

Environmental Assessment



Define Environmental Assessment

Process of identifying, predicting, evaluating and mitigating biophysical, social and other relevant effects of development proposals prior to making major decisions and commitments - IAIA 1999

In general, environmental assessment is a process to predict the environmental effects of proposed initiatives before they are carried out. An environmental assessment:

- identifies possible environmental effects
- proposes measures to mitigate adverse effects
- predicts whether there will be significant adverse environmental effects, even after the mitigation is implemented – CEAA website 2010

Clarifications

EA ensures that environment, society and culture is considered in decision-making related to a development

EA not applied to approve or reject a project

Environmental Assessment (EA) is not the same as Environmental Site Assessment (ESA). ESA is applied to property transfers, contaminated sites, etc.

Environmental assessments are not Environmental Audits that are used to evaluate the environmental management and regulatory compliance of a specific operation. - CEAA website 2010

History of EA

1970 US: National Environmental Policy Act

1972 Canada – Environmental Assessment and Review Process (EARP)

1984 Canada – EARP Guidelines Order

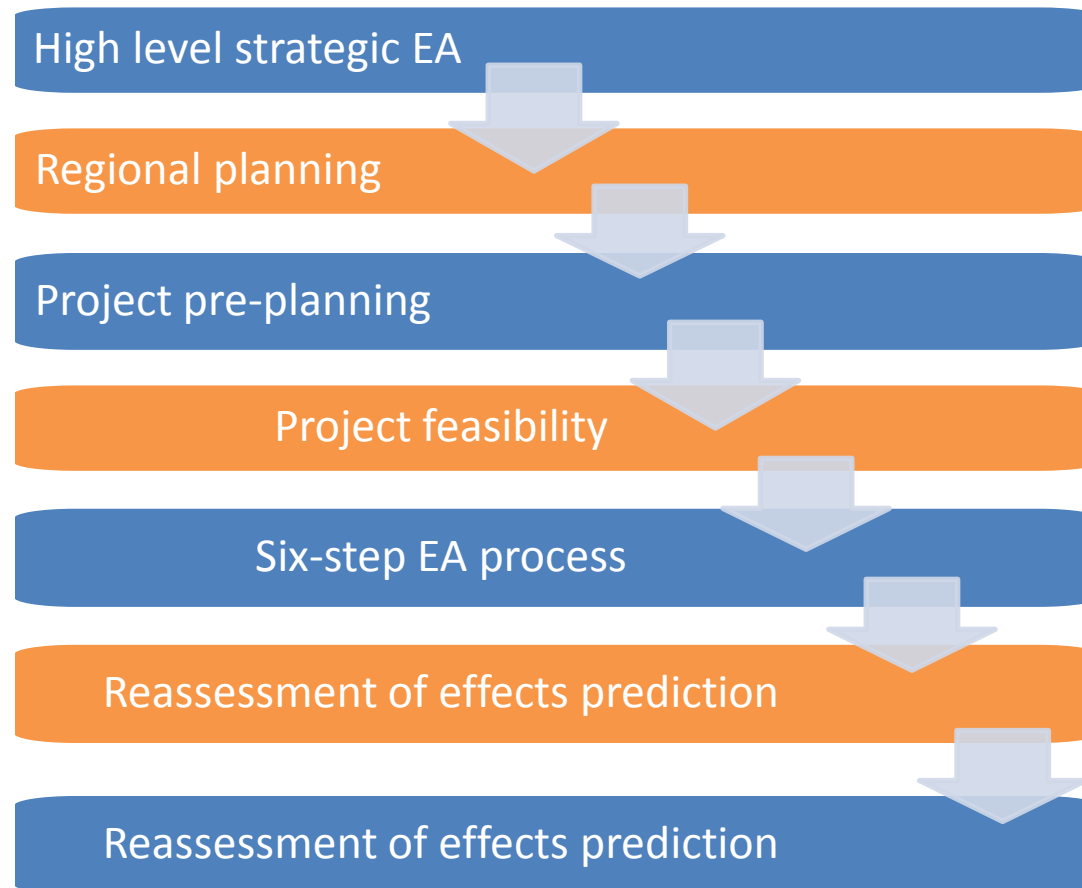
1992-95 Canada – Canadian Environmental Assessment Act (CEAA)

