



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: City of Calgary Application under Navigable Waters Act
Registry Number **3898**; File Number **2021-603937**

Calgary River Forum Society, known as 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.

CRV has contributed to multiple City of Calgary policies, including the Urban Park Master Plan, the Calgary Open Space Plan, the Calgary Biodiversity Strategy, the Calgary Wetland Policy, as well provided feedback on the urban planning document for this area, the Glacier Ridge Area Structure Plan. All of these documents supported the concept of protecting natural areas and biodiversity within the City. It should be noted that a major principle of these guiding documents is preserving biodiversity and wildlife corridor connectivity.

Calgary River Valleys is also 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."

Despite the City of Calgary having multiple environmental and transportation policies designed to celebrate and protect elements of biodiversity and wildlife connectivity, 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.

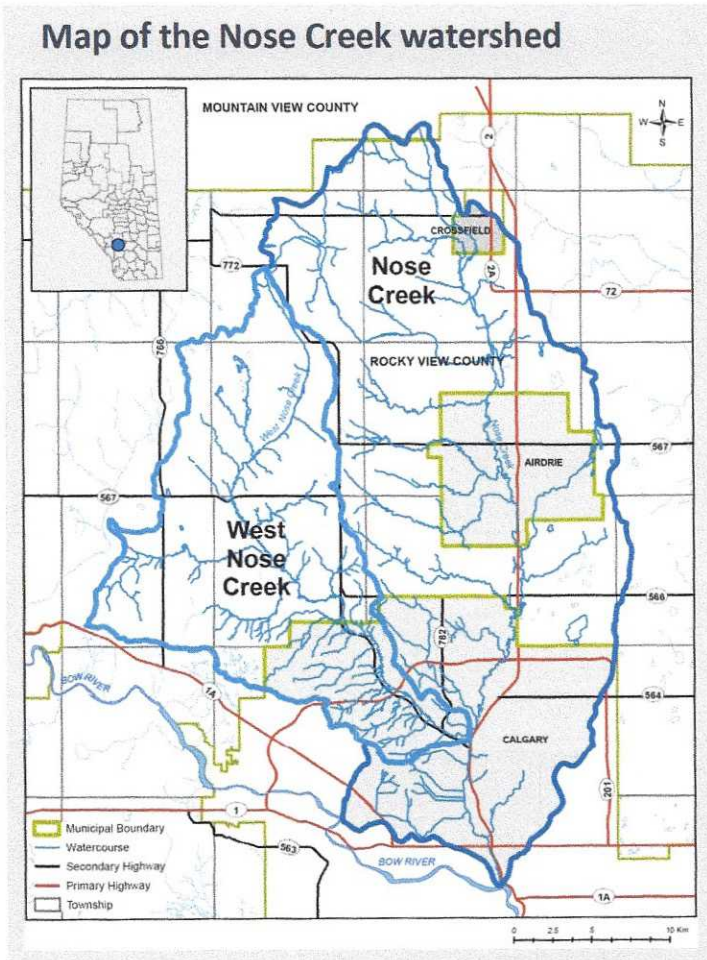
While we could not find Nose Creek or West Nose Creek as protected Navigable Waterways on the Transport Canada website, we are aware of paddlers who have travelled the length of West Nose Creek within Calgary city limits, and downstream through the confluence with Nose Creek and south to the Bow River. 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 natural area, in which biodiversity is to be preserved. After a century of urban development and impacts on the creek, there has been a resurgence in the vision to support the remaining creek valley’s natural infrastructure to ensure the resiliency of the watershed and its biodiversity.

This creek and its valley, including the West Nose Creek arm, has already experienced very significant impacts from land use changes over the years. This bridge project (and the proposed 6-lane major collector roadbed that will cross it) will add substantially to these impacts. These include:

- Major urban development pressure and resulting increase in impervious surfaces have led to a decrease in water infiltration in the surrounding lands,
- More piping of stormwater run-off into the valley and ultimately into the creek, including in the area of the proposed 144 Ave NW bridge, results in an increase of streambank and stream bottom erosion of the creek, and may increase sediment in the creek, which degrades habitat quality for certain kinds of fish,
- Channelization / straightening of the creek can result in an increase in the power of the water during major rain events,

- Removal of natural meanders shortens the creek and results in the loss of wildlife and fish habitat, that could be avoided through a more considerate design,
- Armouring of the creek against erosion and future channel meandering destroys wildlife habitat and tends to result in a loss of insects and other species in the area, including preferred food sources for many other creatures, including fish.

Process Concerns & Questions

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

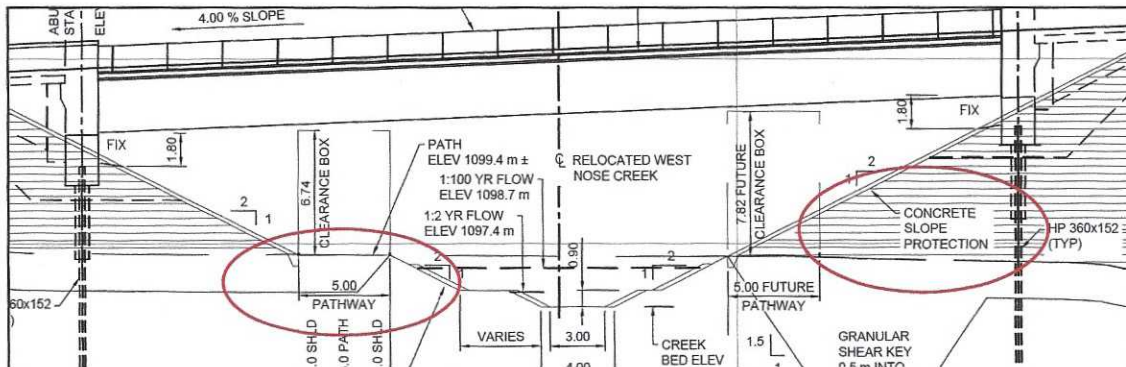
- While we appreciate the fact that an application for approval for this project was made under the Navigable Waters Act within the purview of Transport Canada, we see no indication that an application for this project was also made under the appropriate legislation within the Fisheries and Oceans Canada 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 meander in the creek in this area, which will 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;
- The proposal suggests that following the meander removal and shortening of the creek to accommodate this bridge, the creek will be lengthened (presumably with added meanders) in another section, but no details have been provided regarding these plans which our organization would be interested to review.

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; each new crossing along West Nose Creek amplifies the cumulative impacts on the creek and degrades the biodiversity along the entire reach of 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,
- The proposed bridge design appears to be intended to replace both the existing creek-adjacent wildlife corridor and the wider valley corridor that wildlife use, with a severe concrete slope (see picture below); all of our members who have reviewed this file have questioned why the bridge underpass design isn't significantly more wildlife-friendly (more

height, greater width, more natural surfacing, modification of underpass lighting, increased efforts to avoid wildlife conflict),



- We are also concerned the future 6-lane 144 Ave NW bridge that is the subject of this application, in its present design which is unfriendly to wildlife, will result in wildlife trying to mount the embankment to cross the roadway hazard, rather than cross underneath the bridge along the paved bike/pathway that will be lit with under-bridge lighting 24 hours a day,
- The City of Calgary’s proposed plan is to remove an existing beaver dam within the creek, replace the mud and gravel bottom of the creek in this area with sandstone, and further armour the creek embankments both upstream and downstream, all of which represent cumulative impacts on the creek,
- 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 trout species, rather than the native fish species; 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 at this location.

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