LAKE JAMES ENVIRONMENTAL COMMITTEE ANNUAL REPORT

FEBRUARY 5, 2013

The Lake James Environmental Committee engaged in the following activities from January to December 2012:

1. engaged in continuous meetings with the city of Virginia Beach on the Centerville SGA project and the Indian River & Kempsville Road intersection redesign project from April 2012 until the present time. Emails and written comments were submitted expressing the L J community's concern over stormwater pollution entering into our lake and requested implementation and/or installation of effective stormwater management systems.
   Results: The Centerville SGA has made some modifications of its plan regarding stormwater management and has postponed the final approval from City Council until March 12, 2013.
   The Indian River Rd intersection redesign plan has proposed a few filtration storm drains, but these have yet to be incorporated into the master plan nor has property owner permissions been obtained. Much more community pressure is needed to help the city understand the necessity of redesigned storm drains at this intersection to reduce the trash and pollution that enter Lake James at every rain event.

2. authorized two professional water analyses of Lake James to determine the health and safety of our lake. The June water analysis included heavy metal testing to ensure the safety of our lake water and to serve as a baseline for the future as increased traffic and road widening projects will bring more chemicals, heavy metal and other pollutants directly into our lake.
   Results of water testing: The lake meets the drinking water standards for heavy metals. The fecal bacteria count was within low/safe limits for swimming with the exception of the inlet canal which was found to have very high levels of E. coli and fecal coliform bacteria. Lake James was found to have exceptionally high levels of ammonia (27ppm, 1 ppm is considered a normal range).
   Several sources are to blame: high iron content in the area soils, fertilizer run-off from lawns, large amount of decaying material at the bottom of the lake, fecal contamination from animals and stormwater road runoff.
   High ammonia levels are not harmful to humans. It does affect fish populations, it stunts their growth and reproduction rates. High ammonia levels also cause the water to turn green, have an odor and it promotes

filamentous algae blooms.

3. conducted 3 algaecide treatments to the lake at a cost of approximately $500.00 per application. Algaecide applications do NOT solve the water quality problems. It is a quick fix for a current algae outbreak only. The water problems that are causing the algae outbreaks need to be addressed for a long range solution.

4. contacted the city on several occasions concerning the porous and non-functioning inlet weir. Three separate dye tests were conducted before the city agreed the weir was faulty and needed to be replaced.

5. requested three work orders from Public Works to clean out the Bypass culvert and debris blocking the canal behind Belvoir Lane.

6. toured the HRRC (Hampton Roads Recycling Center) landfill and viewed their operations. They are in compliance with how they handle the industrial waste that enters their pit but a major concern is the sediment ladened groundwater that is pumped into the Cedar-Hill Bypass Canal that feeds directly into Lake James.

7. researched the Department of Environmental Quality guidelines and permit applications to monitor the compliance of the HRRC operation.

8. L J is the recipient of a wetlands grant project for BMPs. The city as a part of installing a new inlet weir, will create a wetland between the new weir and the old weir. All construction, plants, trees, water monitoring and educational signage will be paid for by the city.

9. consulted with the water analysis company on costs for a submersible aeration system, found a community volunteer to conduct water depth measurements as a part of this process.

10. continued to research websites and academic sources for information on stormwater systems, aeration systems and grant opportunities.

11. continued to educate the community on everyone's role of being good stewards to the lake through newsletters, emails and reports.

12. attended the Chesapeake Bay water quality meeting hosted by Congressman Scott Rigell to learn more on the legal and economic impacts of controlling stormwater runoff.

13. The L J Environmental Committee has memberships in the Lynnhaven NOW organization and the Chesapeake Bay Foundation.

14. participated in an ODU study on environmental community groups.

15. researched and compiled a list of nutria trappers to help our community eliminate nutria from the lake.

16. requested street sweeping from the city of Virginia Beach to clean our gutters

17. increased our effort to inform the community of city projects and meetings that will affect the lake through newsletters, emails, signage and the L J website.

GOALS FOR 2013:

1. continue our strong community effort to request from city officials effective and upgraded stormwater treatment systems

2. attend all public meetings and represent Lake James' interests

3. continue to educate and inform our community on all activities concerning the lake and encourage more residents to attend these very important meetings.

4. seek out grant monies to help fund submersible water aeration system in the lake

5. continue professional water analysis of the lake twice a year

6. continue algaecide applications 3 or more times as needed during the spring and summer months

7. identify and pursue other problem sources of lake pollution and propose recommendations for correction.

Respectfully submitted,
Peggy Sansone
Lake James Environmental Committee Chair