



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  
STATISTICS DIVISION  
UNITED NATIONS

**SEEA Revision**

**SEEA Experimental  
Ecosystem Accounting**

**Comment form**

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## Comment form for the Consultation Draft

**Deadline for responses: 1 January , 2013**  
**Send responses to: [seea@un.org](mailto:seea@un.org)**

Your name:	Art Ridgeway
Your country/organization:	Statistics Canada
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To submit responses please save this document and send it as an attachment to the following e-mail address: [seea@un.org](mailto:seea@un.org).

The comment form has been designed to facilitate the analysis of comments.

In Part I general comments on the structure and content of the draft document are sought. In Part II any other comments, particularly those of a technical nature should be included.

### **Relevant documents**

Before submitting responses you are encouraged to read

*Cover Note to the Consultation Draft*

*SEEA Experimental Ecosystem Accounting – Consultation Draft*

### **Part I: General comments**

In the box below please supply any comments on the structure of the document, the balance of material and the coverage of the draft including any thoughts on missing content.

Comments on the style, tone, and readability of the text are also welcome.

**Please reference paragraphs numbers or section numbers as appropriate.**

<p>The document is in general very clear. The discussion is fairly academic, however, and as a result it can be difficult to imagine how these guidelines could be used in a practical application. It would be thus desirable if examples of work could be presented alongside the technical discussion so that readers could see actual policy questions that had been addressed with these techniques. A few of these, showing a policy question, the data gaps, the approach taken and how this has been generalised for broader application in the SEEA could be referenced as examples in the discussion.</p>
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Another modification that may assist in understanding would be the addition of units of measure to the sample tables. This would provide a clearer link to the kinds of data that would be presented. In table 2.1 for example, would we be talking about Watts of sunlight, or cubic metres of flood water protection, or some other type of measure? Would table 2.3 be in monetary terms? It's not always clear what we would put in the tables.

On the topic of "physical units of measure" some further discussion may be warranted. In 2.103, we see a distinction expressed between them (i.e. "physical and non-monetary") whereas in 3.2 we see that physical is non-monetary. Would something like number of visits to a national park (suggested in 3.48) be considered a physical unit of measure? The term does not seem appropriate here.

## **Part II: Other comments**

In the box below please supply any additional comments including those of a more technical nature.

**Please reference your responses with the relevant paragraph number or section number.**

1.11 reference to 1.7 should be to 1.8

1.16 economic and human activity should perhaps be economic and other human activity.

2.12 end of sentence "further" should be "farther"

Figure 2.4 There may be some confusion over abiotic resources, since some of these are of biological origin. In addition, nutrients for crops are mentioned under provisioning services, but some of these are abiotic minerals and elements that are present in soil. These mineral elements should perhaps be mentioned under abiotic resources in the bio-physical environment. Is non-living a more specific term?

2.43 cadastre is not a common term.

2.70 "presence of greenhouse gases" seems like an odd example, since most of these should always be present – perhaps concentrations?

2.73 two "also"s

2.87 may be better to reword as "this approach is analogous to the relationships between various units in economic statistics" since the definition of economic units is more related to their activities and reporting capabilities – i.e. is not analogous to the definition of ecosystem units.

Para 2.92 appears to contradict para 2.90 – one urges caution making generalisations based on land cover, while the other appears to recommend it.

3.15 is physico-chemical correct?

4.27 (i) mentions that only declines due to human activity will be counted under ecosystem degradation. It may be worth clarifying the treatment of natural damage to ecosystems that cause diminished benefit flows. Presumably the asset is still worth less after such damage, but it is not immediately clear how to account for this.

4.33 missing “are” after the first two words.

4.63 “instructive to accounts may be compiled” could use some clarification.

4.72 ends with a “?”

4.87 reference should be to table 4.5.1 (same with 4.88 – or ref to figure 4.4.1)

Table 4.5.1 (Carbon stock account) It is a little unclear if additions to geo-carbon via discoveries of fossil fuel reserves should be included here since it does not fit with the sequestration thinking that seems to be the purpose of the table (i.e. discoveries are not sequestration). This has influence on 4.95 which suggests “all reservoirs” are part of the net carbon balance with discoveries being an influence in this total.

Table 4.5.1 (Accounts for species abundance). In addition to the numbering (see above), there seems to be a need for an “other” category, since there is no spot to record fish, crustaceans, annelids, arachnids, etc....

5.1 remove “is” in the last sentence.

