Intro

Name : Michael Köck

Zoologist, Curator in Haus des Meeres – Zoo,
Cofounder of the Goodeid Working Group

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Todays Topic:

Redlisting Goodeids for the IUCN, process and shortcommings

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The talk will be…

… about the Differences between CITES and the IUCN Redlist

… about assessing Goodeids for the Redlist

… about the Redlist Criteria and their Shortcommings in assessing fish

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About the Differences

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Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The international trade of CITES-listed species is regulated in the Appendices I, II and III.

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Appendix I lists species…

that are the most endangered listed species. They are threatened with extinction and CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial (e.g. scientific research).

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Appendix II lists species…

that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled. It also includes so-called "look-alike species", i.e. species whose specimens in trade look like those of species listed for conservation reasons.

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Appendix III lists species…

included at the request of a Party that already regulates trade in the species and that needs the cooperation of other countries to prevent unsustainable or illegal exploitation.

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Included in the Appendices:

	I	II	III
Fish	16	107	24
Teleosts	6	50	1
Goodeids	0	0	0

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Conclusion:

1. CITES is a trade regulative
2. Species listed don't need to be threatened
3. Goodeids are not on the list because they are not traded.
4. It has no effect on Goodeid conservation.
5. CITES consults the IUCN Redlist for the status

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International Union for the Conservation of Nature, Red List of Threatened Species

The IUCN Red List is a critical indicator of the health of the world's biodiversity. Far more than a list of species and their status, it is a powerful tool to inform and catalyze action for biodiversity conservation and policy change, critical to protecting the natural resources we need to survive. It provides information about range, population size, habitat and ecology, use and/or trade, threats, and conservation actions that will help inform necessary conservation decisions.

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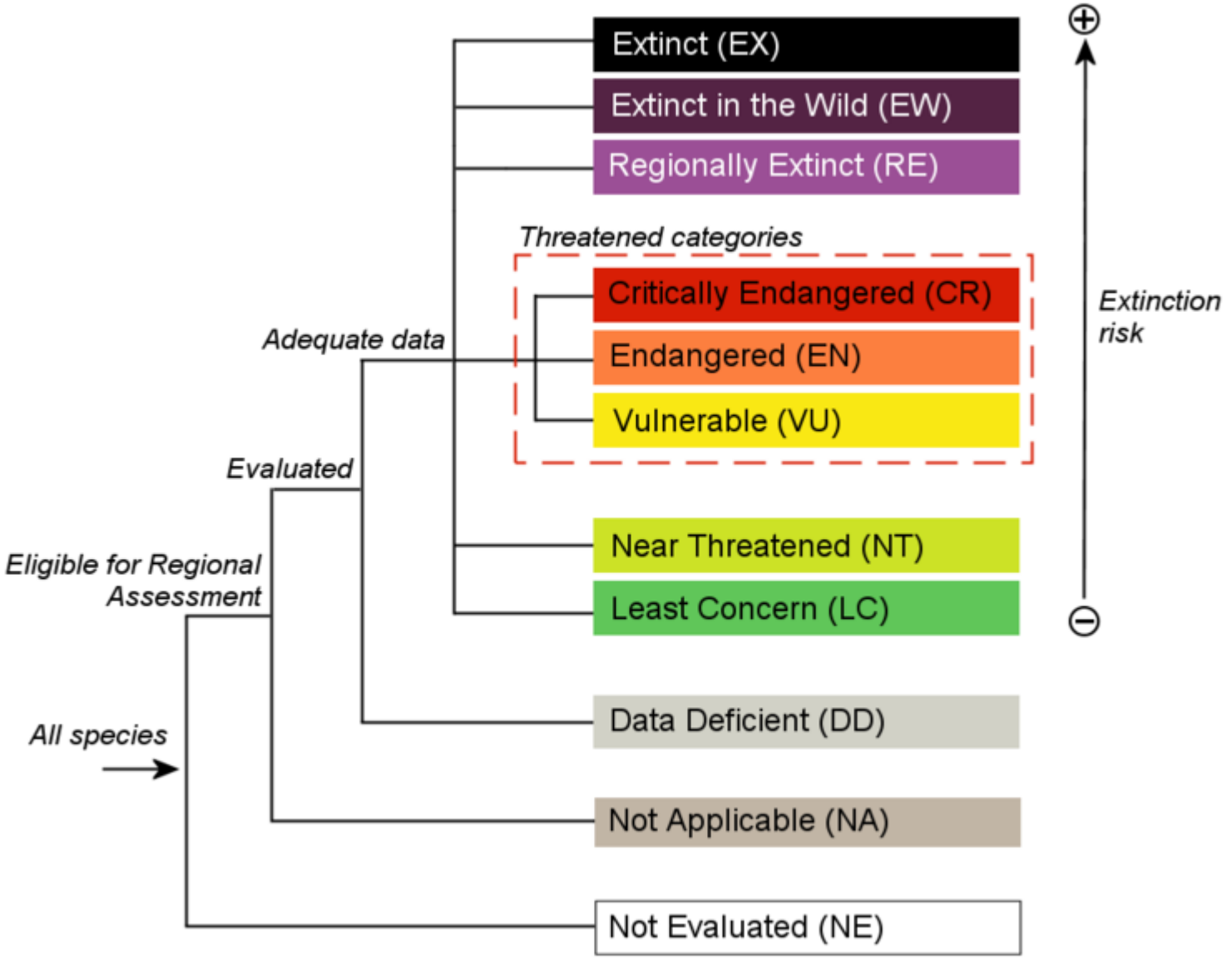

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Red listed Goodeids

1. Characodon garmani (EX)
2. Ameca splendens (EW)
3. Skiffia francesae (EW)
4. Allotoca diazi (CR)
5. Allotoca maculata (CR)
6. Girardinichthys viviparus (CR)
7. Hubbsina (G.) turneri (CR)
8. Zoogoneticus tequila (CR)
9. Ataeniobius toweri (EN)
10. Characodon lateralis (EN)
11. Xenoophorus captivus (EN)
12. Characodon audax (VU)
13. Girardinichthys multiradiatus (VU)

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IUCN Species Information Service

The Species Information Service (SIS) is IUCN's web application for conducting and managing species assessments for the IUCN Red List of Threatened Species™.

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SIS

Michael Koeck

Haus des Meeres-Aqua Terra Zoo GmbH, Austria

Working Sets Filter...

None

My Working Sets

Fishes_FW_Mexico_Goodeidae_JörgFreyhof via Caroline Pc

Mexican Fishes_Goodeidae via Laura Maiz-Tome

Taxon List Filter...

Skiffia lermae

Skiffia multipunctata

Xenoophorus captivus

Xenotaenia resolanae

Xenotoca doadrioi

Xenotoca eiseni

Assessments

Draft Assessments (1)

2018-10-21 --- Global

Xenoophorus captivus

Up to Parent (Xenoophorus) | View Hierarchy | Assess Taxon | Taxomatic Tools

General Information | Assessments | Working Sets | SSC Groups

Overview

Full Name: *Xenoophorus captivus* (23116)

Level: Species

Parent: *Xenoophorus*

Taxonomic Authority: (Hubbs, 1924)

Status: Accepted (plants, etc.)/Valid (animals) - Recognized

Hybrid: No

Synonyms (4)

Goodea captiva Hubbs, 1924 -- [Basionym/Protonym]

Goodea atripinnis (partially) Meek, 1907

Xenoophorus erro Hubbs & Turner, 1937

Xenoophorus exsul Hubbs & Turner, 1939

Common Names (5)

* Relict Splitfin (English)

Mexclapique (erronously: Mexcalpique) viejo (Spanish; Castilian)

Ritterkärpfling (German)

Solo Goodeido (Spanish; Castilian)

Özvegy fogasponty (Hungarian)

Taxonomic Notes Edit

The types Hubbs used in 1924 to describe *Goodea captiva* from Jésus María were collected in 1907 by S.E. Meek but regarded as *Goodea atripinnis*. In 1937, Hubbs and Turner transfered the species into the new erected genus *Xenoophorus* and described a second species in this genus, *Xenoophorus erro* from the Río Santa María. In 1939 they described from endorheic streams near Venado and Moctezuma a third one, *Xenoophorus exsul*. J. Fitzsimons (1979) finally synonymized the last two species with *Xenoophorsu captivus* as he couldn't find any differences. According to thr separate drainages, three subpopulations can be distinguished: The Río Santa María subpopulation (type subpopulation), the Río Matehuala subpopulation from Venado and Moctezuma and the Illesc subpopulation, that inhabited the endorheic springs near Illescas and which is regarded Extinct in th Wild

Previous Next

Infrarank

No Infrarank.

Taxonomic Sources (1)

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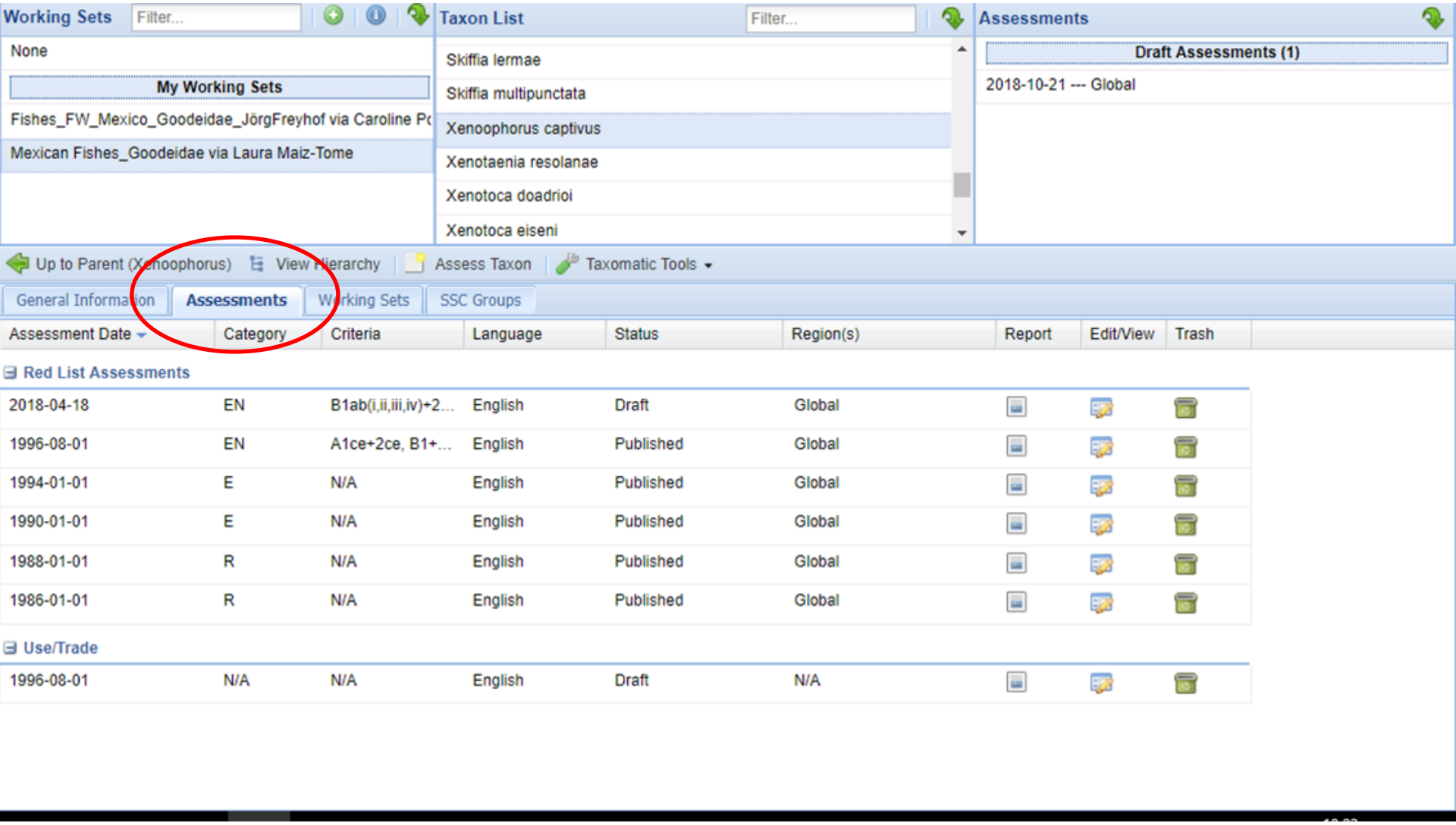

