Memorandum



To: Town of Cedarburg Plan Commission, Town of Cedarburg Board

CC: Michelle Soderling, WDNR; Mike Thompson, WDNR; Travis Schroeder, WDNR; Andrew Struck, Ozaukee County Planning and Parks; Kevin Cahill, Save Cedar Creek

From: Cheryl Nenn, Riverkeeper

Date: December 10, 2025

Subject: Concerns about the Proposed Gauthier Pond Project in the Town of Cedarburg

On behalf of Milwaukee Riverkeeper, we urge you to deny the approval of a proposed 13.2-acre pond for the Gauthier family in the Town of Cedarburg adjacent to Covered Bridge Park, as well as the zoning changes required to facilitate this project. This project violates the Town's Land Division Ordinance, does not address groundwater impacts, will cause environmental harm, violate the public trust doctrine, and set a dangerous precedent for future waterway resource management. We outline below our many concerns and the impact that the project could have on your constituents from an environmental, health and safety perspective.

Milwaukee Riverkeeper is a science-based nonprofit organization dedicated to protecting water quality and wildlife habitat and advocating for sound land management in the Milwaukee River Basin. We collect water quality data to better understand the health of our waterways, and are working toward clean, fishable, swimmable, and drinkable water.

Zoning and Purpose

The Gauthier's own 9 parcels near the proposed project area east of Covered Bridge Road, north of Cedar Creek Road and south of Kaehlers Mill Road. This project would require combining 5 of their 9 existing parcels (R-2, A-1, A-2, E-1, and C-1) to create a 132.29-acre parcel that would be required under Town zoning to construct the 13.2-acre pond. Town zoning states that the size of a pond can't exceed 10% of the lot area. This would include rezoning three agricultural parcels to E-1 or estate zoning (from R-1, A-1, and A-2) and one parcel would retain its conservation zoning (C-1). Estate zoning allows for single-family dwellings with some agricultural uses and manmade recreation and wildlife ponds with special permit. Four of the Gauthier's parcels will remain as separate legal lots of record. The Gauthier's had planned that this pond be used for boating, and it is designed in the size and shape of waterski ponds that are popular in other parts of the country. During earlier reviews in 2020/2021, engineers said that the noise from this boating pond would not be greater than agricultural equipment. At the public hearing on November 5th, project proponents intimated, but did not clearly state, that the pond would be used for wildlife.

To change the zoning of these parcels, the board must justify that the purpose for the change is relevant and that it aligns with the Town's Land Division Ordinance and comprehensive planning Yet, the purpose and intent of this pond is not clear. The Gauthier's have stated that they will construct a home on this

estate in the future, but without clear understanding of the end use of the property, it seems likely that this property could be converted to a different use in the future such as a housing development or private hunting/fishing/boating club. The Town, and the public, must have a clear understanding of what series of events or projects the Gauthier's intend before approving the project.

Our main concerns are the proposed withdrawal of water for the pond from a privately installed well (approximately 10 million gallons), and not from a high capacity well as originally proposed in 2021, as well as the proposed diversion of approximately 25 million gallons of water from Cedar Creek. While the project proposes to withdraw the water over an 8-9-month period, there are periods of time during the year when the flow in Cedar Creek is very low and an additional drawdown would likely impact aquatic life, water flows, and water quality.

The applicant has not provided any detailed analysis of how this water withdrawal would impact residential wells or Cedar Creek and the fish and wildlife that depend on it. Permitting the use of water from this public watercourse for private use is also concerning because it could create a dangerous precedent for the Town. This decision could open the door for others to do the same, eventually diverting more and more water from the Creek, which could impact the ability of the general public to use and enjoy Cedar Creek. Without understanding the full impact of this diversion on the waterway, groundwater wells and the environment, the board is rushing to a decision that could have disastrous impacts down the road.

Groundwater/Well Concerns/Pond Maintenance

There are nearly 3 dozen private landowners within 1,000 feet of the proposed project. It is our understanding that the Gauthier's are planning to use a deeper part of the aquifer that has very few wells or recent water quality testing. The degree of isolation between this deeper zone (250 to 500 feet) of the dolomite aquifer and the zone where most domestic wells are drilled is not well delineated. Given that not many wells have been drilled into the lower part of the aquifer (250 to 500 feet), the only way to know the true impact of this well on residential wells is to drill a test well at this depth and test the connection between these different layers. This data should be reviewed by an independent reviewer. Ideally, as part of this process, several nearby private wells should be monitored during this testing to ensure that there are no impacts to water quality or quantity (water level changes). This would require several private landowners nearby to provide access to their wells. Until the board understands these impacts, the project should not be approved.

