

January 10, 2006

Cass County Commissioners and Planning Board Members
3rd Floor Courthouse
102 East Wall Street
Harrisonville, MO 64701

RE: Application 2673, Public Hearing January 24, 2006

Dear Cass County Commissioners and Planning Board Members,

The following are a few facts that are quite interesting. On average, over 1,000,000 acres of land is converted to urban land use in the United States each year. Recent watershed research has discovered that urban stream quality begins to sharply decline once impervious cover in a watershed exceeds 10%. It is also a fact that storm water runoff produced by a one acre parking lot compared to a one acre meadow is 1600%. The greatest percentage of impervious cover in suburban areas is comprised of roads, parking lots and driveways. The best unit for conducting watershed management and land development planning is at the sub watershed level.

Planners, engineers, scientists, and local officials generally lack a unified theme when agricultural land is converted to sub urbanization. It makes it difficult to achieve a consistent result at both the individual development site and cumulatively at the watershed scale where increased imperviousness and its accumulated effect is a physically defined unit. For the purpose of this discussion increased imperviousness is defined as the sum of roads, parking lots, sidewalks, rooftops, and other non-absorbent surfaces of the suburban landscape.

Therefore, the main focus here concerns the “**increased imperviousness**” and its **accumulated effect** on the upper Big Creek Watershed, which runs in a south to southeast flow down to the bi-lake communities of Raintree Lake\Lake Winnebago together with Alexander Creek, which is a tributary of the Winnebago. The parcel of land for the proposed development of Winding Creek Estates lies in an area vulnerable to flooding from Alexander Creek and the concentration of storm water run-off from existing home sites along 163Rd St. and other southeasterly properties in and around Raintree Lake as it finds its way into Lake Winnebago, the collection point for the upper watershed. As Alexander Creek winds its way down to this area, effects of extreme erosion are evident from the exposure of tree and vegetation roots that line the creek bed, and by the severe down cutting of the streambed. The stream carries soil loss from the down cutting action of the stream banks, down into Winnebago Lake, which is hazardous for all aquatic life forms. Both these lakes see heavy recreational use such as swimming, boating, fishing etc.

There are several active developments already in progress within this upper watershed to date. Attached you will find a map along with a general description of the developments currently approved of and currently under construction (or will be). Some list the targeted capacity of the site. These sites will contribute to the **increased imperviousness** with regard to storm water runoff directly into Raintree Lake and from there it will flow into the Raintree Spillway and down to Lake Winnebago.

The three residential developments (Ward Park, Alexander Creek, and Chateau Place) currently under construction along the west side of Ward Road south of 163Rd

Street and north of 58 Highway will also be contributing to **increased imperviousness** impacting Alexander Creek. Currently, the land that lies east of Ward Road across from these developments is still in agriculture. However, the trend of increasing land value coupled with subsidizing for crop removal will most likely give way to the selling off of these properties to more developers furthering the **accumulated effect of increased imperviousness** in the upper Big Creek Watershed. Keep in mind that the collection point for this accumulated runoff will be Lake Winnebago, notwithstanding the damage or impact to Alexander Creek itself and any future developments down slope within this watershed.

The bi-lake communities of Raintree and Winnebago wish to protect its water resources. As impervious surfaces can collect and convey polluted runoff to our waters, we seek to reduce their amount and impact. The environmental impact of these impervious surfaces are varied and interconnected. These include impacts upon:

1. Water Quality
2. Water Quantity
3. Energy Balances and Local Climates
4. Habitat Degradation, Loss, and Fragmentation
5. Stream and Landscape Aesthetics

The concerned citizens and property owners of the areas that will be the beneficiaries of these changes appeal to the Cass County Commissioners and Zoning Board to consider designing a **comprehensive strategy** for the land use in the upper Big Creek Watershed prior to the approval of the Preliminary Plat for the Winding Creek Estates. The following concerns might be brought into consideration:

1. Contribution of upland development to the floodplain and develop land use regulations that mandate zero or minimal off-site runoff.
2. Riparian Buffer Zone for Alexander Creek
3. Parcel of land proposed for development of Winding Creek Estates be deemed worthy of conservation or left zoned for agriculture due to the negative economic impact to property owners from damage to land because of increased water flow, flooding and erosion. (This would include the county because of the bridge, road, and streambed.)

The proper development of land use is not an easy one. There will be proponents and opponents to most plans that come your way. However, at the end of the day the question will be whether the approval of developments are made for the expediency of the moment or will there be a comprehensive strategy or master plan for the northern most areas of Cass County that will encompass the current and future developments that will impact your successors, populace, and the overall environment of the region.

We ask that a delay be granted to allow the appropriate state and local agencies to perform “due diligence”. This would include on site reviews and evaluations so that all parties, i.e., homes associations, affected homeowners, the developer, and county officials will know precisely what impact this development will truly have on the immediate area. This will insure that no matter what decision is made, all pertinent information will be considered.

Respectfully,
Michael and Brenda Gann

Resources: U.S. Army Corp of Engineers
Missouri Department of Natural Resources
Missouri Department of Conservation
U.S. Geological Survey
NEMO

Attachments: Map of development in and around Raintree Lake
Map of Cass County Watershed
Map of Waters Impaired by Discrete Pollutants