



Lake George  
Association



## ProcellaCOR in Lake George? Too Many Risks, Too Few Benefits, and There Is No Need to Rush into This Process

The Lake George Association (LGA) vehemently opposes the Lake George Park Commission's (LGPC's) proposed use of a new synthetic hormone herbicide, ProcellaCOR, in Blairs Bay (Glenburnie) and Sheep Meadow Bay (Huletts Landing). The LGA team has reviewed the entire U.S. EPA registration docket and all available published and other literature in reaching this position.

**Do we really need this synthetic hormone in our lake?** The active ingredient in ProcellaCOR EC, florypyrauxifen-benzyl, is a synthetic "auxin" which regulates growth and development in plants. This synthetic hormone exerts its effect by "causing the affected plants to essentially grow themselves to death" (EPA). EPA initially registered (not "approved") this product under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) in 2017 by Dow AgroSciences for two purposes: 1) weed control in rice fields and 2) aquatic weed control in freshwater systems. The New York State Department of Environmental Conservation registered ProcellaCOR EC in 2019.

### The Situation in Lake George

**This is a manufactured crisis.** Lake George is different and simply does not have the extent of Eurasian watermilfoil (EWM) that other ponds and small lakes in the Adirondacks have. Eurasian watermilfoil requires receptive lake bed sediment and enough sunlight to support growth; ponds and lakes that have been overrun with Eurasian watermilfoil are typically less than about 30 feet deep, with nutrient-rich sediments. The average depth of Lake George is about 70 feet and, based upon detailed bathymetry studies, the vast majority (over 75%) of Lake George is just too deep and too rocky to support growth of Eurasian watermilfoil.

**Lake George and the proposed treatment areas are not "slow moving/quiescent waters with little or no continuous outflow."** The Federal Pesticide Label for ProcellaCOR requires its use in calm and quiescent waters to maintain the critical concentration-exposure-time for the herbicide to be effective. Lake George is anything but calm and quiescent. Detailed and peer reviewed computer circulation models by The Jefferson Project, verified by physical

measurements, demonstrate there are significant horizontal and vertical water currents in Lake George. This data confirms that in the two bays targeted for the ProcellaCOR experiment, the herbicide will quickly be swept out of the bays into non-targeted areas of the main Lake, given the continuous outflows from those bays. Consequently, ProcellaCOR will have minimum dwell time to be effective where targeted, while potentially adversely affecting other non-targeted species in the areas to which it travels. This situation is very similar to research findings by the U.S. Army Corps of Engineers, which demonstrated the challenges of attempting to effectively use ProcellaCOR in Roanoke Rapids Lake, North Carolina, and Fort Peck Lake, Montana.

## Once Applied, What Could Happen?

**Limited published research and literature points to serious problems and risks while attempting to achieve the advertised results in real lake applications.** The initial registration of the active ingredient in ProcellaCOR was largely based on “unpublished industry studies” and was performed in highly controllable laboratory conditions. Since ProcellaCOR is recently registered (2017 by EPA), there are very limited published research articles on the actual use of ProcellaCOR in lakes. The few published studies that do exist, including by the U.S. Army Corps of Engineers, identify issues with the performance of ProcellaCOR in the field, including:

- Difficulty achieving the desired concentration exposure time in the designated treatment area;
- The need to conduct genetic analysis to determine if the milfoil is indeed invasive, native, or a hybrid;
- The benefits of adding dye with the pesticide application, which facilitates a far clearer understanding of the lake hydrodynamics and pesticide distribution and unanticipated dispersion. (The potential for unanticipated dispersion could be documented if the reviewing agencies require pretreatment dye studies of the proposed treatment sites as was done with the proposed Sonar applications, which were denied for many reasons, including dispersion);
- Impact on native aquatic vegetation is clearly demonstrated;
- The substantial need for comprehensive pre- and post-monitoring, including two years after treatment, to understand the pesticide efficacy, performance, and impacts; and
- The potential for “hormesis,” the unintended stimulative growth of aquatic vegetation at extremely low doses of the hormone herbicide.

**Native aquatic vegetation will be impacted.** Claims of “high selectivity” of ProcellaCOR to Eurasian watermilfoil are overstated. Native plants and benthic species are documented as being susceptible to this herbicide. EPA’s Final Registration Decision acknowledges

that the parent compound and degradants “all demonstrate some level of toxicity to aquatic plants at environmentally relevant levels.” In response to the registrant’s claim of “superior tolerance to native aquatic plant species,” EPA’s response was: “Due to a lack of comparative information about superior selectivity to native plant species, the agency cannot conclude that this is a benefit of registration.” A paper by SePRO (the manufacturer of ProcellaCOR [January 28, 2019]) documents the sensitivity of common native aquatic plant species (Table 1).