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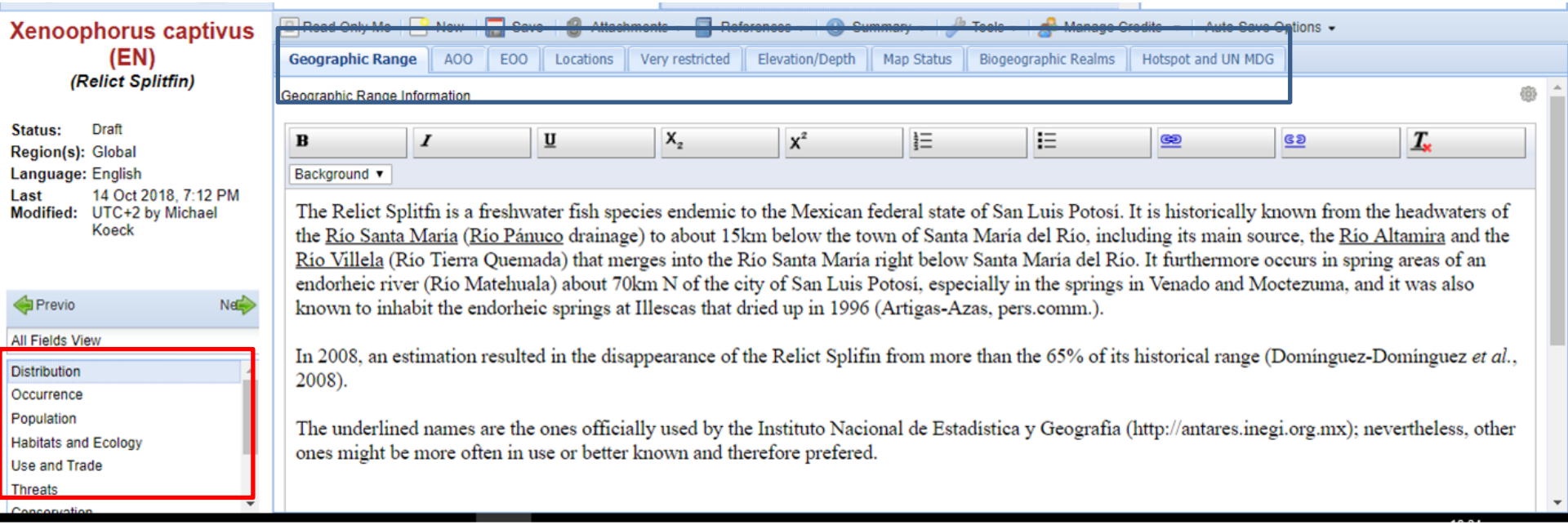

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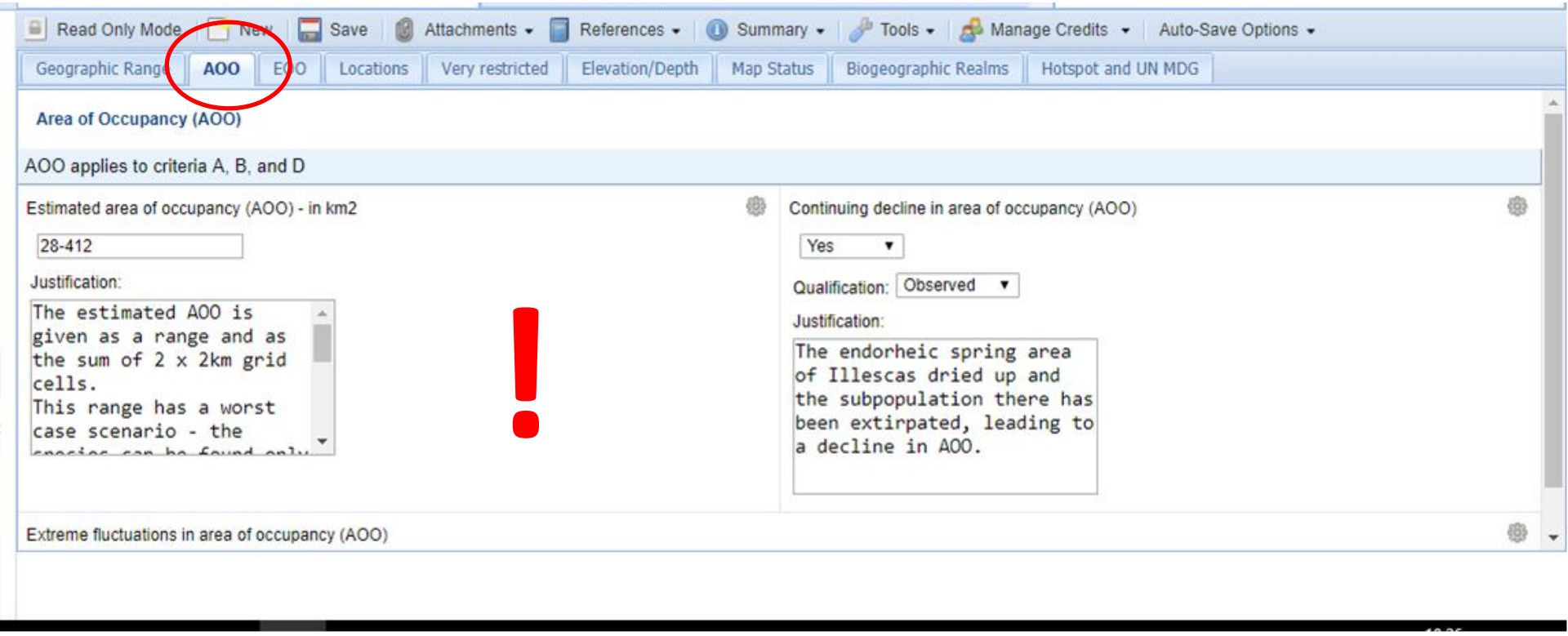

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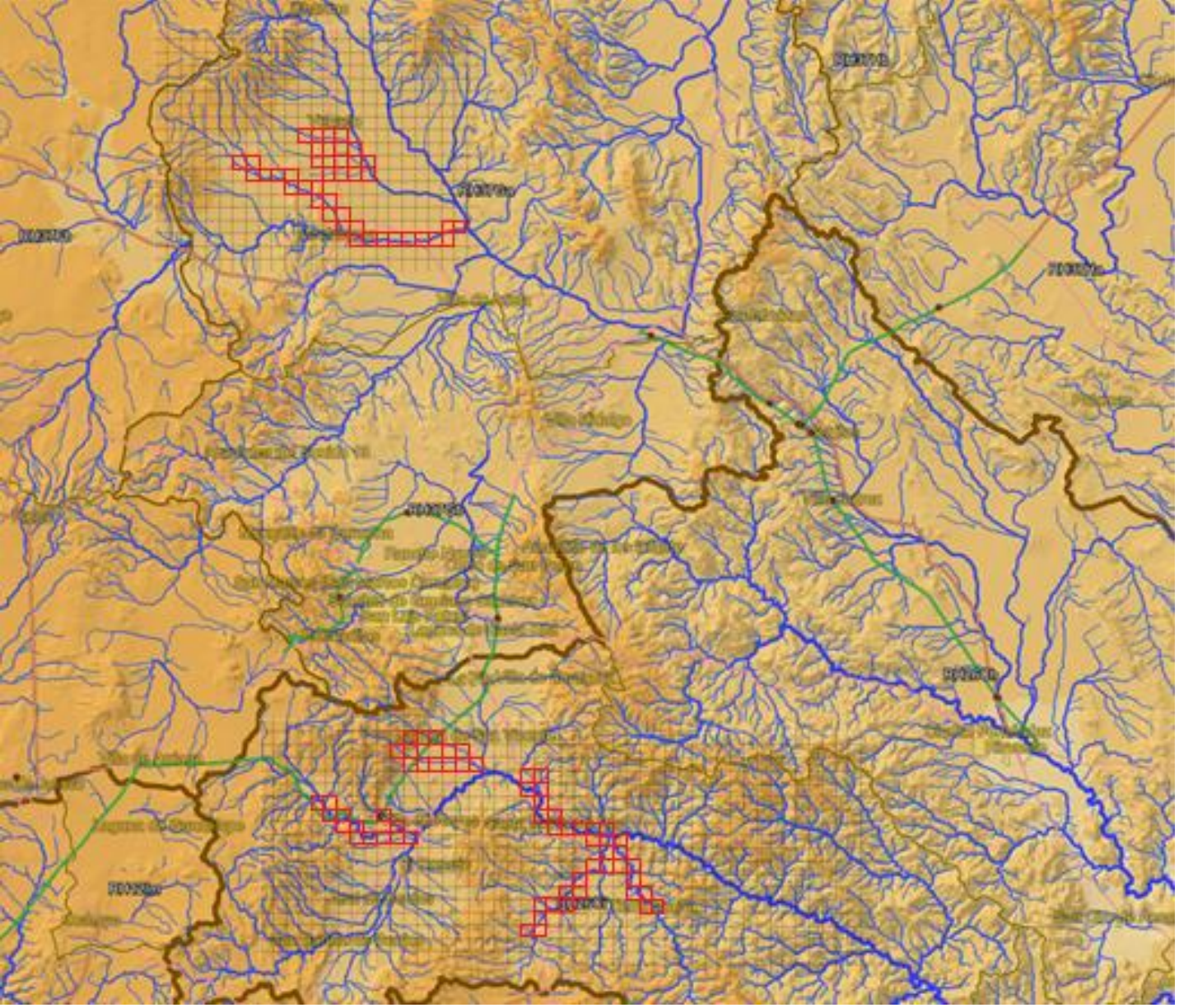

