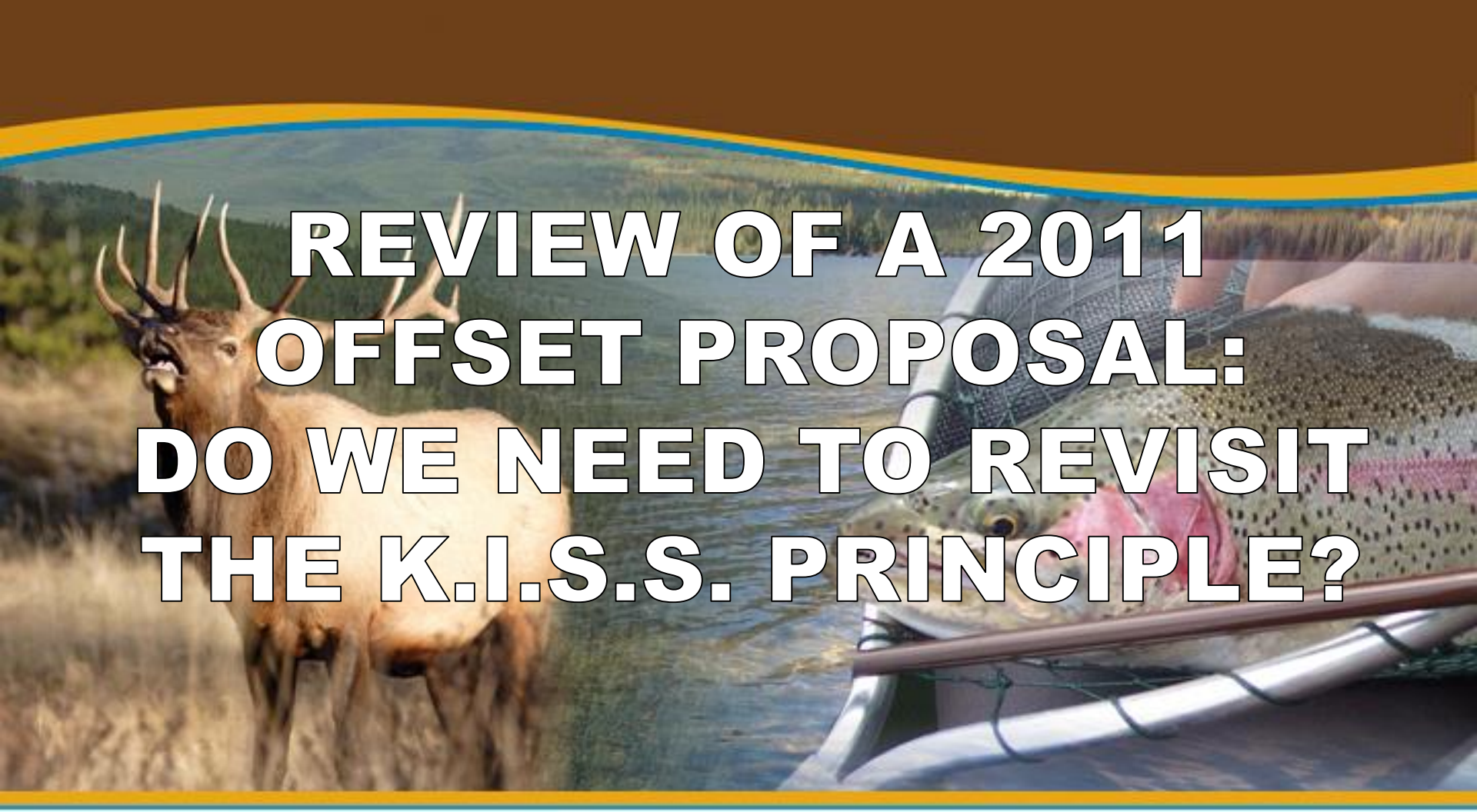

REVIEW OF A 2011 OFFSET PROPOSAL: DO WE NEED TO REVISIT THE K.I.S.S. PRINCIPLE?

Alberta Conservation Association

CONSERVING Alberta's Wild Side

Background

Alberta Conservation Association (ACA) began purchasing “voluntary conservation offsets” on behalf of Suncor in 2003.

By 2009, ACA had purchased conservation offsets on behalf of Suncor, Shell Canada and Total Energy with numerous companies exploring the possibility of conservation offsets.

Alberta Conservation Association

Background

ALSA proclaimed in 2009.

Allows for “conservation offset” to “counterbalance the effect of an activity”.

Companies stopped exploring the possibility of conservation offsets and waited for offset regulations.

Alberta Conservation Association

Background

June 16, 2010 - Mel Knight (Minister of Alberta Sustainable Resource Development) letter to Todd Zimmerling (President and CEO of Alberta Conservation Association)

“I would like to confirm that voluntary conservation offset will be recognized under the new regulations if they meet the following criteria”

Alberta Conservation Association

Background

June 2015

“The GoA review has determined that the Junction Lake project as submitted satisfies the criteria outline in the Early Action Process outlined in Appendix A. The Junction Lake project is eligible to be evaluated as a conservation offset when a relevant offset program is developed.”

