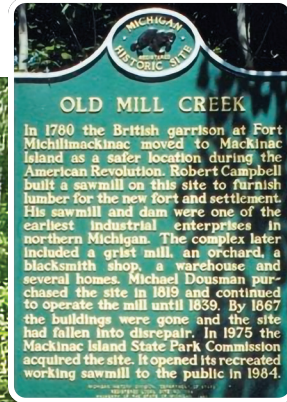


# HISTORIC MILL CREEK UPGRADE



Limitorque electronic motor that operates Slide Gate 2 and controls flow coming into the mill.

**MILL CREEK WAS ESTABLISHED IN 1790**, by Robert Campbell to provide lumber for the growing settlement on Mackinac Island. A gristmill was later added, and in 1819 the site was purchased by prominent island merchant Michael Dousman, who continued operations into the 1830s. Eventually abandoned and forgotten, the site was rediscovered in 1972 and, after extensive archaeological work, reopened in 1984 as a public interpretive center managed by the Michigan Department of Natural Resources.

MACKINAW CITY, MI

## SUMMARY:

### Customer:

Michigan DNR

### Project:

Improve water control infrastructure

### Equipment:

- (2) Slide Gates
- (1) Electronic Motor Operator
- (1) Handwheel Actuator

### Result:

Delivering modern flow control solutions that respect and reinforce the site's 18th-century character.

## THE PROBLEM

Today, Historic Mill Creek operates as a working reconstruction of early industrial life and a public education site. **Michigan DNR** sought to upgrade water control infrastructure while preserving the visual and historical integrity of the setting. Any visible components needed to match the late 18th- to early 19th-century character of the site, particularly near the working flutter wheel and reconstructed mill systems.

The project required a solution that could manage flow in two key areas: one that mirrored the original manual operation for educational demonstration, and another that could offer modern control to accommodate varying site needs.

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Slide Gate 2 – controls the main flow into mill.



Mill Creek operates as a working reconstruction of early industrial life and a public education site.



90-Degree Gear – allows the horizontal actuator to actuate the valve vertically.

## THE SOLUTION

Partnering with MacMillan & Associates and Rowe Professional Services, Kennedy Industries provided two customized slide gates — one actuated by a wooden handwheel to match the look of the mill, and the other equipped with an electric actuator.

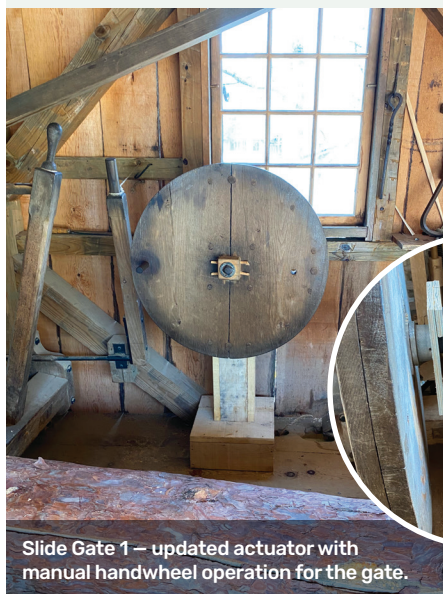
**SLIDE GATE 1** was installed in a drop box structure and designed to operate much like the site's historic gate once did. Kennedy supplied a manually operated gate with a stand screened in wood and a handwheel to ensure visual consistency with the era. This gate directs flow through the flutter wheel to power the mill's saw — just as it would have in the early 1800s.

**SLIDE GATE 2** was installed in the main channel, equipped with a horizontal electric actuator and a right-angle (90-degree) gearbox for flexible flow control. The gate can be adjusted on-site or remotely from a panel in the operator room, providing seamless functionality without disrupting the period setting.

## THE RESULT

The completed solution preserves the authenticity of Historic Mill Creek while supporting its daily operation as a public educational site. Kennedy's attention to both form and function ensures the mill continues to engage visitors — as both a working example of early industry and a treasured part of Michigan's heritage.

*Kennedy Industries played a key role in preserving the function and story of Historic Mill Creek, delivering modern flow control solutions that respect and reinforce the site's 18th-century character.*



Slide Gate 1 – updated actuator with manual handwheel operation for the gate.