

10 Priority Preservation Areas

Priority preservation areas have been identified for our watershed because these areas were shown to have:

- higher water quality compared to other locations
- healthier fish and macroinvertebrate assemblages
- higher quality stream and riparian habitat
- land area included in the Green Infrastructure Vision ecological network
- concentrations of natural habitat features that provide important ecosystem functions (ex. water purification, groundwater recharge, and stream flow regulation)
- concentrations of high quality natural areas and Heritage Database species
- habitats most at risk to invasive species

Data analysis shows that the Deep River Outstanding River reach is generally healthier than any of the other streams assessed in our watershed. Monitoring sites located on this reach had significantly (statistically) higher IBI scores; greater number of fish species; lower number of tolerant species; better QHEI channel morphology sub-metric scores; higher dissolved oxygen concentrations and lower *E. coli* and ammonia concentrations. The higher quality of this reach can likely be attributed to its natural, meandering river channel upstream of Lake George and the contiguous tracts of forest, wetland and floodplain buffering it from adjacent human land uses.

The Hobart Marsh Area encompasses nearly 750 acres of permanently protected land, which includes, wet forest, oak woodland, tall grass prairie, emergent marsh, savanna, and fens. A preliminary review of the Indiana Natural Heritage Database shows that 79 unique element occurrences exist within this area. The site provides critical habitat for nine state threatened or rare plant species, Blanding's turtle (state endangered), over 40 state endangered, threatened and rare insect species, four state endangered bird species, and five high quality natural communities. Several different entities (federal, state, municipal and NGO) own conservation lands within this area.

A half-mile buffer was established around the Deep River outstanding river reach using GIS to identify the Deep River Outstanding River Corridor. This buffer width effectively captured a high percentage of natural land cover areas, core forests, documented high quality natural communities and ETR species, and managed lands along Deep River. The boundary used for the Hobart Marsh Area was the same boundary identified in the Hobart Marsh Plan.

These preservation areas will also be a priority for 319 grant cost-share program implementation at this time in order to protect and maintain the higher quality natural resources.

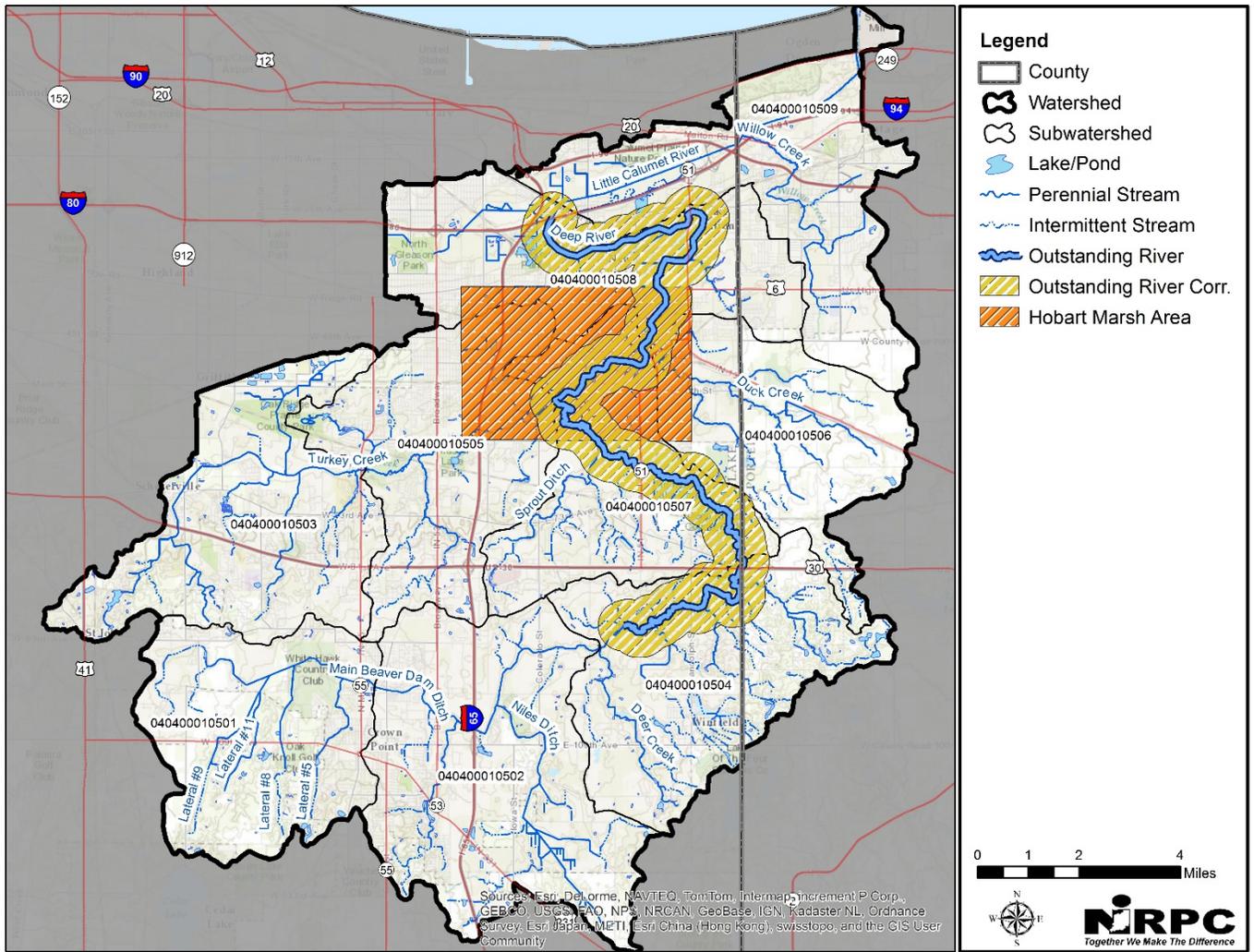


Figure 222 Deep River-Hobart Marsh Conservation Corridor