard texts?). For seagrass meadows, the lag time between water clarity impacts and biomass C stock change could be employed where t2 was estimated as a fraction of initial stock (this is really unclear, my understanding here is that instead to assume that stock losses occur when the activity that causes water pollution strats, it is possible to estimate a more realistic time. what i do not understand how the time t2 could be estimated as a fraction of initial stock. Maybe the intention is to say that t2 should be fixed at time when the carbon stock is reduced at a certain fraction of the initial amount; what fraction? 50% ?)".		Accept with modification. Activity removed.
E_4_0173	Lyde, Gund	4	543	543		"standard texts' - Consider giving an example.		Accept with modification. Text was clarified and augmented.
E_4_0174	Lyde, Gund	4	547	548		Consider naming an example model.		Accept with modification. Example model was considered but not given as to avoid prescription.
E_4_0175	Lyde, Gund	4	551	552		statisically-based sampling' Any sampling done in an inventory should be statistically-based.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0176	Penman, Jim	4	557	558		Where are the data provided in this Guidance?		Accept
E_4_0177	Penman, Jim	4	560			The stock-difference and gain loss approaches are ways to estimate emissions and removals, not methods to calculate emission factors. Please clarify the meaning		Accept
E_4_0178	Wang, Changyong	4	585	637		In section 4.2.1.3, it may be needed to separately add the descriptions on choice of activity data in terms of Tier 2 and Tier3.		Accept
E_4_0179	Parish, Faizal	4	590	590		RAMSAR should be Written Ramsar or Ramsar Convention		Accept
E_4_0180	Parish, Faizal	4	600	606		Harvesting of mangroves can be assessed using air photos or satelite images		Accept
E_4_0181	Penman, Jim	4	603	606		Has remote sensing actually been used operationally (rather than in research projects) for the purposes identified? Can the authors provide references?		Accept
E_4_0182	Brown, Lynette	4	605	606		Awkward, may be missing a word.		Accept
E_4_0183	Kabo-bah, Amos	4	605	607		If these conditions are not present, remote sensing imagery providing data on water clarity using intensity of chlorophyll or concentration of suspended particles other photoimagery can be used and readily available. needs revision		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0184	Lyde, Gund	4	606	606		Consider giving an example of 'photoimagery'		Accept with modification. This text was deleted
E_4_0185	Penman, Jim	4	606			Should say 'and is readily available'. Where? Handwaving statements are not guidance.		Accept with modification. Activity removed and other activity data provided
E_4_0186	Wiseman, Michael	4	607	607		This heading should be on next page		Accept
E_4_0187	Wiseman, Michael	4	622	644		How would the construction of new channels affect the data considering the use of plant machinery and materials could be counter productive		Accept with modification. Activity removed.
E_4_0188	Lyde, Gund	4	624	624		MacDonald et al., 2010 not in references		Accept
E_4_0189	Wiseman, Michael	4	626	626		after surface no full stop needed and the next word should be THIS		Accept
E_4_0190	Federici, Sandro	4	632	633	4.2.1.3	It is unclear why for estimating biomass growth when restoring wetlands it is needed to know the previous wetland coverage. Does it refer to the area (hectares) that was wetland? Why the previous area is a good estimator of the current biomass growth? Further, to estimate biomass growth is not enough to know the increment rate, you need to know also losses, unless you refer to the net increment (gross increment - losses due to natural mortality/turnover) assuming no harvesting		Accept
E_4_0191	Parish, Faizal	4	634	634		Historical Photos "and Satellite images"....		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0192	Lyde, Gund	4	636	636		Consider adding 'GISFish' after 'Systems' and giving the direct URL 'http://www.fao.org/knowledge/documents-detail/en/c/115907/?type=list' instead of the general one for the FAO		Accept
E_4_0193	Abad Viñas, Raul	4	637	638		The heading of the Table 4.3 units are presented as ((gC/100 gDW or % DW) my understanding is that, instead of DW it should to be Dry matter.(d.m.)		Accept
E_4_0194	Lyde, Gund	4	637	638		Table 4.3. Twilley et al. 1992 not found in references. Probably 2413-2414		Accept
E_4_0195	Lyde, Gund	4	637	638		Table 4.3 - there are two Kristensen et al., 2008 in the references - see lines 2015-2019. Which one is correct. If both used, make one 2008a and other 2008b and change text accordingly		Accept
E_4_0196	Wang, Changyong	4	637	638		For Table 4.3, C content of aboveground mangrove biomass does not seem to relate with the climate domain and region where mangroves occur. If due to availability of data or the C content has no significant difference between climate domains or regions, it may be necessary to give a note in the text or below it. It is useful to organize the Table 4.3 with climate domain and region for consistence of other tables in Section 4.2.1.3.		Accept with modification. This level of detail is not considered necessary for Tier 1 implementation. Can be modified at higher tiers.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0197	Penman, Jim	4	637	672		Tables 4.1 to 4.11 appear to be part of a section on activity data, but clearly they are not activity data. Where is the section they belong to? Whith which equations should one use them?		Accept
E_4_0198	Abad Viñas, Raul	4	638	639		The heading of the Table 4.4 units are presented as (tonnes DW ha-1) my understanding is that, instead of DW it should to be Dry matter.(d.m.)		Accept
E_4_0199	Abad Viñas, Raul	4	638	639		Aboveground biomass value for subtropical domain (i.e. 75) is outside of 95% C.I (i.e. 76,84), which it seems a typographical mistake		Accept
E_4_0200	Lyde, Gund	4	638	639		Table 4.4 Ong et al., 1982; not in references but there is an Ong 1982, See line 2195		Accept
E_4_0201	Lyde, Gund	4	638	639		Table 4.4 Lin et al., 1990 not in references. See lines 2064-2065		Accept
E_4_0202	Lyde, Gund	4	638	639		Woofroffe, 1985 not in references		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0203	Brown, Sandra	4	638	table 4.4		Pleae explain how the 95%CI interval was clacualted as a footnote and as it should be equal either side of mean (yes) why not express it that way as +/- X or even as a % of mean. Given the wide ranges for each latitudinal zone, which implies quite a lot of variation and a high SD, i am surprised at how small the CI is for all these values. there is definitley something wrong with the CI calcuations -- there is no way the 95% CI is less than 5% of the mean-- which is what these values in table represent. in fact there seems to be a problem with 95%CI in all table here in this chapter--maybe it is not the 95% CI?		Accept with modification. 95% Cis revised.
E_4_0204	Abad Viñas, Raul	4	640	641		The heading of the Table 4.5 units are presented as (tonnes DW ha-1) my understanding is that, instead of DW it should to be Dry matter.(d.m.)		Accept
E_4_0205	Parish, Faizal	4	641	642		Mangrove not mangroves in the title		Accept
E_4_0206	Lyde, Gund	4	642	643		Table 4.7 Kauffman and Donato, 2012 and Bosire et al., 2012 not in references		Accept
E_4_0207	Parish, Faizal	4	642	643		No units given. Value for sonneratia Alba is less than 10% of aaverage. This does not make sense and may be a typo.		Accept
E_4_0208	Lyde, Gund	4	651	652		Table 4.8 Figueroa et al. 1988; Jenssen 1980; Keefe and Boynton 1973; Ketner 1972; Dunn 1981 not in references		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0209	Lyde, Gund	4	651	652		Table 4.8 Squires and Good 1974 - Check spelling of lead author - See lines 2373 - 2374		Accept
E_4_0210	Lyde, Gund	4	651	652		Table 4.8 Smith et al. 1979 not in references - but there is one for Smith et al 1978 - See lines 2363-2363		Accept
E_4_0211	Parish, Faizal	4	651	652		Does this include tidal freshwater swamp forests such as some bottomland hardwood forests in which case biomass should be much higher		Reject. Currently insufficient data to provide generic default data.
E_4_0212	Abad Viñas, Raul	4	666	667		The heading of the Table 4.9 units are presented as (tonnes DW ha ⁻¹) my understanding is that, instead of DW it should to be Dry matter.(d.m.)		Accept
E_4_0213	Abad Viñas, Raul	4	666	667		Aboveground biomass value for tropical domain (i.e. 6.0) is outside of 95% C.I (i.e. 6.20, 7.89), which it seems a typographical mistake		Accept
E_4_0214	Lyde, Gund	4	666	667		Table 4.9 Drop the 'b; after Brouns 1987 as there is no '1987a' in reference. See line 1652		Accept
E_4_0215	Lyde, Gund	4	666	667		Table 4.9 Povidisa & Delefosse 2009 should probably be Povidisa et al. 2009. See 2268		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0216	Lyde, Gund	4	666	667		Table 4.9 Calleja et al. 2005 not in references. Perhaps the year should be 2006 as shown on line 1676.		Accept
E_4_0217	Lyde, Gund	4	666	667		Table 4.9 Heijs 1984, Kirkman & Reid 1980, Masini et al. 2001, Nienhuis & Bree 1980, Powell 1989, Stevensen 1988, Robertson & Mann 1974 not listed in references		Accept
E_4_0218	Lyde, Gund	4	666	667		Table 4.9 Kraemer & Alberte 1993 not in references but there is a 1995 publication See line 2008		Accept
E_4_0219	Lyde, Gund	4	666	667		Table 4.9 Longstaff et al 2000 not in references but there is a 1999 publication. See line 2083,		Accept
E_4_0220	Lyde, Gund	4	666	667		Table 4.9 Change McMahan to McMahan		Accept
E_4_0221	Lyde, Gund	4	666	667		Table 4.9 Guidetti et al. 2002 not in references but there is a Guidetti and Bussotti 2002 listed. See line 1860		Accept
E_4_0222	Parish, Faizal	4	666	669		why 396 datapoints for tropical in Table 4.10 and 137 in Table 4.9. Ratios can only be calculated after knowing the AGB.		Accept with modification. Revised (and table 4.9 removed).
E_4_0223	Lyde, Gund	4	668	669		Table 4.10 Guidetti et al. 2002, Herbert and Fourqurean 2009, Herbert & Fourqurean 2008, Masini et al. 2001, Powell 1989. Stevensen 1988 not in references,		Accept
E_4_0224	Lyde, Gund	4	668	669		Table 4.10 Change McMahan to McMahan		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0225	Lyde, Gund	4	668	669		Table 4.10 Olesen & Sand-Jensen 1994 not in references but there is a 1993 publication See line 2193.		Accept
E_4_0226	Abad Viñas, Raul	4	671	672		The heading of the Table 4.11 units are presented as ((gC/100 gDW or % DW) my understanding is that, instead of DW it should to be Dry matter.(d.m.)		Accept
E_4_0227	Lyde, Gund	4	671	672		Table 4.11 Fourqurean & Zieman 1992 not in references		Accept
E_4_0228	Brown, Sandra	4	680	680		the word extant? Seems to me to be wrong--do you mean a large number of studies existetc..		Accept
E_4_0229	Brown, Lynette	4	694	694		Replace "region specific" with "region-specific".		Accept
E_4_0230	Brown, Lynette	4	695	695		Spell out 1st occurrence of BCEF - what is it an abbreviation for?		Accept
E_4_0231	Brown, Sandra	4	716	716		use of DOM for dead organic matter--I caution against this as this is a typical acronym for dissolved organic matter and very much relevant when talking about wetlands--so suggest you find another term --why not at least dead organic carbon pool DOCP or if want to stick with DOM--add P so it is dead organic matter pool DOMP		Accept with modification. DOM replaced by dead organic matter throughout