First Early Action Conservation Site!

Alberta Conservation Association

While the early action protocol was a great step forward, the reality is that after 5 years the wording in the early action document provides no greater assurance to offset purchasers than already exists from Mel Knight's letter.

Alberta Conservation Association

While we are work on an conservation offset policy, habitat continues to be lost and species continue to decline.

Over the last five years, how many thousands of hectares of habitat have been disturbed without any offset?

Alberta Conservation Association

So what's holding things up?

PERFECTION!

"Perfect is the enemy of good"

Orland Pescetti 1603

Alberta Conservation Association

An Offset Proposal

What if we went back and looked at a simple idea developed by some simple guys?

Alberta Conservation Association

An Offset Proposal

ACA's voluntary offset system was recognized as a viable foundation for an offset system by both Pembina Institute (Schneider & Dyer 2006) and Canadian Boreal Initiative (Dyer et al. 2008).

Conservation Offsets: A Working Framework for Alberta. August 2011.

Croft, C., Zimmerling T., Zimmer, K.

Ultimate in K.I.S.S.

Alberta Conservation Association

It's not a perfect system.

"We recognize that the system we propose is relatively simplistic and critics will most certainly find areas where improvements to the proposed system can be made in the future; however, it is our firm belief that Alberta cannot afford to wait to develop the "perfect" system. Instead we must adopt the best option we have at the moment and use adaptive management to refine the system as time goes on."

Alberta Conservation Association

Simple concept of using ecosite rarity as a surrogate for biological “value.” The assumption is that a rare ecosite is of more value because there is less of it and is likely more difficult to restore/reclaim.

Alberta Conservation Association

Ecosites are functional ecological units which develop under similar environmental influences and are based on the interaction of biophysical factors which dictate the availability of moisture and nutrients for plant growth (Beckingham and Archibald 1996).

Every biologist, forester, and soil scientist understands ecosites, and they are used in every EIA.

Alberta Conservation Association

What is a conservation offset?

Land that is set aside from future development as mitigation for terrestrial impacts occurring elsewhere.

Alberta Conservation Association

What should be offset?

Any development on public land where:

1) Because of soil disturbance the ecosite characteristics will be changed;

2) Ecosite remains the same but native vegetation will not be re-established within 5 years of initial disturbance.

Alberta Conservation Association

Conservation offset principles.

1) Additionality – must have legitimate risk of disturbance (avoided disturbance); Or restoration beyond legal requirements or business as usual (eg.restoring old seismic).

2) Permanence – the offset must remain, even after the disturbance has been reclaimed. This ensures net gain for biodiversity.

3) Equivalency – propose a surrogate for biodiversity that encompasses vegetation, soil and site productivity as a coarse measure of ecological equivalency (ecosite).

Alberta Conservation Association

Conservation offset ratios.

System is based on ecosites and the relative rarity of ecosites in an Natural Sub-region.

Table 1: Terrestrial Ecosite Rarity within the Central Mixedwood Natural Sub-region of Alberta, compiled from 21 Environmental Impact Assessment, baseline descriptions for oil sands projects covering ~ 500,000 ha.

Ecosite	f	h	e	c	g	b	a	d	Total
Area (ha)	6,406.40	16,014.90	17,592.10	30,137.10	40,147.60	78,691.80	80,243.00	220,201.00	489,433.90
%	1.3	3.3	3.6	6.2	8.2	16.1	16.4	45.0	100.0

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Conservation offset ratios.

Table 2: Offset Ratios Based on Ecosite Rarity in the Central Mixedwood Natural Sub-region of Alberta.

		Disturbance Ecosites			
Offset Ecosites		e,f,h	c,g	a,b	d
	e,f,h	1:1	1:1	1:1	1:1
	c,g	2:1	1:1	1:1	1:1
	a,b	3:1	2:1	1:1	1:1
	d	4:1	3:1	2:1	1:1

- x2 outside sub-region
- x10 outside sub-region and different ecosite

Alberta Conservation Association

Some opinions have changed.

Offsets no longer limited to private land only.

Offsets not just for terrestrial systems in the green zone.

Alberta Conservation Association

Some opinions have changed.

No Net Loss (NNL)

vs.

Best Alternate Outcome (BAO)

To work in a NNL system requires a much more precise measurement system for equivalency. As a result, NNL holds back implementation.

BAO allows the process to move forward quickly.

Alberta Conservation Association

Some opinions have changed.

Is permanence a requirement?

Is like-for-like really the best way to go?

Does it give you the best ecological bang for the buck?

Alberta Conservation Association

Take home message

Biodiversity is NOT carbon and cannot be accurately measured. However, the more time we spend trying to create the perfect system, the less biodiversity we will have to worry about measuring, so over time this will get simpler.

Could the K.I.S.S. principle save some species??

Alberta Conservation Association

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