15: LAND USE / LAND COVER

Land Use/Land Cover (LU/LC) is a two-tiered classification system that systematically defines similar land areas according to land utilization and vegetative structure. Specifically, this is an EPA- and NJDEP-approved method known as the Anderson Classification (Anderson 1976). LU/LC is an important descriptor of any area because it documents natural features, anthropogenic activities and environmental characteristics.

In 1986, NJDEP commissioned an independent contractor to produce the original LU/LC digital data set. The data set was created by combining existing information about land use with current aerial photographs and digitizing the results. The 1986 NJDEP LU/LC database was subsequently updated in 1995, 2000 and most recently in 2002.

It should be emphasized that this LU/LC coverage (or any other coverage derived from LU/LC) has not been field-verified, either by NJDEP or Princeton Hydro, and thus may not be a wholly accurate representation of land uses and land covers within Franklin Township. Although better data and methods, combined with improved technology, made the 2000 and 2002 publications more accurate than previous versions, the use of LU/LC data for site-specific projects is inappropriate because of the limitations of resolution scales and ongoing changes in development patterns over the span of even a single year.

The value of the LU/LC coverage is its reasonably accurate portrayal of development and land cover patterns within the Township (e.g., high-density residential areas, commercial development and wetlands) and its easily manipulated hierarchical classification scheme. This data can be quite valuable in depicting—and sometimes predicting—development trends within the Township, especially when current information is compared with older data. In addition, LU/LC coverage can serve as a basis for estimating pollutant loads on an annual basis.

Based on the 2002 LU/LC dataset, Franklin Township comprises 52 separate LU/LC categories as defined by NJDEP (Figure 14). These diverse classifications are more easily discussed according to more generalized land types. Using this more general classification scheme, the largest land use type within the Township is agriculture, which covers 7,134.57 acres or 47.32% of the Township's land area. Forest is the second most predominant land type, with 5,242.23 acres (34.77%), followed by 1,693.35 acres (11.23%) of urban lands, 726.97 acres (4.82%) of wetlands and 129.05 acres (0.86%) of water (bridges over water, streams, canals, lakes and other waterbodies, both natural and artificial).

As illustrated on Figure 15, wide swaths of agricultural and forested lands dominate Franklin Township, with smaller "pockets" of urban lands distributed throughout the Township and concentrated around the larger transportation corridors. Wetlands tend to be closely associated with stream corridors, while other waterbodies tend to be more widely distributed throughout the municipality.

