Conservation Offsetting 101
An Introduction

Dave Poulton
Executive Director,
Alberta Association for Conservation Offsets
October 26 2016

dpoulton@telus.net
Phone: (403) 607-8525
Outline

- Conservation Offsetting – the Concept
- The Global Policy Picture
- Key Issues in Offsetting
- Offsetting in Alberta Policy
“[M]easurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken.”

Business and Biodiversity Offset Programme, 2013

AKA “Biodiversity Offsets”, “Habitat Compensation”, “Compensatory Mitigation”, “Conservation Allowance”
Conservation Offsets

The Mitigation Hierarchy

1. Impact Site

2. Offset Site

Basic Development
Less Avoided Impact
Less Mitigation
No net loss
Net Benefit

Conservation Offset

- Positive impact
- Offset
- Avoided
- Mitigation
- Negative Impact
Conservation Offsets

What they are NOT:

- Conventional mitigation
- Justification for bad development project
- Applicable in all circumstances
- Comprehensive environmental protection
- A panacea
Conservation Offsets - Variations

Drivers

- Voluntary
- Permit conditions by regulators
- Required by law or policy

Offset Supply Mechanisms

- Project-specific (AKA Permittee-responsible, Bespoke)
- Banking
- Fees in-lieu
Conservation Offsets

Regulatory Conditions

- NEB 2010 – 2012: 3 decisions on NGTL pipeline proposals in Horne River area: caribou habitat offsets
- JRP 2011: Total Joslyn oilsands mine: offsets for species at risk
- JRP 2013: Shell Jackpine oilsands mine: wide range of offsets recommendations
- NEB 2013: Enbridge Northern Gateway pipeline conditions: 10 conditions for 4 different types of offsets (wetlands, freshwater fish habitat, marine habitat, caribou habitat).
- NEB 2016: Kinder Morgan Trans Mountain Expansion: caribou habitat, spotted owl, rare plant communities, grasslands, old growth management areas, wetlands, riparian,
International Context

- 45 offset programs worldwide, 27 under development (Madsen et al, 2011)
- Research into offsets supported by parties to Convention on Biological Diversity
- IUCN: Policy adopted Sept 2016
- International Financial Corporation (World Bank)
  Performance Standard 6
  ◦ No net loss in natural habitat
  ◦ Net gain in critical habitat
- Equator Principles
Federal Policy

- Fish habitat (s 35(2) of Fisheries Act
  - Amended by Bill C-38 to provide for offsetting for “serious harm to fish”
  - Both freshwater and marine
- Federal wetlands policy
  - No net loss policy
- Species at Risk Act
Provincial Policies

Alberta

British Columbia

Ontario
- *Endangered Species Act*

New Brunswick
- *Wetland Policy*

Nova Scotia
- *Wetland Policy*
Biodiversity Offsets

Common Issues

1. Equivalency, fungibility and currency
2. Additionality
3. Timing and duration
4. Uncertainty and risk management
5. Oversight
Conservation Offsets - Issues

Equivalency, Fungibility & Currency

- Type
- Place
  - Ecological
  - Social
- Time

- Currency: by what metric do we measure equivalency?

“If the currency cannot incorporate the environmental values we care about, these become external to the exchange and, as a result, trades may actually worsen the environmental or natural services delivered. Inadequate currencies allow externalities to bleed out of the trading market.”

Salzman & Ruhl, 2000
Conservation Offsets - Issues

Like for like?

- How similar do losses and gains have to be?
Additionality

"Gains in biodiversity from conservation activities at offset sites need to be additional to those that would occur if no offset investment was made by the developer."

BBOP, 2012

Potential Types of Conservation Gains

- Positive Management Actions
- Averted losses
- “Other Conservation Actions”
## Conservation Offsets - Issues

- **Additionality: Positive Management Actions**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Actual improvement in ecosystem condition and function.</td>
<td>• Uncertainty of result: risk of partial or total failure.</td>
</tr>
</tbody>
</table>
Conservation Offsets - Issues

- Additionality: Averted Losses

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty of condition</td>
<td>No actual improvement in ecological conditions</td>
</tr>
<tr>
<td>Greater certainty of cost</td>
<td>Difficult to assess additionality</td>
</tr>
<tr>
<td></td>
<td>Risk of diverted losses.</td>
</tr>
<tr>
<td></td>
<td>Still some risk of future failure.</td>
</tr>
</tbody>
</table>
Conservation Offsets - Issues

