



Edmonton

MILL CREEK DAYLIGHTING

ABANDONED CREEK CHANNEL NORTH OF 98 AVE



CONNORS ROAD AT HISTORIC MILL CREEK



PROJECT VISION

Daylighting diverted reaches of Mill Creek brings the opportunity to re-establish a vital part of Edmonton's ecological network and strengthen the City's multi-functional green network. Re-establishment of a natural Mill Creek channel allows for creation of hydrological and ecological connectivity while providing additional cultural and recreational opportunities.

BACKGROUND

Mill Creek is a prominent feature of Edmonton’s river valley and ravine system, and provides key ecosystem services, such as, biodiversity, aquatic and upland wildlife habitat, floodwater detention and groundwater recharge. However, in the last century, Mill Creek has been subject to numerous diversions and modifications to facilitate urban growth and development in Edmonton. Substantial changes have been most notable in the creek reaches closest to the North Saskatchewan River.

In the 1960’s lower Mill Creek was permanently diverted through a tunnel to the North Saskatchewan River to facilitate development of a freeway system that never came to fruition. In 1972, the James MacDonald Bridge and connecting ramps to Connors Road and 98 Avenue were completed, and the abandoned Mill Creek channel was completely filled in. North of 98 Avenue, the original channel remains but does not receive creek flows. These changes have resulted in reduced recreational opportunities and the loss of natural processes, key among them, loss of a natural connection to the North Saskatchewan River.



EXISTING MILL CREEK, NEAR 82 AVE

DAYLIGHTING MILL CREEK: TECHNICAL FEASIBILITY STUDY

In November 2015, Edmonton City Council directed Administration to explore the feasibility of restoring Mill Creek from south of Connors Road to the North Saskatchewan River. In summer 2016, a study was initiated. The goal of the feasibility study is to assess the technical feasibility of daylighting and develop three conceptual daylighting plans that best address technical requirements and achieve hydrological and ecological connectivity.



1924 APPROXIMATE CREEK ALIGNMENT



1969 DOWNTOWN FREEWAY LOOP PLANNING CONCEPT



1970 APPROXIMATE CREEK ALIGNMENT WITH DIVERSION TUNNEL



2016 TECHNICAL FEASIBILITY STUDY

HISTORIC MILL CREEK CHANNEL ---
POTENTIAL DAYLIGHT AREA [shaded green]
PROPOSED LRT ALIGNMENT ==

PROJECT STATUS

The three phase technical feasibility study is underway. The study includes public open houses and stakeholder engagement activities to collect feedback on current and future uses, and help Administration understand what Edmontonians value most about Mill Creek and the study area.

PHASE I | **Technical Assessment**
+ November 2016

PHASE II | **Visioning & Concept Development**
+ December 2016

PHASE III | **Costing & Illustration**
[Final Report to Council]
+ January 2017

OBJECTIVES

- Determine the technical feasibility, opportunities, and constraints for daylighting
- Investigate hydrology, hydraulics, and existing ecological conditions
- Identify possible routes for daylighting the creek and opportunities for improved fish spawning habitat, wildlife, and recreation
- Identify up to three concept options, and estimated costs, and report back to Council

STUDY DELIVERABLES

The study will result in three conceptual plans that reflect the technical assessment results and input from the public, internal and external stakeholders. These plans will be high-level concepts identifying how the project area could be integrated into Edmonton’s green network. The final report will be presented to City council in early 2017.

For more information:
edmonton.ca/millcreekstudy

“DAYLIGHTING” IS THE TERM USED TO RE-ESTABLISH CREEKS THAT HAVE BEEN ALTERED TO CONCRETE CHANNELS OR DIVERTED TO PIPES