Mainstreaming Ecosystem Services in Policy and Decision Making: Practical Guidance

Susan M. Preston, PhD
Environment and Climate Change Canada
Government of Canada
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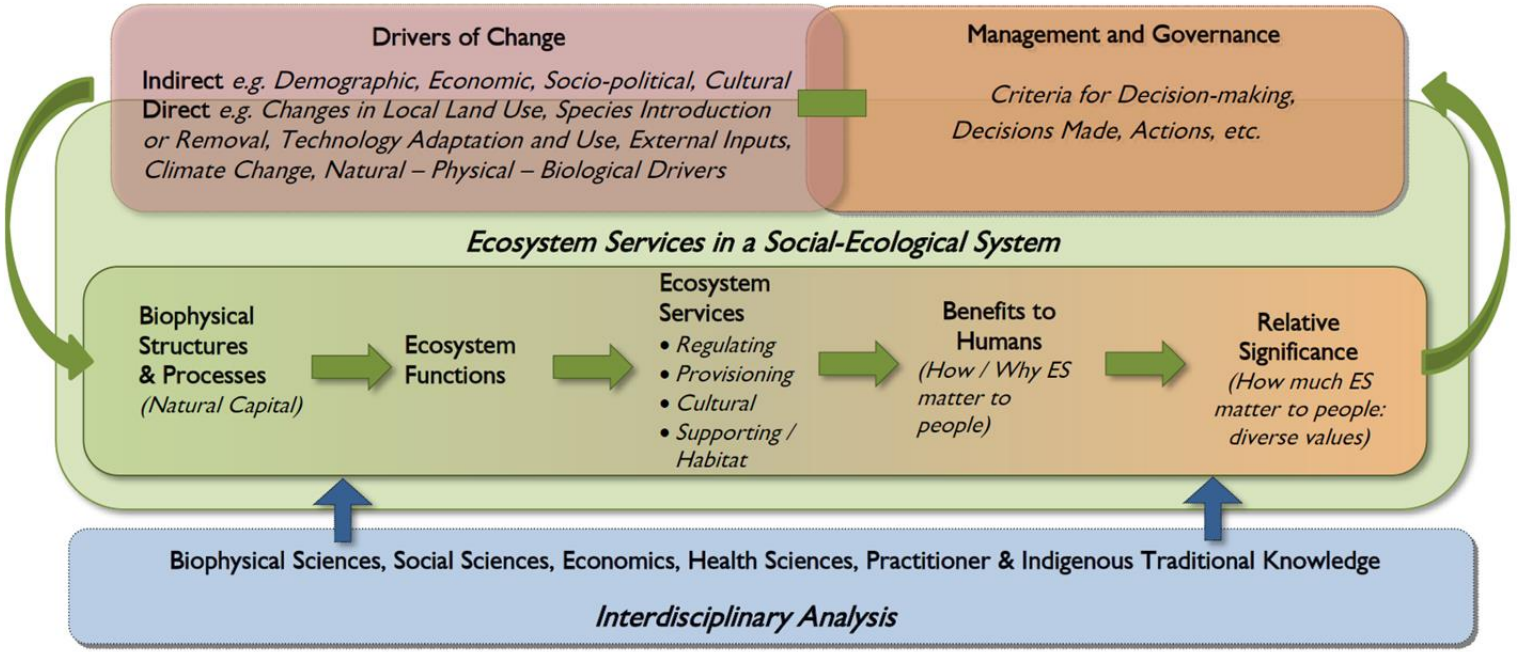
A Community on Ecosystem Services
Susan.Preston@canada.ca

Ecosystem Services *Version 2.0*:
Mainstreaming in Practice

- Since pre-MA much attention to methods and approaches for ES assessment
  - i.e., how to measure, map, interpret, value, analyse, and assess ES
- After 2010/CBD COP10 increasing government commitments globally,
  - e.g. EU commitments for 2020 Biodiversity Goals and Targets; US Presidential Directive October 2015
- …creating demands for how to move from assessment to implementation in real policy/decision contexts
  - and making key insights from real applications very important, e.g. the Ruckelshaus et. al article

But what does it mean to "mainstream ecosystem services" in decision making?