2000 – CEAA Review

2010 - Bill C-9 Amendments

2010 – CEAA Review

Wider context of EA



Objectives of EA

Ensure environmental effects are addressed in the decision-making process

Anticipate and avoid, minimize or offset adverse effects of proposals

Protect natural systems (forests, rivers, lakes, etc.) and ecological processes

Promote development that is sustainable and optimizes opportunities

Benefits of EA

Environmental protection

Public acceptance

Communication / understanding

Reduce risk of surprises

Licence / permit approval

On schedule projects

On budget projects

Principles of EA

**Self-
assessment**

**Early
application**

**Proponent
responsibility**

**Focused on
important
issues**

**Preventative
and proactive
approach**

**Public
involvement**

**Sustainable
development**

Kinds of Environmental Assessments

**Comprehensive
Studies/
Environmental
Impact Statements**

**Panel Reviews
Public Hearings
Mediation**

**Greater
Than 95%**

Screenings

**Many more are
excluded**

EA Legislation

Federal – Canadian Environmental Assessment Act (CEAA) and regulations

Provincial/Territorial – Acts and regulations

Municipal – Bylaws, ordinances

First Nations – Acts, regulations, resolutions, by-laws

Definition of CEAA

Canadian Environmental Assessment Agency -The Agency provides leadership and serves as a centre of expertise for federal environmental assessment. It is responsible for the overall administration of the federal environmental assessment process. CEAA website 2010

- The *Canadian Environmental Assessment Act* (CEAA) is a federal statute that requires federal departments to conduct environmental assessments for prescribed projects and activities before providing federal approval or financial support.
- Enacted in 1995 – amended in 2003 and to be amended again in 2010
- Regulations provided under the Act
- Outlines environmental assessment process
- Defines types of environmental assessments
- Identifies factors to consider in an environmental assessment

CEAA Triggers

- **Federal proponent**
- **Federal funds**
- **Federal lands (sale, transfer, purchase)**
- **Regulatory approval, permit, authorization, etc.**

