1. Wetland associated with freshwater stream or river 2
   1. Wetland not associated with freshwater stream or river 5
      2. Wetland associated with permanent flowing water from surface sources 3
      2. Wetland dominated by ground water or intermittent flows 4
         3. Wetland associated with low gradient and low velocities, within a well-developed floodplain (typically >3rd order)
            Riverine lower perennial (R2)
            (Mainstem floodplain)
         3. Wetland part of a mosaic dominated by floodplain features (former channels, depressions) that may include slope wetlands supported by ground water (see Slope 11)
            Riverine floodplain complex (R2c)
            (new type, mix of the others)
         3. Wetland associated with high gradient and high velocities with relatively straight channel, with or without a floodplain (typically 1st - 3rd order)
            Riverine upper perennial (R3)
            (Headwater floodplain)
            4. Wetland part of a mosaic of small streams, depressions, and slope wetlands generally supported by ground water
               Riverine headwater complex (R3c)
               (new type, mix of headwater floodplain, slope and depressions, including Riparian depressions, a groundwater supported type)
            4. Wetland associated with intermittent hydroperiod
               Riverine intermittent (R4)
               Note: For any riverine type that is impounded, distinguish between:
               Wetland impounded by beaver activity
               Riverine...beaver impounded (R...b)
               (Listed as beaver-imp. or BI)
               Wetland impounded by human activity
               Riverine...human impounded (R...h)
               (Listed as human-imp or HI)
   5. Wetland fringing on a lake or reservoir 6
   5. Wetland not fringing on lake or reservoir 8
      6. Wetland inundation controlled by relatively natural hydroperiod 7
      6. Wetland inundation controlled by dam releases
         Lacustrine artificially flooded (LFK)
         (Fringing – lake or reservoir)
         7. Wetland inundation is permanent with minor fluctuations (year round)
            Lacustrine permanently flooded (LFH)
            (Fringing – lake or reservoir)
         7. Wetland inundation is semipermanent (growing season)
            Lacustrine semipermanently flooded (LFF)
            (Fringing – lake or reservoir)
         7. Wetland inundation is intermittent (substrate exposed often)
            Lacustrine intermittently flooded (LFJ)
            (Fringing – lake or reservoir)
            8. Wetland water source dominated by precipitation and vertical fluctuations of the water table due to low topographic relief 9
            8. Wetland differs from above 10
               9. Wetland substrate is primarily of mineral origin

Flat mineral soil (FLn)
(*we do not use in PA*)

9. Wetland substrate is primarily of organic origin
Flat organic soil (FLg)
(*we do not use in PA*)

10. Wetland water source is primarily ground water and has unidirectional and horizontal flows 11

10. Wetland forms a depression 12

11. Water source for wetland derived from structural geologic discontinuities resulting in discharge of groundwater from distinct point(s) on slope
Stratigraphic slope(SLs)
(we do not distinguish these two until recently)

11. Water source for wetland accumulates at toe-of-slope before discharging
Topographic slope (SLt)
(we do not distinguish these two until recently)

Note: For any slope type, distinguish between: Wetland substrate is primarily of mineral origin**...slope mineral soil** (SL...n)
Wetland substrate is primarily of organic origin ...**slope organic soil** (SL...g)

12. Wetland with frequent surface connections conveying channelized flow
Depression perennial (DFH)
(assume it is Riparian depr)

12. Wetland with infrequent surface water connections conveying channelized flow
Depression seasonal (DFC)
(assume it is Isolated depr)

12. Wetland with no surface outlet, often perched above water table
Depression temporary (DFA)
(assume it is Isolated depr)

Note: For any depression type that is impounded or excavated distinguish between:
Wetland is impounded by human activities
Depression...human impounded(DPh)
Wetland is excavated by human activities
Depression...human excavated (DPx)
Wetland is impounded by beaver activities
Depression…beaver impounded(DPb)
(same as Riverine or Lacustrine – BI)