

# *BDR Data Collection Plan:* *or* *The Goldilock's Guide to BDR Data Collection*



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# Learning Objectives

## The BDR Data Collection Plan.....

- Why it is a must use tool
- How to develop a BDR data collection plan for each Easement.
- How it can *streamline* the field data collection, BDR report writing and future monitoring

# What's the Problem?

BIG

9000  
acres

Contractors

6 staff

\$\$\$ ~2 week

25 restrictions in the office

~2 week

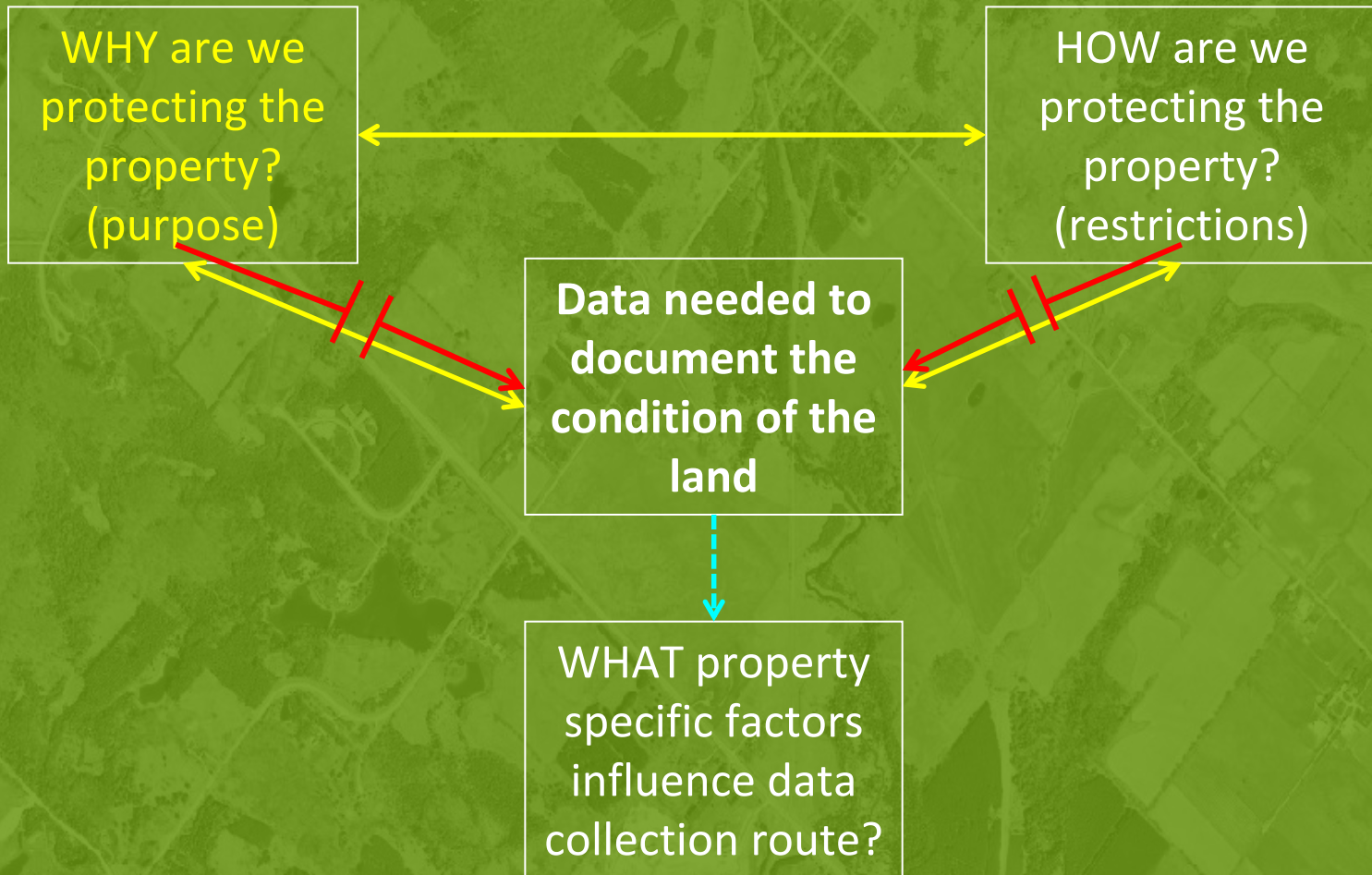
in the field

Habitats



Reserved Rights

# Framing BDR Data Collection



# Why is it a must use tool?

- Strategize over what data to collect
- Streamlines process, saving time and money
- Supports future monitoring and enforcement - upholds the Purpose and Intent of the CE



# Learning Objectives

## The BDR Data Collection Plan.....

- Why it is a must use tool.
- How to develop a BDR data collection plan for each Easement.
