



Calgary River Valleys champions and engages the public in the protection, appreciation and stewardship of Calgary's rivers, creeks, wetlands and watershed resources.

We are the voice of our rivers.

September 10, 2021

Attention: **Transport Canada NPP**
Submitted via the NPP Project Comments website

Re: Registry Number **3898**; File Number **2021-603937**

Calgary River Valleys (CRV) as part of its mandate provides a platform for our members and partners to provide comments on urban planning and development proposals in the Calgary area. This letter represents our organization's comments on the application under the Navigable Waters Act regarding the proposed 144 Ave NW Bridge project over West Nose Creek in Calgary.

Calgary River Valleys is a non-governmental stakeholder group that participates in the Nose Creek Watershed Partnership (NCWP) <http://nosecreekpartnership.com/>. Our organization has contributed input to the Nose Creek Watershed Water Management Plan, and we continue to participate in Partnership meetings. The stated goal of the Partnership is:

"To protect the riparian areas and improve water quality in the Nose Creek watershed."

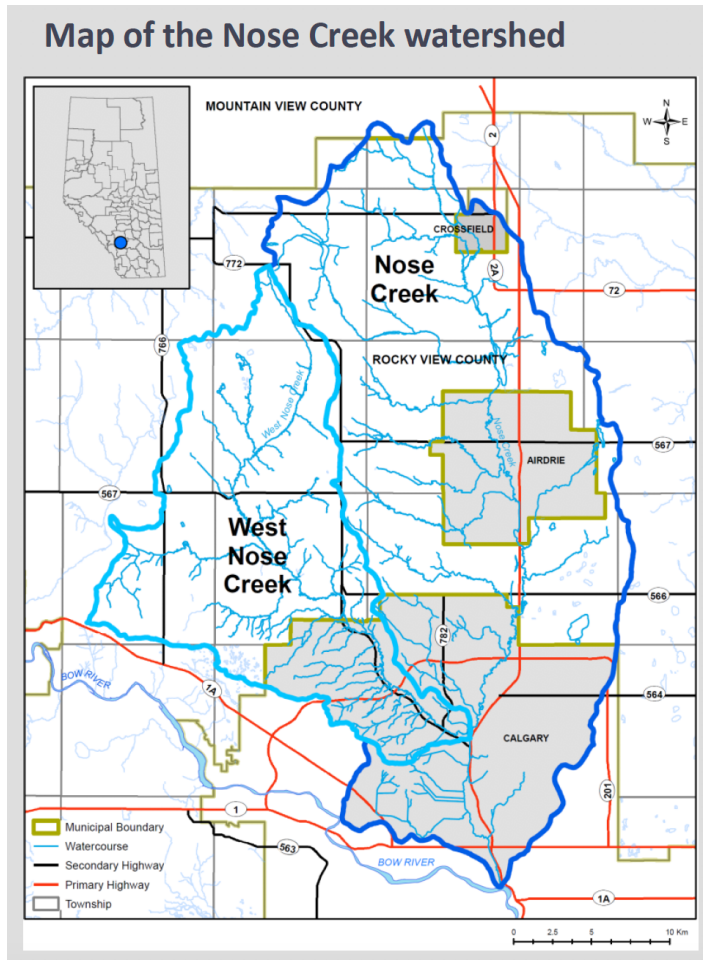
The City of Calgary has multiple environmental and transportation policies designed to celebrate and protect elements of biodiversity and wildlife connectivity. However, we believe this project, as proposed, does not support or promote the City of Calgary's environmental ideals, and it does not preserve the ability of recreational users and wildlife alike to continue to navigate this creek and the creek-adjacent lands.

While we could not find Nose Creek or West Nose Creek as protected Navigable Waterways on the Transport Canada website, we are aware of paddlers who have travelled the length of West Nose Creek within Calgary city limits, and downstream through the confluence with Nose Creek and south to the Bow River. As further urban development occurs in the north part of Calgary, and additional hard surfaces of roads and roofs are built, we should expect to see more and higher sustained flows in West Nose Creek, and the entire Nose Creek watershed, which will facilitate the possibility of an increase in watercraft on the creek.

As a result, we support the application for this creek to be reviewed under the Navigable Waters Act legislation, as it can be navigated by small watercraft. As part of that review, Calgary River Valleys submits the following concerns regarding this project.



Land Use Impacts



Nose Creek is an important tributary to the Bow River in Calgary. The City of Calgary has for many years now, looked at the Nose Creek / West Nose Creek corridor as a valued park area, in which biodiversity was to be preserved, which retained natural infrastructure that ensured the resiliency of the watershed.