Constructing a pond in an upland, outside of the shoreland zone of Cedar Creek to evade any need for State or County shoreland zoning permits, presents significant challenges to retaining water in a newly constructed pond. They will likely need to continually divert water from the Creek to sustain water levels, which will be a continual draw on the Creek, in times when flow may be significantly low. It doesn't seem that the engineers have installed any monitoring wells in the proposed location of the pond, which could help determine if there are any seeps or springs that could help maintain this pond. Even if there were, installing a clay liner would minimize the benefit to the pond from any groundwater sources.

Another challenge will be maintaining "good" water quality and minimizing the growth of nuisance algae, which is highly likely given how warm the pond will get without shoreland vegetation or regular "feeding" of freshwater. Cedar Creek already has high concentrations of phosphorus. A review of our water quality data for Cedar Creek at Covered Bridge Park shows that over 66% of our water samples exceed State of Wisconsin standards for phosphorus. If the owners would like to use this pond for water

skiing, that will necessitate the use of a significant amount of herbicides for maintenance. These herbicides would likely flow back to surface waters given how the pond is designed, including adjacent wetlands and Cedar Creek, as well as infiltrate into groundwater that is being used for residential wells. The Town should know if the Gauthier's will treat their pond with chemicals to fully understand what they are approving. Further, if chemicals are used, regular well monitoring should be conducted for neighboring residences that the Gauthier's should pay for, as well as proof of financial assurance and the creation of a fund to remediate any contamination that occurs. This will protect the Town and its residents.

Cedar Creek Water Quantity Concerns

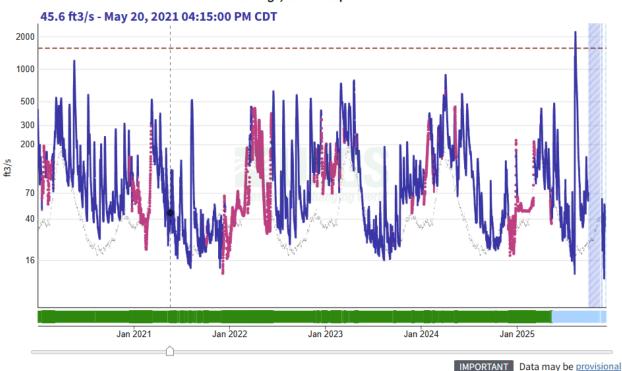
The Gauthier's are proposing to withdraw water from Cedar Creek near Covered Bridge Park using a 3-inch water supply line with a siphon pump that can draw 65 gallons of water per minute. That equates to around 3,900 gallons per hour or 93,600 gallons per day of capacity.

USGS has discharge/flow and water level data for this location by month going back to 1930 (attached)! The mean of monthly discharges for that time period is shown in the table below.

Month	Discharge (cfs)
January	60
February	79
March	205
April	189
May	110
June	92
July	50
August	35
September	49
October	51
November	63
December	59

These flows are relatively low, and there are only a few months per year when its possible to paddle Cedar Creek by canoe or kayak (generally early spring). The water flows from this summer are among the lowest that we have seen in the last 5 years, prior to and after the "flood" in August. However, there have been multiple periods where flows dropped below 15 cfs in the last 5 years, and flows have gotten down to around 10 cfs in the last few weeks. See the below graph of flows during the last 5 years at this location. Generally, it becomes difficult to paddle when water levels drop below 150-200 cfs.

- using custom time span -January 1, 2020 - December 8, 2025 **Discharge, cubic feet per second**



Taking the mean August flow of 35 cfs, (from 1930 to present), which is historically the lowest water levels of the year, that converts to around 22.6 million gallons per day (1 cfs is equal to around 646,317 gallons per day). The pump would be removing around 93,600 gallons per day from the creek if operating as designed, so that equates to around 0.4% of creek flows on a daily basis. At 10 cfs, typical of flows in late November and early December of this year, the water removed would be around 1.4% of water flows in this section of Cedar Creek. It's important to note that any drawdown of the shallow aquifer could also impact flows in this part of the river, so this could lead to additional flow reductions. In addition, there could be significant cumulative impacts from dewatering over an 8-9-month period that could impact the hyporheic zone, groundwater levels, the flow of the river and wetted perimeter.

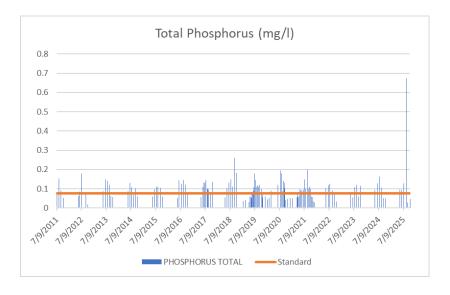
Stream flows vary greatly on a daily, monthly, and annual basis based on a variety of conditions. Removing water from the creek during very low flow conditions over a period of weeks or months could harm aquatic life and strand freshwater mussels and other organisms in different parts of the creek as flows aren't evenly dispersed across the cross section of the stream. Shoreline areas are generally less deep or shallower (especially on an inner river bend as is the proposed pumping location), and its fairly normal for streams to shrink in width or wetted area during summer and fall months. The pipe would likely have to be closer to shore to not interfere with navigation and could have a significant seasonal impact on the stream biota. It's difficult to fully analyze the impacts on the stream of this water diversion without knowing how long the pump would run and when, during which months, at what flow/stage levels, etc. A more detailed hydrologic and hydraulic analysis should be conducted for this project before the Town considers approval.