- How it can *simplify* the field data collection, BDR report writing (and subsequent monitoring!)



# Documenting the Purpose and Intent

- What data would validate the Purpose and Intent of the CE?
- How best can I collect it?
- Do I need any special equipment?

# Purpose Data Collection

<b>Purpose and Intent</b>	<b>Data needed to Confirm the P/I statement</b>	<b>Method of documentation</b>
<i>Each element of the purpose statement</i>	<ul style="list-style-type: none"><li>• Identify what data you need to confirm/provide evidence that the property supports the purpose</li></ul>	<ul style="list-style-type: none"><li>• What methods of data collection would most efficiently get you this data (i.e. referencing existing report? Your own data collection? Personal Communication with a credible source?)</li></ul>
<i>Each element of the purpose statement</i>		



# Purpose and Intent Statement

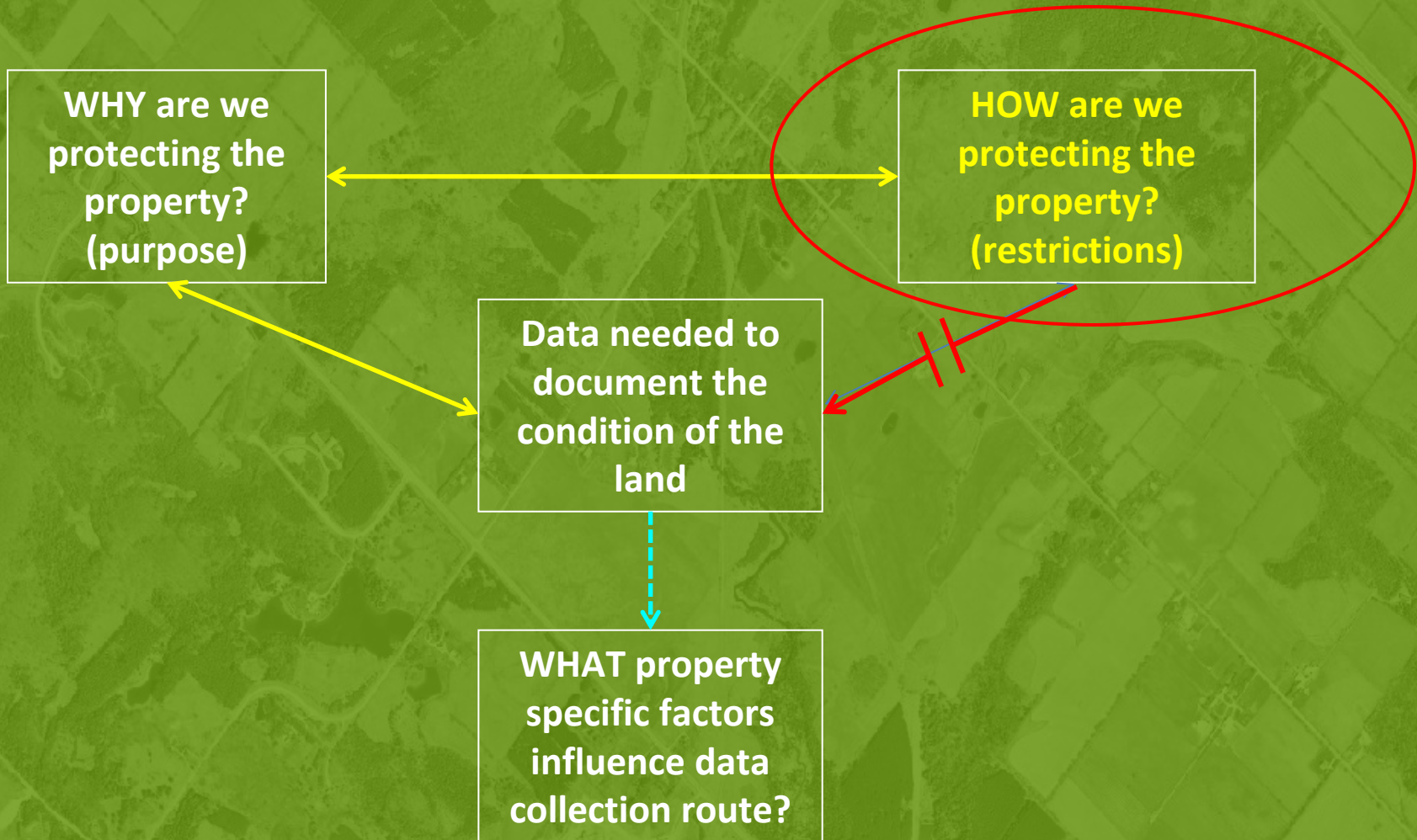
Without limiting the generality of sections 2.1 and 2.2 hereof, it is the intention of the parties hereto.....:

- **Riparian habitat of the Trundle River**
- **Overwintering habitat for ungulates; and**
- **Open space as a wildlife movement corridor**

Purpose and Intent	Data needed to Confirm the P/I statement	Method of Documentation
Riparian habitat of the Trundle River	<ul style="list-style-type: none"> <li>• the location of the river and extent to which we are considering the riparian area.</li> <li>• any special status (ex. Designated Significant Habitat)</li> <li>• habitat type(s)</li> </ul>	<ul style="list-style-type: none"> <li>• GIS layer (do we have it? can we get it?)</li> <li>• Research reports (any gov contacts?)</li> <li>• Primary (field) data collection supported by geo-referenced (with accuracy) photographs (is this right season?)</li> </ul>
Overwintering habitat for ungulates	<ul style="list-style-type: none"> <li>• ?</li> </ul>	<ul style="list-style-type: none"> <li>• ?</li> </ul>
Open space as a wildlife movement corridor	<ul style="list-style-type: none"> <li>• ?</li> </ul>	Incidental wildlife observations....

Purpose and Intent	Data needed to Confirm the P/I statement	Method of Documentation
Riparian habitat of the Trundle River	<ul style="list-style-type: none"> <li>the location of the river and extent to which we are considering the riparian area.</li> <li>any special status (ex. Designated Significant Habitat)</li> <li>habitat type(s)</li> </ul>	<ul style="list-style-type: none"> <li>GIS layer (do we have it? can we get it?)</li> <li>Research reports (any gov contacts?)</li> <li>Primary (field) data collection supported by geo-referenced (with accuracy) photographs (is this right season?)</li> </ul>
Overwintering habitat for ungulates	<ul style="list-style-type: none"> <li>Evidence that this property supports overwintering habitat for ungulates.</li> <li>habitat type(s)</li> </ul>	<ul style="list-style-type: none"> <li>Research papers, government reports, pers comms? (evaluate credibility of pers comm. )</li> <li>Primary (field) data collection supported by geo-referenced (with accuracy) photographs</li> </ul>
Open space as a wildlife movement corridor	<ul style="list-style-type: none"> <li>Evidence that this property functions as a wildlife movement corridor</li> </ul>	Research papers, government reports, pers comms (same person as for ungulates? Or do we need other s?)