- Consideration of many things, requiring broadly interdisiplinary information and analytical skills:



- The question is *HOW*?

Existing government protocols:
barriers or opportunities?

- Protocols / procedures are typically standardized
  - e.g. for designating candidate protected areas, regulatory impact analysis statements, framing environmental impact assessments, etc.
  - Entirely new processes would not be feasible for various reasons, e.g. authorization, costs, workload/capacity
- The key is to show analysts and managers how they can incorporate ES considerations, assessments, and/or results into their *existing practices*

  …and demonstrating the benefits of doing so!

Canada's *Ecosystem Services Toolkit:*
a new technical interdisciplinary guide

- Federal-Provincial-Territorial governments collaboration
  - Mandated by Assistant Deputy Ministers and Deputy Ministers to provide specific practical advice and tools for ES assessment and for integrating into decision processes
- Addresses "mainstreaming" in:
  - Regional Strategic Environmental Assessment & Land Use Planning
  - Environmental Impact Assessment
  - Strategic Environmental Assessment
  - Regulatory and Policy Development
  - Environmental Damages Assessment
  - Establishing and Managing Protected Areas
  - Managing Species and Ecosystems
  - Managing Invasive Alien Species
  - Conservation Incentive Programs
  - Conservation Offsets

Why, when, how to incorporate ES: Justification, Entry points, Examples

- For each policy area:
  - Relevance of ES to analysis and decisions in this policy area
  - **Entry points:**
    - **Where/when**
    - **What/how**
  - Examples of how this has been done
  - Other considerations; Selected sources for further information

Entry Points: ES can be factored into analysis and decision processes at multiple stages

…for example (generally):

- Early stages
  - scoping to show all potential connections between the decision and ES
- Data gathering stages
  - adapt to include ES-related information
- Decision support analysis stages
  - integration of ES-related information
- Implementation, mitigation, or compensation stages
  - defining what to optimize to ensure ES are in the field of options
  - condition and trend analysis at decision site could inform performance objectives criteria or requirements for restoration or mitigation

An example:
Environmental Impact Assessment

- Project design phase:
  - ES assessment could inform design by proponent to minimize negative impacts to ecosystem structures and processes that underpin ES flows, and will identify ES benefits to proponent
- Environmental Impact Statement (EIS) prep phase:
  - Proponents could be encouraged/required to consider ES in EIS to gov't, including scoping, baseline data, and anticipated changes to ES resulting from project. ES assessment could become a standard requirement, and gov't could provide guidelines for consistency.
- Government review phase:
  - Intervenors & proponents increasingly using ES evidence, gov'ts need ability to evaluate, may need to do own assessment
  - Independent ES assessment helps identify cumulative effects of environmental change

An example:
EIA, cont'd

- Decision/mitigation phase:
  - ES analyses could support mitigation strategies by identifying ecosystem 'structures and processes' that society depends on (in combination with conventional environmental analyses)
- Decision/compensation phase:
  - ES analyses could inform criteria/measures for proponent/developer to compensate gov't/society/property owners for unavoidable damages, e.g. monetary penalties or offsets for biodiversity, habitat, or ES

Enabling language is a key for 'entry' into existing protocols

- e.g. natural capital, nature's benefits to society, use values and non-use values, ecosystem services, public interest, human well-being, etc.

Another example:

Entry points for Conservation Incentives

- identifying **target landscapes**
- establishing **criteria** for behaviour
- identifying **specific outcomes**
- selecting optimal **incentive mechanism**
- establishing **criteria for monitoring and evaluation** of outcomes
- determining the **extent of the incentive** using performance criteria
- justifying **renewed investments** based on practices or outcomes
- projecting **anticipated outcomes** of potential investments