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0232	Zhang, Xiuyu	4	716	716		coarse woody debris not really Dead Organic Matter, some are Living organic matter, such as fallen trees, which blown down with not a long time. Please delete "coarse".		Accept with modification. DOM replaced by dead organic matter throughout
E_4_0233	Schwendenmann, Luitgard	4	716	1393	4.2.2	the abbreviation DOM for Dead Organic Matter is misleading. DOM often stands for dissolved organic matter. To avoid confusion another acronym should be used for dead organic matter		Accept with modification. DOM replaced by dead organic matter throughout
E_4_0234	Brown, Lynette	4	717	717		Should "wood" be "roots"?		Accept
E_4_0235	Lyde, Gund	4	717	717		Consider adding 'in' before 'diameter'		Accept
E_4_0236	Lyde, Gund	4	717	718		Where is dead material > 2cm but <10 cm accounted for?		Accept
E_4_0237	Federici, Sandro	4	724	725	4.2.2	What does mean consistency here? How consistency could be achieved? Otherwise delete this sentence		Accept
E_4_0238	Penman, Jim	4	731			Add a sentence saying 'Default data on DOM carbon stocks are provided in tables...' We can only include DOM at Tier 1 if default data are provided.		Accept
E_4_0239	Federici, Sandro	4	739	740	4.2.2	Those activities in mangrove forests determine a land-use change from forest land (are mangrove forest) to other uses; e.g. wetlands, settlements, other land.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0240	Federici, Sandro	4	740	741	4.2.2	Please replace the word "extant"		Accept
E_4_0241	Federici, Sandro	4	741	743	4.2.2	How could be that drainage does not affect biomass vegetation?		Accept
E_4_0242	Federici, Sandro	4	749	749	4.2.2	Again, activities that determine a change in cover, and consequent use, of mangrove forests are to be reported as conversion of land use. E.g. forest land converted to wetland, forest land converted to settlements, forest lands converted to other land. There is no point for reporting those activities under forest land remaining forest land		Accept
E_4_0243	Federici, Sandro	4	749	749	4.2.2	In table 4.12; for this: "AQ, SP, EXT-D2: At start of activity, apply Eq. 2.18 or 2.19; DOMin = 0 and DOMout = DOM oxidized upon disturbance; Table 4.13" you should add guidance for the use of eq. 2.19. I guess a proper guidance should be DOM at t2 = 0		Accept with modification. Table removed, guidance clarified.
E_4_0244	Federici, Sandro	4	749	749	4.2.2	In table 4.12; redraft: "AQ, SP: for abandonment phase, apply Eq. 2.18 and 2.20 or 2.19; Table 4.13" as "AQ, SP: for abandonment phase, apply Eq. 2.19 or 2.18 and 2.20; Table 4.13		Accept with modification. Table removed, guidance clarified.
E_4_0245	Wiseman, Michael	4	749	749		Table 4.12 headings should be on next page with the table content		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0246	Penman, Jim	4	749	750		The information in the 3rd col of this table is very dense and needs explaining. Readers will not understand it as it is.		Accept with modification. Table removed, guidance clarified.
E_4_0247	Wang, Baodong	4	749	750		Table 4.12: other management activities which were not listed in this table may increase DOM significantly, for instance, thinning out of mangrove forests and stumping of bush, these management activities not for Harvesting of Aquatic Resources would increase DOM significantly, and thus should be calculated in DOM content.		Accept with modification. Table removed, guidance clarified.
E_4_0248	Lyde, Gund	4	750	783		Just out of curiosity where does monitoring woody debris on beaches and in the water come in if at all- like logs along the coastal beaches, etc. See Kratz, T.K., Bolgrien, D.W., Giblin, S. & O'Leary, J. (2002) Human influences on the spatial distribution of coarse woody debris in lakes in Northern Wisconsin, USA. Verhandlungen Internationale Vereinigung Limnologie, 28, 545-548.; Mac Nally, Ralph, et al. 2000 Current Loads of Coarse Woody Debris on South-Eastern Australian Floodplains. Report Number R7007.II. Murray-Darling Basin Commission, Natural Resource Management Scheme I & E Program, Riverine Program. 20 p. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.2585&rep=rep1&type=pdf ; and Marburg, Anna E. et al. 2006. Natural and anthropogenic variation in coarse wood among and within lakes. Journal of Ecology 94:558-568. http://www.ctic.org/media/users/taylor/OWOW/Natural%20and%20Anthropogenic%20Variation%20in%20Coarse%20Wood%20Among%20and%20Within%20Lakes.pdf		Reject. Beyond scope of the document.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0249	Federici, Sandro	4	760	767	4.2.2	Again, activities that determine a change in cover, and consequent use, of mangrove forests are to be reported as conversion of land use. E.g. forest land converted to wetland, forest land converted to settlements, forest lands converted to other land. There is no point for reporting those activities under forest land remaining forest land		Accept
E_4_0250	Sato, Atsushi	4	760	767		The description of Tier.1 Mangrove forest only refers the cases for Aquaculture, Salt Production and Extraction activities. The cases for Drainage, Harvesting of Aquatic Resources, Nutrient Enrichment, Hydrologic/Sediment Diversion, Restratorn&Creation, Other Activities should be also explained.		Accept with modification. Activites that remain in the guidance have been clarified.
E_4_0251	Lyde, Gund	4	761	761		Aquaculture, Salt Production, and Extraction - no need to capitalize		Accept
E_4_0252	Kabo-bah, Amos	4	763	763		Gail-loss should be "Gain-Loss"		Accept
E_4_0253	Brown, Lynette	4	764	764		Replace "Gail-Loss" with "Gain-Loss".		Accept
E_4_0254	Sato, Atsushi	4	764			Gail-Loss must be "Gain-Loss"		Accept
E_4_0255	Penman, Jim	4	771			Should say 'Tier 2 methodologies also employ Equations 2.18 or 2.19 using country-specific data...' Th ewhole point of Tier 2 is to use CS data, so it is not simply a matter of encouragement.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0256	Federici, Sandro	4	774	774	4.2.2.1	replace "conversion" with "transfer". This is a carbon transfer indeed.		Accept
E_4_0257	Brown, Lynette	4	781	781		taking of changes is awkward - please clarify sentence		Accept
E_4_0258	Lovelock, Catherine	4	781			5 x 5 m plots? Do you need to be this prescriptive. Smaller plots are often appropriate when forests are very small in stature or very dense, e.g. I think Adame/Kauffman used 2 m radius plots in the scrub forests of Mexico. Adame et al. 2013 Plos One	Attachment_E_4_0258.pdf	Accept
E_4_0259	Lovelock, Catherine	4	782			1 x 1 m traps? Do you need to be this prescriptive. E.g. CARICOMP Method (UNESCO project) uses 0.5 x 0.5 m litter traps. Why cite Senger and Snedaker as the authority on methods? I think they provide examples but not the full range of approaches that have been used.		Accept
E_4_0260	Federici, Sandro	4	786	790	4.2.2.2	Again, activities that determine a change in cover, and consequent use, of mangrove forests are to be reported as conversion of land use. E.g. forest land converted to wetland, forest land converted to settlements, forest lands converted to other land. There is no point for reporting those activities under forest land remaining forest land		Accept
E_4_0261	Federici, Sandro	4	790	792	4.2.2.2	move this sentence under "Tidal marsh and Seagrass meadow"		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0262	Wang, Changyong	4	790	792		Please recheck whether the carbon stock or the change in C stocks is assumed to be zero. In line 745-746, it has been mentioned that the change in C stocks of DOM is assumed to be zero.		Accept
E_4_0263	Lyde, Gund	4	802	803		Table 4.13 Robertson et al 1989 not in reference - but there is a Robertson and Daniel 1989. See line 2308,		Accept
E_4_0264	Brown, Sandra	4	802	T 4.13		something wrong with values in this table--seems the numbes in () are the range perhaps? But clearly not 95% CI		Accept
E_4_0265	Brown, Lynette	4	808	808		Replace "is" with the word "are".		Accept
E_4_0266	Kabo-bah, Amos	4	818	818		poyhaline should read "polyhaline"		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0267	Penman, Jim	4	820	830		<p>I found these paragraphs rather jumbled. Suggest redraft along the lines of: The management activities Aquaculture, Salt Production, Extraction and Drainage result in the most significant effects on the soil carbon pool, especially where the coastal water table is affected. Conversely, restoration or creation of coastal wetlands can result in increased net C accumulation and subsequently net removals of CO₂ from the atmosphere. These activities can also be significant.</p> <p>Activities associated with either localised or extensive lowering of the water table in coastal areas are often associated with the construction of drainage channels leading to CO₂ fluxes due to oxidation of dissolved organic and particulate organic carbon in the water carried by drainage channels. However, there is currently not enough information to provide emission factors for C exports (see Future Methodological Development).</p> <p>Activities do not necessarily result in a land-use category change which needs to be taken into account when reporting emissions</p>		Accept
E_4_0268	Federici, Sandro	4	823	824	4.2.3	How? This is a generic statement, either specify or delete it		Accept
E_4_0269	Li, Fadong	4	846	846		In table 4.14, calculation method for EF of "other activities" was missed. Therefore, it is impossible to get the result. To do that, "Eq. 2.61" should be change to "Eq. 2.61,2".		Accept with modification. Table removed, guidance clarified where appropriate.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0270	Penman, Jim	4	846	847		The information in the 3rd col of this table is very dense and needs explaining. Readers will not understand it as it is.		Accept with modification. Table removed, guidance clarified where appropriate.
E_4_0271	Yano, Masato	4	846	847		Table 4.14 [Extraction activity] Default value of “P” is not clear. If it is assumed to be 1 (same as aquaculture and salt production), such descriptions should be added in this table.		Accept
E_4_0272	Yano, Masato	4	846	847		Table 4.14 [Extraction activity in seagrass meadow] According to this table, default data is provided in Table 4.17. However, this category applies same methodology as “construction” phase of aquaculture and salt production. Therefore, replace the word “Table 4.17” with “Table 4.16”.		Accept
E_4_0273	Yano, Masato	4	846	847		Table 4.14 [Harvesting activity in mangrove forest] According to line 1003-1004, this category follows Equation 4.2. Therefore, replace the words “Eq. 2.6” with “Eq. 4.2”.		Accept
E_4_0274	Brown, Lynette	4	849	849		Replace "emission factors" with "EFs".		Accept
E_4_0275	Penman, Jim	4	850	851		what does (EXT-D) or 2) mean? Similarly (EXT-I)		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0276	Penman, Jim	4	862	864		How is this differentiation between organic and mineral soils made? Different equations? Different emission factors?		Accept with modification. Text is clarified.
E_4_0277	Federici, Sandro	4	870	970	4.2.3.1	growing stock of what? It is unlikely that a stock that grows causes CO2 emissions, the growth of a stock is usually the consequence of either a CO2 uptake or a carbon transfer.		Accept
E_4_0278	Lyde, Gund	4	876	876		Pa´ez-Osuna 2001 - Check with spelling in references line 2217		Accept
E_4_0279	Brown, Lynette	4	882	882		Stevenson et al., 1999 is not listed in the References - please add to References or delete from text.		Accept
E_4_0280	Lyde, Gund	4	882	882		Stevenson et al 1999 not in references.		Accept
E_4_0281	Wang, Changyong	4	884	885		the abandoned aquaculture ponds, the emission of CO2 are assumed to be the same as that from deforested lands; however, it should be noted that the soil layer (up to 1 m) has been removed during the construction of these ponds, and thus losses in soil carbon stock and DOM result. This situation is different from that in deforested lands. Considering that dense OM original from fed deposits in the pond sediment during the use period, leading to nutrient-enrichment in the sediment, the CO2 emissions from these saturated and abandoned ponds may be high; the emission factor may refer to the EF from eutrophical wetlands, given in 4.2.3.3.		Accept with modification. Revised to take into account that there is not yet adequate study of this process to develop an EF