# Framing BDR Data Collection



# Restriction Data Collection Table

<b>Restriction</b>	<b>Data required to document condition of the land and determine change</b>	<b>Data Collection Methods</b>	<b>Equipment</b>
1. VERBATIM RESTRICTION FROM CE	What do I need to collect?	How will I collect it?	Special equipment required?
2. VERBATIM RESTRICTION FROM CE			

# RESTRICTION EXAMPLE:

## CONSTRUCTION/BUILDINGS/STRUCTURES

No construction of additional buildings, structures, roads, or facilities.

# Restriction Data Collection Table

<b>Restriction</b>	<b>Data required to document condition of the land and determine change</b>	<b>Data Collection Methods</b>	<b>Equipment</b>
No construction of additional buildings, structures, roads or facilities	What is present at the time of closing? Location and function?	Aerial mapping Walk the property	Camera GPS

No construction of additional buildings, structures, roads, or facilities **without the prior written approval of the land trust, other than within the building envelope, identified in Schedule Map “A”.**

What structures are present at the time of closing?

Where are they located?

**Any approvals granted? (FILES)**

Where is the building envelope? Must map it

*\*Not necessary to document structures in the building envelope*



No construction of additional buildings, structures, roads, or facilities, without prior written approval of the land trust, other than within the building envelope and identified in Schedule Map “A”

**With an exception where the Landowner may maintain, replace and repair the Existing Facilities (outside of building envelope) but shall be kept to their current size and location.**

**What is the current size (foot print, height) of all the structures outside of the building envelope**

# RESTRICTION EXAMPLE:

## VEHICLE USE

No vehicle use off of existing roads and trails which may result in erosion or compaction of the soil.

# What data do I need to collect?

## Ask yourself.....

Are there definitions of roads and trails?

Where (geo-ref length, width) are the existing roads and trails? Consistent with the definition? Document in what way they are consistent or are NOT consistent

Any erosion caused by vehicles off road and trails at the time of signing?