Wisconsin law, particularly Chapter 30 of the Statutes, protects public rights in navigable waters through the Public Trust Doctrine, allowing uses like navigation, fishing, and recreation. It also grants the DNR power to set Public Rights Stages (PRS) or minimum water levels to ensure these uses are met and to regulate water withdrawals (under chapter 30.18) to ensure rights of riverfront landowners are balanced with public rights such as public recreation like paddling and protection of natural resources. Does this level of water use impact the public's fundamental right to use and enjoy navigable waters? Should the right of a landowner to a private water-skiing pond outweigh the public's right to paddle Cedar Creek in an ever-shrinking seasonal window? WDNR originally stated that they did not have permitting authority for this project due to its location outside of the shoreland zone, and because water was being withdrawn from the creek by a pipe of 3 inches or less. Nonetheless, the Town should know what will happen the Creek, and in our opinion, a conditional use permit is warranted. Any permit should include conditions of when water could be removed from the creek, establish minimum flows required for withdrawals, and ensure that water is returned to the creek in a way that does not add pollutants. This is especially important at a time of changing climate where past flows and water levels may not predict future conditions.

The Town should ensure that the WDNR is permitting this water withdrawal, or if not permitting it, to seek opportunities to protect town residents and natural resources as part of the approval and maintenance agreement for the project if it is approved. The project proponents have provided no information about how frequently water would be removed from the creek after the pond is filled to compensate for evaporation, infiltration, or water sloshing out from wave action. The liner is roughly 80% impervious, so that could mean a longer-term impact on the creek and more water being drawn from the creek during warmer, summer months when flows are generally the lowest. The amount of water withdrawn from the creek is likely to be much more than 25 million gallons to fill it the first time, and the Town should not approve this project without more information and specific conditions placed into any permit to protect the creek and town residents.

Cedar Creek Water Quality Concerns

At the Covered Bridge Site (Cedar Creek at Cedarburg), approximately 66.4% of data since 2011 has failed the state phosphorus standard of 0.075 mg/L for small streams. See chart below.



Withdrawing more water from Cedar Creek during summer months will not be helpful. Water entering the pond from this location, will also be nutrient rich as previously stated. Temperature and oxygen data during this time period has been largely good with the exception of the recent flood, which showed a large drop in dissolved oxygen in the stream. Climate change is likely to cause increased extreme wet weather events punctuated by drought, and warming temperatures, which will both impact the survival of different species of fish and aquatic life. Further stressing the Creek with a withdrawal and potential pollutant loading will only exacerbate water quality concerns.

Safety Concerns

Southeast Wisconsin just experienced a 500-1000-year flood in August of this year. What happens if this pond overtops during such an event? Even though this has been designed to address some spill out with construction of a berm, the WDNR will not be regulating this structure (as a withdrawal or a dam or other) which means that no emergency action planning and inspection, operation, and maintenance plan will likely be required. Has there been modelling conducted of different 100-year, 500-year, and 1000-year flood scenarios and impacts to adjacent homes should the pond fail? This type of analysis should be conducted, and the Town could include an insurance requirement as part of project approval that would cover costs to the town and neighbors should any pond failure impact properties.

Wetland Impacts and Pond Discharge

The design of the pond shows an outflow into an adjacent wetland of pond water. It also shows a surface pathway where pond water would be likely to flow with any failure. It's not completely clear how often water would be discharged to the wetland or creek during dry or wet weather, but that water is likely to be warm and contain other pollutants. Sending heated water to the wetland will cause damage, and thermal impacts to Cedar Creek will exacerbate water quality issues, especially in summer months.

Impacts on Fish, Wildlife, and Sensitive Species

There are several historical records of sensitive freshwater mussel species in Covered Bridge Park that could be impacted by water withdrawals including the Rainbow Shell mussel. The Emerald Hine's Dragonfly is federally endangered and known to occur nearby at the Cedarburg Bog, so any construction work here should minimize possible impacts to that species. Likewise, it's likely the site could have Queen Snake, which is a state endangered species, and construction should consider how impacts to snakes could be mitigated. The Northern Long-eared Bat (federally endangered) and Monarch (federally threatened) should also be considered to ensure they would not be impacted by this project. Eastern Prairie Fringed Orchid is also federally threatened and found in the Cedarburg Bog. This plant should be looked at it in adjacent wetland habitats that might be impacted. Wildlife surveys should be planned for this site to ensure that any species of concern or their habitat would not be impacted by construction or future activities.