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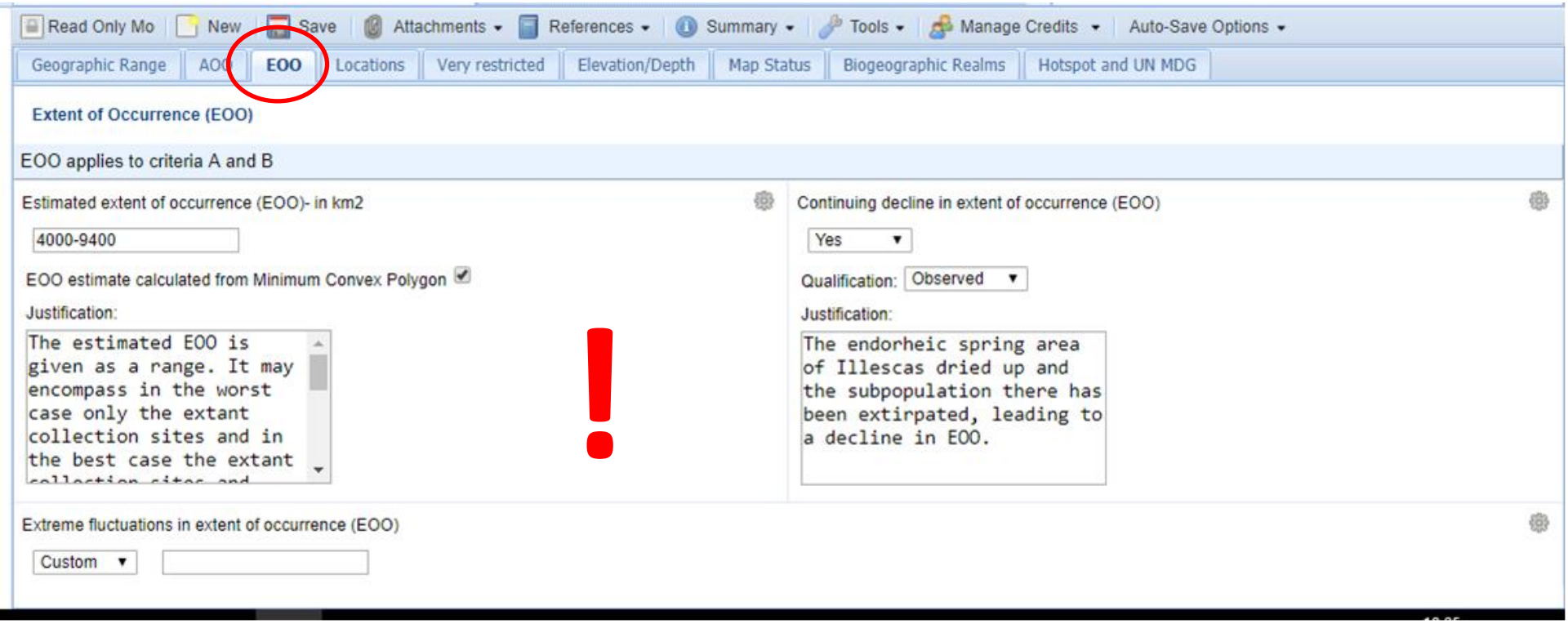

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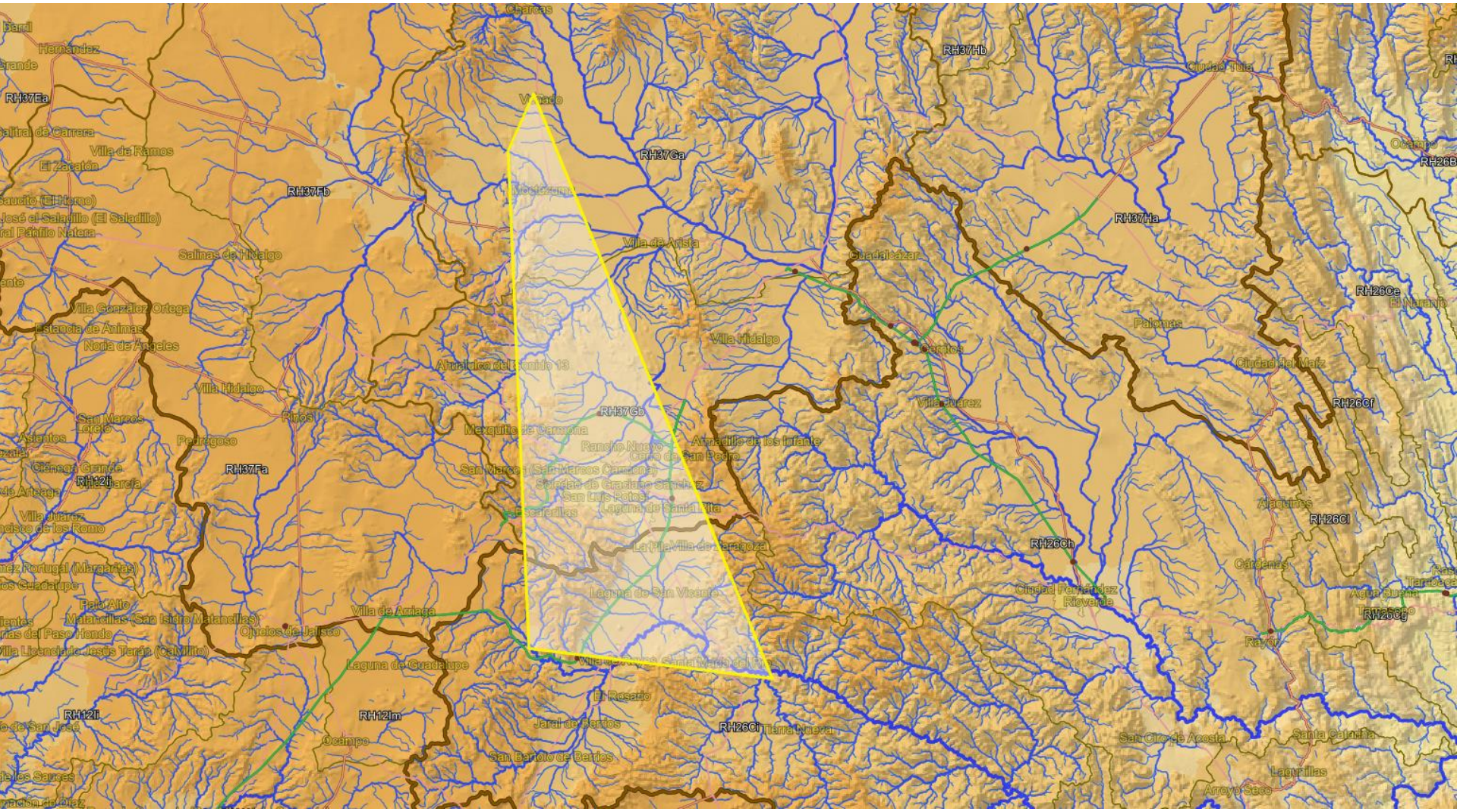

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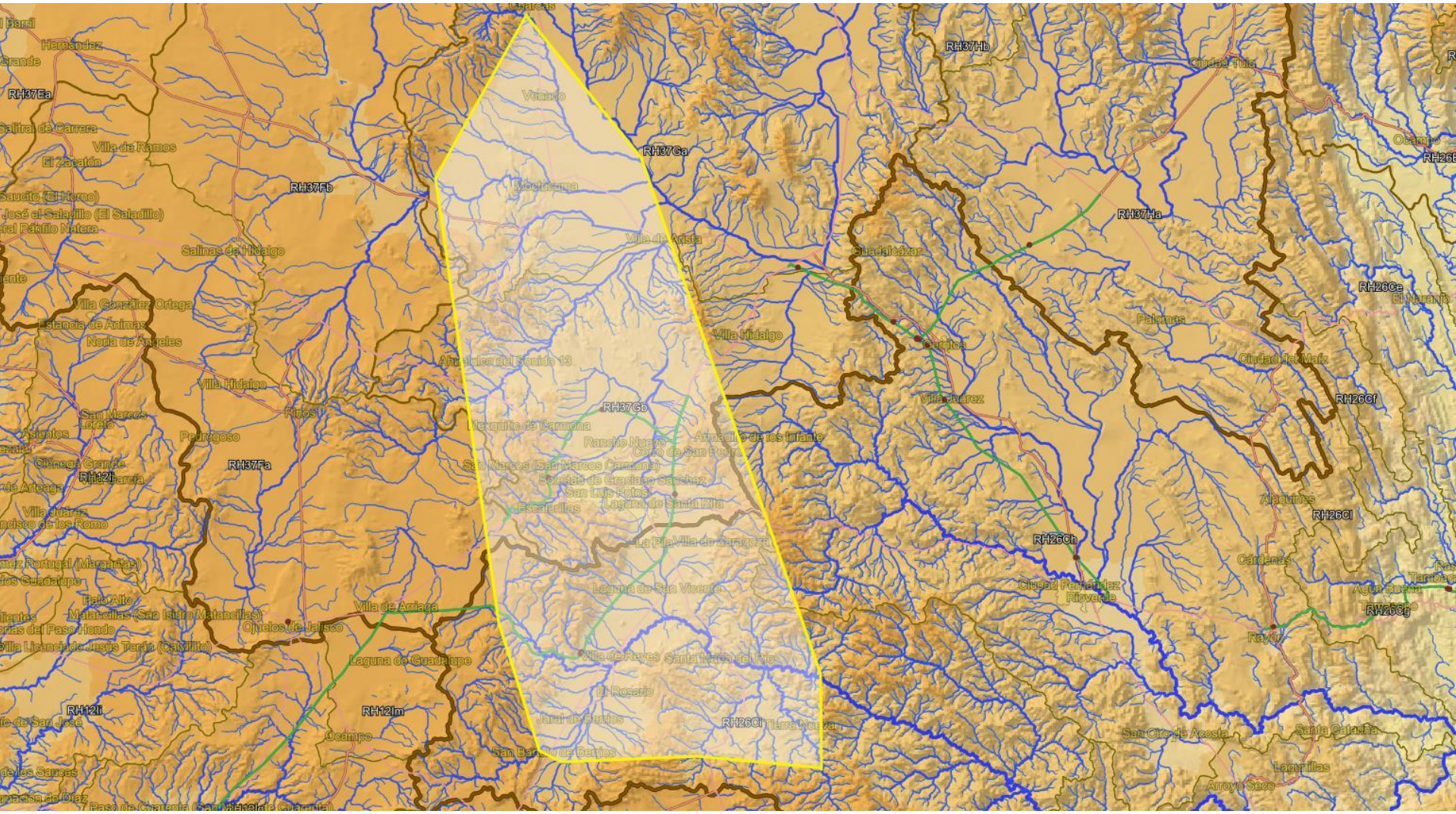