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0282	Christian, Robert	4	887			This assumes that the length of time and hydology in the context of sea-level rise have the elevation high enough to allow revegetation.		Accept with modification. Revised to take into account that there is not yet adequate study of this process to develop an EF
E_4_0283	Brown, Lynette	4	889	889		Replace "emission factors" with "EFs".		Accept
E_4_0284	Penman, Jim	4	892	898		Unclear how the terms (EXT-D) and (EXT-I) relate to the equation		Accept with modification. The presentation and guidance around this activity was revised and clarified.
E_4_0285	Li, Fadong	4	897	897		the EQUATION 4.2 is wrong. Check it please.		Accept with modification. Equations revised.
E_4_0286	Brown, Lynette	4	897	899		The term "CO ₂ -SO _{a,e} " is not defined. Check equation and make sure defined term is identical, there appear to be several formatting errors.		Accept with modification. Equations revised.
E_4_0287	Federici, Sandro	4	899	901	4.2.3.1	Please redraft as follows: "CO ₂ SO _{a,e} = CO ₂ emissions from either organic or mineral soils for each activity(a) (Aquaculture, Salt Production, occurring in the three phases of construction, use and abandonment, and Extraction) in all ecosystem types(e) (mangrove forest, tidal marsh and seagrass meadow), unit = tonnes C yr ⁻¹ ".		Accept with modification. Equations revised.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0288	Federici, Sandro	4	902	905	4.2.3.1	This definition is confusing. Equation 4.2 has three terms with Ae, each of them should be clearly defined and further stratified per activity: ACONSTR,a,e (this may include, as far as I understand, total area of aquaculture or salt production that is under construction, in mangrove forest and tidal marsh, or the total area under extraction, in mangrove forest and tidal marsh); AUSE,e (this may include, as far as I understand, total area of aquaculture that is under use, in mangrove forest, tidal marsh and seagrass meadow); AABAN,e (this includes, as far as I understand, total area that was subject to aquaculture, salt production and extraction, in mangrove forest, tidal marsh and seagrass meadow)		Accept with modification. Equations revised.
E_4_0289	Federici, Sandro	4	910	912	4.2.3.1	If P should be applied also to use and abandonment then this term to be added in the equation for calculating the emissions associated with use and abandonment of aquaculture and salt production.		Accept with modification. Equations revised.
E_4_0290	Federici, Sandro	4	916	917	4.2.3.1	What about extraction after abandonment?		Accept with modification. It was added that it is good practice to continue to track future activities and apply emission factors as recommended
E_4_0291	Federici, Sandro	4	931	932	4.2.3.1	I suggest to redraft as "It is assumed that aquaculture sites are abandoned after 10 years of use".		Accept
E_4_0292	Penman, Jim	4	931	932		Would be clearer to redraft as follows: 'It is assumed that after 10 years after the practice is abandoned, the emissions associated with aquaculture use cease.'		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0293	Ye, Siyuan	4	931	975		I do not think it is reasonable that CO2 emission from abandoned aquaculture ponds on tidal marshes were assumed to be zero. I would like to suggest to use the emission factor of Table 4.18. The example on line 1165-1177 was applying the factor of 7.9 in Table 4.20, please check this contradiction.		Accept with modification. This level o detail is encrouaged for higher Tier implementation.
E_4_0294	Penman, Jim	4	932			'practise' should be 'practice'		Accept
E_4_0295	Penman, Jim	4	939			Would be clearer to redraft as follows: 'It is assumed that after 10 years after the practice is abandoned, the emissions associated with aquaculture use cease.'		Accept
E_4_0296	Brown, Lynette	4	945	945		Insert "area" before "covered".		Accept
E_4_0297	Brown, Lynette	4	949	949		Delete comma after on.		Accept
E_4_0298	Brown, Lynette	4	953	953		extraction the method countries is awkward - please clarify.		Accept
E_4_0299	Brown, Lynette	4	957	957		Delete the first occurrence of "the".		Accept
E_4_0300	Wiseman, Michael	4	957	957		Remove the word THE after 'based on'		Accept
E_4_0301	Kabo-bah, Amos	4	957	957		Tier 3 methods can employ models to estimate CO2emissions based on the whether the practise involves needs revision		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0302	Penman, Jim	4	957			'practise' should be 'practice'		Accept
E_4_0303	Wiseman, Michael	4	962	962		Fifth word USE should be italics		Accept
E_4_0304	Brown, Lynette	4	966	966		Capitalize the f in "forest" for consistency.		Accept
E_4_0305	Brown, Lynette	4	968	968		Should "4.54" be "4.15"?		Accept
E_4_0306	Ye, Siyuan	4	968	968		please check this line: Tables 4.54-4.18, if it is a mistake		Accept
E_4_0307	Brown, Sandra	4	968			Tables 4.15 -4.18 perhaps?		Accept
E_4_0308	Penman, Jim	4	968			Is the table number range correct?		Accept
E_4_0309	Federici, Sandro	4	969	970	4.2.3.1	This sentence is not in the right place (should be in the activity data section); further it is not correct. It is very likely that the area reported in a year under construction , or use, or abandonment will be different from areas reported in a previous or following year because of new construction, new area under use, new areas abandoned and finally abandoned areas that are no more to be considered under this use (a new use intervened)		Accept
E_4_0310	Lyde, Gund	4	971	972		Table 4.15 Adame et al. (2012) - Drop the () or add to all the other references,		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0311	Brown, Lynette	4	971	976		In all previous tables in this reportt references are organized by date (oldest to most recent) not alphabetical - please format for consistency. Also "range" has been capitalized in all tables in this Chapter - please format for consistency.		Accept
E_4_0312	Ye, Siyuan	4	973	973		I doubt EF value (9.5) in seagrass meadow was much higher than Mangrove forests and tidal marshes.if looking at EF=7.9 in table 4.20, I speculate the EF in Table 4.17 for seagrass meadow should lower than 7.9 in Table 4.20.		Reject. The two tables deal with different activities, 4.17 realtes to aquaculture use while 4.2 relates to drainage.
E_4_0313	Lyde, Gund	4	974	975		Table 4.17 Alongi 1999b not in references but thre is an Alongi et al. 1994b at line 1586. In any case drop the b after 1994 as there is no 1994a,		Accept
E_4_0314	Lyde, Gund	4	975	976		Table 4.18 Alongi et al. (1998) not in references. Consider dropping the () around the years in this table or add everywhere else to be consistent,		Accept
E_4_0315	Federici, Sandro	4	989	1019	4.2.3.2	Here It should be specified that the loss of cover does not change the use since regeneration of forest cover is expected. Otherwise this is a land-use change activity that need to be reported in another section of the chapter (coastal wetland converted to other uses)		Accept.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0316	Wang, Aijun	4	991	993		If the biomass above ground is cut off, the particle organic carbon will be buried still, and the buried flux is related to the concentration of particle organic carbon, regional sediment characteristics, sedimentation rates, etc.		Reject. We assume removal of the aboveground biomass, and it is unlikely to be buried
E_4_0317	Lovelock, Catherine	4	996			activities like blood worm harvesting in seagrass is likely to disrupt surface soils and lead to emissions where disturbance is high - this is mentioned in the introductory section. Check for consistency here.		Accept
E_4_0318	Federici, Sandro	4	1002	1004	4.2.3.2	It is table 4.18. Further, whether equation 4.2 applies to this activity also then such information needs to be added to equation 4.2 title and legenda		Accept
E_4_0319	Yano, Masato	4	1003	1003		Replace the words “Table 4.17” with “Table 4.18”.		Accept
E_4_0320	Penman, Jim	4	1003	1004		It isn't clear why harvesting should lead only to estimation of an abandonment term		Accept with modification. Guidance revised & moved to forest management
E_4_0321	Penman, Jim	4	1020	1040		I guess we are still talking about CO2; why then should nutrient enrichment lead to emissions? Not clear what is going on.		Accept with modification. Activity removed.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0322	Yano, Masato	4	1021	1022		In Table 4.19, default data for mangrove forest is not provided, which means that guidance is provided only in the case of seagrass meadow. Therefore, delete the words “mangrove forests and”.		Accept with modification. Activity removed.
E_4_0323	Wang, Aijun	4	1022	1024		The author set the emission factor of tidal marsh as the same value for mangrove forests and seagrass meadows due to insufficient data. Do the exist data support this method? If the difference of these two values are small, then the emission factor can be set as the same value; if the difference is large, then the calculation should be take the real data of the tidal marsh.		Accept with modification. Activity removed.
E_4_0324	Lovelock, Catherine	4	1022			EF only provided for seagrass in tables 4.19 - not mangrove		Accept with modification. Activity removed.
E_4_0325	Federici, Sandro	4	1028	1029	4.2.3.3	How? Please provide additional guidance on how to apply Eq. 2.6, Vol. 4 in conjunction with equation 4.2. Further, add to title and legenda of eq 4.2 information related to the use of such equation for this activity (nutrient enrichment)		Accept with modification. Activity removed.
E_4_0326	Li, Fadong	4	1029	1029		mangrove data were recommened to add into the table 4.19 if it is possible since the mangrove is the most important element in this case.		Accept with modification. Activity removed.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0327	Kabo-bah, Amos	4	1035	1035		associated nutrient needs revision		Accept
E_4_0328	Federici, Sandro	4	1038	1040	4.2.3.3	Please, redraft as follows: "If nutrient enrichment is a significant source of emissions in a managed land category, it is good practice to report emissions associated with nutrient enrichment by applying Tier 2 or 3 methods."		Accept
E_4_0329	Federici, Sandro	4	1041	1045	4.2.3.4	Please, redraft as follows: Annual change in carbon stocks on coastal wetland managed for hydrologic and sediment diversion may occur in mangrove and tidal marsh ecosystems; however, the Tier 1 assumption is that no net change occurs." NB this activity cannot contribute to a key category since it is assumed, by default, that its contribution is 0. Further, please add some guidance for higher tiers (2&3)		Accept with modification. Activity removed.
E_4_0330	Penman, Jim	4	1044			Why 'also'? This part of the sentence doesn't make sense with the earlier part		Accept
E_4_0331	Li, Fadong	4	1052	1052		The present Equation 4.3 looks like a method estimating CO2 emission from partially drained wetland and the fraction of area is assigned as 1 under Tier 1. I suggest the equation be modified and the CO2 emission is calculated as the sum of both from fully drained and partially drained but with these two emissions disaggregated in the equation. Under Tier 1, the emission factor from partially drained wetlands can be assumed to be zero.		Accept
E_4_0332	Brown, Lynette	4	1053	1057		The term EFDR,e does not appear in Equation 4.3, should it?		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0333	Federici, Sandro	4	1055	1055	4.2.3.5	Add the word "Total" before "CO2".		Accept
E_4_0334	Federici, Sandro	4	1056	1056	4.2.3.5	Please, redraft as follows: "A = land area under drainage of ecosystem type(e), units = ha"		Accept
E_4_0335	Federici, Sandro	4	1059	1059	4.2.3.5	whether you want retain Fpd then you need to multiply by (1-Fpd); Otherwise you may use Fd = fraction of area drained. As it is does not work. F should be aimed at excluding the portion of area under drainage that is not drained (I guess this was the intention).		Accept
E_4_0336	Lyde, Gund	4	1060	1061		Table 4.20 Camporese et al. (2008) not in references		Accept
E_4_0337	Parish, Faizal	4	1060	1061		Why no separation of mineral and organic soils. Drained organic soil should have significantly higher emission. Why no differentiation between tropics and temperate/boreal areas as there will be significant differences. Any cross reference to chapter 2 this supplement for drained organic soils.		Accept with modification. There is insufficient scientific evidence to separate organic and mineral tidal soils for drainage or on response of tidal soils in different climate regimes
E_4_0338	Penman, Jim	4	1065	1069		Are the second and third sentences of this paragraph related? The paragraph in general appears garbled. In L 1069 'as reported in' should say 'given in' because reporting should be reserved for reporting of emissions and removals, using reporting tables.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0339	Penman, Jim	4	1065			what period of time?		Accept with modification. Text was clarified:emissions persist as long as soil remains drained or as long as organic matter remains
E_4_0340	Federici, Sandro	4	1066	1066	4.2.3.5	Please delete: "..., further drainage is initiated..."; a further drainage on areas under drainage does not change the final fate of soil carbon stocks, which is (according to your previous text) to be fully oxidised.		Accept
E_4_0341	Federici, Sandro	4	1067	1069	4.2.3.5	Could you provide examples of drainage of mangroves and marshes without changing the use? Why draining those ecosystems if there is not an alternative use of the land to implement in them? Further, could a mangrove forest drained still contain mangroves? could a marsh drained be a marsh? I guess that any drainage implies (is finalized at) a change in use of the land		Accept
E_4_0342	Penman, Jim	4	1067	1072		I am worried that whether or not LUC has occurred can lead to different methodologivcal advice, because we established early on in this chapter that this could just be a mater of definition. Surely it must be the process that matters.		Accept
E_4_0343	Brown, Lynette	4	1070	1070		Insert dash between "Land Use".		Accept
E_4_0344	Brown, Lynette	4	1071	1071		Insert period after "Chapter".		Accept

