COCHRANE LAKE IMPROVEMENT PROJECT

Community Update September 2025





Rocky View County

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Frequently Asked Questions and Answers

1. Why does the lake need to be improved?

• Owned by the Province of Alberta, Cochrane Lake is a drainage catchment for over 1,400 hectares of land. Cochrane Lake is a natural kettle lake, meaning it does not have any natural inlet or outlet which has led to several issues over the years including fluctuating lake levels, poor water quality and odors which have led to past health advisories from Alberta Health Services. The goal of the lake improvements is to improve water quality in the lake, allow for continued collection of stormwater from lands surrounding the lake, and to create a regional recreational amenity which can be enjoyed by residents year-round while respecting the environmental sensitivity of the lake and surrounding area.

2. How will the water quality of the lake be improved?

- Through consultation with various limnologists, biologists and engineers, the consensus is that increasing water flow through the lake will improve water quality. An application to Alberta Environment and Protection Act (AEPA) will be made to allow for the installation of a new water spur line that will feed directly into Cochrane Lake. This new line will connect to the existing raw water line that brings water from the Bow River to the existing Monterra water utility. The ability to introduce fresh Bow River water to Cochrane Lake, combined with the newly upgraded discharge pumps will allow old stagnant water to be pumped out, while pumping fresh water into the lake.
- Adding circulation to the lake will improve the water quality.
- Cochrane Lake will be allowed to naturally increase in depth by approximately 1 metre. This additional depth may keep the lake temperatures cooler and allow less sunlight to reach the lakebed, reducing algae blooms.

3. How does the lake improvement plan address concerns of flooding?

- During the flooding of 2013, there was no mechanism to discharge water from the lake as the lake levels increased, and this led to the flooding of a number of properties around the lake. In 2016, Rocky View County worked with Alberta Environment and Protection Act (AEPA) to install a set of discharge pumps to allow for water to be pumped out at the south end of the lake into Horse Creek. As part of the lake improvements, new higher capacity pumps will replace the existing pumps, which will be capable of discharging up to 150 litres per second. This increase in discharge flow rates will allow the lake levels to be better controlled in heavy storm events and provide flood mitigation.
- The lake levels will be monitored by a sensor and discharge from the lake will occur as required to protect adjacent homes and infrastructure.

4. Who is responsible for the operation and maintenance of the pumps?

• Rocky View County will be responsible for the operation and maintenance of the pumps. The new pumping infrastructure is planned to be automated such that they will turn on when lake levels exceed the normal water level.

5. Can Horse Creek handle the additional flow of water up to 150 litres per second?

• Currently, AEPA has approved discharge up to 90 litres per second to Horse Creek. A hydraulic study of Horse Creek was conducted in 2023 and the results shows that Horse Creek is capable of handling the additional flows up to 150 litres per second. Flow meters installed in Horse Creek since 2023 show that typically by late August Horse Creek has extremely low flows, so additional water is not anticipated to impact the watercourse.

6. Why build a pathway?

• The pathway will allow the community to enjoy the lake and connect to the existing trail systems. For the most part, the pathway will be located on municipal reserve land.

7. Will the pathway go around the entirety of the lake?

• The current joint project between Rocky View County and Macdonald Communities Limited focuses on the south and east sides of Cochrane Lake. Ultimately the pathway is proposed to extend around the lake and will hopefully be continued as part of future community development.

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8. What measures will be taken to ensure the protection of the wildlife and nesting birds during the construction of the pathway?

Over the summer of 2025, a Biophysical Assessment was conducted to support the regulatory approvals
process. This assessment documented existing conditions at the lake and guided efforts to minimize
environmental impacts as a result of the proposed project. One of the major conservation measures was to
eliminate the berm concept and to locate the pathway further away from the lake edge, staying away from the
more sensitive wetland areas. Wildlife sweeps will be conducted prior to the commencement of any construction
activities.

9. How have the plans for the project changed?

- The original plan contemplated a berm. Through conversations and consultation with AEPA throughout 2025 it was determined that the berm is not necessary, and it would be a better scenario to construct the pathway on existing ground. The main reasons for eliminating the berm were:
 - It will allow the construction to more closely follow the current natural walking path around the lake, which will reduce the disturbance to the natural wetlands surrounding the lake, as well as minimizing the impact to animal and plant life.
 - The new proposed paved pathway will be located 0.8 to 1.3 metres above the normal water level and 0.3 metres above the high water level of Cochrane Lake. This is allowing for stormwater drainage from existing properties.
 - The pathway is now proposed to be located completely within existing County owned municipal reserve lands.
 - The berm would require additional stormwater management infrastructure behind it and disrupt the natural overland stormwater drainage that currently exists with water naturally flowing back to the lake.