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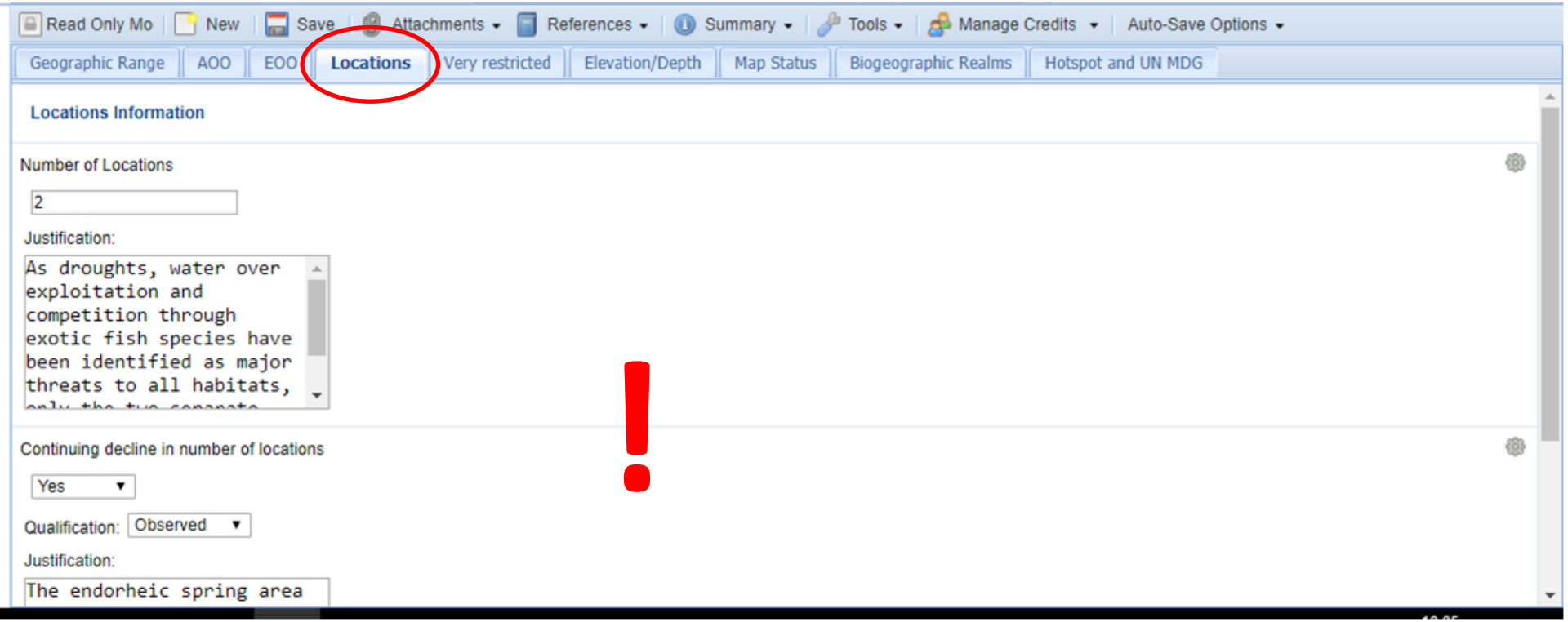

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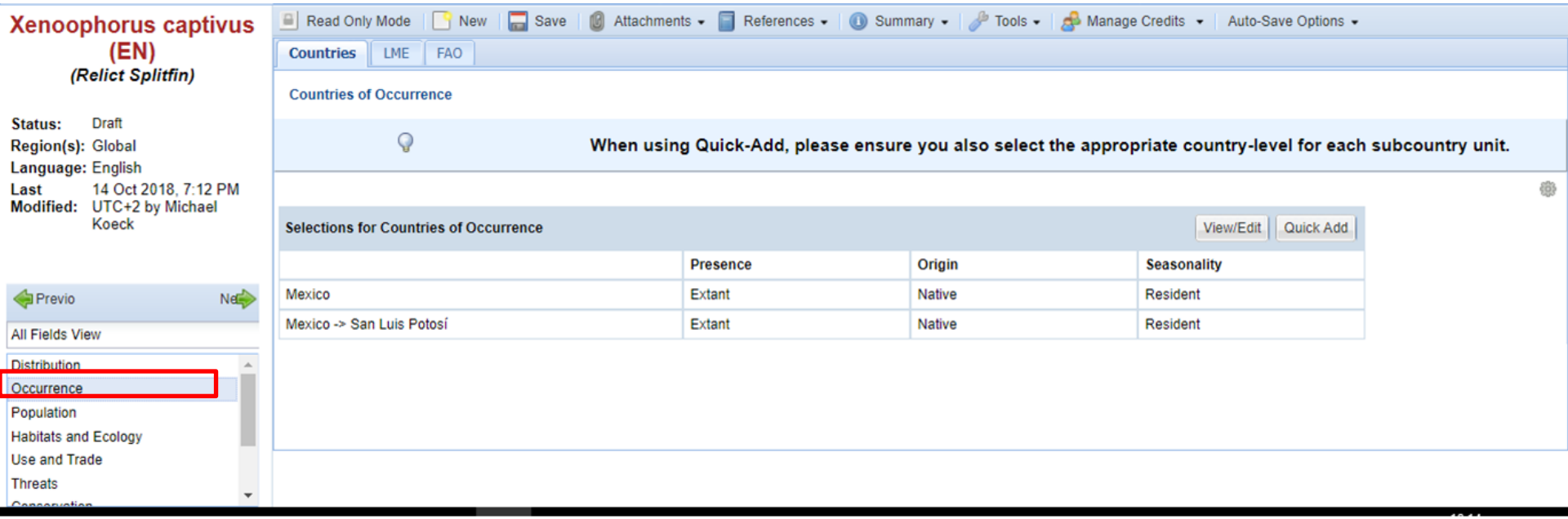

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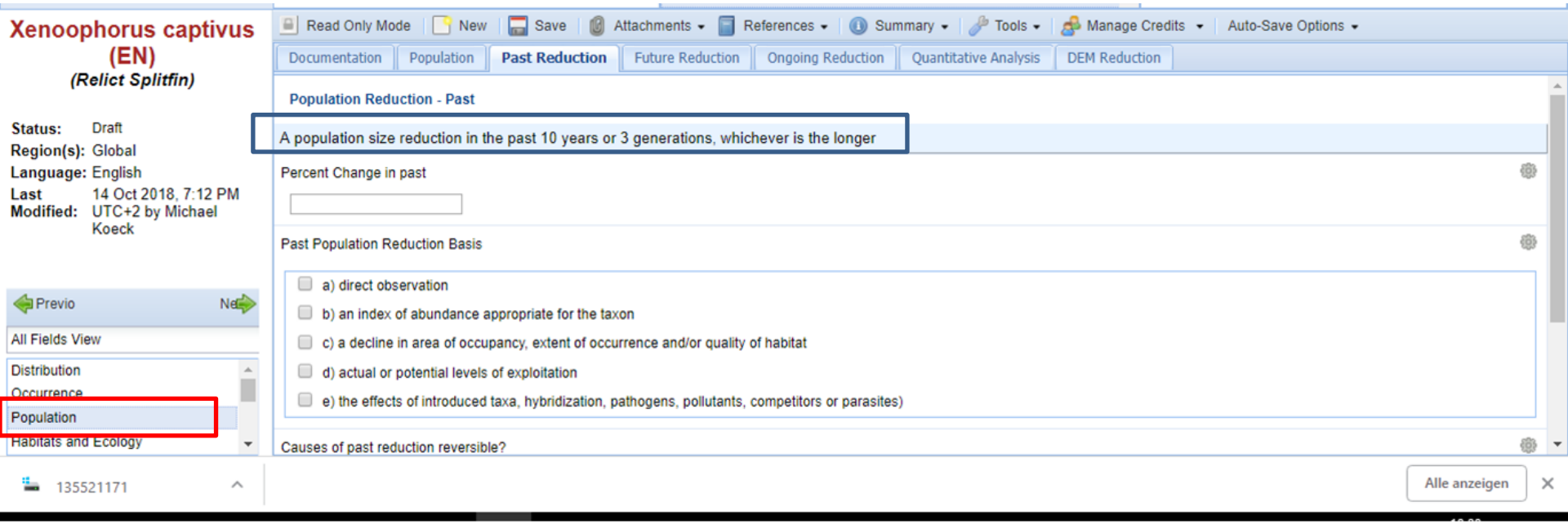