<Review comments by experts on Chapter 4 of the Second Order Draft of Wetlands Supplement>

ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0345	Parish, Faizal	4	1073	1076		Disaggregate according to climatic region, between mineral and organic soils and by drainage depth.		Accept with modification. This was encouraged to be addressed at higher Tiers
E_4_0346	Federici, Sandro	4	1077	1144	4.2.3.6	The use of terms as re-wetting, restoration, rehabilitation, re-establishment and creation is not fully consistent with that in chapter 3. The use of consistent definitions across chapter is a fundamental requirement of the Guidelines.		Accept
E_4_0347	Ye, Siyuan	4	1077	1177		The emissions pertaining this section is not so called anthropogenic greenhouse gas emissions as indicated at the beginning of this chapter.		Accept
E_4_0348	Brown, Lynette	4	1086	1087		The definition of maturation seems arbitrary. A restored/rehabilitated/re-established system should mature quicker than a created system. Additionally a herbaceous system will mature more rapidly than a shrub or forested system. Please include additional discussion or citation for this definition.		Accept
E_4_0349	Federici, Sandro	4	1089	1089	4.2.3.6	CO2 emissions and removals		Accept

<Review comments by experts on Chapter 4 of the Second Order Draft of Wetlands Supplement>

ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0350	Federici, Sandro	4	1090	1091	4.2.3.6	upon rewetting of previously drained soil, or re-establishment of water quality, creation of biomass by purposeful planting or restoration of biomass is initiated. What does mean this? Further, here guidance are about soil stock change so why to refere to biomass creation (?) restoration?		Accept
E_4_0351	Federici, Sandro	4	1091	1091	4.2.3.6	Which "transient period"? Where such a period is defined?		Accept
E_4_0352	Penman, Jim	4	1091			'transient' should say 'transition'. 20 years seems a long time for no removals. Would it not be more realistic to ramp up to the natural rate over this period?		Accept with modification. This text was modified to reflect the time scale for removals with respect to vegetation.