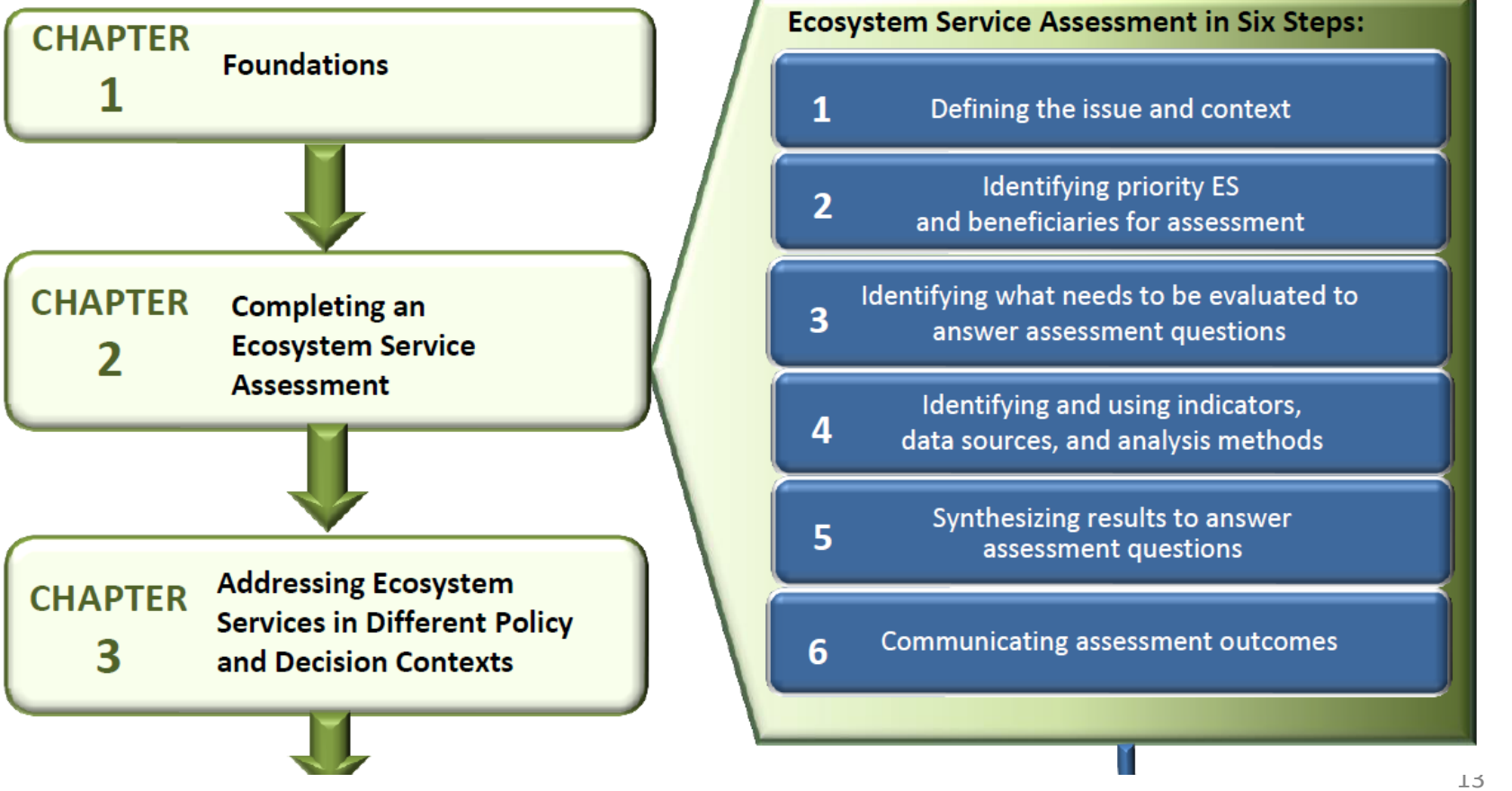
Institutional Strategy for Actioning ES

- Collaboration within and across agencies to develop a strategy for actioning ES could expedite mainstreaming
- A ready-access resource kit could support time-sensitive (aren't they all!) and cost-effective analyses. It includes:
  - A Toolkit for step-by-step advice and tools to complete ES analyses and assessment (in Canada, the *ES Toolkit*)
  - A list with the name, area of expertise, and contact info for all *potentially relevant* ***subject-matter experts*** in ES (biophysical, socio-cultural, economic) starting with "front line" contacts in your department or agency
  - A list with the name, content, holder, and access requirements for all *potentially relevant* ***data sets*** (biophysical, socio-cultural, economic) to support ES analyses

Questions?

Toolkit Contents pt.1

What's Inside This Toolkit



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