**The risks associated with ProcellaCOR are too great for Lake George.** EPA’s 246–page *Environmental Fate and Risk Assessment*, the ProcellaCOR label, and published studies identify numerous known risks, unknown risks, and uncertainties such as:

- Resistant biotypes may eventually dominate the weed population and may not be controlled by these products;
- Chronic risk to freshwater invertebrates cannot be determined or precluded; and
- Potential for chronic risk for mammals whose diet is largely composed of aquatic invertebrates.

**Inadequate pre- and post-monitoring requirements to assess efficacy and impacts.** The proposed pre- and post-treatment monitoring requirements are inadequate to assess the efficacy of or impacts of ProcellaCOR. For example, the claim that the herbicide will “eradicate Eurasian watermilfoil for multiple seasons” cannot be proven without multiple-year monitoring. One research paper recommends monitoring two years after treatment (Podkowka et. Al. 2019).

## **Lake George Is Not the Place to Conduct This Experiment**

**Eurasian watermilfoil has been successfully managed through hand harvesting by professional divers for nearly 30 years.** In 2022, the LGPC, in cooperation with the LGA, hand harvested 64 tons of EWM from 31 sites throughout the Lake at a cost of \$360,000. LGPC intends to treat four acres of Blairs Bay and 3.6 acres of Sheep Meadow Bay with ProcellaCOR at a cost of \$39,300 (an estimate that is several years old). Blairs Bay and Sheep Meadow Bay were last hand harvested in 2014 and 2017, respectively. The LGA estimates that these two sites could be hand harvested in less than two weeks at a cost of about \$17,000 for both bays. This demonstrates that there is no cost-benefit to the proposed treatment, particularly when considering the external costs of this controversy. In fact, many tons of Eurasian milfoil could have been removed from Lake George through non-chemical means if the cost of this controversy had been invested in proven, non-chemical methodologies.

**Public sentiment is largely opposed to use of ProcellaCOR in Lake George.** In response to an APA permit action, 300 letters were submitted in opposition while 22 were in support.

Most of those 22 letters of support were from other lake associations who wanted the Lake George results to inform their decisions. Three towns (Hague, Ticonderoga, and Dresden) passed formal resolutions opposing use of ProcellaCOR in Lake George. In addition, more than 4,600 people signed a petition opposing the use of ProcellaCOR in Lake George.

**Relentless one-sided pursuit of chemical treatment.** As a result of legal action by the LGA and others, State Supreme Court Judge Robert Muller, on March 3, 2023, found that the APA's issuance of ProcellaCOR permits for Lake George, without first holding a hearing, was "arbitrary and capricious." Judge Muller also admonished the LGPC and APA action as: "largely one-sided"; "lacking in comparative analysis"; "fail[ing] to accurately summarize the substance of the comments in opposition to the application"; and "misleading and failing to accurately reflect the successful management of EWM." Despite the ongoing and unresolved legal action, the LGPC doggedly continues to pursue chemical treatment in Lake George in 2024 and is seemingly on a mission to do so without the informative adjudicatory hearings required by law.

**Rushed and flawed public engagement.** The LGPC has again issued a "Letter of Notification," dated January 30, 2024, to certain riparian owners and users for proposed chemical treatment between May 17 and June 30, 2024, providing a 21-day period to respond and indicating that a "lack of response will be considered to be consent to the proposed application." The Letter of Notification provides no phone or email for the referenced NYS DEC contact person, does not provide a specific date and time for submission of comments, and does not provide a clear email address or link for submission of comments. In a press statement, the LGPC estimated that they notified 40-45 riparian owners. We estimate that there are approximately 86 riparian owners when you include all riparian owners within ½ mile of the treatment areas *as is required by the regulations*. Why is the LGPC rushing the process and taking shortcuts on notifications?

**The ecological, reputational, and economic risks of using a synthetic hormone pesticide in Lake George are simply too great.** This would be the third attempt by the LGPC to try to intentionally introduce an aquatic pesticide in Lake George. Once introduced, there are no do-overs. Let's not sully the Queen's pristine reputation with the first-ever permitted introduction of a pesticide when a far better, non-chemical alternative exists and is successful – continued hand harvesting by professional divers.

**For more information,** or links to the science supporting LGA's position opposing use of ProcellaCOR, please contact us at (518) 668-9700 or [info@LakeGeorgeAssociation.org](mailto:info@LakeGeorgeAssociation.org).

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