



19-0685

TITLE: Discuss and Provide Direction on Requiring Property Owners to Remove Sediment from On-Site Ponds and Lakes

COUNCIL GOAL: Enhance the quality of Life in McKinney
(5E. Develop sustainable quality of life improvements within the City of McKinney)

MEETING DATE: August 20, 2019

DEPARTMENT: Development Services / Engineering

CONTACT: Michael Hebert, PE, Assistant Director of Engineering

RECOMMENDED CITY COUNCIL ACTION:

- Discuss and provide recommendations for possible revisions to the Code of Ordinances to address excessive sediment in ponds and lakes

ITEM SUMMARY:

- Staff is seeking council input regarding adding provisions to require property owners to remove lake/pond sediment that is considered excessive
 - Excessive sediment can create significant aquatic vegetation that can be considered a negative for health and aesthetic reasons
- Some residents have expressed concerns regarding excessive sediment buildup in area ponds and lakes, potentially limiting view corridors, decreasing property values, and creating potential health and safety risks
 - Health and safety risks can include
 - Undesirable animal habitat
 - Modifications to upstream floodplains
 - Upsetting the physical/chemical/biological components of the lake
- Most pond/lake property owners have plans in place to remove sediment or otherwise mitigate the aquatic vegetation concerns
- However, some property owners have been reluctant to address sediment concerns, primarily due to cost or the lack of importance to them.
- Staff interviewed several stakeholders to receive input on proposed ordinance

changes that would address the concerns

- Possible amendments to the code of ordinances could include:
 - Removal of sediment when 1/3 the depth of any one acre section of the water body contains sediment
 - Requirement to study the removal of sediment will be apparent due to the presence of a significant stand of cattails
 - The study would then be required to determine what exists in the water body and what will be necessary to remove the sediment (allow 1 year for study completion)
 - Upon completion of the study, sediment must be removed (allow 5 years to accumulate funds and complete the project)
 - Install aeration in water bodies where it is determined to be beneficial by an industry professional
 - Water bodies less than 6 feet of depth may not receive a benefit
- These ordinances would apply to any portion of a non-NRCS lake where the normal water surface is within 200 feet of a residential property
- Feedback from contacted stakeholders was general agreement with the distance from the lake/pond and time frames for sediment removal with the exception of those who are currently adjacent to water bodies with a significant amount of sediment. Those owners desired to see a faster completion time.

BACKGROUND INFORMATION:

- Staff has had discussions with:
 - Property owners
 - HOA representatives
 - Developers
 - Industry professionals
 - Sediment removal
 - Pond maintenance
 - Appraisers
 - Of note is industry professionals contacted were not aware of other cities that require sediment removal from amenity lakes
- Some HOA's have had debates where some members wanted sediment removed, but others appreciated the look of the vegetated wetlands and/or did not want to pay for the removal.

FINANCIAL SUMMARY:

- Costs for sediment removal can vary greatly from approximately \$20 per cubic yard to over \$100 per cubic yard.

BOARD OR COMMISSION RECOMMENDATION:

- N/A

SUPPORTING MATERIALS:

[Revisions \(Proposed\)](#)
[Presentation](#)