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0353	Federici, Sandro	4	1094	1098	4.2.3.6	My understanding of this guidance is that after 20-years from the restoration/creation of a coastal wetland (a so-called transient period) the soil carbon stock change needs to be estimated/reported (for the firsts 20-years is assumed to be 0). This is not consistent with the general guidance provided by the 2006 IPCC Guidelines for estimating stock changes in soils, which establish that soil stock starts to change immediately after the change in use/management of land and for a period of 20-years (after 20-years a new equilibrium achieved). Further, it should be specified how long the Emission factor (this is indeed a removals factor and it would be much better to consider it a carbon-stock-change factor (see 2006 IPCC Guidelines)) should be applied (which means that it should be clarified when the wetland could be considered no more under restoration/creation and carbon-stock-change factors for natural wetlands be applied).		Accept with modification. Modified and consistent use of terms and methodology applied
E_4_0354	Penman, Jim	4	1101			'transient' should say 'transition'. Please check for other occurrences.		Accept with modification. Modified and consistent use of terms and methodology applied
E_4_0355	Federici, Sandro	4	1107	1118	4.2.3.6	Those are not "CO2 emissions"; those are carbon stock increases or net CO2 removals.		Accept with modification. Text was clarified.
E_4_0356	Lyde, Gund	4	1132	1133		Table 4.21 Ren et al. 2010 not in references but there is one for 2009. See line 2295.		Accept
E_4_0357	Lyde, Gund	4	1132	1133		Table 4.21 Callaway et al 1996, Callaway et al 1997, Callaway et al 1998, Callaway et al 1999, not in references		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0358	Lyde, Gund	4	1132	1133		Table 4.21 Hatton 1981 not in references - but there is a Hatton et al. 1981. See line 1874.		Accept
E_4_0359	Lyde, Gund	4	1132	1133		Table 4.21 Serrano et al. 2012 not in references		Accept
E_4_0360	Yano, Masato	4	1132	1133		Table 4.21 is not clear. If carbon is accumulated in soils which have been modified by restoration and creation, "removal" factors should be provided. Default values provided in Table 4.21 are "emission" factors or "removal" factors?		Accept with modification. Removals now identified by negative values for emissions
E_4_0361	Brown, Lynette	4	1139	1139		Capitalize the t in "tier" for consistency.		Accept
E_4_0362	Brown, Lynette	4	1140	1140		Delete s in "dynamics".		Accept
E_4_0363	Federici, Sandro	4	1140	1140	4.2.3.6	...of the dynamics CO2 gas emission factors... please redraft as follows: "...of the dynamic of CO2 fluxes...". Here the fluxes are emissions and removals (more removals) not only emissions.		Accept
E_4_0364	Brown, Lynette	4	1143	1143		Craft 2001 is not listed in the References - please add to References or delete from text.		Accept
E_4_0365	Lyde, Gund	4	1143	1143		Craft 2001 not in references.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0366	Federici, Sandro	4	1144	1148	4.2.3.7	This section should be deleted there is not any guidance. Anyhow a party may report whatever activity it considers relevant by applying its own methodology where Tier 1 method is not provided		Accept
E_4_0367	Brown, Lynette	4	1146	1146		Italicize "good practice".		Accept
E_4_0368	Ye, Siyuan	4	1147	1148		it says a generic method is provided in Table 4.13, I could not find the relationship between Table 4.13 and C emissions from other activities.		Accept
E_4_0369	Federici, Sandro	4	1148	1148	4.2.3.7	TABLE 4.13 is about "TIER 1 DEFAULT VALUES FOR LITTER AND DEAD WOOD CARBON STOCKS"; so, what's the correct table quoted here?		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0370	Federici, Sandro	4	1151	1177	4.2.3.9	This text on calculation steps is not needed, since there are no special steps to be implemented for CO2 emissions/removals from coastal wetlands. I suggest to delete it. Further, the language used is poor and unclear; e.g. "Step 7: Repeat for additional inventory periods." COMMENT: an inventory is a timeseries of annual estimates, what's an inventory period? "Step 6: Estimate total emissions by summing the product area (A) multiplied by the emission factor (EF) for all activity categories." COMMENT: here the sum should include emissions and removals, it should be specified for which pools the summatory should be done, and I do not see why a general total should be done, I guess that reporting a total for each activity will be much more transparent. "Step 5: For each activity category, assign the appropriate emission factor (EF) for annual losses of CO2." COMMENT: Tese activities may determine also carbon gains.		Accept
E_4_0371	Rock, Joachim	4	1166	1167		Please decide whether you want to use 1 Mha or 500,000 ha in the example.		Accept
E_4_0372	Brown, Lynette	4	1170	1170		Delete 1st occurrence of)		Accept
E_4_0373	Brown, Lynette	4	1174	1174		The 2 in CO2 should be subscript.		Accept
E_4_0374	Lyde, Gund	4	1174	1174		The two in CO2 should be a subscript		Accept
E_4_0375	Federici, Sandro	4	1182	1182	4.2.3.10	the first "is" should be "in" and "easily" should be "fastly"		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0376	Brown, Lynette	4	1201	1201		Parkes et al., 2012 is not listed in the References - please add to References or delete from text.		Accept
E_4_0377	Lyde, Gund	4	1201	1207		Parkes et al. 2012 not in references.		Accept
E_4_0378	Brown, Lynette	4	1204	1204		Insert comma after "activity".		Accept
E_4_0379	Federici, Sandro	4	1206	1206	4.2.4	salinity <18 are present. replace with "salinity is <18 ppt."		Accept
E_4_0380	Ye, Siyuan	4	1219	1220		Table 4.21 may change to Table 2.21 from the context		Accept
E_4_0381	Brown, Lynette	4	1221	1224		Should aquaculture be capitalized or not? Be consistent.		Accept
E_4_0382	Brown, Lynette	4	1223	1223		Insert period after "data".		Accept
E_4_0383	Yano, Masato	4	1225	1226		Table 4.22 [N2O emissions from aquaculture activity in mangrove forest] In Equation 4.5 and Table 4.23, information on “nutrient-enriched” are not provided (equation and default EF data). Therefore, delete the words “or nutrient-enriched EF”.		Accept
E_4_0384	Xianmin, Meng	4	1255	1255		The wetland should be replaced by activity.		Accept
E_4_0385	Brown, Lynette	4	1255	1256		Is the Uncertainty Range box blank on purpose - should there be an NA?		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0386	Kabo-bah, Amos	4	1260	1260		CH4 needs revision		Accept
E_4_0387	Federici, Sandro	4	1271	1274	4.2.4.2	This is not consistent with chapter 2 (section 2.2.2.2), where drained organic soils, because of organic matter oxidation, causes N2O emissions to be accounted under tier 1		Accept
E_4_0388	Brown, Lynette	4	1273	1273		Italicize "good practice".		Accept
E_4_0389	Li, Fadong	4	1296	1297		In table 4.24, the results on Mangrove forest and tidal marsh should be divided into two ecosystem. Usually, Mangrove forest distribute separately to tidal marsh. In China, especially, it's hard to find mangrove forest in north China (Shao, H.B., Cui, B.S., Bai, J.H., 2012. Wetland Ecology in China. Clean-Soil Air Water, 40(10): 1009-1014). In the reference list under table 4.24, I can't find Mukhopadhyay et al. 2002, and Biswas et al. 2007. In all other references, only 3 references, Liikanen et al. 2009, Tong et al. 2010 and Adams et al. 2011 presented emission factors of tidal marsh. anyway, I suggest to divide them into two lines rather than 2 in 1.		Accept
E_4_0390	Lyde, Gund	4	1296	1297		Table 4.24 Mukhopadhyay et al. 2002; Biswas et al., 2007; Allen et al., 2010, not in references		Accept
E_4_0391	Brown, Lynette	4	1296	1298		The r in "range" should be capitalized for consistency.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0392	Li, Fadong	4	1296	1298		the results reported by Sun, Z. et al., 2013. Fluxes of nitrous oxide and methane in different coastal Suaeda salsa marshes of the Yellow River estuary, China. Chemosphere, 90(2): 856-865. was recommend to be supplemented.		Accept with modification. Activity removed
E_4_0393	Li, Fadong	4	1297	1298		In table 4.25, combined results of N ₂ O emission factors for Mangrove forest and tidal marsh also suggest to be devided. Here, Liikanen et al 2009, Chen et al. 2010, and Adams et al. 2011 reported EF of marsh only. Chen et al. 2012 can't be found in references list.		Accept
E_4_0394	Lyde, Gund	4	1297	1298		Table 4.25 Chen et al., 2012 not in references		Accept
E_4_0395	Wiseman, Michael	4	1301	1301		eighth word misspelt should be COMPILER		Accept
E_4_0396	Brown, Lynette	4	1302	1302		Italicize "good practice".		Accept
E_4_0397	Smith, Keith	4	1318	1319		the text reads "the EF equals 0 for N ₂ O during a 20 year transition period is the default transition period....". This needs a small rewording for clarity.		Accept
E_4_0398	Federici, Sandro	4	1318	1320	4.2.4.4	the grammar should be revised		Accept
E_4_0399	Parish, Faizal	4	1321	1321		Table 4.26 not 4.27		Accept
E_4_0400	Yano, Masato	4	1321	1321		Replace the words "Table 4.27" with "Table 4.26".		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0401	Brown, Lynette	4	1323	1323		Insert dash after re in "reestablishment" (see line 1128).		Accept
E_4_0402	Brown, Lynette	4	1326	1326		Delete 1st occurrence of "been".		Accept
E_4_0403	Federici, Sandro	4	1326	1328	4.2.4.4	the grammar should be revised		Accept