Para. 5.8 acknowledges two primary motivations for valuation, one being *for policy analysis* and the other *for integration into accounting frameworks*. We would suggest that the manual could cast the net wider in this regard, perhaps including ecosystem valuation uses in the context of awareness-raising / educational tool; as a means for priority setting or evaluating tradeoffs generally at various scales; as a way of informing economic instrument (tax) design; in evaluating compensation and damage claims, etc. Indeed, the fact that SEEA II focuses on a market concept of value limits the range of available methods for valuing ecosystem goods and services. However, estimates that embody consumer surplus are still of use to certain practitioners/organizations outside of the accounting domain, thus it seems worthwhile to identify the range of valuation uses fully.

Para. 5.26 notes that “since non-use value is based purely on the utility of an individual, it can be concluded that non-use values are solely comprised of consumer surplus and hence should be considered out of scope of national accounts measures of value.” We have some difficulty understanding the pointed distinction here between non use values versus all others, with regards to consumer surplus. In a sense, all valuation is “based purely on the utility of an individual” since the existence of any good is a function of its capacity to provide utility to the consumer. Perhaps an important notion regarding this issue is that the only way of getting to the value of non use (and some other) ecosystem services is to sum all individuals’ willingness to pay (CS) leaving little possibility of computing the “market value” component. There is hope that means may be mainstreamed eventually to calculate a market price for some of these services (e.g. recreation services), however, as mentioned subsequently in chapter 5.

5.23 breakdowns should be breaks-down.

5.51 last sentence, should the values accrue to the land owner or the land user or some

split. Only the owner is mentioned.

5.55 For the sake of clarity, requires further explanation or fleshing out.

5.57 typo, second sentence.

5.73 last sentence, “in” should be “it”. Same in 5.75

5.77 (and 5.81) In these paragraphs readers are reminded that much work remains with regard to developing methods for “adjusting” value estimates to bring them in line with the SNA notion of value. If feasible, it may be useful here to refer to illustrative examples (perhaps in volume 3) where advances are being made on this front. In connection with this point, it may be more convenient for reader if you were to present the simulated exchange value concept (5.84) earlier in the chapter as its links to the revealed preference suite of techniques vis-à-vis disentangling consumer surplus are of central importance.

5.86 should open with Simulated, not Simulate.

5.93 Advice on how to take cross-ecosystem dependencies into account may be useful at this point. Perhaps in reference to double counting.

5.95 notes that the “meaningfulness of the resulting sum of values of different ecosystem services depends on the coverage of the measured ecosystem services.” It is also noteworthy that using similar metrics or approaches to valuation has a bearing on meaningfulness of these resulting sums (and for that matter on the meaningfulness of subsequent value comparisons that might be made between ecosystems).

5.97 meaning of the last sentence is a bit unclear.

5.99 addresses challenges to measurement of NPV-based estimates of ecosystem assets. Our observation on this issue (as presented) is that it seems like decisions required vis-à-vis point (i), regarding defining the *business as usual* case cannot really be made in isolation from decisions required to address point (ii), regarding whether use of a given ecosystem asset is sustainable.

Regarding point (iii), an additional sentence may be necessary to clarify meaning. This is a complex notion to express. There may also be a typo here.

5.103 not clear what “respectively” refers to.

5.106 relatively should be relative.

5.107 would be an excellent paragraph at the beginning of the chapter.

Chapter 6 – The title of chapter 6 seems not clearly distinct from that of chapter 5. i.e. Approaches to valuation for ecosystem accounting sounds very similar to Accounting for ecosystems in monetary terms. Should 5 and 6 be combined, or the distinction be made clearer?

6.12 It is not clear how EPE and RM expenditure could be allocated spatially without a census approach to the collection of those data. The challenge of spatially allocating weighted sample survey data, or the need for a census may be worth mentioning.

6.16 second last sentence “detail” should be “detailed”

6.25 first sentence ecosystems

6.31 could use some more explanation as to why re-planting should not be considered an offset to harvest.

6.53 may need adjustment. Wind and solar energy are flows, and as such cannot be considered as stocks for valuation purposes. This is the main reason they cannot be considered as assets, not the fact that they cannot be exhausted like fossil resources.

6.57 (iv) third sentence “used” should be “use”

6.66 “adjustment to” should be removed, since “adjusted” follows later.

Figure A3.1 Farm inputs could be specified as inputs for cultivation (many farm inputs are not related to crop production)

Figure A3.3 Is the ecosystem service trees as opposed to just wood?

A3.8 species should be changed to organisms, since “fish” is not a species (at start and end of para)

A3.20 Air pollution should be identified as a health concern as opposed to “problem” – the health problems are as a result of the pollution, not the pollution itself.

A3.21 concentration measures are more likely in  $\mu\text{g}$  than kg.

A4.25 this para is out of place from another section.

A4.50 note cropland is a land use, not a land cover.

A4.54 need to ad “to” after “if one is”

Table A4.5.1 as above, need another category for fish etc.

A4.73 missing “the” twice in the last sentence