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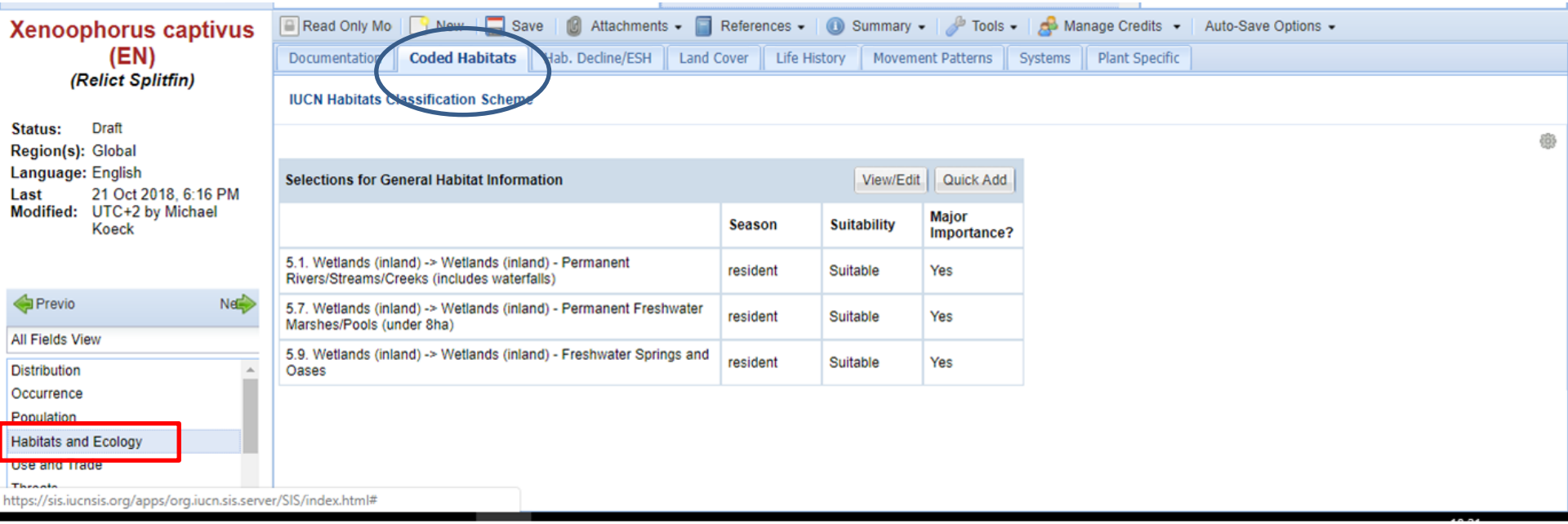

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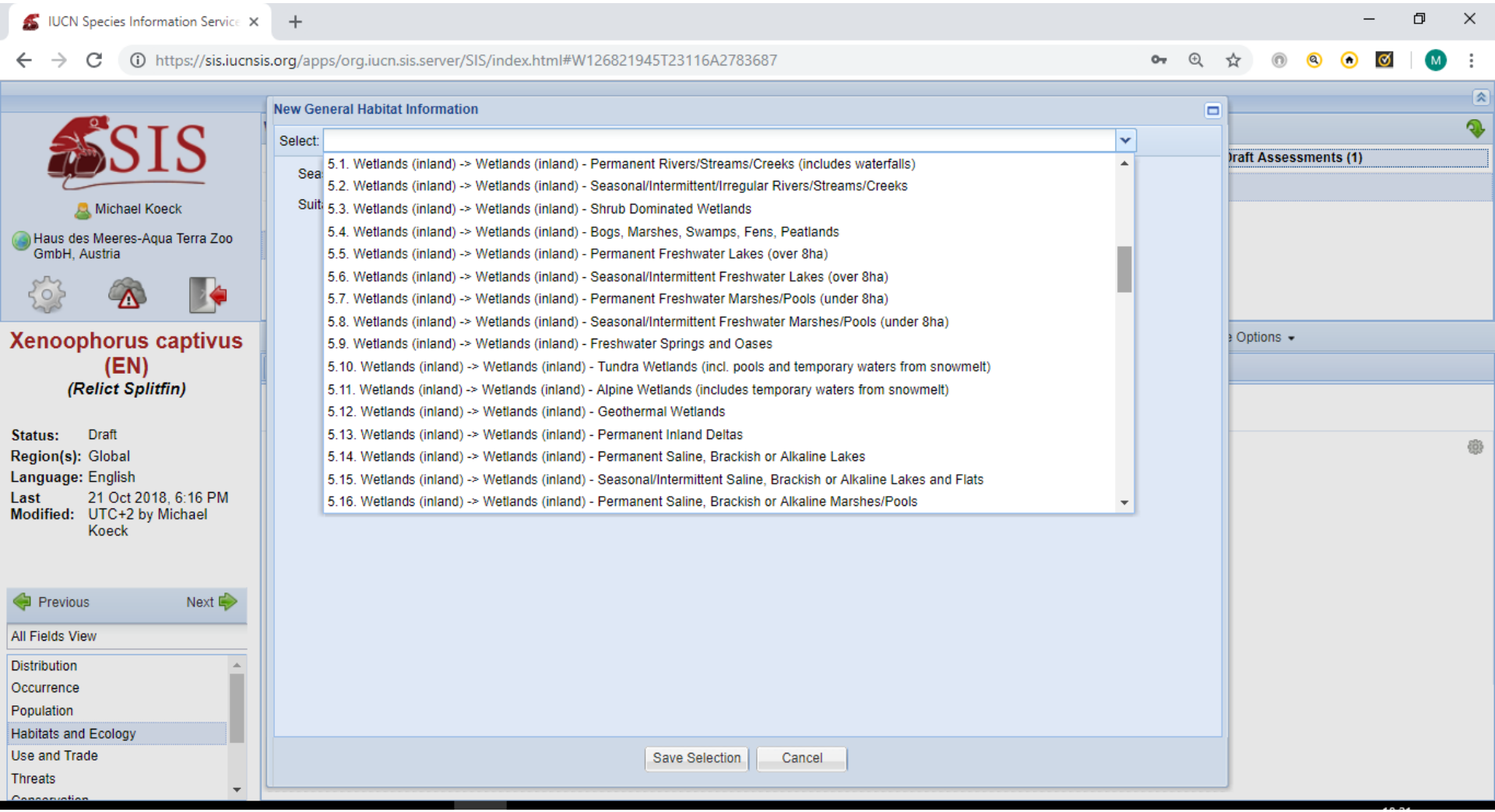

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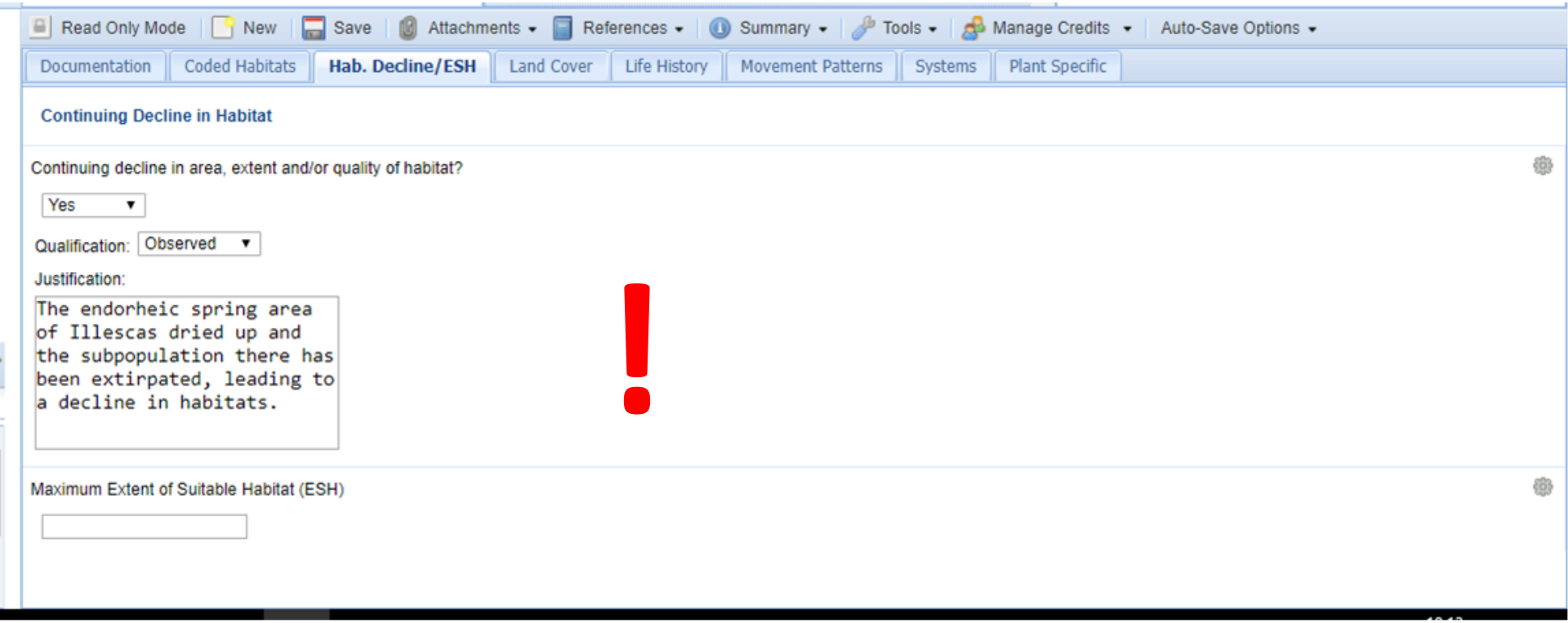

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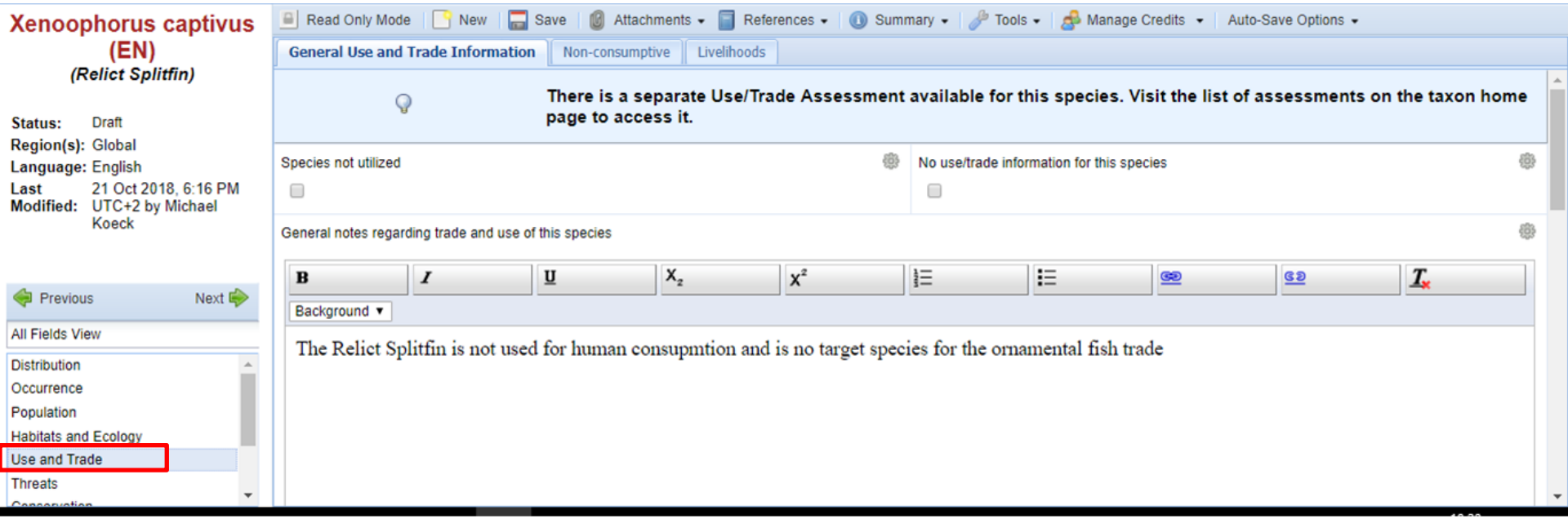