E_4_0404	Brown, Lynette	4	1337	1338		Replace "emission factor" with "EF".		Accept
E_4_0405	Federici, Sandro	4	1338	1339	4.2.4.4	Table 4.21 contains CO2-C emissions factors, why this reference here? (this section is about non-CO2 emissions factors)		Accept
E_4_0406	Brown, Lynette	4	1342	1343		Check font size on "Tidal fresh" row.		Accept
E_4_0407	Lyde, Gund	4	1342	1343		Table 4.26 Page and Dal 2010 not in references but there one for 2011. See line 2219		Accept
E_4_0408	Wiseman, Michael	4	1344	1344		This heading should be on next page		Accept
E_4_0409	Brown, Lynette	4	1347	1347		Capitalize the t in "tier" for consistency.		Accept
E_4_0410	Wiseman, Michael	4	1347	1347		The word tier should be capitalised		Accept
E_4_0411	Brown, Lynette	4	1353	1353		Delete 1st occurrence of "been".		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0412	Federici, Sandro	4	1355	1355	4.2.4.4	the word "transient" has been used in this chapter with a different meaning. It is suggested to simply delete it		Accept
E_4_0413	Brown, Lynette	4	1374	1374		Delete extra dash in "nutrient--affected".		Accept
E_4_0414	Brown, Lynette	4	1387	1387		Insert dash between "Land Use" for consistency.		Accept
E_4_0415	Federici, Sandro	4	1387	1402	4.3	This section as it is is useless. This is why you report all guidance related to land use change; as excavation, drainage, and construction of ponds in forest mangroves, for instance, in the section of land remaining in the same land use, assuming that forest mangroves is a wetland and its removal will end up still in a wetland (maybe an aquaculture site). Please, revise your land-use categorization, moving here, for instance, all changes in forest cover of mangroves that determine the forest be converted to something else, e.g. an aquaculture site.		Accept with modification. Structure of chapter changed.
E_4_0416	Schwendenmann, Luitgard	4	1395	1397	4.3.1.1	the abbreviation DOM for Dead Organic Matter is misleading. DOM often stands for dissolved organic matter. To avoid confusion another acronym should be used for dead organic matter		Accept with modification. DOM replaced by dead organic matter throughout
E_4_0417	Parish, Faizal	4	1401	1402		Phrase "where management activities where coastal wetlands" is unclear		Accept
E_4_0418	Brown, Lynette	4	1410	1410		Insert dash between "Land Use" for consistency.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0419	Schwendenmann, Luitgard	4	1418	1418	4.1.1	the abbreviation DOM for Dead Organic Matter is misleading. DOM often stands for dissolved organic matter. To avoid confusion another acronym should be used for dead organic matter		Accept with modification. DOM replaced by dead organic matter throughout
E_4_0420	Brown, Lynette	4	1422	1422		Insert dash between "land use" for consistency.		Accept
E_4_0421	Federici, Sandro	4	1423	1431	4.4.1	Please move this text in section 4.1, before the word transient is used in the following sections		Accept
E_4_0422	Wiseman, Michael	4	1432	1432		This heading should be on next page		Accept
E_4_0423	Federici, Sandro	4	1437	1544	4.5	This text need to be moved to Chapter 7 to avoid lengthy repetition and potential inconsistencies among text written in different chapters of this report		Accept
E_4_0424	Kumar, Ritesh	4	1440	1449		It would be useful to present a graphical representation of carbon and non carbon pools in a coastal wetland		Noted
E_4_0425	Radunsky, Klaus	4	1441	1441		..to address all coastal wetland ..		Accept
E_4_0426	Ma, Chun	4	1442	1442		I suggest that 'carbon gain and losses' should be 'carbon gains and losses'.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0427	Radunsky, Klaus	4	1443	1443		The coastal wetland area ..		Accept
E_4_0428	Brown, Lynette	4	1444	1444		Delete "on mineral soils".		Accept
E_4_0429	Ye, Siyuan	4	1444	1444		need delete "on mineral soil"		Accept
E_4_0430	Radunsky, Klaus	4	1445	1445		Consistent accounting over time of coastal wetland areas ...		Accept
E_4_0431	Haruyama, Yukio	4	1450	1468		(Developing a consistent time series)		Accept
E_4_0432	Radunsky, Klaus	4	1456	1456		..definitions of coastal wetland type/soil type. Coastal wetlands subject ...		Accept
E_4_0433	Radunsky, Klaus	4	1465	1465		..changes in coastal wetland types need ...		Accept
E_4_0434	Brown, Lynette	4	1485	1485		Change "other" to "order".		Accept
E_4_0435	Wiseman, Michael	4	1485	1485		Second last word should be ORDER		Accept
E_4_0436	Kabo-bah, Amos	4	1485	1485		most important in other to should read "most important in order to"		Accept
E_4_0437	Brown, Lynette	4	1489	1489		Pluralize the word "area".		Accept
E_4_0438	Radunsky, Klaus	4	1489	1489		..that coastal wetland area ..		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0439	Brown, Lynette	4	1512	1512		Change "and" to "as".		Accept
E_4_0440	Kumar, Ritesh	4	1516	1541		Inclusion of carbon stock change assessments in current models of wetland inventory, assessment and monitoring systems may be recommended as good practice for wetland managers		Noted
E_4_0441	Lovelock, Catherine	4	1516			Some new methods are available in recent paper by Maher et al. 2013_Limnology and Oceanography. Adame and Lovelock 2011 reviewed methods for C exchange in mangroves.	Attachment_E_4_0441A.pdf; Attachment_E_4_0441B.pdf	Accept
E_4_0442	Kumar, Ritesh	4	1517	1523		Include reference to geomorphological C stocks, inclduign sediment shelves and their contribution over time		Reject. Considered to be not relevant to implementation of guidance.
E_4_0443	Radunsky, Klaus	4	1518	1519		, the ratio of coastal wetland to watershed area, ...		Accept
E_4_0444	Brown, Lynette	4	1520	1520		Insert period after "exchange".		Accept
E_4_0445	Radunsky, Klaus	4	1521	1521		..; some coastal wetlands export ...		Accept
E_4_0446	Radunsky, Klaus	4	1524	1524		..in a particular coastal wetland is not ..		Accept
E_4_0447	Radunsky, Klaus	4	1533	1533		..or proximal to the coastal wetland.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0448	Lyde, Gund	4	1542	1542		Alongi, 2009 not in references.		Accept
E_4_0449	Lyde, Gund	4	1544	1544		Chmura et al., 1993 not in references		Accept
E_4_0450	Haruyama, Yukio	4	1546	2512		Please add following reference: 1. The ALOS Kyoto & Carbon Initiative Science Team Reports Phase 1 (2006-2008) January, 2010 Japan Aerospace Exploration Agency Earth Observation Research Center 2-1-1 Sengen, Tsukuba-shi Ibaraki 305-8505, Japan JAXA EORC, NDX-100003		Accept
E_4_0451	Haruyama, Yukio	4	1546	2512		Please add following reference: 2. Global Environmental Monitoring by ALOS PALSAR Science Results from the ALOS Kyoto & Carbon Initiative Edited by Ake Rosenqvist, K&C Science Coordinator and Masanobu Shimada, ALOS Science Program Manager. Contact e-mail: aproject@jaxa.jp Published by Japan Aerospace Expoloration Agency (JAXA reference: NDX-100004) Publication Date: March 30, 2010 Tsukuba Space Center 2-1-1 Sengen, Tsukuba, Ibaraki 305-8505, Japan URL http://www.jaxa.jp		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0452	Haruyama, Yukio	4	1546	2512		Please add following reference: 3. Mapping changes in the largest continuous Amazonian mangrove belt using object-based classification of multisensor satellite imagery" (Wilson R.Nascimento Jr.,Oedro Walfir M.souza-Filfo, Cristophe Proisy, Richard M.Lucas, Ake Rosenqvist, Estuarine,Coastal and Shelf Science 117(2013) 83-93 ELSEVIER		Accept
E_4_0453	Sonwa, Denis	4	1548	1551		Make sure that the references year "2012" in line 1548 and "(2012)" in line 1551 is harmonise in all the references		Accept
E_4_0454	Brown, Lynette	4	1551	2511		The year of the publication should not be in (), format rest of References for consistency with previous Chapters.		Accept
E_4_0455	Lyde, Gund	4	1573	1575		Not cited in text		Accept
E_4_0456	Brown, Lynette	4	1586	1586		Why is it 1999b when it is the only Alongi et al., 1999 in this Chapter?		Accept
E_4_0457	Lyde, Gund	4	1591	1592		Not cited in text. Add names of co-authors if reference is used.		Accept
E_4_0458	Brown, Lynette	4	1606	1606		Armentano is separate reference.		Accept
E_4_0459	Sonwa, Denis	4	1620	1624		Bauza... (2002) in line 1623 need to be before Bay,D. (1984) of line 1621		Accept
E_4_0460	Brown, Lynette	4	1652	1652		Why is it 1987b when it is the only Brouns 1987 in this Chapter?		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0461	Sonwa, Denis	4	1652	1652		Brouns,J.J.(1987b) may be Brouns,J.J.(1987) [we do not have 2 references, so while using the "b" after 1987]		Accept
E_4_0462	Brown, Lynette	4	1665	1665		Check author's last name (see line 1663).		Accept
E_4_0463	Lyde, Gund	4	1676	1678		Not cited in text but there is one for 2005 - Stte lines 666-667 table 4.9 footnote 2		Accept
E_4_0464	Sonwa, Denis	4	1712	1714		Camporesse (2008) in line 1714 need to come before Collier....(2009) of line 1712		Accept
E_4_0465	Brown, Lynette	4	1714	1715		This reference is not in alphabetical order.		Accept
E_4_0466	Lyde, Gund	4	1714	1715		Reference is out of order		Accept
E_4_0467	Lyde, Gund	4	1733	1734		Not cited in text		Accept
E_4_0468	Brown, Lynette	4	1750	1750		and others? Generally at least some of the authors are listed.		Accept
E_4_0469	Lyde, Gund	4	1750	1751		List all the co-authors		Accept
E_4_0470	Lyde, Gund	4	1762	1763		Not cited in text		Accept
E_4_0471	Lyde, Gund	4	1798	1799		Not cited in text		Accept
E_4_0472	Lovelock, Catherine	4	1798			Durr et al. 2011 missing from the reference list		Accept