This creek, including the West Nose Creek arm, has already experienced significant impacts from land use changes over the years, and this bridge project will only add to these impacts. These include:

- Major urban development pressure and a resulting increase in impervious surfaces which has led to a decrease in water infiltration in the surrounding lands,
- More piping of stormwater run-off into the creek, including in the area of the proposed 144 Ave NW bridge, which results in an increase in the risk of streambank erosion of the creek near the stormwater outfalls, and an increase in sediment in the creek, which degrades the quality of the creek habitat for certain kinds of fish,
- Channelization and straightening of the creek and the removal of natural meanders which help to reduce the power of the water during major rain events, and which results in the shortening of the creek and loss of wildlife and fish habitat, that could be avoided through a more considerate bridge design,
- Armouring of the creek against erosion and future channel meandering destroys wildlife habitat and tends to result in a loss of insects in the area, which are a preferred food source for many other creatures, including fish.

Process Concerns & Questions

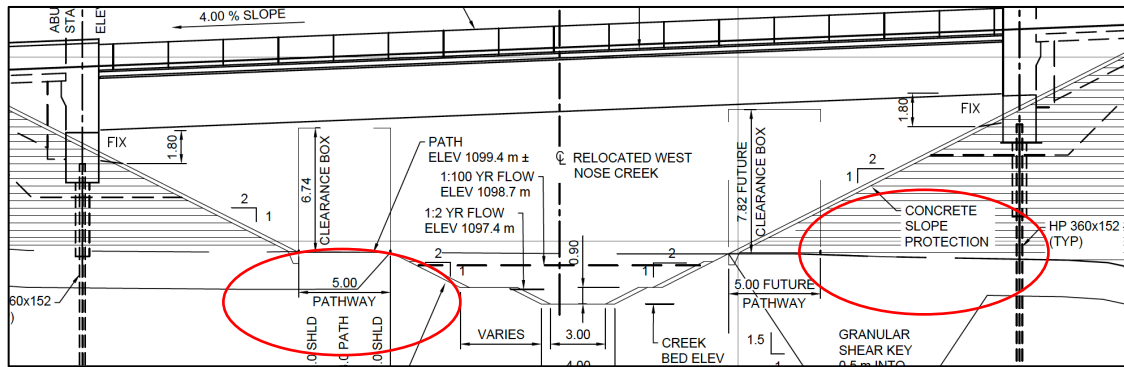
Calgary River Valleys has the following concerns and questions about the process of this application:

- While we appreciate the fact that an application for approval for this project was made under the Navigable Waters Act within the purview of Transport Canada, we see no indication that an application for this project was also made under the appropriate legislation within the Fisheries and Oceans Canada umbrella, despite the documented evidence that this creek contains multiple fish species and that care must be taken to ensure their survival and ensure they are not negatively impacted by this project;
- The Nose Creek Watershed Partnership has just completed studying the telemetry and bathymetry of the Nose Creek watershed in 2020, and this project will remove a major meander in the creek in this area, which will significantly alter the finalized telemetry and bathymetry of the creek: http://nosecreekpartnership.com/wp-content/uploads/2021/03/Final-Report-Phase-I-Model-Scoping-Study_September-2020.pdf;
- We also understand that the City of Calgary may have already put this project out for tender, and our organization would like to understand how the project can be put out to tender before the required permissions have been secured.

Cumulative Impacts

Our organization is concerned about the cumulative impacts on the Nose Creek watershed, including West Nose Creek, the creeks' riparian zones, and the wildlife the watershed supports.

- There are already multiple additional bridges over this creek at various locations in the vicinity; each new crossing amplifies the impacts on the creek,
- This bridge will represent a pinch point for wildlife due to the narrowness of the bridge span, and a pedestrian/bike pathway on one side of the creek, leaving almost no wildlife corridor parallel to the creek, and potential human vs animal conflicts,
- Due to the planned bridge design, which replaces the existing creek-adjacent wildlife corridor with a concrete slope (see picture below), we are concerned the bridge will also create a killing zone for wildlife trying to navigate up or down the creek at the location of the bridge; wildlife will be forced to either mount the embankment to cross the future 6-lane 144 Ave NW roadway, or to cross underneath the bridge along the paved bike/pathway that will be lit with under-bridge lighting 24 hours a day that will be adverse to any animal crossings,



West bank of creek will be a concrete slope, so the only remaining wildlife corridor will be the paved pathway

- The City of Calgary's proposed plan is to remove an extant beaver dam within the creek, replace a mud and gravel bottom creek in this area with non-native sandstone, imported river rock, and further armour the proposed bridge both upstream and downstream.
- Replacing the existing creek bottom with sandstone to create a "riffle effect" is presumed to be either for aesthetic reasons or to support the introduced and non-native population of fish species, rather than native fish species that live in the creek; our organization would like to know what the impact of this "riffle" bottom will have on the native fish species within the creek and on the navigation potential for the creek in the future.

We appreciate the opportunity to provide our input regarding this project. During the Covid-19 pandemic, our staff are generally working from home, but if you need to reach us, you can contact our Program Manager, Anne Naumann, via email at CalgaryRiverValleys2@outlook.com, or you can phone me directly at 403-990-5583.

Sincerely,

Bill Morrison, President
Calgary River Valleys

cc: CRV Circulation
Nose Creek Watershed Partnership
Calgary Field Naturalist Society