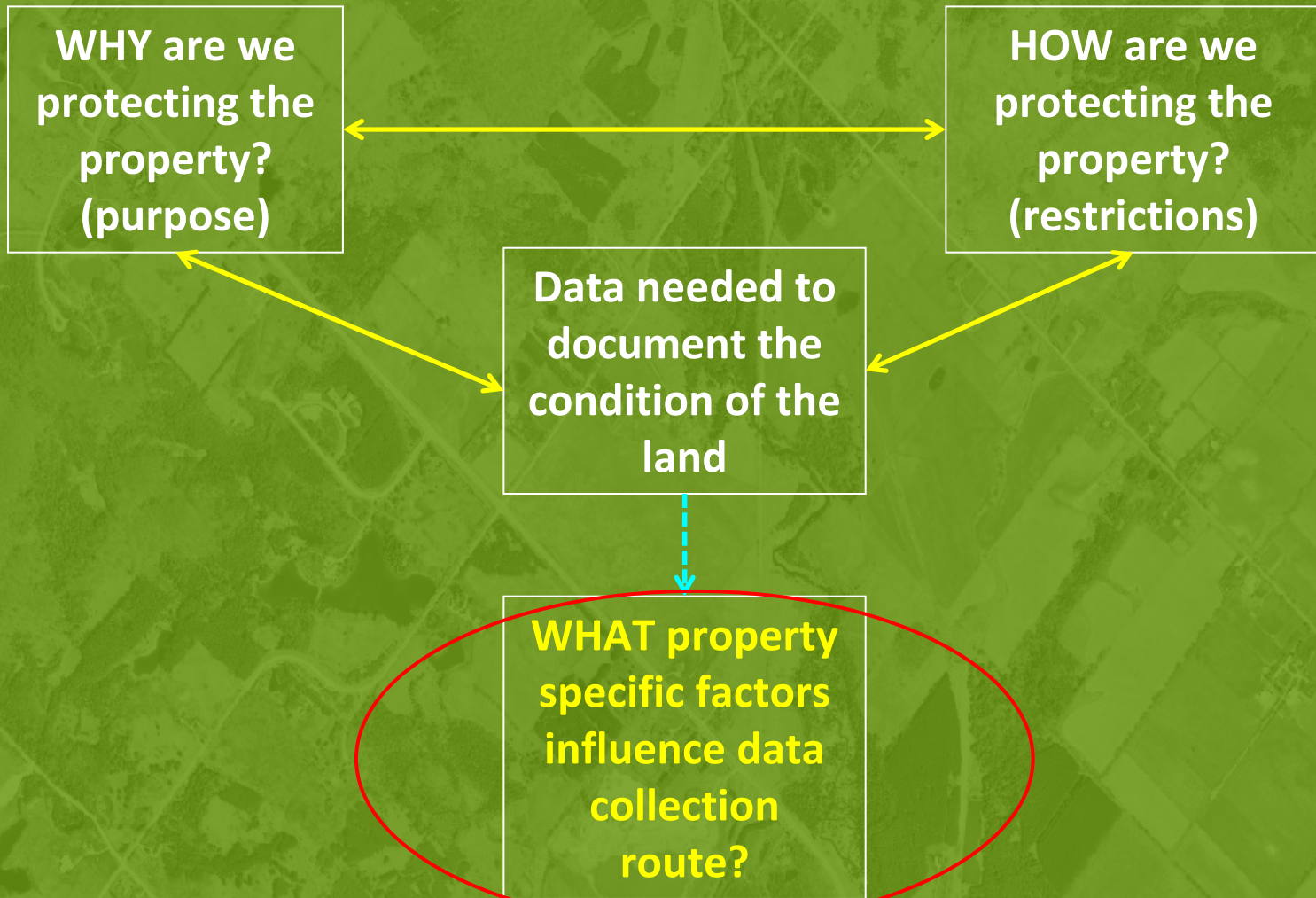
Yes: where, extent, pictures

# Learning Objectives

## The BDR Data Collection Plan.....

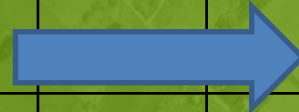
- Why it is a must use tool.
- How to develop a BDR data collection plan for each Easement.
- How it can *simplify* the field data collection, BDR report writing.

# Framing BDR Data Collection



# From the Field to the BDR

Improvement Type <sup>4</sup>	Function	Description	Conditions				Photo Reference Point Label <sup>2,3</sup>
			Size	Height	Principle Material	Condition Rating <sup>1</sup>	
		<p>By all means please have another daughter of this a one, or search for a suitable wife among the relatives.</p> <p>To raising an old man a woman</p>					
		<p>only if <sup>the</sup> <del>which</del> <sup>cross</sup> <del>cross</del> <sup>apart</sup> <del>apart</del> <sup>is</sup> <del>is</del> <sup>clearly</sup> <del>clearly</del> <sup>any</sup> <del>any</del> <sup>right</sup> <del>right <sup>to</sup> <del>to</del> <sup>the</sup> <del>the <sup>property</sup> <del>property</del>.</del></del></p> <p>if <sup>the</sup> <del>the</del> <sup>cross</sup> <del>cross</del> <sup>is</sup> <del>is</del> <sup>in</sup> <del>in</del> <sup>the</sup> <del>the <sup>same</sup> <del>same <sup>land</sup> <del>land, - to three daughters will get all the property, even without <sup>an</sup> <del>an</del> <sup>old</sup> <del>old</del> <sup>or</sup> <del>or</del> <sup>man</sup> <del>man</del> <sup>apart</sup> <del>apart</del>, - the <sup>best</sup> <del>best</del> <sup>sons</sup> <del>sons will get nothing. [Catalan 10/2. 342]</del></del></del></del></p>					



# From the Field to the BDR

Trail Type <sup>4</sup>	Function	Description	Conditions				Photo Reference Point Label <sup>2,3</sup>
			Length	Width	Principle Material	Condition Rating <sup>1</sup>	

