29 July 2020

## Radon Chatterton BSc.

NW-04-12-27-W4 Box Claresholm, AB T0L 0T0

## **Carina Weisbach**

Approval Officer, NRCB carina.weisbach@nrcb.ca (403) 381-5422

Dear Carina,

In regard to the proposed chicken barn (application LA20014); I have concerns regarding both the manure spreading location and the barn itself. My residence is NW-04-12-27-W4, as well I have an interest in family land holdings in 25-11-28-W4.

'The land base for manure and compost application' in Part 2 of the application lists SE-32-11-27-W4. This property is in immediate proximity to Willow Creek, and is part of the floodplain. If the creek were to flood as it has in the past the full area would not be usable for manure disposal.

The location of the proposed barn is concerning because of the proximity to Northern Leopard Frog habitat. Attached is a photo <sup>Image A,B</sup> taken on Meadow Creek close to the fence line between SE-25-11-28-W4 and NE-25-11-28-W4. According to The Government of Alberta<sup>1</sup> these frogs are 'At Risk' <sup>Image C</sup>. On the Government of Canada website<sup>2</sup> the frogs are classified as a species of 'special concern'.

The website referenced includes information on the frogs. One relevant item being; "The species is adversely affected by habitat conversion, including wetland drainage and eutrophication..."<sup>3</sup>. Manure spillage or runoff could contribute to eutrophication, as the river is often slow moving with frequent sections of near standing water. The following excerpts from the 'Habitat' and 'Threats' sections respectively, highlight the sensitive nature of Northern Leopard Frog habitat:

<sup>&</sup>lt;sup>1</sup> https://extranet.gov.ab.ca/env/wild-species-status/default.aspx

<sup>&</sup>lt;sup>2</sup> https://species-registry.canada.ca/index-en.html#/species/552-279

<sup>&</sup>lt;sup>3</sup> https://species-registry.canada.ca/index-en.html#/species/552-279

"The Northern Leopard Frog uses several distinct habitat types to meet its needs throughout the year. Separate sites are generally used for overwintering, breeding and foraging, and contiguity between these habitats is necessary for the species' survival."<sup>4</sup>

"Northern Leopard Frog declines observed in many areas of North America are associated with habitat loss, degradation and fragmentation. The species' diversified habitat requirements make it particularly vulnerable to such changes. Removal or modification of even one of the three habitat types used by Northern Leopard Frogs may render the landscape unsupportive of the species' requirements."<sup>5</sup>

Poultry barns can be negatively affected by noise, as such pilots should not fly over a poultry barn below 2000' above ground level<sup>6</sup> (AGL). For context, this is enough altitude for one plane to fly over an airport<sup>7</sup> while others take off and land below them. In contrast the current legal minimum altitude is 500' AGL. It is much easier for neighboring ranchers to check cattle from 500' than it is from over half a kilometer above them.

Thank you for your consideration, Radon Chatterton

<sup>&</sup>lt;sup>4</sup> https://species-registry.canada.ca/index-en.html#/species/552-279

<sup>&</sup>lt;sup>5</sup> https://species-registry.canada.ca/index-en.html#/species/552-279

<sup>&</sup>lt;sup>6</sup> Aeronautical Information Manual; RAC 1.11.1

<sup>&</sup>lt;sup>7</sup> https://lois-laws.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-602.96

Image A - Leopard Frog

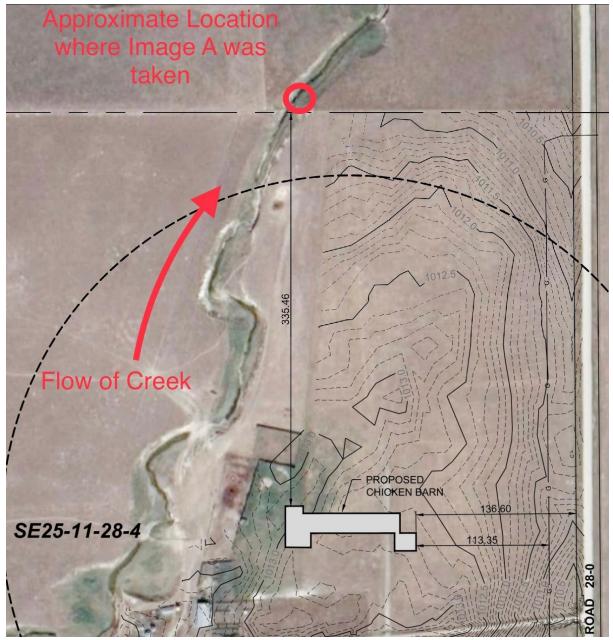


Image A (Enlarged)



## Image B - Location Image A was taken.

Image taken from the application, my markups are in red.



Note: the application states the distance from the project to the surface water (presumably the creek) to be only 100m, roughly the length of a football field.

## Image C - Alberta Wild Species Status Search Results

ELCODE	Class	Scientific Name	Common Name		Status 2010	Status 2005	Comments
AAABH01170	Amphibians	Lithobates pipiens	Northern Leopard Frog	At Risk	At Risk	At Risk	Has severely declined since the late 1970s. Previously commor and widespread but has disappeared from most of its Alberta and Canadian range. Protection of remnant breeding areas essential. Designated as "Threatened" under the Wildlife Act.

https://extranet.gov.ab.ca/env/wild-species-status/default.aspx