Land Use	CBP Abbreviation	Definition
alfalfa	**alf**	This category contains only alfalfa hay. This is a dominant hay crop in many areas of the watershed. Alfalfa is a separate hay category because it is a nitrogen-fixing, leguminous crop and receives different nutrient applications than other hay crops.
animal feeding operations	**afo**	Animal feeding operations allows for the simulation of manure nutrient content runoff from the production areas. The area of animal feeding operations are based on the population of different animal types within a land-segment and accounts for manure generated by multiple animal types. Animal population data are obtained from the U.S. Agricultural Census for 1982, 1987, 1992, 1997, 2002, and 2007 for use in the estimation of both animal feeding operations and the application rates of manure nutrients to cropland and pasture. Animal feeding operations are determined from scenario-year animal populations that are generally projected for each animal type by state agricultural agencies or as trends from existing Agricultural Census animal populations by county. The county animal populations are distributed proportionally to land-segments according to the scenario-year ratio of agricultural acres in a land-segment to agricultural acres in a county. The different animal types are equated through a conversion to animal units which, in turn, defines an animal feeding operations acre.
concentrated animal feeding operations	**cfo**	Concentrated animal feeding operations allows for the simulation of manure nutrient content runoff from confined-animal operation areas. The area of animal feeding operations are based on data from the U.S. Agricultural Census for 1982, 1987, 1992, 1997, 2002, and 2007. State-submitted data of animal populations were used for CAFOs for those states that submitted data.
degraded riparian pasture	**trp**	The degraded riparian pasture land use represents unfenced riparian pasture with an associated stream degraded by livestock. This land use has high nutrient and sediment loads and is treated by riparian buffer BMPs. The area of this land use is arbitrarily set as a percent of the pasture land use.
hay with nutrients	**hyw**	Hay with nutrients includes all tame and small grain hay excluding wild hay or alfalfa, which are included in other categories. These crops receive fertilizer and have a high degree of surface cover for most of the year. Failed cropland is also included in this category because they receive fertilizer but are not harvested, a pattern most similar to hay-fertilized.
hay without nutrients	**hyo**	The hay-unfertilized category includes hay or other herbaceous agricultural areas that do not receive fertilizer and are not harvested, such as wild hay, idle cropland, and fallow land.
hightill with manure	**hwm**	Conventional tillage with manure contains grain, corn, soybeans, and dry beans. Wheat, corn, and soybeans are the dominant crops in the Chesapeake watershed, often planted in a 2-year rotation on the same parcel of land. Crops in this category receive nutrient inputs from manure application as well as fertilizer. The category name indicates that manure may be applied, not that manure is necessarily applied.
hightill without manure	**hom**	The conventional tillage without manure category contains cotton, tobacco, and vegetables. Because most of these crops are grown for direct human consumption, there is generally no manure application. These crops are simulated as only grown with a conventional tillage system. Orchards are also included in this category.
lowtill with manure	**lwm**	The conservation tillage with manure contains grain, corn, soybeans, and dry beans. Wheat, corn, and soybeans are the dominant crops in the Chesapeake watershed, often planted in a 2-year rotation on the same parcel of land. Crops in this category receive nutrient inputs from manure application as well as fertilizer. The category name indicates that manure may be applied, not that manure is necessarily applied.
nursery	**urs**	The nursery land use represents container nurseries, which typically have a high density of plants (10–100 plants per square meter) and high rates of nutrient applications.

nutrient management alfalfa	**nal**	This category contains only alfalfa hay that is under a nutrient management plan. This is a dominant hay crop in many areas of the watershed. Alfalfa is a separate hay category because it is a nitrogen-fixing, leguminous crop and receives different nutrient applications than other hay crops.
nutrient management hay	**nhy**	Nutrient management hay with nutrients includes all tame and small grain hay excluding wild hay or alfalfa, which are included in other categories that are under a nutrient management plan. These crops receive fertilizer and have a high degree of surface cover for most of the year. Failed cropland is also included in this category because they receive fertilizer but are not harvested, a pattern most similar to hay-fertilized.
nutrient management hightill with manure	**nhi**	The nutrient management conventional tillage with manure contains grain, corn, soybeans, and dry beans grown under a nutrient management plan. Wheat, corn, and soybeans are the dominant crops in the Chesapeake watershed, often planted in a 2-year rotation on the same parcel of land. Crops in this category receive nutrient inputs from manure application as well as fertilizer. The category name indicates that manure may be applied, not that manure is necessarily applied.
nutrient management hightill without manure	**nho**	The nutrient management conventional tillage without manure category contains cotton, tobacco, and vegetables that is under a nutrient management plan. Because most of these crops are grown for direct human consumption, there is generally no manure application. These crops are simulated as only grown with a conventional tillage system. Orchards are also included in this category.
nutrient management lowtill	**nlo**	The nutrient management conservation tillage with manure contains grain, corn, soybeans, and dry beans that is under a nutrient management plan. Wheat, corn, and soybeans are the dominant crops in the Chesapeake watershed, often planted in a 2-year rotation on the same parcel of land. Crops in this category receive nutrient inputs from manure application as well as fertilizer. Manure is not necessarily applied but is likely to be applied if there are animals in the county.
nutrient management pasture	**npa**	Nutrient management pasture is pasture that is part of a farm plan where crop nutrient management is practiced.
pasture	**pas**	The pasture category contains only the pastureland item from the agricultural census. The pasture may receive fertilizer and receives manure from grazing animals. The agricultural census underreports pasture area used for horse grazing because horses are not considered to be agricultural commodities.
forest	**for**	Forest, woodlots, and wooded land use includes woodlands, woodlots, and usually any wooded area of 30 meters by 30 meters remotely sensed by spectral analysis. The forest, wood lots, and wooded land use is the predominant land use in the Chesapeake watershed. Without the detail of separate wetland categories in Phase 5, the most representative land use category to include forested and emergent nontidal wetlands was in the forest, woodlots, and wooded land use. Accordingly, the low-loading, low-nutrient input land use of wetlands were included in this land use.
harvested forest	**hvf**	Harvested forest area is estimated to be about 0.33 percent of the forest, woodlot, and wooded land use everywhere in the Phase 5 domain. The harvested forest sediment export rates are applied in the simulation of the harvested forest area for 3 years, including the first year of forest harvesting, and in subsequent years revert to an undisturbed forest rate of sediment export. To account for the total land use of both harvested forest and land recovering from harvested forest land use, a total of 1 percent of land was set in harvested forest.
water	**wat**	Open water area was estimated directly from the 2000 RESAC land use data. Tidal water is outside the Phase 5 domain, so only nontidal waters were quantified as the Phase 5 open water land use. Unlike other Phase 5 land uses, open water land use has a constant area and is unchanged.