<Review comments by experts on Chapter 4 of the Second Order Draft of Wetlands Supplement>

ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0473	Lyde, Gund	4	1809	1812		Not cited in text. If used change make words in the title of the journal to with caps and lower case.		Accept
E_4_0474	Sonwa, Denis	4	1809	1812		the journal name is in CAPITAL... it need to be harmonise with other references.		Accept
E_4_0475	Brown, Lynette	4	1811	1811		Should not be all capital letters.		Accept
E_4_0476	Brown, Lynette	4	1822	1824		There are 2 FAO 2007 publications - please designate a and b in the Reference section and update references throughout Chapter.		Accept
E_4_0477	Sonwa, Denis	4	1822	1824		in line 1822 and 1824 we have the same year of publication (2007) for the same author (FAO) without "a" and "b" after the first and second time the reference is mentioned		Accept
E_4_0478	Lyde, Gund	4	1860	1861		Not cited in text but there is a Guidetti et al. 2002 in footnote 3, table 4.9 - lines 666-667		Accept
E_4_0479	Lyde, Gund	4	1874	1877		Not cited in text but there is a Hatton 1981 in footnote 2 table 4.16 lined 973-974 and table 4.21 lines 1132- 1133.		Accept
E_4_0480	Lyde, Gund	4	1908	1910		Not cited in text but there is one for 2000 in line 279		Accept
E_4_0481	Lyde, Gund	4	2008	2010		Not cited in text but there is one for 1993 - table 4.9, footnote 2. Lines 666-667		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0482	Brown, Lynette	4	2034	2034		Insert space before 2010.		Accept
E_4_0483	Sonwa, Denis	4	2047	2047		2005b without "2005a" in the previous lines.		Accept
E_4_0484	Lyde, Gund	4	2072	2074		Not cited in text but there is one for Livesley & Andrusiak 2012 footnote 2, table 4.16 lines 973-974,		Accept
E_4_0485	Lyde, Gund	4	2087	2088		Not cited in text		Accept
E_4_0486	Lyde, Gund	4	2097	2097		Delete the 1 before (1991)		Accept
E_4_0487	Lyde, Gund	4	2181	2181		Put co-author's last name before his initials		Accept
E_4_0488	Lyde, Gund	4	2195	2195		Not cited in text but Ong et al., 1982 if in footnote 1, table 4.4, lines 638-639		Accept
E_4_0489	Brown, Lynette	4	2196	2197		Should not be all capital letters.		Accept
E_4_0490	Lyde, Gund	4	2206	2208		Insert year of publication after author name - 2006		Accept
E_4_0491	Brown, Lynette	4	2217	2217		Delete A after 2001.		Accept
E_4_0492	Lyde, Gund	4	2217	2217		Pa`Ez-osun F 2001AThe... Check correct spelling of author's name (see line 876). Drop A after 2001.		Accept
E_4_0493	Lyde, Gund	4	2219	2220		Not cited in text but Page and Dal 2010 is in table 4.26 lines 1342-1343		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0494	Lovelock, Catherine	4	2247			Avicennia germinans - typo		Accept
E_4_0495	Lyde, Gund	4	2271	2272		Not cited in text but Powell 1989 is in footnote c, table 4.9 lines 666-667 , table 4.10 footnote 2, lines 668-669		Accept
E_4_0496	Lyde, Gund	4	2293	2294		Not cited in text		Accept
E_4_0497	Lyde, Gund	4	2295	2296		Not cited in text but Ren et al. 2010 is in table 4.15, footnote 1, lines 973-974 and table 4.21 footnote 1, lines 1132-1133		Accept
E_4_0498	Lyde, Gund	4	2308	2309		Not cited in text but there is a Robertson et al. 1989 in table 4.13 lines 802-803		Accept
E_4_0499	Lyde, Gund	4	2353	2354		Not cited in text		Accept
E_4_0500	Lyde, Gund	4	2358	2359		Not cited in text but there is a Simpson et al. 2013 - line 355		Accept
E_4_0501	Lyde, Gund	4	2377	2377		Put co-author's last name before his initials		Accept
E_4_0502	Brown, Lynette	4	2413	2413		Missing year of publication (Table 4.3 lists 1992).		Accept
E_4_0503	Lyde, Gund	4	2413	2413		Needs year of publication. Possibly 1992. See table 4.3 lines 637-638		Accept
E_4_0504	Lyde, Gund	4	2413	2414		Need year of publication		Accept
E_4_0505	Lyde, Gund	4	2417	2418		Not cited in text.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0506	Lyde, Gund	4	2435	2435		Change Van to van to conform with others.		Accept
E_4_0507	Lyde, Gund	4	2470	2471		Not cited in text		Accept
E_4_0508	Lyde, Gund	4	2491	2482		Not cited in text		Accept
E_4_0509	Brown, Lynette	4	2508	2512		There are 2 Zhang et al., 2012 publications even though they are different authors. Please designate a and b in the Reference section and update references throughout Chapter for clarity.		Accept
E_4_0510	Schwendenmann, Luitgard	4	2518	2519	ANNE X 4.1	TOC is not explained		Accept
E_4_0511	Lyde, Gund	4	2525	2525		Ramesh et al. 2008 not in references		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0512	Rosenqvist, Ake	4	2529	2529	Annex 4.2	Amongst web sources that provide information about domestic and international data sources pertaining to coastal wetland areas, it would be relevant to also list the "Kyoto & Carbon Initiative" (http://www.eorc.jaxa.jp/ALOS/en/kyoto/kyoto_index.htm) of the Japan Aerospace Exploration Agency (JAXA), under which Synthetic Aperture Radar mosaics have been generated for the years 1995, 2007, 2008, 2009 and 2010 over all land areas on the Earth, including all coastal zones and mangrove areas, using radar satellite data from the JERS-1 (1992-1998) and ALOS (2006-2011) satellites. The K&C Initiative furthermore comprises the "K&C Global Mangrove Watch" project, where the abovementioned mosaics are used to create (1) maps of global mangrove extent for the years 1995 and 2007-2010, and (2) maps of annual changes in mangrove areas between the years 1995-2007, 2007-2008, 2008-2009 and 2009-2010. When the ALOS-2 satellite will become operational (launch in late 2013), generation of annual radar mosaics and mangrove extent and change maps is planned to be resumed (starting from mid 2014). The K&C Global Mangrove Watch was presented to the Ramsar Science and Technology Review Panel at their annual meeting in Gland, Switzerland in February 2013, where it was suggested by the STRP that the Global Mangrove Watch project could become a pilot		Accept with modification. The following text was included "The Kyoto & Carbon Initiative of the Japan Aerospace Exploration Agency (JAXA) Global Mangrove Watch project, has used Synthetic Aperture Radar mosaics to create maps of global mangrove extent for the years 1995 and 2007-2010, and maps of annual changes in mangrove areas between the years 1995-2007, 2007-2008, 2008-2009 and 2009-2010. (http://www.eorc.jaxa.jp/ALOS/en/kyoto/mangrovewatch.htm)."
E_4_0513	Lyde, Gund	4	2534	2534		FAO 2007 - there are two listed in the references. See 1822-1825 - Which one is this. If there are two different FAO 2007s cited in the text, make one 2007a and the		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0514	Rock, Joachim	4	2568	2586		Please be careful. This is not as easy as you imply here. For example, specify what is meant by "p" in the equations and report which diameter Komiyama et al. used in their assessment. Typically, allometric equations use diameters measured in standard heights (in forestry: DBH, =1.30 meters, in some cases 1.37m). Some ecologists used differing heights (because of limited knowledge and acceptance of standards?), for example 1.00m. Anyway, with the exponent being almost identical and a high probability that "D" is also 1.3m, both equations differ by 33%, not 10. IF global allometric equations should be used on comparatively small regions, the error WILL certainly be higher than 10% and only be acceptable if the same equation is used in repeated assessments (making this a systematic error). Please refer to Pretzsch, H. (2010): Forest Dynamics, Growth and Yield. Heidelberg, Dordrecht, London, New York, Springer, for a general discussion on allometric equations, see Rock, J. (2007): "Suitability of published biomass equations for aspen in Central Europe - results from a case study." Biomass & Bioenergy 31(5): 299-307 and Wutzler, T., C. Wirth and J. Schumacher (2008): "Generic biomass functions for Common beech (Fagus sylvatica) in Central Europe: predictions and components of uncertainty." Canadian Journal Of Forest Research- Revue Canadienne De Recherche Forestiere 38(6): 1661-1675 on problems associated with the transfer of allometric equations from one site to others.		Accept
E_4_0515	Brown, Lynette	4	2570	2570		Should 2005 be 2006 (see line 2364)?		Accept
E_4_0516	Lyde, Gund	4	2573	2575		Komiyama et al. 2005 not in references		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0517	Brown, Lynette	4	2574	2575		Why is "top" only italicized once? Format for consistency.		Accept
E_4_0518	Yu, Kewei	4	2576			Provide unit for "D", and "DBH", likely cm.		Accept
E_4_0519	Lyde, Gund	4	2580	2580		Schaeffler-Novelli, 2005 not in references.		Accept
E_4_0520	Brown, Lynette	4	after 1029	before 1030		The "N" should not be capitalized for sample size.		Accept
E_4_0521	Brown, Lynette	4	after 1060	before 1061		Each table should be able to stand alone, I suggest you insert "Coastal" in the table title. The "N" should not be capitalized for sample size. The t in "tidal" should be capitalized for consistency. Campores et al., 2008 is not listed in the References - please add to References or delete from table.		Accept with modification. This was done to the extent possible but style kept consistent with other chapters.
E_4_0522	Brown, Lynette	4	after 1132	before 1133		Insert dash after Re in "Reestablishment" (see line 1128). The r in "range" should be capitalized for consistency.		Accept
E_4_0523	Brown, Lynette	4	after 156	before 157		Should the SP Subtype box be empty or should there be an "NA" there?		Accept
E_4_0524	Brown, Lynette	4	after 502	before 503		Reword Note 2		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0525	Brown, Lynette	4	after 637	before 638		There are 2 Kristensen et al., 2008 publications - please designate a and b in the Reference section and update references throughout Chapter.		Accept
E_4_0526	Brown, Lynette	4	after 637	before 643		Be consistent on table title formatting. In Table 4.3 only the 1st word is capitalized but in Table 4.4 several words are capitalized and Table 4.7 is all capitals.		Accept
E_4_0527	Brown, Lynette	4	after 638	before 639		Note 1 - should Lin et al., 1990 be Lin and Lu 1990 (see line 2064)? Also should Note 3 Woofroffe 1985 be 1984 (see line 2491)?		Accept
E_4_0528	Brown, Lynette	4	after 642	before 643		Please specify the unit for the wood density values in Table 4.7. Also, neither data source is listed in the References - please add.		Accept
E_4_0529	Brown, Lynette	4	after 651	before 652		Footnote 3 - Several of these citations are not listed in the References (Figueroa, Jenssen, Keefe and Boynton, Ketner, Dunn) - please add to References or delete from table. Also Smith et al., 1979 is listed twice in footnote 3 and it does not appear in References (1978? see line 2362).		Accept
E_4_0530	Brown, Lynette	4	after 802	before 803		Check Ramose-Silva reference (see line 2283). Also should Robertson et al., 1989 be Robertson and Daniel (see line 2308)?		Accept
E_4_0531	Brown, Lynette	4	after 974	before 975		Delete semicolon at end of line.		Accept
E_4_0532	Brown, Lynette	4	after 975	before 976		The "N" should not be capitalized for sample size.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0533	Nair, Malini	4	General	General		The specific geographic effects seem to have been eliminated. Important effects on coastal areas of south and east asia are not included. What are the problems that extraction, port dredging and filling have on the environment of the developing countries located in these regions? I don't see any mention of impacts or adaptation measures for coastal wetlands, some of which should be included in this report		Reject. Beyond scope of the document.
E_4_0534	Brown, Sandra	4	box	4.1		I guess I am missing something as I do not follow Box 4.1--I do not know what message I am to take away from this box? Particularly under Land remaining in a land use category (line 215) and on line 219---if mangroves are cleared surely this is not same land use category? I did not find this box helpful at all and in fact am more confused.		Accept
E_4_0535	Lovelock, Catherine	4	Box 4.1			The titles are hard to understand. Alternative: Examples of when management practices do not (A) and do (B) result in land-use conversion. Then use A and B in the subheadings. After reading this box I was still not sure in which case I would use guidance in the chapter. This became clear in 4.1.1. Perhaps some reference to 4.1.1 would make it clearer.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0536	Schrier-Uijl, Arina	4	general	4.1.1		Aquaculture can also lead to erosion, such as ponds being eroded, collapsed and 'lost' to the sea. That is not mentioned in the text. This has an impact on carbon. Or is assumed that the C is than being stored in the ocean? But then it has to be mentioned.		Accept with modification. This level of detail is not considered necessary for Tier 1 implementation. Can be modified at higher tiers.
E_4_0537	Schrier-Uijl, Arina	4	general	4.1.1		Soil (clay) mineralogy should perhaps also be mentioned as a factor that determines response to drainage.		Accept
E_4_0538	Schrier-Uijl, Arina	4	general	4.1.1		Restoration and creation: perhaps mention other restoration measures except for rewetting such as hybrid engineering?		Reject. Beyond scope of the document.
E_4_0539	Schrier-Uijl, Arina	4	general	4.2.3		The introductory text does not explain all relevant factors and processes governing decomposition or stabilisation of soil organic matter, nor the difference between organic and mineral soils. Input of for example, allochthonous carbon should also be mentioned (export is mentioned). The message has to be: considering the import- en export of C, natural mangrove systems are sinks, if drained they are sources, with size depending on x factors and with a large difference between organic and mineral soils.		Accept. Concepts introduced when appropriate
E_4_0540	Garcia-Diaz, Cristina	4	general	general		it seems that the activity data sections suggest that the areas have to be divided into climatic zones, soil types,... when it is prerogative of the country to subdivide a land use category. It should be said that the areas could be stratified.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0541	Schrier-Uijl, Arina	4	general	soils		organic- and mineral soils are being merged for EF determination from Drainage, while these soils are very different in terms of release of GHG's when drained (tabel 4.20). The given default-emission of 7 t ha-1 yr-1 is far too low for drained tropical peats (see chapters 2 and 3 for EF from peat).		Reject. The value is consistent with drained forest in chapter this supplement.
E_4_0542	Schrier-Uijl, Arina	4	general	soils		For Tier 2 and Tier 3 methods it should be required (see also other chapters of the wetlands supplement) to include site specific measurements of e.g. C-content, BD, clay content, salinity, redox etc. to determine the underlying processes of emissions. Not complete, add perhaps a 'general' paragraph on Tier1,2 and 3 and the requirements to fall in a certain category.		Accept
E_4_0543	Schrier-Uijl, Arina	4	general	tabel 4.21		The text mentions in various places removal from the atmosphere and accumulation of carbon rather then emission after restoration/creation. Why is the emissions factor in table 4.21 positive?		Accept
E_4_0544	Schrier-Uijl, Arina	4	general	table 4.1		Agriculture that does not need drainage is missing (e.g. rice)? Is it included anywhere else?		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0545	Brown, Sandra	4	general			<p>A lot of hard work has obviously gone into these chapters but in many of them I find they missed the target. I had many problems with these chapters as my comments attached will show. My biggest concern is the apparent limited regard for the user of these materials. Most chapters are written like academic scientific reviews—all such material should be moved to annexes in each chapter. Also I read about CH4 in practically all chapters—could this not have been said once and then added as an annex to Ch 1. It seems a lot of the updates are in relation to CH4. Also it seems that even including these other sources of GHGs will hardly ever be that significant in the grander scheme of things within the AFOLU sector.</p> <p>And even as someone who knows a little about such inventories I did not find these chapters too helpful—but then maybe I missed a key section—perhaps this is in one of earlier chapters. But I would hate to be an inventory person in a country who had to wade through all this detail to find the punchlines.</p>		Noted
E_4_0546	Brown, Sandra	4	general			had enough of this chapter...moving on		Noted