**Other triggers include:
public concern and
transboundary effects**

Other federal legislation linking to EA

Canadian Environmental Protection

Fisheries Act

Indian Act

Navigable Waters Protection Act

Migratory Birds Convention Act

Species At Risk Act

Transportation of Dangerous Goods Act

International Rivers Improvement Act

First Nations Land Management Act

EA terminology

Proposal / Proponent / Project

Scope – project and assessment

Environment / Economic / Social / Cultural

Environmental effect / impact

Effect – individual change in the environment caused by the project

Impact – overall change in the environment caused by the project

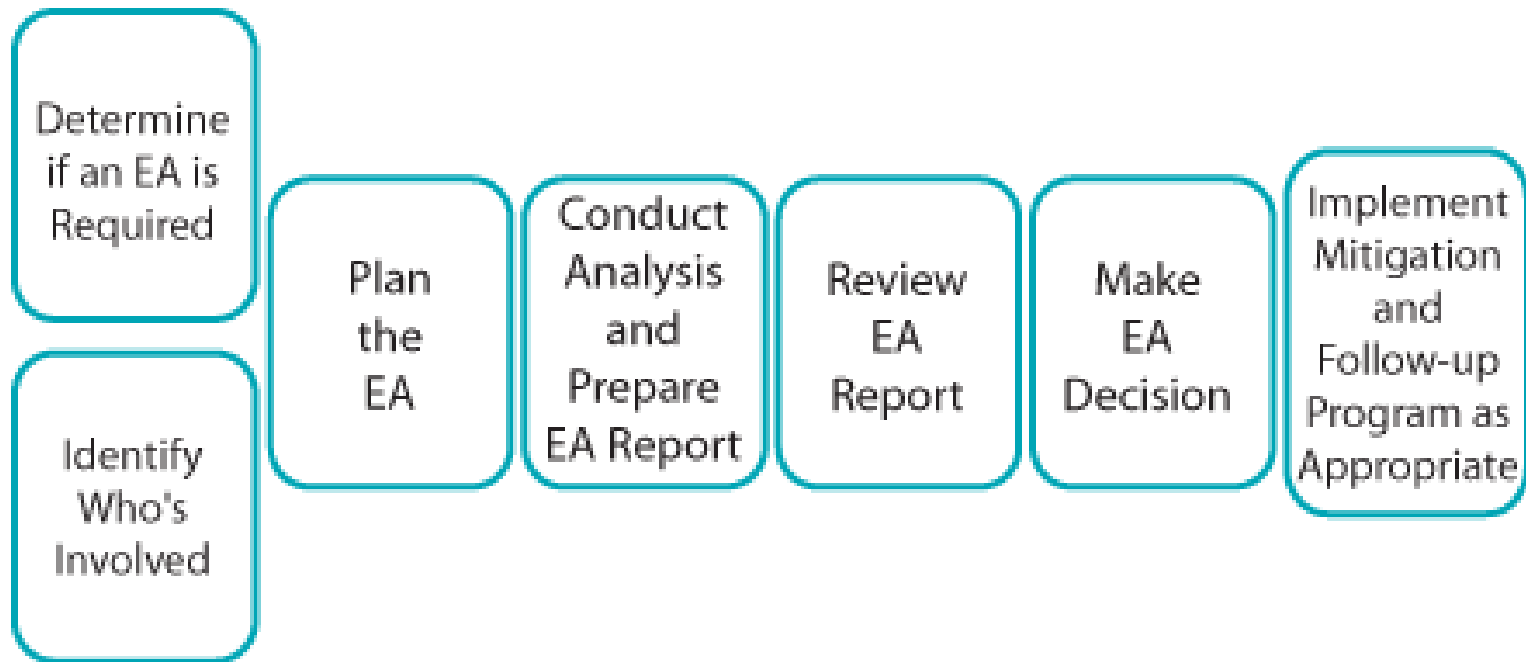
Mitigation measure

Residual environmental effect

Follow-up

Significance

Stages of EA



EA methods

Science &
Indigenous
Knowledge

Checklists

Ad hoc

Matrices

Maps

Network
diagrams

Models

Risk
assessment

Use of Indigenous Knowledge (IK) in EA

T'lakstan

In Namgis First Nation, the local Elders brought to the attention of marine biologists involved in the EA a species of seaweed important to their people as a traditional food.

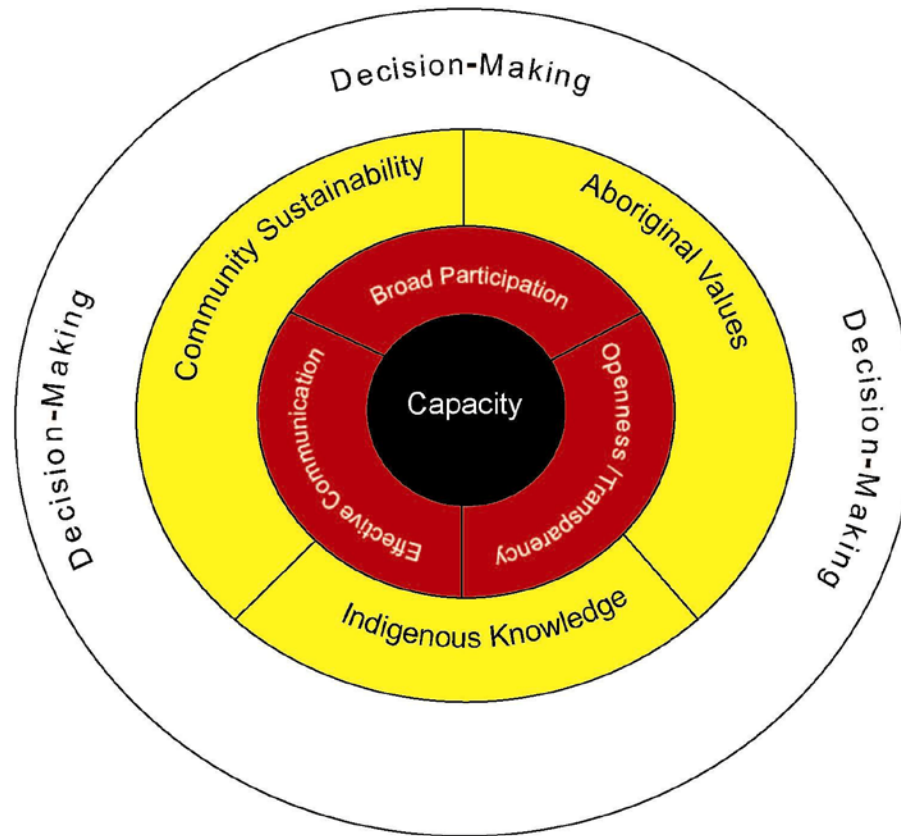
- Single cell seaweed
- Strange lifecycle
- Grows large fronds every May
- Remains hidden 11 months of the year
- Only grows on granite

