From:	Gardner, Matthew D (DFW)
To:	Wilhoyte.Kristopher@student.greenriver.edu
Cc:	SEPADesk2 (DFW)
Subject:	SEPA comment for 22-046 Lowe Grass Carp
Date:	Wednesday, November 9, 2022 4:59:40 PM

## Hello Mr. Wilhoyte:

Thank you for your interest in the proposal to stock triploid (sterile) Grass Carp (*Ctenopharyngodon idella*) into the Lowe private pond. WDFW is recommending approval of a permit for the applicant to stock grass carp to reduce rooted aquatic vegetation. The recommended stocking rate will follow those outline in agency policy, which is roughly 5-10 fish per surface acre. Natural systems do not support fish densities at levels where the metabolic activity of fish would be a significant influence on oxygen concentrations and the addition of grass carp at the recommended rate is unlikely to significantly reduce oxygen levels. Deoxygenation of ponds can occur as a result of several environmental conditions. One example is oxygen depletion by the bacterial decomposition of mass die offs of aquatic vegetation, which can happen under ice cover when gas exchange between the water and air cannot occur (winterkill) or following aquatic herbicide applications when to much plant biomass is acutely treated at once. Another example is under extremely warm water temperatures, when the capacity of water to hold dissolved oxygen is reduced and the limited amount of oxygen can be consumed by the aerobic metabolism of large masses of aquatic plants at night when photosynthesis ceases (summerkill). While grass carp stocking is expected to eventually reduce aquatic plant biomass through gradual consumption, it is unlikely this action will result in the sudden death of algae or plants. Black bass (*Micropterus* spp.) and bluegill (*Lepomis macrochirus*) are not native to Washington and no impacts to native species are anticipated as a result of the introduction of grass carp to this system. The fish screen pictured is a part of the pond and WDFW has assessed that there is currently no risk of escapement.

Please let me know if you have any questions or require additional information.

Thanks,

## Matt Gardner

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