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0547	Christian, Robert	4	General			I am dismayed by the lack of any treatment of sea-level change. A search of the term "sea level rise" produced 4 hits in the text and 3 were in the same paragraph. These are coastal wetlands and exist and function in the context of sea-level change. This is independent of any consideration of accelerated rates associated with climate change. The text reads as if landuse changes (e.g., aquaculture or salt ponds) can be made and maintained for decades with no effect on relative elevation upon abandonment or attempted reestablishment of wetlands. I made this point before in draft version 1, but I find no allusion to these issues in the current version. The scientists involved in this document are excellent; it is amazing to me that they have not addressed (or been allowed to address) sea-level change and accelerated sea-level rise. Certainly any calculations of C storage or GHG emission potential to be done for long-term have to include these factors, if not other factors of climate change. This is a major flaw in the document.		Accept with modification. The context of sea-level rise is acknowledged as important but data are insufficient to address at Tier 1. Guidance only consider initial effect of these activities named, consideration of sea-level change cannot be attributed to a specific country, and are not uniform over space. Higher tier methods are encouraged if this contributes to key category.
E_4_0548	Penman, Jim	4	General			The presentation in this chapter is often very dense and in places I think inventory compilers will have difficulty in following it. I have tried to make specific suggestions but found it impossible to cover everything. The authors need to consider seriously how to make the presentation clearer. It may be worth discussing this with the Steering Group. Particular issues are the density of information in some tables describing methodologies (e.g. col 3 of Table 4.14 and similar) and whether land use change is simply a reporting convention, or reason to adopt a different approach.		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0549	Smith, Keith	4	General			The draft reads very well		Noted
E_4_0550	Christian, Robert	4	general			I must admit that I was so disappointed with the lack of any consideration of sea level change that I did not review the document as thoroughly as I might have otherwise.		Accept with modification. The context of sea-level rise is acknowledged as important but data are insufficient to address at Tier 1. Guidance only consider initial effect of these activities named, consideration of sea-level change cannot be attributed to a specific country, and are not uniform over space. Higher tier methods are encouraged if this contributes to key category.
E_4_0551	Sonwa, Denis	4	General			Please see attachement	Attachment_E_4_0551A.pdf; Attachment_E_4_0551B.pdf	Accept with modification. These sources were added in the section on Future Methodological Development.
E_4_0552	Brown, Sandra	4	Table 4.14			do not refer to equations from vol 4 of IPCC 2006 GL--these suppl material must stand alone--don't make the user's job harder by sending them to another volume for a few equations--add them here in this tale or in footnote to table		Accept with modification. Some equations are repeated but basic biomass, DOM G-L and S-D are not
E_4_0553	Brown, Sandra	4	Table 4.15	T 4.16		I know the source is given--can reader assume that the values are based on reported soil C stocks to 1 m depth for these ecosystem types?...Once again I believe the so-called 95% CI is wrong--then perhaps CI does not mean confidence interval? (95%CI = tstat * SE of the mean). Also in T 4.16--there is no explanation for note 4		Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0554	GUTIERREZ-BELTRAN, Natalia	4	Table 4.26			Los pocos resultados que llevamos hasta el momento y lo que avances en el estudio de manglares en Colombia, indican que estos emiten CH ₄ y N ₂ O, unos en mayor proporción que otros. El proyecto que estamos adelantando nos permitirá establecer el factor de emisión dependiendo del grado de intervención, (bosque reforestado, bosque sin intervención y bosque totalmente degradado). En este sentido, el factor de 0 propuesto en la tabla 4.26 (EMISSION FACTORS FOR CH ₄ FROM UNMANAGED COASTAL WETLANDS FOR TIER 1 ESTIMATION OF REWETTING AND RESTORATION) no sería correcto, con el desarrollo del proyecto de investigación se evaluará este aspecto y la magnitud de la emisión, así, podrá definirse si las emisiones son despreciables o deberán tenerse en cuenta en los inventarios.		Noted
E_4_0555	Kumar, Ritesh	4	Table 4.1			Hydrological diversion is also known to impact mangrove diversity by impacting salinity regimes		Reject. Beyond scope of the document.
E_4_0556	Lovelock, Catherine	4	Table 4.1			Other activities - seagrass has salt production, yet this was NA in the Salt production line of the table. Is this a typo?		Accept
E_4_0557	Lovelock, Catherine	4	Table 4.13			Why cite Saenger and Snedaker 1993 above and then only use a subset of the data in this table? Seems inconsistent.		Accept with modification. Data were utilized as appropriate.
E_4_0558	Lovelock, Catherine	4	Table 4.15			I think the paper for citation should be Adame et al. 2013 - Plos One	Attachment_E_4_0258.pdf	Accept

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0559	Lovelock, Catherine	4	Table 4.17			Some new data for active shrimp ponds in Bali is available: Sidik and Lovelock 2013. Under review in Plos- One. Attached,.	Attachment_E_4_0559.pdf	Reject. Could not accept a paper in review without additional documentation.
E_4_0560	Lovelock, Catherine	4	Table 4.21			The Osland paper also fit in here, also some other recent studies from Asia including those on degraded reefs (Alongi). Data from mangrove forestry in Malaysia and Thailand.? I can see that the Breithaupt review is cited, but does this include everything for mangroves.		Accept
E_4_0561	Brown, Sandra	4	Table 4.8			need to report a range of values here--same as with other tables. Do you really think reproting a vlaue in a default table with n=2 is good practice even for tier 1? And you give a CI--this cannot be right--with n=2?		Accept.
E_4_0562	Brown, Sandra	4	Table 4.9			I am surprised to see a value for biomass for temperate seagrasses...are you sure these are really seagrasses? I was led to believe that these grasses existied in tropical to subtropical waters? Perhaps the so called temp are really subtropical--		Noted

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ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0563	Haruyama, Yukio	4				Please add following sentences; It is good to use multitemporal,multisensor satellite remote sensing imagery for mapping changes in large areas of Wetland and Mangrove. An example is shown in a paper of " Mapping changes in the largest continuous Amazonian mangrove belt using object-based classification of multisensor satellite imagery" (Wilson R.Nascimento Jr.,Oedro Walfir M.souza-Filfo, Cristophe Proisy, Richard M.Lucas, Ake Rosenqvist, Estuarine,Coastal and Shelf Science 117(2013) 83-93 ELSEVIER (see supplementary document Nascimentoetal2013.pdf)	Attachment_E_4_0563.pdf	Accept
E_4_0564	Radunsky, Klaus	4				The text uses either the term "coastal wetlands" or "wetlands". It seems that the authors did not follow a specific rule which term to use. This might confuse the reader and might result in misunderstandings and different interpretation. It is strongly suggested to use only the term "coastal wetlands" if that type of wetland is addressed in the text but never use "wetlands" as a short term instead. "Wetlands" as a term should only be used if all types of wetlands are being addressed, both coastal and inland wetlands.		Accept

<Review comments by experts on Chapter 4 of the Second Order Draft of Wetlands Supplement>

ID	Expert (Last Name, First Name)	Chapter /Section	Start Line	End Line	Sub-section	Comment	supplementary documents	Authors' Action & Note
E_4_0565	Villamizar, Alicia	4	Table 4.1			Table 4.1: included subtypes Large Industrialize Scale and Artisan Scale of Salt Production (SP). Although both belongs to SP activity their management and GHG removal's effect is very different due their respective dimensions and social implications. In many Caribbean countries this type of land use is very common on coastal wetlands but at the same time no data is available about emissions and removals, for this reason could be considered a key category.		Reject. There is insufficient data on the distribution of salt production sites of different scales or the EF associated with salt productions. It is encouraged to incorporate this level of detail at higher Tiers, if possible.
E_4_0566	Villamizar, Alicia	4	Table 4.1			Table 4.1 : included subtype Agriculture Runoff and Leaching for Nutrient Enrichment (NUTR)		Reject. This activity was removed because it is too difficult to attribute to a single country with Tier 1 level of information.
E_4_0567	Wang, Changyong	4	Table 4.1			Additionally, it should be noted that some shellfish farming often occurred in coasts in some countries such as China. Therefore, the words “shellfish farming” needs to be put in the cell of the line “aquaculture” and the column “subtype”.		Accept with modification. This is included with aquaculture.
E_4_0568	Wang, Changyong	4	General			In "Other Activity", it may be mentioned that introduction of alien species, for example, <i>Spartina alterniflora</i> , a smooth cordgrass, into the local coastal wetlands have affected or competed with the local mangrove trees, resulting in reduction of the latter in area.		Reject. This is beyond the scope of the document and "Other activities" as a category is no longer relevant.

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E_4_0569	Wang, Changyong	4	Referen ces		Referen ces	[1] Luzhen Chen, Wenqing Wang, Yihui Zhang, Guanghui Lin, 2009. Recent progresses in mangrove conservation, restoration and research in China. Journal of Plant Ecology, Volume 2, Number 2, Pages 45–54.		Reject. Thank you for this suggestion but we could not find a key use for it.
E_4_0570	Wang, Changyong	4	Referen ces		Referen ces	[2] Shuwen Wan, Pei Qin, Jine Liu, Hongxiang Zhou, 2009. The positive and negative effects of exotic Spartina alterniflora in China. Ecological Engineering, Volume 35, Issue 4. Pages 444–452.		Reject. Thank you for this suggestion but we could not find a key use for it.
E_4_0571	GUTIERREZ _BELTRAN, Natalia	4	General			COMENTARIO GENERAL: Las emisiones de CO2 sólo se consideran cuando la biomasa es retirada del sistema (quema, deforestación), en el bosque sin intervención se consideran la captura de GEI en biomasa, hojarasca y materia orgánica. Sin embargo, en este aspecto hay que tener en cuenta que no toda la hojarasca producida por el bosque, es fijada en el suelo (secuestrada), una parte es degradada y convertida nuevamente en CO2, y otra fracción permanece como materia orgánica recalcitrante y es fijada en el sedimento. Un componente del proyecto de investigación de GEI en ecosistemas de manglar que viene en curso evaluará este aspecto para las tres especies de manglar predominantes en el Caribe colombiano.		Accept with modification. The guidance encourages to fully account for changes in each of the pools in a consistent way as has been set forth in 2006GL.