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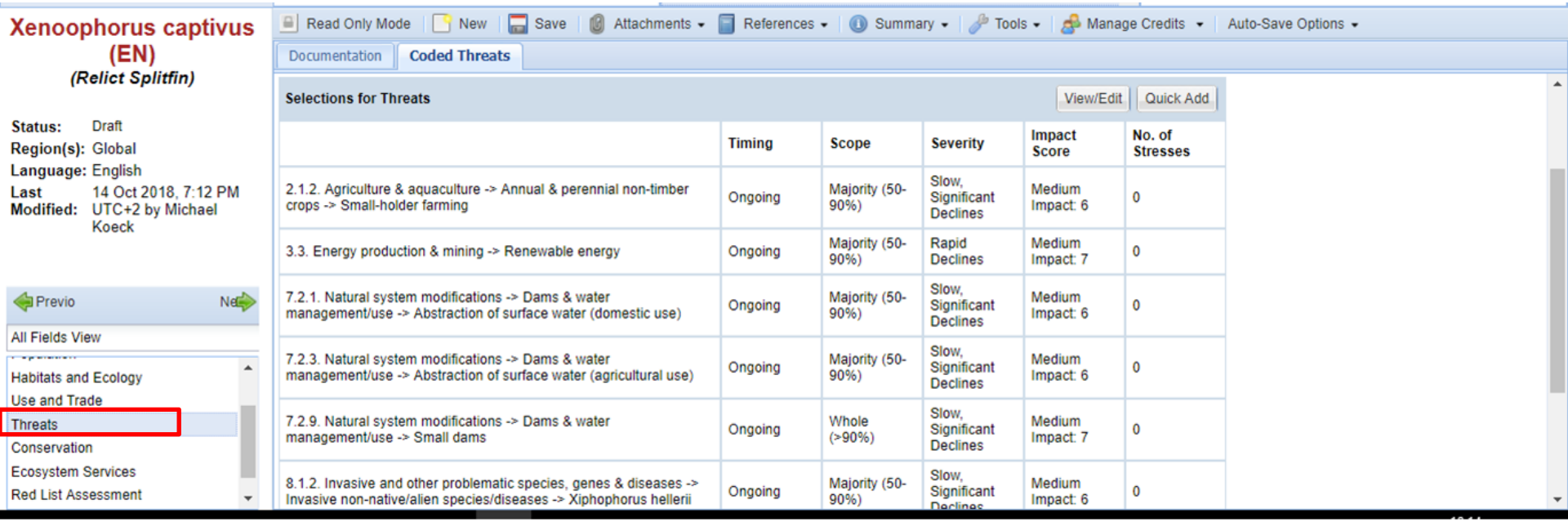

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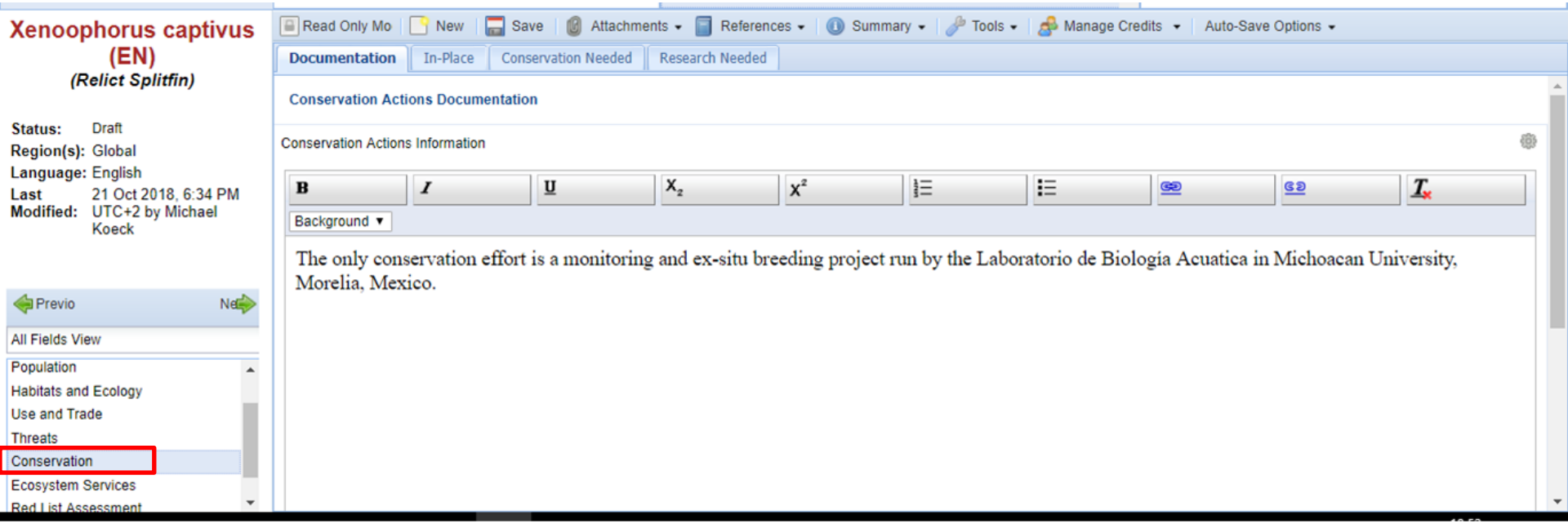

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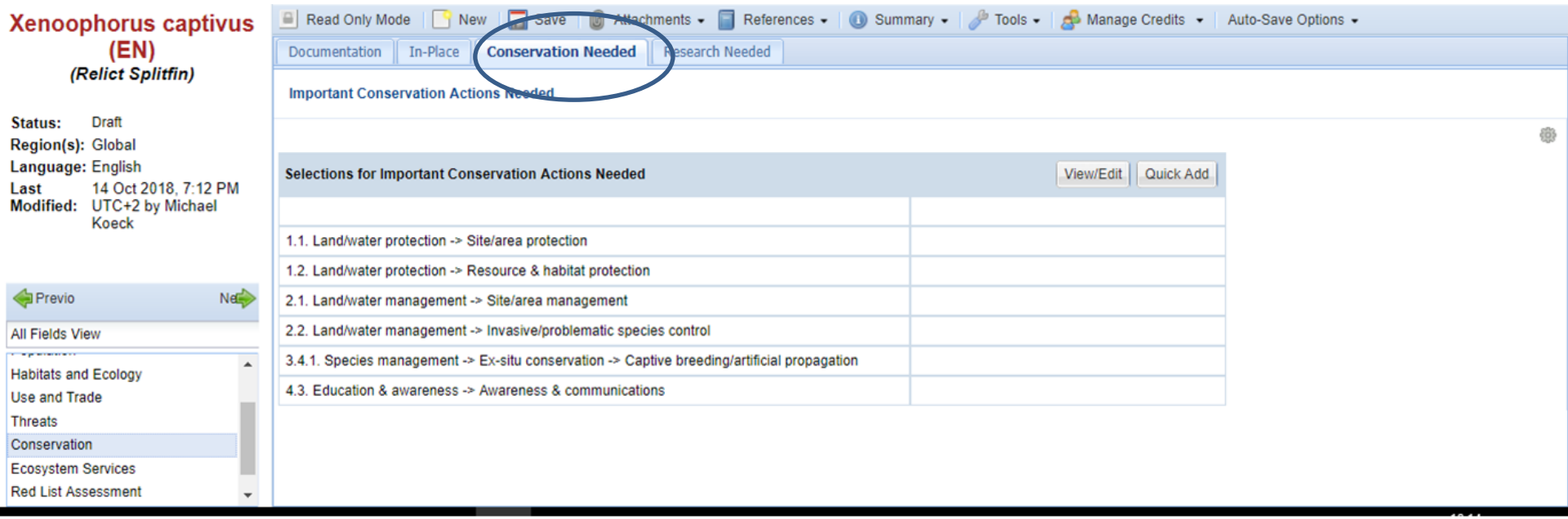

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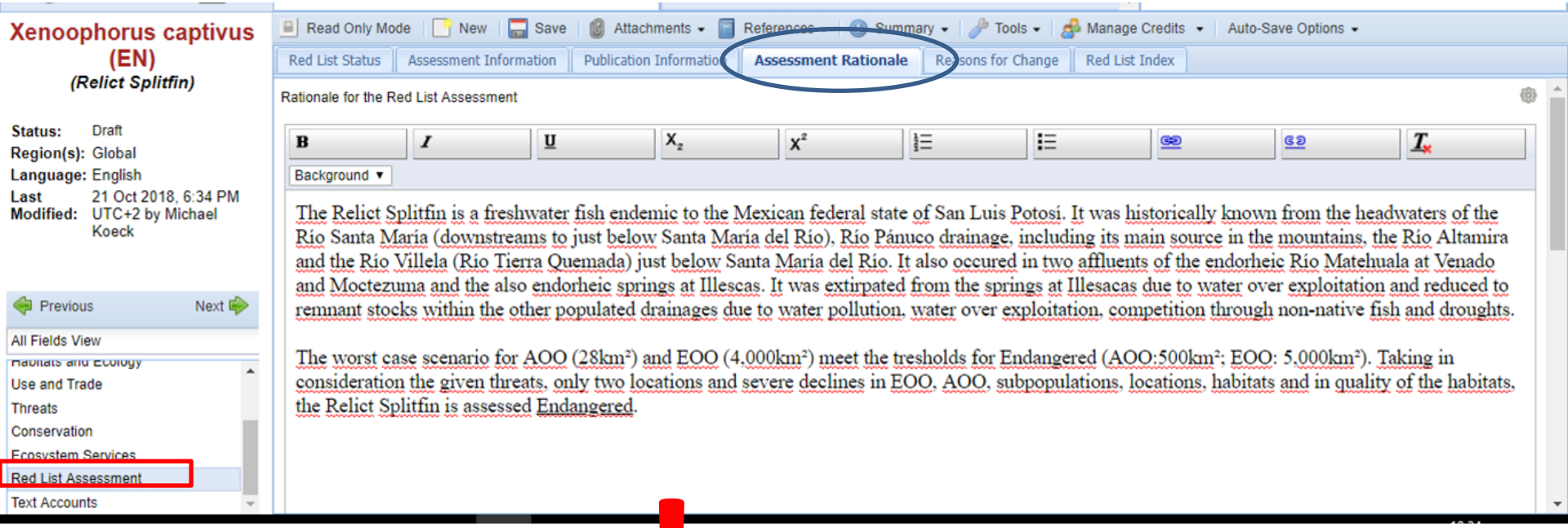

