

Low River Flood Mitigation Plan

March 2020

Intent of the Document

The purpose of the Low River Flood Mitigation Plan (plan) is to provide the State of Alaska Department of Natural Resources (DNR) with the information needed to permit projects for the City of Valdez to mitigate flooding risk in a responsible and sustainable manner. The plan identifies potential strategies for flood mitigation, access areas, and practices to mitigate upstream and downstream impacts, and includes a monitoring program.

Where is this plan applicable?

The flood mitigation plan is only applicable to the Low River. The plan incorporates a significant reach of the Low River, from Keystone Canyon to the mean high-water level in Port Valdez.

Who are the stakeholders?

The City of Valdez is responsible for the assets it owns along the Low River, as well as welfare of the Valdez residents that live adjacent to, or in, the Low River floodplain.

The Flood Mitigation Taskforce will inform the City of the concerns of Valdez residents and help prioritize actions to prevent or mitigate flooding.

The Capital Projects and Engineering Department as well as the Public Works Department will lead the observations for maintenance of existing infrastructure and coordinating the construction of new infrastructure as required.

The Alaska Department of Transportation and Public Facilities also owns and maintains erosion control structures in Valdez but are not currently party to the Low River Flood Mitigation Plan.

How will the plan be implemented?

The plan provides a consistent approach for flood mitigation projects in the Low River, regardless of the engineer of record or contractors that are engaged to complete the work.

The plan is intended to be used prior to the planning and design phase of the flood mitigation

measures to provide a holistic approach to the projects constructed within the Low River Floodplain.

What options for flood mitigation are outlined in the plan?

Three main options can be applied to the Low River below Keystone Canyon. These are gravel extraction; maintenance or modification of existing flood mitigation structures; and construction of new flood mitigation structures.

The goal of the gravel extraction is to draw a portion of the flow away from an impacted area within the floodplain. Maintenance or modification of existing flood mitigation infrastructure is important in order to maximize its effectiveness. Actions that warrant new flood mitigation structures include areas that are newly exposed due to movement of the main channel or increased proportion of flows to the existing channel or bank.

When would construction occur?

As most of the maintenance can be conducted from the landward side of the infrastructure and out of the water, specific timeframes for construction due to fish habitat (fish windows) will not apply. However, if maintenance or new construction is required in-water or has an impact to the aquatic environment, the maintenance will need to occur outside of the fish window and is estimated to take place between November 1 and March 31 each year.