Timing and Duration Issues
Conservation Offsets - Issues

Timing and Duration Issues

• Duration: perpetuity or equal to duration of development project

• Legally secured against conflicting uses
  ◦ Acquisition or conservation easement

• Monitoring

• Governance and and financing
Uncertainty and Risk Management

1. Recognize offset model not applicable in all circumstances (non-offsettability)

2. Variety of techniques

3. Multipliers
Conservation Offsets - Issues

**Oversight** – what role for government and public?

- System design
- Certification
- Run exchange or act as broker or neither?
- Subsequent review
- Overall oversight and accountability
Alberta Policy

- References:
  - Alberta Land-Use Framework
  - Responsible Action (Alberta Oilsands Strategy)
  - A Woodland Caribou Policy for Alberta
  - Lower Athabasca Regional Plan
  - South Saskatchewan Regional Plan

- Alberta Land Stewardship Act
  - s 45-47 provide for exchange to be established dealing in “stewardship units” to “counterbalance” adverse effects of activity on the land

- Alberta Wetland Policy (2013)
- Pilot program conducted in SE Alberta
- Alberta Conservation Offset Framework
Alberta Wetland Policy 2013

- **Goal:** “to conserve, restore, protect, and manage Albert’s wetlands to sustain the benefits they provide to the environment, society, and economy.”

- Comes into effect in white zone 2015, green zone 2016

- Provides option of “restorative replacement” or “non-restorative replacement”

---

**The Wetland Replacement Matrix**

<table>
<thead>
<tr>
<th>Value of Lost Wetland</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:1</td>
<td></td>
<td></td>
<td>4:1</td>
<td></td>
</tr>
<tr>
<td>4:1</td>
<td></td>
<td>2:1</td>
<td>1:1</td>
<td></td>
</tr>
<tr>
<td>2:1</td>
<td>1:1</td>
<td>0.5:1</td>
<td>0.25:1</td>
<td></td>
</tr>
<tr>
<td>1:1</td>
<td>0.5:1</td>
<td>0.25:1</td>
<td>0.125:1</td>
<td></td>
</tr>
</tbody>
</table>

*Ratios are expressed as hectares of wetland*
Where Could We Go?

- Caribou habitat
- Native grasslands
- Grizzly bear habitat
- Water quality/nutrient trading
Alberta Association for Conservation Offsets

Mission:
To support the design, development and implementation of a credible, transparent and outcome-based system of conservation offsets that considers the needs of environment and people, while allowing for flexible business solutions.
Alberta Association for Conservation Offsets

Membership 2016-17

- Alberta Biodiversity Monitoring Institute
- Alberta Conservation Association
- Alberta Innovates Bio Solutions
- Alberta Innovates Technology Futures
- Alberta Pacific Forest Industries
- Alternative Land Use Services
- ConocoPhillips Canada
- Crop Sector Working Group
- Daishowa Marubeni International Ltd.
- Ducks Unlimited Canada
- Edmonton & Area Land Trust
- Enbridge
- Environmental Law Centre
- Golder Associates
- Imperial Oil
- Land Stewardship Centre
- Legacy Land Trust
- Miistakis Institute
- Nature Conservancy of Canada
- Nexen Energy
- Pembina Institute
- Repsol Oil & Gas
- Shell Canada
- Silvacom
- Suncor
- Teck Resources
- Western Sky Land Trust
AACO Activities and Services

- Meetings, approximately quarterly, usually with involvement of GOA
- Hosting of specialized workshops and webinars
- E-mail distribution list for new developments and events
- Facilitation of working groups on specific issues
- LinkedIn discussion group
- On-line resource library
Conservation Offsets: Some issues under consideration by AACO 2015-18

- Opportunities, tools and barriers for conservation offsets on public land
- Principles re: stacking and bundling of multiple credit types
- Effects of conservation offset systems on land values
- Operating in the absence of a No Net Loss standard
- Temporary vs. permanent offsets: implications and operation
- Relationship of offsets and reclamation obligations
Thank you

Questions? Comments?