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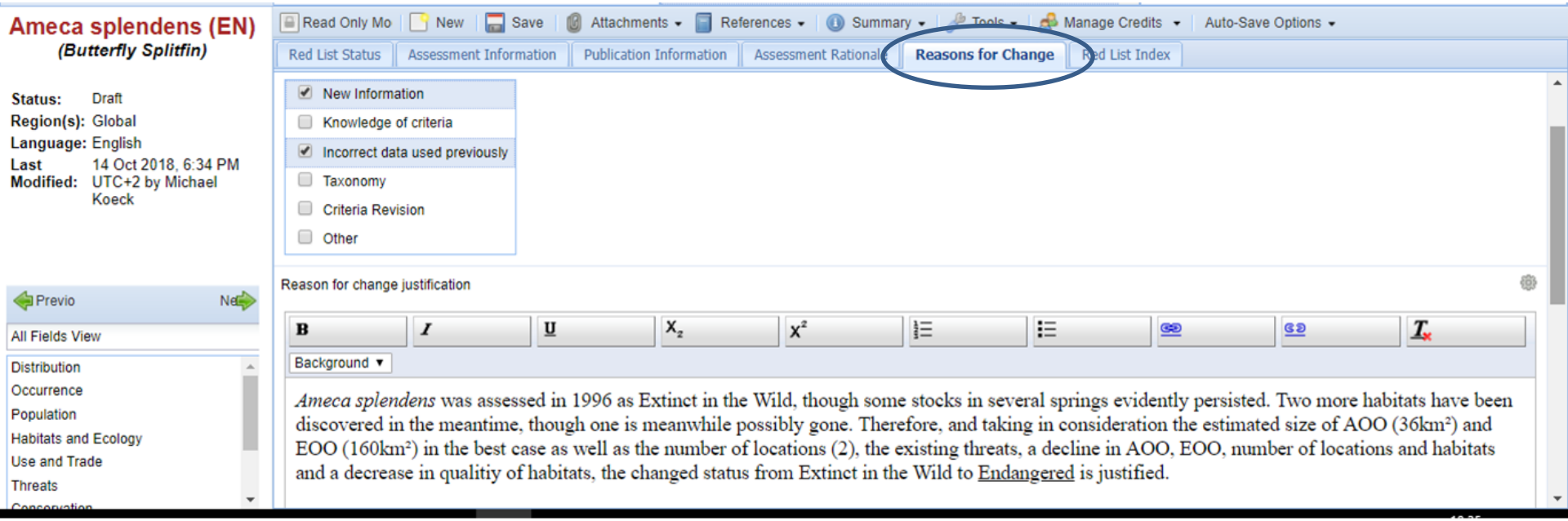

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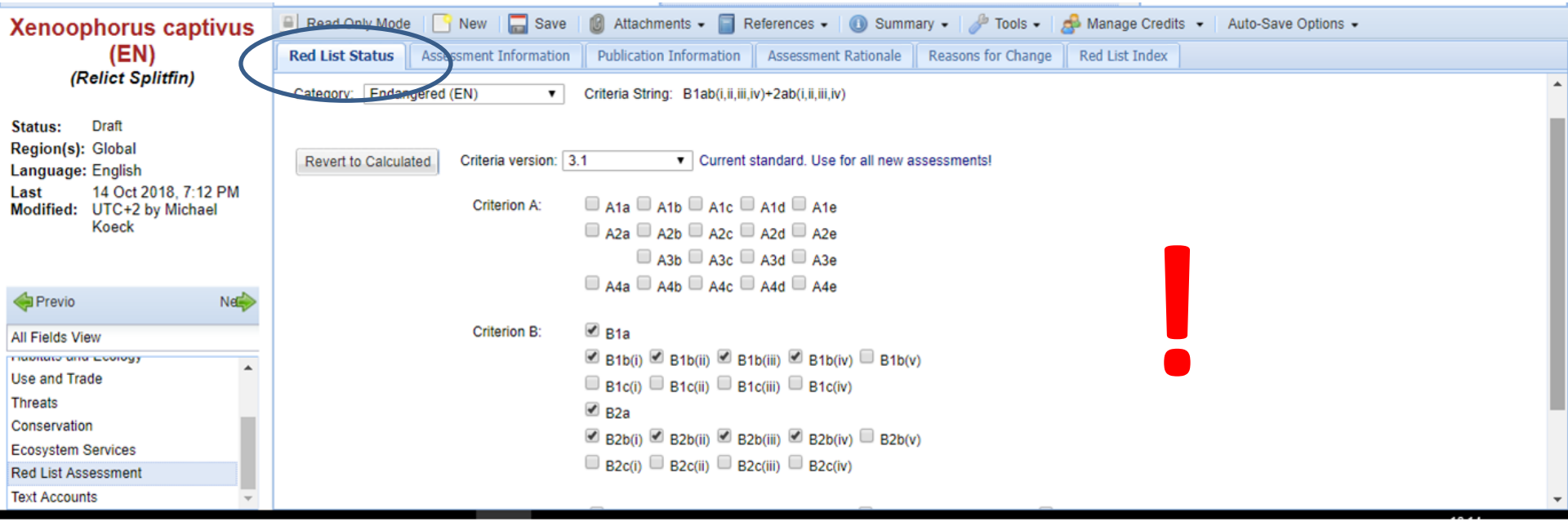

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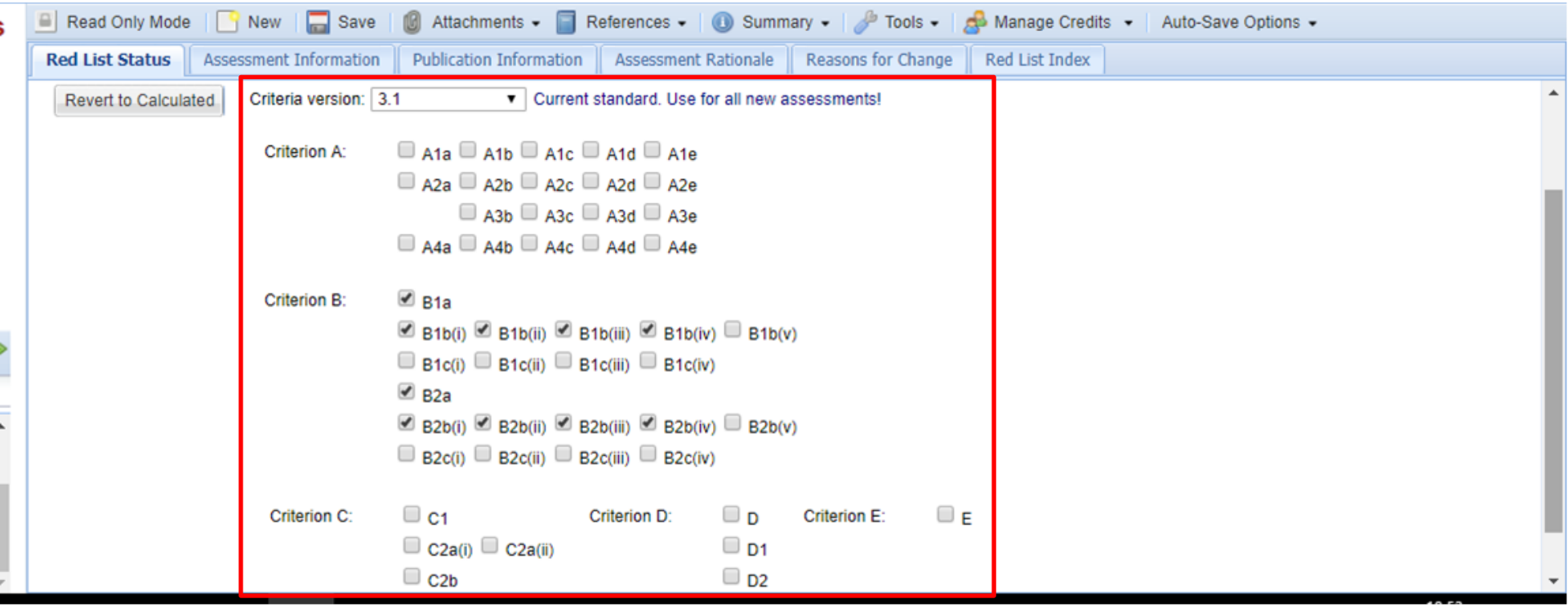

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SUMMARY OF THE FIVE CRITERIA (A-E) USED TO EVALUATE IF A TAXON BELONGS IN AN IUCN RED LIST THREATENED CATEGORY (CRITICALLY ENDANGERED, ENDANGERED OR VULNERABLE).[1]

A. Population size reduction. Population reduction (measured over the longer of 10 years or 3 generations) based on any of A1 to A4

	Critically Endangered	Endangered	Vulnerable
A1	≥ 90%	≥ 70%	≥ 50%
A2, A3 & A4	≥ 80%	≥ 50%	≥ 30%

A1 Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible AND understood AND have ceased.

A2 Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible.

A3 Population reduction projected, inferred or suspected to be met in the future (up to a maximum of 100 years) *[(a) cannot be used for A3]*.