This led to changes in the EA:

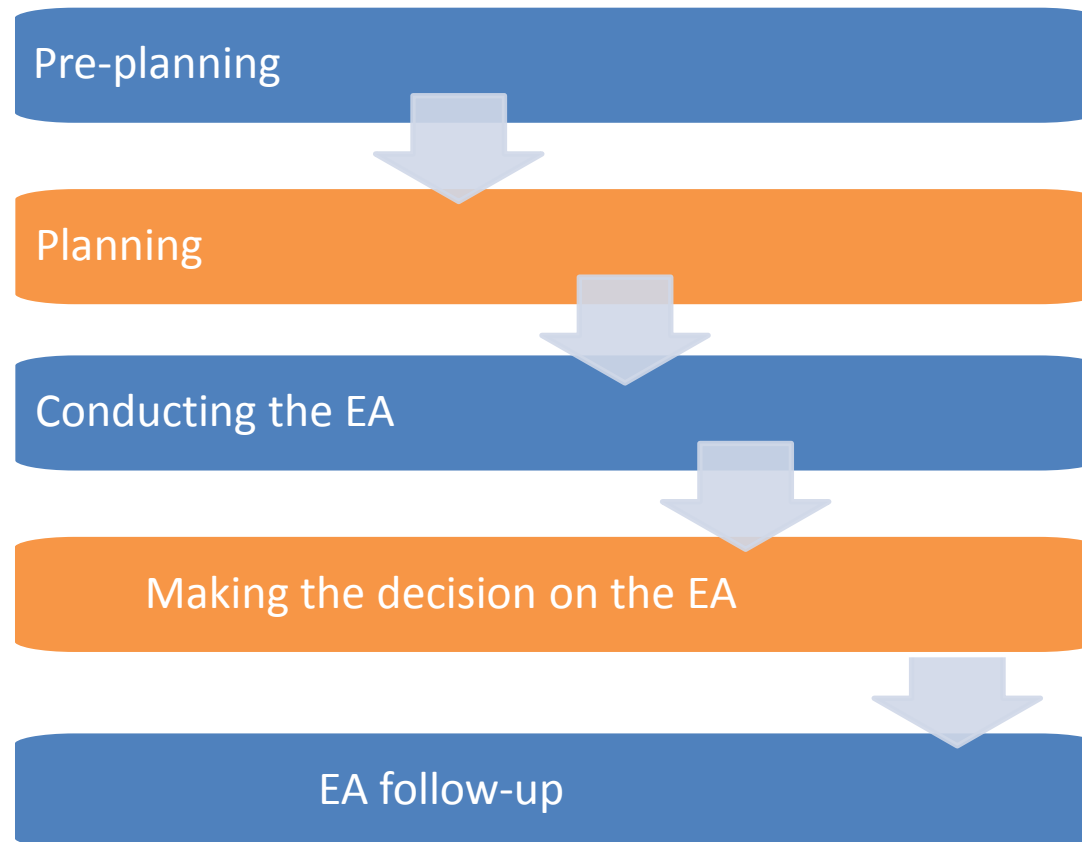
- The conveyor belt was shifted at the request of Namgis to avoid colonies of the seaweed
- The company shipped in granite to the site as further compensation



Principles of meaningful involvement of First Nations (FN) in EA



Stages for FN involvement in EA



Reporting for EAs

Purpose of environmental assessment reports

Reviewing reports

Report checklists

EA and CEAA resource guides/ best practices

International Association for Impact Assessment (IAIA)
Principles of EA Best Practice

IAIA Principles of Social Impact Assessment Best Practice

CSA Draft EA Standard

CEAA policy statements, guides

Provincial/territorial guides