10. When will construction of the pathway start, and how long will it take to construct?

• The Cochrane Lake Improvement Project was approved by Rocky View Council in March 2025. Since that time, Rocky View County and Macdonald Communities Limited, along with their consultants, have been working with AEPA for the necessary approvals to allow the project to proceed. It is currently anticipated that approvals will be granted in 2025, allowing for improvements to start in 2026, with a goal of completing the improvements by the end of 2026.

11. When will the new raw water bypass line be constructed?

• Once the necessary AEPA approvals are granted, construction of the new raw water bypass line can proceed with a goal of completing the installation by the end of 2026.

12. Who is paying for the improvements?

• The Cochrane Lake Improvement Project consists of a paved pathway system on the south and east sides of the lake, a new raw water bypass line to supply water from the Bow River to the Lake, and upgraded discharge pumps from the Lake to Horse Creek. These works are being funded by a shared partnership between Rocky View County and Macdonald Communities Limited. The remaining sections of pathway which are located on private developer owned lands will be the responsibility of those developers.

13. What work has been done to date and what still needs to happen?

- The project has been approved by Council
- Surveying and technical studies have been completed to determine project scope
- Regulatory applications are still in progress
- Detail design is in progress
- Community consultation is underway
- · Meetings with impacted landowners will occur as the project continues

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14. Will the improvements with Cochrane Lake address future stormwater management as development in the area continues?

• The updated normal and high-water levels of Cochrane Lake have been taken into consideration when designing the pathway and increased pumping discharge rate. These updated water levels have been established based on the anticipated full future development of the land surrounding the Lake.

15. How long will it take to improve the lake water quality?

While it isn't possible to give an exact timeline, it is anticipated that as fresh water is added to the Lake from the Bow River and water is flushed from the lake to Horse Creek, water quality will improve.

The timing and volume of water added to or removed from the lake will depend on precipitation events and the pace of continued development around the lake.

16. Will residents be able to access the lake for future recreation?

• The goal of the lake improvements is to ultimately create a regional recreational amenity which can be enjoyed by residents year-round.

17. What are the proposed regulatory and environment approvals needed for this project?

- Approvals under the provincial Water Act and Alberta Wetland Policy are required for construction of the pathway and construction of the new water spur line from the existing water line from the Bow River to the Monterra water utility
- Amendments to existing provincial Water Act licenses to allow for the addition of water from the Bow River and release to Horse Creek
- Approval under the provincial Historical Resources Act for the pathway construction.
- A review of the project by the federal Department of Fisheries and Oceans for the increased release of water into Horse Creek
- Approval by Rocky View County of the stormwater management plan for the Cochrane Lake region
- Rocky View County development permits for the construction of the pathway.

18. As part of the work to ensure the proposed project meets its goals while protecting the environment, Rocky View County and MCL have completed the following studies and prepared the following management plans:

- A hydraulic assessment of Horse Creek to ensure an increase in water discharge won't negatively impact the watercourse.
- The development of an adaptive management plan to be used any time water is pumped into Horse Creek to mitigate potential environmental impacts.
- Ongoing water quantity and quality testing of Cochrane Lake.
- The development of a regional stormwater management plan to ensure the region can be safely developed while managing current and future stormwater.
- A wetland assessment of Cochrane Lake.
- A wildlife habitat assessment of the proposed pathway alignment.
- A vegetation and rare plants assessment of the proposed pathway alignment.
- A geotechnical assessment of the proposed pathway alignment.
- A fisheries assessment of some of the lands.

19. What other projects are happening in at Cochrane Lake?

Visit www.rockyview.ca/cochrane-lake to learn about development in the area.

A new initiative has been proposed to upgrade Cochrane Lake Trail to pavement, improve drainage and add water and wastewater servicing to the area. This is separate to the scope of this project. Visit this County website for updates on planning in the Cochrane Lake community: www.rockyview.ca/cochrane-lake