A4 An observed, estimated, inferred, projected or suspected population reduction where the time period must include both the past and the future (up to a max. of 100 years in future), and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible.

based on any of the following:

(a) direct observation *[except A3]*

(b) an index of abundance appropriate to the taxon

(c) a decline in area of occupancy (AOO), extent of occurrence (EOO) and/or habitat quality

(d) actual or potential levels of exploitation

(e) effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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C. Small population size and decline

		Critically Endangered	Endangered	Vulnerable
Number of mature individuals		< 250	< 2,500	< 10,000
AND at least one of C1 or C2				
C1. An observed, estimated or projected continuing decline of at least (up to a max. of 100 years in future):		25% in 3 years or 1 generation (whichever is longer)	20% in 5 years or 2 generations (whichever is longer)	10% in 10 years or 3 generations (whichever is longer)
C2. An observed, estimated, projected or inferred continuing decline AND at least 1 of the following 3 conditions:				
(a)	**(i)** Number of mature individuals in each subpopulation	≤ 50	≤ 250	≤ 1,000
	(ii) % of mature individuals in one subpopulation =	90–100%	95–100%	100%
(b) Extreme fluctuations in the number of mature individuals				

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D. Very small or restricted population			
	Critically Endangered	**Endangered**	**Vulnerable**
D. Number of mature individuals	< 50	< 250	**D1.** < 1,000
D2. *Only applies to the VU category* Restricted area of occupancy or number of locations with a plausible future threat that could drive the taxon to CR or EX in a very short time.	-	-	**D2.** typically: AOO < 20 km^2 or number of locations ≤ 5

E. Quantitative Analysis			
	Critically Endangered	**Endangered**	**Vulnerable**
Indicating the probability of extinction in the wild to be:	≥ 50% in 10 years or 3 generations, whichever is longer (100 years max.)	≥ 20% in 20 years or 5 generations, whichever is longer (100 years max.)	≥ 10% in 100 years

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B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy)			
	Critically Endangered	**Endangered**	**Vulnerable**
B1. Extent of occurrence (EOO)	< 100 km^2	< 5,000 km^2	< 20,000 km^2
B2. Area of occupancy (AOO)	< 10 km^2	< 500 km^2	< 2,000 km^2
AND at least 2 of the following 3 conditions:			
(a) Severely fragmented **OR** Number of locations	= 1	≤ 5	≤ 10
(b) Continuing decline observed, estimated, inferred or projected in any of: **(i)** extent of occurrence; **(ii)** area of occupancy; **(iii)** area, extent and/or quality of habitat; **(iv)** number of locations or subpopulations; **(v)** number of mature individuals			
(c) Extreme fluctuations in any of: **(i)** extent of occurrence; **(ii)** area of occupancy; **(iii)** number of locations or subpopulations; **(iv)** number of mature individuals			

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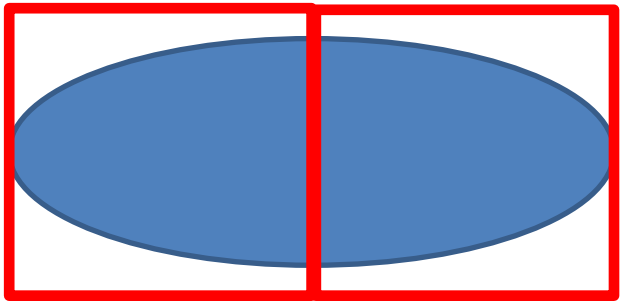
CE versus EN



AOO of 8km² (smaller than 10km²):

CE

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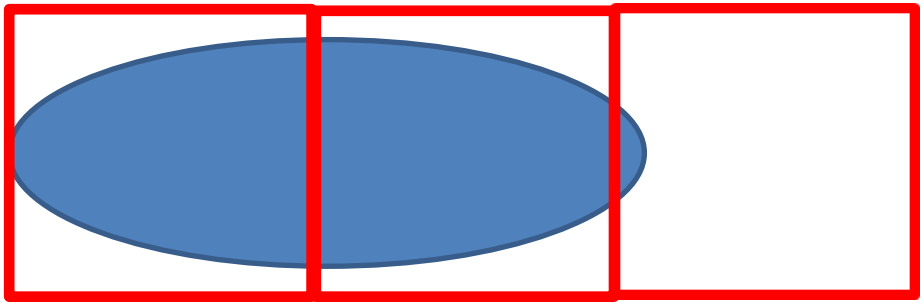
CE versus EN



AOO of 12km² (larger than 10km²):

EN

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CE versus EN

AOO of 8km², but 2 locations:

EN

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CE versus EN

AOO of 8km², 2 locations, but severeley fragmented:

CE

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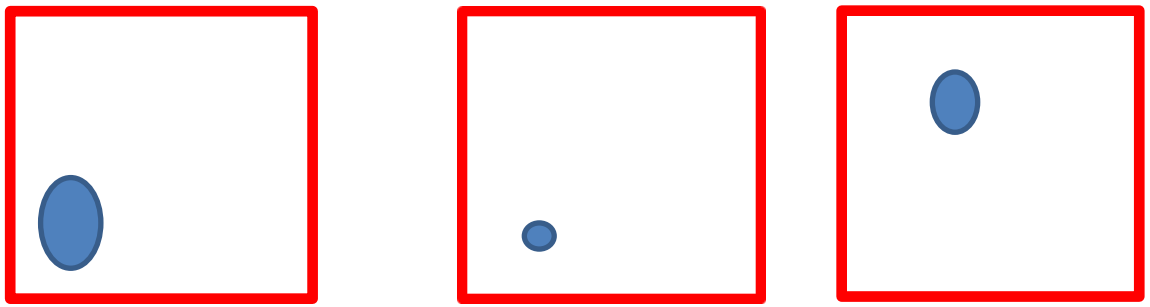
CE versus EN



AOO of 12km², 3 locations, but severeley fragmented:

EN

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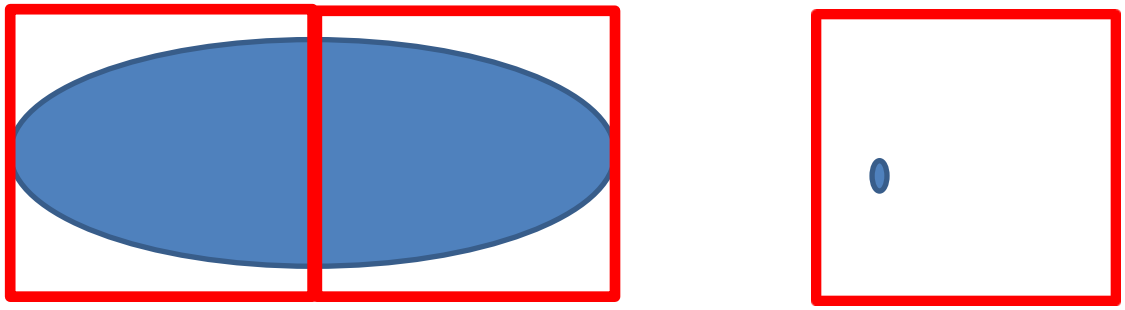
CE versus EN



AOO of 12km², 2 locations, but severely fragmented:

EN

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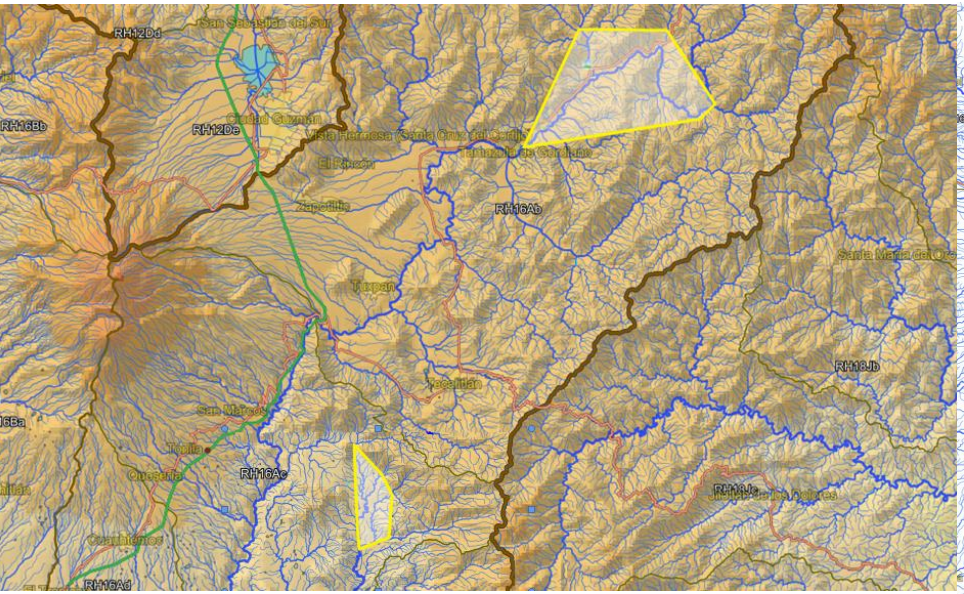
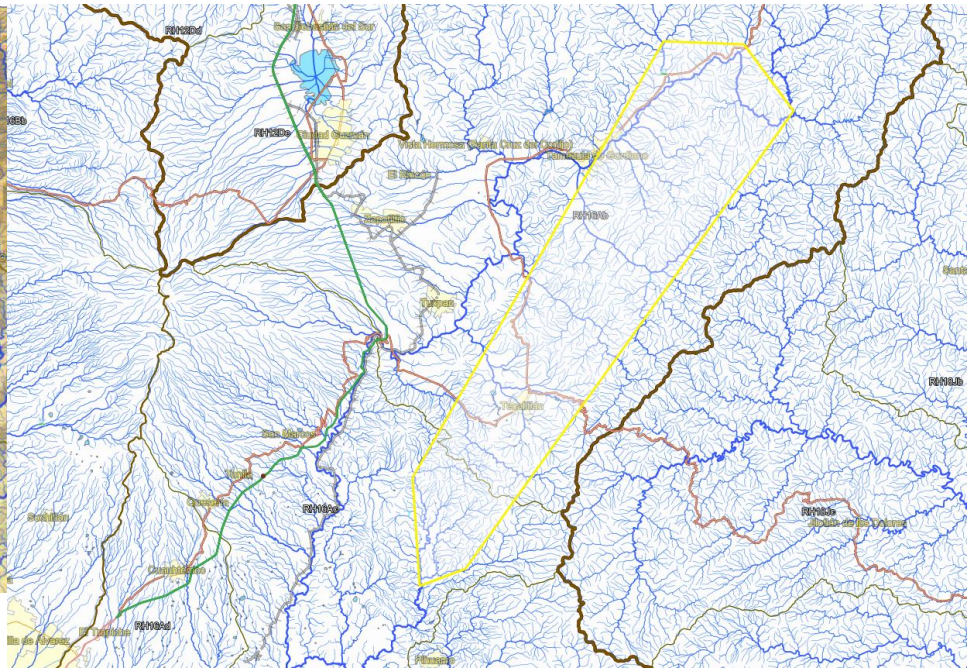
CE versus EN





The pitfalls of EOO and location number:

EN

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Conclusion:

1. The Redlist is comprehensive, focusing also on threats and conservation, on development, not only on the status.
2. It is an international instrument and popular.
3. It has effects on Goodeid conservation.
4. The Criteria are made for mammals and birds and show issues with small fish, and has therefore shortcommings that need to be solved.

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FIN
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