



Return to Lake McCarrons

Does the performance of wetlands hold up over time?

How well does the pollutant removal performance of ponds and wetlands hold up over time? Some have speculated that it must decline, while others assume that it remains constant. Until recently, however, there has been no monitoring data to answer the question. Almost all pond and wetland monitoring studies have been one-time “snapshots” taken over a few years at most, and usually right after construction. Thus, any assumption about the future performance of a stormwater pond or wetland is simply an assumption. A recent study by Gary Oberts (1997) and his colleagues, however, sheds more light on what we can expect about the long term performance of stormwater ponds and wetlands.

Oberts returned to a Minnesota pond/wetland system that he had first investigated nearly a dozen years before. The Lake McCarrons system consists of two main stormwater treatment areas: a wet pond with a surface area of about 2.5 acres, and a six-acre linear wetland composed of five cells (Figure 1). The entire system provided about 0.32 inches of treatment storage, with about 40% allocated to the pond and 60% to the wetland cells. The treatment system had a large contributing drainage area (736 acres) which was 27% impervious. The predominant land use was single family residential homes, interspersed with some commercial development and highways.