Improvement Type <sup>4</sup>	Function	Description	Size	Height	Principle Material	Condition Rating <sup>1</sup>	Photo Reference
							Point Label <sup>2,3</sup>
Fences	Permanent and temporary enclosures for the purposes of containing livestock	East perimeter fence - 4 strand barbed wire (partially fenced)	450 m in length	1.1 m	wood posts, barbed wire	Poor	B1b, B5
		West perimeter fence 4-strand barbed wire	800 m in length	1.2 m	wood posts, barbed wire	Good	B11a, B12a
		North perimeter fence - 3 strand barbed wire (partially fenced)	150 m in length	1.2 m	wood posts, barbed wire	Dilapidated	B10a
Marker - Sash Power Underground Line	Communications	Sash Power underground power line marker	N/A	1.4 m	cable (under ground) wooden pole + metal sign	Good	B2
Natural Spring - well + water Trough	Water for Livestock	Spring fed well with gravity fed trough	5 m x 15 m	1.0 m	soil, vegetation	Good	B4
Natural Spring - water well	Water well	Spring fed well	0.3 m diameter	1.0 m	culvert	Good	B6



- Where data collectors were using the Trimbles: collection sheets were loaded



Improvement Type <sup>4</sup>	Function	Description	Structure				Photo Reference Point Label <sup>2,3</sup>
			Size	Height	Principle Material	Condition Rating <sup>1</sup>	
Fences	Permanent and temporary enclosure for the purposes of containing livestock	East Perimeter Fence, 4-strand barbed wire (partially fenced)	450 m	1.1 m	Wood posts, barbed wire	Poor	B1b, B5
		West Perimeter Fence, 4-strand barbed wire	800 m	1.2 m	Wood posts, barbed wire	Good	B11a, B12a
		North Perimeter Fence, 3-strand barbed wire (partially fenced)	150 m	1.2 m	Wood posts, barbed wire	Dilapidated	B10a
Marker - SaskPower Underground Line	Communication	SaskPower underground power line marker	N/A	1.4 m	Cable (underground) Wooden pole and metal sign	Good	B2
Natural Spring – Well and Water Trough	Water for livestock	Spring fed well with gravity fed trough	5.0 m x 15.0 m	1.0 m	Soil, vegetation	Good	B4
Natural Spring - Water Well	Water well	Spring fed well	0.3 m diameter	1.0 m	Culvert	Good	B6

# How well do you know your equipment?

- Know how to boost accuracy on your GPS?
- Does your GPS collect and store accuracy?
- Has the time/date stamp on your GPS and camera have been set?

## RESTRICTIONS (From BDR Template)

Table 7. Condition of the Property with Respect to the Restrictions

Restriction	Data Collection Method	Findings	Documentation
2.2 The cultivation, breaking or destruction of native plant communities.	A walk-through of the Property was conducted in order to verify features visible on the satellite photo. Plant communities were geo-referenced / mapped. The size/extent of dominant native plant communities was documented using GIS.	There are 26 acres of tame pasture on the property.  No other evidence of cultivation, breaking, or destruction of native plant communities on the Property.	Refer to Figure 1 for locations of Dominant Vegetation Communities.

<b>Restriction</b>	<b>Data Collection Method</b>	<b>Findings</b>	<b>Documentation</b>
<p>2.4 The construction of additional structures or fencing that consists of more than 4 strand barb wire.</p>	<p>A walk-through of the Property in order to verify features visible on the satellite photo. Presence / absence, photographs and geo-referenced location of structures were recorded</p>	<p>The fences present are perimeter fencing and cross fencing, varying in length, type and condition. Majority of fencing is 3-strand barbed wire and 4-strand barbed wire, however there are some small sections of 5-strand barbed wire and page wire. Two spring-fed water wells, and two dilapidated water troughs are present on the property.</p>	<p>Refer to Table 5 and Figure 5 for details and location of current structures.</p>

# Conclusions

- Can't replace good planning
- One more way to approach BDR data collection
- More time up front can save you more time in the end





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